

SWITZERLAND

Act on Nuclear Energy*

of 21 March 2003**

The Federal Assembly of the Swiss Confederation,
having regard to Article 90 of the Constitution,¹
having regard to the message from the Federal Council of 28 February 2001,²
hereby enacts:

Chapter 1

GENERAL PROVISIONS

Section 1

Purpose

This Act regulates the peaceful use of nuclear energy, and aims in particular to protect man and the environment from the hazards related thereto.

Section 2

Scope

1. This Act applies to:
 - a. nuclear articles;

* Unofficial translation provided by the OECD Secretariat.

** It is expected that this Law will take effect as of 1 January 2005, at the same time as its implementing ordinance.

1. RS 101.
2. FF 2001 2529.

- b. nuclear installations;
 - c. radioactive waste:
 - 1. produced in nuclear installations,
 - 2. delivered as provided under Section 27(1) of the Radiological Protection Act of 22 March 1991 (RPA).³
2. The Federal Council may exclude from the scope of this Act:
- a. nuclear articles not related to the use of nuclear energy;
 - b. nuclear installations in which nuclear materials and radioactive waste are present in small quantities or do not constitute a danger;
 - c. low-level nuclear articles and radioactive waste.
3. The provisions of the RPA shall apply unless the present Act provides otherwise.

Section 3

Definitions

In this Act:

- a. *Observation phase* shall mean the prolonged surveillance period of a deep geological repository before it is closed, and from which radioactive waste can be easily recovered;
- b. *Disposal* shall mean the conditioning, temporary storage and storage of radioactive waste in a deep geological repository;
- c. *Deep geological repository* shall mean a facility in a deep geological formation which can be closed if the lasting protection of man and the environment is ensured by passive barriers;
- d. *Nuclear installations* shall mean those installations used to exploit nuclear energy or to produce, manufacture, use, process or store nuclear materials, or to dispose of radioactive waste within the meaning of Section 2(1)c;
- e. *Nuclear energy* shall mean all forms of energy liberated by the fission or fusion of the nuclei of atoms;
- f. *Nuclear materials* shall mean substances which may be used to produce energy from the fission of the nucleus of an atom;

3. RS 814.50.

- g. *Conditioning* shall mean all the operations to prepare radioactive waste for their temporary storage or storage in a deep geological repository, in particular grinding, decontamination, compacting, incineration, encapsulation, and packaging;
- h. *Nuclear articles* shall mean:
 - 1. nuclear materials,
 - 2. components and equipment intended or necessary for the use of nuclear energy,
 - 3. the technology necessary for the development, production or use of the materials, components and equipment referred to in 1 and 2, above;
- i. *Radioactive waste* shall mean radioactive substances or materials contaminated by radioactivity which are not re-used;
- j. *Handling* shall mean research, development, manufacture, temporary storage, transport, import, export, transit and brokerage;
- k. *Brokerage* shall mean:
 - 1. the creation of the conditions necessary to conclude contracts to supply, acquire or sell nuclear articles or radioactive waste, wherever they may be,
 - 2. the conclusion of such contracts when the service is provided by third parties,
 - 3. trading abroad in nuclear articles or radioactive waste from Swiss territory;
- l. *Closure* shall mean the back-filling and sealing of all the underground sections of the access gallery to a deep geological repository, upon completion of the observation phase;
- m. *Reprocessing* shall mean the mechanical removal of spent fuel elements, the chemical dissolving of the oxide fuel and the separation into uranium, plutonium and fission products.

Chapter 2

NUCLEAR SAFETY PRINCIPLES

Section 4

Principles applying to the use of nuclear energy

- 1. When nuclear energy is being used, man and the environment must be protected from ionising radiation, and radioactive substances may only be released in quantities not presenting any risk. In particular, the excessive release of radioactive substances and the excessive irradiation of persons must be prevented, in times of normal operation as well as in abnormal circumstances.

2. Account should be taken of the long-term consequences on the gene pool.
3. Preventive measures should include:
 - a. all the measures which are required in the light of experience and of current science and technology;
 - b. all additional appropriate measures to help reduce the risk.

Section 5

Protective measures

1. Protective measures in line with recognised international principles must be taken by persons who design, construct and operate nuclear installations. These include in particular, the use of high-quality building materials, the setting up of multiple safety barriers, several automated security systems, an appropriate organisation with skilled personnel, and the fostering of a strong safety culture.
2. Emergency protective measures must be established to limit damage in the event of the release of dangerous quantities of radioactive substances.
3. Measures must be taken to prevent third parties from compromising the security of nuclear installations and materials, and to ensure that nuclear materials cannot be stolen. Such measures should as far as possible be classified.
4. The Federal Council shall lay down the measures required.

Chapter 3

NUCLEAR ARTICLES

Section 6

Licensing regime

1. No one may handle nuclear materials without a licence from the authority designated by the Federal Council.
2. The Federal Council may introduce a licensing regime:
 - a. for handling components and equipment intended or necessary for the use of nuclear energy;
 - b. for the export and brokerage of the technology referred to in Section 3(h)3.

3. Licences shall be limited in time.
4. The Federal Council shall regulate the procedure.

Section 7

Conditions for granting licences

A licence shall be granted if:

- a. the protection of man and the environment as well as nuclear security and safety are ensured;
- b. there are no grounds for refusing it relating to the non-proliferation of nuclear weapons, in particular international control measures, not binding from the international law viewpoint but supported by Switzerland;
- c. no constraining measure within the meaning of the Act of 22 March 2002 on Embargoes⁴ has been adopted;
- d. the cover required by the Act of 18 March 1983 on Nuclear Third Party Liability⁵ is ensured;
- e. this would not be in breach of any international commitment and if Switzerland's external security is not affected;
- f. the persons responsible possess the necessary skills.

Section 8

Special measures against specific destination States; exceptions to the licensing regime

1. Independently of the licensing regime, the Federal Council or the authority designated by it may, in special cases concerning the non-proliferation of nuclear weapons, prohibit, or impose conditions and requirements on, the import, export, transit or brokerage of nuclear articles.
2. The Federal Council may, in order to comply with international agreements, provide that no licence shall be granted in relation to certain States or groups of States.
3. The Federal Council may alleviate the provisions of the licensing regime or make exceptions to it, especially in the case of supplies to States which are parties to international agreements on the non-proliferation of nuclear weapons or which participate in control measures supported by Switzerland.

4. RS 946.231.

5. RS 732.44.

Section 9

Export for reprocessing

The export of spent fuel elements for reprocessing shall be authorised if, in addition to the conditions laid down in Section 7:

- a. the destination State has approved in an international Convention the import of spent fuel elements for reprocessing and if Switzerland and the destination State have concluded an agreement on taking delivery of the waste;
- b. the destination State has a suitable reprocessing plant, in line with current international science and technology;
- c. the transit States have approved the transit;
- d. the sender has formally agreed with the receiver, in agreement with the authority designated by the Federal Council, that he would take back the waste produced upon reprocessing or, where relevant, any spent fuel elements not yet reprocessed;
- e. the destination State has ratified international Conventions on the safety of nuclear installations and the management of spent fuel elements and radioactive waste;
- f. the reprocessing is monitored by an international organisation;
- g. contracts exist as to the use, in mixed oxide fuel elements, of all the plutonium extracted.

Section 10

Air transport of nuclear materials containing plutonium

The transport of nuclear materials containing plutonium in Swiss air space is prohibited.

Section 11

Obligation to notify and to keep accounts

1. Licence holders must notify the supervisory authorities without delay of activities and special occurrences which could endanger nuclear security or safety. The Federal Council shall define such activities and events.
2. The Federal Council may require the possession of nuclear articles to be notified.
3. Persons in possession of nuclear materials must check their stocks, keep relevant accounts and periodically inform the supervisory authorities accordingly. These obligations shall apply also to nuclear materials held abroad.

Chapter 4

NUCLEAR INSTALLATIONS

Part 1 General licence

Section 12

General licence regime

1. No one may construct or operate a nuclear installation without a general licence issued by the Federal Council.
2. There shall be no subjective right to be granted a general licence.
3. A general licence shall not be required for low-risk nuclear installations. The Federal Council shall define such installations.

Section 13

Conditions for granting general licences

1. A general licence may be granted if:
 - a. the protection of man and the environment can be ensured;
 - b. there is no other ground for refusing it for under federal legislation, in particular as regards environmental protection, protection of nature and the countryside or territorial development;
 - c. there is a plan for decommissioning or for an observation phase and a plan for closing the installation;
 - d. it is shown that the radioactive waste produced will be disposed of;
 - e. Switzerland's external security is not affected;
 - f. there is nothing in any international undertaking by Switzerland to oppose it;
 - g. as regards deep geological depositories, geological studies confirm that the site is a suitable one.

