

NATIONAL LEGISLATIVE AND REGULATORY ACTIVITIES

Argentina

General Legislation

Decree on the Implementation of the Law on Nuclear Activities and on the Privatisation of the Nuclear Sector (1998)

Decree No. 1390/98, which was promulgated on 27 November 1998, was published in the Official Journal of the Republic of Argentina on 4 December 1998 and entered into force on the same date.

This Decree is divided into three main parts. Chapter 1 provides for the application of the provisions set out in Law No. 24.804 on Nuclear Activities (see *Nuclear Law Bulletin* No. 59). The Decree establishes the obligation to pay a fee towards research and development amounting to 2.5% of the income created from the sale of electrical energy produced by nuclear power plants. This percentage will continue to apply until Unit Atucha II, currently under construction, commences operations, at which stage the annual fee will be reduced to 1.5%. These fees will initially be paid by the company *Nucleoelectrica Argentina s.a* to the National Atomic Energy Commission. Afterwards, the privatisation of this company will be carried out by the limited company *Generadora nuclear Argentina* (GENUAR s.a.).

Chapter II governs the privatisation regime itself. It establishes the limited company GENUAR s.a. as mentioned above and defines the manner in which it will carry out its tasks. In order to carry out the privatisation, it provides that all activities of nuclear energy production previously entrusted to *Nucleoelectrica Argentina s.a.* are now transferred to GENUAR. The statute of GENUAR is to be approved by the Department of Energy of the Ministry of Economy and Public Services. The Decree provides furthermore that until the actual moment when the privatisation comes into effect, 99% of GENUAR's shares will be held by the State and the remaining 1% by *Nucleoelectrica Argentina s.a.* GENUAR therefore becomes the operator of the Atucha I and Embalse plants, and becomes the licenseholder in respect of the construction of the Atucha II plant.

Chapter III establishes three funds in order to guarantee the financing of the decommissioning of the Atucha I, Embalse and Atucha II plants. Furthermore, it sets out the amount necessary to dismantle each plant and the annual contribution which GENUAR must make to each fund. Finally, the Decree establishes the conditions of such contribution, in particular in relation to the timing of payments, the eventual termination of the obligation to make such payments and the annual adjustment of the amount due.

Radioactive Waste Management

Law on Radioactive Waste Management (1998)

Law No. 25018 on radioactive waste management was promulgated on 19 October 1998 (see *Nuclear Law Bulletin* No. 56). This Law is divided into 16 sections within four chapters, which govern respectively general provisions (Sections 1 to 5), liability and transfer of liability (Sections 6 to 9), the national radioactive waste programme (Sections 10 to 12) and financing of radioactive waste management (Sections 13 to 15).

This Law establishes the legal framework and technical provisions governing radioactive waste management on Argentinean territory in order to ensure the protection of the environment and public health and to guarantee the rights of future generations. This management extends to all activities necessary to eliminate radioactive waste generated from nuclear activities from the biosphere until its level of radioactivity no longer poses a threat to man or the environment.

The National Atomic Energy Commission (CNEA) is the body responsible for the correct implementation of this Law. It ensures that the requirements concerning radiological safety and physical protection are observed while waste management activities are being carried out.

The operator of an installation which produces radioactive waste is responsible for its treatment and control until it is transferred to the Commission, which will then establish criteria concerning the acceptance of waste and conditions of its shipment. The operator may not evade his liability for potential damage to individuals or to the environment until this liability has been transferred to the Commission. The CNEA is required to establish a Strategic Plan for Radioactive Waste Management within six months of promulgation of this Law. The guidelines governing this Plan are included in Section 10 of the Law, which lists all the tasks attributed to the Commission in connection with this project. The Strategic Plan will be finally approved by the National Parliament, and a report will be provided annually to the Parliament in this respect.

Finally, a fund is established from the date of promulgation of this Law in order to ensure the financing of the Strategic Plan for Radioactive Waste Management. This fund will consist of contributions made by producers of radioactive waste, which is to be scaled according to the nature and volume of the waste produced, as well as other criteria concerning the manner in which such waste is produced. The Law provides that the National Parliament shall adopt specific legislation to govern the administration and control of this fund.

Armenia

General Legislation

Law for the Safe Utilisation of Atomic Energy for Peaceful Purposes (1999)

The Law of the Republic of Armenia for the Safe Utilisation of Atomic Energy for Peaceful Purposes was adopted on 1 February 1999. It came into force on 1 March 1999 upon its signature by the President.

The Law provides the legal framework and principles for management and regulation of the peaceful use of atomic energy. It determines the respective duties of the Government, Republican and

regional state authorities and local authorities, together with the Operational Organisation which is held responsible for the safe operation of nuclear facilities and the safe treatment of nuclear and radioactive materials.

The basic principles for the regulation of the use of atomic energy are as follows:

- to ensure the protection of the population and the environment from the harmful effects of atomic energy;
- to ensure the predominance of safety requirements during the use of atomic energy;
- to ensure availability of information concerning the use of atomic energy, with the exception of those matters governed by State secret;
- to ensure the participation of concerned legal and physical persons in the drafting of nuclear legislation; and
- to ensure compensation for nuclear damage.

The Law provides that nuclear facilities, nuclear materials and special materials, equipment and technologies defined in the Law are State-owned.

The regulatory function of the State is to be exercised by the Nuclear Regulatory Authority, the duties of which are listed comprehensively in the Law. One of its main tasks is to issue licenses in respect of all activities involving atomic energy, and for all the phases from site selection to decommissioning of nuclear facilities as well as for use, storage, transportation, reprocessing, disposal, import and export of nuclear materials, radioactive materials and special materials, equipment and technologies.

The Law establishes a system of state registration, accounting and control of ionising radiation sources and radioactive waste. The responsibility for such registration is assigned to the licensees who manage ionising radiation sources, or whose activity resulted in the generation of radioactive waste. The import of radioactive waste is prohibited unless such waste was generated by another state as a result of services rendered to Armenia. Measures involving the storage and disposal of radioactive waste are determined by the Government in co-operation with the Regulatory Authority. Nuclear materials, radioactive materials and special materials, equipment and technologies are also subject to state accounting and control.

Licensees are similarly responsible for physical protection, which is to be provided during all stages of operation of nuclear installations.

A special legal regime may be established in the area of nuclear facilities where the rights of those persons involved in the operation of the nuclear installation as well as the general public are restricted.

The Law contains provisions concerning third-party liability for nuclear damage, which provide that licensees for nuclear activities are liable for nuclear damage up to those amounts determined by specific legislation which will be adopted by Armenia. However, compensation available for any nuclear incident must not be less than the minimum amounts determined by the international agreements ratified by Armenia.

The text of this Act will be reproduced in the Supplement to *Nuclear Law Bulletin* No.64.

Australia

Organisation and Structure

Radiation Protection and Nuclear Safety Act (1998)

A set of legislation consisting of three Acts in the field of radiation protection and nuclear safety was passed by both Houses of Parliament on 10 December 1998 and was proclaimed on 5 February 1999.

