106TH CONGRESS 1st Session

SENATE

Exec. Rept. 106–1

### CONVENTION ON NUCLEAR SAFETY

MARCH 24, 1999.—Ordered to be printed

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

## REPORT

#### [To accompany Treaty Doc. 104-6]

The Committee on Foreign Relations to which was referred the Convention on Nuclear Safety done at Vienna on September 20, 1994, having considered the same, reports favorably thereon with six conditions and two understandings and recomends that the Senate give its advice and consent to ratification thereof as set forth in this report and the accompanying resolution of ratification.

#### CONTENTS

	Page
I. Implications of the Nuclear Safety Convention	1
II. Committee Action	6
III. Resolution of Ratification	
IV. Article-by-Article Analysis	

#### I. IMPLICATIONS OF THE NUCLEAR SAFETY CONVENTION

#### Background

Following the 1986 explosion of the nuclear power reactor at Chernobyl, Ukraine, more than 50 nations undertook negotiation of a multilateral treaty intended to increase the safety of civil nuclear power plants. The treaty, the Convention on Nuclear Safety, was signed by the Secretary of Energy on behalf of the United States in September 1994. The treaty was submitted to the Senate in May 1995.

The Convention is viewed by the Executive Branch as an important tool to encourage countries with civilian nuclear programs that do not meet Western safety standards (most particularly, those possessing Soviet-era nuclear power plants) to improve the safety procedures at their installations. The Convention seeks to accomplish this objective by urging countries to: (1) establish a legislative and regulatory framework for nuclear safety; (2) establish procedures to ensure that key technical aspects of nuclear safety are considered when constructing nuclear power reactors; and (3) ensure that priority is given to the establishment and maintenance of nuclear safety programs.

Accordingly, the Executive Branch states that the Convention will contribute to raising nuclear safety standards worldwide. It will be able to do so, according to Administration officials, while protecting the U.S. nuclear industry and the domestic regulatory process from undue foreign intrusion.

The Convention has been referred to as an "incentive" treaty by Executive Branch officials. It contains no enforcement mechanisms, and is not designed to punish countries for failure to achieve progress in implementing the treaty's principles. Rather, it is intended to encourage progress in improving nuclear safety systems through a milder form of peer review. This approach was deemed preferable by the Administration in light of the desire to secure acceptance of the Convention by governments with weak safety systems.

#### Key U.S. Negotiating Objectives Secured in the Convention

A number of U.S. objectives were secured in the process of negotiating the Convention. First, the treaty is limited to land-based civilian nuclear power plants intended primarily for the generation of electricity or heat (or both) to be transmitted for general commercial purposes only. It was judged that nuclear power plants designed for commercial electricity generation warranted the greatest degree of scrutiny because of the magnitude of the inventory of radioactive isotopes, stored energy, and weak regulatory regimes in some countries.

It must be noted that the definition of a civil nuclear power plant includes on-site waste storage, handling, and treatment facilities. It does not include, however, other nuclear facilities such as nuclear power reactors with military applications (e.g. the reactors for ballistic missile submarines and aircraft carriers), fuel cycle facilities such as reprocessing and/or enrichment plants, or research reactors. Therefore, while the Convention would not cover the nuclear reprocessing facility in Russia which experienced an accident in April 1993, neither does the treaty entail any burden on the Armed Forces of the United States.

A second objective accomplished by the United States delegation was limitation of the Convention to the articulation of fundamental principles for nuclear safety, rather than a detailed itemization of standards or rules. Detailed technical provisions would, in the view of the Executive Branch, "intrude on the responsibility of national governments to regulate their nuclear industries and to shape the details of their safety regimes."

Third, the Convention does not establish a new international bureaucracy. Rather, it operates according to a process of peer review of national reports issued at periodic meetings. Again, as Executive Branch documents have put it: "Nuclear safety is ultimately a sovereign responsibility."

#### Key Issues Regarding the Nuclear Safety Convention

At the request of the Chairman of the Foreign Relations Committee, the General Accounting Office (GAO) completed a review of the Nuclear Safety Convention in January 1997. The GAO study summarized its key findings as follows:

The method to review compliance with the Convention on Nuclear Safety has not been finalized. The Convention does not impose sanctions for noncompliance, but seeks to encourage compliance through peer pressure. The Convention relies on each ratifying country to prepare a self-assessment report of its nuclear power program. These reports will, in turn, be reviewed by other member countries at periodic meetings to determine how each country is complying with the Convention. The level of detail to be included in these reports has not been finalized, nor has the process by which countries will critically review these reports been fully determined.

#### Process for Reviewing Safety Assessments

Initially the United States favored a review process whereby the self-assessments of various countries would be reviewed by three specific committees with respective responsibilities for examining each country's (1) governmental organization; (2) practices for construction of nuclear facilities; and (3) practices for operation of civilian nuclear power installations. These three categories are the principal elements of the Nuclear Safety Convention.

The U.S. proposal was rejected, however, in favor of a "countrygrouping" model which places countries in five different groups, in alternating fashion, on the basis of the number of nuclear reactors possessed. This assures that each group will have a mix of countries with extensive nuclear reactor experience and countries with much less experience. The problem with this approach is that the United States is therefore not likely to be in same review group as either Russia or Ukraine, both of which are recipients of large amounts of U.S. nuclear safety assistance.

Because the Convention affords each country the right to discuss and seek clarification regarding the reports submitted at a review meeting by any other country, the Administration states that the United States will be able to review and comment on all self-assessments performed. Administration officials have assured the Foreign Relations Committee, moreover, that the United States would be present in all group meetings where a country currently receiving U.S. nuclear safety assistance had submitted a paper for comment.

