THE PROTOCOL TO THE AGREEMENT OF THE INTERNATIONAL ATOMIC ENERGY AGENCY REGARDING SAFE-GUARDS IN THE UNITED STATES (TREATY DOC. 107–7)

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

REPORT

[To accompany Treaty Doc. 107-7]

The Committee on Foreign Relations, to which was referred the The Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency (IAEA) for the Application of Safeguards in the United States of America (the "Additional Protocol" or "U.S. Additional Protocol") (Treaty Doc. 107–7), having considered the same, reports favorably thereon subject to the two conditions and eight understandings set forth in this report and the accompanying resolution of ratification and recommends that the Senate give its advice and consent to ratification thereof.

CONTENTS

		Page
I.	Purpose	1
	Background	4
III.	Summary of the Protocol	6
IV.	Article-by-Article Analysis Committee Action	7
V.	Committee Action	16
VI.	Views of the Armed Services Committee	35
	CBO Cost Estimate	40
VIII.	Resolution of Ratification	51
IX.	Hearing and Questions for the Record (Contains Administration and	
	Other Experts' Views)	55

I. Purpose

The Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America supplements and amends the verification arrangements set forth in the existing Agreement Between the United States of America and the IAEA for the Application of Safeguards in the United States of America of November 18, 1977 (the "Voluntary Offer"), which entered into force, following Senate advice and consent, on December 9, 1980. The Voluntary Offer was, in turn, an outgrowth of the Treaty on the Non-Proliferation of Nuclear Weapons (the "Nuclear Nonproliferation Treaty" or "NPT"), which mandated safeguards on

each country's declared peaceful nuclear energy facilities.

When the Senate Foreign Relations Committee reported the NPT resolution of ratification to the Senate in 1968, it noted that, "given [the] burgeoning capability of so many nations to build nuclear weapons...U.S. efforts to curtail the spread of nuclear weapons and skills have become increasingly more serious and urgent." One of the bargains that was struck in the NPT to gain the support of many states, especially those without nuclear weapons, was that in forgoing nuclear weapons, non-nuclear-weapon states (NNWS) would be guaranteed access to the peaceful uses of atomic energy. Thus, Article IV of the NPT states:

Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty. 2

The Foreign Relations Committee was mindful of the likely limitations of safeguards agreements at the time it reported the NPT to the full Senate. The Committee noted:

[T]he implementation of the treaty raises uncertainties. The reliability and thereby the credibility of international safeguards systems is still to be determined. No completely satisfactory answer was given to the Committee on the effectiveness of the safeguards systems envisioned under the the treaty. . . . But [the Committee] is equally convinced that when the possible problems in reaching satisfactory safeguards agreements are carefully weighed against the potential for a worldwide mandatory safeguards system, the comparison argues strongly for the present language of the treaty. 3

The NPT and the IAEA's existing safeguards agreements sufficed to forestall nuclear weapons programs in the world's advanced industrial states, several of which were weighing the nuclear option 40 years ago. This regime has failed to keep pace, however, with the increase in the global availability of nuclear weapons technology, especially the technology and equipment for uranium enrichment and spent nuclear reactor fuel reprocessing to produce the fissile material for such weapons. Now the road to nuclear weapons can be traveled by determined countries with only a minimal in-

¹U.S. Congress, Senate Committee on Foreign Relations, September 26, 1968, Treaty on the Non-proliferation of Nuclear Weapons, 90th Congress, 2d Session, Executive Report No. 9, p. 2.

Non-proliferation of Nuclear Weapons, 90th Congress, 2d Session, Executive Report No. 9, p. 2. Hereinafter, "Committee Report."

2"Treaty on the Non-proliferation of Nuclear Weapons," the International Atomic Energy Agency, INFCIRC/140, April 22, 1970, available at http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf.

3 Committee Report, p. 14.

dustrial base. While the number of recognized nuclear-weapon states (NWS) has not dramatically increased over the years, the dangers of proliferation have become all too real and apparent.

Many are now questioning the grand bargain between non-proliferation and peaceful uses of nuclear energy contained within the NPT itself. As Dr. Ronald F. Lehman II, former director of the U.S. Arms Control and Disarmament Agency, noted in a statement submitted to the Committee, "Today, advocates of peaceful applications of nuclear technology increasingly understand that they must address concerns about non-proliferation and vulnerability to terrorist exploitation or attacks." ⁴ The inherent dual-use nature of the complete nuclear fuel cycle, combined with its wide availability in peaceful civil power applications, uniquely challenges the world to find ways to stop its contribution to nuclear weapons. The only international body, at this time, capable of doing so is the IAEA, and one of the tools with which to attempt to fix this problem is the Additional Protocol.

Ratification and appropriate implementation by non-nuclear-weapon states of the Additional Protocol, based on a Model Additional Protocol issued by the IAEA, could reduce the risk of nuclear proliferation and improve international confidence that non-nuclear-weapon states party to the NPT are not misusing nuclear materials to develop nuclear weapons. The Model Additional Protocol was designed to improve the ability of the IAEA to detect clandestine nuclear weapons programs in non-nuclear-weapon states party to the NPT by providing the IAEA with increased information about and expanded access to nuclear fuel cycle activities and sites.

The United States, although under no obligation to do so as a nuclear-weapon state under Article I of the NPT, negotiated and signed an Additional Protocol with the IAEA, which incorporates the full text of the Protocol. This underscores U.S. commitment to combating the potential spread of nuclear weapons, and demonstrates that adherence to the Model Additional Protocol by other countries will not place them at a commercial disadvantage. The U.S. Additional Protocol is identical to the Model Additional Protocol which non-nuclear-weapon states are being asked to accept, with the only exceptions being that the U.S. Additional Protocol does not obligate the United States to apply the Additional Protocol to activities or locations of direct national security significance to the United States and that it has a right to use managed access to protect information of direct national security significance should inspections be carried out in the United States.

Under the current safeguards regime, the IAEA already has the right to inspect certain facilities that the United States has declared to it. In practice, however, ever since 1993, "[a]ll of these inspections were conducted at the request of the United States in order to safeguard fissile material declared excess to our defense needs." 5 The Additional Protocol could result in additional inspections in the United States, and the United States must prepare for that possibility and ensure protections for itself if the IAEA were

⁴Dr. Ronald F. Lehman, "Written Statement on the U.S.-IAEA Additional Protocol and its Strategic Content, Submitted to the U.S. Senate Foreign Relations Committee," see Part IX of this Report, p. 98. (Hereinafter, "Part IX.")

⁵Answer to Committee Question for the Record, Part IX, p. 111.

to conduct such inspections; but the IAEA fully understands that the United States maintains the right to engage in nuclear weapons activities and that there is little, therefore, for the IAEA to discover here.

The Committee finds that it is in the interest of the United States to continue to demonstrate leadership in this area through ratification and appropriate implementation of the U.S. Additional Protocol and to that end has reported favorably its resolution of advice and consent and this report to accompany it.

II. BACKGROUND

The Additional Protocol between the United States and the IAEA is the latest of a series of safeguards regimes intended to stem nuclear proliferation, while allowing all countries to reap the benefits of nuclear energy. Originally, safeguards applied only to nuclear facilities that received assistance from the IAEA. Article II of the IAEA's statute states that one of its fundamental objectives is to "ensure, so far as it is able, that all applications of the atom in a non-nuclear-weapon state, including the assistance provided by it . . . is not used in such a way as to further any military purpose." ⁶

With the entry into force of the NPT in 1970, IAEA safeguards were expanded to become "comprehensive" safeguards for all of a country's declared civil nuclear facilities, and then were formalized by "safeguards agreements" between each country and the IAEA. A total of 188 states have approved the NPT and 145 (including three states that are not party to the NPT) have safeguards agreements, some of them comprehensive, some of them not, with the IAEA.

The United States' Voluntary Offer to accept IAEA comprehensive safeguards entered into force in 1980, following Senate advice and consent to ratification. The NPT requires non-nuclear-weapon state parties to accept IAEA safeguards on all nuclear material in all of their peaceful nuclear activities. The United States, as a nuclear-weapon state party to the NPT (along with Russia, China, the United Kingdom and France), is under no legal obligation to accept such safeguards. President Lyndon Johnson declared in 1967, however, that the United States would accept the same obligations that it asked others to accept, with the proviso that it would not provide any information or access relating to its nuclear weapons programs. By submitting itself to the same safeguards on all of its civil nuclear facilities that non-nuclear-weapon state parties are subject to, the United States intended to demonstrate that adherence to the NPT did not place other countries at a commercial disadvantage, either because of increased costs associated with safeguards or because of the risk of the compromise of proprietary information. This offer was critical to gaining the acceptance of the NPT by countries such as Germany and Japan.

At the end of the Persian Gulf War, the world learned about the extent of Iraq's clandestine pursuit of an advanced program to develop nuclear weapons, some of which had been conducted in close proximity to declared facilities inspected by the IAEA. The inter-

⁶Statute of the International Atomic Energy Agency, as last amended on December 28, 1989, available at http://www.iaea.org/About/statute_text.html.

national community recognized that the IAEA's international inspection system needed to be strengthened in order to increase its capability to detect secret nuclear programs. After four years of work by the Secretariat of the IAEA, an IAEA Committee agreed on a Model Additional Protocol (the "Model Protocol") for strengthening nuclear safeguards. The Model Protocol was approved by the IAEA's Board of Governors in 1997. The Model Protocol was designed to amend existing safeguards agreements to strengthen such safeguards by requiring non-nuclear-weapon states to provide, inter alia, broader declarations to the IAEA about their nuclear programs and nuclear-related activities, and by expanding the access rights of the IAEA. The new safeguards measures become effective in each state when it brings its Additional Protocol into force.

During the negotiations of the Model Protocol, many non-nuclear-weapon state parties to the NPT urged the United States, as the strongest proponent of the NPT, to accept on a voluntary basis the provisions of the Model Protocol. The Department of State, the former Arms Control and Disarmament Agency, the Department of Defense, the Department of Energy, and the Nuclear Regulatory Commission, with the advice and support of the Central Intelligence Agency, were primarily responsible for the negotiation of the U.S. Additional Protocol. Following the example of the Voluntary Offer, the United States stated during the negotiations that it would accept the provisions of the Model Protocol, subject to a national security exclusion (NSE) and provisions allowing for managed access during IAEA inspections. An illustrative list of measures for managed access was provided in a separate Subsidiary Arrangement that is to enter into force upon entry into force of the Additional Protocol.

The success in achieving a strong Model Protocol was critically dependent on voluntary acceptance of Model Protocol measures by the United States. The signature of the U.S. Additional Protocol was a significant factor in the early decision by many non-nuclear-weapon states to accept the protocol. As of March 26, 2004, the Additional Protocol to IAEA safeguards agreements of 86 states had been approved by the Board of Governors, 81 states had signed their approved Additional Protocols, and 39 contracting states have had their Additional Protocols enter into force. The U.S. Additional Protocol and its Subsidiary Arrangement were approved by the Board of Governors on June 11, 1998. The U.S. Additional Protocol and Subsidiary Arrangement were signed by representatives of the IAEA and the United States on June 12, 1998.

The Additional Protocol was submitted by President Bush to the United States Senate for its advice and consent to ratification on May 9, 2002, and was subsequently referred to the Committee on Foreign Relations.

The responsibility for preparing for the entry into force of the Additional Protocol has been undertaken by an interagency group led by the National Security Council staff and comprised of representatives of the Department of State, the Department of Defense, the

 $^{^7}$ "Safeguards and Verification, Strengthened Safeguards System: Status of Additional Protocols," the International Atomic Energy Agency, available at http://www.iaea.org/OurWork/SV/Safeguards/sg_protocol.html.

Department of Justice, the Department of Commerce, the Department of Energy, the Nuclear Regulatory Commission, and the Central Intelligence Agency. This group has addressed not only the Senate's consideration of U.S. ratification, but also the necessary implementing legislation (a recommended text for which was submitted to the Senate on November 21, 2003, and introduced, at the request of the Administration, by Chairman Lugar as S. 1987 on December 9, 2003), agency regulations, interagency procedures and guidance, preparation at affected locations with national defense programs, and outreach to other locations that may be affected by the reporting or IAEA access provisions of the Additional Protocol.

III. SUMMARY OF THE PROTOCOL

The U.S. Additional Protocol is based upon the IAEA Model Additional Protocol. Within 180 days of the entry into force of an Additional Protocol, under Article 3, a state party must provide to the Agency a declaration containing information about its nuclear and nuclear-related activities. This includes expanded information about its holdings of uranium and thorium ores and ore concentrates and of other plutonium and uranium materials not currently subject to Agency safeguards, general information about its manufacturing of equipment for enriching uranium or producing plutonium, general information about its nuclear fuel cycle-related research and development activities not involving nuclear material, and its import and export of nuclear material and equipment. Such broad-based information makes it substantially more difficult for a state planning a clandestine nuclear-weapon program to conceal the early stages of that program and provides the IAEA with a critical reference base for comparison with information that would otherwise not be available to it, including information from other member states.

The United States, as a nuclear-weapon state, has already indicated to the IAEA that certain nuclear material, sites and activities are outside the scope of the U.S. Additional Protocol and will therefore not be declared.

The Additional Protocol provides the IAEA with certain rights of access to declared locations and also to other undeclared locations to investigate the possibility of undeclared activities. The resulting increased risk of early detection is intended to deter non-nuclear-weapon states from undertaking a clandestine nuclear weapons program. With increased transparency, moreover, the IAEA should be able to provide greater assurance of both the absence of diversion of declared nuclear material and the absence of undeclared nuclear material and activities in those states.

The overall design of the Additional Protocol was shaped by the interest of states in establishing an appropriate balance between improving the effectiveness of the safeguards system and the need to avoid undue interference with legitimate nuclear or nuclear-related activities. The declaration requirements of the Additional Protocol are of a general character. The IAEA is precluded from mechanistically or systematically verifying the declarations. The Additional Protocol defines the activities the IAEA may carry out at locations of different types; provides for managed access to protect various classes of sensitive information; and provides for the

negotiation of subsidiary arrangements as needed to further define how Protocol measures shall be applied, including at particular locations. The Additional Protocol also requires the IAEA to maintain a stringent regime to ensure effective protection against disclosure of confidential information that the IAEA receives in reports or

through inspections.

Because the United States is an accepted nuclear-weapon state under the NPT, the U.S. Additional Protocol includes two provisions not contained in the Model Additional Protocol. The national security exclusion provision (or NSE) is intended to exclude the application of the Additional Protocol where the United States decides that its application would result in IAEA access to "activities with direct national security significance to the United States or to locations or information associated with such activities" (Article 1.b). The Managed Access provision permits the United States to manage access by the IAEA to "activities with direct national security significance to the United States or to locations or information associated with such activities" (Article 1.c). This supplements the managed access rights of all countries that sign Additional Protocols, to "prevent the dissemination of proliferation sensitive information, to meet safety or physical protection requirements, or to protect proprietary or commercially sensitive information" (Article 7). An illustrative list of measures permitted to be taken by the United States during managed access under Article 1 is contained in a Subsidiary Agreement to the Additional Protocol that is to enter into force when the Additional Protocol enters into force. The United States has conveyed to the IAEA its intent to make full and repeated use of these provisions in order to protect information, locations, and activities of direct national security significance to the United States.

IV. ARTICLE-BY-ARTICLE ANALYSIS

The Protocol Additional to the Agreement between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America consists of the main text of the protocol along with two annexes, which are an integral part of the Additional Protocol. It is based on the Model Additional Protocol, with certain additions, most notably the provision that allows the United States to exclude application of the Additional Protocol in cases where the United States decides it would result in access by the International Atomic Energy Agency (the "IAEA") to activities with direct national security significance to the United States or to locations or information associated with such activities. This provision is the "National Security Exclusion". executive branch agencies will exercise their responsibilities to implement the Additional Protocol subject in all respects to the President's authority as chief executive and consistent with his foreign affairs power.

TITLE AND PREAMBLE

The Title of the Additional Protocol is the "Protocol Additional to the Agreement between the United States of America and the International Atomic Energy IAEA for the Application of Safeguards in the United States of America". The Additional Protocol is a bilateral treaty that will supplement and amend the IAEA verification arrangements set forth in the existing Agreement between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America (the "Voluntary Offer"), which was signed at Vienna on November 18, 1977, and entered into force on December 9, 1980.

The Preamble to the Additional Protocol serves as an introduction and sets forth the intention of the United States and the IAEA in broad terms. The first paragraph of the Preamble notes that the United States and the IAEA are already parties to the Voluntary Offer. The following paragraphs of the preamble set forth the Parties' considerations upon entering into the Additional Protocol. These paragraphs first recognize the desire of the international community to further enhance nuclear non-proliferation by strengthening the IAEA's safeguards system. They also reiterate certain provisions in the Voluntary Offer, inter alia, that the IAEA must, in the implementation of safeguards, take into account the need to avoid hampering the economic and technological development of the United States or international cooperation in the field of peaceful nuclear activities; respect health, safety, physical protection and other security provisions in force and the rights of individuals; and take every precaution to protect commercial, technological, and industrial secrets as well as other confidential information. Furthermore, they note that, consistent with the objective to strengthen the effectiveness and improve the efficiency of safeguards, the frequency and intensity of activities described in the Additional Protocol will be kept to a minimum.

ARTICLE 1—RELATIONSHIP BETWEEN THE ADDITIONAL PROTOCOL AND THE VOLUNTARY OFFER, U.S. NATIONAL SECURITY EXCLUSION, AND MANAGED ACCESS

Article 1.a establishes the relationship between the Voluntary Offer and the Additional Protocol. It provides that the provisions of the Voluntary Offer will apply to the Additional Protocol to the extent relevant to and compatible with the provisions of the Additional Protocol. Where there is a conflict between the two agreements, the provisions of the Additional Protocol are to apply. The principal differences between the Voluntary Offer and the Additional Protocol include the broader declaration requirements called for and the expanded access permitted in the Additional Protocol. There are also improved procedures for designating IAEA inspectors, issuing their visas, and protecting safeguards information by the IAEA. These procedures are discussed below in the sections describing Articles 11, 12, and 15. In such areas, the Additional Protocol provisions will govern. As a practical matter, the United States has been implementing procedures similar to those in the Additional Protocol for designating inspectors and issuing their visas on a voluntary basis for several years.

Under Article 1.b of the Additional Protocol, the United States has the right to exclude the application of the Additional Protocol where the United States decides that its application would result in access by the IAEA to activities with direct national security sig-

nificance to the United States or to locations or information associated with such activities. The United States has the sole discretion to determine whether an activity implicates information of direct national security significance and therefore whether and how to invoke the National Security Exclusion. The United States will have undeclared nuclear material and activities outside the scope of the Additional Protocol and the Voluntary Offer, including certain activities at locations that are part of the U.S. civil nuclear program, consistent with its status as a nuclear-weapon state. The IAEA knows and accepts that this will be the case.

In addition, under Article 1.c, the United States has the right to use managed access in connection with activities with direct national security significance to the United States or in connection with locations or information associated with such activities. This right is not available to non-nuclear-weapon states. Consistent with the President's authority, use of the National Security Exclusion will be guided by principles developed for its application.

Information of direct national security significance will be pro-

tected in all aspects of implementation of the Additional Protocol through invoking the National Security Exclusion or through the implementation of managed access. The National Security Exclusion is applicable to all of the following provisions and will exempt the United States from any of the requirements noted when it is invoked.

The United States will make full use of the managed access and National Security Exclusion provisions of Article 1 in order to protect activities of direct national security significance to the United States or locations or information associated with such activities. Additionally, decisions concerning the use of the National Security Exclusion and managed access to protect national security information will be made in accordance with established implementing procedures solely by the affected cognizant Department.

ARTICLE 2-PROVISION OF INFORMATION

Article 2 sets forth information that the United States is to provide to the IAEA. The United States must provide the following declarations specified in Article 2.a: information regarding nuclear fuel cycle-related research and development activities not involving nuclear material that are funded, specifically authorized or controlled by, or carried out on behalf of, the United States (Article 2.a(i)); if agreed by the United States, additional information needed to improve the effectiveness or efficiency of safeguards on nuclear material at nuclear facilities and locations outside facilities (Article 2.a(ii)); a general description of each building on a site (i.e., the area delimited by the United States in the relevant design information for a facility) (Articles 2.a(iii) and 18.(b)); a description of the scale of operations of each location engaged in the manufacturing activities specified in Annex I (Article 2.a(iv)); information regarding uranium mines and concentration plants and thorium concentration plants (Article 2.a(v)); information regarding locations with certain quantities of specified nuclear materials as well as information regarding exports and imports of certain quantities of these materials (Article 2.a(vi)); information regarding nuclear material declared by the United States but exempted from safeguards by arrangement with the IAEA (Article 2.a(vii)); information regarding the location or further processing of intermediate or high-level waste containing plutonium, high enriched uranium or uranium-233 on which safeguards have been terminated pursuant to Article 11 of the Voluntary Offer (Article 2.a(viii)); information regarding the equipment and non-nuclear material specified in Annex II with regard to exports and imports of such items (Article 2.a(ix)); and information regarding general plans for the succeeding 10-year period relevant to the development of the nuclear fuel cycle when approved by the appropriate authorities in the United States (Article 2.a(x)).

Article 2.b requires the United States to make every reasonable effort to provide: information regarding specified nuclear fuel cyclerelated research and development activities not involving nuclear material that are not funded, specifically authorized or controlled by, or carried out on behalf of, the United States (Article 2.b(i)); and a general description of activities and the identity of the person or entity carrying out activities at locations identified by the IAEA outside a site (i.e., the area delimited by the United States in the relevant design information for a facility) that the IAEA considers might be functionally related to the activities of that site (Articles 2.b(ii) and 18.b).

Article 2.c requires the United States, if requested by the IAEA, to provide amplifications or clarifications of any information provided under Article 2, in so far as relevant for the purpose of safeguards. The United States has informed the IAEA that it expects that a "question relating to the correctness and completeness of the information provided pursuant to Article 2", (Article 4.a.(ii)) or an "inconsistency relating to that information" (Article 4.a.(ii)) will be judged by the IAEA strictly within the context of whether the information provided with respect to civil nuclear activities is complete, correct, and internally consistent. In accordance with the National Security Exclusion, the United States will supply information pursuant to Article 2 of the Additional Protocol only on those unclassified activities to which it has determined that it will be able to provide the IAEA with sufficient access, including with managed access, to enable it to verify the accuracy of the declared information.

ARTICLE 3—TIMELINES FOR THE PROVISION OF INFORMATION

Article 3 sets forth the timelines for submission of the U.S. declarations. The United States must provide to the IAEA the information identified in Article 2.a(i), (iii), (iv), (v), (vi)(a), (vii), and (x) and Article 2.b(i) within 180 days of the entry into force of the Additional Protocol. Other information is to be submitted on a quarterly or annual basis, within a specified period from a particular event, or as negotiated on a case-by-case basis.

ARTICLES 4-6-COMPLEMENTARY ACCESS

Article 4 establishes the rights and obligations of the IAEA with regard to the implementation of complementary access. Specifically, Article 4.a provides that the IAEA shall not mechanistically or systematically seek to verify the information in the Article 2 declarations and then sets forth the purposes for which the IAEA can exercise complementary access. Article 4.a(i) specifies that the IAEA

shall have access to the locations referred to in Article 5.a(i) or (ii) on a selective basis in order to assure the absence of undeclared nuclear material and activities. Under Article 4.a(ii), the IAEA shall have access to the locations specified in Articles 5.b or 5.c for the purpose of resolving a question relating to the correctness and completeness of the information provided or in resolving an inconsistency relating to that information. Article 4.a(iii) allows the IAEA to have access to any of the decommissioned locations referred to in Article 5.a(iii) to the extent necessary to confirm the U.S. declaration. The United States has informed the IAEA that it expects the IAEA to seek such access in the United States for the purpose of increasing the effectiveness or efficiency of IAEA safeguards at facilities in non-nuclear-weapon states or enhancing the capability of the IAEA to detect undeclared nuclear material and activities in a non-nuclear-weapon state. Further, the United States has informed the IAEA that, as a nuclear-weapon state, the United States foresees no circumstances in which the IAEA would need to request access in the United States pursuant to Article 4.d of the Additional Protocol without first providing the United States with the opportunity to clarify and facilitate the resolution of the question or the inconsistency.

Under Article 4.b, the IAEA is generally required to give advance notice of access of at least 24 hours. However, for access to any place on a site (defined in Article 18.b as the area delimited by the United States in the relevant design information for a facility) that is sought in conjunction with design information verification visits or ad hoc or routine inspections on that site, the period of advance notice shall, if the IAEA so requests, be at least two hours, but in exceptional circumstances may be less than two hours. Under Article 4.c, the advance notice shall be in writing and specify the reasons for access and the activities to be carried out. Article 4.d states that, in the case of a question or inconsistency, the IAEA shall provide the United States with an opportunity to clarify and facilitate the resolution of the question or inconsistency. The Additional Protocol states that such an opportunity is to be provided before a request for access, unless the IAEA considers that delay in access would prejudice the purpose for which the access is sought. The IAEA is not to draw any conclusions about the question or inconsistency until the United States has been provided with such an opportunity. As noted throughout, the United States has informed the IAEA that as a nuclear-weapon state, the United States foresees no circumstances in which the IAEA would need to request access pursuant to Article 4.d of the Additional Protocol without first providing the United States with the opportunity to clarify and facilitate the resolution of the question or inconsistency. Pursuant to Article 4.e, unless otherwise agreed to by the United States, access shall only take place during regular working hours. Article 4.f specifically authorizes U.S. representatives to accompany IAEA inspectors during their access, provided that the inspectors are not thereby delayed or otherwise impeded in the exercise of their functions. However, the managed access provisions of Article 1 and Article 7 or the National Security Exclusion could be invoked and, if invoked, could preclude or otherwise affect IAEA access or activities as the case may be.

Article 5 sets forth the locations to which the IAEA may have access. Specifically, Article 5.a defines the locations for which the United States must provide access subject to the managed access provision of Article 1 and the National Security Exclusion or the managed access provisions of Article 7. These are: any place on a site (i.e., the area delimited by the United States in the relevant design information for a facility) (Article 5.a(i)); any location identified by the United States in its declarations under Article 2.a(v)–(viii) (Article 5.a(ii)); and any decommissioned facility or decommissioned location outside facilities where nuclear material was customarily used (Article 5.a(iii)).