Act No. 133 (Australian Radiation Protection and Nuclear Safety Act), which is a framework Law, established the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) as the regulatory body for radiation protection and nuclear safety, in place of the Nuclear Safety Bureau. The Chief Executive Officer of ARPANSA, who is appointed by the Governor-General for a term of up to 5 years, exercises the following regulatory functions:

- to promote uniformity of radiation protection and nuclear safety policy and practices;
- to provide advice and services concerning radiation protection and nuclear safety;
- to undertake research in relation to radiation protection, nuclear safety and related issues;
- to accredit persons with technical expertise for the purpose of this Act;
- to monitor the operations of ARPANSA, the Radiation Health and Safety Advisory Council (the Council), the Radiation Health Committee and the Nuclear Safety Committee; and
- to monitor compliance with the provisions of this Act.

The Chief Executive Officer is obliged to submit annual and quarterly reports to the Minister on the operations of the Chief Executive Officer, ARPANSA, the Council, the Radiation Health Committee and the Nuclear Safety Committee.

The Council is a consultative body which examines issues relating to radiation protection and nuclear safety and advises the Chief Executive Officer on these issues as well as on the adoption of recommendations, policies and codes. The Radiation Health Committee and the Nuclear Safety Committee are to be established as advisory committees to the Chief Executive Officer or the Council. Both committees should draft national policies, codes and standards in their respective fields and review their effectiveness periodically.

The second in this series of legislation, Act No. 134 (Australian Radiation Protection and Nuclear Safety (License Charges) Act) requires holders of both facility and source licenses to pay an annual charge, to be prescribed by the regulations.

Act No. 135 (Australian Radiation Protection and Nuclear Safety (Consequential Amendments) Act) repeals those provisions of the 1987 Australian Nuclear Science and Technology Organisation Act which concern the Nuclear Safety Bureau, and the 1978 Environment Protection Act as a whole.

Austria

Third Party Liability

Law on Third Party Liability for Nuclear Damage (1998)

A new Law on Third Party Liability for Nuclear Damage was adopted by the Austrian Parliament on 7 October 1998. This Law was the subject of an article by Professor Monika Hinteregger in *Nuclear Law Bulletin* No. 62. The text of this Law is reproduced in the Supplement to this Bulletin.

Bosnia and Herzegovina

General Legislation

Law on Radiation Protection and Radiation Safety (1999)

The Parliament of the Federation of Bosnia and Herzegovina adopted the Law on Radiation Protection and Radiation Safety on 24 January 1999. The Law will enter into force on the eighth day after its publication in the Official Gazette of the Federation of Bosnia and Herzegovina. Details on this Law will be provided in the next Bulletin.

Brazil

General Legislation

Law on the Levying of a Tax in Respect of the Licensing and Control of Radioactive Materials and Nuclear Installations (1998)

Law No. 9.765 of 17 December 1998 establishes a system of taxation of radioactive materials and nuclear installations. This system is based upon the exercise of supervisory powers attributed to the National Nuclear Energy Commission in respect of the following activities:

- prospecting for nuclear minerals containing thorium and uranium or minerals used to produce nuclear energy;
- choice of site, construction, operation and decommissioning of nuclear installations;
- choice of site, construction, operation and decommissioning of installations to be used for the production and utilisation of radioelements for scientific, medical, agricultural or industrial purposes;

- production of and trade in nuclear minerals and materials, as well as minerals containing uranium and thorium;
- transport of radioactive materials;
- construction and operation of installations to be used for the production of radioactive materials and for the utilisation of nuclear energy;
- the possession, utilisation and control of radioactive materials;
- the collection, treatment, transport and storage of radioactive waste.

This tax will in principle be paid by natural or legal persons authorised to exercise the following activities: operate a nuclear installation; use radioactive materials; hold, transport or store ionising radiation sources; carry out research into uranium and thorium minerals; produce and commercialise minerals of interest to nuclear energy; and carry out radioactive waste management. The relevant amounts are set out in the Annex to this Law.

This Law was published in the Official Journal of the Republic of Brazil on 18 December 1998 and entered into force on 1 January 1999.

Resolution of the Secretary for Strategic Affairs concerning the Protection System for the Brazilian Nuclear Power Programme – SIPRON (1998)

The objective of Resolution No. 145 of 7 December 1998 is to set out the procedure for the protection of secret information in connection with the Protection System for the Brazilian Nuclear Power Programme (SIPRON). This instrument provides instructions for the preparation of guidelines concerning secret State information, in particular on nuclear activities and installations (see *Nuclear Law Bulletin* Nos. 27, 50, 53 and 60).

Such measures destined to protect secret information aim to rule out any possibility of hostile activities, and extend to employees, documentary resources, and to the premises where nuclear activities are carried out.

This Resolution was published and entered into force on 8 December 1998.

Croatia

*Act on Liability for Nuclear Damage (1998)**

Introduction

On 9 October 1998, the Croatian Parliament adopted the new Act on Liability for Nuclear Damage (Official Gazette No. 143/98), hereinafter referred to as “the 1998 Act”, which amended the

* . This note has been kindly prepared by Mr. V. Šoljan, Assistant, Chair of Trade Law and International Economic Law, Faculty of Economics, University of Zagreb. The facts contained and ideas expressed in this note are the responsibility of the author alone.

previous Act of 1978 (see *Nuclear Law Bulletin* No. 23). The need for amendment derived from some obvious deficiencies in the 1978 Act, in particular, its references to certain public authorities which in the Croatian legal system no longer exist, and the fact that the formulation of certain provisions did not reflect in a sufficiently precise manner the solutions established in the 1963 Vienna Convention. The lack of the necessary level of precision, which resulted in legal uncertainty, concerned in particular the provision governing the minimum amount of liability of the operator.

Scope of Application

The 1998 Act governs liability for nuclear damage which results from peaceful uses of nuclear energy, insurance and other financial security covering such liability (Article 1). The definitions of nuclear material and nuclear installation to which the provisions of the 1998 Act refer, as well as the definition of nuclear damage, are the same as those contained in the 1963 Vienna Convention (Article 2). However, several nuclear installations of one operator that are located at the same site shall be considered as a single nuclear installation (Article 3). The Act contains a provision on reciprocity, which may be based on national legislation or established by multilateral or bilateral treaty, thus binding the State in question and the Republic of Croatia (Article 4).

Liability for Nuclear Damage

Liability for nuclear damage lies exclusively with the operator of a nuclear installation, irrespective of his fault (Articles 10 and 11). Exceptionally, with the approval of the competent State authority and with the written consent of the operator who would otherwise be considered liable, a carrier of nuclear material may take the place of the operator (Article 6). The operator is liable for nuclear damage caused by a nuclear incident if the incident occurred in his nuclear installation or during the transport of nuclear material to or from his installation (Article 5).

Liability for nuclear damage is limited up to the amount of 320 million Kuna, which corresponds approximately to \$ 48 million (Article 8). In cases where several nuclear installations of one and the same operator are involved in any one nuclear incident, such operator shall be liable in respect of each nuclear installation involved, up to the amount established in Article 8 of the 1998 Act (Article 15). Also, the operator is not liable for nuclear damage caused to the nuclear installation or to any on-site property, or to the means of transport on which the nuclear material involved was located at the time of the nuclear incident (Article 13).