#### The Content of Self-Assessment Reports

National reports provided by Contracting Parties to the Convention provide the basis for the entire process established under the treaty. Therefore, one would want the reports submitted to be of the highest technical quality. The Convention contains no specific requirements, however, regarding the content of national self-assessments. Accordingly, administration officials expect the quality of such assessments to vary widely. The Guidelines Regarding National Reports Under the Convention on Nuclear Safety put forth a comprehensive set of "suggested" categories of information to be included in national reports. To the extent that countries use these guidelines to establish the minimum level of information required, the contribution of the Convention to the overall discussion of nuclear safety issues will be enhanced. For countries that elect to be non-responsive, or that do not have the technical expertise or resources to prepare a thorough report, it is to be hoped that the United States delegation to review meetings will elicit all of the information suggested in the Guidelines by exercising the treaty-provided right to issue requests for clarification.

#### Cost to Implement the Convention

The International Atomic Energy Agency (IAEA) will serve as the Convention's secretariat and provide the facilities and personnel for each of the various meetings conducted under the treaty. As such, the cost for implementation of the Convention will be borne through an increase in the amount assessed to member countries by the IAEA on an annual basis. In response to a request from the Committee for a detailed cost estimate, the Nuclear Regulatory Commission supplied a December 1993, paper which provided high, middle, and low estimates for the implementation of the Convention. The 1993 estimates of the cost for the conduct of a "meeting of the parties" (the principal activity conducted pursuant to the Convention) varied from \$10,800 to \$10,303,200. The factors which were expected to drive the cost of the treaty were interpretation and translation requirements.

According to the Executive Branch, signatories of the Convention have worked to minimize the actual costs of implementing the Convention. The Convention's Rules of Procedure and Financial Rules adopted in April 1997 significantly limit the use of languages other than English at meetings other than plenary sessions of the Review Meeting that is held once every three years. Each Party is required to provide an English version of its national report and of questions and comments on other Parties' reports, or else to repay the IAEA for its translation costs. Organizational Meetings and General Committee sessions will be conducted in English, as will most Country Group discussions.

As a result of these steps, the IAEA has budgeted \$376,000 for 1999 to cover all Convention functions, including the Review Meeting and preparation costs. The IAEA has budgeted only \$206,000 for the year 2000, when there will not be a Review Meeting, and the Executive Branch believes that costs for 2001 are likely to be even lower. The United States would be assessed a share of these costs—25 percent—in its IAEA contribution whether the United States ratifies the Convention or not. Whether the U.S. would agree to pay such assessments, however, need not be a matter of contention between the Congress and the Administration, as the Committee recommends that the Senate provide advice and consent to ratification of the treaty. Membership in the Convention, of course, will enable the United States to work to minimize costs.

#### Will Participation in the Nuclear Safety Convention Render Other U.S. Government Activities Duplicative?

The United States currently participates in, and expends funds on a number of organizations dealing with nuclear safety issues, including the VVER Owner's Regulatory Group, the International Atomic Energy Agency's Senior Regulators Meetings, the Organization for Economic Cooperation and Development's Nuclear Energy Agency (OECD/NEA) Heads of Regulatory Agency Meeting and the OECD's Committee on Nuclear Regulatory Activities, the Committee on the Safety of Nuclear Installations, the International Nuclear Regulators Association, and the proposed Forum of the Spanish-American Regulatory Agencies. Additionally, the Administration wishes to create, and participate in, an Asian Regulators Group. Because the U.S. Nuclear Regulatory Commission is generally the primary representative of the U.S. Government in these various fora, the U.S. domestic nuclear power industry winds up footing the bill (assessed through the NRC's fee structure) for U.S. participation.

Review of the terms of reference/mandates of these various groups, and of the subject matters considered by them in recent years, reveals that all of these organizations duplicate—at least in part—the stated objectives of the Nuclear Safety Convention, as expressed in Article 1 of that treaty.

pressed in Article 1 of that treaty. One group—the International Nuclear Regulators Association (INRA)—replicates the object and purpose of the Nuclear Safety Convention in entirety. According to NRC documents, in May 1997, the members of INRA agreed to "endeavor to identify a set of fundamental elements in nuclear safety regulation which are common to the various regulatory systems of nuclear countries." The group further agreed that the key elements of nuclear safety regulation would need to be "consistent with existing agreed provisions on nuclear regulations, specifically those in the Convention on Nuclear Safety (CNS)." Further, Article 2 of the terms of reference for INRA states that the Association's fundamental purpose is to "influence and enhance nuclear safety, from the regulatory perspective, among its members as well as worldwide." This differs little in substance from the primary objective of the Nuclear Safety Convention, which is "to achieve and maintain a high level of nuclear safety worldwide through the enhancement of national measures and international cooperation including, where appropriate, safety-related technical cooperation."

The Executive Branch cites several reasons for having so many nuclear safety organizations. Some are more technically-oriented (e.g., the VVER Owner's Regulatory Group, the IAEA Senior Regulators Meeting, and the OECD/NEA Committee on Nuclear Regulatory Activities, which has highly technical subgroups), while others (e.g., the OECD/NEA Heads of Regulatory Agency Meeting and INRA) exist for discussion of broad regulatory policy. Also, some organizations are limited to the most advanced countries in the field, while others are universal or regional in their application.

In providing advice and consent to U.S. participation in the Convention on Nuclear Safety, the Senate has the opportunity to eliminate unnecessarily duplicative U.S. activities in other, non-binding fora for which the Senate's advice and consent was not obtained.

