

THE JOINT CONVENTION ON THE SAFETY OF SPENT  
FUEL MANAGEMENT AND ON THE SAFETY OF RADIO-  
ACTIVE WASTE MANAGEMENT

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Mr. LUGAR, from the Committee on Foreign Relations,  
submitted the following

REPORT

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The Committee on Foreign Relations to which was referred the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, having considered the same, reports favorably thereon subject to 3 conditions set forth in this report and the accompanying resolution of ratification and recommends that the Senate give its advice and consent to ratification thereof.

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I. PURPOSE

The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (the Convention) was created to achieve a high level of nuclear safety worldwide. This is to be accomplished through international cooperation and the enhancement of the national safety measures of the participating Contracting Parties (the Parties). It is anticipated that there will be a thorough examination of these national programs through an international exchange of views, so that Parties can learn from each other’s solutions to common and individual safety problems. The process is viewed as a mechanism for contributing to improving worldwide safety measures against potential radio-

logical hazards, so as to protect current and future generations, prevent accidents with radiological consequences, and mitigate effects should such accidents occur. The promotion of stable technical environments and regulatory systems in developing countries will also aid these Parties in developing security measures to prevent the theft of waste materials, thus lessening the risk of their possible use in radiological dispersal devices.

The creation of this Convention fulfills a commitment outlined in the Convention on Nuclear Safety (CNS), which entered into force on October 24, 1996, and to which the United States became a Contracting Party on July 10, 1999. Subsection (ix) of the CNS Preamble states that the Contracting Parties affirm “the need to begin promptly the development of an international convention on the safety of radioactive waste management as soon as the ongoing process to develop waste management safety fundamentals has resulted in broad international agreement.” The CNS establishes a legal obligation on the part of the Contracting Parties to apply certain safety principles to the construction, operation, and regulation of civilian nuclear power reactors. Together, the Convention and the CNS formulate a joint mechanism to strengthen the worldwide safety culture for the complementary issues of nuclear power, spent nuclear fuel, and radioactive waste.

The Convention is consistent with United States policy to support safety as a top priority in the use of nuclear energy worldwide, to promote safe operation of spent nuclear fuel management and civilian nuclear waste management facilities, and to encourage the implementation of radiation protection principles. The pursuit of common strategies for the handling of spent nuclear fuel and radioactive waste is compatible with U.S. policy on climate change and the promotion of a sustainable global environment. The Convention is a particularly important complement to bilateral and multilateral safety assistance programs, as it establishes a political mechanism to encourage governments to support emerging regulatory organizations and other entities responsible for the promotion of a nuclear safety culture.

By becoming a Contracting Party to the Convention, the United States will have the opportunity to review and benefit from the experiences of other nations; promote and help influence a stable technical environment, safety programs and regulatory systems in developing countries; identify possible areas for bilateral and multilateral technical and regulatory cooperation; and minimize the threat of the malicious use of radioactive waste, as may occur with disused sealed sources.

## II. SUMMARY OF THE CONVENTION

Structured to parallel the Convention on Nuclear Safety (CNS), the Convention establishes a series of broad commitments with respect to the safe management of spent nuclear fuel and radioactive waste resulting from civilian nuclear applications. It also covers such issues as disused sealed sources no longer needed, operational radiation protection, management of nuclear facilities, decommissioning, emergency preparedness, legislative and regulatory frameworks, and transboundary movement. The Convention, along with the CNS, fosters a constructive multilateral framework to increase safety and security at nuclear facilities around the world.

As with the CNS, this Convention encourages broad participation through its elaboration as an incentive process, under which Parties take appropriate steps to bring their activities into compliance with the obligations of the Convention. The Convention does not delineate mandatory standards the Parties must meet; instead, Parties are to take “appropriate steps” to bring their activities into compliance with the obligations of the Convention. The goal is that over time, through processes of self-improvement, acceptance of the obligations under the Convention, and periodic reviews of their Convention-related activities, all the Parties will attain a higher level of safety in the management of their spent fuel and radioactive waste.

Under the Convention, Parties will submit periodic national reports on the steps that they are taking to implement the obligations contained in the Convention. These reports will be reviewed and discussed at Review Meetings of the Parties, at which each Party will have an opportunity to discuss and seek clarification of reports submitted by other Parties. Although it is not reflected in the Convention text, the Parties are to be organized into groups of five to seven countries. The United States will be assigned to a group and will have the opportunity to review national reports of other countries assigned to this group. Parties can also request and comment on the national reports of countries not in their review group and, if they do so, may participate in meetings of the groups to which those countries are assigned.

In response to questions for the record, the Administration assured the Committee of its intent to look beyond the group to which the United States is assigned:

The United States will request copies of all national reports prepared for the review meeting under the Joint Convention.

The United States has the right to request this information under the Joint Convention, and it intends to ask for this information.

We intend to ensure that the United States takes advantage of the availability of information and the opportunity to provide comments as appropriate.

The Committee recommends that the Senate require, in its resolution of ratification for this Convention, that the President certify that the United States will both request copies of all national reports prepared for each review meeting under the Convention and comment, in each review meeting, upon aspects of safety significance in any report by a Contracting Party that is receiving U.S. financial or technical assistance relating to the improvement of its nuclear and radiological safety and security practices. The Senate included a similar condition in the CNS resolution of ratification, and the Administration reports that the process of reviewing and commenting on reports under the CNS has proved valuable. In response to a question for the record, the Administration wrote that this process enabled it:

. . . to identify key goals and objectives for the safety and regulatory programs in States of the former Soviet Union, such as Russia and Ukraine. The goals and objectives will provide targets for assistance programs to these countries. We also used the process to determine that additional

progress can be made in nuclear regulatory oversight programs of Russia and the Ukraine, and identified the nuclear regulatory programs of China, Armenia, and Pakistan as warranting further attention.

The Committee also recommends that the Senate include in its resolution of ratification of the Convention a condition ensuring that the legislative branch and the Comptroller General of the United States will be given appropriate access to information relating to the operation of the Convention. A similar condition was included in the CNS resolution of ratification.

The form and structure of the U.S. national report will be closely modeled after that of the report submitted for the CNS. As required under the Convention, the report will include, *inter alia*, the U.S. legislative and regulatory framework, spent nuclear fuel and radioactive waste inventory data (available from existing U.S. Government databases), and a listing of existing and proposed Federal, State, and private facilities.

The Convention does not include naturally occurring radioactive material, unless a Party declares it as radioactive waste for the purposes of the Convention. The Convention applies to military radioactive waste and spent nuclear fuel only if and when such material is permanently transferred to and managed within exclusively civilian programs. The Convention contains provisions to ensure that national security is not compromised and that Parties have absolute discretion as to what information is reported on material from military sources. In the United States, all military radioactive waste and spent nuclear fuel is normally transferred to civilian programs for disposal. The Convention, therefore, will not affect ongoing U.S. military operations in any way. Classified information will not be included in the U.S. national report, and the Administration has assured the Committee, in response to a question for the record, that “[t]he Joint Convention poses no threat to sensitive U.S. information or activities. The United States will provide information in the national report that is already publicly available.”

The Department of Energy (DOE) will be the lead agency for preparation of the report, in coordination with the Nuclear Regulatory Commission (NRC), the Environmental Protection Agency (EPA), and the Department of State. DOE estimates the annual cost for preparing the U.S. national report to be approximately \$200,000. Costs will be absorbed within the existing DOE budget. Costs incurred by NRC are not expected to be substantial and can be absorbed within the existing budget. EPA also expects any costs to be minimal, and will absorb any such costs within its existing budget. The review of reports submitted by other Parties is expected to cost \$6,000 per report, and U.S. Agencies will strive to absorb those costs as well within existing budgets.

As a Party to the Convention, one delegate (and any other alternates, experts, or advisers as are deemed necessary) may represent the U.S. Government. The U.S. Delegate will be a representative of the Department of State. U.S. Alternate Delegates will be representatives of DOE, NRC, and EPA. An interagency working group has already been established for the purpose of coordinating Convention activities.

The Administration believes that review of the national reports and the prospect of bilateral cooperation will strengthen the DOE’s

spent fuel and radioactive waste program. Possible improvements would relate to the development of technological alternatives to current stabilization, storage, treatment, and disposal missions at the Department. However, no changes are expected in the overall policy and strategy of the Department's spent nuclear fuel and radioactive waste programs.

NRC does not anticipate the need to make any significant changes to its regulations as a result of the Convention. Nonetheless, by providing a mechanism for receiving information on other Parties' national programs through the constructive exchange of national reports and reviews, the Convention will support the Commission's continuing efforts to improve its own regulatory program through self-assessment. The Convention is not expected to have an effect on the regulatory program of EPA.

Through meetings held with State and industry representatives, the Administration determined that no significant new burdens or unfunded mandates for States or industry will result from the Convention. The Nuclear Energy Institute wrote to the Committee to express its strong support of U.S. ratification of the Convention, and the Administration has assured the Committee that no firms or groups have warned it that they will suffer in some way if this Convention is ratified and implemented. Parallel consultations with the United States Congress led the Administration to conclude that no implementing legislation will be necessary for the United States to comply with its obligations under the Convention.

An amendment to this Convention may be approved by consensus at a review meeting or at an extraordinary meeting, or referred, by a two-thirds vote of the Parties present and voting, to a Diplomatic Conference that can adopt it either by consensus or by a two-thirds vote of all the Parties. All amendments shall be subject to national ratification or acceptance processes, and shall enter into force (for ratifying or accepting Parties only) 90 days after receipt of the relevant instruments from two-thirds of the Parties. In response to a question for the record, the Administration confirmed its intent to submit to the Senate, for its advice and consent to ratification, all amendments that the President believes the United States should accept: "It is important to remember that the United States will not be bound by any amendment unless the United States affirmatively accepts the amendment with the advice and consent of the Senate."

### III. BACKGROUND

In order to address the commitment contained in subsection (ix) of the Preamble of the Convention on Nuclear Safety, a Group of Experts was constituted from approximately fifty countries to prepare a draft convention on spent nuclear fuel and radioactive waste. From 1995 to 1997, the International Atomic Energy Agency (IAEA) convened seven meetings of the Group, in which the United States participated. A draft text was completed in March 1997 and submitted for review by the Board of Governors at its June 1997 meeting. The Board subsequently authorized the Director-General to convene a Diplomatic Conference at the IAEA headquarters in Vienna. The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management was adopted on September 5, 1997. Secretary of Energy Peña signed

the Convention on that date, making the United States the first country to do so.

On September 13, 2000, President Clinton submitted the Convention to the United States Senate for its advice and consent to ratification. The Convention was subsequently referred to the Committee on Foreign Relations.

Pursuant to Article 40, the Convention entered into force on June 18, 2001, the ninetieth day after the date of deposit with the Depositary of the twenty-fifth instrument of ratification, acceptance or approval, including the instruments of fifteen States each having an operational nuclear power plant. There are currently forty-two Signatories and thirty Contracting Parties to the Convention, nineteen of which have an operational nuclear power plant.

Article 29 of the Convention dictates that a preparatory meeting is to be held not later than 6 months after entry into force. In accordance, the Contracting Parties met in December 2001 and agreed upon the guidelines for the form and structure of the national reports, the guidelines for the review process, the Rules of Procedure, and the Financial Rules. The United States, not having ratified the Convention, was not in attendance.

The next organizational meeting of the Contracting Parties is scheduled for April 7, 2003. Although the United States cannot become a Contracting Party by that time, it expects to participate in the meeting if the Convention has been ratified by that date. The United States would be able to provide input on the organization of the formal peer review meeting for the safety programs of Contracting Parties, which is scheduled to begin November 3, 2003.

#### IV. COMMITTEE ACTION

The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management was referred to the Committee on September 13, 2000.

The Committee received testimony on the Convention at a hearing on March 19, 2003. The witness at the hearing was Mr. Richard J. K. Stratford, Director of the Office of Nuclear Energy Affairs in the Bureau of Nonproliferation at the Department of State, who was the principal U.S. negotiator of the Convention.

At a business meeting on April 1, 2003, the Committee considered a draft resolution of ratification. After discussion and debate, this resolution was approved by a vote of 19–0.