Articles 5.b and 5.c list other locations for which the United States shall provide access or, if it is unable to do so, "shall make every reasonable effort" to satisfy IAEA requirements, without delay, through other means. The locations in Article 5.b are the locations (other than those referred to in Article 5.a(i)) described in the declarations made under the following provisions: Article 2.a(i) (locations of nuclear fuel cycle-related research and development funded, authorized, or controlled by, or carried out on behalf of the United States); Article 2.a(iv) (locations engaged in activities listed in Annex I); Article 2.a(ix)(b) (locations of intended use in the United States of imported Annex II equipment and non-nuclear material) and Article 2.b (specified nuclear fuel cycle-related research and development that is not funded, authorized, or controlled by, or carried out on behalf of, the United States and locations outside a site). Article 5.c provides for access to any location specified by the IAEA, other than locations referred to in Article 5.a or 5.b, to carry out location-specific environmental sampling.

Under the National Security Exclusion, the United States has the right to exclude from the Article 2 declarations locations that it determines would result in IAEA access to activities with direct national security significance or to locations or information associated with such activities. Access under Articles 5.a(i), 5.a(ii), 5.a(iii) and 5.b is limited to those locations identified by the United States in its declarations under Article 2. The IAEA could seek access to other locations (Article 5.c), but the United States will invoke the National Security Exclusion and deny access if it determines that such access would result in access by the IAEA to activities with direct national security significance or to locations or information associated with such activities.

Article 6 sets forth the range of activities that may be employed by IAEA inspectors during complementary access. Under Article 6, the type of activities that can be conducted by the inspectors depends on the particular location under inspection. The United States intends to exercise its right under the National Security Exclusion and managed access provisions of Article 1 to preclude the use of particular measures if their use would result in access by the IAEA to activities with direct national security significance to the United States or to locations or information associated with such activities. For example, the United States will use the National Security Exclusion to preclude the IAEA from collecting location specific environmental samples from current or former nuclear weapon production complex sites. In addition, the complementary

access activities referred to in Articles 5 and 6 are subject to the managed access provisions contained in Article 7.

ARTICLE 7-MANAGED ACCESS

Article 7 provides that, upon request by the United States, the IAEA and the United States shall make arrangements for managed access under the Additional Protocol in order to prevent the dissemination of proliferation-sensitive information, to meet safety or physical protection requirements, or to protect proprietary or commercially sensitive information. Under Article 7.b, the United States may, when providing the information referred to in Article 2, inform the IAEA of the places at a site or location at which managed access may be applicable, although it is not obligated to do so. Article 7.c allows the United States to use managed access pending entry into force of any necessary Subsidiary Arrangements. Specific managed access measures needed to protect the types of information set forth in Article 7 will be determined on a case-by-case basis and will depend on, among other factors, the details of the particular location, and the specific inspection activities that are requested by the IAEA. As noted previously, the United States intends to deny access or the application of specific measures on the basis of the National Security Exclusion. Where the United States decides to permit access, Article 1.c also allows the United States to use managed access to protect activities, information, or locations of direct national security significance. This gives the United States the discretion to use managed access, rather than the National Security Exclusion, to protect activities, information, or locations of direct national security significance. Such circumstances may arise, for example, where unclassified, civil nuclear activities are being conducted at installations where national security activities are also being conducted and it has been determined that managed access procedures can be implemented to allow IAEA access to the unclassified activities while fully protecting classified information.

When the Additional Protocol was concluded, a Subsidiary Arrangement was agreed to between the United States and the IAEA specifying, for the purposes of the Additional Protocol with the United States, as a nuclear-weapon state, measures that could be taken to manage access. These may include, inter alia: (a) removal of sensitive papers from office spaces; (b) shrouding of sensitive displays, stores, and equipment; (c) shrouding of sensitive pieces of equipment, such as computers or electronic systems; (d) logging off of computer systems and turning off data indicating devices; (e) restriction of safeguards instrumentation or environmental sampling to the purpose of the access; and (f) in exceptional cases, giving only individual inspectors access to certain parts of the inspection location. This Subsidiary Arrangement is to enter into force when the Additional Protocol enters into force.

ARTICLE 8—ADDITIONAL ACCESS AT U.S. REQUEST

Article 8 allows the United States to offer the IAEA access to locations in addition to those referred to in Articles 5 and 9 and to request that the IAEA conduct verification activities at a particular

location. The IAEA shall, without delay, make every reasonable effort to act upon such a request.

ARTICLE 9-ENVIRONMENTAL SAMPLING

Under Article 9, the United States shall provide the IAEA with access to locations specified by the IAEA to carry out wide-area environmental sampling, provided that if the United States is unable to provide such access, it shall make every reasonable effort to satisfy IAEA requirements at alternative locations. Article 9 further provides that the IAEA shall not seek such access until the use of wide-area environmental sampling and the procedural arrangements therefor have been approved by the IAEA's Board of Governors and only following consultations between the IAEA and the United States. Such arrangements have not been brought before or approved by the Board. The United States has informed the IAEA that even if such arrangements were approved, the United States does not foresee circumstances in which the IAEA would need to propose to conduct wide-area environmental sampling.

ARTICLE 10—REQUIREMENTS FOR IAEA REPORTS TO THE UNITED STATES

Article 10 requires the IAEA to inform the United States, within specified time limits, of activities carried out under the Additional Protocol, the results of activities in respect of any questions or inconsistencies the IAEA had brought to the attention of the United States, and the conclusions it has drawn from its activities under the Additional Protocol.

ARTICLE 11—DESIGNATION OF IAEA INSPECTORS

Article 11 provides improved procedures for the designation of IAEA inspectors. Under Article 11, the Director General shall notify the United States of the Board's approval of any IAEA official as a safeguards inspector. Unless the United States advises the Director General of its rejection of such an official as an inspector within three months of receipt of notification of the Board's approval, the inspector will be considered designated to the United States. Under the terms of the Voluntary Offer, the United States also retains the right subsequently to withdraw acceptance of inspectors as needed.

ARTICLE 12—VISAS

To enable inspectors to carry out their duties in the United States, Article 12 requires the United States to issue appropriate multiple-entry/exit and/or transit visas to designated IAEA inspectors. These visas must be valid for at least one year, must be issued within one month of a request, and must be renewed, as required, to cover the duration of the inspector's designation to the United States.

ARTICLE 13—SUBSIDIARY ARRANGEMENTS

Article 13 provides for the conclusion of Subsidiary Arrangements that specify how Additional Protocol measures are to be applied. Requests for such arrangements can be made at any time by

either the United States or the IAEA. Subsidiary Arrangements are likely to regard matters such as managed access and IAEA communications. The United States and the IAEA shall agree on such arrangements within 90 days of the entry into force of the Additional Protocol or, where the indication of the need for such Subsidiary Arrangements is made after the entry into force of the Additional Protocol, within 90 days of date of such indication. As discussed in Article 7, the United States and the IAEA have agreed to an initial Subsidiary Arrangement governing certain measures regarding managed access. This Arrangement is to enter into force upon entry into force of the Additional Protocol.

ARTICLE 14—IAEA COMMUNICATION SYSTEMS

Under Article 14, the United States is required to permit and protect unimpeded communications by the IAEA for official purposes between IAEA inspectors in the United States and IAEA Headquarters and/or Regional Offices. The IAEA has the right, in consultation with the United States, to make use of internationally established systems of direct communications, including satellite systems and other forms of telecommunication. IAEA communications shall take due account of the need to protect proprietary or commercially sensitive information or design information that the United States regards as being of particular sensitivity.

ARTICLE 15—IAEA PROTECTION OF CONFIDENTIAL INFORMATION

Article 15 requires the IAEA to maintain a stringent regime to ensure effective protection against disclosure of commercial, technological, and industrial secrets and other confidential information coming to its knowledge. The Board has approved a strengthened regime and is required under the Additional Protocol to review it periodically. This regime includes provisions relating to general principles and associated measures for the handling of confidential information, conditions of staff employment relating to the protection of confidential information, and procedures in cases of breaches or alleged breaches of confidentiality.

ARTICLE 16—INTEGRATION AND AMENDMENT OF THE ANNEXES

Article 16.a provides that the Annexes to the Additional Protocol are an integral part thereof. These annexes provide technical definitions of key nuclear activities and equipment and material declarable under Article 2 of the Additional Protocol. Article 16.b provides that the Annexes may be amended by the Board upon the advice of a working group of experts established by the Board and open to all members of the IAEA. Any such amendment will take effect four months after its adoption by the Board.

ARTICLE 17-ENTRY INTO FORCE

This provision establishes the date of entry into force of the Additional Protocol. Specifically, the Additional Protocol will come into force only when the IAEA receives written notification from the United States that its statutory and constitutional requirements for entry into force have been met.

ARTICLE 18—DEFINITIONS

Article 18 sets forth the definitions of the following terms used in the Additional Protocol: "nuclear fuel cycle-related research and development activities"; "site"; "decommissioned facility and decommissioned location outside facilities"; "closed-down facility and closed-down location outside facilities"; "high-enriched uranium"; "location-specific environmental sampling"; "wide-area environmental sampling"; "nuclear material"; "facility"; and "location outside facilities".

ANNEXES

Annex I contains a list of nuclear-related activities, such as centrifuge manufacturing, required to be reported under Article 2.a(iv). Annex II contains the list of specified equipment and non-nuclear material for the reporting of exports and imports, as required by Article 2.a(ix). Annex II reproduces the list of specified equipment and non-nuclear material that was approved by the Board in 1992 for voluntary reporting of exports to the IAEA

V. COMMITTEE ACTION

The Additional Protocol was referred to the Committee on May 10, 2002.

The Committee received testimony on the Additional Protocol at a hearing on January 29, 2004. Witnesses for this hearing were: The Honorable Linton F. Brooks, Administrator, National Nuclear Security Administration; the Honorable Peter Lichtenbaum, Assistant Secretary of Commerce for Export Administration, U.S. Department of Commerce; Ms. Susan F. Burk, Acting Assistant Secretary of State for Non-proliferation, U.S. Department of State; and, Mr. Mark T. Esper, Deputy Assistant Secretary of Defense for Negotiations Policy, U.S. Department of Defense. The Committee also requested and received statements from the Nuclear Energy Institute; the Honorable Ronald F. Lehman, Director of the Center for Global Security Research at Lawrence Livermore National Laboratory and the former Director of the Arms Control and Disarmament Agency; and Ambassador Norman A. Wulf, former Special Representative of the President for Nuclear Non-proliferation.

At a business meeting on March 4, 2004, the Committee considered a draft resolution of ratification including 2 conditions and 8 understandings. After discussion and debate, the resolution was approved by a vote of 19 in favor and 0 against. Neither the conditions nor the understandings need be transmitted to the IAEA when the United States deposits its instrument of ratification. Rather, they address the relationship between the Senate and the President as the Senate gives its advice and consent to ratification of the Additional Protocol.

Condition (1). Certifications Regarding The National Security Exclusion, Managed Access, and Declared Locations.

In deciding to accept the entire text of the Additional Protocol, the United States clearly seeks to show its support for the Additional Protocol as an additional non-proliferation tool and to demonstrate that adoption of the Model Additional Protocol by non-nu-

clear weapon states will not put their civilian nuclear industries at a disadvantage. As Ambassador Linton F. Brooks, Administrator of the National Nuclear Security Administration, noted in testimony before the Committee:

[I]f we're going to get the benefits of widespread adherence to the protocol, the United States must lead the way. Given our dominant position in the world today, there's simply no substitute for U.S. leadership. . . . Just like the original Safeguards Agreement, the U.S. Additional Protocol contains a national security exclusion to protect our national security equities. But except for that, the U.S. Additional Protocol contains every word of the IAEA Model Protocol and we're the only nuclear weapon state that has accepted the Model Protocol in its entirety. If we hadn't pushed so hard for a strong Model Protocol and if we hadn't accepted a comprehensive Additional Protocol for ourselves, I believe fewer states would have been willing to accept their own protocols. 8

The Committee accepts the need to demonstrate U.S. leadership, but it is pleased nevertheless that protections for the U.S. nuclear weapons and civil application sectors were included in the Additional Protocol. The most sweeping of such provisions is the National Security Exclusion contained in Article 1.b, discussed above. Likewise, the Committee notes that there are distinct forms of managed access provided for under the Additional Protocol. Article 1.c states that "the United States shall have the right to use managed access in connection with activities with direct national security significance to the United States or in connection with locations or information associated with such activities." Article 7 of the Additional Protocol permits the United States to invoke managed access "in order to prevent the dissemination of proliferationsensitive information, to meet safety or physical protection requirements, or to protect proprietary or commercially sensitive information."

While the Committee strongly supports the U.S. decision to accept the entire text of the Additional Protocol, with only the addition of our national security rights under Article 1, it is important to determine how the executive branch will actually exercise and use those rights available to the United States in Article 1. As Ambassador Brooks noted, "We chose to adopt the entire Additional Protocol with only the addition of the national security exemption. It's not a national inconvenience exemption, it's not a national burden-on-some body-who-has-to-fill-out-a-form $\rm ^{'}$ exemption, $\rm ~it's~a~na-tional~security~exemption." <math display="inline">\rm ^{9}$

Testimony before the Committee strongly indicates that use of the National Security Exclusion under Article 1 is the exclusive right of the United States, and is not subject to interpretation by the IAEA. As Ambassador Brooks told the Committee:

[T]he United States can unilaterally and without explanation invoke [the] National Security Exclusion that en-

⁸ Part IX, p. 60. ⁹ Part IX, p. 96.

ables us to deny IAEA access to activities with direct national security significance, or to locations associated with those activities. The IAEA has no right to challenge or question the U.S. invocation of the National Security Exclusion. 10

Similarly, Mark T. Esper, Deputy Assistant Secretary of Defense for Negotiations Policy, stated:

The National Security Exclusion is a critical protection for the United States. Under this provision, the United States can exclude information and activities from declarations and deny access to IAEA inspectors anytime, anyplace. In the declaration process, the National Security Exclusion will be used to exclude locations, activities and information of direct national security interest. The United States, unlike non-nuclear weapon states, has and will continue to have undeclared nuclear material and activities outside the scope of the Additional Protocol. 11

In addition to the Administration's statements before the Committee, included in the package sent by the Administration to the Senate containing the Additional Protocol was a letter sent by Ambassador Kenneth C. Brill, the United States Permanent Representative to the International Atomic Energy Agency and the Vienna Office of the United Nations, to the Director General of the International Atomic Energy Agency on April 30, 2002. This letter is incorporated by reference in the Committee's recommended Understanding (1), and its text is reproduced in the discussion of that provision. Ambassador Brill's letter makes clear to the IAEA that "the United States will make full and repeated use" of its rights under Article 1 "in order to protect information and activities of direct national security significance to the United States." 12 The Article-by-Article Analysis submitted by the President with the Additional Protocol further notes that the IAEA is aware of these views and that "[t]he Agency knows and accepts that this will be the case." 13

An equally important concern is how the use of the National Security Exclusion will be decided within the U.S. Government. The Article-by-Article Analysis submitted to the Senate states that the National Security Exclusion will be exercised when the application of the Additional Protocol's provisions would involve "activities with direct national security significance to the United States or to locations and information associated with such activities" 14 and further that "decisions concerning the use of the National Security Exclusion and managed access to protect national security information will be made in accordance with established implementing procedures solely by the affected cognizant Department or Agency. In response to a Committee Question for the Record, the Administration added that, "in cases where the equity agency deems there

¹⁰ Part IX, p. 61. ¹¹ Part IX, p. 84. ¹² Treaty Doc. 107–7, at p. 1. ¹³ Treaty Doc. 107–7, at p. 7.

¹⁵ Ibid, p. 8.

is information, activities, and locations of direct national security significance which cannot be protected, the national security exclusion will be used." 16

The Committee received several classified briefings regarding principles that will govern the use of the National Security Exclusion under Article 1.b and the right of managed access under Article 1.c, and has been shown a classified study which details the principles developed for the application of the National Security Exclusion. Additionally, several classified answers to questions for the record addressed this issue. Based in part on these briefings and answers, the Committee believes that the executive branch will eventually promulgate procedures to implement Article 1.b. The needed regulations and interagency guidance have not been finalized, however, and cannot be until after the Senate gives its advice and consent to ratification and implementing legislation is enacted.

Because of the need to ensure that such regulations and guidance are promulgated in a timely manner, and more importantly are consistent with the principles developed for the application of the National Security Exclusion, the Committee has included Condition (1) in its proposed Resolution of Ratification. Condition (1) (A) requires the President to certify that not later than 180 days after entry into force of the Additional Protocol, all necessary regulations will be promulgated and in force concerning the National Security Exclusion and that such regulations shall be made in accordance with the principles developed for application of the National Security Exclusion, principles which have been briefed to the Committee. This Condition allows for prospective certification, prior to the deposit of the instrument of ratification, so as not to delay the Additional Protocol's entry into force. Pursuant to Article 3.a of the Additional Protocol, the provision to the IAEA of information under Article 2.a(i), (iii), (iv), (v), (vi) (a), (vii), and (x) and 2.b(i) need not be made until 180 days after entry into force. Thus, the regulatory framework governing U.S. implementation of the Additional Protocol could be completed during this 180-day period. The intended effect of Condition (1)(A) is to ensure that regulations will be timely and will conform to the principles concerning the National Security Exclusion that have been shared with the Committee.

Managed access under the Additional Protocol is complicated, as there are two types of managed access. For the Department of Energy, managed access under Article 7 includes "shrouding, closing doors, limiting access, turning off computers . . . that will allow us to prevent IAEA inspectors from coming into contact with proliferation sensitive or proprietary or commercially sensitive information." 17

Ambassador Brooks testified that "Managed access under Article 1 is more robust than the Article 7 managed access." ¹⁸ Thus, the Subsidiary Arrangement of June 12, 1998, cites such additional managed access measures as removal of sensitive papers from inspected areas and "in exceptional cases, giving only individual in-

Part IX, p. 106.
 Testimony of Ambassador Linton F. Brooks, Part IX, p. 61.

spectors access to certain parts of the inspection location." 19 Ambassador Brooks emphasized, however, that the utility of managed access is limited:

We'll . . . make full use of managed access, but once again only where we're confident that managed access is sufficient to protect our national security equities. . . . In short, we plan to make full use of our rights under the Additional Protocol to protect our interests while still meeting our obligations. 20

Secretary Esper noted that the only sites where the Defense Department anticipates possibly invoking managed access (rather than the National Security Exclusion) will be at those sites the Department of Energy declares, but at which certain Defense Department equities might be at stake.

The Committee believes that it is important also to ensure that if managed access is invoked it is used effectively. Condition (1)(B), which is similar to (1)(A), therefore requires prospective certification regarding inter-agency guidance and regulation on managed access.

Finally, in (1)(C) the Committee has conditioned entry into force on the timely completion of necessary security and counterintelligence training for any declared locations of direct national security significance to the United States. While it is clear that the National Security Exclusion will be used in the declaration process to, as Secretary Esper noted, "exclude locations, activities and information of direct national security interest," the Committee finds that there still may be locations that contain sensitive activities and national security equities that could be declared to the IAEA, and where managed access might be used if an inspection were to occur. In such a circumstance it is only prudent that necessary and proper security measures be taken for such locations.

Condition (2). Certification Regarding Site Vulnerability Assessments.

The Committee has devoted particular attention to the status of site vulnerability assessments for potentially declarable sites in the United States. In response to a Committee Question for the Record, the Administration stated that "DOD, in cooperation with DOE, conducted 10 vulnerability assessments at DOE facilities in 1999— 2000. These assessments were based on preliminary assumptions that are no longer valid and will need to be revisited." 21 The response to this question offered no reason as to why preliminary assessments are no longer valid, but stated that "[t]his process is underway." 22

During testimony before the Committee, Secretary Esper noted that for the Department of Defense:

In order to gauge risk at specific locations, vulnerability assessments will be conducted at potentially declarable sites that have national security equities. Once our imple-

¹⁹ Treaty Doc. 107–7, at p. 4. ²⁰ Part IX, p. 62. ²¹ Part IX, p. 106. ²² Ibid

mentation guidance has been clarified and implementing legislation passed, we will revisit and update assessments that have been previously conducted. We are also reviewing what other sites may require vulnerability assessments. These assessments will vary, based on the nature and location, among other things, of the site or activity. Some will be fairly simple, while others will require a more detailed examination. 23

The Administration's answer to a Committee Question for the Record addressed what this process will entail:

In addition to initial assessments and procedure revisions to support entry into force, DOE sites will integrate Additional Protocol requirements into its periodic security assessment, planning, and procedure updates. Furthermore, a subgroup of the DOD Nuclear Safeguards Implementation Working Group will identify other sites that require vulnerability assessments. The completion date depends on the number of locations identified for vulnerability assessments and available resources. All necessary site vulnerability assessments will be completed by entryinto-force of the U.S. Additional Protocol. 24

Similarly, Secretary Lichtenbaum noted for the Department of Commerce that

. . . in order to ensure that proper protections are established and that industry has adequate time to understand and implement its reporting obligations, entry into force will not occur until Commerce publishes its regulations in final form and vulnerability assessments of declared locations of direct national security significance are completed. 25

The Committee is concerned about the about the small number of site vulnerability assessments that have been completed for locations of direct national security significance that might be declared under the Additional Protocol. The Committee understands that, as Ambassador Brooks stated, "The list of sites will obviously grow. We don't know by how much," 26 and that as a result, site vulnerability assessments are difficult to complete at this time. The Committee believes that all such assessments should be carried out prior to any possible inspections under the Additional Protocol and accordingly recommends conditioning the Senate's advice and consent to ratification on certification that all site vulnerability assessments will have been completed not later than 180 days after the deposit of the United States instrument of ratification for the initial United States declaration to the IAEA under the Additional Protocol.

²³ Part IX, p. 86. ²⁴ Part IX, p. 106. ²⁵ Part IX, p. 91. ²⁶ Part IX, p. 92.

Understanding (1). Implementation of the Additional Protocol.

As noted above, on April 30, 2002, Ambassador Kenneth C. Brill sent a letter to the Director General of the IAEA in which he expressed the United States' interpretation of certain provisions contained in the Additional Protocol. The text of this letter is as follows:

United States Mission to International Organizations in Vienna, Obersteinergasse 11/1, A–1190, Vienna, Austria. April 30, 2002.

MR. MOHAMED ELBARADEI, *Director General*, International Atomic Energy Agency, Vienna International Center.

Dear Mr. ElBaradei:

I wish to inform the International Atomic Energy Agency of the decision to recommend that President Bush seek the advice and consent of the U.S. Senate to ratification of the Protocol Additional to the Agreement between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America (the "Additional Protocol"), signed on June 12, 1998.

The recommendation to the President to seek Senate advice and consent to ratification of the Additional Protocol is based on how the United States views implementation of key provisions of the Additional Protocol. The United States intends to provide information and access to the IAEA in accordance with the terms of the Additional Protocol in order to assist it in developing the procedures, tools and techniques that will strengthen the capability of the IAEA to detect undeclared nuclear activities in "non-nuclear-weapon states" (NNWS).

A. Use of the National Security Exclusion and Managed Access

The Additional Protocol includes all of the measures of the Model Protocol adopted by the Board of Governors. It also contains several provisions unique to the status of the United States as a "nuclear weapon state" (NWS). In particular, the Additional Protocol contains a "National Security Exclusion" (NSE) that allows the United States to exclude the application of the Additional Protocol where the United States decides that its application would result in "access by the Agency to activities with direct national security significance to the United States or to locations or information associated with such activities." (Article 1.b) The Additional Protocol also contains a provision not contained in the Model Protocol for NNWS that permits the United States to manage access "in connection with activities with direct national security significance to the United States or in connection with locations or information associated with such activities." (Article 1.c)

The United States will make full and repeated use of these provisions in order to protect information, locations, and activities of direct national security significance to the United States.

Decisions regarding the use of these provisions are a unilateral prerogative of the United States—not subject to interpretation by,

or justification to, any other party.

The United States, unlike NNWS, has and will continue to have, undeclared nuclear material and activities outside the scope of the Additional Protocol and the November 18, 1977, Agreement between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America and their applicable inspection provisions, consistent with its status as a NWS. Certain activities that occur at locations that are part of the United States civil nuclear program may also be excluded from the declaration and access provisions of the Additional Protocol in accordance with the terms of the NSE.

The U.S.-IAEA Subsidiary Arrangement to the Additional Protocol signed at Vienna on June 12, 1998, will enter into force when

the Additional Protocol enters into force.

B. Role of the Additional Protocol in Strengthening IAEA Capabilities

The United States intends that its implementation of the Additional Protocol will, as expressed in the Preamble, "further enhance nuclear non-proliferation by strengthening the effectiveness and improving the efficiency of the Agency's safeguards system." Since the United States will have undeclared nuclear activities, Agency activities directed toward the detection of undeclared nuclear activities in the United States are not viewed as necessary to enhance non-proliferation. In accordance with the NSE, the United States will supply information pursuant to Article 2 of the Additional Protocol only on those unclassified activities to which it has determined that it will be able to provide the IAEA with sufficient access, including with managed access, to enable it to verify the accuracy of the declared information.

The Untied States expects the IAEA to seek access in the United States for the purpose of increasing the effectiveness or efficiency of IAEA safeguards at facilities in NNWS, or enhancing the capability of the IAEA to detect undeclared nuclear material and activi-

ties in NNWS.

As a NWS, the United States foresees no circumstances in which the IAEA would need to request access in the United States pursuant to Article 4.d of the Additional Protocol on the basis of a question or inconsistency without first providing the United States with the opportunity to clarify and facilitate the resolution of the question or inconsistency.

When the IAEA has access to a location, site or facility in the United States, the United States will conduct "managed access" under Article 1.c of the Additional Protocol according to U.S. national security requirements, or under Article 7 of the Additional Protocol, according to requirements to protect, inter alia, proprietary or commercially sensitive information, as applicable.

C. Questions Under Article 2

A "question relating to the correctness and completeness of the information provided pursuant to Article 2," (Article 4.a.(ii)) or an "inconsistency relating to that information" (Article 4.a.(ii)) will be

judged by the IAEA strictly within the context of whether the information provided with respect to civil nuclear activities is complete, correct, and internally consistent.

D. Wide-Area and Site-Specific Sampling

Should the use of wide area environmental sampling be approved by the IAEA Board of Governors in accordance with Article 9, the United States does not foresee circumstances in which the IAEA would need to propose to conduct wide-area environmental sampling in the United States.

In accordance with the NSE, the United States will not allow location specific environmental sampling with respect to locations, information, and activities of direct national security significance to the United States. In this regard, the United States intends to use the NSE with regard to location-specific environmental sampling at any current or former nuclear weapon production complex site.

any current or former nuclear weapon production complex site.

It is on the basis of these U.S. views that the United States is prepared to move toward bringing the Additional Protocol into force. The United States looks forward to working with the IAEA in improving its capability to detect undeclared nuclear material and activities in NNWS.

Sincerely yours,

KENNETH C. BRILL, Ambassador.