The 1998 Act has modified to a certain extent the provisions of the 1963 Vienna Convention in respect of liability for damage occurring during the transport of nuclear material. In addition, nuclear material may be imported into or transported through the territory of the Republic of Croatia only if the carrier has a certificate issued by or on behalf of the insurer or other financial guarantor providing the security required, which covers liability for nuclear damage up to an amount not less than that established under Article 8 of the 1998 Act (Article 19). This provision, which departs from the provisions of the Vienna Convention, does not however undermine the general rule of the 1963 Convention whereby the liability ceiling of the operator is that specified by the national law of the operator liable. This is because the limitation of liability established by the 1998 Act reflects the amount of minimum liability established by Article V of the 1963 Vienna Convention, as the US dollar referred to in this instrument denotes a unit of account equivalent to the value of the United States dollar in terms of gold on 29 April 1963 (\$ 35 per one troy ounce of fine gold).

Limitation and Exclusion of Liability

The operator shall not be held liable for nuclear damage caused by a nuclear incident which is directly due to an act of armed conflict, hostilities, civil war, insurrection or a grave natural disaster of an exceptional character (Article 12). Also, in cases where the person suffering damage has acted intentionally or where the nuclear damage resulted from his gross negligence, the operator may be wholly or partly relieved from his obligation to pay compensation in respect of the damage suffered by such a person (Article 14).

Insurance and other Financial Security

The operator is obliged to provide and maintain insurance or other financial security covering his liability for nuclear damage of an amount which shall not be lower than that established under Article 8. If the liability of the operator which may occur during transport of nuclear material is not covered by such insurance or other financial security, such liability shall be covered by a separate insurance policy or financial security (Article 16). The insurer or financial guarantor is not entitled to cancel the insurance or the financial security without giving notice in writing three months prior to such cancellation to the operator and the competent state authority. Furthermore, they are not entitled to cancel the coverage during the carriage of nuclear material (Article 17).

The Role of the State

The 1998 Act introduced elements of state intervention in respect of compensation for nuclear damage, in certain strictly enumerated situations. More precisely, the 1998 Act has recognised the obligation of the Republic of Croatia to establish measures of supervision to verify the existence and content of insurance or financial security contracts. The Republic of Croatia shall provide the means for compensation of nuclear damage up to the amount established under Article 8:

1. if the operator fails to provide for or maintain insurance or financial security pursuant to Article 16;
2. if the insurer or financial guarantor is not liable to compensate the nuclear damage, pursuant to the terms of the insurance contract or financial security;
3. if the insurer or financial guarantor cannot fulfil his contractual obligations due to insolvency.

In such cases, the Government of the Republic of Croatia has a right of recourse against the insurer or financial guarantor, or operator, up to the amount paid, during a period of five years from each payment of compensation made (Article 20).

The Compensation of Nuclear Damage and the Right of Recourse

Jurisdiction over compensation for nuclear damage shall lie only with the court on whose territory the nuclear installation of the operator liable is located. However, where nuclear damage occurs during the carriage of nuclear material, jurisdiction over such actions shall lie with the court on whose territory the nuclear damage occurred or on whose territory the nuclear installation of the operator liable is located (Article 21).

Actions for compensation for nuclear damage caused by a nuclear incident may be brought not only against the operator, but also directly against the insurer or financial guarantor (Article 22). The action may be brought within ten years from the date of a nuclear incident, provided that the action is not brought later than three years from the date on which the person suffering nuclear damage had knowledge of the damage and of the operator liable for the damage (Article 24).

In cases where funds, which on the basis of public health insurance, pension insurance, inability insurance or other insurance funds, have been used entirely or partly for the payment of compensation for nuclear damage for which the operator is liable, the bodies responsible for the management of such funds have a right of recourse against the operator, up to the actual amount which has been paid (Article 26).

Penal Provisions

The operator shall be fined if he fails to acquire and maintain insurance or other financial security covering his liability for nuclear damage. Also, the insurer or financial guarantor shall be fined in the event that he cancels the insurance or financial security before giving notice in writing to the competent state authority, or during the carriage of nuclear material (Article 27).

Conclusions

The 1998 Act has incorporated all of the principles of the 1963 Vienna Convention and is almost entirely based on its provisions. Furthermore, Article 28 explicitly states that all other matters which are not specifically regulated by its provisions shall be governed by the provisions of the 1963 Vienna Convention. In any case, the 1998 Act is a significant step forward in comparison with the provisions of the old legislation. Finally, it should be mentioned that in Croatia, there is at present no nuclear installation to which the regime of operator's liability may be applied. Therefore, the Act shall only cover situations where nuclear material is transported through the territory of the Republic of Croatia.

Finland

Third Party Liability

Decree on Liability Amount (1998)

Pursuant to Section 18 of the 1972 Nuclear Liability Act, as amended, the Council of State adopted, on 30 October 1998, Decree No. 785 which raised the maximum liability amount of a Finnish operator from 150 to 175 million SDRs (the text of the 1972 Act is reproduced in the Supplement to *Nuclear Law Bulletin* No. 44, see also Bulletin Nos. 53 and 55). This Decree entered into force on 1 January 1999.

France

Radiation Protection

Decrees concerning the protection of workers against the dangers of ionising radiation (1998)

Two Decrees, bearing the references 98-1185 and 98-1186 of 24 December 1998, amended the existing French legislation in relation to the protection of workers against the dangers of ionising radiation (Decree No. 75-306 of 28 April 1975, as amended and Decree No. 86-1103 of 2 October 1986, as amended). These two legislative instruments implement Council Directive No. 90/641/Euratom of 4 December 1990 (see *Nuclear Law Bulletin* No. 47) on the operational protection of outside workers exposed to the risk of ionising radiation during their activities in controlled areas.

One of the principal objectives of these Decrees is to introduce the concept of operational dosimetry. They provide that only the worker concerned (or his legal representatives), the in-house doctor and inspector, and those persons who are qualified in radioprotection may have access to the individual results in respect of the radiation measures carried out. The Board for Protection against Ionising Radiation (OPRI) is entitled to use such individual results for statistical purposes or in the study of epidemiology. Furthermore, these Decrees set up a registration system to certify outside companies which carry out activities in controlled areas in a major nuclear installation, or which are involved in maintenance or repair work on machinery which emits ionising radiation. These certification measures apply equally to temporary employment agencies whose employees participate in such work.

Decision concerning official maximum limits for radioactive contamination by radon (1998)

Official maximum limits for radioactive contamination of housing by radon have for the first time been fixed by the French Government in a Circular signed by the Ministers of Health and Housing. Two different ceilings exist: the alert limit, which is fixed at 1000 Becquerels per cubic metre of air, and the precautionary limit, at 400 Bq/m³ for existing buildings and 200 Bq/m³ for new constructions. These maximum limits are based on 1998 recommendations by the High Council for Public Health in France.

Transport of Radioactive Materials

Orders modifying the ADR and RID Orders on transport of dangerous goods by road and rail (1998)

The ADR and RID Orders of 5 and 6 December 1996, which implement respectively into French legislation the European Agreement on the International Carriage of dangerous Goods by Road (ADR) and the Regulation on the International Carriage of Dangerous Goods by Rail (RID), were further amended on 17 December 1998. The principal objective of this amendment was to implement the modifications introduced in 1999 to the ADR and the RID into French law.

Order concerning the nomination and professional qualifications of safety officers for transport of dangerous goods by road, rail or inland waterway (1998)

The position of “safety officer” was established in Council Directive 96/35/CE of 3 June 1996. Companies obliged to designate such a safety officer include those which carry out road, rail or river transport of materials considered as dangerous according to the terms of the ADR, RID and ADN

instruments. The safety officer is in charge of preventing risks which may occur during loading, transport and unloading of dangerous materials. This officer is required to identify and promote, under the authority of the company director, measures which encourage the company to observe all the applicable regulations and to carry out work in optimum safety conditions.

