

Government Decree (734/2008)

on the Security in the Use of Nuclear Energy

Issued in Helsinki 27 November 2008

According to the Government decision made on the submission by the Ministry of Employment and the Economy, the following provisions are issued under Section 7 q of the Nuclear Energy Act (990/1987), issued on 11 December 1987, in the form laid down in the Act 342/2008:

Chapter 1

Scope of application and definitions

Section 1

Scope of application

This Decree lays down provisions on the security related to the use of nuclear energy. The decree concerns the security of nuclear facilities, and, as necessary, the security of nuclear materials and nuclear waste, and the transportation thereof.

Section 2

Definitions

For the purposes of this Decree:

- 1) *unlawful action* shall refer to a deliberate activity or measure aimed at endangering the safety of a nuclear power plant or the integrity of nuclear material or nuclear waste, or posing some other kind of a direct or indirect threat to nuclear or radiation safety, or the other negligent infliction of damage on a nuclear facility, nuclear material or nuclear waste;
- 2) *threat* shall refer to a situation during which unlawful action against a nuclear power plant, nuclear material or nuclear waste is ascertained, or reason to suspect such is found;
- 3) *risk analysis* shall refer to examinations, performed using systematic measures, in order to identify threats, problems and vulnerabilities, surveying the causes and consequences thereof, and assessing the related risks;
- 4) *dangerous object* shall refer to such an object, copy of an object or substance that may endanger or can be used to endanger the safety of a nuclear facility or persons within the nuclear facility, or the safety of persons participating in the treatment and transport of nuclear material or nuclear waste; and
- 5) *common-cause failure* shall refer to the failure of several systems, components or structures of a nuclear facility, simultaneously or within a short period of time, as a consequence of an individual event or cause.

Chapter 2

Basis of security

Section 3

Design basis

The design of security shall be based on risk analyses of the activity to be secured, and protection requirements assessed on the basis thereof.

The design of security shall prepare, among other risks, for the risk of unlawful action being taken by an individual working at the nuclear facility, or by someone participating in the treatment and transport of nuclear material or nuclear waste, or by an outside group or person, who may be assisted by a person working at the facility or in a transport-related task. Design shall also account for the possibility that any person or group attempting unlawful action may have conventional weapons and explosives or ones based on an electromagnetic, chemical or biological impact, as well as information and expertise unavailable to the public.

Security shall be consistent with the operation, fire safety and emergency response arrangements of nuclear energy.

Furthermore, security shall be consistent with the rescue service, emergency and special situational plans drawn up by the authorities.

Section 4

General planning of a nuclear facility

Structures, systems and components important to the safety of a nuclear facility as well as the locations of nuclear material and nuclear waste shall be designed to facilitate the effective implementation of security, taking into account the requirements for nuclear and radiation safety. Security shall be based on the utilisation of several security zones placed within each other so that systems and components important to safety, and nuclear material and nuclear waste, are afforded particular protection and access control and the control of goods traffic can be arranged. The interfaces of security zones will form efficient structural obstacles to unlawful action.

Advanced data security principles shall be utilised in the planning of the nuclear facility and its information, communications and automation systems. Unauthorised access to the protection, control and adjustment systems of the nuclear facility shall be prevented.

Section 5 *Personal security*

Appropriate security clearances shall be carried out in order to ensure the personnel vetting of persons working at the nuclear facility and participating in the treatment and transportation of nuclear material and nuclear waste. Access rights and rights of use pertaining to information related to each task shall be defined. Measures for preventing threats related to persons shall be implemented systematically and extended to the subcontractors utilised by the licensee, and persons in the employ thereof.

Passage rights of persons working at the nuclear facility shall be defined for the area of the nuclear facility.

Section 6 *Implementation of security and security maintenance*

Security shall be implemented in compliance with design bases, security standing order, security plan and other approved descriptions.

The effectiveness of security may not be significantly reduced by any failure of a single security system, structure or component. Security shall be implemented so that the level thereof does not significantly decrease in the event of any common-cause failures or emergencies at the facility, such as an electric power failure or fire.

Annual exercises shall be taken to practice procedures in compliance with the security plan and security standing order in a threatening situation. Regular exercises shall also be arranged with the authorities concerned.

Nuclear facility personnel shall be appropriately familiarised with security and security control and procedures contributing to the implementation of these at the workplace.

All documents concerning security shall be kept up to date.