The Committee noted that the IAEA had not responded to the letter, and so asked the Administration, in a Question for the Record, to state the purpose of Ambassador Brill's letter. The Administration replied:

The letter was sent as a U.S. initiative and not as a response to any request by an IAEA official. We wanted to inform the IAEA explicitly and directly about the U.S. approach toward the Additional Protocol and the importance of the National Security Exclusion, rather than just indirectly through the documents transmitting the Protocol to the Senate. No official response, either written or oral, to the April 30, 2002, letter from Ambassador Kenneth Brill to IAEA Director General Mohamed ElBaradei was requested or received. There is no evidence of any negative reaction. ²⁷

Committee staff pursued this matter in discussions with IAEA officials and representatives, both in Washington and at IAEA Headquarters in Vienna. They, too, found no evidence of any negative reaction to Ambassador Brill's letter. Since 1993, the only inspections conducted by the IAEA in the United States have been those that the United States specifically requested, so as to document its handling of excess fissile material. The Committee believes that this practice is likely to continue. As the Administration noted in response to a Committee Question for the Record, "The IAEA is not expected to waste scarce resources . . . in a nuclear-weapon state such as the United States." ²⁸

²⁷ Part IX, p. 109. ²⁸ Part IX, p. 111.

Given the importance of Ambassador Brill's letter as a statement of U.S. interpretation and intent, the Committee believes that the Senate should formally recognize this letter as one of the underpinnings of its advice and consent to ratification. Understanding (1) does this by stating the Senate's understanding that "[i]mplementation of the Additional Protocol will conform to the

principles set forth in the letter."

Administration responses to other Committee Questions for the Record and testimony before the Committee underscore Ambassador Brill's point that U.S. adoption of the Additional Protocol is intended to demonstrate U.S. leadership and enhance the capability of the IAEA in non-nuclear-weapons states. The United States, consistent with its status as a nuclear weapon state party to the NPT, will continue to have undeclared activities related to its nuclear weapons complex. "It is not the purpose of Protocol implementation in nuclear weapons states to permit the IAEA to verify the completeness of the state's declaration" ²⁹ because, as a matter of fact, such states (indeed, the United States) will always have incomplete declarations:

The primary purpose of the Additional Protocol in a non-nuclear-weapon state is to enable the IAEA to provide some assurance about the absence of undeclared nuclear activities in that state. This purpose does not apply to nuclear-weapon states, which are understood to have extensive nuclear activities not required to be declared to the IAEA. ³⁰

The United States will implement the Additional Protocol in a manner consistent with the purposes for which the Additional Protocol exists in nuclear weapon states, accepting the entire text of the Protocol to show support for its universal adoption, and applying it only to the extent it does not infringe on our right to have undeclared activities as a nuclear-weapon state.

One issue that Ambassador Brill's letter does not fully address is that of wide-area environmental sampling under Article 9. Ambassador Brill's letter notes that, with regard to site-specific envi-

ronmental sampling:

In accordance with the [National Security Exclusion], the United States will not allow location-specific environmental sampling with respect to locations, information, and activities of direct national security significance to the United States. In this regard, the United States intends to use the NSE with regard to location-specific environmental sampling at any current or former nuclear weapon production complex site.

The letter does not state a definitive U.S. position with regard to wide-area environmental sampling, however, merely stating that, "Should the use of wide area environmental sampling be approved by the IAEA Board of Governors in accordance with Article 9, the United States does not foresee circumstances in which the IAEA

²⁹ Part IX, p. 109.

would need to propose to conduct wide-area environmental sam-

pling in the United States."

The Committee understands that the IAEA's Board of Governors has not yet taken a decision with regard to the use of wide-area sampling techniques because the methods and technology associated with such sampling have not yet evolved to the point of making it an effective safeguards tool. The Committee is also aware of the potential utility of such sampling in a non-nuclear-weapon state suspected of having undeclared activities. There would appear to be no utility, however, in using such sampling in the United States to determine if there are undeclared activities here since, as a nuclear-weapon state, the United States will of course have undeclared nuclear activities.

Another possibility is that the IAEA would wish to conduct widearea environmental sampling in the United States in order to test equipment or techniques for later use in non-nuclear-weapon states. The Committee expects that such a request would be granted only if the relevant U.S. Government agencies were certain that it would not lead to the loss of information of direct national security significance, and it is unclear whether that standard could ever be met. In response to Committee Questions for the Record, the Administration emphasized the need not only for the Board of Governors to approve wide-area environmental sampling as a safeguards technique, but also for consultation with the United States: 'If wide-area sampling is eventually approved by the Board of Governors, its use in the United States requires consultations, and therefore agreement, between the IAEA and the United States."31 the Administration went on to note that the United Kingdom "accepted a limited version of Article 9 that states it may accept wide area sampling if it were focused on detecting covert activities in [non-nuclear-weapon states]." 32

The Committee supports wide-area environmental sampling as a tool for use in non-nuclear-weapon states, but it is unclear what specific procedural arrangements the United States would seek regarding the use of wide-area environmental sampling in this country. The Committee expects that, as in the application of the National Security Exclusion generally, the relevant Federal department or agency with national security equities in the area will still have the power to determine the use of the National Security Exclusion should wide-area sampling raise a risk of disclosure of sen-

sitive national security information.

Understanding (2). Notification to Congress of Added and Deleted Locations.

When the Senate adopted a resolution of advice and consent to the Voluntary Offer to accept IAEA safeguards, it included five understandings. One of those understandings stated:

That the President shall notify the Committee on Foreign Relations of the Senate and the Committee on Foreign Affairs of the House of Representatives of any proposed addition to the list, to be provided to the Inter-

³¹ Part IX, p. 110. ³² Part IX, pp. 110–111.

national Atomic Energy Agency pursuant to Article 1(b) of the Agreement, of nuclear facilities within the United States eligible for International Atomic Energy Agency inspections, together with an explanation of the basis upon which the determination was made that any such facility did not have a direct national security significance, not less than 60 days prior to such proposed addition being provided to the International Atomic Energy Agency, during which period the Congress may disapprove such addition by joint resolution by reason of direct national security significance, under procedures identical to those provided for the consideration of resolutions pursuant to section 130 of the Atomic Energy Act of 1954 as amended.³³

The Committee recommends a similar notification provision concerning added and deleted locations under the Additional Protocol, and the same consideration under expedited procedures for a resolution of disapproval of added locations as was included in the Senate's advice and consent to the Voluntary Offer. For any locations added to the list of locations to be declared to the IAEA, the understanding also calls for a certification that such addition shall not adversely affect U.S. national security. The Committee understands that for determinations concerning deleted locations that have a direct national security significance, notification under this understanding may have to come in classified form. The Committee did not specify a period of time under subsection (B) for consideration of such notifications, so long as the notification is provided to the Congress before being provided to the IAEA, so as not to prevent the United States from protecting the national security while meeting its obligations under the Protocol. The Committee also did not include an identical 60-day prior notice requirement for added locations that was set in the Voluntary Offer resolution of ratification because locations under the Additional Protocol will be provided in an annual report that may well not be finalized until a short time before the deadline for submission of that report.

Understanding (3). Protection of Classified Information.

Included in the Senate's resolution of advice and consent to the Voluntary Offer was an understanding regarding protection of classified information:

That the agreement shall not be construed to require the communication to the International Atomic Energy Agency of "Restricted Data" controlled by the provisions of the Atomic Energy Act of 1954, as amended, including data concerning the design, manufacture, or utilization of atomic weapons. ³⁴

The Committee recommends that a nearly identical provision be included in the resolution of ratification for the Additional Protocol.

Agency for the Application of Safeguards in the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America, with Attached Protocol, signed at Vienna on November 18, 1977," Ex. B, Ninety-fifth Congress, Second session, approved by the Senate on July 2, 1980.

Understanding (4). Protection of Confidential Information.

The protection of confidential business information is an important duty of both the United States Government and the Senate. The Committee notes that although Article 1 of the Additional Protocol affords the United States special rights to protect information "with direct national security significance," the same is not true of confidential business information. As Secretary Lichtenbaum noted, "In particular, the rights that we have under this treaty to minimize the burden and protect confidential information for industry are rights that are available to other countries. So it's not that we have a right to minimize the burden or protect confidential information that they do not have."35

When the Senate passed its resolution of advice and consent to ratification of the Convention on the Prohibition of Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (the CWC) ³⁶ it included a condition on the protection of confidential information:

PROTECTION OF CONFIDENTIAL INFORMATION—

(A) Unauthorized Disclosure of United States Business In-FORMATION.—Whenever the President determines that persuasive information is available indicating that-

(i) an officer or employee of the Organization has willfully published, divulged, disclosed, or made known in any manner or to any extent not authorized by the Convention any United States confidential business information coming to him in the course of his employment or official duties or by reason of any examination or investigation of any return, report, or record made to or filed with the Organization, or any officer or employee thereof, and

(ii) such practice or disclosure has resulted in financial losses or damages to a United States person,

the President shall, within 30 days after the receipt of such information by the executive branch of Government, notify the Congress in writing of such determination.

The Committee recommends that a nearly identical provision be included in the resolution of advice and consent to the Additional Protocol.

The Committee does not recommend Understanding (4) because of any concern with regard to IAEA protection of confidential information. In fact, the Committee has been informed that the IAEA has a consistently positive record with regard to the handling of both confidential and classified information obtained in the United States. In addition, Article 15 of the Additional Protocol calls for the IAEA to "maintain a stringent regime" to protect such information. In response to a Committee Question for the Record, the Administration provided information regarding that regime:

The new regime is substantially more detailed than what existed previously. For example, the new regime includes penalties for IAEA staff found to be in breach of their obligations, including potential exposure to civil and

 $^{^{35}}$ Part IX, p. 95. 36 Treaty Doc. 103–21, approved by the Senate on April 24, 1997.

criminal penalties and waiver by the Agency of legal immunities. The IAEA has continued to make regular reports to the Board on its progress in implementing security improvements in such areas.

The United States has supported and participated in IAEA's efforts in this area. The United States, through its voluntary contribution to the IAEA, has provided technical assistance to the IAEA in improving information security in the Department of Safeguards, including in its safeguards information systems. The IAEA has made substantial and steady progress in implementing the recommendations made. ³⁷

When Committee staff visited the IAEA's Headquarters in Vienna and its Safeguards Analytical Laboratory in Seibersdorf, Austria, they found that the IAEA goes to great lengths to ensure that it maintains a proper chain of custody over information gained through inspections, and also to minimize the risk that either its own laboratory or cooperating national laboratories will know with certainty the origin of the samples that they analyze.

Understanding (5). Report on Consultations Regarding Adoption of Additional Protocols in Non-Nuclear Weapon States.

During briefings and the Committee's hearing on the Additional Protocol, officials stated on several occasions that the Administration intended to pursue, as a general policy, adoption of the Additional Protocol by all non-nuclear weapon states party to the NPT. Acting Assistant Secretary of State Susan F. Burk testified: "Senate approval of the Additional Protocol will . . . greatly strengthen our ability to promote universal adoption of the Model Additional Protocol, a central goal of the President's nonproliferation policy." Ambassador Brooks testified that:

Achieving the widest possible international adherence to an effective AP [Additional Protocol] materially serves U.S. national security interests . . . The diplomatic reality is that our support for the AP, and our agreement to accept its implementation in the United States in a manner that is appropriate to our status as a nuclear weapons state, has been critical to getting the AP to where it is today. One can only ponder the possible impact of failing to ratify the U.S. AP, for example, on the effort to get Iran and other countries of concern to implement their own Additional Protocols. ³⁸

Ambassador Brooks also cited President Bush in this regard:

We seek universal acceptance of the Additional Protocol in the international community as an important goal of U.S. national security policy. As the President said in his transmittal package to the Senate, "Adhering to the Additional Protocol will bolster U.S. efforts to strengthen nuclear safeguards and promote the nonproliferation of nu-

³⁷ Part IX, p. 107. ³⁸ Part IX, p. 63.

clear weapons, which is the cornerstone of U.S. foreign and national security policy." 39

A logical question is how the United States will work to achieve universal acceptance of the Additional Protocol. In response to a Committee Question for the Record, the Administration stated

Both when the United States signed its Additional Protocol in 1998, and when President Bush transmitted the Additional Protocol to the Senate in May 2002, U.S. Embassies around the world were asked to press the host countries to adopt the Additional Protocol. We have also raised the issue at appropriate opportunities, such as Assistant Secretary [for Nonproliferation] John Wolf's trip to Argentina and Brazil in May 2003. Since September 2000, when the IAEA adopted an Action Plan to promote adherence to safeguards agreements and Additional Protocols, we have focused on supporting the IAEA's outreach efforts. We participated in IAEA regional outreach seminars in Japan, Peru, Kazakhstan, South Africa, Malaysia, Romania and Uzbekistan and have provided voluntary contributions to support those and other IAEA efforts.

The United States has stated its strong support for universal adherence to the Additional Protocol. Achieving this goal would be greatly facilitated by ratification of the U.S. Additional Protocol, as signed. Should the Senate give its advice and consent to ratification for the U.S. Additional Protocol, we would initiate another outreach in diplomatic channels to press states to sign and ratify Protocols. 40

On February 11, 2004, in a speech delivered at the National Defense University, President Bush increased the pressure on non-signatory states. The President proposed "that by next year, only states that have signed the Additional Protocol be allowed to import equipment for their civilian nuclear programs. Nations that are serious about fighting proliferation will approve and implement the Additional Protocol." 41

The Committee believes that achievement of universal acceptance of the Additional Protocol will be neither quick nor easy. In October 2003, in an article in The Economist, IAEA Director General Mohammed ElBaradei, noted how few members states have actually completed additional protocols:

Fewer than 20% have finalised an additional protocol endorsed in 1997 after the discovery of Iraq's clandestine nuclear programme—which gives the IAEA the authority inspect countries more broadly, particularly undeclared nuclear material and activities. . . . This sluggish performance on all fronts signals the need for a different approach. Reluctance by one party to fulfil its obli-

³⁹ Part IX, p. 62. ⁴⁰ Part IX, p. 108. ⁴¹ The White House, "President Announces New Measures to Counter the Threat of WMD," Remarks by the President on Weapons of Mass Destruction Proliferation, Fort Lesley J. McNair—National Defense University, Washington, D.C.", February 11, 2004, available at http://www.whitehouse.gov/news/releases/2004/02/20040211-4.html.

gations breeds reluctance in others. Each discovery of a clandestine programme makes us question whether more exist. 42

Given the importance of universal adoption and adherence to the Additional Protocol, to both the United States and the IAEA, the Committee recommends an understanding requiring an annual report on U.S. measures taken in furtherance of universal adoption and implementation of the Additional Protocol in non-nuclear weapon states. Such a report will help Congress maintain the high priority that this endeavor deserves.

Understanding (6). Report on U.S. Assistance to the Agency for the Purpose of Additional Protocol Implementation and Verification of Non-Nuclear Weapon States' Obligations.

All of the work conducted by the IAEA in verification of existing safeguards is carried out under a budget that, as one IAEA official told Senate Foreign Relations Committee staff in February 2004,

"is less than the budget for Vienna's police department."

In 1985, the Geneva Group (the 14 largest contributors to the United Nations) imposed a policy of "zero real growth" on the IAEA's budget, save for staff salaries and inflation. 43 This policy was reversed by the IAEA's Board of Governors in July 2003. Remarking on this that decision, Director General ElBaradei noted that "The bulk of the increase goes to the verification programme, because that programme has been experiencing the greatest demand for additional resources and has for years been the most chronically under-funded." 44

The Committee strongly supports the decision to end the zero real growth policy, which is consistent with previously-enacted legislation. 45 As more non-nuclear weapon states adopt Additional Protocols, however, the IAEA may require more financial resources to carry out expanded inspections and verification activities in non-

nuclear weapon states.

United States assistance, both in voluntary financial contributions above and beyond its assessed share of the IAEA regular budget and in the provision of training and services, has been vital to the success of the IAEA's safeguards experts. Committee staff who visited the IAEA's Safeguards Analytical Laboratory found that time after time its analysis depended upon equipment and training provided by member states, and usually the United States. Continued U.S. assistance to the IAEA's safeguards mission will be essential to maintaining that capability because states with covert programs will continually improve their efforts to thwart IAEA monitoring and inspections.

The Committee believes that continuing attention must be paid both to the need for U.S. assistance to the IAEA and to the efficiency with which that assistance is used. The Committee therefore

2003

⁴² Mohammed ElBaradei, "Towards a Safer World," *The Economist*, October 18, 2003.
⁴³ General Accounting Office, "Nuclear Nonproliferation: Uncertainties With Implementing IAEA's Strengthened Safeguards System," GAO NSIAD-98-184, July 9, 1998.
⁴⁴ The International Atomic Energy Agency, "IAEA Board of Governors Recommends Landmark Budget Increase," IAEA Press Release 2003/12, July 18, 2003, available at http://www.iaea.org/NewsCenter/PressReleases/2003/prn0312.shtml.
⁴⁵ See section 1305 of P.L. 107–228, The Foreign Relations Authorization Act, Fiscal Year 2003

recommends an understanding requiring an annual report on all assistance provided to the IAEA by the United States in order to promote effective implementation of Additional Protocols in non-nuclear weapon states, and verification of such states' compliance with their obligations to the IAEA, and (for all but a few states) under the NPT.

Understanding (7). Subsidiary Arrangements and Amendments.

The Committee notes that Article 13.a of the Additional Protocol specifies that the United States has the right to enter into subsidiary arrangements with the IAEA on how measures laid down in the Protocol are to be implemented. The Committee also notes that under Article 16.b changes may be made to the lists of equipment and articles in Annexes I and II of the Additional Protocol by decision of the IAEA's Board of Governors. The Administration transmitted to the Senate, with the Additional Protocol and its Annexes, an initial Subsidiary Arrangement, signed at Vienna on June 12, 1998, regarding measures for managed access under Article 1.46

The Committee accepts the Administration position that the Subsidiary Arrangement transmitted to the Senate should not be subject to the Senate's advice and consent. In response to a Committee Question for the Record regarding Article 13, the Administration stated:

Subsidiary arrangements under the Additional Protocol, as with those that are periodically negotiated under the existing Safeguards Agreement, are of a detailed technical character and do not change the rights and obligations of the Parties. As such, Subsidiary Arrangements have not been submitted to the Senate for its approval. 47

The Committee understands this response, but notes that this first Subsidiary Arrangement is broadly applicable to use of managed access under Article 1. The Committee recommends that the resolution of ratification specify the Senate's understanding that this Subsidiary Arrangement contains an "illustrative, rather than an exhaustive list of U.S. managed access measures."

Further subsidiary arrangements are, of course, possible. the Administration's response to the Committee Question for the Record stated:

No other subsidiary arrangements have been signed or negotiated, nor is the Administration negotiating any such agreement. The Administration is exploring the development of General Part Subsidiary Arrangements, which could include technical matters such as describing reporting formats, to facilitate implementation of the Additional Protocol. 48

The Committee recommends that the resolution of ratification include an understanding that future subsidiary arrangements shall be notified to the appropriate Committees of Congress, so that they

⁴⁶Treaty Doc. 107–7 at p. 4. ⁴⁷Part IX, p. 111.

⁴⁸ Thid

can keep abreast of developments. The Committee recommends similarly requiring notification of any amendments under Article

The Committee also notes that the Administration does not rule out the need for Senate advice and consent to a future subsidiary arrangement. In its response to a Committee Question for the Record, the Administration stated: "The normal factors for determining whether an agreement is subject to Senate advice and consent would be applied to future subsidiary arrangements." 49

Understanding (8). Amendments to the Protocol.

Amendments to the Additional Protocol can be of two sorts: amendments to the text of the Additional Protocol; or amendments to the lists contained in the Annexes to the Additional Protocol. Amendments to the Additional Protocol are governed by Articles 23-26 of the Safeguards Agreement between the United States and the IAEA, signed in 1977 and entered into force in 1980. Article 1.a of the Additional Protocol makes clear that provisions of the Safeguards Agreement remain in force, unless they are contradicted by the Additional Protocol. As the Additional Protocol does not address amendments to its text, the relevant provisions of the underlying Safeguards Protocol will continue to apply.

Article 23(b) of the Safeguards Agreement states: "All Amendments shall require the agreement of the United States and the Agency." Amendments to treaties are ratified (just as treaties are ratified in the first instance) "by and with the Advice and Consent of the Senate," pursuant to Article II, Section 2, Clause 2 of the United States Constitution. The Committee intends that Understanding (8) serve, in part, to remind the executive branch of this

constitutional requirement.

Article 16 of the Additional Protocol sets forth the procedure for amendments to the lists in Annex I and Annex II of the Additional Protocol. Annex I contains a list of activities on which the United States will have to report annually concerning the scope of those activities, pursuant to Article 2.a.(iv) of the Additional Protocol. Annex II contains a list of equipment and material, the import and export of which will be subject to annual reporting by the United States, pursuant to Article 2.a.(ix) of the Additional Protocol.

Article 16.b states that the lists in Annex I and Annex II "may be amended by the Board [of Governors of the IAEA] upon the advice of an open-ended working group of experts established by the Board. Any such amendment shall take effect four months after its adoption by the Board." In practice, the IAEA Board of Governors takes nearly all actions on the basis of consensus; but it has the power to take action either by majority vote or (for matters that a majority of the Board conclude are major issues) by a two-thirds vote. While the United States will always be a member of the Board, it does not have a veto over the Board's actions if members decide not to proceed on the basis of consensus. There is no provision, moreover, for U.S. ratification of amendments to the lists in Annex I and Annex II. This fact, combined with the short time period between adoption of the amendment and entry into force,

⁴⁹ Ibid.

means that the Senate may not be in a position to exercise its prerogative to give advice and consent to such amendments prior to their entry into force.

There is precedent for the Senate approving treaties that allow for technical modifications by such a "tacit agreement" process. ⁵⁰ Due, perhaps, to their complexity and technical specificity, a number of arms control and environmental agreements establish processes for their own modification which do not require further Senate involvement. The modifications allowed typically are described as not rising to the level of an amendment of the treaties; but, nonetheless, the processes permit the treaty regime to evolve in some respects without subsequent Senate approval.

Arms control treaties that allow for technical modifications include the Intermediate Nuclear Forces (INF) Treaty, the Protocol to the Threshold Test-Ban Treaty (TTBT), the Treaty on Conventional Armed Forces in Europe (CFE), the first START Treaty, and the Open Skies Treaty. Environmental treaties with similar provisions include the United States-Japan Convention for the Protec-

tion of Migratory Birds, the United States-Canada Treaty on Pa-

cific Salmon, and the Montreal Protocol on Substances that Deplete the Ozone Layer.

Some agreements explicitly permit certain technical modifications to become effective for all parties even absent unanimous agreement. These include the Montreal Protocol on Substances that Deplete the Ozone Layer, the International Convention on Safety of Life at Sea, the Convention on Facilitation of International Maritime Traffic, the International Hydrographic Organization Convention, the Protocol to the Madrid Agreement Concerning the International Registration of Marks, and the Chemical Weapons Convention.

The Senate, in giving its advice and consent to the treaties which contain these various processes for modification, has not required modifications made to these treaties under such processes to be referred to the Senate for its advice and consent prior to their coming into force for the United States. Rather, in giving its advice and consent to these treaties in the first instance, the Senate has also given its consent in advance to the modifications adopted pursuant to those processes. The tacit amendment process has given the Senate some concern, however, and at times the Senate has required, or received assurances of, prior notice of proposed modifications before the executive branch accepted their inclusion in such treaties. The Senate has also at times specifically limited its acceptance of future tacit amendments to those of a technical or administrative nature.

Article 16 of the Additional Protocol appears to be similarly intended, as the Administration's Article-by-Article Analysis of the Protocol states that the Annexes "provide technical definitions." The Committee intends that Understanding (8) serve, in part, as a reminder to the executive branch that amendments to the lists

⁵⁰This analysis draws upon *Treaties and Other International Agreements: The Role of the United States Senate*, a study prepared for the Committee by the Congressional Research Service of the Library of Congress, S. Prt. 106–71 (2001), pp. 181–183. In addition, some of the treaties cited are drawn from David A. Koplow, "When is an Amendment Not an Amendment?: Modification of Arms Control Agreements Without the Senate," University of Chicago Law Review, Vol. 59 (Summer 1992), pp. 981–1071.

in Annex I and Annex II are to be "technical" rather than a means to achieve major substantive change in the Additional Protocol regime.

The Committee notes that the substantive purpose of Article 16, which was strongly supported by the United States when the Model Additional Protocol was being negotiated, is to permit expansion of Additional Protocol reporting requirements if a new approach to developing a nuclear weapons capability should arise. The Additional Protocol could be seriously undermined if, in such a case, a state engaged in illegal activity were able to block, or to exempt itself from a decision to expand the reporting requirement. The Committee also notes that, in practice, the list in Annex II will be the "trigger list" maintained by the Nuclear Suppliers Group, which adds items only by consensus; so no amendment to that list will occur without U.S. support, or at least acquiescence.

The Committee believes that the Senate has the authority to approve a treaty that provides for technical and administrative modifications to be adopted by a process that does not give the United States a veto power over those modifications. The Committee emphasizes that such provisions should be limited, as here, to technical or administrative modifications. Of course, it reserves the right to accept or reject such provisions in future treaties. The Committee encourages the executive branch to consult closely with the Committee during the course of treaty negotiations when such provisions are contemplated for inclusion in future agreements.

VI. VIEWS OF THE ARMED SERVICES COMMITTEE

Consistent with long-standing practice, the Senate Armed Services Committee has submitted a letter detailing the views of the Armed Services Committee on the Additional Protocol. Chairman John Warner and Ranking Member Carl Levin have submitted the following letter to the Committee, which it is pleased to include in this report.

United States Senate, Committee on Armed Services. February 24, 2004.

Hon. RICHARD G. LUGAR, Chairman, Hon. JOSEPH R. BIDEN, JR., Ranking Member, Committee on Foreign Relations, United States Senate, Washington, D.C. 20510.

Dear Senator Lugar and Senator Biden:

Traditionally, the Senate Armed Services Committee has provided to the Senate Foreign Relations Committee its views on the military implications of national security treaties. We are writing to express our views concerning the military implications of the Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America, with annexes, signed at Vienna on June 12, 1998 (the "Additional Protocol").

We support ratification of the Additional Protocol because we believe that it will contribute to the nuclear non-proliferation objectives of the United States, while providing for the full protection of information and facilities of direct national security significance to the United States. As President Bush stated in his letter of transmittal: "Adhering to the Additional Protocol will bolster U.S. efforts to strengthen nuclear safeguards and promote the non-proliferation of nuclear weapons, which is a cornerstone of U.S. foreign and national security policy." The Senate Armed Services Committee has a tradition of strong support for U.S. non-proliferation efforts. Adoption of the Additional Protocol is consistent with that tradition.