2. A general licence may be granted to public limited liability companies, co-operative societies or corporate bodies governed by public law. Foreign companies must have a Swiss subsidiary listed on the commercial register. If not in breach of any international undertaking, the Federal Council may refuse a general licence to a company governed by foreign law when the State in which it has its headquarters does not grant reciprocity.

Section 14

Terms of general licences

1. The general licence shall designate:
 - a. the licence holder;
 - b. the site of the installation;
 - c. the purpose of the installation;
 - d. the outline of the project;
 - e. the maximum exposure limit of persons to radiation in proximity to the installation;
 - f. in addition, for a deep geological repository:
 1. the criteria for deciding that a proposed site is unsuitable,
 2. a provisional protection zone.
2. The outline of the project shall include an approximate indication of the size and location of the main buildings and, in particular:
 - a. for a nuclear reactor: its system, power category and main cooling system;
 - b. for a repository for nuclear materials or radioactive waste: the classification of the materials stored and the repository's maximum capacity.
3. The Federal Council shall lay down the time limit within which the construction licence must be requested. It may prolong this time limit where circumstances so warrant.

Part 2
Construction

Section 15

Construction licence regime

No one may construct a nuclear power plant without a construction licence issued by the Federal Department of the Environment, Transport, Energy and Communication (“the Department”).

Section 16

Conditions for granting construction licences

1. A construction licence shall be granted if:
 - a. the protection of man and the environment is ensured;
 - b. the project complies with the principles of nuclear security and safety;
 - c. there is no other ground for refusing it under federal legislation, in particular as regards environmental protection, protection of nature and the countryside or territorial development;
 - d. the technically correct implementation of the project is ensured and if there is a programme of measures to ensure quality for the whole of the construction phase;
 - e. there is a plan for decommissioning or for an observation phase and a plan for closing the installation.
2. In addition, for installations subject to a general licence, a construction licence shall be granted only if:
 - a. the applicant possesses a general licence which has entered into force;
 - b. the project meets the conditions laid down in the general licence.
3. Installations which are not subject to a general licence must in addition meet the requirements laid down in Section 13: (1)d to f, and (2).

Section 17

Terms of construction licences

1. The construction licence shall indicate:
 - a. the licence holder;
 - b. the construction site;
 - c. the planned power of the reactor or capacity of the installation;
 - d. an outline of the technical realisation;
 - e. an outline of emergency protective measures;
 - f. the constructions the execution of which, or the parts of the installation the incorporation of which, require a permit issued by the supervisory authorities.
2. The Department shall lay down the time limit within which work must begin. It may extend this time limit where circumstances so warrant.

Section 18

Implementation of the project

The construction licence holder must prepare a comprehensive dossier on the technical equipment installed and on the checks and controls carried out.

Part 3 Operation

Section 19

Operating licence regime

No one may operate a nuclear power plant without an operating licence issued by the Department.

Section 20

Conditions for granting operating licences

1. An operating licence shall be granted if:
 - a. the applicant is the owner of the installation;
 - b. the conditions laid down in the general licence and construction licence have been complied with;
 - c. the protection of man and the environment is ensured;
 - d. the planned installation and operation meet the requirements of nuclear security and safety;
 - e. the requirements as regards personnel and organisation are met;
 - f. measures to ensure quality have been taken for all the activities carried out by the enterprise;
 - g. emergency protective measures have been taken;
 - h. the insurance cover required under the Act of 18 March 1983 on Nuclear Third Party Liability⁶ exists.
2. The operating licence may be granted at the same time as the construction licence if it is possible, at that stage, to judge that the conditions necessary for safe operation will be met.
3. With the permission of the Department, the owner of a nuclear reactor may store nuclear materials in his installation before the operating licence has been granted to him. Sections 20 to 24 shall apply by analogy.

Section 21

Terms of operating licences

1. The operating licence shall indicate:
 - a. the licence holder;
 - b. the authorised power of the reactor or capacity of the installation;
 - c. the limits of the release of radioactive substances into the environment;

6. RS 732.44.

- d. surveillance measures in the vicinity;
 - e. the security, safety and emergency protective measures the licence holder must take during operation;
 - f. the stages of commissioning, which may not begin until the supervisory authorities have issued the relevant permit.
2. Operating licences may be limited in time.

Section 22

General obligations of operating licence holders

1. Operating licence holders shall be responsible for the security of the nuclear installation and its operation.
2. To this end, they must in particular:
 - a. always give the required priority to nuclear security during operation, and must in particular comply with the operating limits and conditions imposed upon them;
 - b. set up a suitable organisation and recruit a sufficient number of specialised staff; the Federal Council shall lay down the minimum requirements and regulate the training of specialised staff;
 - c. take the measures required to maintain the installation in a proper condition;
 - d. throughout the lifetime of the installation, carry out systematic security and safety assessments as well as subsequent controls;
 - e. in the case of a nuclear power plant, carry out regular detailed safety checks;
 - f. regularly inform the supervisory authorities about the condition of the installation and its functioning, and communicate to them without delay any occurrences subject to notification;
 - g. re-equip the installation insofar as experience and the state of re-equipment technology so require, and beyond this if that helps to reduce further the risk and insofar as it is appropriate;
 - h. keep track of scientific and technical developments and the experience of the operators of comparable installations;
 - i. keep a comprehensive file on the technical equipment and on operations, and where necessary adjust the security and safety reports;
 - j. apply measures to ensure the quality of all the activities carried out in the enterprise;

- k. keep the decommissioning plan, or the observation phase project and the plan to close the installation, up to date.
3. The Federal Council shall lay down the criteria obliging the licence holder to take his installation temporarily out of service and to proceed with re-equipment.

Section 23

Surveillance team

1. The Department may require an operating licence holder to recruit a surveillance team including armed guards, whose task will be to protect the nuclear installation against any attack or intrusion.
2. The Federal Council shall lay down the requirements which the surveillance team has to meet and specify its tasks and prerogatives after consulting the cantons.
3. The canton in which the installation is situated shall regulate the training of the surveillance team in collaboration with the competent federal service.

Section 24

Reliability tests

1. Persons carrying out key functions for nuclear security and the safety of the nuclear installation must submit themselves periodically to a reliability test.
2. This test may involve the processing of sensitive data on the health and mental state of such persons as well as data about their lifestyle which are important for security; a file may be made up on this topic.
3. These personal data may be communicated to the owner of the nuclear installation and to the supervisory authority.
4. The Federal Council shall designate which persons must submit themselves to reliability tests, and specify the procedure. It shall designate the service responsible for this procedure, for processing the data and for constituting a data bank.

Section 25

Measures to be taken in the event of extraordinary circumstances

In the event of extraordinary circumstances, the Federal Council may order the preventive closedown of nuclear power plants.

Part 4
Decommissioning

Section 26

Obligations related to decommissioning

1. The owner of an installation must decommission his installation:
 - a. when he withdraws it definitively from service;
 - b. when no operating licence has been granted to him, when it has been withdrawn or when it has lapsed in accordance with Section 68(1)a or b, and the Department has ordered it to be decommissioned.
2. He must in particular:
 - a. meet the requirements of nuclear security and safety;
 - b. transfer the nuclear materials to another nuclear installation;
 - c. decontaminate the radioactive parts or treat them as radioactive waste;
 - d. dispose of the radioactive waste;
 - e. ensure that the installation is guarded until all sources of nuclear risk have been eliminated.

Section 27

Decommissioning project

1. The owner of the installation must submit a decommissioning project to the supervisory authorities who then set a deadline.
2. The project shall set out:
 - a. the phases and timetable of the work;
 - b. the successive steps of dismantling and demolition;
 - c. protective measures;
 - d. needs in terms of personnel and organisation;
 - e. arrangements for disposing of the radioactive waste;
 - f. the total cost as well as a guarantee of financing by the operating company.

Section 28

Decommissioning decision

The Department shall order the decommissioning work, specifying what work requires a permit from the supervisory authorities.

Section 29

End of decommissioning

1. Once decommissioning has been accomplished in accordance with the regulations, the Department shall issue a finding that the installation no longer represents a source of radiological risk and that it accordingly is no longer governed by the legislation on nuclear energy.
2. The winding up of the company responsible for decommissioning shall be subject to the approval of the Department.

Chapter 5

RADIOACTIVE WASTE

Part 1 General

Section 30

Principles

1. Radioactive substances must be handled in such a way as to produce the least radioactive waste possible.
2. Radioactive waste produced in Switzerland must in principle be disposed of in Switzerland.
3. Radioactive waste must be disposed of in such a way that the lasting safety of man and the environment is ensured.