#### V. ARTICLE-BY-ARTICLE ANALYSIS

##### JOINT CONVENTION ON THE SAFETY OF SPENT FUEL MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT

The Preamble describes the concerns underlying the Convention, recognizing that the operation of nuclear power plants generate spent fuel and radioactive waste, and that other applications of nuclear technology generate waste. Cognizant of the importance to the international community of ensuring well regulated and environmentally sound management practices for spent fuel and radioactive waste, the Parties acknowledge that the same safety objectives apply both to spent fuel and radioactive waste management

and state their desire to promote an effective nuclear safety culture world wide. Recognizing that ultimate responsibility for defining its own fuel cycle policies rests with the State, Parties recognize that some States consider spent fuel a valuable resource that may be re-processed, while others elect to dispose of it. The Preamble notes that the Parties are mindful of the needs of developing countries and States with economies in transition and the need to assist them, in the fulfillment of their rights and obligations set out in the Convention. The Parties also express the desirability of strengthening the international system of transboundary movement and affirm the importance of international cooperation for the enhancement of nuclear safety through bilateral and multilateral mechanisms and this incentive Convention.

Article 1 sets forth the objectives of the Convention, which are to: (1) achieve and maintain a high level of nuclear safety world-wide in spent fuel and radioactive waste management through the enhancement of national measures and international cooperation, including where appropriate, safety-related technical cooperation; (2) ensure that during all stages of spent fuel and radioactive waste management there are effective defenses against potential radiological hazards so that individuals, society, and the environment are protected from harmful effects of ionizing radiation, now and in the future; and (3) prevent accidents with radiological consequences, and mitigate such consequences should they occur during any stage of management.

Article 2 contains 21 definitions for the Convention. Particular attention is drawn to the following definitions: “discharges” means planned and controlled releases into the environment, as a legitimate practice, within limits authorized by the regulatory body, of liquid or gaseous radioactive materials that originate from regulated nuclear facilities during normal operation; “disposal” means the appropriate facility without the intention of retrieval; “license” means any authorization, permission or certification granted by a regulatory body to carry out any activity related to the management of spent fuel or of radioactive waste; a “nuclear facility” means a civilian facility and its associated land, buildings, and equipment in which radioactive materials are produced, processed, used, handled, stored, or disposed of on such a scale that consideration of safety is required; “radioactive waste” means radioactive material in gaseous, liquid, or solid form for which no further use is foreseen by the Party or by a natural or legal person whose decision is accepted by the Party, and which is controlled as radioactive waste by a regulatory body under the legislative and regulatory framework of the Party; a “regulatory body” for each Party means any body or bodies given the legal authority by that Party to regulate any aspect of the safety of spent fuel or radioactive waste management including the granting of licenses; “sealed source” means radioactive material that is permanently sealed in a capsule or closely bonded and in a solid form, excluding reactor fuel elements; “spent fuel” means nuclear fuel that has been irradiated in and permanently removed from a reactor core; “State of destination” means a State to which a transboundary movement is planned or takes place; a “State of origin” means a State from which a transboundary movement is planned to be initiated or is initiated; a “State of transit” means any State, other than a State of origin

or destination, through whose internal waters, inland waterways, or land territory a transboundary movement is planned or takes place.

Article 3 specifies that the Convention's scope is to apply to the safety of spent fuel management when the spent fuel results from the operation of civilian nuclear reactors. It also applies to the safety of radioactive waste management when radioactive waste results from civilian applications. Unless otherwise declared by the Party, military or defense program spent fuel or radioactive waste is not covered under the Convention, unless such materials are permanently transferred to and managed exclusively within civilian programs. Nor does it apply to fuel held at reprocessing facilities as part of a reprocessing activity unless the party declares reprocessing to be part of spent fuel management, or waste containing only naturally occurring radioactive materials that do not originate from the fuel cycle unless it constitutes a disused sealed source (understood to be old or new sources no longer in use or which are not intended to be used) or it is declared as radioactive waste for the purposes of this Convention by the Party. The Convention also applies to discharges as defined in Article 2 and as provided for in Articles 4, 7, 11, 14, 24, and 26.

Articles 4 to 10 address the safety of spent fuel. Article 4 requires each Party to take appropriate steps to ensure that at all stages of spent fuel management, individuals, society, and the environment are adequately protected against radiological hazards. Without identifying specific steps the Parties should take, and thus leaving such steps to each Party's discretion, the Convention enumerates seven goals of these steps:

- (i) ensure that criticality and removal of residual heat generated during spent fuel management are adequately addressed;
- (ii) ensure that the generation of radioactive waste associated with spent fuel management is kept to the minimum practicable consistent with the type of fuel cycle policy adopted;
- (iii) take into account interdependencies among the different steps in spent fuel management;
- (iv) provide for effective protection of individuals, society, and the environment, by applying at the national level suitable protective methods as approved by the regulatory body, in the framework of its national legislation which has due regard to internationally endorsed criteria and standards;
- (v) take into account the biological, chemical, and other hazards that may be associated with spent fuel management;
- (vi) strive to avoid actions that impose reasonably predictable impacts on future generations greater than those permitted for the current generation;
- (vii) aim to avoid imposing undue burdens on future generations.

Article 5 requires each Party to take the appropriate steps to review the safety of any existing spent fuel management facility and to ensure that, if necessary, all reasonably practicable improvements are made to upgrade facility safety.

Article 6 addresses the siting of spent fuel management facilities. Parties are required to take the appropriate steps to ensure that



procedures are established and implemented for a proposed spent fuel management facility: to evaluate all relevant site-related factors likely to affect the safety of the facility during its operating lifetime; to evaluate the likely safety impact of a proposed facility on individuals, society, and the environment; and to make such information public. Each Party must also take the steps to ensure that appropriate procedures are established and implemented, to consult Parties in the vicinity of a proposed facility likely to be affected by that facility and provide to them, upon request, general data to evaluate and assess the likely safety impact of the facility upon their own territory, and to ensure that these facilities do not have unacceptable effects on other Parties by following the general safety requirements of Article 4.

Article 7 sets forth obligations associated with the design and construction of a spent fuel management facility. Each Party is to take appropriate steps to ensure that the design and construction of a facility provides for suitable measures to limit possible radiation effects on individuals, society, and the environment, including those from discharges or uncontrolled releases. Each Party must also take the appropriate measures to ensure that experience, testing, or analysis support technologies incorporated in the design and construction of such a facility. Conceptual plans and, as necessary, technical provisions for decommissioning must be taken into account at the design stage.

Article 8 obligates each Party to take the appropriate steps to ensure that systematic safety and environmental assessments appropriate to the hazard presented by the facility and covering its operating lifetime are carried out before the construction of a spent fuel management facility. These assessments must be documented and subsequently updated when deemed necessary before the operation of the facility.

Addressing the safety of operation of spent fuel management facilities, Article 9 requires each Party to take the appropriate steps to ensure that the license to operate a facility is based on the assessments specified in Article 8 and is conditions on a commissioning program demonstrating that the facility, as constructed, is consistent with design and safety requirements. Parties must also take appropriate measures to ensure that operational limits and conditions derived from the Article 8 safety assessments, tests, and operational experience are defined, and revised as necessary. Operation, maintenance, monitoring, inspection, and testing of spent fuel facilities are to be conducted in accordance with established procedures. Under subparagraphs (iv) and (v) of Article 9, Parties must also take appropriate steps to ensure that engineering and technical support is available in all safety-related fields throughout the operating lifetime of the facility, and that incidents significant to safety are reported to the regulatory body in a timely manner by the holder of the relevant license. Subparagraph (vi) obligates Parties to take appropriate steps to establish programs to collect and analyze relevant operating data. They must also ensure that conclusions of the analysis are acted upon where appropriate. Lastly, Parties are required under subparagraph (vii) to ensure decommissioning plans for a spent fuel management facility are prepared and updated, as necessary, using information obtained during the

operating lifetime of the facility, and reviewed by the regulatory body.

Under Article 10, if a Party, pursuant to its own legislative and regulatory framework, has designated spent fuel for disposal, the disposal of such spent fuel must be in accordance with the Convention obligations relating to the disposal of radioactive waste (Articles 11 to 17).

Articles 11 to 17 address the safety of radioactive waste management. Article 11 requires Parties to take the appropriate steps to ensure that at all stages of radioactive waste management individuals, society, and the environment are adequately protected against radiological and other hazards. These steps must:

- (i) ensure that criticality and removal of residual heat generated during radioactive waste management are adequately addressed;
- (ii) ensure that the generation of radioactive waste is kept to the minimum practicable;
- (iii) take into account interdependencies among the different steps in radioactive waste management;
- (iv) provide for effective protection of individuals, society, and the environment, by applying at the national level suitable protective methods as approved by the regulatory body, in the framework of its national legislation which has due regard to internationally endorsed criteria and standards;
- (v) take into account the biological, chemical, and other hazards that may be associated with radioactive waste management;
- (vi) strive to avoid actions that impose reasonably predictable impacts on future generations greater than those permitted for the current generation;
- (vii) aim to avoid imposing undue burdens on future generations.

Under Article 12, each Party is in due course to take the appropriate steps to review the safety of radioactive waste management facilities existing at the time the Convention enters into force for that Party. All reasonably practicable improvements are to be made to upgrade the safety of the facility. Article 12 also requires that the results of past practices be reviewed to determine whether any intervention is needed for reasons of radiation protection, bearing in mind that the reduction in detriment resulting from the reduction in dose should be sufficient to justify the harm and the costs, including the social costs, of the intervention.

Article 13 addresses the siting of radioactive waste management facilities. Parties are required to take the appropriate steps to ensure that procedures are established and implemented for a proposed management facility to evaluate (1) all relevant site-related factors likely to affect the safety of the facility during its operating lifetime as well as that of a disposal facility after closure, and (2) the likely safety impact of a proposed facility on individuals, society, and the environment, and to make information on the safety of such a facility public.

Each Party must also take the appropriate steps to ensure that procedures are established and implemented for consulting Parties in the vicinity of a proposed facility likely to be affected by that fa-

cility and providing to them, upon their request, general data to evaluate the likely safety impact of the facility upon their own territory. Parties must also take the appropriate steps to ensure that such facilities do not have unacceptable effects on other Parties by being sited in accordance with the general safety requirements of Article 11.

Article 14 addresses the design and construction of radioactive waste management facilities. This article obligates a Party to take appropriate steps to ensure that the design and construction of a facility provides for suitable measures to limit possible radiation impacts on individuals, society, and the environment, including discharges or uncontrolled releases. Conceptional plans and, as necessary, technical provisions for the decommissioning and closure of the facility must also be taken into account at the design stage. Each Party must also take appropriate steps to ensure that experience, testing, or analysis supports technologies incorporated in the design stage and construction of a management facility.

Article 15 obligates each Party to take measures to ensure that systematic safety and environmental assessments, appropriate to the hazard presented by the radioactive waste management facility covering its lifetime, are carried out before the construction of the facility. Similar assessments must also be carried out before construction for the period following closure. In addition, the results of such assessments must be evaluated against criteria established by the appropriate regulatory body. Before the operation of a radioactive waste management facility, updated and detailed versions of the safety assessment and of the environmental assessment must be prepared when deemed necessary to complement the assessments referred to above.

Article 16 concerns the operational safety of radioactive waste management facilities. It requires each Party to take the appropriate steps to ensure that the license to operate the facility is based upon the safety assessments specified in Article 15, conditioned on a commissioning program, that demonstrates the facility, as constructed, is consistent with design and safety requirements. Parties must also institute measures to ensure that operational limits and conditions derived from the Article 15 safety analysis, tests, and operational experience are defined, and revised as necessary, for identifying safe boundaries for operation. The operation, maintenance, monitoring, inspection, and testing of radioactive waste management facilities are to be conducted in accordance with approved procedures, and the results thus obtained used to verify and to review the validity of assumptions made and to update the assessments as specified in Article 15 for the period after closure.

Under subparagraphs of Article 16, Parties must also take appropriate steps to ensure that engineering and technical support is available in all safety-related fields throughout the operating lifetime of the facility, that incidents significant to safety are reported in a timely manner by the license holder to the regulatory body, and that procedures for characterization and segregation of radioactive waste are applied. Subparagraph (vii) obligates Parties to take appropriate steps to establish programs to collect and analyze relevant operating data and that they ensure that conclusions of the analysis are acted upon, where appropriate. Parties are re-

quired under subparagraphs (viii) and (ix), to ensure decommissioning and closure plans for radioactive management facilities and disposal facilities, respectively, are prepared and updated, as necessary, using information obtained during the operating lifetime of the facility. The regulatory body must also review these plans.

Article 17 sets forth the conditions for closure of a disposal facility, including record keeping (location, design, and inventory), and active or passive institutional controls. Parties are to take the appropriate steps to ensure that after closure, and during any period of active institutional controls, if an unplanned release of radioactive materials into the environment is detected, intervention measures are implemented, if necessary.