At the end of the Persian Gulf War in 1991, the world learned that Iraq had an advanced clandestine program to develop nuclear weapons. To increase the capability of the International Atomic Energy Agency (IAEA) to detect such clandestine nuclear programs, the international community negotiated a Model Additional Protocol to strengthen the IAEA's nuclear safeguards system. The IAEA uses the Model Additional Protocol for negotiation and conclusion of Additional Protocols that amend and strengthen states' existing comprehensive safeguards agreements. These Additional Protocols broaden the information states are required to give to the IAEA and provide additional access rights for IAEA inspectors to verify those declarations when necessary. Non-nuclear weapon states must incorporate all the measures in the Model Additional Protocol in negotiating their additional protocols. Nuclear weapon states and countries not party to the Treaty on the Non-Proliferation of Nuclear Weapons (the NPT), however, are free to choose among or limit the application of the provisions of the Model Additional Protocol, since these nations have not made a commitment to place all nuclear activities under safeguards. Thus far, 83 nations have negotiated such Additional Protocols with the IAEA, and 38 of those nations have brought their Additional Protocols into force.

The U.S. Additional Protocol is a bilateral treaty that would supplement and amend the verification arrangements under the existing Agreement Between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America of November 18, 1977, which entered into force on December 9, 1980.

The NPT requires non-nuclear-weapon states parties to accept safeguards on their nuclear activities. The United States, as a nuclear-weapon state party to the NPT, is not obligated to accept IAEA safeguards on its nuclear activities. Nonetheless, it has been the policy of the United States since 1967 to permit the application of safeguards to its nuclear facilities, excluding only those of direct national security significance.

The Additional Protocol similarly allows the United States to exclude the application of its provisions in instances where the United States decides that the provisions would result in access by the IAEA to activities with direct national security significance to the United States, or access to locations or information associated with such activities. By submitting itself to the same safeguards on all of its civil nuclear activities that non-nuclear-weapon states par-

ties to the NPT are subject to, the United States intends to demonstrate that adherence to the Model Additional Protocol does not place other countries at a commercial disadvantage. U.S. acceptance of the Additional Protocol is consistent with the United States' longstanding record of voluntary acceptance of nuclear safeguards and greatly strengthens our ability to promote universal adoption of the Model Additional Protocol, a central goal of U.S. non-proliferation policy.

Because this Committee has oversight responsibilities for the Department of Defense and the Department of Energy nuclear weapons complex, we carefully considered whether the Additional Protocol could and would be implemented in a fashion that is fully consistent with the need to protect national security information. We believe that two features of the Additional Protocol—the right to invoke the National Security Exclusion and the right to manage access to sensitive U.S. locations—adequately address the security concerns of our Committee.

During your Committee's hearing of January 29, 2004, on the Additional Protocol, the Department of Defense and Department of Energy witnesses provided testimony regarding the protection of national security information and the impact of the Additional Protocol on Department of Energy (DOE) and Department of Defense (DoD) facilities.

Regarding the protection of national security information at DOE facilities, National Nuclear Security Administrator at the Department of Energy, Ambassador Linton F. Brooks, testified:

At the same time that the Additional Protocol provides the IAEA with important tools to ferret out undeclared military activities in non-nuclear weapons states, the Additional Protocol also includes a set of "robust mechanisms" by which DOE can protect its commercially sensitive, export-controlled, and classified assets. The first method is managed access, also referred to as "Article 7 managed access." This managed access involves a wide range of measures, such as shrouding, closing doors, or turning off computers and other equipment to prevent IAEA inspectors from coming into contact with "proliferation sensitive information or proprietary or commercially sensitive information." Second, the United States can unilaterally, and without explanation, invoke a National Security Exclusion (NSE) under Article 1 that enables the U.S. not to declare or allow IAEA complementary access to "activities with direct national security significance to the United States or to locations or information associated with such activities."

Third, under Article I, the United States also has the right to use managed access associated with the NSE. Managed access under Article 1 is more robust than the Article 7 managed access. We would employ this managed access under Article 1 of the Additional Protocol only where our security evaluation shows that such managed access would mitigate, in a manner acceptable to us, any risk of inadvertent disclosure of national security activities or information to the inspector. I would reiterate that the

use of the NSE or managed access under the NSE is entirely unilateral, and the IAEA has no right to challenge or question the U.S. invocation of the National Security Exclusion. With managed access and the National Security Exclusion rights combined with Additional Protocol-specific security plans and DOE's past experience with IAEA inspections, DOE is confident that it can fully manage the risks associated with the Additional Protocol.

Regarding the protection of national security information at DoD facilities, Deputy Assistant Secretary of Defense for Negotiations Policy, Mark T. Esper testified:

The Administration fully recognizes that adopting an instrument designed to detect the diversion of nuclear material in non-nuclear weapons states is not without risk. The potential intrusiveness of the Additional Protocol both in terms of declaring activities and allowing access by inspectors is significant. However, we are confident that liberal use of the protections afforded the United States by way of the National Security Exclusion and the use of managed access to protect sensitive information and activities can mitigate this risk—The United States will make full and repeated use of these provisions to protect information, locations, and activities of direct national security significance . . . The National Security Exclusion is a critical protection for the United States. Under this provision, the United States can exclude information and activities from declarations and deny access to IAEA inspectors anytime, anyplace.

In considering the Additional Protocol, the Committee focused primarily on national security concerns, but our oversight responsibilities also required us to seek information regarding the costs associated with implementing the Additional Protocol. Regarding costs to DOE, Administrator Brooks testified: "In addition to the cost in time and effort, there will be a financial cost to implement the Additional Protocol. Current budget estimates indicate that the Department will require approximately \$3.5 million for headquarters, including the funds already allocated, to prepare the complex. In addition, the up-front preparation costs for each site, including the cost of comprehensive vulnerability and security assessments will be an estimated \$220 thousand per site, for a total of approximately \$10 million."

Mr. Esper did not explicitly address the financial costs DoD may incur in connection with the Additional Protocol in his testimony before your Committee. However, DoD officials have subsequently indicated to our Committee that the Department currently estimates that costs in the first four years after the Protocol is ratified could be in the range of \$13-18 million annually, and \$6-9 million annually beginning in year five. These costs would ensue primarily from the need to conduct vulnerability assessments at DoD sites or

at DOE or contractor sites where DOD is engaged.

The Committee views these as reasonable and appropriate costs, in light of the expected non-proliferation benefits that will result from U.S. ratification of the Additional Protocol.

In sum, we found the testimony of Administration witnesses compelling both in making the case for the non-proliferation benefits of adopting the Additional Protocol due to the increased transparency and enhanced inspection rights such Additional Protocols will provide to the IAEA in non-nuclear weapon states, and in making clear that the provisions for a National Security Exclusion and for managed access to sensitive locations will ensure that risks to the United States are mitigated and U.S. national security information will be protected. The Committee expects the executive branch to make full use of these features, as necessary, to protect critical national security information. We believe the resolution of ratification should make clear that it is the intent of the United States to make full use of these provisions for a National Security Exclusion and for managed access in order to protect information, locations, and activities of direct national security significance to the United States.

Several administration witnesses, including Mr. Esper, also noted the interest of the United States in protecting information reported to or otherwise acquired by the United States Government in implementing the Additional Protocol from disclosure under the Freedom of Information Act as proposed in the draft implementing legislation. We believe that the provision included in the draft implementing legislation exempting this non-governmental information from disclosure is important and should be included in the final implementing legislation.

Based on the testimony of administration witnesses, and subsequent analysis, we believe the Additional Protocol advances the national security interests of the United States and deserves the Senate's support. U.S. ratification of the Protocol will demonstrate the United States' continued leadership in, and commitment to, non-proliferation. Adoption of the Additional Protocol by the United States will facilitate adoption of the Model Protocol by non-nuclear weapon states and thus will provide the IAEA an important tool to help detect and deter proliferation of the technology and materiel needed for nuclear weapons. We are convinced that adequate protections have been incorporated into the Protocol signed by the United States to allow the United States to prevent the compromise of sensitive activities and information.

We ask your consideration of our views as you draft the resolution of ratification and the implementing legislation for this Protocol, and ask that this letter be included in the official report of your Committee's consideration of the Additional Protocol. We appreciate the opportunity to share our views with you.

Sincerely,

JOHN WARNER, Chairman. CARL LEVIN, Ranking Member.

VII. CBO COST ESTIMATE

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.
November 10, 2003.

Dr. DOUGLAS HOLTZ-EAKIN, *Director*, Congressional Budget Office, *Washington*, *DC*.

Dear Dr. Holtz-Eakin:

As the Committee on Foreign Relations prepares to begin its consideration of the Protocol to the Agreement of the International Atomic Energy Agency (IAEA) Regarding Safeguards in the United States (the Additional Protocol), which the President submitted to the Senate on May 9, 2002 for its advice and consent to ratification, we ask for your assistance in evaluating the Additional Protocol. In order to help the Committee during its consideration of this agreement, the Committee requests that the Congressional Budget Office conduct an assessment of the costs associated with the implementation of the Additional Protocol for inclusion in its report on this agreement.

The Additional Protocol provides for augmented inspections and broader requirements on parties to the Treaty on the Nonproliferation of Nuclear Weapons (NPT). Since the 1991 Persian Gulf War, and the revelations about the ability of non-nuclear weapons states (NNWS) to carry out clandestine nuclear activities that may lead to the development of nuclear weapons under existing safeguard arrangements, the IAEA has been negotiating with parties to the NPT to implement improved inspections and declarations through adoption of model or additional protocols. Broadly, a model/additional protocol would require states to make more extensive declarations concerning their presumably peaceful nuclear activities and provide the IAEA with more intrusive inspection rights.

The United States, as a declared nuclear-weapon state (NWS), is not obligated to accept IAEA safeguards on its nuclear activities, and also under its Additional Protocol will have the right to exclude nuclear facilities and activities of direct national security significance. The Committee has been informed by the Administration that the likelihood of there actually being an inspection of U.S. facilities under its Additional Protocol is very low. Nevertheless, important questions pertaining to the cost of conducting inspections in the United States, and in other NWS and NNWS, remain. I have enclosed a list of such questions with this letter and hope that your analysis will be able to help the Committee answer many of them.

I look forward to receiving your analysis early in 2004 so that the Committee can move forward with its recommendations regarding action on the Additional Protocol in the early part of 2004.

If you or your staff have any questions concerning this request, please contact the Committee's Staff Director, Kenneth A. Myers, Jr., or Committee staff members Kenneth A. Myers, III, and Thomas C. Moore, at (202) 224–4651. Additionally, my staff are ready to meet with representatives from the Defense, International Affairs,

and Veterans' Affairs Cost Estimate Unit of the Budget Analysis Division to discuss this request.

Sincerely,

RICHARD G. LUGAR, Chairman.

Enclosures (1)

QUESTIONS CONCERNING COSTS ASSOCIATED WITH U.S. AND IAEA IM-PLEMENTATION OF THE ADDITIONAL PROTOCOL WITH THE UNITED STATES

- 1. Does the CBO concur with the IAEA's assessment of the costs that will be incurred in order for it to carry out additional inspections under Model Aditional Protocols either in the United States or in other member states?
- 2. Would the inspections carried out under the Additional Protocol with the United States, or with other parties to the NPT (NWS or NNWS), require increases in the US annual contribution to the IAEA's safeguards budget?
- 3. Does the U.S. Government have in place all needed staff, facilities, and adequate budget resources such that, if, under the unlikely scenario that an Additional Protocol inspection were carried out in the United States in the next six months, such inspections could be adequately supported and U.S. national security information be protected?
- 4. A key contention of the IAEA is that any additional costs needed to carry out inspections under Additional Protocols would be offset by efficiencies gained in safeguard operations. Does the CBO concur?
 - 5. Does the IAEA have in place necessary arrangements to:
 - a. Identify the total resource requirements for implementing new inspections;
 - b. Provide an implementation schedule, with metrics and equipment, to carry out additional inspections and accurate costs for associated equipment;
 - c. Compose a schedule and prioritize countries with a model/additional protocol in force where inspections would need to be conducted.
- 6. What impact, if any, will the IAEA Board of Governor's decision of July 2003 to reverse the Agency's policy of zero real growth in its budget have on the ability of the Agency to carry out inspections under Additional Protocols with member states?

U.S. Congress,
Congressional Budget Office,
Washington, DC.
March 5, 2004.

Hon. RICHARD G. LUGAR, *Chairman*, Committee on Foreign Relations, United States Senate, *Washington*, *DC*.

Dear Mr. Chairman:

In response to your request, the Congressional Budget Office has prepared the attached analysis of the costs associated with ratifying the Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency Regarding Safeguards in the United States (Treaty Document 107–7). CBO estimates that one-time costs to the U.S. government for implementing the Additional Protocol would total between \$20 million and \$30 million, and recurring costs would total between \$10 million and \$15 million a year. Those costs would come from appropriated funds. CBO does not anticipate that any direct spending would result from ratification of the protocol.

If you would like further information about this analysis, we would be pleased to provide it. The CBO staff contact is Raymond J. Hall.

Sincerely,

Douglas Holtz-Eakin, Director.

Attachment.

The Cost of Implementing the Additional Protocol to the Treaty on the Non-Proliferation of Nuclear Weapons

SUMMARY

On June 12, 1998, the United States signed the Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency (IAEA) Regarding Safeguards in the United States (commonly referred to as the Additional Protocol). The Additional Protocol is a bilateral agreement that would supplement and amend the verification arrangements that exist under the current agreement between the United States and the IAEA. The IAEA operates under the auspices of the United Nations and serves as the global focal point for counterproliferation activities.

All 135 member countries of the IAEA, including the United States, bear the direct costs for financing the IAEA's operations. The IAEA budget for 2004 totals \$385 million, with the likely contribution from the United States totaling \$118 million. The IAEA budget pays for several activities, including safeguard programs that verify through an inspection system that countries comply with their commitments to use nuclear material and facilities only for peaceful purposes. About \$160 million of the \$385 million budget has been allocated to those safeguard programs—for the salaries

of about 230 inspectors and 200 administrative personnel, the cost of conducting roughly 900 inspections worldwide each year, and the

cost of purchasing safeguard equipment.

Implementing the Additional Protocol in the United States would increase costs to the federal government in two ways, the Congressional Budget Office (CBO) estimates. First, the IAEA would incur costs to inspect additional facilities, which would most likely be borne by the United States. On the basis of information provided by the IAEA, CBO estimates that those costs would be about \$240,000 a year. Second, CBO estimates that several U.S. agencies would incur costs to implement the new safeguard measures required by the Additional Protocol. On the basis of data provided by those agencies, CBO estimates that one-time start-up costs in 2005 would total between \$20 million and \$30 million, and recurring costs thereafter would total between \$10 million and \$15 million a year. Most of those costs would be associated with protecting national security interests and helping to protect companies' proprietary information.

CBO also examined the potential impact on U.S. payments to the IAEA if the agency implemented additional protocols with other member countries. CBO expects that implementing the Additional Protocol with other member countries would increase the IAEA's operating costs. Whether those additional costs affected U.S. payments to the IAEA would depend on how those costs were paid for, however. If host countries fully reimbursed the IAEA for the costs of the additional inspections, U.S. payments to the agency would not increase. If countries failed to fully reimburse the IAEA for those inspections, the agency would need to include the costs in its regular budget or solicit additional voluntary contributions. The IAEA Board of Governors recently approved a \$20 million increase in the agency's regular budget for 2004 and plans to increase that budget by another \$5 million by 2007. CBO estimates that the U.S. share of that increase will total about \$6 million a year. The IAEA hopes that the budget increases will cover the costs of the additional inspections outside the United States, but that outcome is not assured because the number of additional inspections that might be necessary is very uncertain.
Finally, CBO examined the ability of the U.S. government to sup-

port the Additional Protocol. On the basis of information from the State Department and other U.S. agencies, CBO believes that the United States could provide all needed staff and adequate budget resources to support the IAEA inspections that are likely under the Additional Protocol and to protect U.S. national security interests. Although CBO believes that the IAEA is ready to implement the broader safeguard measures in the United States, it has no basis for determining the IAEA's readiness to implement those measures

in other countries.

THE IAEA AND THE ESTABLISHMENT OF INTERNATIONAL SAFEGUARDS

The International Atomic Energy Agency was created in 1957 and is an affiliated agency of the United Nations that serves as the global headquarters for counterproliferation activities.

By 1964, five countries—the United States, Russia, the United Kingdom, France, and China—had acquired nuclear weapons. The

United States and many other U.N. members were concerned that the number of countries with nuclear weapons could increase to around 30 by the 1980s. Those fears led to growing support for legally binding, international commitments and comprehensive safeguards to stop the further spread of nuclear weapons and to work toward their eventual elimination.

As a result, the Nuclear Non-Proliferation Treaty (NPT) was adopted in 1968 with the aims of preventing the spread of nuclear weapons and weapon technology, fostering the peaceful uses of nuclear energy, and furthering the goal of achieving general and complete disarmament. Today, nearly every country in the world is a signatory to the NPT. (Exceptions are India, Israel, and Pakistan, which never signed the treaty, and North Korea, which recently withdrew from the treaty.)

Every signatory of the NPT that does not have nuclear weapons is required to conclude a comprehensive safeguard agreement with the IAEA. Today, nearly all countries have done so, including the United States and the other four nations that possess nuclear weapons, which have agreed to accept safeguards on certain peaceful nuclear activities.

NPT AND THE IAEA SAFEGUARDS IN THE UNITED STATES

The IAEA safeguards are a set of technical measures and activities by which the agency seeks to verify that nuclear material identified by each country is not diverted to nuclear weapons. Those safeguard measures include using physical barriers to control access to and the movement of nuclear material, using cameras to detect the movement of nuclear material, and conducting on-site inspections.

Under the terms of the NPT, the United States, Russia, the United Kingdom, France, and China are not subject to IAEA inspections. Instead, they voluntarily submit to inspections as a demonstration of cooperation with the IAEA and a show of support for safeguards. Since 1967, the United States has permitted inspections of its nuclear facilities—both public and private—excluding only those with direct national security significance. The existing safeguard agreement between the IAEA and the United States (sometimes called the Voluntary Offer) has been in effect since 1980.

Under the Voluntary Offer, the United States provided a list of roughly 245 commercial and governmental facilities that would be made available for IAEA inspections. All sites under the jurisdiction of the Department of Defense (DoD) were exempted from those inspections under National Security Exclusions. Since 1981, the IAEA has inspected 19 U.S. nuclear facilities: six civil nuclear reactors, six fuel-fabrication plants, six Department of Energy (DOE) facilities, and one additional site. In recent years, the IAEA has inspected four facilities that hold or process nuclear materials in excess of defense needs—the Y–12 National Security Complex in Oak Ridge, Tennessee; the Savannah River Site near Aiken, South Carolina; the Hanford Site in southeastern Washington State; and the BWX Technologies facility in Lynchburg, Virginia.

THE MODEL ADDITIONAL PROTOCOL

Most countries abide by their commitments to the IAEA and the NPT, but the IAEA safeguards attempt to also deal with those that do not. In the aftermath of the 1990 Gulf War, it became clear that Iraq's nuclear program was more advanced than had been previously assessed through regular IAEA inspections of declared facilities. That revelation pointed to important limitations of the safeguard agreements in place at the time. Those agreements focused on verifying declared nuclear material and activities rather than on addressing undeclared nuclear activities. Although the IAEA has taken steps to address those undeclared activities, continued shortcomings have led the United States to propose, and the international community to negotiate, measures to strengthen safeguards, including development of the Model Additional Protocol. That protocol forms the basis for the Additional Protocol to the Treaty on the Non-Proliferation of Nuclear Weapons Between the United States and the IAEA.

The objective of the Model Additional Protocol is to verify the absence of undeclared nuclear activities in countries that do not have nuclear weapons. The Model Additional Protocol gives IAEA inspectors broader access to information about member countries' nuclear programs and broader physical access to both declared and undeclared locations. Under the protocol, countries not possessing nuclear weapons must provide declarations about all phases of their civil nuclear fuel cycle and related research and development. They must also provide declarations about other locations where nuclear material intended for peaceful purposes is present and about the manufacture and export of materials, equipment, and facilities especially designed for nuclear use. That model protocol is the first major change to the IAEA safeguard system in 25 years.

Today, 78 countries have signed a Model Additional Protocol with the IAEA. The agency's goal is to have additional protocols signed with the remaining countries by 2005.

THE ADDITIONAL PROTOCOL BETWEEN THE UNITED STATES AND THE IAEA

The U.S. Additional Protocol is based on the Model Additional Protocol but has some added features. Like the previous safeguard agreement, it exempts locations and activities of direct national security significance to the United States. In addition, the U.S. Additional Protocol protects commercial interests by restricting access to companies' confidential information.

to companies' confidential information.

In implementing the U.S. Additional Protocol, the U.S. government would initially provide the IAEA with a list of both public and private facilities that are declared sites under the protocol and, therefore, subject to inspection. Those sites would include private nuclear reactors, commercial facilities that manufacture parts used in the production of nuclear reactors, facilities that enrich or convert uranium, and universities that are conducting nuclear research. According to the Department of State, recent estimates

¹The nuclear fuel cycle refers to the series of steps that uranium goes through to be processed into an efficient fuel for use in applications such as the generation of electricity and in weapons.

place the potential number of sites that could be subject to the IAEA safeguards under the Additional Protocol at about 1,775. (About 1,000 of those sites are abandoned uranium ore mines, which would probably not be inspected.) The United States would be required to provide that list to the IAEA no more than 180 days after the United States declared that the Additional Protocol would take effect.

THE IAEA BUDGET

The International Atomic Energy Agency prepares a regular budget each year to fund its programs. Every member country contributes to the regular budget based on an agreed assessment percentage. The IAEA also funds its programs through voluntary contributions from some countries, including the United States. Funding for the IAEA's programs provided though both its regular budget and voluntary contributions has increased from about \$290 million in 1995 to \$385 million in 2004. Using information provided by the IAEA and the State Department, CBO estimates that the IAEA will spend about \$160 million (or about 40 percent) of its \$385 million budget on safeguard programs in 2004.

The IAEA's regular budget, which pays for safeguard costs along with the costs of science, safety, health, and environment programs, has grown from \$205 million in 1995 to \$245 million in 2003 because of agreements between the agency and its member countries to maintain an almost "zero-real-growth" budget over that period. Under that policy, the IAEA could only increase its budgets from year to year to adjust for the impact of inflation on such items as salaries and purchases. As a result, the agency has grown more dependent on voluntary contributions. Those contributions increased from about \$87 million in 1995 to an estimated \$120 million in 2004, primarily to support rising costs in the safeguard programs.

In light of the expansion of the IAEA's safeguards over the past 10 years, the agency's Board of Governors approved a real increase in the regular budget beginning in 2004. The budget rose to \$265 million in 2004 and will increase by another \$5 million (to \$270 million) by 2007. According to the IAEA, about \$19 million of that increase will be allocated to safeguard programs.

U.S. SPENDING FOR THE IAEA

The U.S. government provides funds in support of the IAEA's activities in three ways. First, since the IAEA is an affiliated agency of the United Nations, the United States makes payments toward the IAEA's regular budget as a member of the United Nations. Second, the United States makes voluntary contributions to the IAEA to help the agency meet its safeguard commitments. Finally, the U.S. Congress appropriates funds to federal agencies to pay for programs that support the IAEA's activities.

THE U.S. SHARE OF THE IAEA'S REGULAR BUDGET

Historically, the United States has paid about 26 percent of the IAEA's regular budget. That share amounts to \$68 million in 2004. The U.S. share of the IAEA's regular budget is paid from the "Contributions to International Organizations' account in budget

function 150 (international affairs), which is funded through annual appropriations to the State Department. Under a deferredpayment policy that has been in effect since the 1980s, the United States will use fiscal year 2005 appropriations to pay its 2004 assessment. the Administration's 2005 budget requests about \$69 million for that assessment's lightly higher than the IAEA assessment of \$68 million. Such differences arise because of varying assumptions about exchange rates.

THE U.S. VOLUNTARY CONTRIBUTION

The United States has long been the largest contributor to the IAEA's budget. Voluntary contributions to the agency from all nations totaled about \$120 million in 2003. Historically, the U.S. voluntary contribution has averaged about 45 percent of the IAEA's total voluntary contributions.

For 2004, the U.S. voluntary contribution will total \$53 million, the amount appropriated by the Congress. That contribution is made from the "Non-Proliferation, Antiterrorism, Demining, and Related Projects" (NADR) account in budget function 150 (international affairs), which is funded through annual appropriations to the State Department.

OTHER U.S. COSTS RELATED TO THE IAEA'S SAFEGUARD PROGRAMS

Besides contributing to the IAEA's regular budget and making additional voluntary contributions, the United States has historically allocated funds every year to U.S. government agencies to support the IAEA's safeguard activities. In 2004, DOE, DoD, the State Department, and the Nuclear Regulatory Commission (NRC) spent about \$40 million to support the IAEA's inspections within the United States (see Table 1).

DOE plans to spend \$34 million in 2004 on international safeguard programs. Those programs provide technology and expertise to strengthen IAEA's ability to detect undeclared nuclear material, support U.S. initiatives to promote adherence to the Nuclear Non-Proliferation Treaty and IAEA safeguard agreements, and oversee the implementation of those safeguards at U.S. facilities.

DoD plans to spend about \$5 million in support of IAEA efforts in 2004, performing environmental sample analysis in the United States for the IAEA. Currently, the Air Force's Technical Applications Center conducts about 400 sample analyses a year.

In 2004, the NRC plans to spend about \$1 million from its international nuclear safety support program to support IAEA safeguards. About four people will work with the IAEA inspectors fulltime on nuclear security and proliferation activities.

Finally, the State Department's Bureau of Non-Proliferation plans to spend about \$25 million in 2004 on efforts to reduce threats to the United States and its allies from the proliferation of nuclear, biological, and chemical weapons. On the basis of information provided by the State Department, CBO estimates that 10 to 15 people will support the IAEA's efforts in the United States and

abroad at a cost of about \$2 million a year.

Table 1. Inspection Activities and Costs Related to IAEA Safeguards in 2004

	Department of Energy	Department of Defense	Nuclear Regulatory Commission	Department of State	Total
Number of U.S. Sites Currently Eligible for IAEA Inspections Number of U.S. Sites Currently	35	a	210	0	245
Inspected by IAEA Each Month	3	0	1	0	4
U.S. Agency Costs (Millions of dollars)	34	5	1	2	42

Source: Congressional Budget Office based on data provided by the State Department and the Administration's 2005 budget justification materials.

a. DoD applies the National Security Exclusion to all of its facilities.