Chapter 3 **Security control**

Section 7

Transaction of business at the nuclear facility

For the purpose of transacting business at the nuclear facility, measures for preventing threats related to the transaction of business shall be planned. The transaction of business also comprises visits to the nuclear facility. Therefore, the planning of visits and programmes thereof shall take account of security perspectives.

The identity of persons transacting business with the nuclear facility shall be ascertained. Security control related to transacting business shall utilise the appropriate control equipment and up-to-date technology suitable for the purpose.

Passage through the site area for those transacting business with the nuclear facility shall be restricted in compliance with the purpose of the transactions, and controlled.

Section 8 *Control of passenger and goods traffic*

Vehicles, persons, objects and materials as well as goods transport equipment shall be checked in order to ensure that no dangerous objects are brought onto the nuclear facility site. Movement in the nuclear facility site shall be restricted and supervised so that effective account is taken of security and safety aspects.

Passage and goods traffic control shall be arranged in the necessary way, even in connection with nuclear material or nuclear waste transports and any related storage.

In particular, the licensee shall ensure that nuclear material, nuclear waste, radioactive materials or confidential information materials cannot be removed from the nuclear facility without the appropriate authorisation.

Chapter 4 **Security personnel and preparation for threats**

Section 9 *Qualification requirements for security personnel*

Security personnel, as referred to in section 7 1 of the Nuclear Energy Act, shall have completed basic guard training in compliance with section 24 of the Private Security Services Act (282/2002), or other corresponding security sector training. In addition, security personnel shall comply with the general qualifications required of a guard as laid down in section 24.

Moreover, any member of the security organisation of a nuclear facility shall demonstrate

that he/she possesses the knowledge required for the task, concerning:

- 1) the security standing order and principles and instructions concerning the operations of the security organisation;
- 2) the leading principles of operations and the functions to be secured within the facility;
- 3) rescue, emergency and special situation plans for operations; and
- 4) any other required operating instructions enabling the security person to perform his/her duties correctly and safely.

Section 10

Special requirements regarding forcible means equipment

A security guard who carries forcible means equipment, or whose duties require being prepared to use such equipment in the face of a threat, shall meet the qualification requirements for carrying forcible means equipment as laid down in section 29(2) of the Private Security Services Act.

The security standing orders of a nuclear facility include provisions on user training for forcible means equipment other than those referred to in section 29(2) of the Private Security Services Act, and demonstrating evidence of the required skills and monitoring thereof.

The security organisation of a nuclear facility may only use forcible means equipment complying with the security standing orders, possessed by the licensee or security services supplier.

Section 11

Alarm centre

A nuclear facility shall have a central alarm centre for the purposes of security, and a stand-by centre. Both centres shall be capable of maintaining redundant communication with the police and the plant control room. The central alarm centre or stand-by centre shall always be manned by at least one person responsible for emergency functions. In connection with the transport or storage of nuclear material or nuclear waste, emergency communication and arrangements shall be implemented in the manner required for the appropriate protection of transport or storage.

Section 12

Command centre

A nuclear facility shall have a constantly manned control centre function for the security organisation, and a room allocated for this function. The person responsible for the function shall be in command of security of the facility until the police, as laid down in section 13, announce that they have assumed command of measures taken for the prevention of unlawful action.

In a nuclear facility, excluding a research reactor, the same person cannot simultaneously act as the person responsible for commanding the security organisation and emergency functions.

A nuclear facility shall designate an appropriately equipped room for the use of the police in commanding operations for the prevention of unlawful action being taken against the nuclear facility.

The command centre shall have a stand-by centre. Both centres shall be capable of maintaining redundant communication with the police and the plant control room.

Chapter 5

Threats

Section 13

Actions to be taken when under threat

During a threat, immediate action in compliance with the security standing orders or the security plan shall be taken alongside other measures required.

Whenever a threat has been detected, the alarm shall be raised with the police immediately. As the police arrive at the scene, information on the threat and its progress shall be submitted to the police as far as possible.

When a threat has been detected, the person in charge of the security organisation will take control of measures preventing the threat. Control of these activities will be handed over to the police when the police officer concerned notifies that the police are assuming said control. In such a case, a sufficient number of personnel shall be designated to assist the police. These persons shall possess expert knowledge of nuclear technology and radiological protection. The licensee will be responsible for matters pertaining to nuclear safety and radiological protection at the nuclear facility.