Section 31

Disposal obligation

1. Whoever operates or decommissions a nuclear installation shall be obliged to dispose, in a safe manner and at his expense, of the radioactive waste produced by it. The essential preparatory work, such as research and geological studies, as well as the preparation in good time of a deep geological repository, form an integral part of the obligation.
2. The disposal obligation shall be fulfilled when:
 - a. the waste has been placed in a deep geological repository and the financial resources required for the surveillance phase and closure have been ensured;
 - b. the waste has been transferred to a disposal facility abroad.
3. In the event of the transfer of the general licence for a nuclear power plant to a new operator [Section 66(2)], the old and the new operators shall be responsible for disposing of the operating waste and spent fuel elements produced until the transfer.
4. The winding up of the company responsible for disposal shall be submitted to the Department for approval.

Section 32

Waste management programme

1. Persons responsible for disposing of radioactive waste must prepare a waste management programme. This shall include a plan for financing up until the withdrawal from service of the nuclear installations. The Federal Council shall fix the time limit for setting up this programme.
2. The authority designated by the Federal Council shall examine the programme. The Department shall submit it to the Federal Council for approval.
3. The authority designated by the Federal Council shall ensure compliance with the programme.
4. Persons responsible for disposing of waste must regularly adapt the programme to changing circumstances.
5. The Federal Council shall regularly inform the Federal Assembly of the programme's progress.

Section 33

Disposal by the Confederation

1. The Confederation shall dispose of:
 - a. radioactive waste delivered in accordance with Section 27(1) of the RPA;⁷
 - b. other radioactive waste, paid for out of the management fund, if the person responsible fails to fulfil his obligations in this respect.
2. To this end, it may:
 - a. participate in geological studies or carry them out itself;
 - b. participate in the construction and operation of a waste facility, or construct and operate such a facility itself.

Section 34

Handling radioactive waste

1. Sections 6 to 11 shall apply by analogy to the handling of radioactive waste outside nuclear installations.
2. A licence to import radioactive waste from nuclear installations outside Switzerland but to be disposed of in Switzerland, may exceptionally be granted if the conditions laid down in Section 7 are met, and if:
 - a. Switzerland has, in an international Convention, approved the import of the radioactive waste for this purpose;
 - b. it has a suitable disposal facility, in line with current international science and technology;
 - c. the transit States have approved the transit;
 - d. the receiver has formally agreed with the sender, in agreement with the State of origin of the waste, that the sender will take it back if necessary.
3. A licence to export radioactive waste for conditioning shall be granted if the conditions laid down in Section 7 are met, and if:
 - a. the destination State has, in an international Convention, approved the import of radioactive waste for this purpose;

7. RS 814.50.

- b. it has a suitable disposal facility, in line with current international science and technology;
 - c. the transit States have approved the transit;
 - d. the sender has formally agreed with the receiver, in agreement with the authorities designated by the Federal Council, that he will take back the conditioned radioactive waste or that resulting from the conditioning and, if necessary, any radioactive waste not yet conditioned.
4. The export of radioactive waste for purposes of storage may exceptionally be authorised if the conditions laid down in paragraph 3, a to c are met and if, in addition, the sender and receiver have agreed by contract, in agreement with the authorities designated by the Federal Council, that the sender will take it back if necessary.

Part 2

Geological studies

Section 35

Regime and conditions for granting a licence

1. Geological studies carried out in a possible location region in order to gather information about the feasibility of constructing a deep geological repository shall be subject to a licence from the Department.
2. The Department shall grant such a licence if:
 - a. the planned studies are likely to provide the information which will make it possible subsequently to assess the safety of a deep geological repository without prejudicing the suitability of the site;
 - b. there is no other ground for refusing it under federal legislation, in particular as regards environmental protection, protection of nature and the countryside or territorial development.
3. The Federal Council may exclude from the licensing regime studies which involve only minor prejudice.

Section 36

Terms of licences

1. Licences to proceed with geological studies shall establish:
 - a. the outline of the studies, notably the approximate location and extent of the drilling and underground construction planned;
 - b. studies which may not be undertaken without a permit from the supervisory authorities;
 - c. the scale of the geological documentation.
2. Licences shall be limited in time.

Part 3

Particular provisions for deep geological repositories

Section 37

Licences to operate deep geological repositories

1. A licence to operate a deep geological repository shall be granted if the conditions laid down in Section 20(1) are met, and if:
 - a. the information gathered during construction confirms that the site is suitable;
 - b. it is reasonably feasible to recover the radioactive waste up until the closure of the deep geological repository.
2. The operating licence shall establish the definitive protection zone of the deep geological repository.
3. It shall lay down the requirements, in particular the activity limits of the waste to be placed therein. A permit from the supervisory authorities shall be required for the storage of each category of waste.

Section 38

Specific obligations of the holder of a licence to operate a deep geological repository

1. The Federal Council may require that the holder of a licence to operate a deep geological repository take charge of radioactive waste originating from Switzerland, in exchange for cost-price compensation, provided that such waste meets the conditions laid down in the operating licence.

2. Operating licence holders shall be obliged to maintain comprehensive records about the information gathered up until the conclusion of the observation phase and which is important for security, about the plans for the deep geological repository and about the inventory of the waste stored.
3. For as long as the deep geological repository is regulated by nuclear energy legislation, the operating company may not be wound up without the approval of the Department.

Section 39

Observation phase and closure of the deep geological repository

1. The owner of the deep geological repository must submit an updated project for the observation phase and a project for eventual closure:
 - a. when the disposal of the radioactive waste is completed;
 - b. when the operating licence has been withdrawn or ceased to be valid in accordance with Section 68(1)a or b and the Department has ordered the presentation of a project.
2. Once the observation phase is over, the Federal Council shall order work on closure if the lasting safety of man and the environment is assured.
3. After closure in accordance with the regulations, the Federal Council may order an additional surveillance period.
4. After closure or at the end of the additional surveillance period, the Federal Council shall declare that the deep geological repository is no longer regulated by nuclear energy legislation. The Confederation may take measures beyond this period, in particular measures to monitor the environment.

Section 40

Protection of deep geological repositories

1. The protection zone shall be the underground area in which any intervention might prejudice the security of the deep geological repository. The Federal Council shall lay down the criteria applicable to protection zones.
2. Anyone intending to conduct deep drilling, pierce an underground gallery, carry out mining operations or any other activities affecting a protection zone must apply for a licence from the authority designated by the Federal Council.
3. Once a general licence has been issued, the authority designated by the Federal Council shall declare, so that it can be entered in the property register, the provisional protection zone, as well as the definitive protection zone once the operating licence has been issued. The canton shall enter in the property register the buildings affected by the protection zone which are not already registered. Those which have not already been officially measured shall be measured for this

purpose (initial measurement or new measurement). The Federal Council shall regulate the arrangements for this.

4. The canton shall enter the protection zone in its development plan and its land-use plan.
5. If the deep geological repository is not built or not brought into service, the authority designated by the Federal Council shall abolish the provisional protection zone and invite the Land Registry Office to delete the relevant entry. The canton shall amend its development and land-use plans accordingly.
6. The Federal Council shall ensure that the documents relating to the deep geological repository, to waste placed therein and to the protection zone, as well as the information concerning them, are preserved. It may communicate information pertaining to them to other States or international organisations.
7. The Federal Council shall prescribe permanent marking for deep geological repositories.

Section 41

Communication and use of geological data

1. The unprocessed data and the results obtained from geological studies and the construction of deep geological repositories shall, at its request, be communicated to the Confederation free of charge.
2. The Federal Council shall regulate access to such data and their use. It shall ensure that the interests of the owners of geological data are protected.

Chapter 6

PROCEDURE AND SURVEILLANCE

Part 1 General licence

Section 42

Opening of the procedure

Applications for a general licence must be sent together with the necessary documents to the Federal Energy Office (the “Office”), which checks whether the file is complete and, if necessary, has it completed.

Section 43

Expertise and opinions

1. The Office shall commission the necessary expertise, relating in particular to:
 - a. protecting man and the environment;
 - b. disposing of the radioactive waste.
2. It shall invite the cantons and the specialised services of the Confederation to give an opinion on the application for a general licence and on the expertise, within three months. The other time limits laid down for the environmental impact study shall be maintained. If circumstances so warrant, the Office may extend this time limit.
3. The resolution of differences within the Federal Administration shall be regulated by Section 62*b* of the Act of 21 March 1997 on the Organisation of the Government and the Administration.⁸

Section 44

Participation of the canton in which the installation is to be located

The Department shall invite the canton in which the installation is to be located, as well as the cantons and States in the immediate proximity, to participate in preparing the draft decision to grant the general licence. The concerns of the canton in which the installation is to be located, as well as of the cantons and States in the immediate proximity, shall be taken into account inasmuch as they do not constrain the project in a disproportionate manner.