THE COST TO THE FEDERAL GOVERNMENT OF IMPLEMENTING THE U.S. ADDITIONAL PROTOCOL

Implementing the Additional Protocol in the United States would increase costs to the federal government in two ways. First, the IAEA would incur costs to inspect more facilities in the United States. CBO estimates that those costs—about \$240,000—would most likely be recouped by an increase in either the IAEA's regular budget or the U.S. voluntary contribution. Second, CBO estimates that several U.S. agencies would incur costs for implementing the new safeguard measures. CBO estimates that one-time start-up costs in 2005 would total between \$20 million and \$30 million and recurring costs thereafter would total between \$10 million and \$15 million a year.

INCREASE IN COSTS TO THE IAEA

Today, the IAEA conducts monthly inspections at three DOE sites and one commercial site. On the basis of information provided by the IAEA, CBO expects that any additional inspections that the agency would conduct under the Additional Protocol would be made in conjunction with those ongoing monthly visits to the United States. According to the IAEA, inspectors would probably travel to one additional commercial site during each visit to the United States. Information from the agency leads CBO to assume that a team of about 10 inspectors would spend one additional day in the United States conducting such an inspection, at a cost of about \$20,000. Since IAEA inspectors come to the United States 12 times a year to visit four sites under existing safeguards, the costs of 12 additional site inspections would amount to about \$240,000 a year, CBO estimates. The IAEA could recoup those costs either by increasing its regular budget or by asking the United States to raise its voluntary contribution. Consistent with the United States' current practice of completely reimbursing the IAEA for those expenses, CBO expects that the United States would pay for those costs. (The contributions would come from the State Department's NADR account.)

CBO's estimate of the IAEA's costs to carry out additional inspections in the United States is similar to the agency's estimate of between \$100,000 and \$200,000.

INCREASE IN COSTS TO U.S. AGENCIES

Implementing the Additional Protocol in the United States could also affect the budgets of the Department of Energy, the Department of Defense, the Department of Commerce (DOC), and the Nuclear Regulatory Commission. Taken together, the one-time start-up costs to those agencies of implementing the Additional Protocol would total between \$20 million and \$30 million in 2005, CBO estimates, and annual recurring costs would total between \$10 million and \$15 million after that. The estimate for each agency is discussed below.

Department of Energy

According to DOE, the number of its sites that would be eligible for inspections under the Additional Protocol would not change from today's level. From discussions with DOE, CBO anticipates that the costs to the department attendant with implementing the Additional Protocol would be those associated with conducting vulnerability assessments at roughly 35 facilities. Those assessments would be conducted to ensure that national security and commercial propriety information are protected. On the basis of information provided by DOE, CBO expects that the department would conduct each assessment using a team of approximately 10 engineers and that each assessment would take about five working days to complete and cost, on average, about \$220,000. Assuming that DOE needs to conduct about 50 assessments (one or two at each of its 35 sites), the one-time costs for those initial assessments would total about \$11 million in 2005, CBO estimates. DOE indicates that it would also conduct outreach efforts to help contractors prepare for the IAEA inspections. CBO estimates that those efforts would cost about \$1 million. In total, CBO estimates, the one-time start-up efforts would cost about \$12 million. DOE indicates that it would also need to conduct follow-up vulnerability assessments each year in support of the additional protocol. On the basis of information provided by DOE, CBO expects that the department would conduct annual follow-up assessments at about 10 sites a year. A follow-up assessment would cost about \$220,000. Thus, CBO estimates that the annual recurring costs of those follow-up assessments would total about \$2 million a year.

Department of Defense

DoD plans to apply the National Security Exclusion to all of its facilities, making none of them available to IAEA inspectors. However, DoD also has concerns about protecting national security interests at DOE labs, universities, fuel-fabrication plants, and commercial manufacturing sites made available for inspections under the Additional Protocol, because many of those sites perform work for DoD. (Information provided by the State Department indicates that the number of sites could exceed 500.)

DoD expects to have to conduct vulnerability assessments at some of those 500 sites. Each assessment would probably cost between \$80,000 and \$400,000, depending on the complexity of the assessment and whether DoD used contractor personnel. Current staffing levels could not complete the additional vulnerability assessments in a timely manner, and contractors would most likely

be hired to conduct many of those assessments. DoD provided no information on the possible number of assessments that might be conducted in a year but indicated that the number would remain steady for the foreseeable future. Assuming that DoD conducts 25 to 50 vulnerability assessments a year, CBO estimates that the cost of those assessments would total between \$5 million and \$15 million a year.

Nuclear Regulatory Commission

The NRC expects that 30 additional facilities that it licenses would become eligible for IAEA inspections. According to the commission, it would be responsible for revising regulations to include the new requirements for implementing the Additional Protocol. NRC staff would also prepare guidance documents for IAEA access to commercial licensees and new reporting requirements. Recurring efforts would involve overseeing the information provided by licensees directly to the Web-based reporting system run by the Department of Commerce. The NRC estimates that those activities might require hiring one additional full-time employee. On the basis of information provided by the NRC, CBO estimates that the commission's cost to implement the Additional Protocol would total about \$200,000 a year.

Department of Commerce

DOC's Bureau of Industry and Security would assist U.S. firms in complying with the IAEA's safeguard programs. Information provided by DOC indicates that about 500 commercial sites and 1,000 abandoned uranium mines could be made available for IAEA inspections. The IAEA does not inspect any of those commercial sites today, but DOC indicates that the IAEA would be likely to visit some of those sites under the new measures.

The Additional Protocol would require the nuclear industry—including public and private fuel-cycle facilities and nuclear power plants—to report certain information to the Department of Commerce. DOC is developing a new database specifically to support the reporting requirements of the Additional Protocol, called the Additional Protocol Reporting System (APRS). DOC estimates that the one-time cost for developing the APRS will total about \$2 million. DOC also estimates that additional one-time costs for outreach, training, and inspection support activities at the commercial facilities could total \$1 million in 2005. The department expects to spend about \$1 million a year thereafter for continuing the training efforts and maintaining the APRS database.

THE COST TO THE PRIVATE SECTOR AND STATE AND LOCAL GOVERNMENTS OF IMPLEMENTING THE U.S. ADDITIONAL PROTOCOL

The Additional Protocol would require the commercial nuclear industry, including public and private fuel-cycle facilities and nuclear power plants, to submit to inspections by the IAEA. Affected facilities, in conjunction with the Nuclear Regulatory Commission, would certify their operations, allow the IAEA to inspect them, and report certain information to the Department of Commerce. According to industry sources, the NRC, its licensees, and certain related facilities already maintain the information that would have to be

reported and have experience conducting similar types of inspections. The nuclear industry does not expect that the Additional Protocol would have a significant impact on the fees licensees pay to the NRC. Consequently, CBO estimates that the cost to nuclear facilities, both public and private, to comply with the protocol would be minimal. The Additional Protocol would not affect the budgets of the state and local commissions that regulate utilities.

OTHER ISSUES

Implementing the additional protocols with other member countries would also increase the IAEA's operating costs. Those added costs could affect U.S. payments to the agency, depending on how those costs were financed. Possible scenarios include:

- A host country could fully reimburse the IAEA for the associated inspection costs, similar to the arrangement that currently exists between the United States and the agency. In that case, U.S. payments to the IAEA would not increase.
- A host country could fail to fully reimburse the IAEA for those inspections. The agency would thus need to increase its regular budget or solicit larger voluntary contributions to cover the costs. As mentioned earlier, the IAEA Board of Governors approved a \$20 million increase in the regular budget for 2004 and plans to increase it by another \$5 million by 2007. CBO estimates that the U.S. share of that increase will total about \$6 million a year. The IAEA hopes that the budget increases will cover the costs of the additional inspections, but that outcome is not assured because the number of additional inspections that might be necessary is very uncertain.

CBO also assessed the ability of the U.S. government and the IAEA to support the Additional Protocol. On the basis of information from the State Department and other U.S. agencies, CBO believes that the United States government has made sufficient plans to ensure that necessary staff and budget resources will be available to support the IAEA inspections that might occur under the Additional Protocol and to protect U.S. national security interests.

Finally, CBO believes that the IAEA is ready to implement the broader safeguard measures under the Additional Protocol in the United States. However, CBO has no basis for determining the IAEA's readiness to implement the broader safeguard measures in other countries.

VIII. RESOLUTION OF RATIFICATION

Resolved (two-thirds of the Senators present concurring therein), SECTION 1. SENATE ADVICE AND CONSENT SUBJECT TO CONDITIONS AND UNDERSTANDINGS.

The Senate advises and consents to the ratification of the Protocol Additional to the Agreement between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America, with Annexes, signed at Vienna June 12, 1998 (T. Doc. 107–7) subject to the conditions in section 2 and the understandings in section 3.

SEC. 2. CONDITIONS.

The advice and consent of the Senate under section 1 is subject to the following conditions, which shall be binding upon the President:

- (1) CERTIFICATIONS REGARDING THE NATIONAL SECURITY EXCLUSION, MANAGED ACCESS, AND DECLARED LOCATIONS.—Prior to the deposit of the United States instrument of ratification, the President shall certify to the appropriate congressional committees that, not later than 180 days after the deposit of the United States instrument of ratification—
 - (A) all necessary regulations will be promulgated and will be in force regarding the use of the national security exclusion under Article 1.b of the Additional Protocol, and that such regulations shall be made in accordance with the principles developed for the application of the national security exclusion;
 - (B) the managed access provisions of Articles 7 and 1.c of the Additional Protocol shall be implemented in accordance with the appropriate and necessary inter-agency guidance and regulation regarding such access; and

(C) the necessary security and counter-intelligence training and preparation will have been completed for any declared locations of direct national security significance.

(2) CERTIFICATION REGARDING SITE VULNERABILITY ASSESS-MENTS.—Prior to the deposit of the United States instrument of ratification, the President shall certify to the appropriate congressional committees that the necessary site vulnerability assessments regarding activities, locations, and information of direct national security significance to the United States will be completed not later than 180 days after the deposit of the United States instrument of ratification for the initial United States declaration to the International Atomic Energy Agency (in this resolution referred to as the "Agency") under the Additional Protocol.

SEC. 3. UNDERSTANDINGS.

The advice and consent of the Senate under section 1 is subject to the following understandings:

- (1) IMPLEMENTATION OF ADDITIONAL PROTOCOL.—Implementation of the Additional Protocol will conform to the principles set forth in the letter of April 30, 2002, from the United States Permanent Representative to the International Atomic Energy Agency and the Vienna Office of the United Nations to the Director General of the International Atomic Energy Agency.
- (2) NOTIFICATION TO CONGRESS OF ADDED AND DELETED LOCATIONS.—
 - (A) ADDED LOCATIONS.—The President shall notify the appropriate congressional committees in advance of declaring to the Agency any addition to the lists of locations within the United States pursuant to Article 2.a.(i), Article 2.a.(iv), Article 2.a.(vi), Article 2.a.(vii), Article 2.a.(viii), and Article 2.b.(i) of the Additional Protocol, together with a certification that such addition will not adversely affect the national security of the United States. During the ensuing 60 days, Congress may dis-

approve an addition to the lists by joint resolution for reasons of direct national security significance, under procedures identical to those provided for the consideration of resolutions under section 130 of the Atomic Energy Act of 1954 (42 U.S.C. 2159).

(B) DELETED LOCATIONS.—The President shall notify the appropriate congressional committees of any deletion from the lists of locations within the United States previously declared to the Agency pursuant to Article 2.a.(i), Article 2.a.(vi), Article 2.a.(vii), Article 2.a.(viii), and Article 2.b.(i) of the Additional Protocol that is due to such location having a direct national security significance, together with an explanation of such deletion, as soon as possible prior to providing the Agency information regarding such deletion.

(3) PROTECTION OF CLASSIFIED INFORMATION.—The Additional Protocol will not be construed to require the provision, in any manner, to the Agency of "Restricted Data" controlled

by the provisions of the Atomic Energy Act of 1954.

(4) PROTECTION OF CONFIDENTIAL INFORMATION.—Should the President make a determination that persuasive information is

available indicating that—

- (A) an officer or employee of the Agency has willfully published, divulged, disclosed, or made known in any manner or to any extent contrary to the Agreement between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America and the Additional Protocol, any United States confidential business information coming to him or her in the course of his or her official duties relating to the implementation of the Additional Protocol, or by reason of any examination or investigation of any return, report, or record made to or filed with the Agency, or any officer or employee thereof, in relation to the Additional Protocol; and
- (B) such practice or disclosure has resulted in financial losses or damages to a United States person;

the President shall, not later than 30 days after the receipt of such information by the executive branch of the United States Government, notify the appropriate congressional committees in writing of such determination.

- (5) REPORT ON CONSULTATIONS ON ADOPTION OF ADDITIONAL PROTOCOLS IN NON-NUCLEAR WEAPON STATES.—Not later than 180 days after entry into force of the Additional Protocol, and annually thereafter, the President shall submit to the appropriate congressional committees a report on measures that have been taken or ought to be taken to achieve the adoption of additional protocols to existing safeguards agreements signed by non-nuclear weapon states party to the Nuclear Non-Proliferation Treaty.
- (6) REPORT ON UNITED STATES ASSISTANCE TO THE AGENCY FOR THE PURPOSE OF ADDITIONAL PROTOCOL IMPLEMENTATION AND VERIFICATION OF THE OBLIGATIONS OF NON-NUCLEAR WEAP-ON STATES.—Not later than 180 days after the entry into force

of the Additional Protocol, and annually thereafter, the President shall submit to the appropriate congressional committees a report detailing the assistance provided by the United States to the Agency in order to promote the effective implementation of additional protocols to safeguards agreements signed by non-nuclear weapon states party to the Nuclear Non-Proliferation Treaty and the verification of the compliance of such parties with Agency obligations.

(7) SUBSIDIARY ARRANGEMENTS AND AMENDMENTS.—

(A) The Subsidiary Arrangement.—The Subsidiary Arrangement to the Additional Protocol between the United States and the Agency, signed at Vienna on June 12, 1998 contains an illustrative, rather than exhaustive, list of accepted United States managed access measures.

(B) Notification of additional subsidiary arrangements and amendments.—The President shall notify the appropriate congressional Committees not later than 30 days

after—

- (i) agreeing to any subsidiary arrangement with the Agency under Article 13 of the Additional Protocol; and
- (ii) the adoption by the Agency Board of Governors of any amendment to its Annexes under Article 16.b.
- (8) AMENDMENTS.—Amendments to the Additional Protocol will take effect for the United States in accordance with the requirements of the United States Constitution as the United States determines them.

SEC. 4. DEFINITIONS.

In this resolution:

- (1) ADDITIONAL PROTOCOL.—The term "Additional Protocol" means the Protocol Additional to the Agreement between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America, with Annexes and a Subsidiary Agreement, signed at Vienna June 12, 1998 (T. Doc. 107–7).
- (2) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term "appropriate congressional committees" means the Committee on Foreign Relations and the Committee on Armed Services of the Senate and the Committee on International Relations and the Committee on Armed Services of the House of Representatives.
- (3) NUCLEAR NON-PROLIFERATION TREATY.—The term "Nuclear Non-Proliferation Treaty" means the Treaty on the Non-Proliferation of Nuclear Weapons, done at Washington, London, and Moscow July 1, 1968, and entered into force March 5, 1970.

IX. HEARING AND QUESTIONS FOR THE RECORD

THE PROTOCOL ADDITIONAL TO THE SAFEGUARDS AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE IAEA

CONTENTS	Pass
Biden, Hon. Joseph R., Jr., U.S. Senator from Delaware, opening statement Brooks, Ambassador Linton F., Administrator, National Nuclear Security Administration, U.S. Department of Energy, Washington, DC Prepared statement Burk, Ms. Susan F., Acting Assistant Secretary of State for Non-Proliferation, Department of State, Washington, DC Prepared statement Esper, Mr. Mark T., Deputy Assistant Secretary of Defense for Negotiations Policy, U.S. Department of Defense, Washington, DC Prepared statement Lichtenbaum, Hon. Peter, Assistant Secretary of Commerce for Export Administration, U.S. Department of Commerce, Washington, DC Prepared statement Lugar, Hon. Richard G., U.S. Senator from Indiana, opening statement	73 58 59 62 73 77 83 87 67
Statements Submitted for the Record Lehman, Hon. Ronald F., Ph.D., Director, Center for Global Security Research, Lawrence Livermore National Laboratory, Livermore, CA Nuclear Energy Institute, testimony for the record from Marvin S. Fertel, senior vice president and chief nuclear officer	98 101 103 106

THURSDAY, JANUARY 29, 2004

U.S. SENATE, COMMITTEE ON FOREIGN RELATIONS, Washington, DC.

The committee met, pursuant to notice, at 9:30 a.m. in room SD-419, Dirksen Senate Office Building, Hon. Richard G. Lugar (chairman of the committee), presiding.

Present: Senator Lugar.

OPENING STATEMENT OF SENATOR RICHARD G. LUGAR

The Chairman. This hearing of the Senate Foreign Relations Committee is called to order.

Today, the committee meets to consider the Additional Protocol to the Agreement Between the United States and the International Atomic Energy Agency, the IAEA. The United States signed the Additional Protocol in Vienna on June 12, 1998, and President

Bush submitted it to the Senate on May 9, 2002. The State Department submitted the implementing legislation to Congress on November 19, 2003. At the administration's request, I introduced the

implementing legislation in the Senate last December.

Since Senate ratification of the Nuclear Non-Proliferation Treaty (NPT) and our voluntary offer to accept IAEA's safeguards in 1980, 188 states have now approved the treaty. Unfortunately, the NPT and its existing Safeguards Agreements have been insufficient to stem the tide of proliferation, and we have witnessed an increase in the global availability of nuclear weapons materials, and reprocessing and enrichment technologies. To ensure that materials and technologies are devoted only to peaceful uses, it is in the interest of the United States that the IAEA have the power to conduct intrusive inspections in a non-nuclear weapon state (NNWS).

In 2003, the international community was confronted with two cases involving non-nuclear weapon states violating their commitments under the NPT by pursuing nuclear weapons programs. Iran's clandestine drive toward a nuclear weapons capability was exposed by an Iranian resistance group and confirmed by the IAEA. After months of discussion, Germany, France, and the United Kingdom concluded separate negotiations with Tehran in which the regime agreed to abandon its uranium enrichment program and to cease all efforts to pursue nuclear weapons. Iran

signed an Additional Protocol with the IAEA in December.

Earlier this month, Iranian Foreign Minister Kharrzi appeared to hedge on Iran's commitment by suggesting that Tehran had agreed, "to the suspension, not stopping, of the uranium enrichment process." It is clear that Iran is not in full compliance with

its obligations.

In Libya, we witnessed an important non-proliferation success. Following intense negotiations with the Bush administration and the United Kingdom, Libya admitted that it had WMD programs and agreed to abandon those efforts and to work with the international treaty regimes to verify Libya's commitment. I applaud President Bush and his team for a victory in the war against proliferation of weapons of mass destruction.

I'm eager to hear from our panel today whether we would have been able to detect and to stop Iran and Libya's clandestine programs long before now had Additional Protocols been in force in

those countries.

Events in Iran and Libya are important to our consideration of the Additional Protocol. In 1980, the Senate ratified the U.S. commitment to voluntarily accept safeguards and inspections to demonstrate a firm commitment to the IAEA and to the NPT. As a nuclear weapon state (NWS) party to the NPT, the United States is not required to accept any safeguards. Our decision sent an important non-proliferation message to the world: that the preeminent superpower, with a large civilian nuclear power industry, could accept IAEA safeguards.

Over time, we have learned that existing safeguards agreements have been circumvented by determined cheaters in pursuit of weapons. The Additional Protocol seeks to fill holes in the existing patchwork of declarations and inspections. It will require the declaration of many locations and activities to the IAEA not previously

required, and allow, with less than 24 hours' notice, inspection of such locations.

The United States, as a declared nuclear weapon state party to the NPT, may exclude the application of the IAEA safeguards on its activities. Under the Additional Protocol, the United States also has the right to exclude activities and sites of direct national security significance in accordance with this National Security Exclusion contained in Article 1.b This provision is crucial to United States acceptance of the Additional Protocol and provides the basis for the protection of U.S. nuclear weapons-related activities, sites,

and materials, as a declared nuclear power.

The Additional Protocol does not contain any new arms-control or disarmament obligations for the United States. Although there are increased rights granted to the IAEA for the conduct of inspections in the United States, the administration has assured the Foreign Relations Committee that the likelihood of an inspection occurring in the United States is very low. Nevertheless, should an inspection under the Additional Protocol be determined that it would be potentially harmful to United States' security interests, the United States has the right, through the National Security Exclusion, to prevent the inspection.

For the past month, the majority and minority staffs of this committee have been working closely with the administration to craft a resolution of ratification that will gain broad support in the U.S. Senate. I thank Senator Joe Biden and his staff, in particular, for their cooperation in this bipartisan effort. I look forward to reporting, soon, the Protocol and the resolution of ratification, and will work with the majority leader of the Senate to schedule timely Sen-

ate consideration.

I am pleased to introduce our panel this morning. First, I would like to extend my personal thanks to Ambassador Linton Brooks, Administrator of the National Nuclear Security Administration. We will look to Ambassador Brooks to tell us how this Protocol will further United States non-proliferation interests, while not harming the critical weapons complex over which he and his agency preside.

We welcome Susan Burk, Acting Assistant Secretary of State for Non-Proliferation. We look forward to Secretary Burk's perspective

on the United States negotiating position on this Protocol.

Joining us from the Commerce Department, is Assistant Secretary for Export Administration, Peter Lichtenbaum. Secretary Lichtenbaum will share his department's plans to mitigate the burdens of the Protocol, if any, on United States industry.

And we welcome Mark Esper, Deputy Assistant Secretary of Defense for Negotiations Policy. We appreciate his appearance today to share the Defense Department's strong support for the Additional Protocol, and to discuss the national security benefits outlined in the President's letter of submission.

The committee also has asked the Nuclear Energy Institute and outside various experts to submit testimony outlining their views on the Additional Protocol. Further, we expect to receive the views of the Committee on Armed Services in the near future, for incorporation into our committee report.

Now, let me say, at the outset, each of the pieces of testimony that I have cited will be made a part of the record. Likewise, each of the statements that you will make will be made a part of the record in full, so you need not ask for that in the event you wish

to summarize and proceed.

We very much look forward to the insights of each of our witnesses this morning. We thank you for coming to speak on this important issue. And at the time that Senator Biden joins our hearing, of course, I will call upon him for his additional statements that will also be made a part of the record.

[The opening statement of Senator Biden follows:]

OPENING STATEMENT OF SENATOR JOSEPH R. BIDEN, JR.

Thank you, Mr. Chairman. I am very pleased that the committee today will hear testimony from executive branch officials regarding the Additional Protocol to the Safeguards Agreement between the United States and the International Atomic Energy Agency. Moving forward on U.S. ratification of the Additional Protocol has been a long-standing priority for me.

In fact, I pressed strongly for the submission of this Protocol to the Senate and then for submission of draft implementing legislation, which both houses of Congress must pass before the Additional Protocol can enter into force. I understand that our respective staffs have been working together to fashion an agreed text for a Resolution of Ratification and that the chairman hopes the committee will approve

this Resolution of Ratification at a business meeting next week.

Senate ratification and entry into force for the the Additional Protocol is so critical because it can help spur the signing and ratification of other Additional Protocol agreements between the IAEA and non-nuclear weapons states. The recent disclosure on the nuclear programs of Iran and Libya remind us that the IAEA nuclear safeguards regime without the Additional Protocol is not strong enough to catch a cheater that uses undeclared nuclear sites.

Additional Protocols will make it more difficult for future Irans and Libyas to escape IAEA detection, as they authorize the IAEA to inspect those undeclared sites. But the United States must demonstrate leadership by putting our own Additional Protocol into force; we then will be in a stronger position to pressure other nations to do the same. As today's hearing will demonstrate, Senate ratification of the Additional Protocol will not pose any significant new burden to the United States government or industry. In short, ratification of the Additional Protocol is a win-win proposition.

Why should inspections apply to the United States, which the Nuclear Non-proliferation Treaty recognizes as a nuclear weapons state? In 1967, when the Nuclear Nonproliferation Treaty was still being negotiated, President Johnson announced that the United States would voluntarily submit to safeguards on nuclear materials, to assuage the concerns of non-nuclear weapons states that feared that the five nuclear weapons states would otherwise enjoy an unfair commercial advantage on nuclear power.

Accordingly, a U.S.-IAEA safeguards agreement, known as the "Voluntary Offer," has been in place since 1980. Truth be told, this Voluntary Offer is more symbolic than real; until 1994, the IAEA only applied safeguards to two commercial power reactors and two fuel fabrication facilities in the United States, from a list of 250 eligible facilities. In recent years, it has inspected only sites for which the United States requested inspections, like the site where we store the highly enriched uranium we removed from Kazakhstan.

Should the Additional Protocol enter into force, the United States would submit additional information on civil nuclear facilities on an annual basis and identify additional civilian facilities, a small number of which might someday be inspected.

All implementation activities under the Additional Protocol would be subject to a "National Security Exclusion" that would allow our government to exclude the application of the Additional Protocol wherever it would result in "access by the Agency to activities with direct national security significance to the United States or to locations or information associated with such activities."

In other words, just as under the Voluntary Offer, the United States always will retain the trump card of not declaring a facility, not submitting certain information, or halting or limiting an inspection if our national security interests come into play. Why should the Senate quickly ratify the Additional Protocol this year? Recall

Why should the Senate quickly ratify the Additional Protocol this year? Recall that the IAEA has long insisted that Iran sign and implement an Additional Protocol.

With an Additional Protocol in force, IAEA inspectors enjoy greater access rights to Iran's nuclear facilities (whether they are declared to the IAEA or not) and can demand information that Iran otherwise would not be obligated to provide. Late last year, Iran finally signed the Additional Protocol, but complex ratification procedures offer many opportunities for Iran to delay the agreement's entry into force.

Iran is not the only non-nuclear weapons state that has not ratified the Additional Protocol. Other countries that have yet to do so include Algeria, Argentina, and Brazil, to name just a few. Indeed, the Additional Protocol has entered into force

for only 37 non-nuclear weapons states.

Senate ratification of the Additional Protocol and then the enactment of implementing legislation, would send a strong signal to the rest of the world on the importance the United States attaches to a genuine nuclear nonproliferation agenda. U.S. ratification would affirm that implementation of the Additional Protocol brings no commercial disadvantage for a nation's civil nuclear industry. Most importantly, ratification would strip the Irans of the world of a potent excuse: why should we ratify the Additional Protocol when the United States has yet to do so?