Articles 18 to 26 address the Convention's General Safety Provisions. Article 18 requires each Party to take, within the framework of its national law, the legislative, regulatory, and administrative measures, and other steps necessary, to implement its obligations under the Convention.

Under Article 19, each Party is obligated to establish and maintain a legislative and regulatory framework to govern the safety of spent fuel and radioactive waste management. The framework must provide for the establishment of applicable national safety requirements and regulations for radiation safety; a system of licensing; the prohibition of the operation of facilities without a license; a system of institutional control, regulatory inspection; documentation and reporting; the enforcement of regulations and the terms of licenses; and a clear allocation of responsibilities of bodies involved. When considering whether to regulate radioactive materials as radioactive waste, Parties must take due account of the objectives of the Convention.

Article 20 requires each Party to establish or designate a regulatory body entrusted with the implementation of the legislative and regulatory framework created under Article 19, to provide that body with adequate authority, competence, financial and human resources, and to ensure its effective independence in the performance of regulatory functions.

Under Article 21, each Party is obligated to ensure that the prime responsibility for the safety of spent fuel and radioactive waste management rests with the holder of the relevance license and to take the appropriate steps to ensure that each license holder meets its responsibility. If there is no such license holder, the responsibility rests with the Party having jurisdiction over spent fuel or radioactive waste.

Article 22 requires each Party to take the appropriate steps to ensure that qualified staff are available, as needed, for safety-related activities during the operating lifetime of a spent fuel and radioactive waste management facility. This Article also requires that appropriate steps be taken to ensure that adequate financial resources are available to support the safety of facilities during their operating lifetime, for decommissioning, and for institutional controls and monitoring arrangements following closure of a disposal facility for whatever period deemed necessary.

Under Article 23, each Party must take the appropriate steps to ensure that safety quality assurance programs are established and implemented.

Article 24 requires Parties to take the appropriate steps to ensure that during the operating lifetime of a spent fuel or radioactive waste management facility, the radiation exposure of the workers and the public caused by the facility shall be kept as low as reasonably achievable and that no individual shall be exposed in normal situations to radiation doses exceeding prescribed national dose limits with due regard to internationally endorsed standards on radiation protection. This Article also obligates each Party to take the appropriate steps to prevent unplanned or uncontrolled releases of radioactive material into the environment. Each Party must also take the appropriate steps to ensure that during the operating lifetime of a regulated nuclear facility, in the event that an unplanned or uncontrolled release of radioactive materials into the environment occurs, appropriate corrective measures are implemented to control the release and mitigate its effects.

Under Article 25, each Party must ensure that before and during operation of a spent fuel or radioactive waste management facility, there are appropriate on-site and, if necessary, off-site emergency plans covering the activities to be carried out in the event of an emergency. Emergency plans are to be routinely tested, and each Party must take appropriate steps for the preparation and testing of emergency plans for its territory insofar as it is likely to be affected in the event of a radiological emergency at a facility in the vicinity of its territory.

With respect to safe decommissioning, under Article 26, each Party is to take appropriate steps to ensure that qualified staff and adequate financial resources are available, the radiation protection principles in Article 24 are applied, emergency preparedness provisions in Article 25 are applied, and records important to decommissioning are kept.

Under Article 27, each Party involved in transboundary movement is to ensure that such movement is undertaken in a manner consistent with this Convention and relevant binding international instruments. In this connection, Parties undertake to take appropriate steps, to ensure authorized transboundary movement only with prior notification and consent of the State of destination. Under international law, notification to or authorization of coastal States is not required for passage through territorial seas and exclusive economic zones (EEZs); as a result prior notification of a State of transit is not required. Movement through States of transit is subject to those international obligations, which are relevant to the particular modes of transport utilized (e.g. IAEA Standards on the Safety of the Transport of Radioactive Materials). A Party which is a State of destination must consent to a transboundary movement only if it has the administrative and technical capacity, as well as the regulatory structure, needed to manage the spent fuel or the radioactive waste in a manner consistent with the Convention. A Party, which is a State of origin, must authorize a transboundary movement only if it can satisfy itself in accordance with the consent of the State of destination that the State of destination requirements are met prior to transboundary movement. A Party which is a State of origin must take the appropriate steps to permit re-entry into its territory, if a transboundary movement is not or cannot be completed in conformity with this Article, unless an alternative safe arrangement can be made.

Article 27 also prohibits Parties from licensing the shipment of spent fuel or radioactive waste to a destination south of latitude 60 degrees South (the Antarctic region) for storage or disposal. This Article further provides that nothing in the Convention prejudices or affects: (1) the exercise, by ships and aircraft of all States, of maritime, river, and air navigation rights and freedoms, as provided for in international law; (2) rights of a Party to which radioactive waste is exported for processing to return, or provide for the return of, the radioactive waste and other products after treatment to the State of origin; (3) the right of a Party to export its spent fuel for reprocessing; and (4) rights of a Party to which spent fuel is exported for reprocessing to return, or provide for the return of, radioactive waste and other products resulting from reprocessing operations to the State of origin.

Article 28 requires that each Party, within the framework of its national law, take steps to ensure that the possession, remanufacturing or disposal of disused sealed sources takes place in a safe manner and to allow for reentry for disposal, if in the framework of its national law, it has accepted that they be returned to a manufacturer qualified to receive and possess the disused sealed sources.

Articles 29, 30, and 31 establish timetables for meetings of the Parties. Article 29 provides for a Preparatory Meeting to be held not later than 6 months after the date of entry into force of this Convention. At that meeting, Contracting Parties will establish a date for the first Review Meeting, to be held not later than 30 months after the date of entry into force, and prepare and adopt Rules of Procedure and Financial Rules. Guidelines are to be established regarding the form and structure of the national reports, a date of submission of such reports, and the process for reviewing reports. Article 29 allows any State or regional organization of an integration or other nature which ratifies, accepts, approves, accedes to or confirms this Convention and for which the Convention is not yet in force may attend the preparatory meeting as if it were a Party to the Convention.

Article 30 provides for Review Meetings of the Parties for the purpose of reviewing the national reports submitted pursuant to Article 32. At these meetings, each Party is to have a reasonable opportunity to discuss and seek clarification of the national reports submitted by others. At each Review Meeting, the Parties must also determine the date for the succeeding Review Meeting, at an interval of no more than 3 years and, if appropriate, amend by consensus the Rules of Procedure and the Financial Rules.

Article 31 specifies that Extraordinary Meetings of the Parties shall be held only if agreed to by a majority of the Parties present and voting at a meeting, or at the timely written request of a Party, to the other Parties and the Secretariat, which is supported by a majority of the Parties.

Article 32 obligates each Party to submit for review, prior to each Article 30 Review Meeting, a report on the measures it has taken to implement its obligations under the Convention. Reports must address or include the following:

- (i) spent fuel management policy;
- (ii) spent fuel management practices;

- (iii) radioactive waste management policy;
- (iv) radioactive waste management practices;
- (v) criteria used to define and categorize radioactive waste;
- (vi) a list of spent fuel management facilities subject to this Convention, their location, main purpose, and essential features;
- (vii) an inventory of spent fuel that is subject to this Convention and that is being held in storage and of that which has been disposed of and, if available, information on its mass and its total activity;
- (viii) a list of radioactive waste management facilities subject to this Convention, their location, main purpose and essential features;
- (ix) an inventory of radioactive waste that is subject to this Convention that is being held in storage at radioactive waste management and nuclear fuel cycle facilities, has been disposed of, or has resulted from past practices, including available information such as volume or mass, activity, and specific radionuclides;
- (x) a list of nuclear facilities in the process of being decommissioned and the status of decommissioning activities at those facilities.

Article 33 provides that each Party must attend meetings of the Parties and be represented at such meetings by one delegate, and by alternates, experts, and advisers as it deems necessary. Parties may, by consensus, invite intergovernmental organizations to attend, as observers, any meetings or specific sessions thereof, who are competent in matters relating to the Convention, provided they accept in writing the provisions of Article 36.

Under Article 34, summary reports addressing the issues discussed and conclusions reached during a meeting are to be adopted by the Parties by consensus and made available to the public.

Article 35 specifies that the languages of meetings in the Parties are Arabic, Chinese, English, French, Russian, and Spanish, unless otherwise provided in the Rules of Procedure (Article 29). Reports may be prepared in the national language of the submitting Party, or in a single designated language agreed upon in the Rules of Procedure, although in the former case the Party must also provide a translation into the designated language.

Article 36 provides that the Convention does not affect the rights and obligations of the Parties under their own laws to protect information from disclosure. Information is defined to include, *inter alia*, personal data, information protected by intellectual property rights or industrial or commercial confidentiality, and information relating to national security and physical protection of nuclear materials. When, in the context of the Convention, a Party provides information identified by it as protected, such information is to be used only for the purposes for which it has been provided and its confidentiality is to be respected. Similarly, the contents of discussions of national reports held at Review Meetings are to be kept confidential.

With respect to information relating to spent fuel or radioactive waste falling within the scope of this convention by virtue of paragraph 3 of Article 3, Article 36 provides for exclusive discretion of

a concerned Party to decide: (1) whether such information is classified or otherwise controlled to preclude release; (2) whether to provide such information in the context of the Convention; and (3) what conditions of confidentiality are attached to such information if it is provided in the context of the Convention.

Under Article 37, the Secretariat functions for meetings of the Parties under the Convention are to be provided by the International Atomic Energy Agency (IAEA). The IAEA is to pay the costs of performing these functions out of its regular budget. The Secretariat's duties are to convene, prepare, and service the meetings of the Parties, and transmit to the Parties information received or prepared under the Convention.

Article 38 addresses dispute resolution. In the event of a disagreement between Parties concerning the interpretation or application of the Convention, the Parties must consult within the framework of a meeting of the Parties with a view to resolving the disagreement by consensus. If those consultations do not resolve the disagreement, then Article 38 provides that recourse can be made to the mediation, conciliation, and arbitration mechanisms provided for in international law, including the rules and practices prevailing within the IAEA. During the Diplomatic Conference in 1997 that considered and adopted the Convention, it was made clear during the discussions leading to the adoption of the final text of Article 38 that the words "recourse can be made" were deliberately chosen to avoid any implication that the dispute resolution mechanisms referred to in the Article were mandatory. Thus, Article 38 does not commit the United States to binding mediation, conciliation, or arbitration.

As provided in Article 39, the Convention was opened for signature by all States at the Headquarters of the IAEA in Vienna on September 29, 1997. After the Convention has entered into force, it is to be open for accession. Under this Article, regional organizations constituted by sovereign States and with competence in respect of negotiation, conclusion, and application of international agreements in matters covered by this Convention may become Parties to the Convention. In matters within their competence, which shall be detailed in a declaration communicated to the Convention's depositary, such organizations may exercise the rights and fulfill the responsibilities of the Convention on their own behalf, but do not have any vote additional to those of their member States.

Article 40 provides that the Convention will enter into force on the ninetieth day after the date of deposit with the Depositary of the twenty-fifth instrument of ratification, acceptance or approval, including the instruments of fifteen States each having an operational nuclear power plant. It will enter into force for each additional adhering State or regional organization on the ninetieth day after the date of deposit with the Depositary of the appropriate instrument by such a State or organization.

Procedures for amendment of the Convention are included in Article 41. Under Article 41, any Party may propose an amendment to this Convention. Proposed amendments must be considered at a Review Meeting or at an Extraordinary Meeting. The text of any proposed amendment must be communicated by the Depositary to the Parties at least 90 days before the meeting for which it is sub-



mitted for consideration. The Parties may adopt the proposed amendment by consensus, or, in the absence of consensus, provided that at least one half of the Parties are present at the time of voting, may decide, by a two-thirds majority vote of the Parties present and voting, to submit the proposed amendment to a Diplomatic Conference. The Conference shall make every effort to ensure that amendments are adopted by consensus. However, should that not be possible, amendments are adopted by a two-thirds majority of all Parties. All amendments are subject to ratification, acceptance, approval or confirmation by the Parties and shall enter into force for those Parties having satisfied or otherwise accepted the amendment 90 days after two-thirds of the Parties have deposited instruments of acceptance. Amendments will only enter into force for other Parties 90 days after that Party has deposited its relevant instruments accepting the amendment.

Under Article 42, a Party may denounce the Convention by written notification to the Depositary, effective one year following the Depositary's receipt of the notification or at such later date as specified in the notification.

Under Article 43, the IAEA Director General is the Depositary of the Convention, charged with the duty of notifying all Parties of signatures and deposits of instruments in accordance with Article 39; the date on which the Convention enters into force; notifications of denunciation under Article 42; and proposed amendments under Article 41.