#### The Convention Does Not Solve the RBMK Problem

The Convention is regarded by many as a positive step toward the strengthening of international nuclear safety standards. It is purely advisory, however, and does not provide a solution to the matter of existing problem reactors—most notably the Chernobyltype RBMK reactor, of which several still are in operation on the territory of the former Soviet Union. OECD efforts and Western financial assistance are argued by the Administration to be the means by which countries that depend on such reactors can replace them.

#### II. COMMITTEE ACTION

The Convention on Nuclear Safety was adopted at Vienna on September 20, 1994. It was submitted to the Senate on May 11, 1995, and referred on the same day to the Committee on Foreign Relations.

The Committee held a hearing on the Convention on March 17, 1999, and heard from the following witnesses:

Robert Einhorn, Deputy Assistant Secretary of State for Nonproliferation Affairs;

Marvin Fertel, Senior Vice President for Nuclear Infrastructure, Support and International Programs of the Nuclear Energy Institute, and

Gary Jones, Associate Director for Energy, Resources and Science Issues in the Resources, Community and Economic Development Division of the General Accounting Office.

On March 23, 1999, the Committee unanimously approved, by voice vote, a resolution of ratification of the Convention including 6 conditions and 2 understandings.

#### Condition 1: Certification on the Elimination of Duplicative Activities

Condition (1) requires the President to certify, within 45 days of the Senate's advice and consent to ratification of the Convention, that the United States Government will not unnecessarily duplicate (in other multinational fora) activities to be undertaken in conjunction with the Convention. This condition also bars the United States from participation in the Convention, beyond the act of depositing the instrument of ratification, until the requisite certification is made.

The Committee became concerned, during the course of its review of the Convention, regarding the large number of international nuclear safety-related groups in which the United States participates. One benefit of the Nuclear Safety Convention may be an opportunity to consolidate some such activities under the auspices of Convention-related meetings. It also is hoped that the Administration will eliminate activities which unnecessarily duplicate those to be performed under the Nuclear Safety Convention. Certainly, the Committee expects the Executive Branch to ensure that nuclear safety-related activities that are conducted in accordance with a legally-binding treaty take precedence over similar activities conducted only under executive agreements. The Committee understands that there are several reasons for continued U.S. participation in nuclear safety organizations that operate outside of the treaty framework. In particular, there will continue to be a need for groups that are highly specialized and technically-oriented (e.g., the VVER Owner's Regulatory Group). However, the Executive Branch should seriously consider limiting U.S. participation in non-treaty organizations which exist largely for discussion of broad regulatory policy. While Condition (1) identifies no particular group or organization as being "unnecessarily" duplicative, questioning in the Committee's hearing on the Nuclear Safety Convention focused on whether the International Nuclear Regulators Association (INRA) should be eliminated pursuant to the certification required under Condition (1).

#### Condition 2: Commitment to Review Reports

Condition (2) requires the President to assure the Congress that the United States will review and comment upon the safety reports prepared by any country receiving U.S. assistance relating to nuclear safety. During the course of its consideration of the Convention, the Committee became concerned that the United States might not be a formal member of the same review group as either Russia or Ukraine, both of which are recipients of large amounts of U.S. nuclear safety assistance. This is due to the manner by which review groups are established under the Convention.

However, because the Convention affords the United States the right to discuss and seek clarification regarding reports submitted for review, the Administration contends that the United States will be able to review and comment on all self-assessments performed. Administration officials assured the Committee that the United States would be present in all review meetings where a country currently receiving U.S. nuclear safety assistance had submitted a paper for comment. Condition (2) formalizes this commitment.

#### Condition 3: Limitation on the Cost of Implementation

This provision addresses the fact that the United States is scheduled to pay for implementation of the Convention in its annual assessed contribution to the International Atomic Energy Agency. Pursuant to this provision, the United States shall not pay more than \$1 million per year (adjusted for inflation) for the implementation of the Convention, unless the President first certifies that more funds are required and Congress enacts a joint resolution approving the President's certification.

#### Condition 4: Complete Review of Information by the Legislative Branch of Government

Condition 4 makes clear that the Executive Branch may not cite any provision of the Convention as justification for denying the Legislative Branch access to information relating to the operation of the Convention, including information deemed "confidential" or "protected" by foreign nations. This provision further requires the President to agree that the Comptroller General of the United States, who is frequently tasked by the Committee to perform assessments of nuclear safety-related issues, is to be given full and complete access to certain specific categories of information. Finally, the condition requires the Executive Branch to prepare a detailed report on Convention-related issues, upon request by the Chairman of either of the appropriate Committees of Congress.

#### Condition 5: Amendments to the Convention

Condition (5) renders binding upon the Executive Branch of Government the obligation to be present at all relevant meetings and Conferences, and to cast a vote—either positive or negative—on all proposed amendments. That, in turn, will ensure that the President shall submit to the Senate for its advice and consent to ratification all amendments to the Convention. Given the wording of Article 32 of the Convention, if the Senate were not to adopt this provision, it would be possible for an amendment to be adopted without being submitted to the Senate for advice and consent, or, indeed, over the objection of the Senate.

#### Condition 6: Treaty Interpretation

The Committee condition on Treaty Interpretation affirms that the constitutionally-based principles of treaty interpretation, set forth in Condition (1) of the Senate's resolution of ratification of the INF Treaty (May 27, 1988) and Condition (8) of the resolution of ratification of the CFE Flank Document (May 14, 1997) apply to all treaties. These principles apply regardless of whether the Senate chooses to say so in its consideration of any particular treaty.