Section 45

Enquiry and publication

1. An enquiry must be opened for three months in respect of applications for a general licence, of the opinions of cantons and specialised services and of the expertise.
2. The enquiry must be published in the official bodies of the cantons and communes concerned and in the *Feuille fédérale* (Official Gazette).

8. RS 172.010.

Section 46

Objections and opposition

1. During the three months following the date of publication, anyone may submit in writing to the Office, duly reasoned objections to the granting of a general licence. The Office may extend this three-month time period upon reasoned request. Objections are recorded free of charge; no expenses are awarded.
2. Anyone qualifying as a party by virtue of the Federal Act of 20 December 1968 on Administrative Procedure (AP)⁹ may register his opposition with the Office within three months of the date of publication. Communes shall assert their interests by way of opposition. In addition, the provisions of the AP shall apply.
3. Parties domiciled abroad must elect a domicile in Switzerland to which notifications can be sent. Failing this, notifications might not be sent to them or be published in the *Feuille fédérale*.

Section 47

Opinions on objections and opposition

1. The Office shall invite the cantons, specialised services and authors of expertises to communicate to the Federal Council their opinions on the objections and opposition recorded.
2. The resolution of differences within the Federal Administration shall be regulated by Section 62b of the Act of 21 March 1997 on the Organisation of the Government and the Administration.¹⁰

Section 48

Decisions

1. The Federal Council shall decide what follow-up to give to an application for a general licence and to any objections and opposition.
2. It shall submit its decision to the Federal Assembly for approval.
3. If the Federal Council refuses to grant a general licence and the Federal Assembly does not approve this decision, it shall instruct the Federal Council to grant the general licence with any requirements decided by it and to submit to it a new decision for approval.
4. The decision of the Federal Assembly regarding the approval of a general licence shall be subject to referendum.

9. RS 172.021.

10. RS 172.010.

Part 2
Licence to construct a nuclear installation
and licence to proceed with geological studies

Section 49

General

1. The procedure for granting a licence to construct a nuclear installation or to proceed with geological studies shall be regulated by the provisions of the present Act, and subsidiarily by those of the AP¹¹ and the Federal Act of 20 June 1930 on Expropriation (FAE).¹²
2. The licence shall cover all the licences required under federal law.
3. No licence or plan under cantonal law shall be required. Cantonal law shall be taken into account inasmuch as it does not constrain the project in a disproportionate manner.
4. Before granting a licence, the Department shall consult the canton in which the installation is to be located. If the Department issues a licence contrary to the opinion of the canton, the latter shall have a right of appeal.
5. The service facilities and the areas required for the construction and operation of a nuclear installation shall also form part of the installation itself. Areas used to recycle or store materials arising from digging, excavation and demolition shall form part of deep geological repositories and must be included in the geological study when they are in the immediate vicinity of the planned installation and are of direct use to it.

Section 50

Opening of the procedure

Licensing applications, together with the required documents, must be sent to the Office which shall verify that the dossier is complete and, if necessary, have it completed.

Section 51

Right of expropriation

The applicant shall have a right of expropriation in order to:

- a. construct, operate and decommission a nuclear installation requiring a general licence;

11. RS 172.021.

12. RS 711.

- b. proceed with geological studies which require a licence;
- c. construct the service facilities and areas required for the projects referred to in a) and b);
- d. prepare sites for the temporary storage or recycling of digging, excavation and demolition materials which are located in the immediate vicinity of the planned installation and which are of direct use to it.

Section 52

Staking and models

1. Before the licence application enquiry, the applicant must mark out, with stakes, the changes that the future installation or planned studies will make on the site; if buildings are to be constructed, he shall build models.
2. Objections against the staking or construction of models must be sent to the Office without delay, and at the latest before expiry of the time limit for starting the enquiry.

Section 53

Consultation, publication and enquiry

1. The Office shall send the licence application to the cantons concerned and invite them to give their opinion within three months. If circumstances so warrant, it may extend this time limit.
2. The licensing application must be published in the official bodies of the cantons and communes concerned and in the *Feuille fédérale*, and shall be opened to an enquiry for 30 days.
3. The opening of the enquiry shall institute the expropriation ban referred to in Sections 42 to 44 of the FAE.¹³

Section 54

Personal opinion

In accordance with Section 31 of the FAE,¹⁴ the applicant must send to persons concerned, at the latest when the enquiry concerning the licence application begins, a personal opinion informing them about the expropriation rights.

13. RS 711.

14. RS 711.

Section 55

Opposition

1. Persons who qualify as a party under the AP¹⁵ or FAE¹⁶ may notify the Office of their opposition during the period of the enquiry. Any person who has not done so shall be excluded from the rest of the procedure.
2. All objections concerning expropriation and all claims for indemnity or compensation in kind must be submitted within the same time limit. Any opposition or claims notified subsequently under Sections 39 to 41 of the FAE must be sent to the Office.
3. Communes shall assert their rights by means of opposition.
4. Section 46(3) shall apply to parties domiciled abroad.

Section 56

Resolution of differences within the Federal Administration

The resolution of differences within the Federal Administration shall be regulated by Section 62*b* of the Act of 21 March 1997 on the Organisation of the Government and the Administration.¹⁷

Section 57

Decisions

When granting a licence, the Department shall also give a ruling on objections to expropriation.

Section 58

Assessment procedure, early possession

1. After completion of the licensing procedure, an assessment procedure is begun if necessary before the Assessment Commission, in accordance with the FAE.¹⁸ Only those claims which have been produced shall be taken into consideration; Section 38 of the FAE shall apply.

15. RS 172.021.

16. RS 711.

17. RS 172.010.

18. RS 711.

2. The Office shall send the approved plans, the expropriation plan, the table of expropriated rights and any claims which have been produced, to the Chairman of the Assessment Commission.
3. The Chairman of the Assessment Commission may authorise early possession when the licensing decision is enforceable. The expropriator shall be presumed to have suffered serious prejudice if he does not enjoy early possession. In addition, Section 76 of the FAE shall apply.

Section 59

Claims regarding expropriation relating to the protection zone

1. Where prejudice to property rights due to the establishment of a protection zone is equivalent to an expropriation, it shall be fully compensated. Compensation shall be calculated on the basis of the conditions prevailing at the time of the entry into force of the limitation on the property right.
2. Compensation shall be the responsibility of the possessor of the deep geological repository.
3. Persons suffering prejudice to their property rights must send their claims for compensation in writing to the possessor of the repository within five years of the definitive recording in the land registry [Section 40(3)]. If the claims are wholly or partially contested, Sections 57 to 75 of the FAE¹⁹ shall apply.
4. This procedure relates to stated claims only. Subsequent proceedings for prejudice to property rights shall be excluded.
5. Interest shall be paid on compensation as from the date when the prejudice to the property right takes effect.

Section 60

Participation of the cantons in disposing of digging, excavation or demolition materials

1. If the geological studies or the construction of a deep geological repository produce a considerable quantity of digging, excavation or demolition materials which can be neither recycled nor stored nearby, the canton concerned shall designate the sites required for their disposal.
2. If, at the time of the granting of the construction licence or the licence to proceed with geological studies, the canton concerned has not issued a permit or if the permit has not yet entered into force, the Department may designate a site for the storage of the materials and establish the requirements and conditions for its use. In such cases, the provisions of the present Part on procedure shall apply. The canton shall, within five years, designate the sites required for the disposal of the materials.

19. RS 711.

Part 3
**Licence to operate a nuclear installation, decommissioning
of a nuclear installation and closure of a deep geological repository**

Section 61

Licence to operate a nuclear installation

The procedure concerning licences to operate nuclear installations shall be governed by Sections 49(1) to (4), 50, and 53 to 59.

Section 62

Decommissioning of a nuclear installation

The procedure concerning the decommissioning of a nuclear installation shall be governed by Sections 49(1) to (4), 50 to 58, and 60.

Section 63

Closure of a deep geological repository

The procedure concerning the closure of a deep geological repository shall be governed by Sections 49(1) to (4), 50, 53 and 55.

Part 4
Other decisions, including implementation permits

Section 64

1. The AP²⁰ shall apply to the decisions based on the present Act other than those referred to in Parts 1 to 3.
2. Section 46(3) shall apply to parties domiciled abroad.
3. In the procedure for granting an implementation permit by the supervisory authorities, only the applicant shall qualify as a party.