So I welcome with great pleasure the testimony of our esteemed witnesses today. Ambassador Brooks, Mr. Lichtenbaum, Ms. Burk, and Mr. Esper, I look forward to hearing your statements. Mark, I also want to welcome you back as you testify before your former committee.

Thank you, Mr. Chairman.

The CHAIRMAN. It's a pleasure, Ambassador Brooks, to call upon you for your testimony.

STATEMENT OF AMBASSADOR LINTON F. BROOKS, ADMINISTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, WASHINGTON, DC

Ambassador BROOKS. Thank you, Mr. Chairman. It's a pleasure to be back before a committee with which I have worked so closely in the past. And it's an honor to appear, on behalf of the President and the administration, to urge that the Senate provide its advice and consent to ratification of the Additional Protocol.

I have submitted a detailed written statement. And, as you suggest, I will simply make some specific points drawn from that statement.

My main message is a very simple one. Universal adherence to the Additional Protocol will give us important new tools in the fight against nuclear proliferation. Senate advice and consent at an early date will demonstrate U.S. leadership in this area and will encourage widespread adherence to the Additional Protocol by other states. And, finally, the administration is convinced that it can manage the risks associated with implementing the Additional Protocol. I'll explain why that's true for the Department of Energy. My colleagues will discuss other departments' preparations.

In his transmittal package to the Senate, the President said, "Adhering to the Additional Protocol will bolster U.S. efforts to strengthen nuclear safeguards and promote the non-proliferation of nuclear weapons, which is the cornerstone of U.S. foreign and na-

tional security policy."

This committee knows better than anyone that the proliferation of nuclear weapons is among our most important national security challenges. Most parties to the Non-Proliferation Treaty are honoring their obligations, but a small number of states, as you mentioned in your opening statement, have repudiated those obligations or are engaging in activities that raise serious questions about their intentions.

One of the international community's primary tools in verifying compliance with the Non-Proliferation Treaty is the safeguard system with the International Atomic Energy Agency. Now, international regimes, alone, are not sufficient solution to the risk of proliferation, but they're necessary components of an overall strategy that uses all tools, whether international, multilateral, or unilateral. And to have a strong overall non-proliferation strategy, each element of that strategy must be as strong as possible.

Today, the IAEA system of safeguards covers only declared activities, and it's not adequate to detect undeclared activities, and it needs the enhancements the Additional Protocol will provide.

Events over the past decade have shown that effective non-proliferation depends on detecting undeclared activities as early as possible, when potential weapons programs are in their formative stages. By broadening the verification role of the IAEA to include fuel-cycle research and development, related manufacturing, imports and exports of sensitive nuclear equipment, the Additional Protocol will allow the IAEA to detect these undeclared activities earlier.

The need for this became clear in 1991, following the first gulf war. We discovered a well-developed nuclear weapons program in Iraq; and in response to that revelation, under the leadership of the United States, a group of IAEA member states negotiated the so-called Model Additional Protocol to supplement and amend the Model Safeguards Agreement. As I said a moment ago, while the Safeguards Agreement focuses on accounting for material at declared facilities, the Additional Protocol gives the IAEA the tools it needs to discover undeclared programs at the early stage.

Technology transfer, as recent events have made very clear, is an important precursor to actual proliferation, and the Additional Protocol offers the ability to deal with this issue. It's very important, as this committee knows well, that we pursue our own national technical means of detecting proliferation activities—I don't suggest that this or any other agreement is a substitute for that—but it's also vital to ensure that we use the widest possible set of tools. Widespread adherence to the Additional Protocol will strengthen

international efforts to detect and control proliferation.

But if we're going to get the benefits of widespread adherence to the Protocol, the United States must lead the way. Given our dominant position in the world today, there's simply no substitute for U.S. leadership. Now, we've exercised that leadership already, of course. Just like the original Safeguard Agreement, the U.S. Additional Protocol contains a national security exclusion to protect our national security equities. But except for that, the U.S. Additional Protocol contains every word of the IAEA Model Protocol, and we're the only nuclear weapons state that has accepted the Model Protocol in its entirety.

If we hadn't pushed so hard for a strong Model Protocol, and if we hadn't accepted a comprehensive Additional Protocol for ourselves, I believe fewer states would have been willing to accept their own Protocols. The diplomatic reality is that our support for the Additional Protocol and our agreement to accept its implementation have been crucial. Just as we provided the critical push for the Non-Proliferation Treaty by voluntarily agreement to accept

IAEA's Safeguards Agreement in 1980, our acceptance to the Additional Protocol provides an impetus for other countries to conclude and implement their own Additional Protocols.

And Senate advice and consent will allow us to continue this U.S. leadership and renew our efforts to gain universal acceptance of the Additional Protocol. That's clearly in the national security in-

terest of both the United States and our friends and allies.

Now, the benefits of widespread adherence to the Additional Protocol must, of course, be balanced by consideration of the risks to U.S. security from additional IAEA presence in the United States. Department of Energy, as you mentioned in your opening statement, is in a unique position to consider this balance. We have significant non-proliferation responsibilities, and we have a unique role in dealing with the IAEA. But, at the same time, we have responsibilities for safeguarding the U.S. nuclear weapons complex.

Our Department has a long, constructive history of working with the IAEA. And because of this extensive collaborative relationship, we have a vast store of experience and knowledge concerning safeguards. And that knowledge and experience will apply to our implementation of the Additional Protocol. It includes experience in preparing for and supporting IAEA safeguards, while protecting

sensitive U.S. information from disclosure.

And based on this experience, we are convinced that ratification of the Additional Protocol will not endanger U.S. security. That's because along with providing the IAEA with important tools to ferret out undeclared military activities, the Additional Protocol includes a set of robust mechanisms by which the United States can protect commercially sensitive, export-controlled, and classified material.

First method is managed access. Managed access can involve a wide variety of measures—shrouding, closing doors, limiting access, turning off computers—and that will allow us to prevent IAEA inspectors from coming into contact with proliferation-sensitive or

proprietary or commercially sensitive information.

Second, and most important, the United States can unilaterally, and without explanation, invoke a national security exclusion that enables us to deny IAEA access to activities with direct national security significance or to locations associated with those activities. The IAEA has no right to challenge or question the U.S. invocation of the national security exclusion.

So with managed access, the national security exclusion rights, site-specific plans, and our long experience, I am confident that we can fully manage any risks associated with the Additional Protocol. This is not just based on theory. The IAEA currently conducts monthly inspections of safeguarded nuclear materials in three Department of Energy sites under our existing voluntary-offer agreement. It's department 1904 with no significant problems.

ment. It's done so since 1994, with no significant problems.

Now, we expect that if the IAEA seeks access to a DOE site under the Additional Protocol, it will do so only in rare circumstances, and then only after we've had the opportunity to supply additional information that might make access unnecessarily. Thus, in contrast with the monthly inspections that we handle now, we wouldn't expect any regular access beyond that already permitted by our Safeguards Agreement.

My formal statement describes the modest administrative and financial burden that we expect from implementation of the Additional Protocol. At present, we only have preliminary figures and the type and number of activities to be declared, but we've made a firm policy that we'll only declare an activity for which complementary access could be granted without posing a risk to national security equities. If we can't provide access, we won't declare the activity. We'll also make full use of managed access. But, once again, only where we're confident that managed access is sufficient to protect our national security equities. Likewise, we'll protect from disclosure of proprietary or commercially sensitive information. In short, we plan to make full use of our rights under the Additional Protocol to protect our interests while still meeting our obligations.

Our preparations for safeguarding security while implementing the Additional Protocol are detailed in my written statement. They include development of a computerized data base to manage our portion of the U.S. declaration; exercises, both tabletop and fields, to help us understand implementation of complementary access; comprehensive training for DOE officials, both in headquarters and at the field; and development of special training for security personnel; and, finally, close coordination with other agencies.

The risk of nuclear weapons falling into the hands of rogue states is one of the greatest threats to U.S. national security today. The international nuclear non-proliferation regime is one made major line of defense against that threat. Additional Protocols in non-nuclear weapon states will strengthen our efforts to prevent the diversion or clandestine production of fissile material directly enhancing our national security. And U.S. leadership, in adopting our own Protocol, is crucial to gaining adherence from others. We, therefore, urge this committee and the Senate to provide advice and consent to this Protocol as soon as possible.

Thank you very much for your attention. Once my colleagues have made their statements, we'll be prepared to take any questions you may have.

[The prepared statement of Ambassador Brooks follows:]

PREPARED STATEMENT OF AMBASSADOR LINTON F. BROOKS

INTRODUCTION

Mr. Chairman, members of the Committee, thank you for this opportunity to discuss the Additional Protocol and its implications for the Department of Energy (DOE). We seek universal acceptance of the Additional Protocol in the international community as an important goal of U.S. national security policy. As the President said in his transmittal package to the Senate,

Adhering to the Additional Protocol will bolster U.S. efforts to strengthen nuclear safeguards and promote the nonproliferation of nuclear weapons, which is the cornerstone of U.S. foreign and national security policy.

Mr. Chairman, as you and your fellow Committee members are well aware, the proliferation of nuclear weapons is among the United States' foremost national security challenges. While most Parties to the Non-Proliferation Treaty (NPT) are honoring their obligations and share our concerns about the risks of nuclear proliferation, a small number of states have repudiated their obligations or are engaging in activities that pose serious questions about their intentions. One of the international community's primary tools in verifying states' compliance with the NPT is the IAEA's safeguards system.

Strong U.S. support for the Additional Protocol, including U.S. implementation of the Additional Protocol, will promote our objective of verifying other States' compli-

ance with their obligations.

International regimes such as the NPT and IAEA safeguards play a critically important role in reducing the risk of nuclear proliferation. Clearly, these regimes in themselves are not a sufficient solution to the risks of proliferation, but strong US support for them forms a necessary component of a broadly gauged nonproliferation support for them forms a necessary component of a broadly gauged horipromeration strategy that embraces all effective tools, whether they be international, multilateral, or unilateral in nature. Achieving the widest possible international adherence to an effective AP materially serves US national security interests, just as do such recent measures as the Proliferation Security Initiative and our ongoing diplomatic efforts to achieve a peaceful resolution of the proliferation challenge the international community faces in North Korea and Iran.

U.S. diplomatic support for a strong Model Additional Protocol was indispensable during negotiations of the Model Additional Protocol in the mid-1990s in order to overcome concerns posed by other countries about the scope of what would be subject to verification. In response to the limitations of traditional safeguards that were exposed in Iraq following the Persian Gulf War, our objective has been to strengthen IAEA safeguards. Had the United States not pushed so hard for a strong AP, including by accepting a comprehensive AP to its own IAEA safeguards agreement, it is questionable whether we would have achieved this objective. The diplomatic reality is that our support for the AP, and our agreement to accept its implementation in the United States in a manner that is appropriate to our status as a nuclear weapons state, has been critical to getting the AP to where it is today. One can only ponder the possible impact of failing to ratify the U.S. AP, for example, on the effort to get Iran and other countries of concern to implement their own Additional Proto-

As events over the past decade amply show, the effectiveness of nonproliferation efforts depends upon detecting undeclared activities as early as possible, when potential nuclear weapons programs are in their formative stages. By broadening the verification role of the IAEA to include fuel cycle R&D and related manufacturing not involving nuclear materials, as well as imports and exports of sensitive nuclear equipment, the AP advances the stage at which the IAEA can detect undeclared activities. As important as it is to pursue our own national technical means of detecting proliferation activities, it is also vital to ensure that the widest possible net is cast to detect such activities. Our experience under the AP will give us an invaluable window into its effectiveness and whether even further strengthening of the

Our support of the IAEA is long standing. The United States has always maintained a leadership position in the IAEA and in the international safeguards system. Indeed, it was in President Eisenhower's "Atoms for Peace" speech, 50 years ago last month, that one can find the broad outlines of what became the IAEA and of the concept of using international safeguards to verify the peaceful uses of nuclear energy. Continued U.S. leadership is essential to the ability of the IAEA to successfully carry out its vital role in verifying Non-Nuclear Weapons States' com-

pliance with their obligations under the Non-Proliferation Treaty.

The Department of Energy and its predecessor agencies have had a long and constructive history of working with the IAEA. Because of this extensive collaborative relationship, DOE has a vast store of experience with and knowledge of IAEA safeguards. This knowledge and experience, which can be applied directly to the implementation of the Additional Protocol, includes effective preparation for and support of implementation of IAEA safeguards at certain DOE facilities, and protection of sensitive U.S. information from disclosure to IAEA inspectors. Secretary Abraham has reiterated his personal commitment to and support for the Department's strong and effective engagement with the IAEA, including support for IAEA safeguards implemented at DOE facilities.

In 1991, following the first Gulf War, a well-developed nuclear weapons program was discovered in Iraq. In response to that revelation, a group of IAEA Member States, with strong leadership by the United States, negotiated the Model Additional Protocol to supplement and amend the model Safeguards Agreement. While the Safeguards Agreement (also known as INFCIRC/153) focuses on nuclear material accountancy at declared facilities, the Additional Protocol gives the IAEA the tools it needs to discover undeclared nuclear programs at an early stage, and to deter non-nuclear weapons states from undertaking prohibited military programs. The Additional Protocol was opened for signature in 1997. Just as the United States provided a critical push for the NPT by agreeing to voluntarily accept a U.S.-IAEA Safeguards Agreement in 1980, U.S. acceptance of the Additional Protocol will provide an impetus for other countries to conclude an Additional Protocol. Like the original safeguards agreement, the U.S. Additional Protocol contains a national security exclusion to protect U.S. national security equities.

The Administration firmly believes that the universal acceptance of the Additional Protocol is in the national security interest of the United States. The Senate's positive advice and consent to ratification of the Additional Protocol would make the United States a leader by example, and encourage other states to ratify an Additional Protocol.

IMPACT ON THE DEPARTMENT OF ENERGY COMPLEX

Let me also address the impact of the Additional Protocol on the DOE complex. Based on past arms control vulnerability assessments and on our analysis of the Protocol, DOE is confident that it can manage the risk to national security associated by the AP. Other agencies that will be testifying today also have implementation responsibilities for facilities and activities, some that could involve the Department of Energy sites. While I am confident that the AP does not pose an unreasonable burden on the US, and that US national security activities will be protected from disclosure, as a representative of the Department of Energy and the Administrator of its National Nuclear Security Administration, I will address the AP's impact on the Department of Energy complex.

At the same time that the Additional Protocol provides the IAEA with important tools to ferret out undeclared military activities in non-nuclear weapons states, the Additional Protocol also includes a set of robust mechanisms by which DOE can protect its commercially sensitive, export-controlled, and classified assets. The first method is managed access, also referred to as "Article 7 managed access." This managed access involves a wide range of measures, such as shrouding, closing doors, or turning off computers and other equipment to prevent IAEA inspectors from coming into contact with "proliferation sensitive information or proprietary or commercially sensitive information." Second, the United States can unilaterally, and without explanation, invoke a national security exclusion (NSE) under Article 1 that enables the U.S. not to declare or allow IAEA complementary access to "activities with direct national security significance to the United States or to locations or information associated with such activities."

Third, under Article I, the United States also has the right to use managed access associated with the NSE. Managed access under Article 1 is more robust than the Article 7 managed access. We would employ this managed access under Article 1 of the Additional Protocol only where our security evaluation shows that such managed access would mitigate, in a manner acceptable to us, any risk of inadvertent disclosure of national security activities or information to the inspector. I would reiterate that the use of the NSE or managed access under the NSE is entirely unilateral, and the IAEA has no right to challenge or question the U.S. invocation of the national security exclusion. With managed access and the national security exclusion rights combined with Additional Protocol-specific security plans and DOE's past experience with IAEA inspections, DOE is confident that it can fully manage the risks associated with the Additional Protocol.

The IAEA currently conducts monthly inspections of safeguarded nuclear materials at three sites in the DOE complex since 1994. We have applied this extensive experience to our preparations for the AP. We expect, that if the IAEA conducts a complementary access visit to a DOE site under the AP to resolve a question regarding our declaration for the specific activity in question, it would do so only in rare circumstances, and then only after we have had the opportunity to supply additional information in writing. In contrast to the monthly inspections we now support at the three DOE sites under the VOA, we would not expect any regular complementary access visits by the IAEA at DOE sites.

Indeed, while the impact of the Additional Protocol will not be insignificant, it will nonetheless be manageable. The bulk of the time, effort, and expense associated with the Additional Protocol will be in connection with preparations for entry-into-force, particularly in developing the initial DOE portion of the declaration and completing security plans. The Department is continuing to refine its analyses of how many of its sites will be affected by the Additional Protocol. We believe that nearly all the major Department of Energy National Laboratories and facilities will be affected, consistent with implementation of the National Security Exclusion. While the DOE complex has diverse missions and activities, some sites will only have a small number of declarable programs, and in a few cases will have none. Other sites and facilities will have larger numbers of declarable activities.

At this point in time, the Department has only preliminary figures on the type and number of activities to be declared. The declarations will primarily be in the areas of civil nuclear fuel cycle research not involving nuclear material, manufac-

ture of the items listed in Annex II of the Additional Protocol (such as equipment to build and maintain nuclear reactors and enrichment equipment), and exports of items listed in Annex II. I should note that the Department already, under a voluntary arrangement with the IAEA, declares certain exports. The Additional Protocol will formalize this arrangement. Based on analyses carried out to date, we believe that the number of DOE declarable items will be in the low 100s. We will further refine this estimate as we move forward in our preparations for entry into force. I will discuss the Department's on-going preparations for the Additional Protocol in more detail shortly.

In addition to the cost in time and effort, there will be a financial cost to implement the Additional Protocol. Current budget estimates indicate that the Department will require approximately \$3.5 million for headquarters, including the funds already allocated, to prepare the complex. In addition, the up-front preparation costs for each site, including the cost of comprehensive vulnerability and security assessments will be an estimated \$220 thousand per site, for a total of approximately \$10 million. Please keep in mind that this is an upper bound, and as the Department gains experience in preparing for the Additional Protocol, these estimates may decrease. I would also note that this is a one-time expense in preparing for entry-into-force. The annual cost of the Additional Protocol will be approximately 10% of the initial cost per year for the first couple of years and less in the out-years.

PROTECTION OF NATIONAL SECURITY EQUITIES

Before I continue any further, I would like to highlight the steps that the Department of Energy is currently taking and will take in the future to protect the very important national security equities at our sites and facilities. DOE already has a great deal of practical experience in preparing declarations and carrying out inspections under the current U.S.-IAEA Safeguards Agreement (also known as the Voluntary Offer Agreement [VOA]), while still protecting adjacent national security equities. Since 1994, the IAEA has been carrying out monthly inspections of highly enriched uranium and plutonium at multiple DOE facilities, and currently carries out inspections at three DOE facilities: the Y-12 Complex near Oak Ridge, Tenessee; the Hanford Site near Richland, Washington; and the Savannah River Site near Aiken, South Carolina.

In preparation for these traditional IAEA safeguards inspections, comprehensive vulnerability assessments were completed, and specific, detailed security plans were developed and implemented to prevent inadvertent disclosure of sensitive and classified information to the inspectors. The Department will conduct site-specific vulnerability assessments (VAs) for DOE facilities where potentially declarable activities under the Additional Protocol are taking place, to determine whether or not we can offer the IAEA access to those activities.

DOE will only declare an activity for which complementary access could be granted without posing a risk to national security equities. Let me be clear on this. If DOE cannot provide access, for whatever reason, we will not declare the activity. We will make full use of managed access measures where we are confident that they will protect our national security equities, including proliferation sensitive information. Likewise, we will protect from disclosure proprietary or commercially sensitive information. In short, we will make full use of our rights under the Additional Protocol to protect these interests, while meeting our obligations under the Protocol.

It want to be equally clear that our exercise of our NSE rights under the Protocol.

I want to be equally clear that our exercise of our NSE rights under the AP will not allow Non-Nuclear Weapon States (NNWS) to follow suit. That is because the NSE right in Article 1 of the U.S. Additional Protocol, which is available to us as a Nuclear Weapon State in NPT terms, is not available to NNWS. The NSE in the US AP parallels the exclusion of defense nuclear materials under our Voluntary Offer safeguards agreement with the IAEA, which is similarly unique.

DOE Orders require that site security personnel conduct operational security reviews of sensitive equities on a periodic basis. The frequency of these reviews is determined by the levels of sensitivity. For example, Top Secret and Special Access Programs have the highest frequency. Specific guidance for the conduct of reviews pertaining to the Additional Protocol is under development and is expected to be issued in the near future.

Over the past ten years, the Department has conducted vulnerability assessments and exercises at most of its facilities to ascertain whether or not a wide variety of arms control regimes could be accommodated. These activities have been related to the Chemical Weapons Convention, the Fissile Materials Cutoff Treaty, the Strategic Arms Reduction Treaty, the Biological weapons Convention, and the Additional Protocol. Arms control assessments were conducted at five facilities last year. An exercise was also conducted last fall. The conclusion that the Department has drawn

from these assessments and exercises is that national security equities at Department of Energy and National Nuclear Security Administration sites can be protected under the Additional Protocol, provided that the United States can exercise managed access and the national security exclusion. Thus, while we shall continue our preparations for the AP, we are confident that we will protect our national security interests from disclosure under the AP. I base this confidence on conclusions of particular analyses tailored to the AP regarding protecting national security interests at DOE locations, as well as over a decade's experience in assessing vulnerabilities under arms control agreements of varying intrusiveness and our experience with supporting IAEA inspections under the VOA.

The Department is in the process of identifying potentially declarable activities under the Additional Protocol. Once these activities are identified, the Additional Protocol-specific assessments will be conducted at each of the impacted sites to determine which activities can be declared. These assessments will be conducted as part of the on-going site OpSec programs and will be coordinated with other federal agencies that have security interests. Finally, let me repeat that DOE will not declare under the Additional Protocol any activity or location for which it cannot grant complementary access, because of the nature of the activity itself, other agencies' affected national security equities or because of location-related national security

concerns.

DEPARTMENT OF ENERGY PREPARATIONS FOR THE ADDITIONAL PROTOCOL

The Department of Energy has already begun preparations should the Additional Protocol enter into force. DOE has begun the development of an Additional Protocol Reporting System (APRS). The APRS is a computerized database that will collect, store, and update the DOE portion of the USG Additional Protocol declaration. Because of the unique nature of the DOE portion of the Additional Protocol declaration, DOE sites will not input directly into the United States Government system under development by the Department of Commerce. Site security and OpSec personnel with knowledge of national security activities at those locations will rigorously scrub individual candidate declaration entries prepared by other site personnel, and there will be additional scrutiny at the headquarters level. Furthermore, since the DOE provides national security related products and services to the Department of Defense (DoD), the DOE declaration will be also receive a DOD review prior to submission to the USG declaration compiled by the Department of Commerce (DOC). The combination of these steps will give the DOE complex an extra layer of security and assurance. DOE is working closely with the Department of Commerce to ensure that the two systems will be able to communicate with each other. While exact numbers are not known at this time, the DOE APRS is expected to maintain a declaration of a few hundred entries. This declaration is dynamic and will change over time. DOE has developed a comprehensive and precise set of guidelines to ensure that personnel in the field will be able to determine whether projects are declarable or not.

Another element of our preparations involves exercises to give us a hands-on perspective on implementation of complementary access. Recently, DOE held a tabletop exercise for DOE Headquarters personnel and national laboratory representatives at Oak Ridge National Laboratory to test some assumptions about how an IAEA complementary access visit under the Additional Protocol would work. Subsequently, representatives from the rest of the interagency, conducted a U.S.-only field trial to test certain DOE and Administration assumptions about how the Additional Protocol would be implemented in the United States. It was an invaluable test of the system, giving DOE personnel, laboratory staff, and interagency representatives real hands-on experience with a mock complementary access visit. DOE intends to run more tabletop and field trial exercises. We are currently planning a tabletop exercise at a nuclear weapons lab to simulate application of the NSE to the declaration process and complementary access, under NSE managed access conditions, to a declar-

able activity (e.g., a civil fuel cycle R&D program).

In a wider context, the Department has undertaken a comprehensive outreach program to inform the DOE Headquarters, field operations offices, laboratories, and sites of their rights and responsibilities under the Additional Protocol. The program consists of management briefings, detailed staff tutorials and training on complementary access, making declarations, and using the Additional Protocol Report-

ing System. Specialized training will be developed for security personnel.

In its preparations for the Additional Protocol, DOE has been coordinating closely with other relevant agencies. Regular working level meetings are held among the concerned agencies to discuss policy issues. Additionally, DOE is working with the Department of Commerce to ensure that compatibility between the DOE and USG Additional Protocol Reporting Systems. Finally, DOE has begun regular meetings with DOD to ensure that DOD equities at DOE sites are protected. We will similarly ensure that the national security equities of other U.S. Government agencies at our facilities will be protected.

CONCLUSION

Let me conclude by reiterating the Administration's commitment to the IAEA and the Additional Protocol. The risk of nuclear weapons falling into the hands of rogue states or terrorists is one of the greatest threats to U.S. national security today, and the international nuclear non-proliferation regime is a primary line of defense. Protocols in Non-Nuclear Weapon States will strengthen our efforts to prevent the diversion or clandestine production of fissile material, directly enhancing the national security of the United States. We believe that the widespread adoption of the Additional Protocol is strongly in U.S. interests and that U.S. leadership in adopting the Protocol ourselves is critical. I urge you to provide your advice and consent to this Protocol in an expeditious manner. Thank you for your time and attention. I am now prepared to take any questions you may have.

The CHAIRMAN. Thank you very, very much for that testimony. It is so important to our consideration today, thanks to the broad experience that you bring to the table.

It's a pleasure now to call on the Honorable Peter Lichtenbaum, then Secretary Burk, and Secretary Esper.

Secretary Lichtenbaum.

STATEMENT OF HON. PETER LICHTENBAUM, ASSISTANT SECRETARY OF COMMERCE FOR EXPORT ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE, WASHINGTON, DC

Mr. LICHTENBAUM. Thank you very much, Mr. Chairman. And thank you for the opportunity to testify before the committee today on the impact of the Additional Protocol on the U.S. commercial nuclear industry, and the role of the Commerce Department in the implementation of the Additional Protocol. Like Ambassador Brooks, I urge the Senate's advice and consent to the Additional Protocol.

Regarding the impact of the Additional Protocol on U.S. industry, the Additional Protocol will expand declaration requirements and access provisions to include upstream and downstream nuclear fuel-cycle activities. These include mining and milling, research and development, equipment manufacturing, exports and imports, and waste processing.

Commerce does not expect that implementing the Additional Protocol will be overly burdensome on U.S. industry. Based on studies conducted for the U.S. Government, we estimate that no more than 500 operating commercial locations under our responsibility will have to file declarations. And based on discussions with the IAEA, we anticipate that the United States would receive no more than a few complementary access visits annually.

a few complementary access visits annually.