Section 14

Notification of the Radiation and Nuclear Safety Authority (STUK)

The Radiation and Nuclear Safety Authority (STUK) will be notified without delay when a threat arises. The licensee shall ensure that the Radiation and Nuclear Safety Authority (STUK) is kept informed of the threat and its progress, even in cases where the security organisation command is committed to activities aimed at preventing the realisation of the threat. The Radiation and Nuclear Safety Authority (STUK) shall inform other authorities of the threat, should the situation so require.

Chapter 6

Advisory Committee on Nuclear Security

Section 15

Tasks

The Advisory Committee on Nuclear Security, as referred to in section 56(3) of the Nuclear Energy Act, has the following tasks:

- 1) to assess the threat scenarios in the field of nuclear security and changes therein;
- 2) to develop capabilities and flow of information related to threat situations in the nuclear sector;
- 3) to promote cooperation between the authorities and licensees;
- 4) to monitor nuclear security developments, training and research as well as instructions and communication concerning the sector;
- 5) to monitor and promote international cooperation on nuclear security;
- 6) to define guidelines for nuclear security and to take initiatives concerning them; and
- 7) on the request of the Radiation and Nuclear Safety Authority (STUK), to prepare and issue opinions on nuclear security issues.

Section 16

Composition

The Advisory Committee consists of a chairperson and vice-chairperson. In addition, the Advisory Committee comprises a maximum of 12 members, each with a personal deputy member. The Government shall appoint the chairperson and vice-chairperson, other members and their deputies for a period of three years at a time. Those invited to join the Advisory Committee shall represent a high standard of expertise in the nuclear sector or security sector. Should any Advisory Committee member or deputy member resign from the Advisory Committee, or pass away during his or her term of

office, the Ministry of Employment and the Economy shall appoint a new member or deputy member as a replacement for the remaining term.

Section 17

Organisation of activities

The Advisory Committee shall convene upon the invitation of the chairperson, or the vice-chairperson, should the chairperson be prevented from issuing said invitation, or whenever a minimum of two members have requested this in writing for the purpose of handling a matter which they have communicated.

The Advisory Committee has a quorum when, in addition to the chairperson or vice-chairperson, at least one half of the other members are present.

The Advisory Committee can have a secretary-general and other part-time secretaries, appointed for this duty by the Radiation and Nuclear Safety Authority (STUK), the latter having consulted the Advisory Committee.

The Advisory Committee can consult experts and obtain statements and reports. Furthermore, the Advisory Committee can appoint fixed-term sub-committees for preparing issues, the members of which can comprise experts who are not members of the Advisory Committee. The chairperson of any such sub-committee shall be a member of the Advisory Committee.

Section 18

Fees and remunerations

The fees paid to the chairman, vice-chairman and other members, deputy members, secretaries and experts of the Advisory Committee shall be determined in accordance with the recommendation of the Ministry of Finance. The general collective agreement for the government on the reimbursement of travel expenses shall be applied to the reimbursement of travel expenses.

Chapter 7

Miscellaneous provisions

Section 19

Drafting and approval of plans

Plans on security, and measures to prepare for threats, shall be prepared in cooperation with the appropriate police authorities.

Prior to the implementation of security, the following shall be submitted to the Radiation and

Nuclear Safety Authority (STUK) for its approval: the plan in principle for security, the preliminary plan for security in accordance with paragraph 5, section 35(2) of the Nuclear Energy Decree (161/1988), a security plan as referred to in paragraph 7, section 36(1) of the aforementioned Decree, alongside security standing order in compliance with section 7 n of the Nuclear Energy Act.

Moreover, any amendments to the aforementioned documents shall be submitted to the Radiation and Nuclear Safety Authority (STUK) for approval.

Section 20

Confidentiality

Issued in Helsinki, 27 November 2008

Mauri Pekkarinen, Minister of Economic Affairs

Pasi Mustonen, Senior Adviser

Provisions on the obligation to observe secrecy are laid down in section 78 of the Nuclear Energy Act, and sections 14 and 41 of the Private Security Services Act.

Section 21

Entry into force

This Decree enters into force on 1 December 2008.

This Decree will repeal the Decision of the Council of State on the general regulations for the physical protection of nuclear power plants, issued on 14 February 1991 (396/1991).

Measures required for the enforcement of the Decree can be undertaken prior to its entry into force.