20. RS 172.021.

Part 5
Modification, transfer, withdrawal and cessation of validity of decisions

Section 65

Modification

1. A modification of the general licence, using the granting procedure, shall be necessary:
 - a. to change the purpose or main lines of a nuclear installation subject to the general licensing regime; the decommissioning and closure of such an installation do not fall within the scope of this provision;
 - b. to renovate entirely a nuclear power plant with a view to extending its operating life significantly, notably by replacing the pressure vessel.
2. Any important difference in relation to the construction licence or the operating licence, the licence to proceed with geological studies or the decision on decommissioning or closure shall make it necessary to modify the licence or the decision, such modification being carried out in accordance with their respective granting procedures.
3. If the modifications do not differ significantly from the licence or decision within the meaning of paragraph 2, but may have an impact on security or nuclear safety, the operator must ask the supervisory authorities for an implementation permit.
4. Any other modification must be notified to the supervisory authorities.
5. In the event of doubt, it shall be the responsibility of:
 - a. the Federal Council to decide whether the general licence should be modified;
 - b. the Department to decide whether a licence or decision within the meaning of paragraph 2 should be modified;
 - c. the supervisory authorities to decide whether an implementation permit is required.

Section 66

Transfer

1. The authority which granted a licence may transfer it to a new operator provided he meets the conditions for granting the licence.
2. The general licence for a nuclear installation may be transferred if, in addition, the former operator has provided financing for the decommissioning of the installation and the disposal of the waste in proportion to the period during which he operated the installation.

3. The Federal Council shall decide on the transfer of a general licence. A prior opinion from the canton in which the installation is located shall be required.
4. The construction and operating licences are transferred along with the general licence. They cannot be transferred separately.
5. In the procedure for transferring a general licence, only the applicant and the former licence holder are parties. The provisions of the AP²¹ shall apply.
6. Licences to handle nuclear articles and radioactive waste may not be transferred.

Section 67

Withdrawal

1. The authority which granted a licence shall withdraw it:
 - a. if the conditions on which it was granted have not been, or are no longer, met;
 - b. if the licence holder, in spite of a reminder, has failed to meet a requirement or perform a task imposed upon him by a decision.
2. The Federal Council shall decide whether to withdraw a general licence.
3. The decision of the Federal Council shall be submitted to the Federal Assembly for approval.
4. Withdrawal of the general licence shall entail withdrawal of the construction and operating licences.
5. In the event of the withdrawal of a general licence, the provisions of the AP²² shall apply.

Section 68

Cessation of validity

1. A licence shall cease to be valid:
 - a. when the time limit has expired;
 - b. when the licence holder declares to the authority that he relinquishes it;
 - c. when the Department or, under Section 39 (4), the Federal Council, finds that the installation no longer falls within the scope of nuclear energy legislation.

21. RS 172.021.

22. RS 172.021.

2. A general licence shall cease to be valid if the application for a construction licence has not been made within the time limit laid down. A construction licence shall cease to be valid if the construction work has not begun within the time limit laid down.
3. The cessation of validity of a general licence shall mean that the construction and operating licences also cease to be valid.

Section 69

Continuation of certain licence conditions

1. Operating licence conditions necessary for the security of the installation, even after decommissioning, shall continue to be valid after the licence is withdrawn or ceases to be valid, and that up until work on decommissioning and closure has been ordered.
2. Paragraph 1 shall apply by analogy to the withdrawal or cessation of validity of a licence within the meaning of Section 20(3).

Part 6 Surveillance

Section 70

Supervisory authorities

1. The Federal Council shall designate the supervisory authorities.
2. No one may give technical instructions to the supervisory authorities, who are formally separate from the competent licensing authorities.

Section 71

Nuclear Installation Safety Commission

1. The Federal Council shall nominate a Nuclear Installation Safety Commission.
2. This Commission shall give advice to the Federal Council and the Department. It will, in particular, study fundamental nuclear safety issues, monitor the operation of nuclear installations and give its opinion on applications for nuclear installation licences.

Section 72

Tasks and powers of the supervisory authorities

1. The supervisory authorities shall examine projects submitted to them and ensure that licence holders and those in possession of nuclear articles fulfil their obligations under the present Act.
2. They shall order all measures, in line with the principle of proportionality, necessary to maintain nuclear security and safety.
3. In the event of imminent danger, they may order emergency measures diverging from the relevant licence or decision.
4. If necessary, they may sequester nuclear articles and radioactive waste and eliminate sources of risk at the expense of the person in possession of them.
5. They may call on cantonal and communal police forces and the investigatory services of the customs administration for assistance. If there are indications that the present Act has been breached, they may call on the Federal police services concerned for assistance. The customs service shall be responsible for border controls.
6. The supervisory authorities shall keep accounts of the nuclear materials and radioactive waste located in Swiss nuclear installations. Accounts shall also be kept of nuclear materials and radioactive waste abroad if they are in the possession of a Swiss licence holder. Accounts shall give comprehensive information about the use, processing and storage of such materials and waste.

Section 73

Obligation to provide information and documents, access

1. Any information or document enabling the supervisory authorities to judge the situation or carry out a control must be provided to them spontaneously or handed over on request if this is required for the enforcement of the present Act, its implementing provisions or decisions based on these.
2. The supervisory authorities shall be entitled to visit, without notice, the sites, buildings and installations of persons obliged to give information, as well as sites on which geological studies, within the meaning of Section 35, have been carried out, install monitoring equipment, affix seals, take samples of equipment and of soil, and consult files. They shall sequester any components needed in evidence.

Section 74

Informing the public

1. The competent authorities shall regularly inform the public of the state of nuclear installations and of the situation relating to nuclear articles and radioactive waste.
2. They shall inform the public of any particular occurrences.
3. Manufacturing and business confidentiality shall be respected.

Section 75

Protection of data

1. The licensing and supervisory authorities may process personal data within the limits of the present Act.
2. They may not process sensitive personal data relating to legal proceedings or administrative or criminal sanctions. They may process other sensitive personal data only if this is essential in a given case.
3. The electronic storage of data shall be allowed.

Part 7

Legal recourse

Section 76

An appeal may be brought before the Appeals Board of the Federal Department of Environment, Transport, Energy and Communication (DETEC) against decisions of the Department, the authorities designated by the Federal Council to grant licences, the supervisory authorities designated by the Federal Council and the administrative boards referred to in Section 81(2).

Chapter 7

FINANCING GUARANTEE FOR DECOMMISSIONING AND WASTE DISPOSAL

Section 77

Decommissioning Fund and Waste Disposal Fund

1. The Decommissioning Fund shall ensure the financing of the decommissioning and dismantling of nuclear installations withdrawn from service, and that of the disposal of the waste produced thereby (decommissioning costs).
2. The Waste Disposal Fund shall ensure the financing of the disposal of radioactive operating waste and of spent fuel assemblies, after withdrawal from service of nuclear installations (disposal costs).
3. The owners of nuclear installations shall contribute to the Decommissioning Fund and to the Waste Disposal Fund. The Federal Council may exempt the proprietors of installations with low decommissioning and disposal costs.

Section 78

Credit

1. Each contributor shall have a credit of an amount equal to that paid by him plus the income from the capital, minus expenses. This credit may not be sold, given or taken as security, nor form part of assets in bankruptcy.
2. If a contributor's credit exceeds the amount paid by the Fund, the surplus shall be paid back to him in the year following the closing of the accounts.
3. In the event of a bankrupt nuclear installation being taken over, the credit shall transfer to the new owner, who must then pay the contributions due by the bankrupt company.
4. If, following bankruptcy proceedings, a company is struck off the commercial register with the approval of the Department and if the installation is not taken over by another company, the contributions paid by it shall be returned to the Funds. They shall be used to finance the decommissioning of the installation and the disposal of the waste. The Federal Council shall decide how any monies left over should be attributed.

Section 79

Fund services

1. If a contributor's credit does not cover the costs, he must pay the shortfall.
2. If the contributor proves he is unable to pay this sum, the Decommissioning Fund or the Waste Disposal Fund shall make up the shortfall, using all the resources available. This shall apply also to the case provided for in Section 78(4).
3. The Waste Disposal Fund shall use the contributions to cover the cost of disposing of the radioactive waste for which the Confederation is responsible under Section 33(1)b. If the contributions do not suffice, all the Fund's available resources shall be used.

Section 80

Supplementary payments

1. If the payments by a Fund to a claimant exceed the amount of the credit, the claimant must reimburse the difference, plus interest calculated at the usual market rate.
2. If the claimant cannot make the reimbursement within the time limit laid down by the Federal Council, the other contributors and creditors of the Fund in question shall be obliged to pay the difference by making supplementary payments in proportion to their contributions.
3. The obligation to make supplementary payments shall also exist:
 - a. in the case provided for in Section 78(4), if the monies returned to the Fund are not sufficient to cover the decommissioning or waste disposal costs;
 - b. in the case provided for in Section 79(3), if the person responsible for disposing of the waste does not pay the difference back to the Fund.
4. If covering the difference represents an unbearable economic burden for the operators obliged to make supplementary payments, the Federal Assembly shall decide whether the Confederation will help pay for the costs which are not covered and if so, to what extent.