Under Article 44 the original of the Convention, of which the Arabic, Chinese, English, French, Russian, and Spanish texts are equally authentic, must be deposited with the Depositary.

## VI. RESOLUTION OF RATIFICATION

The resolution of ratification, with its conditions, is as follows:

*Resolved (two-thirds of the Senators present concurring therein),*

### SECTION 1. SENATE ADVICE AND CONSENT SUBJECT TO CONDITIONS.

The Senate advises and consents to the ratification of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, done at Vienna on September 5, 1997 (Treaty Document 106-48), subject to the conditions of section 2.

### SEC. 2. CONDITIONS.

The advice and consent of the Senate to ratification of the Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management is subject to the following conditions, which shall be binding upon the President:

(1) COMMITMENT TO REQUEST AND REVIEW REPORTS.—Not later than 45 days after the deposit of the United States instrument of ratification, the President shall certify to the appropriate committees of Congress that the United States will:

(A) request copies of all national reports submitted pursuant to Article 32 of the Convention; and

(B) comment in each review meeting held pursuant to Article 30 of the Convention (including each meeting of a subgroup) upon aspects of safety significance in any report

submitted pursuant to Article 32 of the Convention by a Contracting Party that is receiving United States financial or technical assistance relating to the improvement of its nuclear and radiological safety and security practices.

(2) COMPLETE REVIEW OF INFORMATION BY THE LEGISLATIVE BRANCH OF GOVERNMENT.—

(A) UNDERSTANDING.—The United States understands that neither Article 36 nor any other provision of the Convention shall be construed as limiting the access of the legislative branch of the United States Government to any information relating to the operation of the Convention, including access to information described in Article 36 of the Convention.

(B) PROTECTION OF INFORMATION.—The Senate understands that the confidentiality of information provided by other Contracting Parties that is properly identified as protected pursuant to Article 36 of the Convention will be respected.

(C) CERTIFICATION.—Not later than 45 days after the deposit of the United States instrument of ratification, the President shall certify to the appropriate committees of Congress that the Comptroller General of the United States shall be given full and complete access to—

(i) all information in the possession of the United States Government specifically relating to the operation of the Convention that is submitted by any other Contracting Party pursuant to Article 32 of the Convention, including any report or document; and

(ii) information specifically relating to any review or analysis by any department, agency, or other entity of the United States, or any official thereof, undertaken pursuant to Article 30 of the Convention, of any report or document submitted by any other Contracting Party.

(D) REPORTS TO CONGRESS.—Upon the request of the chairman of either of the appropriate committees of Congress, the President shall submit to the respective committee an unclassified report, and a classified annex as appropriate, detailing—

(i) how the objective of a high level of nuclear and radiological safety and security has been furthered by the operation of the Convention;

(ii) with respect to the operation of the Convention on an Article-by-Article basis—

(I) the situation addressed in the Article of the Convention;

(II) the results achieved under the Convention in implementing the relevant obligation under that Article of the Convention; and

(III) the plans and measures for corrective action on both a national and international level to achieve further progress in implementing the relevant obligation under that Article of the Convention; and

(iii) on a country-by-country basis, for each Contracting Party that is receiving United States financial or technical assistance relating to nuclear or radiological safety or security improvement—

(I) a list of all nuclear facilities within the country, including those installations operating, closed, and planned, and an identification of those nuclear facilities where significant corrective action is found necessary by assessment;

(II) a review of all safety or security assessments performed and the results of those assessments for existing nuclear facilities;

(III) a review of the safety and security of each nuclear facility using facility-specific data and analysis showing trends of safety or security significance and illustrated by particular issues at each facility;

(IV) a review of the position of the country as to the further operation of each nuclear facility in the country;

(V) an evaluation of the adequacy and effectiveness of the national legislative and regulatory framework in place in the country, including an assessment of the licensing system, inspection, assessment, and enforcement procedures governing the safety and security of nuclear facilities;

(VI) a description of the country's on-site and off-site emergency preparedness; and

(VII) the amount of financial and technical assistance relating to nuclear or radiological safety or security improvement expended as of the date of the report by the United States, including, to the extent feasible, an itemization by nuclear facility, and the amount intended for expenditure by the United States on each such facility in the future.

(3) TREATY INTERPRETATION.—The Senate reaffirms condition (8) of the resolution of ratification of the Document Agreed Among the States Parties to the Treaty on Conventional Armed Forces in Europe (CFE) of November 19, 1990 (adopted at Vienna on May 31, 1996), approved by the Senate on May 14, 1997, relating to condition (1) of the resolution of ratification of the Intermediate-Range Nuclear Forces (INF) Treaty, approved by the Senate on May 27, 1988.

### SEC. 3. DEFINITIONS.

As used in this resolution:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term “appropriate committees of Congress” means the Committee on Foreign Relations of the Senate and the Committee on International Relations of the House of Representatives.

(2) CONTRACTING PARTY.—The term “Contracting Party” means any nation that is a party to the Convention.

(3) CONVENTION.—The term “Convention” means the Convention on the Safety of Spent Fuel Management and on the

Safety of Radioactive Waste Management, done at Vienna on September 5, 1997 (Treaty Document 106–48).

(4) NUCLEAR FACILITY.—The term “nuclear facility” has the meaning given the term in Article 2(f) of the Convention.

(5) UNITED STATES INSTRUMENT OF RATIFICATION.—The term “United States instrument of ratification” means the instrument of ratification of the United States of the Convention.

## VII. ADMINISTRATION STATEMENTS AND SUPPLEMENTARY MATERIAL

WRITTEN STATEMENT OF MR. RICHARD J. K. STRATFORD, SENATE  
FOREIGN RELATIONS COMMITTEE HEARING OF MARCH 19, 2003

Mr. Chairman and members of the Committee I appreciate this opportunity to discuss with you the importance of timely Senate action on the *Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management*. We greatly appreciate your scheduling a hearing on this important Convention. On September 13, 2000, the prior Administration sent the Joint Convention to the Senate for advice and consent. This Administration fully supports the Joint Convention and also desires your advice and consent to the ratification of the Convention, so that the United States can participate in worldwide efforts to ensure the safety of spent fuel and radioactive waste management for the benefit of current and future generations. A favorable action at this time is necessary, so that the United States can join the Parties as they gather this year to implement the Joint Convention. Otherwise we will be excluded from the process.

The Joint Convention is a companion convention to the *Convention on Nuclear Safety* to which the Senate gave its advice and consent on March 25, 1999, and which entered into force for the United States on July 10, 1999. With the United States’ participation, the Convention on Nuclear Safety is successfully raising the level of nuclear safety at civilian nuclear power plants throughout the world. It is the goal of the Joint Convention to extend similar efforts to spent nuclear fuel and waste management facilities.

The objectives of the Joint Convention are to achieve and maintain a high level of nuclear safety worldwide in spent nuclear fuel and radioactive waste management through the enhancement of national measures and international cooperation, to ensure that at all stages of spent fuel and radioactive waste management there are effective safety measures against potential radiological hazards so that current and future generations are protected, to prevent accidents with radiological consequences and to mitigate effects should such accidents occur.

The United States played a key role in developing the Joint Convention, and ratification will ensure our continued leadership in its worldwide implementation. The Joint Convention was adopted by a Diplomatic Conference convened by the International Atomic Energy Agency in September 1997. The United States was the first nation to sign the Joint Convention, when the U.S. Secretary of Energy signed it at the International Atomic Energy Agency’s General Conference on September 29, 1997. To date, 42 nations have signed the Joint Convention, of which 30 nations have become Parties to it. The Joint Convention entered into force on June 18, 2001,

after the requisite 25 nations became Parties, including at least 15 nations that had an operational nuclear power plant. The following nations are currently Parties to the Joint Convention: Argentina, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Republic of Korea, Latvia, Luxembourg, Morocco, Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, and United Kingdom. In addition to the United States, the following nations have signed the treaty, but have yet to ratify, accept, or approve it: Australia, Brazil, Estonia, Indonesia, Italy, Kazakhstan, Lebanon, Lithuania, Peru, Philippines, and the Russian Federation.

The Joint Convention is important to U.S. foreign policy. It supports safety as the top priority in use of nuclear power worldwide. It promotes the safe operation of spent nuclear fuel and radioactive waste management facilities and the application of radiation protection principles. It is an incentive convention that was carefully drafted to encourage participation by countries, such as the Newly Independent States and Central and Eastern European countries, so that they can adhere to the Joint Convention even as they develop their domestic infrastructure. The Joint Convention provides a mechanism for the United States to continue to work with other countries to promote objectives, consistent with U.S. policies and the U.S. legislative and regulatory framework, that ensure the safety of spent fuel and radioactive waste management for the benefit of current and future generations. By becoming a Party to the Joint Convention, the United States will have an opportunity to: review and benefit from the experience of other nations, promote and help influence a stable technical environment, safety programs, and regulatory system in developing countries; identify possible areas for bilateral and multilateral technical and regulatory cooperation; and strengthen the worldwide safety culture, including the management of radioactive waste, to minimize the threat of the malicious use of radioactive waste, as may occur with disused sealed sources.

Based on the successful format of the *Convention on Nuclear Safety*, the Joint Convention establishes a series of broad commitments with respect to the safe management of spent nuclear fuel and radioactive waste without prescribing specific or mandatory standards for its Parties. Parties to the Joint Convention are required to take appropriate steps to bring their activities into compliance with the Convention's general obligations related to the safety of spent fuel and radioactive waste management. However, the specific steps that Parties should take are not prescribed but are left to each Party's discretion. In addition, the Joint Convention adopts a review process similar to that established in the *Convention on Nuclear Safety* to apply to spent nuclear fuel and radioactive waste management activities. Each Party is obligated to prepare a national report covering the scope of the Joint Convention and subject it to review by other Parties. Such review has proven very successful for implementation of the *Convention on Nuclear Safety*.

The Joint Convention applies to spent nuclear fuel resulting from operation of civilian nuclear reactors, radioactive waste from civilian applications, and disused radioactive sealed sources. For such

material, the Joint Convention seeks to ensure safety is a consideration in virtually all aspects, including the legislative and regulatory framework, operational radiation protection, management of nuclear facilities, decommissioning, emergency preparedness, and transport between nations. The Joint Convention does not apply to naturally occurring radioactive materials, unless the Party declares this material as waste for purposes of the Joint Convention.

The Joint Convention does not apply to military radioactive waste or military spent nuclear fuel unless the Contracting Party declares it as waste for purposes of the Convention. The Joint Convention does apply to military radioactive waste or military spent nuclear fuel that is permanently transferred to and managed within exclusively civilian programs. In this way, the Joint Convention ensures that national security is not compromised and Parties have absolute discretion as to what information is reported from military sources. In the United States, military radioactive waste is disposed of at U.S. Department of Energy facilities, and military spent nuclear fuel will eventually be disposed of in a Department of Energy geologic repository along with civilian spent fuel and defense high-level waste. The U.S. national report will cover the military radioactive waste that has been transferred to an exclusively civilian program, and will not cover military spent nuclear fuel that has not been transferred to and managed within exclusively civilian programs. The Joint Convention will not affect U.S. military operations in any way, nor will classified information be included in the U.S. national report.

The Joint Convention is non-controversial and has broad support from U.S. industry groups and U.S. States. It has the full support of the Department of State, the Department of Energy, the Environmental Protection Agency, and the Nuclear Regulatory Commission. There is no overlap or duplication of efforts with any other international convention or agreement. In addition to the *Convention on Nuclear Safety*, the Joint Convention is complementary to the *Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal* and the *London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter*.

As a Party to the Joint Convention, the United States would be represented by a delegate, a representative of the Department of State, with alternate delegates from the Department of Energy, the Environmental Protection Agency, and the Nuclear Regulatory Commission. Consistent with its foreign policy responsibilities, the State Department will lead U.S. representation at meetings of the Parties and coordinate activities with Congress. The Department of Energy is the lead agency responsible for collection of information and preparation of the U.S. national report and technical coordination with the other agencies, including review of other Parties' national reports. The Nuclear Regulatory Commission and the Environmental Protection Agency will provide information on the regulatory perspectives in the U.S. national report and will participate in reviews of other Parties' national reports. An interagency working group has been established to coordinate Joint Convention activities.

The United States has taken the initial steps to prepare a national report in anticipation of becoming a Contracting Party. We

do not envision any changes in our regulatory programs resulting from the Joint Convention. However, it is likely that information received through the constructive review and information exchange with other nations will help with our continuous improvement process.