Germany

Transport of Radioactive Materials

Amendment to the Act Concerning the Carriage of Dangerous Goods (1998)

The Act Concerning the Carriage of Dangerous Goods by Rail, Road, Air and Waterway of 6 August 1975 (see *Nuclear Law Bulletin* No. 16) was amended by Act of 6 August 1998 (*Bundesgesetzblatt* 1998 I, p. 2037). This amendment, *inter alia*, implements EC Council Directives Nos. 93/75/EC; 94/55/EC as amended; 95/50/EC; 96/35/EC, 96/49/EC as amended (Official Journal of the European Union 1993 No. L 247; 1994 No. L 319; 1995 No. L 249; 1996 No. L 145; 1996 No. L 235 and L 335), and entered into force on 14 August 1998. A consolidated text of the Act was published in the *Bundesgesetzblatt* 1998 I, p. 3114. This legislation applies to the transportation of dangerous goods as defined in Section 2. This definition includes radioactive material notwithstanding the absence of an express provision to this effect. The Act applies to transportation by rail, by road, by inland waterways and by air. It does not apply to carriage on the sites of installations where dangerous goods are produced, processed, stored, used or disposed of. Furthermore, the Act does not apply to the transboundary shipment of dangerous goods, to the extent that regulations of the European Union or international agreements apply to that carriage. Finally, it does not apply to transportation by mountain railway.

Amendments to Annexes A and B to the ADR Agreement (1998)

Based on an authorisation in the 1998 Act Concerning the Carriage of Dangerous Goods, the Federal Minister of Transportation issued the 14th Ordinance of 29 September 1998 (*Bundesgesetzblatt* 1998 II, p. 2618) to apply the 1998 amendments of the Annexes A and B to the European Agreement on the International Carriage of Dangerous Goods by Road, as revised in 1997 (See *Nuclear Law Bulletin* No. 59). The amended Annex is published in Annex to *Bundesgesetzblatt* 1998 II, No. 42. A consolidated version of the Annexes A and B to the European agreement is published in Annex to *Bundesgesetzblatt* 1998 II, No. 44.

Amendments to the Ordinances on the Carriage of Dangerous Goods (1998)

The 1st Ordinance to Amend the Ordinance on the Carriage of Dangerous Goods by Road and the 1st Ordinance to Amend the Ordinance of Dangerous Goods by Rail (See *Nuclear Law Bulletin* No. 59) implement the EU Directive No. 96/86/EC of 13 December 1996 to Amend the Directive 94/55/EC of the Council (Official Journal of the European Union 1996 No. L 335) (*Bundesgesetzblatt* 1998 I, pp. 3984, 3985). Consolidated versions of the Dangerous Goods Ordinances were published in *Bundesgesetzblatt* 1998 I, pp. 3910, 3993.

The 7th Ordinance to Amend the Order Concerning the International Railway Transportation of Dangerous Goods (RID) pronounces the entry into force as of 1 January 1999 of the Order for the

International Carriage of Dangerous Goods by Rail (RID), which is Annex 1 to the Agreement on the International Railway Transportation of Goods (CIM) (*Bundesgesetzblatt* 1998 II S. 2955).

The amendments of Annexes A, B1 and B2 to the Ordinance on the Carriage of Dangerous Goods on the Rhine river and on the Mosel river respectively, were set into force by the 4th Ordinance on Entry into Force of the above-mentioned amendments of 22 December 1998 (*Bundesgesetzblatt* 1998 II, p. 3000 and Annex to *Bundesgesetzblatt* 1998 II, No. 51).

Ordinance on the Shipment of Radioactive Waste (1998)

By Ordinance of 27 July 1998 (*Bundesgesetzblatt* 1998 I, p. 1918), Germany implemented the EU Council Directive of 3 February 1992 on the Supervision and Control of Shipments of Radioactive Waste between Member States and into and out of the Community (Official Journal of the European Union 1992 No. L 35, p. 24). The Ordinance sets up the legal framework as required by the Directive, including the necessary licence specifications. The Ordinance entered into force on 1 August 1998.

Radiation Protection

Fourth Ordinance Implementing the Preventive Radiation Protection Act (1998)

The Fourth Implementing Ordinance of 30 July 1998 was adopted (*Bundesgesetzblatt* 1998 I, p. 2009) to assign competence for measurement and evaluation in accordance with the Preventive Radiation Act of 1986 as amended (see *Nuclear Law Bulletin* No. 39) to the German Weather Service. The Ordinance entered into force on 1 January 1998.

Implementation of EU Directives on Electromagnetic Compatibility (1998)

The adoption of the Act on the Electromagnetic Compatibility of Equipment on 18 September 1998 (*Bundesgesetzblatt* 1998 I, p. 2882) resulted in the implementation in Germany of numerous EU Directives concerning protection against electromagnetic radiation. The regime established by the Act provides for special requirements for protection purposes and measures to assess the compliance of electromagnetic equipment with EU regulations.

Regulations on Nuclear Trade (including Non-Proliferation)

Amendments to the Foreign Trade Ordinance (1998)

The Foreign Trade Ordinance of 22 November 1993, as last amended by the Ordinance of 20 January 1998 (see *Nuclear Law Bulletin* No. 61) was further amended by a series of ordinances on foreign trade (*Bundesanzeiger* 1998 Nos. 105, 139, 162 and 174). The 42nd, 43rd and 45th Ordinances implement European Union law regarding foreign trade with the Federal Republic of Yugoslavia and certain African countries. The 44th Ordinance provides for the necessary legal framework in order to introduce the Euro currency to German foreign trade.

Through the adoption of the 94th Ordinance to Amend the Export List – Annex AL to the Foreign Trade Ordinance – of 7 May 1998 (*Bundesanzeiger* 1998 No. 88), the Export List was adapted in accordance with Decisions made in 1998 by the Council of the European Union. The Export List now

conforms to the amended Joint List of the European Union for Goods with Dual Use. The amendments implement in particular the decisions of the Nuclear Suppliers Group. Notwithstanding the fact that the Joint List of Goods of the European Union is directly applicable in EU Member States, it was deemed appropriate to introduce an express amendment to this effect into the German Export List for reasons of consistency. Furthermore, this Ordinance contains amendments to implement the decisions of the Wassenaar arrangements regarding military goods.

Act to implement the Comprehensive Nuclear Test-Ban Treaty (1998)

Following the ratification of the Comprehensive Nuclear Test-Ban Treaty of 24 September 1996 by the German Parliament (Act of 9 July 1998: *Bundesgesetzblatt* 1998 II, p. 1 210), Parliament adopted on 23 July 1998 an Act to implement this Treaty (*Bundesgesetzblatt* 1998 I, p. 1 882). This Act provides for the necessary legal framework to carry out inspections under Article IV of the Treaty. According to Section 2 of the Act, such inspections will only take place if a special “accompanying group” is present. This group is composed of representatives of competent German authorities. Section 3 of the Act describes in detail the rights of the inspectors, who, *inter alia*, are granted access to sites and rooms during normal business hours. Section 4 imposes on those persons and entities who are to be inspected obligations to co-operate with the inspectors and accompanying group. In the event of damage being caused by a member of the inspection group, the Federal Republic of Germany will be held liable in accordance with the provisions of the German Law for State Liability (Section 6). According to Section 8, special rules apply to the transfer and use of protected data. Finally, the Act provides for the necessary sanctions by amending the penal code accordingly.