We expect that the cost to industry of submitting declarations and participating in any access visits will be fairly low. Based on data from industry compliance with the Chemical Weapons Convention, or CWC, it takes an average of 5 hours to complete a declaration. The cost of an access visit under the CWC has been about \$30,000; however, we expect the cost under the Additional Protocol to be lower than that, since Additional Protocol inspections will be more limited.

As far as Commerce's role in implementing the Additional Protocol, we will have two key responsibilities. First, we will help industry comply with the Additional Protocol, consistent with Commerce's overall role to assist U.S. industry to comply with international arms-control agreements. Second, we will establish and run the system to integrate all U.S. information into our national declaration.

Regarding the first area of responsibility, Commerce will be responsible for implementation for commercial activities not licensed by the Nuclear Regulatory Commission, or NRC. Commerce will, however, work with the NRC so that U.S. companies know which regulations apply to them. Since some companies may have to comply with both Commerce and NRC rules, depending on their activities, we will work with the NRC to ensure that our rules are complementary, and we will jointly develop declaration forms and conduct outreach.

Commerce will help the industry comply with the Additional Protocol following the same principles as we have used to help indus-

try to comply with the CWC.

First, demonstrating industry compliance. We will conduct seminars, training, and other outreach to industry in order to assist companies in understanding and implementing their declaration and complementary access obligations. We will also offer site-assistance visits and assistance in advance of inspections to compa-

nies that seek help.

Second, protecting confidential information. In our outreach, we will help companies to identify and protect proprietary and other sensitive information and technology. Commerce will manage complementary access visits at commercial locations under our responsibility. We will escort inspectors from the IAEA from the time they arrive at the front gate of the location until they depart the location. In addition, Commerce will vigorously employ the managed-access measures permitted under Article 7 of the Additional Protocol and contained in the U.S. subsidiary arrangement to protect confidential or proprietary information.

And, third, regarding minimizing burdens on the U.S. industry. At the declaration stage, the information that we will require companies to submit by regulation will be kept to the minimum necessary to meet U.S. treaty obligations. The declaration form itself will be developed in a user-friendly way; for instance, by allowing companies to check boxes, rather than write text. We will maintain an Additional Protocol Web site so that companies have quick access to information. And we will seek to use the clarification proc-

ess to avoid any need for a complementary access visit.

I mentioned that we have a second responsibility to integrate information submitted to us and other agencies of the government for ultimate submission to the IAEA. And as part of that, we will develop a secure, but unclassified, Additional Protocol Reporting System, or APRS. The APRS will collect and process industry submissions and will aggregate all agency declaration information into a U.S. national declaration for transmission to the IAEA. This system will permit agencies to identify activities with direct national security significance in order to protect them through the national security exclusion.

There are many risks associated with releasing the identity and activities of commercial locations. Therefore, we believe the U.S. Government needs an effective means of preventing the domestic release of information contained in the Additional Protocol Reporting System. An exemption from Freedom of Information Act disclosure, as contained in the implementing legislation, would provide such protection.

In conclusion, Commerce plans to implement the Additional Protocol so as to ensure U.S. industry's compliance, while minimizing burdens and avoiding any national security vulnerability.

I would be happy to respond to any questions from the committee following my colleagues' testimony.

Thank you.

[The prepared statement of Mr. Lichtenbaum follows:]

PREPARED STATEMENT OF ASSISTANT SECRETARY PETER LICHTENBAUM

COMMERCE DEPARTMENT ROLE IN IMPLEMENTING THE U.S. ADDITIONAL PROTOCOL

Chairman Lugar, Senator Biden, and Members of the Committee:

Thank you for the opportunity to testify before the committee today on the impact of the Additional Protocol (Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America) on the U.S. commercial nuclear industry and the role of the Department of Commerce in implementation of the Additional Protocol. As you know, the mission of the Commerce Department's Bureau of Industry and Security (BIS) is to advance U.S. national security, foreign policy, and economic interests. BIS's responsibilities include assisting U.S. industry to comply with international arms control agreements. It is in this capacity that I am testifying before you today.

Background

The Additional Protocol is a critical amendment to the Safeguards Agreement. It will expand declaration requirements and access provisions beyond facilities handling source or special fissionable material to include upstream and downstream nuclear fuel cycle activities, such as mining and milling, research and development, equipment manufacturing, exports and imports, and waste processing. The recent discoveries by the International Atomic Energy Agency (IAEA) in Iran demonstrate the limitations of the Safeguards Agreement and the benefits of inspectors' ability to access the full scope of nuclear fuel cycle-related activities to ensure a non-nuclear-weapon state's compliance with the Nuclear Non-Proliferation Treaty.

Commerce and NRC Roles

The Additional Protocol, by expanding the application of the U.S. Safeguards Agreement to civil nuclear activities, subjects additional U.S. commercial locations to declaration and complementary access requirements. The Nuclear Regulatory Commission (NRC) will have the lead role for commercial activities that it licenses (e.g., uranium mills, infrastructure supporting facilities, and equipment exports). BIS will be responsible for implementation as it applies to any commercial activity not licensed by NRC, including uranium mining, research and development not involving nuclear materials, and manufacturing and importing of specially designed nuclear equipment. To assist U.S. companies in determining to which regulations they are subject, BIS and NRC will ensure that our rules are complementary, and will jointly develop declaration forms and conduct outreach.

BIS Approach

BIS has a successful history of assisting industry to comply with the only other international arms control treaty that directly affects U.S. commercial activities: the Chemical Weapons Convention (CWC). Our approach to ensuring U.S. compliance has been both novel and successful. We have developed a partnership with commercial facilities built upon three guiding principles:

- (1) Demonstrating industry compliance;
- (2) Emphasizing the protection of confidential information; and
- (3) Minimizing burdens and costs to industry.

This approach has been successful from a compliance standpoint and has been commended by the largest domestic chemical industry trade group. We intend to implement the industry compliance provisions of the Additional Protocol following these same principles.

Additional Protocol Reporting System

As part of our implementation responsibilities, BIS has been tasked to develop a secure Additional Protocol Reporting System that will collect and process industry submissions, and will aggregate all agency information collected from declarations into a U.S. national declaration for transmission to the IAEA. As part of this system, BIS is developing an electronic tool that will permit agencies to identify activities with direct national security significance to the United States in order to protect these equities through a national security exclusion (NSE). Under Article 1.b of the Additional Protocol, the United States reserves the right to exclude locations or activities of direct national security significance from declaration to the IAEA. BIS regulations will instruct companies not to submit classified information with declarations. Nevertheless, the identification of activities and locations of certain companies, including defense contractors, could require the U.S. Government to exercise the NSE for commercial activities in order to guard against the potential to disclose information of direct national security significance. For example, this situation could exist where a program of direct national security significance is co-located with unrelated commercial activities (e.g., equipment manufacturing). The U.S. Government has the right to exercise the NSE to prevent such sensitive information from being submitted to the IAEA.

Protection of Sensitive Information

Additionally, declaration information must be protected from domestic release. There are many risks associated with releasing the identity and activities of commercial locations engaged in nuclear fuel cycle activities. Therefore, the U.S. Government needs an effective means of preventing the domestic release of information contained in the unclassified Additional Protocol Reporting System. A statutory exception to Freedom of Information Act disclosure would provide the means of protecting our sensitive commercial information and the identity of those sensitive locations. Moreover, our right under the Additional Protocol to exercise the NSE would be undermined if information pertaining to excluded locations or activities were subject to domestic release.

Simplified Reporting

Based on studies conducted by the Departments of Commerce and State, we estimate that no more than 500 commercial locations or activities outside of the NRC's jurisdiction will be subject to declaration (excluding the one-time submission of declarations for abandoned uranium mines, which may total more than 1,000). Information required to be submitted will be kept to the minimum necessary to meet U.S. treaty obligations. In order to simplify reporting requirements, we are developing check-box forms that limit the need for free-style writing. Companies engaged in multiple activities subject to declaration may submit a combined declaration. BIS also will permit commercial locations to submit declarations electronically via the internet. After submitting initial declarations, companies whose activities remain unchanged from the previous calendar year will simply need to submit a "no-change" form, thereby further reducing paperwork burdens.

Industry Outreach

As was done in preparation for CWC implementation, BIS will conduct seminars, training and other outreach to industry in order to assist companies in understanding and implementing their declaration and complementary access obligations. We will also offer site assistance visits to companies that seek help in preparing for inspections. A primary focus of such outreach is to assist companies in identifying and protecting proprietary and other sensitive information and technology.

Complementary Access

As we have successfully done during 47 CWC inspections, BIS will manage complementary access visits at commercial locations. BIS will escort inspectors from the time they arrive at the front gate of a location until they depart the location. Based on discussions with the IAEA, we anticipate receiving no more than a few such visits annually. We will work with the Department of Defense and other agencies to ensure that a security countermeasures expert is available to participate on BIS host teams and to provide expertise with regard to inspecting IAEA equipment for integrity and safety purposes.

Advance Preparation for Complementary Access

Under the CWC, we have found that the ability to provide advance assistance to facilities prior to the inspection team's arrival is invaluable. Such assistance includes training company personnel on escort techniques to facilitate compliance with verification aims and to protect confidential information. We will make such services available in the event of a complementary access visit under the Additional Protocol as well. Moreover, should an inspection take place at a location under contract by the U.S. Government, any agency concerned will participate on the host team and instruct BIS as to whether and how to invoke the NSE to manage access pursuant to Article 1.c of the Additional Protocol.

Managed Access and Protection of Confidential Information

In addition, BIS will vigorously employ the managed access measures permitted under Article 7 of the Additional Protocol and contained in the U.S. Subsidiary Arrangement to protect confidential or proprietary information. Invocation of managed access techniques does not require advance agreement with the IAEA. As with our implementation of CWC inspections, we will work closely with companies to identify and protect confidential information, and will not respond to IAEA inspector questions not directly related to compliance with the Additional Protocol.

Basis for IAEA Complementary Access

The most effective way to protect confidential and other sensitive information is to avoid complementary access visits. The United States has no plans to volunteer a commercial location for complementary access. Unlike the routine inspection provisions of the CWC, the IAEA will not seek to routinely verify declarations submitted pursuant to the Additional Protocol. For uranium mines, the IAEA has access on a selective basis to assure the absence of undeclared nuclear material and activities. For all other commercial locations that will be subject to BIS regulations, the IAEA will have access to a location only after the IAEA gives the United States an opportunity to resolve a question or inconsistency and only where the visit would be consistent with the requirements of the Fourth Amendment. BIS's objective is to ensure the submission of complete and accurate declarations in order to preclude the need for complementary access at these commercial locations. In addition to providing support to companies to ensure accurate declarations, BIS will work closely with companies to develop a comprehensive U.S. response to an IAEA clarification request if one is received.

Nevertheless, prudent planning dictates that BIS conduct site assistance visits to help locations prepare for complementary access visits, particularly any locations that are co-located with sensitive programs. As demonstrated under the CWC, hosting an inspection is greatly facilitated by advance planning and proper execution

Voluntary Consent and Warrants

Regardless of the location to be inspected, the Administration's draft implementing legislation provides that a complementary access visit will not occur unless a company grants consent or an administrative search warrant is obtained, except in any situations where such consent or warrant is not required by the Fourth Amendment.

IAEA Protection of Confidential Information

Article 15 of the Additional Protocol requires the IAEA to maintain a stringent regime to ensure protection of confidential information. No information submitted to the IAEA is subject to release without a state party's consent. While certain confidential information may be required to be released to the IAEA in order to comply with the Additional Protocol, it will be kept to a minimum and the U.S. Government will closely monitor the IAEA's adherence to the requirements of protecting such information. At a minimum, BIS will review all information prior to release to IAEA inspectors to ensure it is relevant to the Additional Protocol. Additionally, no company documentation, including photographs, may be taken off-site by IAEA inspectors without BIS's approval.

Vetting of Inspectors

In preparation for complementary access visits, the U.S. Government has the right to exclude certain inspectors from inspecting locations in the United States. We will work with the interagency community to exercise this right with regard to nationals from terrorist-supporting countries and will take account of espionage concerns when vetting inspector lists.

Entry-Into-Force

With regard to entry-into-force, we are committed to implementing the requirements of the Additional Protocol as soon as possible after ratification and enactment of implementing legislation. However, to ensure that proper protections are established and industry has adequate time to understand and implement its reporting obligations, entry-into-force will not occur until BIS publishes its regulations in final form and vulnerability assessments of declared locations of direct national security significance are completed. In the interim, BIS will promulgate a proposed rule and offer interested parties an opportunity to comment.

Expected Low Burden to Industry

Based upon the limited response to our request for public comments on the Additional Protocol in a Federal Register Notice of Inquiry and discussions with the Nuclear Energy Institute, we do not anticipate that implementation will be overly burdensome on industry. The Nuclear Energy Institute has stated that it ". . . does not foresee significant burdens on industry from ratification and imposition of the U.S. Additional Protocol." $^{\rm 1}$

Our experience with implementing the CWC's declaration and inspection requirements also suggests that the impact of the Additional Protocol on industry will be modest. The limited amount of information required to be declared will minimize the burden on industry from filling out forms. Moreover, complementary access visits will occur less frequently and their duration will be much shorter than CWC inspections, based on the IAEA's current practice in other states that have implemented the Additional Protocol. As we proceed with implementation, BIS will coordinate closely with affected companies to ensure declaration forms are user-friendly and implementation procedures are fully understood.

CONCLUSION

In conclusion, while the bulk of U.S. locations affected by the Additional Protocol are engaged in purely commercial or academic activities, the burdens are expected to be low and the potential vulnerabilities can be mitigated through a public-private partnership. The Department of Commerce recognizes the international non-proliferation benefits of this agreement and will do its utmost to support the treaty's nonproliferation goals. We will demonstrate industry compliance while protecting confidential information and minimizing the burden on industry.

The CHAIRMAN. Well, thank you very much, Secretary Lichtenbaum.

At this point, let me indicate that I have received word that Senator Biden will not be with us. And let me offer a word of explanation to our witnesses, as well as to those who are in the hearing today. Both of the political parties, Republican Senators and Democratic Senators, are involved in policy retreat deliberations today and tomorrow, and so they are there doing that work. But I felt that the issue before us, this Protocol, is so important so we should proceed today. We very much appreciate your cooperation in coming.

Obviously, the full record will be made available to our colleagues. We will have a committee markup in which they will have an opportunity to read the materials and to discuss them fully. As I have indicated, the staff, Republican and Democratic, have been very active in working with the administration, including figures such as yourselves, to make certain that we do the right thing for the country and that, as rapidly as possible, we have a very sound piece of legislation to place before the Senate.

¹ "Comments on the Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency Concerning the Application of Safeguards in the United States of America ("U.S. Additional Protocol") [67 Fed.Reg. P. 70049-November 20, 2002]", Nuclear Energy Institute, January 23, 2003.

So I will put in the record Senator Biden's opening statement, which will come directly after the one that I delivered this morning, and before the testimony of our witnesses.

I now call upon Secretary Burk.

STATEMENT OF MS. SUSAN F. BURK, ACTING ASSISTANT SECRETARY OF STATE FOR NON-PROLIFERATION, U.S. DEPARTMENT OF STATE, WASHINGTON, DC

Ms. Burk. Thank you very much.

Mr. Chairman, I want to thank you and the committee for inviting me here today to discuss the U.S.-IAEA Additional Protocol (USAP), an important amendment to our longstanding Safeguards Agreement with the International Atomic Energy Agency (IAEA).

The President strongly believes that implementation of the U.S.-IAEA Additional Protocol is in the best interest of the United States. Senate approval of the Additional Protocol will help sustain our longstanding record of voluntary acceptance of nuclear safeguards and greatly strengthen our ability to promote universal adoption of the Model Additional Protocol, a central goal of the President's non-proliferation policy.

Mr. Chairman, your original request was for Under Secretary of State John Bolton to appear before you today. As he discussed with you last week, unfortunately he cannot be here, as he is in Moscow for consultations on various international security matters. Please be assured, however, that the testimony I will give today, on behalf of the administration, in favor of ratification represents the administration position, which, of course, Mr. Bolton fully supports.

I'd like to summarize some of the key points from the longer tes-

timony which we have submitted for the record.

First, let me begin by discussing our experience, to date, in implementing IAEA safeguards, pursuant to our Safeguards Agreement with the IAEA, which has been in force since 1980. We concluded this agreement, also known as the U.S. Voluntary Offer, to demonstrate our willingness to accept international safeguards under virtually the same terms and conditions that non-nuclear weapon states are called upon to accept safeguards under the Nuclear Non-Proliferation Treaty.

The key difference in our Voluntary Offer is the inclusion of our right to invoke, unconditionally, a national security exclusion to protect national security information. Under that agreement, the U.S. has made available for IAEA's safeguards inspection over 250 civil nuclear facilities. These include a large number of power reactors and research reactors, commercial fuel fabrication plants, ura-

nium enrichment plants, as well as other types of facilities.

In the case of a non-nuclear weapon state, the IAEA would have an obligation to inspect any such facility, as well as many other locations where nuclear material is used. In the United States, in contrast, the IAEA has the right, but not the obligation, to select facilities for inspection. In more than two decades, the IAEA has conducted inspections at only 18 of these facilities, and never at more than five facilities in any one year. These inspections have been carried out on a cooperative basis with the United States, and I'm confident that this longstanding pattern of cooperation will continue as we implement the Additional Protocol.

In order to explain why the Additional Protocol is so important to curbing proliferation, we need to step back to the end of the Persian Gulf war when the world community learned the extent of Iraq's clandestine pursuit of an advanced program to develop nuclear weapons. Although the IAEA had not been lax in fulfilling their obligations in Iraq, Iraq's nuclear program had been completely and deliberately hidden from IAEA inspectors. IAEA member states simply had not given the agency the tools and mandates to detect a clandestine program such as Iraq's.

To address this program, the IAEA Board of Governors agreed on a series of measures that it could take to strengthen safeguards under its existing legal authority. It also agreed to begin negotiation on another set of measures, which it did not then have the legal authority to implement. These measures came to be incor-

porated in the Model Additional Protocol.

The United States took a leading role in the negotiations of the Model Protocol. Several other industrialized states, including close allies, were hesitant to support so substantial an expansion of declaration requirements and IAEA access. Following the example of our Voluntary Offer, the United States stated during the negotiations that it would accept the provisions of the Model Protocol, subject to a national security exclusion. By continuing our willingness to submit to the same safeguards on all of our civil nuclear facilities that non-nuclear weapon states parties to the NPT are subject to, the United States intends to demonstrate that adherence to the Model Protocol does not place other countries at a commercial disadvantage. We strongly believe our success in achieving a strong Model Protocol depended on our voluntary acceptance of all measures in the Model Protocol.

Similarly, U.S. signature of our Additional Protocol was a significant factor in the early decision by many non-nuclear weapon states to accept the protocol. A number of our close friends and allies have also relied on our pledge in persuading their legislatures

to approve their Additional Protocols.

The Additional Protocol requires non-nuclear weapon states to declare, to the IAEA, a number of nuclear and nuclear-related items, materials, and activities that, while they could be part of a peaceful nuclear program, would also be required for a covert nuclear weapons program. Specifically, non-nuclear weapon states must report exports of nuclear-related items controlled by the Nuclear Suppliers Group, confirm imports of such items, and report domestic manufacturing of key items. These states must also report exports, imports, and stockpiles of raw uranium and thorium that could be used as feed material for a covert nuclear program, as well as information related to uranium mines, uranium and thorium concentration plants, uses of each building on the sites of safeguarded nuclear facilities, construction of new nuclear facilities, and certain nuclear-related research and development work not involving nuclear material. Thus, a proliferator having an Additional Protocol in force would have to successfully conceal a much broader range of activities and facilities in its covert nuclear program to escape detection.

The Additional Protocol provides the IAEA with three important types of access rights to enable it to detect and expose cheating through use of spot-checks, as needed, in non-nuclear weapon states. These include: Access to locations declared by the state where nuclear facilities or materials are located, "on a selective basis," in order to assure the absence of undeclared nuclear material and activities; Access rights at other declared locations that could contribute to a nuclear program, to be exercised only in the event of a question or inconsistency related to the state's declarations. Such access is allowed, in general, only following consultation with the state to resolve the question or inconsistency; and Circumscribed access rights at undeclared locations, also available only in the event of a question or inconsistency related to the state's declarations. Again, such access normally follows consultation with the state to resolve the question or inconsistency. In addition, the range of activities that the IAEA may carry out at undeclared locations is narrowly restricted.

The U.S. Additional Protocol includes all the above provisions of the Model Protocol, but, as is the case in our Voluntary Offer Safeguards Agreement, the Additional Protocol also includes one other major provision that is unique to our status as a nuclear weapons state: the "national security exclusion." This provision states the United States will apply, and permit the agency to apply, the provisions of the protocol, "excluding only instances where its application would result in access by the agency to activities with direct national security significance to the United States or to locations

or information associated with such activities."
Unlike the Chemical Weapons Convention, the Intermediate Range Nuclear Forces Treaty, and other treaties that rely on procedural restraints on inspectors to protect U.S. national security interests, the United States has the right to deny access or exclude inspection activities on the basis of the national security exclusion. Since the national security exclusion makes clear that the United States will have undeclared nuclear material and activities, both the United States and the IAEA, as well as the IAEA member states, recognize that inspections in the United States serve primarily the symbolic purpose of demonstrating U.S. commitment to safeguards and its willingness to accept the burdens that their applications might entail.

In particular, the United States will not provide to the IAEA information of direct national security significance to the United States, or access to activities and locations of direct national security significance to the United States; and exclude inspector activities that are inconsistent with the national security exclusion at a given location. The national security exclusion, therefore, gives the United States an extraordinary, broad, legal means to prevent the

transfer of information to the IAEA.

The Model Protocol's provisions regarding declarations and access are aimed at making it harder for cheaters, such as Iran, Iraq, North Korea, and Libya, to hide undeclared nuclear activities, as you mentioned in your statement, and either at declared facilities or at other locations. For this reason, the Protocol gives the IAEA access rights in short timeframes, particularly to un-safeguarded buildings at sites of declared nuclear facilities.

If an Additional Protocol had been in force, safeguards inspectors at Irag's Tuwaitha facility could have required access to other buildings at that site within a period as short as 2 hours, and this would have enabled them to detect elements of Iraq's clandestine nuclear weapons program. In this way, the Protocol seeks to force a prospective proliferator to hide its covert activities away from its declared nuclear activities, where they are easier to detect.

Iraq and others have also carried out covert activities far from declared sites, to avoid IAEA access. To address this problem, the Additional Protocol gives the IAEA the authority to seek access at undeclared locations based on questions and inconsistencies that arise regarding the state's declaration. The IAEA can, thus, act on evidence uncovered in its internal information evaluation efforts or

provided by members states or other credible sources.

Perhaps the best example of the benefits of the Protocol is the present situation in Iran. While there have long been grounds for concern about Iran's nuclear activities, the existing safeguard system permitted Iran to carry out many aspects of its program undetected. Under its Safeguards Agreement with the IAEA, Iran was not required to declare the construction of key facilities. It was slow to grant access to a variety of locations, and balked at IAEA use of sensitive environmental sampling techniques at a key location suspected of enrichment-related activities. If Iran had had an Additional Protocol in force, it would have had an obligation to declare many of these and other activities at an earlier stage.

Thus, a key non-proliferation goal of the United States has been to increase non-nuclear weapon states adherence to the Additional Protocol. Entry into force of the U.S.-IAEA Additional Protocol would provide a powerful tool in furthering this goal and, thereby,

enhance U.S. national security.

Throughout the negotiation of the Model Additional Protocol, there was strong interest in giving the IAEA the tools it needed to conduct inspections, while protecting the rights of the states inspected. In addition to the national security exclusion, the U.S. Additional Protocol includes the same protections for commercially sensitive information as the Model Protocol. For example: Information on nuclear R&D activities declared to the IAEA is limited to location and general description, and does not include details or results; Information declared to the IAEA on nuclear-related manufacturing is limited to location and the scale of operation.

Access is designed to be infrequent and for research and development, as well as nuclear-related manufacturing, based on unresolved questions or inconsistencies. Inspection activities are limited, and relevant to detection of undeclared nuclear material and

activities.

No other state may request IAEA access in the United States, unlike the challenge inspection system under the Chemical Weapons Convention. The IAEA is required to maintain a stringent regime for protection against disclosure of commercial, technological, and industrial confidential information, and the regime is subject to periodic review and approval by the United States and other IAEA board members.

Only those individuals to whom the United States agrees may be assigned by the IAEA to conduct inspections in the United States under the U.S. Safeguards Agreement or for access under the U.S. Additional Protocol. If the U.S. objects to a particular individual on

the proposed list of inspectors, and so notifies the IAEA, the IAEA must remove that person from the list of inspectors designated for the United States.

Whenever requested by the United States, managed access arrangements must be used to prevent disclosure of proliferation sensitive information or proprietary or commercially sensitive information. And, finally, both the IAEA and its officers or employees may be subject to legal process in the event of unauthorized disclosure of confidential information. The IAEA can withdraw immunity of inspectors in cases of abuse.

In conclusion, Mr. Chairman, the administration believes that Senate advice and consent to ratification of the U.S. Additional Protocol will advance the national security interests of the United States by strengthening the global nuclear non-proliferation regime. At the same time, the administration believes that adequate protections have been built into the Protocol to ensure that its application in the United States will not compromise activities or information of direct national security significance.

I want to thank you. And I also look forward to any questions when my colleagues have finished.

[The prepared statement of Ms. Burk follows:]

PREPARED STATEMENT OF ACTING ASSISTANT SECRETARY SUSAN F. BURK

INTRODUCTION

Mr. Chairman: thank you and the Committee for inviting me here today to discuss the U.S.-IAEA Additional Protocol (USAP), an important amendment to our longstanding safeguards agreement with the International Atomic Energy Agency (IAEA). The President strongly believes that implementation of the U.S.-IAEA Additional Protocol is in the best interest of the United States. Senate approval of the Additional Protocol will help sustain our longstanding record of voluntary acceptance of nuclear safeguards and greatly strengthen our ability to promote universal adoption of the Model Additional Protocol, a central goal of the President's non-proliferation policy.

Mr. Chairman, your original request was for Under Secretary of State John Bolton to appear before you today. As he discussed with you last week, unfortunately he cannot be here today as he is in Moscow for consultations on various international security matters. Please be assured, however, that the testimony I will give today on behalf of the Administration, in favor of ratification, represents the Administration position, which of course Mr. Bolton fully supports.