Section 81

Legal form and organisation of the Funds

1. The Funds, which have legal personality, shall be supervised by the Confederation.
2. The Federal Council shall nominate for each of them an administrative board which shall act as the directing body. The Boards shall establish the amount of the contributions paid by each contributor to the Funds, and the amount of the payments made by the latter.

3. If necessary, the Funds may grant loans, and the Confederation may grant them loans; these shall be remunerated on the basis of usual market conditions.
4. The Funds shall be exempt from all direct Federal, cantonal and commune taxes.
5. The Federal Council shall lay down the necessary procedures; it shall establish the bases for calculating contributions and the main options for investing this money. It may merge the Funds.

Section 82

Guarantee of the financing of other waste disposal operations

1. To finance the waste disposal for which they are responsible before the withdrawal from service of nuclear installations, the owners of such installations shall make provisions in application of Article 669 of the Code of Obligations,²³ on the basis of the costs calculated by the Waste Disposal Fund.
2. In addition, they must:
 - a. submit the plan for making provision for risks and costs to the authority designated by the Federal Council for approval;
 - b. designate the assets dedicated to covering disposal costs, for an amount corresponding to the provision for risks and costs;
 - c. submit to the authority designated by the Federal Council the report by the review body certifying conformity with the plan for making provision for risks and costs and the exclusive allocation of such provision.
3. The review body shall check the financing and long-term investment plans and consider whether the amounts available are sufficient to cover the cost of waste disposal before the withdrawal from service of nuclear installations and whether reserves have been constituted in accordance with the plan.

23. RS 220.

Chapter 8

EMOLUMENTS, COMPENSATION AND INCENTIVES

Section 83

Emoluments and surveillance taxes received by the Confederation

1. The Federal authorities shall receive emoluments from applicants and possessors of nuclear installations, nuclear articles and radioactive waste, and shall require them to reimburse expenses arising in particular from:
 - a. the granting, transfer, modification, adaptation or withdrawal of a licence;
 - b. the establishment of an expertise;
 - c. surveillance activities;
 - d. research and development which they carry out or commission in relation to their obligation of surveillance of a given installation.
2. In addition, they shall charge the possessors of nuclear installations an annual surveillance tax to cover the costs of surveillance not relating to a specific installation. This tax shall be calculated on the basis of the average cost of the five preceding years; it shall be divided between nuclear installations in proportion to the emoluments due by those possessing them.
3. The Federal Council shall regulate the arrangements.

Section 84

Emoluments received by cantons

The cantons may receive emoluments from those possessing nuclear installations, nuclear articles and radioactive waste, and require them to reimburse the expenses arising in particular from:

- a. the planning and implementation of emergency protection measures;
- b. the protection by the police of nuclear installations and the transport of nuclear materials and radioactive waste;
- c. training surveillance teams;
- d. officially measuring buildings in the protection zone, registering them and entering them on the land register.

Section 85

Compensation for infringing cantonal sovereignty

1. If a licence holder exercises sovereign cantonal rights, whether by reason of the geological studies referred to in Section 35, the construction of a deep geological repository or the establishment of a protection zone, he must fully compensate the canton concerned.
2. Full compensation within the meaning of paragraph 1 must also be paid when the construction of a nuclear power plant involves using cantonal water rights.
3. In the event of a dispute, the Assessment Commission shall establish the compensation amount using the procedure laid down in Sections 57 to 75 and 77 to 86 of the FAE.²⁴

Section 86

Encouraging research and the training of experts

1. The Confederation may encourage applied research on the peaceful use of nuclear energy, in particular on the security of nuclear installations and the disposal of radioactive waste.
2. It may support the training of experts or train them itself.
3. As a general rule, financial assistance shall be given to an individual only if he pays at least 50% of the costs.

Section 87

Contributions paid to international organisations and participation in international projects

The Confederation may pay contributions to international organisations working in the field of the peaceful use of nuclear energy, notably to promote the non-proliferation of nuclear weapons, security, health and the environment, and participate in international projects.

24. RS 711.

Chapter 9

PENAL PROVISIONS

Section 88

Breaches of security and safety measures

1. A punishment of imprisonment or a fine of up to 500 000 Swiss francs shall be imposed on anyone who intentionally:
 - a. manufactures or delivers defective components intended for a nuclear power plant and which are decisive for nuclear security or safety;
 - b. in a nuclear installation, damages, removes, renders unusable, operates in breach of the requirements or withdraws from service, fails to install or to render workable, a device decisive for nuclear security or safety;
 - c. in handling nuclear materials or radioactive waste, fails to take the protective measures which are decisive for nuclear security or safety.
2. Any person knowingly endangering the life or health of a large number of persons or property of considerable value belonging to third parties shall be punished by imprisonment. He may also be sentenced to a fine of up to 500 000 Swiss francs.
3. If the author of an offence acted negligently, he shall be punished by imprisonment or a fine of up to 100 000 Swiss francs.

Section 89

Offences relating to nuclear articles or radioactive waste

1. A punishment of imprisonment or a fine of up to one million Swiss francs shall be imposed on anyone who intentionally:
 - a. without a permit, handles nuclear articles or radioactive waste, or fails to comply with the conditions and obligations laid down in the licence;
 - b. in an application, gives false or incomplete information which is decisive for the granting of the licence, or who uses an application drafted by a third party;
 - c. notifies in an inexact manner nuclear articles or radioactive waste, or does not notify them upon import, export or transit;

- d. personally or through the intermediary of another person, delivers, transfers or procures for somebody else, nuclear articles or radioactive waste to or from a final purchaser or destination other than that mentioned in the licence;
 - e. has nuclear articles or radioactive waste delivered to a person whom he knows or must assume will transfer them, directly or indirectly, to a final purchaser not licensed to receive them;
 - f. participates in arrangements to pay for the trafficking of nuclear articles or radioactive waste, or serves as an intermediary in the financing of such trafficking.
2. The punishment in serious cases shall be imprisonment for up to ten years. A fine of up to five million Swiss francs may also be imposed.
 3. If the author of an offence acts negligently, he shall be punished by imprisonment of up to six months and a fine of up to 100 000 Swiss francs.

Section 90

Breach of the obligations imposed by a nuclear installation licence

1. A punishment of imprisonment or a fine of up to 500 000 Swiss francs shall be imposed on anyone who intentionally:
 - a. constructs or operates a nuclear installation without a licence;
 - b. is in breach of the obligations relating to the licence to operate a nuclear installation (Sections 22 and 38), decommissioning (Section 26), the disposal of radioactive waste or the closure of a deep geological repository [Sections 31 and 39(1) and (2)];
 - c. carries out, without permission, measures prejudicing the protection zone of a deep geological repository;
 - d. carries out a measure requiring a permit without having obtained it.
2. If the author of an offence acted negligently, he shall be punished by imprisonment of up to six months or a fine of up to 100 000 Swiss francs.
3. Anyone who, intentionally or negligently, carries out, without a licence, other measures subject to the licensing regime under the present Act or an implementing Order, shall be punished by imprisonment of up to six months or a fine of up to 100 000 Swiss francs.

Section 91

Breach of confidentiality

1. A punishment of imprisonment or a fine of up to 500 000 Swiss francs shall be imposed on anyone who intentionally:

- a. tries to find out about secret facts or arrangements relating to the protection of nuclear installations, nuclear materials or radioactive waste against attacks by third parties or against the consequences of war, in order to reveal them or make them accessible to unauthorised persons or to use them himself in an illegal manner;
 - b. reveals or makes accessible such facts or arrangements to unauthorised persons.
2. If the author of the offence acted negligently, he shall be punished by imprisonment of up to six months or a fine of up to 100 000 Swiss francs.

Section 92

Relinquishing possession

1. Anyone who intentionally relinquishes the possession of nuclear materials or radioactive waste without being so authorised, shall be punished by imprisonment or a fine of up to 100,000 Swiss francs.
2. If the author of the offence acted negligently, he shall be punished by imprisonment of up to six months or a fine.

Section 93

Breaches

1. A punishment of arrest or a fine of up to 100 000 Swiss francs shall be imposed on anyone who intentionally:
 - a. refuses to give information, supply documents, grant access to the premises of the enterprise or allow consultation of documents in accordance with Section 73, or who gives false information with regard thereto;
 - b. breaches the obligation to notify, carry out a control or keep accounts, or to constitute a file as required under the present Act or an implementing Order;
 - c. breaches in some other way the present Act, one of its implementing provisions the breach of which is declared punishable, or a decision referring to the present Section, but whose behaviour is not punishable on the grounds of some other offence.
2. Attempt and complicity shall be punishable.
3. If the offender acted negligently, he shall be punished by a fine of up to 40 000 Swiss francs.