#### Understanding 1: Dismantlement of the Juragua Nuclear Reactor

This provision establishes the formal understanding of the United States Government that Cuba will not be considered to have satisfied its treaty obligations under Article 6 of the Convention unless it has agreed not to complete the Juragua nuclear installation. Article 6 of the Convention binds Contracting Parties either to upgrade the safety of their nuclear installations "as a matter of urgency" or, if upgrading cannot be achieved, to implement plans to shut down the installation "as soon as practically possible."

The Committee judges that the Government of Cuba has not taken the necessary steps to ensure that the nuclear reactor site under construction at Cienfuegos, Cuba, will meet acceptable safety standards. In particular, the Committee judges that the Government of Cuba has not satisfactorily engaged in the types of activities stipulated under Articles 17, 18, and 19 of the Convention (relating to the siting, design and construction, and proposed operation of a nuclear facility). Because of the Cuban Government's lack of appropriate safety precautions, the Committee believes that the Juragua nuclear reactor, if completed, would pose a serious environmental and health hazard. Just as the accident at Chernobyl affected people living well beyond the borders of Ukraine, so too would an accident at Juragua threaten the lives and health not only of the Cuban people, but of U.S. citizens as well. The Committee deems the risk posed by this planned reactor to be unacceptable, and recommends adoption of Understanding (1).

#### Understanding 2: IAEA Technical Assistance

Understanding (2) establishes the sense of the Senate that the United States should withhold certain funds from the International Atomic Energy Agency every year in an effort to induce that organization not to provide funds to nuclear-related projects in Iran and Cuba. (The withheld funds would be the U.S. proportionate share of IAEA's technical cooperation fund projects in Iran and Cuba.) The Committee is concerned that the IAEA continues to provide resources to Cuba for work relating to the partially-completed nuclear reactor at Cienfuegos. Moreover, the IAEA continues to provide technical assistance relating to Iran's Bushehr nuclear installation. As is made clear by Understanding (1), the Committee is deeply concerned with the environmental and health implications of the Cienfuegos facility.

The Committee is concerned with the Bushehr reactor in Iran for different reasons. Specifically, the Committee shares the Executive Branch's concern that Iran continues to pursue a nuclear weapons capability, and that the facility at Bushehr will be used both to train Iranian nationals who may subsequently work in the weapons program and as a cover for the program itself. III. RESOLUTION OF RATIFICATION

# Senate of the United States

IN EXECUTIVE SESSION

March \_\_\_\_, 1999

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

# 1 SECTION 1. SENATE ADVICE AND CONSENT SUBJECT TO 2 CONDITIONS AND UNDERSTANDINGS.

# 3 The Senate advises and consents to the ratification 4 of the Convention on Nuclear Safety, done at Vienna on 5 September 20, 1994 (Senate Treaty Document 104-6), 6 subject to the conditions of section 2 and the understand7 ings of section 3.

8 SEC. 2. CONDITIONS.

9 The advice and consent of the Senate to ratification 10 of the Convention on Nuclear Safety is subject to the fol-11 lowing conditions, which shall be binding upon the Presi-12 dent:

13	(1) CERTIFICATION ON THE ELIMINATION OF
14	DUPLICATIVE ACTIVITIES
15	(A) IN GENERAL.—Not later than 45 days
16	after the deposit of the United States instru-
17	ment of ratification, the President shall certify

18	to the appropriate committees of Congress that
19	the United States Government will not engage

1 in any multilateral activity in the field of inter-2 national nuclear regulation or nuclear safety 3 that unnecessarily duplicates a multilateral ac-4 tivity undertaken pursuant to the Convention. 5 (B) LIMITATION.—The United States shall 6 not contribute to or participate in the operation 7 of the Convention other than by depositing the 8 United States instrument of ratification until 9 the certification required by subparagraph (A) 10 has been made. (2) COMMITMENT TO REVIEW REPORTS .- Not 11 12 later than 45 days after the deposit of the United 13 States instrument of ratification, the President shall 14 certify to the appropriate committees of Congress 15 that the United States will comment in each review 16 meeting held under Article 20 of the Convention (in-17 cluding each meeting of a subgroup) upon aspects of 18 safety significance in any report submitted pursuant 19 to Article 5 of the Convention by any State Party 20 that is receiving United States financial or technical 21 assistance relating to the improvement in safety of 22 its nuclear installations. 23 (3) LIMITATION ON THE COST OF IMPLEMENTA-

24 TION.-

1	(A) LIMITATION.—Notwithstanding any
2	provision of the Convention, and subject to the
3	requirements of subparagraphs (B), (C), (D),
4	and (E), the United States shall pay no more
5	than \$1,000,000 as the portion of the United
6	States annual assessed contribution to the
7	International Atomic Energy Agency attrib-
8	utable to the payment of the costs incurred by
. 9	the Agency in carrying out all activities under
10	the Convention.
11	(B) RECALCULATION OF LIMITATION
12	(i) IN GENERAL.—On January 1,
13	2000, and at 3-year intervals thereafter,
14	the Administrator of General Services, in
15	consultation with the Secretary of State,
16	shall prescribe an amount that shall apply
17	in lieu of the amount specified in subpara-
18	graph (A) and that shall be determined by
19	adjusting the last amount applicable under
20	that subparagraph to reflect the percent-
21	age increase by which the Consumer Price
22	Index for the preceding calendar year ex-
23	ceeds the Consumer Price Index for the
24	calendar year three years previously.