During the national report preparation process, the Department of Energy will use existing information so that there is no burden on governmental or commercial spent-fuel and waste management activities. The report will follow a format arrived at by consensus of the Parties. The Department of Energy will utilize information from existing sources, e.g., Spent Nuclear Fuel Database, Central Internet Database, Manifest Information Management System, and commercial spent fuel information available from the Office of Civilian Radioactive Waste Management.

From December 10-14, 2001, the Joint Convention Parties convened a meeting in Vienna, Austria, to take the first steps in the reporting process. The United States was not in attendance because we had not ratified the Convention. During this meeting the Contracting Parties reached consensus on the procedures, report preparation schedule, report format, and review process details.

An organizational meeting of the Parties is scheduled for April 7, 2003. This meeting is significant because it will determine the makeup of the review groups and the selection of a meeting Chairman and review group Chairmen. The first Review Meeting is scheduled to take place November 3, 2003. We anticipate that the Parties will be organized into subgroups of five to seven nations. Members of the subgroups will exchange reports for review and have an opportunity to ask questions and request clarification during the subgroup meetings. The process will allow written questions and comments to be made on all national reports, whether in the assigned subgroup or not, prior to the review meetings. Results of the subgroup meetings will be reported to a plenary review meeting, at which time all Parties will have an opportunity to further discuss the national reports. The plenary meeting will develop a summary review report for public release, addressing the issues discussed and conclusions reached without providing details from national reports or review debates. Following completion of this process, the next review meeting will be held within 3 years.

Let me next address the amount of resources required and availability of reports. Costs incurred once every 3 years may be considered to fall into three categories: (1) preparation of the U.S. national report, (2) preparation and participation by the four agencies in organizational and review meetings, and (3) review and analysis of other national reports. We expect to absorb these costs within each agency's budget and that expenditure will occur on a 3-year cycle.

With regard to availability of information, the United States will receive national reports from members of the review subgroup and any other reports it requests. We will request a copy of all national reports be provided to the United States. Reports provided by Parties will be available to the Committee and General Accounting Office subject to any confidentiality conditions expressed by the Parties. Once submitted, the U.S. national report will be publicly available.

The Parties to the Joint Convention are proceeding with the process of preparing national reports for the first review meeting. The Administration seeks advice and consent to the Joint Convention so that the United States can participate fully with the other Contracting Parties to accomplish the goals of this Convention. An organizational meeting of the Parties is scheduled for April 7, 2003. Although the United States cannot become a Party by that time, it expects to participate in the meeting if it has ratified the Joint Convention by that date. We are eager to continue the important U.S. role in promoting safety in worldwide spent nuclear fuel and radioactive waste management activities by fully participating in this process.

Thank you for the opportunity to discuss the Joint Convention, and let me introduce my colleagues from the Department of Energy, Environmental Protection Agency, and Nuclear Regulatory Commission, who are here with me to answer any questions that you may have.

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#### INTERAGENCY-CLEARED QUESTIONS AND ANSWERS ON THE CONVENTION, MARCH 19, 2003

##### I. PURPOSE

*Question 1.* What is the purpose of the Waste Convention?

Answer. The purpose of the Waste Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Waste Convention) is to achieve a high level of safety worldwide in spent fuel and radioactive waste management. This is to be accomplished through the enhancement of national measures and international cooperation. It is anticipated that there will be a thorough examination of national programs through an exchange of views, so that Contracting Parties can learn from each other's solutions to common and individual safety problems. The process is viewed as a mechanism for contributing to improving worldwide safety.

*Question 2.* Is there a relationship between the purpose of the Waste Convention and the Convention on Nuclear Safety (CNS)?

Answer. Yes. The CNS, which establishes a legal obligation on the part of the Contracting Parties to apply certain safety principles to the construction, operation, and regulation of civilian nuclear power reactors, contains a preambular statement affirming a commitment by Parties to develop a similar convention on the safe management of radioactive waste. Together, the Waste Convention and the CNS formulate a joint mechanism to strengthen the worldwide safety culture.

Both Conventions are consistent with U.S. policy. The United States became a Contracting Party to the CNS on July 10, 1999 and signed the Waste Convention on September 29, 1997.

##### II. SCOPE

*Question 3.* What is the scope of the Waste Convention?

Answer. The Waste Convention applies to the safety of spent fuel and radioactive waste management resulting from civilian nuclear



applications. It also covers such issues as radioactive waste management resulting from civil applications; disused sealed sources no longer needed; operational radiation protection; management of nuclear facilities; decommissioning; emergency preparedness; legislative and regulatory frameworks; and transboundary movement. It does not include naturally occurring radioactive materials (NORM), unless a Contracting Party declares it as radioactive waste for the purposes of the Waste Convention.

*Question 4.* Does the Waste Convention apply to military radioactive waste or spent nuclear fuel?

Answer. The Waste Convention does not apply to a Contracting Party's military radioactive waste or spent nuclear fuel unless the Contracting Party declares it as spent nuclear fuel or radioactive waste for the purposes of the Convention. The Waste Convention would apply to military radioactive waste and spent nuclear fuel if and when such material is permanently transferred to and managed within exclusively civilian programs. The Waste Convention contains provisions to ensure that national security is not compromised and that States have absolute discretion as to what information is reported on material from military sources.

In the United States, all military radioactive waste and spent nuclear fuel is normally transferred to civilian programs for disposal. The Waste Convention will not, however, affect ongoing U.S. military operations in any way, nor will classified information be covered in the U.S. national report.

*Question 5.* Does the Waste Convention lay out international standards Contracting Parties must meet?

Answer. No. The Waste Convention in and of itself does not delineate standards the Contracting Parties must meet. Contracting Parties are required to take "appropriate steps" to ensure safe management of spent nuclear fuel and radioactive waste and to report on their activities as described within the articles of the Waste Convention.

*Question 6.* What are the obligations of Waste Convention Contracting Parties with respect to internationally endorsed standards and criteria?

Answer. The Waste Convention obligates Contracting Parties to consider internationally endorsed standards and criteria, however a Contracting Party is not bound by them in setting national protective methods and radiation standards which will govern even as to transboundary effects.

*Question 7.* What are the Waste Conventions obligations with respect to transportation and how do they relate to the International Atomic Energy Agency (IAEA) Code of Practice on International Movement of Radioactive Waste?

Answer. Waste Convention obligations regarding transboundary movement are a restatement of relevant provisions of the non-legally-binding IAEA Code of Practice on International Movement of Radioactive Waste.

*Question 8.* What are the implications of Article 27, Transboundary Movement, for:

- 1(v): a Contracting Party which is a State of origin shall take the appropriate steps to permit re-entry into its territory, if a transboundary movement is not or cannot be completed in conformity with this Article, unless an alternative safe arrangement can be made.”

Answer. A State of origin must take the appropriate steps to permit re-entry of a shipment that cannot be completed unless other safe arrangements can be made. This avoids situations of stranded shipments. The Convention recognizes that any State has the right to ban foreign radioactive waste and spent fuel import into its territory.

- “3(ii): . . . a Contracting Party to which radioactive waste is exported for processing to return, or provide for the return of, the radioactive waste and other products after treatment to the State of origin;”

Answer. The Convention does nothing to prejudice or affect the rights of the Contracting Party to return wastes to their State of origin.

- “3(iii): . . . a Contracting Party to export its spent fuel for reprocessing;”

Answer. The Waste Convention does nothing to prejudice or affect this right. For U.S. origin fuel, other countries are required, under the terms of the applicable Agreement for Peaceful Nuclear Cooperation with the United States, to seek the consent of the United States prior to the export for reprocessing of any U.S.-obligated spent fuel. The Waste Convention has no effect upon these U.S. legal requirements nor does it affect U.S. consent rights under Agreements for Peaceful Nuclear Cooperation.

Most international or regional facility proposals focus on the nuclear program in Taiwan and the Republic of Korea as potential customers. Switzerland and Japan have also been mentioned. The United States has retransfer consent rights on all the spent fuel on Taiwan and much of the spent fuel in the ROK. The United States also has certain consent rights over much of the fuel in Switzerland and Japan.

*Question 9.* Does the Waste Convention’s obligation to minimize radioactive waste generation limit a Contracting Party’s nuclear fuel cycle options?

Answer. No. Contracting Party obligations under the Waste Convention do not limit a Contracting Party’s nuclear fuel cycle options or decisions to opt for higher enrichment or increased fuel burn up, even if options selected may generate more waste than other available options. The Convention explicitly states that this obligation is to keep the generation of wastes to the minimum practicable, consistent with the type of fuel cycle policy adopted.

*Question 10.* Does the Waste Convention obligate a Contracting Party to obtain views, approval, or permission on the safety impacts of other Contracting Parties in the vicinity of a proposed spent fuel or radioactive waste facility?

Answer. No. Although Contracting Parties in the vicinity of a proposed spent nuclear fuel or radioactive waste facility should be consulted, and thus would have an opportunity to provide their

views on the facility's likely safety impact, there is no requirement to obtain their views, approval or permission on the likely safety impact of a nearby proposed facility.

### III. IMPLEMENTATION PROCESS

*Question 11.* What are U.S. obligations under the terms of the Waste Convention?

Answer. Structured similarly to the Convention on Nuclear Safety, the Waste Convention identifies a range of issues with respect to the safe management of spent nuclear fuel and radioactive waste and Contracting Parties commit to take appropriate steps to address such issues. The specific steps to be taken are left to each Contracting Party's discretion. In addition, as a Contracting Party to the Convention, the United States is obligated to submit a national report and participate in the review meetings on measures taken to meet Waste Convention commitments by the United States and other countries.

*Question 12.* Who represents the United States at the Review meetings of the Contracting Parties?

Answer. As a Contracting Party to the Convention, the United States would be represented by one delegate and any other alternates, experts, advisers, or observers as the United States deems necessary.

- The U.S. delegate would be a representative of the Department of State.
- U.S. Alternate delegates would be representatives of the Department of Energy (DOE), the Nuclear Regulatory Commission (NRC), and the Environmental Protection Agency (EPA).
- Experts and advisers may possibly be invited to be part of the U.S. delegation if determined to be needed. It is a possible, but not likely, that this could include representatives from Non-Government Organizations (NGO), industry, or utilities as appropriate. Intergovernmental organizations may, as appropriate, be invited to attend a meeting or session as an observer.

*Question 13.* The Convention entered into force June 18, 2001, 90 days after adherence by 25 signatories, including 15 which have an operational nuclear power plant. According to Article 29, a preparatory meeting is to be held not later than 6 months after entry into force. Has a meeting been held and did the United States attend?

Answer. Yes, a preparatory meeting was held in December 2001. The United States, not having ratified the Convention, was not in attendance. An organizational meeting of the Contracting Parties is scheduled for April 7, 2003. Although the United States cannot become a Contracting Party by that time, it expects to participate in the meeting if it has ratified the Waste Convention before that date. The United States would need to be a Contracting Party to review national reports of other States and participate in the November 2003 review meetings.

*Question 14.* What happened at the preparatory meeting?

Answer. In December 2001, the Contracting Parties met and agreed upon the guidelines for the form and structure of national

reports; the guidelines for the review process; Rules of Procedure and Financial Rules.

*Question 15.* What role do U.S. Agencies and Departments play in the Waste Convention process?

Answer. The Departments of State and Energy, the Nuclear Regulatory Commission (NRC) and the Environmental Protection Agency (EPA) all have responsibilities in support of U.S. participation in the Waste Convention process:

- U.S. Department of State  
The State Department's foreign policy responsibilities include representation of the United States to, and conducting negotiations with, other countries and international organizations. These responsibilities also include strengthening Congressional and public understanding of, and support for, the goals, objectives, and approaches of the President and the Secretary in the area of foreign policy. International peaceful nuclear cooperation policy is primarily a foreign affairs issue. For that reason, the State Department's function, in implementation of the Waste Convention, is to lead the U.S. delegation at meetings of the Contracting Parties.
- U.S. Department of Energy (DOE)  
Implementation of U.S. obligations under the Waste Convention will be carried out primarily by the DOE as the U.S. agency responsible for the safe storage, treatment, and disposition of the majority of U.S. high-level radioactive waste, as well as low-level radioactive waste generated by DOE. DOE is responsible for the cleanup of the legacy waste from the Cold War era. In this respect, DOE will be responsible for the preparation of the U.S. national report and the representation of this information. DOE will also be responsible, for working with other U.S. agencies, in the proposal and strategy for U.S. participation in the Waste Convention.
- U.S. Nuclear Regulatory Commission  
The NRC has responsibility for regulating all commercial spent fuel storage and all spent fuel and high-level radioactive disposal activities. NRC and/or Agreement States (i.e., States to which the NRC has relinquished regulatory authority over certain nuclear activities and facilities) also have responsibility for regulating waste management for commercial low-level radioactive waste. NRC's role in implementation of U.S. obligations under the Waste Convention is to provide information on the regulatory perspective for spent nuclear fuel and radioactive waste management for the U.S. national report.
- U.S. Environmental Protection Agency (EPA)  
EPA establishes generally applicable environmental standards for protection of the general environment from radioactive material. In addition, EPA has regulatory authority for storage, management, and disposal of transuranic wastes at DOE's Waste Isolation Pilot Plant (WIPP). EPA also is responsible for implementation of the London Convention provisions associated with prohibiting ocean dumping of radioactive wastes. EPA's role in implementation of U.S. commitments under the Waste Convention is to provide information on the regulatory

perspective for transuranic waste management for the U.S. national report.