With the exception of two articles, this Act will enter into force when the Treaty itself, in accordance with Article XIV, enters into force. This date will be published in the *Bundesgesetzblatt*.

Radioactive Waste Management

Act to implement the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes (1998)

The German Parliament ratified the 1996 Protocol to the 1972 London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (see *Nuclear Law Bulletin* Nos. 17, 28, 36 and 53), by an Act of 9 June 1998 (*Bundesgesetzblatt* 1998 II, p. 1 345). An Act was adopted on 25 August 1998 in order to implement this 1996 Protocol (*Bundesgesetzblatt* 1998 I, p. 2 455). The Act describes in Sections 2 and 3 the scope of application and defines terms used in the Act. According to the general rule in Section 4 of the Act, the dumping of waste and other matter into the high seas is prohibited. The incineration of waste and other matter at high sea is also forbidden (Section 6). In the event of an emergency, the prohibition in dumping contained in Section 4 of the Act does not apply. The Act furthermore designates the competent authority and authorises the Minister for the Environment, Nature Conservation and Nuclear Safety to issue implementing Ordinances. Finally, it amends numerous other acts of relevance in the field of sea dumping.

Indonesia

Organisation and Structure

Decree on the National Energy Control Board (1998) and Decree on the National Nuclear Energy Agency (1998)

Decree No. 76 of the President of the Republic of Indonesia on the National Energy Control Board (BAPETEN) was promulgated on 8 May 1998. The purpose of this Decree is to implement the 1997 Atomic Energy Act which established separate agencies for the promotion (BATAN) and regulation (BAPETEN) of nuclear energy.

The principal functions assigned to BAPETEN under this regulation are as follows:

- formulation of national policies and programmes for the control of the peaceful uses of nuclear energy;
- preparation of regulations with regard to nuclear safety assessment, radiation protection and control of nuclear materials and the supervision of their application;
- licensing and inspection for the construction and operation of nuclear installations;
- co-operation with other organisations for the control of the peaceful uses of nuclear energy; and
- guidance for the health and safety of workers and the public as well as for the protection of the environment.

This Decree describes the structure of BAPETEN, and lists the duties of its Chairman and his two Deputies, one of whom is responsible for nuclear safety assessment, and the other for licensing and inspection.

Decree No. 197 of the President of the Republic of Indonesia, promulgated on 7 December 1998, repeals and replaces the 1985 Decree concerning the National Nuclear Energy Agency (BATAN) and redefines its principal functions as follows:

- formulation of policies and programmes in the nuclear field in co-operation with other departments and organisations;
- development, planning and implementation of technical and administrative services and basic research and application programmes on nuclear energy;
- nuclear technology development;
- development of nuclear fuel cycle technology and engineering programmes; and
- promotion of public acceptance of nuclear science and technology programmes;

BATAN is headed by its Chairman who is supported by the Executive Secretariat and four Deputies. The Chairman of each Organisation is empowered to establish a Commission of Experts in order to advise them on particular issues.

Italy

Organisation and Structure

Decree on the Reorganisation of the National Committee for Research and Development of Nuclear and Alternative Energies – ENEA (1999)

Parliamentary Decree No. 36 of 30 January 1999 provides for the re-structuring of the National Committee for Research and Development of Nuclear and Alternative Energies (ENEA) (see *Nuclear Law Bulletin* No. 48). Since 1991, the ENEA has exercised its activities in the fields of nuclear energy, the environment and new technologies. This Decree widens the scope of its activities. These new tasks which have been assigned to the ENEA essentially involve research in the field of sustainable development, innovation in terms of the production of small and medium-sized businesses and in relation to transfer of technology to such businesses, in particular in the energy field. As an Agency of the Civil Service, the ENEA provides advanced technical support in the fields of energy, the environment and technological innovation.

This Decree repeals and replaces Act No. 282 of 25 August 1991.

Radiation Protection

Community Law implementing European Directives (1998)

Community Law No. 25 of 5 February 1999 aims to implement several European Union Directives in the Italian legislation. This simplified method is used in order to speed up the procedure of incorporating Community regulations into national legislation (see *Nuclear Law Bulletin* Nos. 46, 49 and 53).

On the question of protection against ionising radiation, Annex B refers to Directive 96/29/Euratom of 13 May 1996 which sets out basic standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation and Directive 97/43/Euratom of 30 June 1997 on health protection of individuals against the dangers of ionising radiation in relation to medical exposures.

According to this Law, the Government is to adopt parliamentary decrees in order to implement into national law the obligations arising under these Directives. Consequently, Decree No. 230 of 17 March 1995 on radiation protection will be subject to amendment (see *Nuclear Law Bulletin* Nos. 56 and 58). The Government should adopt such implementing decrees within twelve months from the date of entry into force of this Law (February 1999).

Japan

Third Party Liability

Law on Compensation for Nuclear Damage (1999)

The Law introducing partial amendments to the 1961 Law on Compensation for Nuclear Damage (see Nuclear Law Bulletin Nos. 9, 45 and 56), which will, upon its entry into force, raise the amount of financial security required for the operation of nuclear reactors from 30 billion yen to 60 billion yen, was adopted by the Diet on 28 April 1999. The provisions of this Law will be described in further detail in the next *Nuclear Law Bulletin*.

Lithuania

Radiation Protection

Law on Radiation Protection (1999)

The Law on Radiation Protection was adopted by the Lithuanian Parliament on 12 January 1999 and came into force on 1 April 1999. This legislation is divided into 10 Chapters governing *inter alia* licensing, radioactive waste and spent ionising radiation sources, limitation of doses, requirements concerning medical radiation procedures and liability. Implementing legislation which remains to be adopted includes Regulations on licensing of activities using ionising radiation sources and the Statute governing the Register of the sources of ionising radiation.

Poland

General Legislation

New Criminal Code (1998)

The New Polish Criminal Code entered into force on 1 September 1998 (*Nuclear Law Bulletin* No. 88, item 2677). Two new provisions have been introduced into Chapter XX of this Code, dealing with nuclear energy and ionising radiation. Article 163, paragraph 1.4, provides that a person responsible for an event which poses a threat to the life and health of a significant number of persons or considerable damage to property, through release of nuclear energy or ionising radiation, will be liable to imprisonment for a period of one to ten years. The second of these provisions, Article 170, paragraph 1, provides that whoever, without permission or contrary to stipulated conditions, possesses, uses, produces, reprocesses, collects or deals with explosion devices or substances, radioactive materials, ionising sources or other objects dangerous to the life or health of a significant number of persons or subject to cause considerable damage to property, will be liable to imprisonment for a period of six months to eight years.

Portugal

Organisation and Structure

Decree-Law setting up the Commission for Radiological Protection and Nuclear Safety (1998)

Decree-Law No. 311/98 of 14 October 1998 was published in the Portuguese Official Journal on 14 October 1998. This legislation was adopted in order to minimise risks to public health and to the environment as a result of ionising radiation, radioisotopes and nuclear installations.