Section 94

Offences committed in enterprises

Section 6 of the Federal Act of 22 March 1974 on Penal Administrative Law²⁵ shall apply to the offences mentioned in the present Act.

Section 95

Offences committed abroad, participation in such offences

1. Swiss citizens who commit abroad a crime or offence within the meaning of Sections 89 and 91 shall be punishable even if no proceedings are taken against their actions in the place where they were carried out.
2. Swiss penal law shall apply to anyone who participates in Switzerland in a punishable act committed abroad if the main act is punishable under Swiss law, irrespective of the legislation of the State in which it was committed.

Section 96

Prescription

The prescriptive period for offences under the present Act shall be five years. The prescriptive period for criminal proceedings shall in any event be half the normal period.

Section 97

Confiscation of objects

Irrespective of whether a person is punishable or not, the court shall pronounce the confiscation of the objects concerned if no guarantee can be given that they can be used subsequently within the law. The Confederation shall become the owner of objects confiscated as well as of any proceeds from their sale.

Section 98

Confiscation of securities and compensatory credits

The Confederation shall become the owner of confiscated securities or compensatory credits.

25. RS 313.0.

Section 99

Relationship with the Penal Code

In addition, confiscation within the meaning of Sections 97 and 98 of the present Act shall be regulated by Articles 58 and 59 of the Penal Code.²⁶

Section 100

Jurisdiction, obligation to denounce

1. The Federal criminal courts shall have jurisdiction to pursue and sentence the crimes and offences defined in Sections 88 to 92.
2. The breaches referred to in Section 93 shall be pursued and sentenced by the Office. The procedure shall be governed by the Act of 22 March 1974 on Penal Administrative Law.²⁷
3. The authorities responsible for granting licences, the supervisory authorities, the police services of cantons and communes as well as the customs services shall be obliged to inform the Confederation's Public Minister of any offences under the present Act which they discover or are informed about in the course of their duties.

Chapter 10

FINAL PROVISIONS

Section 101

Implementation

1. The Federal Council shall adopt implementing provisions.
2. It may delegate to the Department or subordinate services the power to lay down requirements, having regard to their scope.
3. The authority designated by the Federal Council shall maintain a central service responsible for gathering, processing and communicating the information required to implement the present Act, to prevent offences and punish those which have been committed.
4. The authorities granting licences and the supervisory authorities shall be bound by professional secrecy and shall take all necessary precautions to prevent economic espionage in their sector.

26. RS 311.0.

27. RS 313.0.

5. The Federal Council may involve the cantons in implementing the present Act.
6. Within the limits of its powers, the implementing authority may call on third parties, in particular to conduct examinations and controls.

Section 102

Mutual administrative assistance in Switzerland

The competent Federal services and the cantonal and communal police services may communicate to each other and to the supervisory authorities the information necessary for implementing the present Act.

Section 103

Mutual administrative assistance involving foreign authorities

1. The Federal bodies competent in matters of implementation, control, preventing offences and conducting criminal proceedings may collaborate with the competent foreign authorities and with international organisations and bodies, and co-ordinate their investigations, inasmuch as the implementation of the present Act or the corresponding foreign legislation so requires and provided the foreign authorities, organisations and bodies in question are bound by professional secrecy or an equivalent obligation of discretion.
2. They may in particular request the foreign authorities and international organisations and bodies to communicate necessary information to them. In order to obtain such information, they may supply them with data on:
 - a. the nature, quantity, place of destination and of use, use and the person receiving nuclear articles or radioactive waste;
 - b. persons participating in the manufacture, supply, brokerage or financing of nuclear articles or radioactive waste;
 - c. the financial arrangements for the operation;
 - d. accidents and other occurrences involving security.
3. If the foreign State accords reciprocity, they may, on their own initiative or on request, communicate to it the data mentioned in paragraph 2 if the foreign authority gives an assurance that:
 - a. such data will be used only for purposes in compliance with the present Act; and
 - b. they will only be used in criminal proceedings if they have been obtained subsequently in accordance with the provisions relating to international judicial mutual assistance.

4. They may also communicate the data in question to international organisations or bodies if the conditions laid down in paragraph 3 are met, notwithstanding the reciprocity requirement.
5. The provisions relating to international judicial mutual assistance in criminal matters shall apply.

Section 104

International Conventions

1. The Federal Council may conclude bilateral international Conventions on:
 - a. the handling of nuclear articles and radioactive waste;
 - b. safety and control measures for nuclear articles and radioactive waste;
 - c. information exchange on the construction and operation of nuclear installations.
2. Within the limit of the appropriations voted, it may conclude agreements on the participation of Switzerland in international projects within the meaning of Section 87.

Section 105

Repeal and amendments of the law in force

The repeal and amendments of the law in force are regulated in the annex hereto.

Section 106

Transitional provisions

1. Nuclear installations in service which are subject to a general licence under the present Act may continue to be operated without such licence for as long as no modification is made which would require the modification of the general licence provided for in Section 65(1).
2. The owners of nuclear power plants in service must prove within ten years that the disposal of their radioactive waste is ensured, if the Federal Council does not consider that this has already been proved. If circumstances so warrant, the Federal Council may extend this time limit by five years.
3. A licence to operate an existing nuclear power plant may be transferred to a new operator without a general licence. Sections 13(2), 31(3) and 66(2) shall apply by analogy.
4. Spent fuel assemblies may not be exported for reprocessing for a period of ten years as from 1 July 2006. During this time, they must be disposed of as radioactive waste. The Federal Council may make exceptions to this for research purposes, Section 34(2) and (3) applying by

analogy. The Federal Assembly may, by simple Federal Order, extend this time limit by up to ten years.

Section 107

Referendum and entry into force

1. The present Act shall be subject to referendum.
2. The Federal Council shall publish the present Act in the *feuille fédérale* if the “Moratorium plus” and “Phase-out Nuclear” popular initiatives are withdrawn or rejected.
3. The Federal Council shall establish the date of entry into force.

Council of States, 21 March 2003
President: Gian-Reto Plattner
Secretary: Christopher Lanz

National Council, 21 March 2003
President: Yves Christen
Secretary: Christophe Thomann

Date of publication: 27 May 2003²⁸
Referendum time limit: 4 September 2003

28. FF 2003 3242.

Annex

(Section 105)

Repeal and amendments of the law in force

I

The following shall be repealed:

1. The Act of 23 December 1959 on Atomic Energy²⁹
2. The Federal Order of 6 October 1978 concerning the Act on Atomic Energy³⁰

II

The following legislation shall be amended as follows:

1. FEDERAL ACT ON JUDICIAL ORGANISATION OF 16 DECEMBER 1943³¹

Section 99(1)e

1. There shall be no right of administrative appeal against:
 - e. The granting or refusal of licences to construct or operate technical installations or vehicles, except for air navigation installations and nuclear installations;

Section 100(1)u

1. In addition, there shall be no right of administrative appeal against:
 - u. In the field of nuclear energy:
 1. decisions relating to the general licence for nuclear installations,
 2. decisions relating to the closure of deep geological repositories,

29. RO 1960 541 585, 1983 1886, 1987 544, 1993 901, 1994 1933, 1995 4954.

30. RO 1979 816, 1983 794, 1990 1646, 2001 283.

31. RS 173.110.

3. decisions relating to the requirement of an implementation permit or to the modification of a licence or a decision,
4. decisions relating to the approval of a plan making provision for the disposal costs incurred before the decommissioning of a nuclear installation,
5. implementation permits.