#### IV. NATIONAL REPORTS AND THE CONVENTION PROCESS

*Question 16.* What is the process by which the Contracting Parties to the Waste Convention will review national reports?

Answer. Contracting Parties are to submit national reports addressing measures taken to implement the obligations of the Convention, their relevant national policies and factual information about their facilities and materials. The Contracting Parties will hold meetings for the purpose of reviewing national reports. The first review meeting is to be held beginning November 3, 2003. The interval between review meetings is not to exceed three years.

*Question 17.* How will the United States participate in the review of national reports of other countries at the review meeting?

Answer. As currently proposed, the Contracting Parties are to be organized into subgroups of five to seven countries with a Chairman, Vice-Chairman, and a Rapporteur. The United States will be assigned to a group. Membership of each group will be rotated from review meeting to review meeting. In subgroup meetings, members will exchange national reports for the purpose of conducting a detailed review. Each country will have a reasonable opportunity to ask questions and request clarification of reports submitted during meetings of the subgroups. The Rapporteur will prepare a reporting document, which will be used as the basis for a subgroup report to the Plenary Session.

*Question 18.* Will the United States have an opportunity to comment on national reports from countries not in the U.S. assigned country subgroup?

Answer. Yes. A Contracting Party has additional opportunities to comment on national reports of all other Contracting Parties, by sending written comments and questions before the review meeting, by attending the subgroup meeting in which a particular report is discussed, and by addressing a Plenary Session.

However, the United States must first become a Contracting Party to be entitled to participate in the review of any Contracting Party's national report, unless the IAEA and the Contracting Party voluntarily permitted such a review.

The guidelines adopted at the preparatory meeting (December 2001) propose that the Contracting States should review all country reports. The review process allows formal comment by Contracting States on all reports, whether inside or outside the reporting group.

*Question 19.* In the U.S. view, what countries have what problems?

Answer. There is a wide range of problems and differences between States party to the Waste Convention. Some emerging nations have issues associated with lack of regulatory systems and requirements. Laws and regulations need to be structured to increase safety of spent fuel and radioactive waste management if they do not exist. Not all countries have operational nuclear power plants and spent fuel, their problems will focus on waste management

issues and disused sealed sources. Most nations, including the United States, have difficulties siting disposal facilities.

*Question 20.* Will any activity under the Waste Convention, including U.S. advice or comments on other country national reports through the review process provide a basis for any U.S. liability?

Answer. It is unlikely that adherence to the Waste Convention could provide a basis for United States government liability. The Convention does not purport to affect international nuclear liability. Under the Waste Convention, the responsibility for safety of spent fuel or radioactive waste management rests with the Contracting Party which has jurisdiction over the spent fuel or over the radioactive waste. The Waste Convention provides for no private right of action and does not waive the sovereign immunity of Contracting Parties.

*Question 21.* Under Article 32, Reporting, for 2(ii) an inventory of spent fuel that is subject to this Convention and that is being held in storage and of that which has been disposed of. This inventory shall contain a description of the material and, if available, give information on its mass and its total activity; will the Russian Federation report include spent fuel inventories?

Answer. Like the United States, the Russian Federation has not yet become a Contracting Party. Once they complete their ratification process and become a Contracting Party, the Russian Federation will be subject to the terms of Article 32, including the requirement to report its inventory of spent fuel held in storage or disposed of. Article 32 would also apply to any future regional or international repository in the Russian Federation.

*Question 22.* Under Article 36, Confidentiality, what are the implications for Congressional information interests?

Answer. Under the terms of Article 36, information will be available, but its confidentiality is to be respected. The Convention does not affect the rights and obligations of the Contracting Parties, under their laws, to protect information from disclosure. This includes a range from national security to industrial property protection. The Contracting Party has exclusive discretion to denote "information" as classified or otherwise controlled. The Administration will make information available to the fullest extent possible. The Convention on Nuclear Safety (CNS) will serve to some extent as a paradigm for implementation of the Waste Convention.

*Question 23.* Will there be a review meeting summary report? Will it be available publicly?

Answer. Yes. Under Article 34 of the Waste Convention, Contracting Parties are obligated to adopt by consensus, and make available to the public, a summary report addressing the issues discussed and the conclusions reached during the meeting. However, no specific national report will be identified, nor will details of debates be available. The summary report is prepared from the subgroup Rapporteur reports.

#### V. U.S. NATIONAL REPORT PROCESS

*Question 24.* What is the process by which the United States will prepare a national report?

Answer. Each Contracting Party is required to submit a national report for review on measures taken to meet its commitments under the articles of the Waste Convention, prior to the review meeting. The United States will follow the guidelines for the form and structure of national reports established by the Contracting Parties at the December 2001 preparatory meeting.

- DOE will be the lead agency for preparation of the U.S. national report in coordination with the NRC, EPA, and the Department of State.
- The U.S. national report form and structure will be closely modeled after the U.S. national report submitted for the Convention on Nuclear Safety, although the Waste Convention elaborates on the content of the report in more detail than the CNS. Appendices to the Report will include detailed data tables. Generic summary documents, standard DOE, NRC, and EPA documents, and other appropriate documents and reports will be cited by reference.
- An interagency working group (IWG), The Executive Steering Committee for the Convention on Spent Fuel and Radioactive Waste Convention, chaired by the Department of Energy, was established for the purpose of coordinating U.S. Waste Convention activities in anticipation of ratification and in preparation for the review meetings. Other members include NRC, EPA, and the Department of State.

*Question 25.* Will Agreement States and Low-Level Radioactive Waste Compacts (Compacts are States that band together with a plan to have one disposal facility per compact in a selected host State) (Compacts), and others have an opportunity to review and comment on the U.S. national report prior to submittal?

Answer. No formal opportunity for Agreement State or Low-Level Radioactive Waste Compact review and comment of the U.S. national report is expected prior to submittal to the IAEA. Likewise, there is no obligation for review or comment on the part of any or all Agreement States or Compacts to contribute or review the U.S. national report or the report of any other Contracting Party.

*Question 26.* Will the Comptroller General and the General Accounting Office have access to U.S. analyses and documents prepared under the Waste Convention Process?

Answer. Yes. In accordance with the law.

*Question 27.* Once submitted, would the U.S. national report be publicly available?

Answer. Yes. The U.S. national report will be made available to the U.S. public.

*Question 28.* Will other Contracting Party national reports be available to the U.S. public?

Answer. Contracting Parties are entitled to designate certain information to be protected against public disclosure. The United States must respect such confidentiality designations. As a Contracting Party, the United States would be entitled to receive national reports of all other Contracting Parties. However, because of the enormity in the quantity of documentation of national reports

from all Contracting Parties, reports for only those States participating in a specific subgroup will be transmitted to members of the group. Other reports will be provided by the Secretariat upon request.

Following the first review under the Convention on Nuclear Safety, many national reports were posted on the IAEA web site and thus are publicly available. We anticipate a similar practice to be implemented for national reports under the Waste Convention.

## VI. NATIONAL REPORT ELEMENTS

*Question 29.* What spent nuclear fuel and radioactive waste inventories will be included in the U.S. national report?

Answer. The U.S. national report inventory data, which will be taken from currently available Federal Government databases, is to cover spent nuclear fuel stored or disposed of and radioactive waste stored at certain facilities or which has been disposed of or has resulted from past practices. Radioactive waste from hospitals, medical institutions, research facilities and the like would be covered in the inventory after shipment to a radioactive waste facility. Specific waste materials included are to be itemized in the report's inventory list.

*Question 30.* What specific spent nuclear fuel and radioactive waste databases will be used as the source for inventory data in the U.S. national report? Who maintains the databases? What is the source of funding?

Answer. In preparing the U.S. national report, three databases will be used as the source for identifying U.S. inventory:

- DOE Spent Nuclear Fuel Inventory (SNF). The National Spent Nuclear Fuel Database is maintained at the Idaho National Engineering and Environmental Laboratory (INEEL), National Spent Fuel Program Office. The DOE Office of Environmental Management funds the database.
- Commercial SNF Inventory. Data on the commercial SNF inventory will be obtained from the DOE Office of Civilian Radioactive Waste Management's Environmental Impact Statement (EIS) entitled, "Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada." The DOE Office of Civilian and Radioactive Waste Management (OCRWM) funded the collection of inventory data for this EIS. OCRWM funds the collection of commercial SNF inventory information on a periodic basis.
- Commercial Low-Level Waste Disposal Volumes. Commercial low-level waste disposal volumes are collected by DOE through the Manifest Information Management System. The DOE Office of Environmental Management funds this program and collection of data.
- DOE Low-Level Inventory. The DOE low-level inventory is collected in DOE's Environmental Management Corporate Database. This system is maintained and funded by the DOE Office of Environmental Management. The Office updates DOE's low-level radioactive waste inventory every two years. Waste information is collected annually.



*Question 31.* What facilities will be included in the national report inventory?

Answer. The U.S. national report will cover existing and proposed facilities, whether Federal, State, or private. The report's list of sites identifies which types of sites are included.

*Question 32.* How many spent fuel and waste management facilities in the United States come under the Convention?

Answer. Numerous facilities in both commercial and government sectors in the United States will be included in the report under the Convention. In terms of sites where the facilities are or will be located, there are:

- Three existing low-level waste disposal sites (Barnwell, Hanford, and Clive) and four closed low-level waste disposal sites (Beatty, Sheffield, Maxey Flats, and West Valley) in the commercial sector. Any future Low-Level Radioactive Waste Compact site would be included in the report under the Waste Convention.
- Currently, there are 26 operating independent spent fuel storage installations (ISFSI) in the United States. However, facilities within the controlled area at operating reactors will not be included in the report.
- Interim Spent Nuclear Fuel Storage facilities are located at 21 commercial reactor sites, however facilities within the perimeter at operating reactors will not be included in the report.
- DOE facilities located at 30 different sites across the nation for government waste, including operating and planned disposal facilities for transuranic (WIPP) and low-level waste, treatment facilities, and storage facilities.
- Mill tailings sites include 39 under NRC jurisdiction and 9 under Agreement States. There are 5-10 Uranium/Thorium sites.
- The planned Yucca Mountain high-level waste site and any other site for commercial spent nuclear fuel.
- Twenty-eight contaminated materials facility sites.

*Question 33.* Is a nuclear power reactor in decommissioning to be included in the inventory of facilities?

Answer. Yes, the Joint Convention's Article 32.2(v) specifies that the National Report is required to provide a list of nuclear facilities (which include nuclear power reactors) in the process of being decommissioned, as well as the status of decommissioning activities at those facilities.

*Question 34.* Does the Convention include disused sealed sources no longer needed?

Answer. Disused sealed sources no longer needed are covered to the extent that they are disposed in a radioactive waste facility and that a Contracting Party should permit reentry if such a source is being returned to a manufacturer licensed to receive and possess it. The Contracting Party should also have a framework for safe management of disused sources. There is no requirement that a source be registered or tracked throughout its life cycle.

*Question 35.* Will the national reports include inventories of disused sealed sources?

Answer. There is no specific requirement in the Waste Convention to report inventories of disused sources. In some countries, disused sealed sources may be included in their waste inventories as waste. Those sources returned for re-manufacturing would not be subject to the reporting requirements, unless the Contracting Party voluntarily reported such inventories. However, those disused sealed sources which are to be disposed of would be considered radioactive waste and should be reported under the radioactive waste inventory.

The IAEA has ongoing programs (Net-Enabled Waste Management Data Base) in place for reporting disused sealed sources. Also, the IAEA is in the process of revising the non-legally-binding Code of Conduct on the Safety and Security of Radioactive Sources to address security concerns raised in the wake of September 11. The Code identifies activities important for strengthening national controls on cradle-to-grave management of radioactive sources. National registries of radioactive sources is being considered as a possible addition to the Code.