The Preamble of the Decree-Law provides for an initial phase of comprehensive analysis of the existing legal and regulatory framework, which will be followed by regular updates to take into account scientific and technical progress. To attain this objective, the Commission for Radiological Protection and Nuclear Safety has been established. This Commission comprises representatives from the three ministries competent in this field, namely the Ministry of the Environment, the Ministry of Health and the Ministry of Science and Technology.

The Commission's duties are as follows:

- to draft bills and regulations in the above-mentioned sectors;
- to verify compliance with conditions set out in licenses for the storage, production or transport of radioactive material and equipment or for nuclear installations which generate radioactive residues or nuclear waste;
- to guarantee the respect of international obligations related to radiological protection and nuclear safety;
- to co-operate with similar bodies working in these fields in other countries and with the competent international organisations;
- to assist in the preparation of national radiological and nuclear emergency plans.

Technical assistance is provided to the Commission by the Technological and Nuclear Institute, within which a Department specialised in issues of radiological protection and nuclear safety has been created. The tasks assigned to this Department are listed in the Decree-Law and are of a strictly technical nature in order to guarantee its complementarity with the Commission's duties.

Slovenia

Third Party Liability

Decree establishing the Amount of Operator's Liability and the corresponding Amount of Insurance for Nuclear Damage (1998)

On 26 November 1998, a Decree establishing the Amount of Operator's Liability and the corresponding Amount of Insurance for Nuclear Damage was adopted by the Slovenian Government. It was published in the Official Gazette of 11 December 1998 and entered into force on 1 February 1999.

This Decree raised the amount of operator's liability for nuclear damage to the sum in Slovenian Tolars equivalent to US\$ 42 million in order to reflect the current value of the US\$ 5 million provided for in the 1963 Vienna Convention.

Furthermore, the operator of a nuclear installation is required to have and maintain insurance up to the above-mentioned amount. Exceptions to this exist in respect of the transport of nuclear materials, for which the insurance requirement is set at US\$ 14 million, and research reactors for which the insurance requirement varies between US\$ 187 000 and US\$ 467 000 depending on the thermal power of the particular reactor.

The adoption of this governmental Decree is deemed to be an interim solution while revision of the existing legislation takes place (See *Nuclear Law Bulletin* No. 54).

Spain

Organisation and Structure

Law establishing the National Energy Commission (1998)

Law No. 34 of 7 October 1998 establishes the National Energy Commission, which takes over the functions of the Commission on the National Electric System, established in 1994.

This new Commission is entrusted with fairly extensive powers, although its priority areas remain those of the energy and hydrocarbon markets. It participates in the legislative process in the energy sector as an advisory body, and it is involved in the licensing procedure for installations in the field of energy.

The Commission is a public body under the auspices of the Ministry for Industry and Energy. It is headed by a Board of Management comprised of a Chairman and eight members. Members of the Board are chosen from key public figures, and their nomination is confirmed by the adoption of a royal decree following a proposal from the Ministry for Industry and Energy.

Transport of Radioactive Materials

Regulation on the transport of dangerous goods by road (1997)

A Regulation was adopted on 31 January 1997 in order to incorporate into national legislation the 1993 amendments to the Regulation on the international transport of dangerous goods by road, which constitutes an Annex to the 1980 Convention on international transport by road.

This Regulation was enacted pursuant to Royal Decree No. 879 of 2 June 1989, which authorises the Minister of Public Works to amend the National Regulation on the transport of dangerous goods by road in order to incorporate modifications which have been introduced at the international level and published in the Spanish Official Journal.

Third Party Liability

Regulation concerning the Almaraz nuclear power plant (1997)

A Regulation was adopted on 25 April 1997 declaring that the two units at Almaraz nuclear power plant are to be considered as one nuclear installation. Therefore, these two units will be covered by one and the same insurance policy, and the operator will be liable for damages caused to third parties as if it were one nuclear installation.

Sweden

General Legislation

The Environmental Code (1999)

On 1 January 1999 a major new piece of legislation entered into force in Sweden: the Environmental Code (SFS 1998:808), amalgamating 15 of the principal environmental statutes into a consolidated version. The Code is wide in scope and applies to all operations, whether commercial or private and irrespective of whether the operation requires a permit or not. The provisions in the Code are more stringent than previous texts in this field, as they aim at promoting sustainable development as well as guaranteeing a healthy and pleasant environment for present and future generations.

Principal provisions of the Code

Fundamental provisions are to be found in Chapter 2, including the *general rules of consideration*, which contain common requirements for all activities that involve a risk to human health or the environment. These rules indicate that operations must be conducted in such a way and that necessary measures are taken so as to avert any harm to the health or the environment. The rules confirm general principles such as the “Polluter Pays Principle”, the principle of the “Best Available Technology”, the principle of knowledge (necessary to determine the effects of the operation), the localisation principle and the sound resource management and recycle principle.

There also exists a requirement that the measures to be taken should be reasonable and balanced in relation to the benefits to be gained. Furthermore, there is a “stop rule” according to which an operation may be stopped if it leads to unacceptable effects on the environment, even though it fulfils the requirements according to the general rules of consideration. The Government may for special reasons grant exceptions to the stop rule if the operation should prove beneficial to common interests.

An important new provision in the Code is the possibility for the Government to issue *Environmental Quality Norms*, according to Chapter 5. Regulations introducing such norms may concern the quality for land, water, air or the environment in general. These norms will specify the levels of pollution and of disturbance that humans may be exposed to without any significant risk. Public and local authorities must ensure that the Norms are attained when they consider permits and similar approvals, both under the Code and under other acts, e.g. the Nuclear Safety and Radiation Protection Acts.

According to Chapter 6 an *Environmental Impact Statement (EIS)* is required to constitute a basis for a decision on a permit. The EIS should facilitate an overall assessment of the planned operation's effects on the environment, health and management of natural resources, thus providing a better basis for the decision. The chapter contains mandatory requirements relating to the contents of the EIS as well as requirements on broad consultations with authorities, municipalities, organisations and the public affected. This should allow for those concerned to influence the work with the EIS at an early stage. Before issuing the permit, the permit authority must approve of the EIS.

According to Chapter 16, permits, approvals or exemptions may be issued for a limited period only, thus the entire activity must be re-examined at the expiry of this period in order to grant a renewal of the permit. Furthermore, permits, approvals or exemptions may be subjected to conditions in each individual case. Such conditions shall be based on the general rules of consideration in Chapter 2, or on other provisions of the Code. Permits or exemptions may not be issued for a new operation that would contribute to the contravention of an Environmental Quality Norm, unless special measures reducing the negative effects are taken.

For certain activities listed in the Code, e.g. nuclear activities or treatment of hazardous waste, the Government shall consider whether or not to allow such operations to proceed. This means that the Government shall decide whether the entity carrying out such activities may be established and in such a case, where it should be located. Such activities may be allowed only if the municipal assembly in the municipality concerned has given its consent. However, the Government may in certain cases, e.g. concerning intermediate or final storage of nuclear material, disregard such a municipal veto if the operation is considered to be of national importance and a more suitable location has not been found.

In the event that the Government authorises such activities, the matter is referred to the authority competent for the delivery of a permit, whether a governmental or local authority, an environmental court or the Government itself, as in the case of nuclear operations. The permit authority is then bound by the Government's decision on the permissibility, and the task of the authority is simply to decide on the necessary conditions for the operation in question.