1	(ii) CONSUMER PRICE INDEX DE-
2	FINED.—In this subparagraph, the term
3	"Consumer Price Index" means the last
4	Consumer Price Index for all-urban con-
5	sumers published by the Department of
6	Labor.
7	(C) ADDITIONAL CONTRIBUTIONS REQUIR-
8	ING CONGRESSIONAL APPROVAL
9	(i) AUTHORITY.—Notwithstanding
10	subparagraph (A), the President may fur-
11	nish additional contributions to the regular
12	budget of the International Atomic Energy
13	Agency which would otherwise be prohib-
14	ited under subparagraph (A) if—
15	(I) the President determines and
16	certifies in writing to the appropriate
17	committees of Congress that the fail-
18	ure to make such contributions for the
19	operation of the Convention would
20	jeopardize the national security inter-
21	ests of the United States; and
22	(II) Congress enacts a joint reso-
23	lution approving the certification of
24	the President under subclause (I).

1	(ii) STATEMENT OF REASONS.—Any
2	certification made under clause (i) shall be
3	accompanied by a detailed statement set-
4	ting forth the specific reasons therefor and
5	the specific uses to which the additional
6	contributions provided to the International
7	Atomic Energy Agency would be applied.
8	(4) COMPLETE REVIEW OF INFORMATION BY
9	THE LEGISLATIVE BRANCH OF GOVERNMENT.—
10	(A) UNDERSTANDING.—The United States
11	understands that neither Article 27 nor any
12	other provision of the Convention shall be con-
13	strued as limiting the access of the legislative
14	branch of the United States Government to any
15	information relating to the operation of the
16	Convention, including access to information de-
17	scribed in Article 27 of the Convention.
18	(B) PROTECTION OF INFORMATIONThe
19	Senate understands that the confidentiality of
20	information provided by other States Parties
21	that is properly identified as protected pursuant
22	to Article 27 of the Convention will be re-
23	spected.
24	(C) CERTIFICATION.—Not later than 45
25	days after the deposit of the United States in-

1	strument of ratification, the President shall cer-
2	tify to the appropriate committees of Congress
3	that the Comptroller General of the United
4	States shall be given full and complete access
5	to
6	(i) all information in the possession of
7	the United States Government specifically
8	relating to the operation of the Convention
. 9	that is submitted by any other State Party
10	pursuant to Article 5 of the Convention,
11	including any report or document; and
12	(ii) information specifically relating to
13	any review or analysis by any department,
14	agency, or other entity of the United
15	States, or any official thereof, undertaken
16	pursuant to Article 20 of the Convention,
17	of any report or document submitted by
18	any other State Party.
19	(D) REPORTS TO CONGRESS.—Upon the
20	request of the chairman of the appropriate com-
21	mittee of Congress, the President shall submit
22	to the committee an unclassified report, and a
23	classified annex as appropriate, detailing-

1 (i) how the objective of a high level o
2 nuclear safety has been furthered by the
3 operation of the Convention;
4 (ii) with respect to the operation of
5 the Convention on an Article-by-Article
6 basis—
7 (I) the situation addressed in the
8 Article of the Convention;
9 (II) the results achieved under
10 the Convention in implementing th
11 relevant obligation under that Article
12 of the Convention; and
13 (III) the plans and measures fo
14 corrective action on both a national
15 and international level to achieve fur
16 ther progress in implementing the rel
17 evant obligation under that Article o
18 the Convention; and
19 (iii) on a country-by-country basis, fo
20 each country that is receiving United
21 States financial or technical assistance re
22 lating to nuclear safety improvement—
23 (I) a list of all nuclear installa
24 tions within the country, including
25 those installations operating, closed

1	and planned, and an identification of
2	those nuclear installations where sig-
3	nificant corrective action is found nec-
4	essary by assessment;
5	(II) a review of all safety assess-
6	ments performed and the results of
7	those assessments for existing nuclear
8	installations;
. 9	(III) a review of the safety of
10	each nuclear installation using instal-
11	lation-specific data and analysis show-
12	ing trends of safety significance and
13	illustrated by particular safety-related
14	issues at each installation;
15	(IV) a review of the position of
16	the country as to the further oper-
17	ation of each nuclear installation in
18	the country;
19	(V) an evaluation of the ade-
20	quacy and effectiveness of the na-
21	tional legislative and regulatory
22	framework in place in the country, in-
23	cluding an assessment of the licensing
24	system, inspection, assessment, and

1	enforcement procedures governing the
2	safety of nuclear installations;
3	(VI) a description of the coun-
4	try's on-site and off-site emergency
5	preparedness; and
6	(VII) the amount of financial and
7	technical assistance relating to nu-
8	clear safety improvement expended as
. 9	of the date of the report by the Unit-
10	ed States, including, to the extent fea-
11	sible, an itemization by nuclear instal-
12	lation, and the amount intended for
13	expenditure by the United States on
14	each such installation in the future.
15	(5) Amendments to the convention.—
16	(A) VOTING REPRESENTATION OF THE
17	UNITED STATES.—A United States representa-
18	tive—
19	(i) will be present at any review meet-
20	ing, extraordinary meeting, or Diplomatic
21	Conference held to consider any amend-
22	ment to the Convention Amendment Con-
23	ferences; and