*Question 36.* How does ratification of the Waste Convention support U.S. efforts to minimize the threat of malicious use of radioactive waste, such as disused sealed sources?

Answer. Article 28 of the Waste Convention, entitled "Disused Sealed Sources", commits Contracting Parties to the Convention to take the appropriate steps to ensure that the possession, re-manufacturing or disposal of disused sealed sources, in the framework of national law, takes place in a safe and secure manner. The Waste Convention offers an opportunity for the United States, as a Contracting Party, to review other nations' progress through national report reviews and reviews. U.S. concerns about control and intentional misuse of radioactive waste or disused sealed sources can be raised in the context of the national report review meeting. In this way, the United States can influence globally the safe management of spent fuel and radioactive waste and urge nations to enact new laws and controls on disused sealed sources, where they now do not exist.

## VII. U.S. PROGRAM EFFECTS

*Question 37.* Will the Waste Convention improve or strengthen DOE's spent nuclear fuel and waste program? How or Why not?

Answer. Yes. Review of the national reports and the prospect of bilateral cooperation will strengthen DOE's spent fuel and radioactive waste program. Lessons learned from other countries both from how they manage their spent nuclear fuel and their experiences in resolving common and individual safety problems could be used to improve DOE's programs.

*Question 38.* Does DOE anticipate any changes in its spent nuclear fuel or waste program in the near-term, long-term? What is the anticipated nature of the changes?

Answer. No changes are expected in the policy and strategy of DOE's spent nuclear fuel and radioactive waste programs. Any changes would be related to developing technological alternatives to current stabilization, storage, treatment, and disposal missions at DOE. Alternative technical solutions are often needed to meet

environmental compliance requirements and to reduce the cost of operations.

*Question 39.* Will the Convention improve or strengthen NRC's regulatory and licensing program? How or Why not?

Answer. The Waste Convention is not expected to result in major changes to the NRC's regulatory program. Nonetheless, by providing a mechanism for receiving information on other national programs through the constructive exchange of national reports and reviews, the Waste Convention will support the NRC's own continuing efforts to improve its regulatory program through self-assessment.

*Question 40.* Does NRC anticipate any changes in its regulatory program for radioactive waste management and/or spent nuclear fuel management in the near-term, long-term? What is the anticipated nature of the changes?

Answer. The NRC does not anticipate the need to make any significant changes to its regulations as a result of the Waste Convention. Changes, if any, will be publicly vetted as part of the NRC's rulemaking process.

*Question 41.* Will the Waste Convention improve or strengthen EPA's regulatory program? How or Why not?

Answer. The Waste Convention is not expected to have an effect on EPA's regulatory program.

*Question 42.* Does EPA anticipate any changes in its regulatory program in the near-term, long-term? What is the anticipated nature of the changes?

Answer. EPA does not anticipate any changes to its regulatory program either in the near-term or the long-term.

#### VIII. POST 9-11 ISSUES

*Question 43.* Does the Waste Convention address security and diversion from terrorist attacks?

Answer. No, the Waste Convention does not directly address security and diversion from terrorist attacks. However, the Convention, along with the CNS, does foster a constructive multi-lateral framework to increase safety and security at facilities throughout the world. It is an incentive convention that addresses safety issues primarily associated with spent nuclear fuel management and radioactive waste management. Promoting a stable technical environment and regulatory systems in developing countries through the Convention will assist contracting States to increase security and diversion from terrorist attacks.

#### IX. COSTS

*Question 44.* What costs are associated with participating in the Waste Convention?

Answer. The costs to the United States as a Contracting Party to the Waste Convention include:

- Preparation of the U.S. national report every three years
- Reviewing national reports of other countries

- U.S. delegation participation in the preparatory, organizational, and review meetings.

*Question 45.* What are the anticipated costs for preparing the U.S. national report? Will there be any additional costs to licensees?

Answer:

- For DOE, anticipated costs for preparing the U.S. national report is estimated at \$200,000 for FY-2003 and an estimated \$200,000 incurred annually thereafter. Costs will be absorbed within the existing DOE budget.
- For NRC, costs to prepare information on the commercial regulatory perspective for the national report are not expected to be substantial and can be absorbed within the existing budget. There are no expected additional costs to licensees.
- For EPA, costs are expected to be minimal and can be absorbed within the existing budget. No additional costs to licensees are anticipated.

*Question 46.* Under the NRC's regulatory regime Agreement States subsume certain of the NRC's regulatory authority subject to oversight. Will there be any additional costs to Agreement States?

Answer. In countries having a federal system of government such as the United States, States may carry out convention provisions. For the United States there are no significant new burdens or unfunded mandates for the Agreement States that are anticipated to result from the Waste Convention.

*Question 47.* Under U.S. law, States are responsible for the disposal of low-level radioactive waste and permitted to formulate compacts for this purpose. Will there be any additional costs to Low-Level Waste Compacts?

Answer. No additional costs are expected to States or Low Level Waste Compacts, because the regulatory program to which such entities are subject is not expected to change as a result of the Convention.

*Question 48.* Will the DOE National Laboratories be involved in preparing the U.S. national report? What are the anticipated costs?

Answer. No. National Laboratories will not be involved in preparation of the U.S. national report. There are no anticipated costs.

*Question 49.* What is the total number of national reports the United States anticipates it will review from the assigned country subgroup process? What are the anticipated costs for the United States to review and comment on national reports within this group?

Answer. The United States as part of the country subgroup will review five to seven reports within its group and others of interest. Costs will be absorbed within existing agency budgets.

*Question 50.* In addition to the national reports received as part of the assigned country subgroup process; does the United States anticipate requesting other national reports for the purpose of review and comment? If yes, for what countries? What is the anticipated additional cost?

Answer. Similar to its practice with respect to the CNS, the United States will review national reports for all countries which receive nuclear and radiation safety assistance from the United States or for which it has special safety concerns. The costs will be absorbed within existing agency budgets.

*Question 51.* What are the anticipated costs for U.S. representatives to participate in the meetings?

Answer. Representatives from the Department of State, DOE, NRC, and EPA are attending all associated Waste Convention meetings to be held at the IAEA headquarters office in Vienna. The delegation will include up to 12 delegates, with associated full-time equivalent (FTE), per diem and travel costs.

*Question 52.* Are representatives from DOE National Laboratories, Agreement States, Low-Level Waste Compacts, or the private sector anticipated to attend meetings of the Contracting Parties as experts, advisors or observers? If part of the U.S. delegation, how would such participation be funded?

Answer. No. Representatives from National Laboratories, Agreement States, Low-Level Waste Compacts, and the private sector are not expected to attend any meetings of the Contracting Parties.

*Question 53.* Are there any costs for the United States if it is not a Contracting Party?

Answer. Yes. The IAEA is the Secretariat for the Contracting Parties, including preparing and servicing of the meetings and transmitting information associated with the Waste Convention. Cost for these Secretariat services are included in the annual IAEA budget. The United States is obligated to pay its annual IAEA membership assessment of 25% of the total IAEA regular budget. Therefore whether or not the United States is a Contracting Party to the Waste Convention, a portion of the U.S. membership assessment will be used to fund Secretariat services in support of the Convention.

## X. BENEFITS

*Question 54.* How does the United States benefit from participation as a Contracting Party to the Convention?

Answer. As a Contracting Party to the Convention, the national report review process benefits the United States by providing *inter alia*:

- An opportunity to review the national spent nuclear fuel and radioactive waste management programs of other Contracting Parties and to benefit from their experience;
- A vehicle, through the drafting of the U.S. national report, to help harmonize management and assessment techniques used by DOE, NRC, and EPA's programs associated with the safe management of spent nuclear fuel and radioactive waste management;
- An opportunity to promote a stable technical environment and safe regulatory system in developing countries, thereby supporting trade services and products of U.S. companies;
- A means to identify possible areas for bilateral and multilateral technical and regulatory cooperation;

- An opportunity to influence the development of nuclear safety programs in other countries, through international cooperation on the life cycle management of spent nuclear fuel and radioactive waste; and
- A means to help harmonize, in a nurturing forum, international approaches to assessing and managing risks and raising the target level of safety associated with spent fuel and radioactive waste, thus strengthening the worldwide safety culture.

*Question 55.* What are the benefits or value (direct/indirect) of the Waste Convention to Agreement States and Low-Level Radioactive Waste Compacts?

Answer. Improvements to the national regulatory program from U.S. participation in the Convention will carry over to benefit the individual U.S. States' and Low-Level Radioactive Waste Compacts' regional regulatory programs.

*Question 56.* What are the benefits or value (direct/indirect) to licensees, industry and utilities?

Answer. Through U.S. review of other Contracting Parties' national reports, the United States benefits from lessons learned and in the opportunities which it provides to identify areas for trade in services and products, as well as bilateral cooperation in technology development.

*Question 57.* The United States participated in the Convention on Nuclear Safety (CNS) second review process.

- What benefits did the United States receive from participation in the CNS review process?

Answer. As a result of participating in the second CNS review meeting held in Vienna, Austria, April 15-26, 2002, U. S. participants concluded that it was a very important and effective venue for promoting nuclear safety worldwide. Participation in reviews provided wide-ranging benefits to the United States, for example based on interactions with other CNS Parties, the NRC will more closely examine the potential benefits of performing periodic safety reviews of licensed activities as part of its regulatory program.

- Has the CNS process been influential on other nations' nuclear safety programs? How?

Answer. Most significantly and as noted during the conduct of the second review meeting, the CNS process has clearly influenced the safety and regulatory programs in States of the former Soviet Union, such as Russia and Ukraine, in positive ways. Assistance programs in these countries are taking into consideration key goals and objectives identified as part of the CNS process. In addition, based on its participation in the 2nd review meeting, the NRC has also determined that additional progress can be made in nuclear regulatory oversight programs of the Russian Federation and Ukraine, and identified the programs of China, Armenia, and Pakistan, as warranting further attention.

In preparing the national report, each country must demonstrate how it complies with the Articles of the Convention.

This exercise alone, documenting how the Articles of the Convention are met, and submitting the report for scrutiny by other Contracting Parties in an international forum, exerts pressure on a Contracting Party To improve its safety practices. But perhaps more importantly is the review process itself where countries must respond to the questions of other Contracting Parties. Two examples will demonstrate how the CNS review process influences signatory countries. One of the major concerns addressed by the Articles of the Convention is the independence of the regulatory body. Many of the former Soviet Union and Eastern European countries reported in their initial 1998 CNS reports that their regulatory bodies were not independent from organizations that promoted nuclear power. However, because of the many questions that were raised during the review process, most of these countries reported significant progress in making their regulatory bodies more independent in the 2001 reports, with hopes to report further achievements on regulatory independence in the 2004 reports. A second example concerns the Russian Federation's schedule for completing safety enhancements at many of its aging nuclear power plants. The 1998 Russian Federation report stated that many safety enhancements would be performed but was vague on the enhancements to be performed at specific plants and schedules for when these enhancements would be completed. The 2001 report provided very little detail as well. However, because of the many written questions received from other Contracting Parties during the review process, the Russians provided a complete list of the enhancements for each plant and the schedule for their completion during its presentation at the 2002 CNS national report review meeting.

#### XI. FOREIGN POLICY CONSIDERATIONS

*Question 58.* Why is the Waste Convention important to U.S. foreign policy interests?

*Answer.* The Waste Convention is consistent with U.S. policy to support safety as a top priority in the use of nuclear energy worldwide; to promote safe operation of spent nuclear fuel management and civilian nuclear waste management facilities and radiation protection principles. Pursuing common strategies for the handling of spent nuclear fuel and radioactive wastes are also harmonious with U.S. policy on climate change and promoting a sustainable global environment. The Waste Convention is a particularly important complement to bilateral and multilateral safety assistance programs, because it provides a crucial political mechanism to encourage governments to support emerging regulatory organizations and other entities responsible for nuclear safety culture.

*Question 59.* What consideration does the Waste Convention give to the needs of developing countries and countries in transition, particularly to the Newly Independent States (NIS) and Central and Eastern European countries (CEE), to assist in fulfillment of their rights and obligations?

*Answer.* The Waste Convention is a particularly important complement to these bilateral and multilateral safety assistance programs, because similar to the CNS it is an incentive convention.

This means that the Convention was carefully drafted to encourage early participation by countries such as the Newly Independent States and Central and Eastern European countries, so that they can adhere without potentially being in a state of non-compliance while they further develop their domestic infrastructure. As such it provides a crucial political mechanism to encourage such governments to become Contracting Parties at an early date. It also provides a nexus for technology transfer to assist developing countries to better facilitate the transition to more effective regulatory infrastructures and waste safety management strategies.