Subsequent amendments in the Nuclear and Radiation Protection legislation

The Acts on Nuclear Activities and on Radiation Protection have not been included among the consolidated statutes in the Environmental Code. Instead, they have been amended so as to include references to the Code, which applies on a parallel basis. These amendments entered into force on 1 January 1999, in accordance with the Environmental Code.

Amendments to the Act on Nuclear activities (SFS 1984:3)

According to the amendment of Article 5b, the following provisions in the Environmental Code shall apply when considering matters under this Act:

- Chapter 2 concerning the general rules of consideration;
- Chapter 5 (Article 3) concerning the Environmental Quality Norms, when considering permits and similar approvals or when exercising supervisory powers or deciding on regulations;
- Chapter 16 (Article 5) indicating that permits, approvals or exemptions may not be issued for a new operation that would contravene an environmental quality norm, unless precautionary measures to alleviate the negative effects are taken.

Furthermore, it is mandatory to submit an EIS together with an application for a permit to construct, possess or operate a nuclear power plant. In the case of applications for permits for other matters than those mentioned, the Government or the appointed authority may issue regulations calling for an EIS to be included in the application for a permit. Such regulations shall follow the requirements concerning EIS in Chapter 6 of the Environmental Code.

Amendments to the Nuclear Activities Ordinance (SFS 1984:14)

According to Article 3a, the Swedish Nuclear Power Inspectorate (SKI) is authorised to issue regulations concerning an EIS in matters other than those linked to the construction, possession or operation of a nuclear power plant. Such regulations shall follow the requirements concerning EIS in Chapter 6 of the Environmental Code.

Amendments to the Act on Radiation Protection (SFS 1988:220)

According to the amendment introduced into Article 22a, the following provisions in the Environmental Code shall apply when considering matters under the Act on Radiation Protection or when deciding on conditions relating to nuclear operations governed by the Act on Nuclear Activities:

- Chapter 5 (Article 3) concerning the Environmental Quality Norms, when considering permits and similar approvals or when exercising supervision or deciding on regulations;
- Chapter 16 (Article 5) indicating that permits, approvals or exemptions may not be issued for a new operation that would contravene an Environmental Quality Norm, unless precautionary measures to alleviate the negative effects are taken.

According to the amendment of Article 27, the Government or the appointed authority may issue regulations calling for an EIS in matters concerning conditions on radiation protection for a nuclear operation.

Amendments to the Radiation Protection Ordinance (SFS 1988:293)

According to revised Article 14a in the Ordinance, the Swedish Radiation Protection Institute (SSI) is also authorised to issue regulations concerning Environmental Impact Statements.

Ukraine

Organisation and Structure

Presidential Decree on the Reorganisation of the Nuclear Control Structures (1999)

By Decree issued on 13 March 1999, the Ukrainian President has ordered a major restructuring of the state management system, involving substantial changes in the regulatory control of the country's nuclear sector. These measures are aimed at improving the efficiency of State executive bodies and strengthening the role of ministries in developing and implementing government policy. The Decree provides for the setting up of a new nuclear regulatory authority, called the State Nuclear Regulatory Administration of Ukraine, which will have the status of a central state executive body. The Nuclear Regulatory Administration, which will report to the Minister for Environmental Protection and Nuclear Safety, will have separate legal status that will render it financially independent, with its own accounting system, and which will give it considerable regulatory weight. The Cabinet is expected to draw up detailed plans for the implementation of this Decree over the coming months.

Regime of Nuclear Installations

Law on Basic Principles governing the Further Operation and Decommissioning of Chernobyl (1998)

On 11 December 1998, the Ukrainian Rada approved a new Law on basic principles governing the further operation and decommissioning of Chernobyl NPP and the transformation of its destroyed Unit 4 into an environmentally safe area. Article 3 of this Law outlines its principal objectives, namely, to develop legal principles governing the further operation and decommissioning of Chernobyl NPP, the rehabilitation of Unit 4 and social security cover for the personnel of the power plant and the population of Slavutich city. This legislation aims also to determine criteria for the more efficient use of international technical assistance offered for the above purposes, and to establish a special tax regime for commercial entities within the administrative territory of Slavutich city. Activities involving the early closure and decommissioning of Chernobyl, or measures of reinstatement of the impaired environment in respect of the Shelter Facility must be approved by the Cabinet of Ministers of Ukraine. Such activities are to be financed through the state budget, funds from the operating organisation (Energoatom), international technical support or voluntary contributions and, in the case of measures of reinstatement of the impaired environment, by the Fund for the elimination of the consequences of the Chernobyl catastrophe and social security of the population.

Third Party Liability

Decree concerning Ratification of the 1988 Joint Protocol relating to the Application of the Vienna Convention and the Paris Convention (1999)

On 8 February 1999, the Cabinet of Ministers of Ukraine issued a Decree confirming Ukraine's decision to ratify the 1988 Joint Protocol relating to the application of the Vienna Convention and the Paris Convention. At the same time, a draft law concerning ratification of this instrument was introduced before the Rada.

Resolution on Indemnifying Participants in the Shelter Implementation Plan (SIP) against Civil Liability for Nuclear Damage (1999)

On 18 February 1999, the Cabinet of Ministers of Ukraine issued Resolution No. 223 on indemnifying participants in the Shelter Implementation Plan against civil liability for nuclear damage. According to Article 1 of the Statement of the Cabinet of Ministers which is reproduced as Attachment 1 to the Resolution, the guarantees which are envisaged by this instrument are those granted in connection with activities financed through grant agreements entered into pursuant to the Framework Agreement of 20 November 1997 between the EBRD and Ukraine. The Ukrainian government agrees to indemnify foreign contractors from countries non-members to the Vienna Convention for any costs, losses, damages and expenses incurred in relation to activities undertaken in connection with the SIP.

It furthermore provides that Ukraine will bring no claims against the EBRD, or any contractors, subcontractors or employees in connection with damage suffered by Ukraine or any third-party claims as a result of a nuclear incident at the Chernobyl Plant, including the Shelter Facility. The Resolution ceases to apply only where the country of the foreign contractor in question and Ukraine have both ratified the Vienna Convention and the Joint Protocol or another similar convention which applies to both territories. A further Appendix to this Resolution contains a model letter of agreement concerning this arrangement to be signed by the supplier/contractor and the government of Ukraine

United States

Radioactive Waste Management

Bill to amend the Nuclear Waste Policy Act of 1982 (1999)

On 6 January 1999, draft legislation (H.R. 45) to amend the Nuclear Waste Policy Act was introduced in the House of Representatives and on 15 March 1999 a similar bill, S. 608, was introduced in the Senate (see *Nuclear Law Bulletin* Nos. 16, 31, 35 and 41). This pending legislation is supported by the nuclear utilities in the United States and is similar to previous bills introduced in 1997 which did not have the support of the Administration.

The major point of controversy in the legislation is a proposal to locate an interim storage facility in Nevada before a determination is made with regard to construction of a permanent repository at Yucca Mountain. A majority of members of both houses of Congress has supported this provision in the past, but not the two-thirds majority of the Senate required to override the threatened Presidential veto.