1	(ii) will cast a vote, either affirmative
2	or negative, on each proposed amendment
3	made at any such meeting or conference.
4	(B) SUBMISSION OF AMENDMENTS AS
5	TREATIES.—The President shall submit to the
6	Senate for its advice and consent to ratification
7	under Article II, Section 2, Clause 2 of the
8	Constitution of the United States any amend-
9	ment to the Convention adopted at a review
10	meeting, extraordinary meeting, or Diplomatic
11	Conference.
12	(6) TREATY INTERPRETATION
13	(A) PRINCIPLES OF TREATY INTERPRETA-
14	TION.—The Senate affirms the applicability to
15	all treaties of the constitutionally-based prin-
16	ciples of treaty interpretation set forth in condi-
17	tion (1) in the resolution of ratification of the
18	INF Treaty, approved by the Senate on May
19	27, 1988.
20	(B) CONSTRUCTION OF SENATE RESOLU-
21	TION OF RATIFICATIONNothing in condition
22	(1) of the resolution of ratification of the INF
23	Treaty, approved by the Senate on May 27,
24	1988, shall be construed as authorizing the
25	President to obtain legislative approval for

1	modifications or amendments to treaties
2	through majority approval of both Houses of
3	Congress.
4	(C) DEFINITION.—As used in this para-
5	graph, the term "INF Treaty" refers to the
6	Treaty Between the United States of America
7	and the Union of Soviet Socialist Republics on
8	the Elimination of Their Intermediate-Range
. 9	and Shorter Range Missiles, together with the
10	related memorandum of understanding and pro-
11	tocols, done at Washington on December 8,
12	1987.
13	SEC. 3. UNDERSTANDINGS.
14	The advice and consent of the Senate to the Conven-
15	tion on Nuclear Safety is subject to the following under-
16	standings:
17	(1) DISMANTLEMENT OF THE JURAGUA NU-
18	CLEAR REACTOR.—The United States understands
19	that
20	(A) no practical degree of upgrade to the
21	safety of the planned nuclear installation at
22	Cienfuegos, Cuba, can adequately improve the
23	safety of the existing installation; and
24	(B) therefore, Cuba must undertake, in ac-
25	cordance with its obligations under the Conven-

1	tion, not to complete the Juragua nuclear in-
2	stallation.
3	(2) IAEA TECHNICAL ASSISTANCE
4	(A) FINDINGS.—The Senate finds that—
5	(i) since its creation, the International
6	Atomic Energy Agency has provided more
7	than \$50,000,000 of technical assistance
8	to countries of concern to the United
. 9	States, as specified in section 307(a) of the
10	Foreign Assistance Act of 1961 (22 U.S.C.
11	2227(a)) and in provisions of foreign oper-
12	ations appropriations Acts;
13	(ii) the International Atomic Energy
14	Agency has budgeted, from 1995 through
15	1999, more than \$1,500,000 for three on-
16	going technical assistance projects related
17	to the Bushehr nuclear installation under
18	construction in Iran; and
19	(iii) the International Atomic Energy
20	Agency continues to provide technical as-
21	sistance to the partially completed nuclear
22	installation at Cienfuegos, Cuba.
23	(B) SENSE OF THE SENATE.—The Senate
24	urges the President to withhold each fiscal year
25	a proportionate share of the United States vol-

1	untary contribution allocated for the Inter-
2	national Atomic Energy Agency's technical co-
3	operation fund unless and until the Agency dis-
4	continues the provision of all technical assist-
5	ance to programs and projects in Iran and
6	Cuba.
7	SEC. 4. DEFINITIONS.
8	As used in this resolution:
9	(1) Appropriate committees of con-
10	GRESS.—The term "appropriate committees of Con-
11	gress" means the Committee on Foreign Relations
12	of the Senate and the Committee on International
13	Relations of the House of Representatives.
14	(2) CONVENTION.—The term "Convention"
15	means the Convention on Nuclear Safety, done at
16	Vienna on September 20, 1994 (Senate Treaty Doc-
17	ument 104–6).
18	(3) NUCLEAR INSTALLATION.—The term "nu-
19	clear installation" has the meaning given the term in
20	Article 2(i) of the Convention.
21	(4) STATE PARTY.—The term "State Party"
22	means any nation that is a party to the Convention.
23	(5) UNITED STATES INSTRUMENT OF RATIFI-
24	CATION.—The term "United States instrument of

- 1 ratification" means the instrument of ratification of
- 2 the United States of the Convention.

#### IV. ARTICLE BY ARTICLE ANALYSIS

The Preamble describes the concerns underlying the Convention. The Contracting Parties wish to promote a high level of nuclear safety worldwide, recognizing the importance to the international community of ensuring that the use of nuclear energy is safe, well regulated and environmentally sound and also recognizing that accidents at "nuclear installations" (defined in Article 2) potentially have trans-border impacts. The Preamble also states that the Convention entails a commitment to the application of fundamental safety principles for nuclear installations rather than of detailed safety standards, and affirms the importance of international cooperation for the enhancement of nuclear safety.

Article 1 sets forth the objectives of the Convention, which are to achieve and maintain a high level of nuclear safety worldwide through the enhancement of national measures and international cooperation, to establish and maintain effective defenses in nuclear installations against potential radiological hazards, and to prevent accidents with radiological consequences and mitigate such consequences if they occur.

Article 2 contains definitions for the Convention. "Nuclear installation" is defined as any land-based civil nuclear power plant under the jurisdiction of a Contracting Party, including storage, handling and treatment facilities for radioactive materials that are on the same site and are directly related to the operation of the nuclear power plant. A "regulators body" for each Contracting Party means any body or bodies given the legal authority by that Contracting Party to grant licenses and regulate the siting, design, construction, commissioning, operation or decommissioning of nuclear installations. "License" means any authorization granted by the regulatory body to the applicant to have the responsibility for the siting, design, construction, commissioning, operation or decommissioning of a nuclear installation.

Article 3 specifies that the Convention shall apply to the safety of nuclear installations.

Article 4 requires each Contacting 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.