*Question 60.* What goals and objectives does the United States hope to achieve as a Contracting Party?

Answer. The Waste Convention reflects all of the U.S. goals and objectives in the negotiations. The United States will continue to work with other countries to promote objectives, consistent with U.S. policies and legislative and regulatory framework to:

- Ensure commitment to the principles of a worldwide safety culture, through the enhancement of national measures and international cooperation.
- Increase international understanding and develop common philosophies on the storage, treatment, and disposal of radioactive waste.
- Take appropriate steps to ensure that during the lifetime of a spent nuclear fuel or radioactive waste management facility, radiation exposure is kept as low as reasonably achievable.
- Take appropriate steps to ensure no individual or population is exposed to radiation which exceed national standards.
- Take appropriate measures to prevent unplanned or uncontrolled releases of radioactive material into the environment.
- Assure appropriate corrective measures are implemented to control unplanned or uncontrolled releases and mitigate effects in the event of a release.
- Pursue common strategies for the handling of spent nuclear fuel and radioactive wastes harmonious with U.S. climate change policies and the promotion of a sustainable global environment.
- Maintain minimal cost to the United States for carrying out Contracting Party obligations under the Waste Convention.

*Question 61.* Has other international recognition been given to the Waste Convention?

Answer. Yes. The Waste Convention is of high-level importance to other foreign States many of which have signed and/or ratified the Convention. The Convention also received support at several of the G-7 Economic Summit meetings, including mention in the 1997 Denver Summit Communiqué, in addition to reaffirmation at the 1996 Moscow Nuclear Safety and Security Summit. An International IAEA Waste Conference was held in Cordoba, Spain in 2000, and a second in Vienna in 2002.

*Question 62.* What considerations does the Waste Convention give to other international instruments, international law, and other multilateral mechanisms?



Answer. The Waste Convention recalls the desirability of strengthening the international control system and recognizes principles laid out in international instruments, international law, and multilateral mechanisms applying to radioactive waste and spent fuel, including *inter alia*:

- Basel Convention (1989) on the Control of Transboundary Movements of Hazardous Waste and their Disposal;
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972, as amended) (London Convention on Ocean Dumping);
- Convention on Nuclear Safety (1994);
- Convention on Early Notification of a Nuclear Accident (1986);
- Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (1986);
- Convention on the Physical Protection of Nuclear Material (1979);
- IAEA Code of Practice on Transboundary Movement of Radioactive Waste (1989);
- IAEA Safety Fundamentals, The Principles of Radioactive Waste Management (1995);
- International Standards relating to the Safety of the Transport of Radioactive Materials;
- International Basic Safety Standards for Protection Against Ionizing Radiation and for the Safety of Radiation Sources (1996); and
- Rio de Janeiro (1992) UN Conference on Environment and Development (Agenda Chapter 21, Chapter 22, Sound Management of Radioactive Waste).

*Question 63.* Does the Convention overlap or duplicate any other international Convention or Agreement?

Answer. No. The Waste Convention is complimentary to:

- The Basel Convention (1989) on the Control of Transboundary Movements of Hazardous Waste and their Disposal. Article 1 (3)) specifically excludes radioactive wastes. This Article states: “Wastes which, as a result of being radioactive, are subject to other international control systems, including international instruments, applying specifically to radioactive materials, are excluded from the scope of the Convention.”
- The Convention on Nuclear Safety (1996). The CNS contains a preambular statement affirming the need for a Waste Convention. Subsection (ix) states: “Affirming the need to begin promptly the development of an international convention on the safety of radioactive waste management as soon as the ongoing process to develop waste management safety fundamentals has resulted in broad international agreement.”
- The London Convention on Ocean Dumping (1972, as amended) prohibits the dumping of radioactive wastes. Radioactive waste does not apply to wastes or other materials containing de minimus (exempt) levels of radioactive waste as defined by the IAEA and adopted by the Contracting Parties.

RESPONSES OF MR. RICHARD J. K. STRATFORD TO QUESTIONS FOR  
THE RECORD FROM THE HEARING OF MARCH 19, 2003

*Question 1.* Mr. Stratford provided the Committee with a very informative set of questions and answers regarding the Joint Convention. This document states that the Joint Convention “contains provisions to ensure that national security is not compromised and that States have absolute discretion as to what information is reported on material from military sources.” The document goes on to state that the Joint Convention “will not . . . affect ongoing U.S. military operations in any way, nor will classified information be covered in the U.S. National Report.”

- Were these questions and answers interagency-approved?
- Are the Department of Defense and the Department of Energy confident that the Joint Convention poses no threat to sensitive U.S. information or activities?

Answer:

- Yes. The Department of Energy, the Nuclear Regulatory Commission and the Environmental Protection Agency participated in the drafting of the questions and answers, and interagency approval of the final version was obtained through the U.S. Office of Management and Budget.
- Yes. The Joint Convention poses no threat to sensitive U.S. information or activities. The United States will provide information in the national report that is already publicly available. The Joint Convention does not apply to military or defense programs, with the exception of spent fuel and radioactive waste permanently transferred to civilian programs.

*Question 2.* Recently, the government of Iran indicated that it intends to develop an indigenous capability to manufacture nuclear reactor fuel and to reprocess spent fuel. While Iran has not signed the Joint Convention, there is nothing to prevent it from doing so. What is the risk that a country could use technical advice and assistance, including nuclear safety advice, to develop capabilities that were actually intended to contribute to a nuclear weapons program—even though the country might operate under IAEA safeguards until the decision was made to commence the production of fissile material for weapons purposes?

- How will the Administration minimize the risk that advice given under the Joint Convention will be used by other countries to develop a “full fuel cycle” that is really intended as part of a nuclear weapons program?
- Are there steps that the international community should take to guard against such misuse of peaceful nuclear assistance? If so, are there recommendations in this regard that the Senate could usefully make in a resolution of ratification of the Joint Convention?

Answer. The Joint Convention does not involve advice or cooperation in sensitive areas of the nuclear fuel cycle. The type of information that will be considered by the Contracting Parties to the Joint Convention is not associated with nuclear weapons development. Indeed, the information being presented in the U.S. National Report is publicly accessible from U.S. government and other public sites. No internal or security-related information is being included

in the U.S. National Report being prepared by the U.S. Department of Energy, with the assistance and cooperation of the Nuclear Regulatory Commission, the Environmental Protection Agency, and the Department of State. In addition, any comments the United States might have on other country's submissions would be limited to non-sensitive information. We believe that one of the benefits of the Joint Convention is that it operates on the basis of transparency as it makes information on other country's waste activities widely known. We see no need for the Senate to take further action in this regard in the resolution of ratification.

*Question 3.* Under the Joint Convention, country reports will be reviewed by subgroups—and the United States will receive only the reports of countries in its subgroup, unless it asks for others as well. Will the United States ask for all reports?

- Is there any reason why the Senate should not require this?

Answer. The United States will request copies of all national reports prepared for the review meeting under the Joint Convention.

The United States has the right to request this information under the Joint Convention, and it intends to ask for this information. We do not believe that this should be a requirement in the resolution of ratification.

*Question 4.* In its resolution of ratification for the Convention on Nuclear Safety, the Senate required that the United States formally comment on every report from a country that is a recipient of U.S. nuclear safety assistance. Under that convention—and also under the Joint Convention—such a formal comment is needed if the United States wants to attend the subgroup discussion of that report and the country is not a member of the same subgroup as the United States. Has the United States benefited from commenting on such reports in the Convention on Nuclear Safety?

- Is there any reason why the Senate should not require this approach to the Joint Convention as well?

Answer:

- Yes. We used the CNS process to identify key goals and objectives for the safety and regulatory programs in States of the former Soviet Union, such as Russia and Ukraine. The goals and objectives will provide targets for assistance programs to these countries. We also used the process to determine that additional progress can be made in nuclear regulatory oversight programs of Russia and the Ukraine, and identified the nuclear regulatory programs of China, Armenia, and Pakistan as warranting further attention.
- We intend to ensure that the United States takes advantage of the availability of information and the opportunity to provide comments as appropriate. We do not believe that this should be a requirement in the resolution of ratification.

*Question 5.* The Department of State indicates, in its questions and answers document, that the Department of Energy will absorb the \$200,000 cost of preparing the U.S. report every few years and that the Department of State will absorb the cost of sending a 6-person delegation to meetings under the Convention. If we require the Executive branch to read and comment on all country reports, or at least on all reports from countries that receive U.S. nuclear

safety assistance, will the cost of preparing for and attending meetings go up substantially?

- Will additional funds be needed for this, or will you still be able to handle those costs under current budget allocations?

Answer:

- There will be additional preparation cost associated with reviewing all national reports. We estimate the cost at \$6,000 per additional report. We do not anticipate any additional costs for attending the meetings, since we are planning to have coverage for all the review subgroups.
- We will strive to keep costs at a minimum and within the current budget allocation.

*Question 6.* Article 41 of the Joint Convention (on Amendments to the Convention) allows a meeting of the Contracting Parties to adopt an amendment by consensus, or to refer it to a Diplomatic Conference by a two-thirds vote of those present and voting.

When the Senate considered an identical provision in the Convention on Nuclear Safety, it required that the United States cast a vote on each proposed amendment, and submit each approved amendment to the Senate for its advice and consent to ratification. This was done to avoid a situation in which the Executive branch could refrain from voting on an amendment that it knew the Senate would oppose, or refrain from submitting it to the Senate, and still have it enter into effect for most of the Contracting Parties. Do you see any serious problem with our enacting similar language in the resolution on the Joint Convention?

- Under what circumstances might the United States not want to vote on a proposed amendment?
- Do you interpret the resolution of ratification for the Convention on Nuclear Safety as preventing the United States from allowing an amendment to be approved by consensus? If so, is that the Administration's concern?
- Under what circumstances might the President not want to submit an approved amendment to the Senate for its advice and consent to ratification?
- How would the Executive Branch handle a situation in which most of the Contracting Parties supported an amendment, but the United States did not? In that situation, why not submit it to the Senate with a recommendation to reject it?

Answer:

- It is important to remember that the United States will not be bound by any amendment unless the United States affirmatively accepts the amendment with the advice and consent of the Senate. Moreover, the single vote of the United States is unlikely to be the sole determinant of whether an amendment is adopted at a Diplomatic Conference by a two-thirds vote, nor would it prevent an amendment that has been adopted and ratified by two-thirds of the Contracting Parties to the Convention from entering into force for those Contracting Parties. The U.S. representative's affirmative or negative vote on an amendment and any subsequent Senate action on that amendment cannot prevent an amendment to the Convention on Nuclear Safety from entering into force for those Contracting Parties.

that have ratified the amendment, if two-thirds of the Contracting Parties have done so. The condition of the Senate's resolution of advice and consent to the Convention on Nuclear Safety therefore does not achieve the purpose stated here. Likewise, the inclusion of a similar condition in the resolution on the Joint Convention would not achieve the stated goal. By requiring that the United States cast an affirmative or negative vote on a proposed amendment, the Senate's condition also forecloses the United States from abstaining or absenting itself from a vote; both actions are sometimes useful diplomatic tools.

- Hypothetically, an abstention would be useful in a situation in which the United States does not have a compelling interest in the proposed amendment one way or the other, but its vote would needlessly antagonize the faction against which the United States would be forced to vote—and when the United States might want the support of that faction for or against a more important provision.
- We would consider associating the United States with a consensus action as equivalent to an affirmative vote. At a Diplomatic Conference, however, it is sometimes desirable to be able to abstain or deliberately be absent from a vote.
- The President might not want to submit an approved amendment to the Senate for advice and consent if the United States had opposed its adoption or if the final version of the amendment were considered inimical to United States interests.
- The Joint convention sets a very high standard—a two-thirds majority vote—for the adoption of amendments. In the unlikely case that an adopted amendment that the United States opposes enters into force for other Contracting Parties, the United States would not be bound by that amendment without its consent. We are unaware of a precedent for submitting a treaty that the President opposes to the Senate for rejection. The President has plenary authority not to ratify an amendment he opposes.

*Question 7.* The Committee understands that the Nuclear Energy Institute strongly recommends the expeditious ratification of the Joint Convention. Have any other industry groups endorsed ratification? Have any firms or groups warned that they will suffer in some way if this Convention is ratified and implemented?

*Answer.* Apart from the Nuclear Energy Institute's (NEI) support for ratification (on behalf of the nuclear energy industry), we are not aware of any other firms or groups taking a position on this issue. None have warned that they will suffer in some way if the Convention is ratified and implemented.