The Bill H.R. 45 provides for:

- Development of a temporary storage facility within Area 25 of the Nevada Test Site with operations to commence by 30 June 2003. This facility would be licensed in two phases by the Nuclear Regulatory Commission (NRC).¹ The first phase would be for a term of 20 years with storage capacity up to 10,000 MTU; the second phase would be for an initial and renewable term of 100 years with capacity up to 40,000 MTU.
- Acceptance and transportation of spent nuclear fuel (SNF) and high-level radioactive waste (HLW) commencing 30 June 2003. Trucks would move SNF and HLW from a main rail line in Caliente, Nevada to the interim storage facility. All transportation would be in licensed packages with services provided by private industry wherever possible.
- Construction of a permanent repository scheduled to commence operations by 17 January 2010 and licensed in three steps: 1) the Secretary of Energy would apply for a construction authorisation by 31 December 2003; 2) following construction and filing of necessary information, the NRC would issue a license to dispose if it determines that the repository will operate in conformity with the Nuclear Waste Policy Act and NRC regulations; and 3) after emplacement, the Secretary would apply for a license amendment for permanent closure.
- A new funding mechanism consisting of a combination of a user fee and a mandatory fee, with an average fee to electricity consumers of 1 mill per kilowatt-hour until the repository opens. During the averaging period, the fee could not exceed 1.5 mills/kWh in any given year. After the repository opens, the fee would be capped at 1 mill/kWh.²
- A radiation health standard prohibiting releases exposing a member of the general population in the vicinity of Yucca Mountain to an annual dose in excess of 100 millirems.
- Revocation of the DOE's Siting Guidelines at 10 C.F.R. Part 960.

S. 608 is similar to H.R. 45 in providing for an integrated system for the Federal government to accept spent fuel at a temporary storage facility by 30 June 2003 at Area 25 of the Nevada Test Site, but only after an environmental impact statement on that site is completed. The Senate bill would establish a more stringent risk-based radiation standard whereby releases of radioactive material or radioactivity would not exceed 30 millirems per year, and the funding mechanism would be similar to that proposed in the House bill. Shipping would be consistent with guidelines for transporting transuranic waste to the Waste Isolation Pilot Plant (WIPP).³

1. 10 C.F.R. Part 72, "Licensing Requirements For The Independent Storage Of Spent Nuclear Fuel and High-Level Radioactive Waste".

2. "H.R. 45 The Nuclear Waste Policy Act Of 1999", *NEI Issue Brief*. The Nuclear Energy Institute (NEI) represents all of the nuclear utilities in the United States, as well as nuclear vendors, radiopharmaceutical companies and universities with nuclear programmes. Information concerning NEI is available on the World Wide Web at: <http://www.nei.org>.

3. "Bill To Reform Energy Department's Used Nuclear Fuel Disposal Program Introduced in Senate", *NEI Fact Sheet*.

Third Party Liability

Recommendations concerning amendments to the Price-Anderson legislation (1999)

The Price-Anderson Act was originally enacted in 1957 as an amendment to the Atomic Energy Act of 1954 (AEI) to encourage development of the nuclear industry by providing private industry with financial protection in the event of liability resulting from a nuclear incident. The Price-Anderson Amendments Act of 1988 extended to 1 August 2002 the respective responsibilities of the Nuclear Regulatory Commission (NRC) and Department of Energy (DOE) for financial protection in respect of nuclear activities of both licensees of the NRC and contractors of the DOE. The Act has been renewed approximately every ten years since 1957. Section 170p. of the AEI required that both the NRC and DOE submit detailed reports to Congress in 1998 on the need for continuing or modifying the Price-Anderson Act, taking into account the condition of the nuclear industry, availability of private insurance and the state of knowledge concerning nuclear safety among other factors.

NRC RECOMMENDATIONS. The NRC announced in September 1998 that it was recommending a 10-year extension and modifications to clarify the Price-Anderson Act. With respect to NRC licensees operating large commercial nuclear power plants, the Act provides for a two-layer compensation system to pay public liability claims. The first layer consists of \$200 million dollars of insurance per reactor site currently available from the private insurance market. The second layer is provided by funds made available through an assessment on each licensed reactor of a prorated share not to exceed \$83.9 million per reactor per incident, as adjusted for inflation effective 20 August 1998. This program currently would make more than \$9 billion available to pay public liability claims if a severe accident were to occur. In its report to Congress,⁴ the NRC recommends that:

- To cover any new plants that might be licensed, the Price-Anderson Act be extended for 10 years after expiration, on 1 August 2002, of the NRC's authority to enter into new indemnity agreements. Plants presently licensed continue to be indemnified even if the law is not renewed.
- The maximum a nuclear utility can be assessed per reactor per incident per year be doubled to \$20 million dollars. This change would substantially increase the amount of funds available shortly after an accident. The total \$83.9 million dollar retrospective premium would be unchanged.
- Congress investigate whether the \$200 million dollars now available from the private insurance market for liability claims per reactor can be increased to keep pace with inflation.
- Congress consider clarifying its intent on some other issues, including: coverage for legal costs incurred by non-profit licensees; the prohibition on payment of punitive damages; jurisdiction of Indian tribal courts; and the effect of NRC regulation of selected Department of Energy activities.

DOE RECOMMENDATIONS In December 1998, DOE issued its "Report to Congress on the Price-Anderson Act".⁵ As noted in the Report, with respect to activities conducted for DOE, the Act

4. The 152-page NRC report entitled "The Price-Anderson Act – Crossing the Bridge to the Next Century: A Report to Congress" is available on the NRC's Internet web page at: <http://www.nrc.gov/NRC/NUREGS/indexnum.html>.

5. The DOE report entitled "Report to Congress on the Price-Anderson Act" and related documents are available at: <http://www.gc.doe.gov>.

requires that DOE include an indemnification in every contract that involves the risk of a nuclear incident. The DOE indemnification: 1) provides omnibus coverage of all persons who might be legally liable; 2) indemnifies fully all legal liability up to the statutory limit – currently \$9.43 billion for a nuclear incident in the United States; 3) covers all DOE contractual activity that might result in a nuclear incident in the United States; 4) is not subject to the usual limitation that funds be appropriated by Congress; and 5) is mandatory and exclusive.

The Price-Anderson Amendments Act of 1988 increased the amount of the DOE indemnification for a nuclear incident in the United States from \$500 million to \$9.43 billion, made inclusion of the DOE indemnification mandatory in all DOE contracts involving the risk of a nuclear incident, and established a system of civil penalties for DOE contractors, subcontractors, and suppliers covered by the DOE indemnification. The Report discusses experience with civil penalties imposed by DOE for violations of nuclear safety requirements by contractors, subcontractors and suppliers and concludes that this has proven a valuable tool for increasing the emphasis on nuclear safety and accountability of DOE contractors. It also examines the potential effects on the Price-Anderson Act of the Convention on Supplementary Compensation for Nuclear Damage. Ratification of the Convention will require conforming amendments to the Price-Anderson Act. The DOE Report contains five recommendations:

- The DOE indemnification should be continued without any substantial change.
- The amount of the DOE indemnification should not be decreased.
- The DOE indemnification should continue to provide broad and mandatory coverage of activities conducted under contract for DOE.
- DOE should continue to have authority to impose civil penalties for violations of nuclear safety requirements by for-profit contractors, subcontractors and suppliers.
- The Convention on Supplementary Compensation for Nuclear Damage should be ratified and conforming amendments to the Price-Anderson Act should be adopted.