2. PENAL CODE³²

Article 226^{bis33}

- | | |
|--|---|
| Risks attributable to nuclear energy, radioactivity and ionising radiation | <ol style="list-style-type: none"> 1. Any person intentionally endangering the life or health of persons or property of considerable value belonging to third parties by using nuclear energy, radioactive materials or ionising radiation shall be punished by <i>réclusion</i> (deprivation of liberty with an obligation to work) or imprisonment and by a fine of up to 500 000 Swiss francs. 2. If the author acted negligently, he shall be punished by imprisonment of up to five years and by a fine of up to 500 000 Swiss francs. |
|--|---|

32. RS 311.0

33. Upon the entry into force of the amendment of 13 December 2002 of the Penal Code (FF 2002 7658), Article 226^{bis} shall read as follows:

Article 226^{bis}

- | | |
|--|---|
| Risks attributable to nuclear energy, radioactivity and ionising radiation | <ol style="list-style-type: none"> 1. Any person intentionally endangering the life or health of persons or property of considerable value belonging to third parties by using nuclear energy, radioactive materials or ionising radiation shall be punished by being deprived of his liberty or by a fine. In the event of deprivation of liberty, a fine shall also be pronounced. 2. If the author acted negligently, he shall be punished by deprivation of liberty for up to five years or by a fine. In the event of deprivation of liberty, a fine shall also be pronounced. |
|--|---|

Article 226^{ter34}

Punishable preparatory measures

1. Any person who systematically prepares, from a technical or organisational point of view, measures endangering the life or health of persons or property of considerable value belonging to third parties by using nuclear energy, radioactive materials or ionising radiation, shall be punished by *réclusion* of up to five years or imprisonment, and by a fine of up to 100 000 Swiss francs.
2. Any person who has produced radioactive substances, constructed installations or manufactured devices or objects containing them or which are capable of emitting ionising radiation, has obtained such, transferred them to third parties, received them from a third party, kept, hidden or transported them, and who knew or should have assumed that they were intended for illegal use, shall be punished by *réclusion* of up to ten years or imprisonment, and by a fine of up to 100 000 Swiss francs.
3. Any person who has supplied a third party with information on how to produce such substances or make such installations, devices or objects, and who knew or should have assumed that they were intended for illegal use, shall be punished by *réclusion* of up to five years or imprisonment, and by a fine of up to 100 000 Swiss francs.

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34. Upon the entry into force of the amendment of 13 December 2002 of the Penal Code (FF 2002 7658), Article 226^{ter} shall read as follows:

Article 226^{ter}

Punishable preparatory measures

1. Any person who systematically prepares, from a technical or organisational point of view, measures endangering the life or health of persons or property of considerable value belonging to third parties by using nuclear energy, radioactive materials or ionising radiation, shall be punished by being deprived of his liberty for up to five years or by a fine. In the event of deprivation of liberty, a fine shall also be pronounced.
2. Any person who has produced radioactive substances, constructed installations or manufactured devices or objects containing them or which are capable of emitting ionising radiation, has obtained such, transferred them to third parties, received them from a third party, kept, hidden or transported them, who knew or should have assumed that they were intended for illegal use, shall be punished by being deprived of his liberty for up to ten years or by a fine. In the event of deprivation of liberty, a fine shall also be pronounced.
3. Any person who has supplied a third party with information on how to produce such substances or make such installations, devices or objects, and who knew or should have assumed that they were intended for illegal use, shall be punished by being deprived of his liberty for up to five years or by a fine. In the event of deprivation of liberty, a fine shall also be pronounced.

*Article 340, Chapter 1, paragraph 4*³⁵

1. The following shall be subject to Federal jurisdiction:

The crimes and offences laid down in Articles 224 to 226^{ter};

3. ACT OF 18 MARCH 1983 ON NUCLEAR THIRD PARTY LIABILITY³⁶

Section 1(1)c to e

In addition, the Confederation shall, insofar as the injured party has not caused the damage intentionally, cover nuclear damage, out of general funds and up to the amount specified in Section 12:

- c. where the damage is caused by a deep geological repository which is no longer governed by nuclear energy legislation;
- d. *current paragraph c)*
- e. *current paragraph d)*

4. ACT OF 22 MARCH 1991 ON RADIOLOGICAL PROTECTION³⁷

Section 2(2) and (3)

2. Handling shall include producing, manufacturing, processing, marketing, installation, use, storage, transportation, disposal, import, export, transit and any other form of transferral to a third party.
3. Sections 28 to 38 shall not be applicable to activities requiring a licence under the terms of the Act of 21 March 2003 on Nuclear Energy.³⁸

35. Upon entry into force of the amendment of 13 December 2002 of the Penal Code (FF 2002 7658), Article 336(1)d shall read as follows:

Article 336(1 d)

1. The following shall be subject to Federal jurisdiction:
 - d. the crimes and offences laid down in Articles 224 to 226^{ter};

36. RS 732.44.

37. RS 814.50.

38. RS ...; RO ... (FF 2003 3242).

Section 3(a)

In addition to the provisions of this Act, the following in particular shall also apply:

- a. the Act of 21 March 2003 on Nuclear Energy:³⁹ to nuclear installations, nuclear articles and radioactive waste;

Section 25(3) and (4)

3. Radioactive waste originating in Switzerland shall be disposed of domestically. An export licence for the disposal of radioactive waste may exceptionally be issued where:
 - a. the destination State has, in an international Convention, approved the import of the radioactive waste in question for this purpose;
 - b. the destination State has a suitable nuclear installation, in line with current international science and technology;
 - c. the transit States have approved the transit;
 - d. the sender has formerly agreed with the receiver, in agreement with the authority designated by the Federal Council, that he will take back the radioactive waste if necessary.
4. A licence to import radioactive waste not originating in Switzerland but destined for disposal there, may exceptionally be issued where:
 - a. Switzerland has, in an international Convention, approved the import of the radioactive waste for this purpose;
 - b. Switzerland has a suitable nuclear installation, in line with current international science and technology;
 - c. the transit States have approved the transit;
 - d. the receiver has formally agreed with the sender, in agreement with the State of origin, that the sender will take back the radioactive waste if necessary.

Section 26(3)

3. Such radioactive waste as is not permitted to be released into the environment shall be retained in a suitable manner or safely enclosed and, as appropriate, solidified, collected and stored in a place approved by the supervisory authority whilst awaiting delivery or disposal.

39. RS ...; RO ... (FF 2003 3242).

Section 27, Title and paragraphs 2 to 4

Delivery

2. Such persons shall pay the costs of disposal.
3. The Federal Council shall lay down rules for the processing of waste in the installation and its delivery.
4. Whenever it is not possible, for reasons of radiological protection, to deliver or dispose of waste immediately, it shall be placed in supervised interim storage.

Section 30

Licensing authorities

The Federal Council shall designate the licensing authorities.

Section 43

Unjustified exposure of third parties to radiation

1. Anyone who intentionally subjects a third party to manifestly unjustified radiation exposure shall be punished by imprisonment or a fine of up to 100 000 Swiss francs.
2. Anyone who intentionally subjects a third party to manifestly unjustified radiation exposure with a view to harming his health shall be punished by *réclusion* or imprisonment.
3. Anyone who intentionally subjects a third party to manifestly unjustified radiation exposure shall be punished by imprisonment or a fine.

Section 43a

**Illegal handling of radioactive substances;
unjustified exposure of property to radiation**

1. A prison sentence or a fine of up to 100 000 Swiss francs shall be imposed on anyone who intentionally:
 - a. stores, disposes of or releases into the environment, radioactive substances in contravention of the regulations;
 - b. subjects property of great value belonging to third parties to manifestly unjustified radiation exposure with a view to prejudicing their usefulness.

2. If the guilty party acted negligently, the sanction shall be imprisonment of up to six months or a fine.

Section 44(1)a

1. Sequestration or a fine shall be imposed on anyone who intentionally or negligently:
 - a. carries out activities requiring a licence without being in possession of a licence, obtains a licence illegally or fails to comply with the conditions or requirements linked to a licence;

Section 46(1)

1. The offences referred to in Sections 43 and 43a shall be subject to federal criminal jurisdiction.

Section 47(2) and (3)

2. It may delegate to the competent Department or subordinate services, the power to lay down radiological protection requirements for the activities for which the Act of 21 March 2003 on Nuclear Energy⁴⁰ requires a licence. It shall take into account the scope of such requirements.
3. *current paragraph 2*

5. ACT OF 2 SEPTEMBER 1999 REGULATING VALUE ADDED TAX⁴¹

Section 29^{bis}

End of tax liability of the owners of nuclear installations

The owners of nuclear installations shall remain liable to value added tax after such installations have been withdrawn from service up until completion of the decommissioning work and disposal of the waste; they shall be entitled to deduct the withholding tax for the duration of the decommissioning work and disposal of the waste. This deduction shall apply to all the expenses relating to decommissioning, demolition and waste disposal.

40. RS ...; RO ... (FF 2003 3242).

41. RS 641.20.

6. ENERGY ACT OF 26 JUNE 1998⁴²

Section 5^{bis}

Distinctive electricity marking

In order to protect final users, the Federal Council may lay down provisions concerning distinctive markings, notably as to the type of production and the origin of the electricity. It may introduce a distinctive marking requirement.

Section 7(7)

7. The extra expense incurred by electricity distribution firms as a result of using electricity supplied by independent producers shall be financed by the operators of the transmission network by means of a supplement applied to the costs of providing high-voltage networks.

Section 28(1)a^{bis}

1. A sentence of imprisonment or a fine of up to 40 000 Swiss francs shall be imposed on anyone who intentionally:

a^{bis} infringes the provisions relating to distinctive electricity marking (Section 5^{bis});

42. RS 730.0.