Article 5 provides that each Contracting Party shall submit for review, prior to each review meeting provided for in Article 20, a report on the measures it has taken to implement its obligations under the Convention. Review meetings must be held no less fre quently than every three years (*see* Article 21), so national reports must be submitted at least that frequently. This reporting requirement, combined with the review process provided for in Article 20, is the central implementing mechanism of the Convention. Article 6 directs each Contracting Party to take the appropriate steps to ensure that the safety of nuclear installations existing at the time the Convention enters into force for that Contracting Party is reviewed as soon as possible, and to ensure that all reasonably practicable improvements are made as a matter of urgency to upgrade the safety of the nuclear installation. If such upgrading cannot be achieved by a Contracting Party, it must implement plans to shut down the nuclear installation as soon as practically possible, taking into account the whole energy context and possible alternatives, as well as the social, environmental and economic impact.

Article 7 requires each party to establish and maintain a legislative and regulatory framework to govern the safety of nuclear installations. The framework must provide for the establishment of applicable national safety requirements and regulations, a system of licensing with regard to nuclear installations and the prohibition of the operation of a nuclear installation without a license, a system of regulatory inspection and assessment of nuclear installations to ascertain compliance with applicable regulations and the terms of licenses, and the enforcement of applicable regulations and of the terms of licenses, including suspension, modification or revocation.

Article 8 requires each Contracting Party to establish or designate a regulatory body entrusted with the implementation of the legislative and regulatory framework created under Article 7. Each such regulatory body must be given adequate authority, competence and resources to fulfill its assigned responsibilities. Contracting Parties must also ensure that the functions of these regulatory bodies are effectively separated from those of any other body concerned with the promotion or utilization of nuclear energy.

Under Article 9, each Contracting Party is obligated to ensure that the prime responsibility for the safety of a nuclear installation rests with the holder of the relevant license and to take steps to ensure that each such license holder meets its responsibility.

Article 10 obligates each Contracting Party to take the appropriate steps to ensure that all organizations engaged in activities directly related to nuclear installations establish policies giving due priority to nuclear safety.

Article 11 requires a Contracting Party to take the appropriate steps to ensure that there are adequate financial resources available to support the safety of each nuclear installation throughout its life, and that there are sufficient numbers of qualified and ap propriately trained and retrained staff available for all safety-related activities for each nuclear installation throughout its life.

Article 12 requires each Contracting Party to take the appropriate steps to ensure that the capabilities and limitations of human performance are taken into account throughout the life of a nuclear installation.

Under Article 13, each Contracting Party must take the appropriate steps to ensure that quality assurance programs are established and implemented with a view to providing confidence that specified requirements for all activities important to nuclear safety are satisfied throughout the life of a nuclear installation. Article 14 obligates each Contracting Party to take the appropriate steps to ensure that comprehensive and systematic safety assessments are carried out before the construction and commissioning of a nuclear installation, as well as throughout its life. These assessments must be well documented and subsequently updated in the light of operating experience and significant new safety information. They also must be reviewed under the authority of the regulatory body. Article 14 also requires Contracting States to take the appropriate steps to ensure that verification by analysis, surveillance, testing and inspection is carried out to ensure that the physical state and the operation of a nuclear installation continue to be in accordance with its design, applicable national safety requirements, and operational limits and conditions.

Article 15 requires Contracting Parties to take the appropriate steps to ensure that the radiation exposure to workers and the public caused by a nuclear installation in all operational states shall be kept as low as reasonably achievable, and also that no individual shall be exposed to radiation doses exceeding prescribed national dose limits.

Under Article 16, each Contracting Party must take the appropriate steps to ensure that there are on-site and off-site emergency plans covering the activities to be carried out in the event of an emergency and that such emergency plans are routinely tested. Emergency plans must be prepared and tested before any new nuclear installation commences operation above a low power level agreed to by the regulatory body. Each Contracting Party must also take the appropriate steps to ensure that its own population and the competent authorities of the States in the vicinity of the nuclear installation are provided with appropriate information for emergency planning and response. Contracting Parties without nuclear installations on their territories must take the appropriate steps for the preparation and testing of emergency plans for their territories, if they are likely to be affected by a radiological emergency at a nuclear installation in the vicinity.

Article 17 deals with the siting of nuclear installations. Contracting Parties are required to take the appropriate steps to ensure that appropriate procedures are established and implemented for evaluating all relevant site-related factors likely to affect the safety of a nuclear installation for its projected lifetime, and for evaluating the likely safety impact of a proposed nuclear installation on individuals, society and the environment, as well as for re-evaluating as necessary all such factors so as to ensure the continued safety acceptability of the nuclear installations. Each Contracting Party must also take the appropriate steps to ensure that appropriate procedures are established and implemented for consulting Con tracting Parties in the vicinity of a proposed nuclear installation likely to affect them and provide to them, upon their request, information necessary for them to evaluate and assess the likely safety impact of the nuclear installation on their own territory.

Article 18 sets forth the actions that each Contracting Party must take with respect to the design and construction of nuclear installations. The article obligates a Contracting Party to take appropriate steps to ensure that the design and construction of a nuclear installation provides for several reliable levels and methods of protection (defense in depth) against the release of radioactive materials, to prevent the occurrence of accidents and mitigate their radiological consequences if they do occur. Each Contracting Party must also take appropriate steps to ensure that the technologies incorporated in the design and construction of a nuclear installation are proven by experience or qualified by testing or analysis, and that the design of a nuclear installation allows for reliable, stable and easily manageable operation, with specific consideration of human factors and the man-machine interface.

Addressing the safety of operation of nuclear installations, Article 19 requires each Contracting Party to take the appropriate steps to ensure that the initial authorization to operate a nuclear installation is based upon an appropriate safety analysis and a commissioning program demonstrating the consistency of the installation as constructed with design and safety requirements. Contracting Parties must also take appropriate steps to ensure that operational limits and conditions derived from the safety analysis, tests and operational experience are defined and revised as necessary for identifying safe boundaries for operation, and that operation, maintenance, inspection and testing of nuclear installations are conducted in accordance with approved procedures. Under sub-paragraphs (iv) and (v) of Article 19, Contracting Parties must also take appropriate steps to ensure that procedures are established for responding to anticipated operational occurrences and to accidents, and that necessary engineering and technical support in all safety-related fields is available through the lifetime of a nuclear installation. Subparagraph (vi) obligates Contracting Parties to take appropriate steps to ensure that incidents significant to safety are reported in a timely manner by the holder of the relevant license to the regulatory authority. Under subparagraph (vii), Contracting Parties must take appropriate steps to ensure the establishment of programs to collect and analyze operating experience, and must also ensure that the conclusions of these analyses are acted upon and that existing mechanisms are used to share important experience with international bodies and with other operating organizations and regulatory bodies. Lastly, Contracting Parties are required under subparagraph (viii) of Article 19 to take appro priate steps to ensure that the activity and volume of radioactive waste resulting from the operation of a nuclear installation is kept to the minimum practicable for the process concerned, both in activity and in volume, and that any necessary treatment and storage of spent fuel and waste directly related to the operation and on the same site as that of the nuclear installation take into consideration conditioning and disposal.

Article 20 provides for review meetings of the Contracting Parties for the purpose of reviewing the national reports submitted pursuant to Article 5. At these meetings, each Contracting Party is to have a reasonable opportunity to discuss and seek clarification of the review reports submitted by others. Sub-groups comprised of representatives of Contracting Parties may also be established as necessary for the purpose of reviewing specific subjects contained in the reports.

Article 21 establishes timetables for meetings of the Contracting Parties. A preparatory meeting must be held not later than six months after the entry into force of the Convention. At that meeting, Contracting Parties must establish a date for the first review meeting, to be held no later than 30 months after the date of the Convention's entry into force. At each review meeting, the Contracting Parties must determine the date for the succeeding review meeting, at an interval of no more than three years.

Article 22 concerns the procedures to be followed at the meetings of the Contracting Parties. Rules of Procedure, including guidelines regarding the form and structure of the reports to be submitted under Article 5, a date for submission of such reports, and the proc ess for reviewing them, and Financial Rules are to be prepared and adopted-by consensus by the Contracting Parties at the preparatory meeting.

Article 23 provides for extraordinary meetings of the Contracting Parties if agreed to by a majority of those present and voting at the meeting (including abstentions as voting), or at the written request of a Contracting Party supported by a majority of the Contracting Parties.

Article 24 provides that each Contracting Party shall attend meetings of the Contracting Parties and be represented at such meetings by one delegate, and by alternates, experts and advisers it deems necessary. Contracting Parties may by consensus invite intergovernmental organizations competent in matters relating to the Convention to attend, as observers, any meetings or specific sessions thereof.

Summary reports addressing the issues discussed and conclusions reached during a meeting are to be adopted by the Contracting Parties by consensus and made available to the public (Article 25).

The languages of meetings of the Contracting Parties are Arabic, Chinese, English, French, Russian and Spanish, unless otherwise provided in the Rules of Procedure (Article 26). Reports may be in the national language of the submitting Contracting Party or in a single designated language agreed upon in the Rules of Procedure, although in the former case the Contracting Party must also provide a translation into the designated language.

Article 27 provides that the Convention does not affect the rights and obligations of the Contracting Parties under their own laws to protection 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 or to the physical protection of nuclear materials or nuclear installations. When a Contracting Party provides information identified by it as protected, such information can be used only for the purposes for which it has been provided and must be kept confidential. Similarly, the contents of discussions of national reports held at review meetings must be kept confidential.

The secretariat functions for meetings of the Contracting Parties under the Convention are to be provided by the IAEA, which will pay the costs of performing these functions out of its regular budget (Article 28). The secretariat's duties are to convene, prepare and service the meetings of the Contracting Parties, and transmit to the Contracting Parties information received or prepared under the Convention.

Article 29 concerns dispute resolution. In the event of a disagreement between Contracting Parties concerning the interpretation or application of the Convention, the Contracting Parties shall consult within the framework of a meeting of the Contracting Parties to try to resolve the disagreement.

The Convention was opened for signature by all States at the Headquarters of the IAEA in Vienna on September 20, 1994, and will remain open for signature until its entry in force (Article 30). After the Convention has entered into force, it is to be open for accession by all States. Under Article 30, 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 also sign or accede to the Convention. In matters within their competence, 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 31 provides that the Convention will enter into force on the ninetieth day after the date of deposit with the Depositary of the twenty-second instrument of ratification, acceptance or approval, including the instruments of seventeen States each of which as at least one nuclear installation which has achieved criticality in a reactor core. It will enter into force for each additional adhering State or regional organization 90 days after the date of deposit with the Depositary of the appropriate instrument by such State or organization. Procedures for amendment of the Convention are included in Article 32.

A Contracting Party may denounce the Convention by written notice to the Depositary, effective one year following the Depositary's receipt of the notification or at such later date as specified in the notification (Article 33). The Depositary of the Convention is the Director General of the IAEA, who is charged with the duty of notifying all Contracting Parties of all significant developments concerning the Convention (Article 34).