As the number of non-nuclear weapon states adhering to Additional Protocols increases, the international nuclear safeguards system will be strengthened. It will give greater capabilities to provide assurance to the United States and other nations that nuclear activities in non-nuclear weapon states are directed toward peaceful purposes only. Implementation of Additional Protocols will help dissuade potential proliferators from using safeguarded nuclear material for other than peaceful purposes, or engaging in clandestine nuclear activities, because of the increased risk of being caught.

ORIGIN OF THE ADDITIONAL PROTOCOL

I would like to begin by underscoring that the United States relies heavily on the IAEA safeguards system to detect and deter the diversion of nuclear material for use in covert weapons programs. The IAEA, as the recognized international nuclear inspection organization, is instrumental in unraveling covert, and often complex, nuclear activities, e.g., the Iraqi and DPRK nuclear weapons program. The tenacious approach taken during the last year by IAEA inspectors in Iran is to be highly commended.

Iraq Experience

The process of refining and strengthening IAEA safeguards has been ongoing since their inception. The IAEA, with strong U.S. support, undertook a major strengthening effort in the 1990s, in direct response to discoveries made during

IAEA inspections in Iraq following the first Gulf War. These inspections uncovered an ambitious clandestine nuclear weapons program in Iraq, involving a number of undeclared installations. Of particular significance was a covert enrichment facility located adjacent to a declared nuclear facility where the Agency had been applying its safeguards for years. The IAEA had not detected this concealed activity before the war because its Member States only required it to ensure against the non-diversion of declared material. The existing safeguards system was designed almost exclusively for detecting diversion of nuclear material only at declared facilities. Under the then-existing safeguards system, the IAEA had only a limited capability to determine whether Iraq (or any other state) was engaged in undeclared or clandestine nuclear activities. To address this and other deficiencies, the United States and other IAEA member states conducted a review of the nuclear safeguards system. Subsequently, the IAEA Board of Governors decided to make broader use of the Agency's existing authority and to provide the additional authority and tools needed by IAEA inspectors to uncover undeclared nuclear activities.

During the course of this review of the safeguards system, the IAEA identified some meaningful rights whose full use could meaningfully improve the capabilities of the system, e.g., special inspections and environmental sampling. A number of deficiencies in the system were also noted. To fill these gaps in the IAEA's authority, the IAEA Board of Governors created an open-ended negotiating committee of Member States that met 55 times during 1996-1997 to agree upon the text for a Model Additional Protocol. The resulting text for the Model Additional Protocol was approved by the Board of Governors in 1997. The United States worked hard to bring these negotiations to a successful conclusion, and believes that the measures contained in the Model Additional Protocol greatly improve the IAEA's ability to uncover undeclared nuclear material and activities. The United States signed its Pro-

tocol on June 12, 1998.

Application of the Additional Protocol to Non-Nuclear Weapon States

The IAEA uses the Model Additional Protocol for negotiation and conclusion of Additional Protocols that amend and strengthen states' existing comprehensive safeguards agreements. As such, Additional Protocols broaden the information states are required to give to the IAEA and provide additional access rights for IAEA inspectors to verify those declarations when necessary. Non-nuclear weapon states must incorporate all the measures in the Model Additional Protocol in negotiating their Additional Protocols. Nuclear weapon states and countries not party to the NPT, however, are free to chose among or limit the application of the provisions of the Model Additional Protocol, since they have not made a commitment to place all nuclear activities under safeguards.

The United States, consistent with our rights as a nuclear weapon state, has chosen to limit the application of the Protocol's provisions. I will outline briefly for you the provisions of the Model Additional Protocol, then discuss how the Protocol's provisions will be applied in the United States.

Provisions of the Model Additional Protocol

The Model Additional Protocol requires states to declare to the IAEA a number of nuclear and nuclear-related items, materials, and activities that, while they could be part of a peaceful nuclear program, would be required for a covert nuclear weapons program. Specifically, the Protocol requires states to report exports of nuclear-related items controlled by the Nuclear Suppliers Group, confirm imports of such items, and report domestic manufacturing of key items. It also requires states to report exports, imports, and stockpiles of raw uranium and thorium that could be used as feed material for a covert nuclear program, and also report information related to uranium mines, uranium and thorium concentration plants, uses of buildings on the sites of safeguarded nuclear facilities, construction of new nuclear facilities, and certain nuclear-related research and development work not involving nuclear material.

A proliferator having an Additional Protocol in force would have to successfully conceal a much broader range of activities and facilities in its covert nuclear program to escape detection. The IAEA would have more types of information available as triggers for access requests. Import and export reporting would give the IAEA opportunities to compare declarations from different countries to detect suspicious activity, thereby requiring air-tight connivance between regulatory authorities in supplier and recipient counties in order to deceive the IAEA. The requirement that countries declare R&D activities, mining and materials stocks, facility construction, and manufacturing and the uses of unsafeguarded buildings at nuclear facilities increases the potential avenues by which information acquired by the IAEA could be used to reveal the existence of covert nuclear programs in their early stages: such

revelations would be actionable immediately, since they would be based upon state-provided declarations.

Access to Locations

The Model Additional Protocol does not provide for full IAEA verification of all of the new declarations required. Indeed, it explicitly excludes creation of any system for "mechanistically or systematically" seeking to verify the new declarations. Verification in detail of all declarations was judged unnecessarily expensive and burdensome for the IAEA and inspected parties. But the Additional Protocol does provide the IAEA with three important types of access rights to enable the IAEA to detect and expose cheating through use of spot checks, as needed:

- Access to locations declared by the state where nuclear facilities or materials are located "on a selective basis" in order to assure the absence of undeclared nuclear material and activities:
- Narrower access rights at other declared locations that could contribute to a nuclear program, to be exercised only in the event of a question or inconsistency related to the State's declarations. Such access is allowed, in general, only following consultation with the state to resolve the question or inconsistency; and
- Circumscribed access rights at undeclared locations, also available only in the event of a question or inconsistency related to the State's declarations. Again, such access normally follows consultation with the state to resolve the question or inconsistency. In addition, the range of activities that the IAEA may carry out at undeclared locations is narrowly restricted.

Benefit of the Additional Protocol for U.S. National Security

The Model Additional Protocol's provisions regarding declarations and access are aimed at making it harder for cheaters to hide undeclared nuclear activities, either at declared facilities or at other locations. Iraq had co-located clandestine nuclear activities with their declared nuclear facilities in order to mask its covert activities and for reasons of convenience and economy. For this reason, the Protocol gives the IAEA access rights in short time frames at sites of declared nuclear facilities. If an Additional Protocol has been in force, safeguards inspectors at Iraq's Tuwaitha facility could have required access to other buildings at that site within a period as short as two hours, enabling them to detect undeclared activities. In this way, the Protocol seeks to force a proliferator from hiding its covert activities away from its declared nuclear activities rendering it easier to detect.

Iraq and others have also carried out covert activities far from declared sites to avoid IAEA access. This is why the Additional Protocol gives the IAEA the authority to seek access at undeclared locations, based on questions and inconsistencies that arise regarding the State's declaration. The IAEA can thus act on evidence uncovered in its internal information evaluation efforts or provided by member states or other credible sources.

Having gained access, the IAEA has the ability, particularly through sensitive sampling techniques that detect trace signatures of nuclear activities, to find evidence of covert activities. It was IAEA sampling in North Korea in 1992 that demonstrated significant omissions in North Korea's declarations concerning its plutonium production activities, making clear to the world that the DPRK was cheating on its nonproliferation obligations. More recently, IAEA sampling demonstrated the presence of enriched uranium at certain locations in Iran, despite initial Iranian assertions by Iran that it had not carried out enrichment activities.

Of course, proliferators may also resist IAEA demands for access to the incriminating facilities or information. A refusal of access, however, can be itself significant evidence of noncompliance. It was the DPRK's refusal to cooperate with the IAEA in providing access to sites that ultimately led to the IAEA Board of Governors finding the DPRK in noncompliance with its safeguards agreement. Given the broader IAEA access rights under the Additional Protocol, a state refusing to permit access in order to hide a clandestine nuclear weapons program is likely to raise concerns at an earlier stage of the program, enabling the Board of Governors and the international community to respond sooner.

Perhaps the best example of the benefits of the Protocol is the present situation in Iran. While there have long been grounds for concern about Iran's nuclear activities, the existing safeguards system permitted Iran to carry out many aspects of its program undetected. For example, Iran was not required to declare the construction of key facilities. Moreover, once challenged by the IAEA, Iran, was slow to grant access to a variety of locations, and balked at IAEA use of sensitive environmental sampling techniques at a key location suspected of enrichment-related activities. If Iran had had an Additional Protocol in force, it would have had an obligation to de-

clare many of these and other activities at an early stage in their construction; there would have been no doubt about the IAEA's right to access, and no legitimate grounds for Iran to deny or delay. Resistance to inspection, or discovery of these facilities in advanced stages of construction would have been unambiguous violations of Iran's obligations.

Thus, a key nonproliferation goal of the United States has been to increase non-nuclear weapon state adherence to the Additional Protocol. Entry into force of the U.S.-IAEA Additional Protocol would provide a powerful tool in furthering this goal, and thereby enhance U.S. national security.

U.S.-IAEA PROTOCOL

Experience with IAEA Safeguards

Let me say a few words about our experience since 1980 in implementing our Voluntary Offer Agreement with the IAEA, in force since 1980.

The Treaty on the Non-Proliferation of Nuclear Weapons (the "NPT") requires

nonnuclear weapon state parties to accept IAEA safeguards on all nuclear material in all of their peaceful nuclear activities. The United States, as a nuclear weapon state party to the NPT, is under no obligation to accept such safeguards. However, beginning with President Johnson's 1967 pledge, it has been the announced policy of the United States since then to permit the application of IAEA safeguards to all of its nuclear facilities, except for those facilities and activities excluded for national security reasons. By submitting itself to the same safeguards on all of its civil nuclear facilities that non-nuclear weapon state parties are subject to, the United States intended to demonstrate that adherence to the NPT did not place other countries at a commercial disadvantage. This offer was critical to gaining acceptance of the NPT by countries such as Germany and Japan.

Pursuant to our Voluntary Offer Agreement with the IAEA, the United States has

made eligible for IAEA safeguards inspection over 250 civil nuclear facilities. These include a large number of power reactors and research reactors, commercial fuel fabrication plants, uranium enrichment plants, as well as other types of facilities. In the ease of a non-nuclear weapon state, the IAEA would have an obligation

to inspect all of these facilities, as well as many other locations where nuclear material is used. In the United States, in contrast, the IAEA has the right, but not the obligation, to select facilities for inspection. In more than two decades, the IAEA has conducted inspections at only 18 of these facilities, and never at more than five facilities in any one year. These inspections have been carried out on a cooperative basis with the United States. I'm confident this longstanding pattern of cooperation will continue. A fundamental point here is that safeguards in the United States are not directed at uncovering illicit or non-compliant nuclear activities or transfers (as they are in non-nuclear weapon states). Rather, they serve the basically political purpose of underscoring U.S. support for the regime and voluntary cooperation with the IAEA, as well as U.S. willingness to accept for the American nuclear industry a fair share of the economic burden of inspections. As I will discuss in greater detail later, these were key elements of the political bargain that allowed successful conclusion of the NPT. Thus, the IAEA's ability to conduct inspections in the United States plays a valuable role in helping to strengthen the political case for application of IAEA safeguards world-wide.

The IAEA, because of budgetary pressures, discontinued inspections in the United States in 1993. At the request of the U.S. Government, the IAEA resumed inspections in 1994 by applying safeguards to several tons of weapons-usable nuclear material, which had been declared excess to U.S. national security stockpiles. The IAEA undertook this effort on the condition that the United States reimburse the IAEA. At present, the IAEA applies safeguards at four U.S. facilities.

U.S. NATIONAL SECURITY EXCLUSION

The U.S. Additional Protocol, which would amend the U.S. Voluntary Offer of 1980, includes all the provisions contained in the Model Protocol. However, it includes one other major provision that is unique to our status as a nuclear weapon state: the "national security exclusion." This provision states that the United States will apply and permit the Agency to apply the provisions of the Protocol "excluding only instances where its application would result in access by the Agency to activities with direct national security significance to the United States or to locations or information associated with such activities." Thus, implementation of the USAP will be entirely different in both practice and concept than in non-nuclear weapon states. Similarly, unlike the CWC, the INF, and other treaties that rely on procedural restraints on inspectors to protect U.S. national security interests, the United States has the right to deny access or exclude inspection activities on the basis of

the national security exclusion. Since the national security exclusion makes clear that the United States will have undeclared nuclear material and activities, both the United States and the IAEA, as well as IAEA Member States, recognize that inspections in the United States serve primarily the symbolic purpose of demonstrating U.S. commitment to safeguards and its willingness to accept the burdens their application may entail. In particular, the United States:

- will not provide to the IAEA information of direct national security significance to the United States or access to activities and locations of direct national security significance to the United States; and
- will exclude inspector activities that are inconsistent with the national security exclusion at a given location.

The national security exclusion, therefore, gives the United States an extraordinary legal means to protect and prevent the transfer of information to the IAEA and exclude inspectors' access in the United States wherever required for the protection of activities of direct national security significance to the United States or of information or locations associated with such activities.

Because the IAEA will have the legal right to conduct all activities permitted under our Protocol, steps have been taken to ensure that our national security interests are protected if and when the IAEA decides to exercise those rights. At the same time, the United States has important equities in promoting a strong and effective nuclear nonproliferation regime, including the need to avoid disclosure of nuclear weapon information to non-nuclear weapon states, which would violate our NPT obligations.

PHILOSOPHY BEHIND THE U.S.-IAEA ADDITIONAL PROTOCOL

During the negotiation of the Model Protocol, many non-nuclear weapon state parties to the NPT urged the United States, as the strongest proponent, to accept on a voluntary basis the provisions of the Model Protocol. Following the example of the Voluntary Offer, the United States stated during the negotiations that it would accept the provisions of the Model Protocol, subject to a National Security Exclusion. By submitting itself to the same safeguards on all of its civil nuclear activities that non-nuclear weapon state parties to the NPT are subject to, the United States intends to demonstrate that adherence to the Model Protocol does not place other countries at a commercial disadvantage.

The United States took a leading role in the negotiations of the Model Protocol. Several other industrialized states, including close allies, were hesitant to support so substantial an expansion of declaration requirements and IAEA inspection powers. Our success in achieving a strong Model Protocol was critically dependent on our voluntary acceptance of the Model Protocol measures. Similarly, U.S. signature of our Additional Protocol was a significant factor in the early decision by many non-nuclear weapon states to accept the Protocol. A number of our close friends and allies have also relied on our pledge in persuading their legislatures to approve their Additional Protocols.

Nevertheless, implementation of the USAP is fundamentally different in concept from implementation of the Additional Protocol in non-nuclear weapon states. While the fundamental purpose of the Model Additional Protocol is to provide increased assurance that non-nuclear weapon states do not have undeclared nuclear activities, all states understand that nuclear weapon states will have undeclared activities. It is a matter of public record that we have, and are entitled to have, such activities. This has important consequences. References in the U.S. Additional Protocol to the "completeness and correctness" of U.S. declarations or possible "inconsistencies" in them have meaning only in the context of what we need to report; this excludes what we do not need to report, i.e., anything we determine to fall within the "national security exclusion." Thus, the right of the Agency to seek access to undeclared locations in the United States (Article 5.c) is uniquely limited. The IAEA does not have access rights under the Protocol to locations and activities that the United States excludes pursuant to the National Security Exclusion.

Where not excluded on national security grounds, however, the United States will be required to declare certain nuclear-related locations and activities and to allow IAEA access under specified circumstances. While such access will be infrequent in non-nuclear weapon states we believe it is likely to be even more infrequent in the United States, but may nevertheless occur.

The Additional Protocol requires the United States to provide information to the IAEA about locations, such as mines and concentration plants, producing or storing uranium and thorium or other materials that could serve as feed material for the nuclear fuel cycle. There is no provision for routine verification of these declarations,

but the IAEA can seek access to these locations "on a selective basis in order to assure the absence of undeclared nuclear material and activities."

Certain nuclear fuel cycle-related R&D and industrial activities will also be subject to declaration. IAEA access to these locations is allowed only if needed to resolve a question or inconsistency regarding U.S. declarations, normally only after the IAEA provides the United States an opportunity to clarify and resolve the question or inconsistency. If Agency concerns can be addressed through additional information from the United States, access is not required. If such visits do occur, so-called "managed access" techniques can be used to protect sensitive proprietary or commercially sensitive information from disclosure. Where managed access cannot sufficiently protect information of direct national security significance, the national security exclusion will be applied and Agency access will be denied.

The IAEA will also have the right to request access to locations of its own choosing. The United States, as a nuclear weapon state, has the right to deny access to any location where it deems the risk of disclosing national security information to be unacceptable; U.S. Government policy is to exercise this right as necessary.

PROTECTING SENSITIVE INFORMATION

Throughout the negotiation of the Model Additional Protocol, there was strong interest in giving the IAEA the tools it needed to conduct inspections while protecting the rights of the states inspected. The U.S. Additional Protocol, in addition to the national security exclusion, includes all the protections for commercially sensitive information contained in the Model Protocol. For example:

- Information on nuclear R&D activities that must be declared to the IAEA is limited to location and general description and does not include details or results:
- Similarly, the required information on nuclear-related manufacturing is also limited to location and the scale of operation without details;
- Access is designed to be infrequent;
- Inspection activities are limited and relevant to detection of undeclared nuclear material and activities;
- Unlike the Chemical Weapons Convention, there is no provision in the Safeguards Agreement or the Additional Protocol for any other state to request access in the United States.
- The IAEA is required to maintain a stringent regime for protection against disclosure of commercial, technological and industrial confidential information, and the regime is subject to periodic review and approval by the United States and other Board members;
- Only those individuals to whom the United States agrees may be assigned by the IAEA to conduct inspections in the United States under the U.S. safeguards agreement or for access under the U.S. Additional Protocol;
- Whenever requested by the United States, managed access arrangements must be used to prevent disclosure of proliferation sensitive information, or proprietary or commercially sensitive information;
- Both the IAEA and its officers or employees may be subject to legal process in the event of unauthorized disclosure of confidential information. The IAEA can withdraw immunity of inspectors in eases of abuse.

In addition, complimentary access visits to locations in the United States will only be conducted consistent with the Fourth Amendment. This requirement was communicated, at the request of the Department of Justice, by a letter from Ambassador Kenneth Brill to the IAEA on January 23, 2004. Although, the IAEA has not yet responded to this letter, we expect a favorable response, and of course, will formally ratify the Treaty only after the IAEA communicates to us its acceptance.

IMPLEMENTING LEGISLATION

The Administration has determined that some provisions of the U.S.-IAEA Additional Protocol are not self-implementing. These include:

- · declarations of U.S. civil nuclear activities and related industry;
- restrictions on disclosure of information; and
- IAEA access to locations in the United States.

Implementing legislation, therefore, is required in order to give these provisions effect within the United States. The administration was pleased to provide its rec-

ommended legislation to the Congress late last year. We look forward to working closely with you on preparation of the final legislation.

In this regard, I would like to reinforce how important it is to the Administration that the implementing legislation for the U.S. Additional Protocol restricts appropriately the disclosure of information provided by U.S. entities to the United States Government in execution of Protocol obligations. Under the Administration's proposal, such information could be disclosed only to U.S. Government officials, U.S. Government contractor personnel, and officials of the IAEA Secretariat with a clear "need to know." This practice will ensure that the data collected under the Protocol will be used exclusively for the purposes of the safeguards regime. We therefore will be used exclusively for the purposes of the safeguards regime. We, therefore, request that the implementing legislation for the Additional Protocol exempt information obtained by the United States Government in implementing the provisions of the Additional Protocol from disclosure under the Freedom of Information Act (FOIA)

In conclusion, Mr. Chairman, the Administration believes that Senate advice and consent to ratification of the U.S. Additional Protocol will advance the national security interests of the United States by strengthening the global nuclear non-proliferation regime. At the same time, the Administration believes that adequate protections have been built into the Protocol to ensure that its application in the United States will not compromise activities or information of direct national security sig-

nificance.

Thank You. I look forward to your questions.

The Chairman. Thank you very much, Secretary Burk.

Let me indicate that, as you mentioned, we had a good conversation with Secretary Bolton last week. He came to brief me on developments in Libya and indicated he would be in Russia today, and I commended that effort. I appreciate your mention specifically of him and his endorsement, obviously, and perhaps his help in the preparation of your testimony.

Secretary Esper.

STATEMENT OF MARK T. ESPER, DEPUTY ASSISTANT SEC-RETARY OF DEFENSE FOR NEGOTIATIONS POLICY. U.S. DE-PARTMENT OF DEFENSE, WASHINGTON, DC

Mr. ESPER. Good morning, Mr. Chairman.

Thank you for the opportunity to testify before the Senate Foreign Relations Committee in support of the United States-IAEA Additional Protocol. My remarks today will address the purpose and benefits of the Additional Protocol, the likely impact of the Protocol on the Department of Defense, and the role of the Department

in implementing the Protocol.

The Defense Department supports ratification of the Additional Protocol because doing so demonstrates United States' leadership in non-proliferation and may encourage non-nuclear weapon states to do the same. Widespread adoption of the Additional Protocol by other nations, and particularly by states of proliferation concern, would help the International Atomic Energy Agency detect or prevent the proliferation of the technology and material needed for nuclear weapons.

Even though the United States, as a declared nuclear power, is under no obligation to adhere to the Protocol, by voluntarily imposing these requirements on ourselves we are in a stronger position to press other members of the Non-Proliferation Treaty to follow

our example.

The universal acceptance of the Additional Protocol will help improve shortfalls in the IAEA's standing Safeguards Agreements. These deficiencies were highlighted by the discovery of Iraq's nuclear weapons program after the first gulf war, as well as by recent revelations of illicit nuclear activities by states under existing safeguards, such as Iran and Libya. The Protocol's declaration requirements and access provisions will make it harder for states to con-

ceal such illicit activities in the future.

During the negotiations of the Model Protocol, many NPT states parties pushed to watered-down provisions of the document, arguing that the intrusiveness of the Protocol's measures and the costs to industry would be too great. This, they argued, would place them at a commercial disadvantage with respect to the United States. To defuse this argument, the United States pledged to accept the Protocol in its entirety, even though the United States is an acknowledged nuclear weapons state. Our only changes were the addition of the national security exclusion and managed-access provision, both of which are necessary to protect information of direct national security significance. As a recognized nuclear weapons state, these changes are both necessary and logical.

The Administration fully recognizes that adopting an instrument designed to detect the diversion of nuclear material in non-nuclear weapon states is not without risk. The intrusiveness of the Additional Protocol, both in terms of declaring activities and allowing access by inspectors, is significant. However, we are confident that liberal use of the protections afforded the United States by way of the national security exclusion and the use of managed access to protect sensitive information and activities can mitigate this risk. We believe that these measures and others will form an integrated framework to protect our equities. The interdependent nature of these measures requires that all of them be employed in order to

effectively manage the risks.

The United States will make full and repeated use of these provisions in order to protect information, locations, and activities of national security significance. Decisions regarding the use of these provisions are a unilateral prerogative of the United States. They are not subject to interpretation by, or justification to, any other party, including the IAEA. As this is an area of particular importance for the Department of Defense, I will speak to it at some

length.

The national security exclusion is a critical protection for the United States. Under this provision, the United States can exclude information and activities from declarations and deny access to IAEA inspectors anytime, anyplace. In the declaration process, the national security exclusion will be used to exclude locations, activities, and information of national security interest. The United States, unlike non-nuclear weapon states, has, and will continue to have, undeclared nuclear material and activities outside the scope of the Additional Protocol. Certain activities that occur at locations that are part of the United States' civil nuclear program may also be excluded from the declaration and access provisions of the Additional Protocol, in accordance with the terms of the national security exclusion.

Since the United States will have undeclared nuclear activities, IAEA activities directed toward the detection of these activities in the United States are not considered necessary to enhance non-proliferation or to serve the purpose of the Additional Protocol. Rather, the United States expects the IAEA to seek access in the U.S. for

the purpose of increasing the effectiveness of IAEA safeguards—at facilities in non-nuclear weapon states or enhancing the capability of the IAEA to detect undeclared nuclear material and illicit activities in such states.

As a general rule, declarations will not be made for any current or former sites, facilities, or locations that are owned or operated by the Department of Defense, or for other locations that have sensitive Defense Department equities associated with them. The most likely exception may be the Department of Energy sites to which we currently allow limited IAEA access in fulfillment of our existing Voluntary Offer. Adoption of the Additional Protocol will in no way expand IAEA access or rights at Department of Energy locations associated with sensitive Defense Department equities.

The United States, as a nuclear weapon state, has different prerogatives than non-weapon states, and will, as Ambassador Brill has already made clear in writing to the IAEA, make, quote, "full and repeated use," unquote, of the national security exclusion and

managed access, to protect those prerogatives.

The concept of managed access provides an additional method to protect sensitive information and activities at all locations. These measures range from shrouding and closing doors, to turning off the computers and other equipment to prevent IAEA inspectors from coming into contact with sensitive information. As with the national security exclusion, managed access measures will be applied liberally to ensure sensitive information is protected.

Of course, it is important to note that before and during inspections, any agency with a national security equity may either declare a national security exclusion or employ managed access proce-

dures, even if it is not the lead agency.

Article 1 of the Additional Protocol allows the United States to invoke managed access to ensure that national security information is protected. The specific measures taken will be site specific.

În addition to this provision, Article 7 permits the Ûnited States to invoke managed access to prevent the dissemination of proliferation-sensitive information, to meet safety or physical protection requirements, or to protect proprietary or commercially sensitive information. Moreover, inspectors will be escorted at all times when at, or in proximity of, inspected locations. For those possible few activities with a Defense Department equity that DOD allows to be declared, the Department will have experts on the escort team in addition to the Defense Threat Reduction Agency personnel who will take part in the inspection.

Environmental sampling is performed by the IAEA to detect the presence of undeclared nuclear activities. As a nuclear weapon state, the United States is allowed and expected to have undeclared nuclear activities. The United States does not foresee circumstances in which the IAEA would propose to conduct wide-area environmental sampling in the United States, and believes that IAEA requests for location-specific environmental sampling in the

U.S. would be unlikely.

While such sampling would have little utility for Additional Protocol purposes in the United States, it could reveal information of national security significance, including the presence of sensitive undeclared activities. Therefore, in accordance with the national se-

curity exclusion, the United States will not allow environmental sampling with respect to such current or former locations, information, and activities.

In addition to the national security exclusion and managed access measures, the United States will continue to review the IAEA list of inspectors nominated for inspection duty in the United States. Within the executive branch, concerned agencies will conduct separate checks on any potential inspectors. Any inspector suspected of being a national security risk will be flagged, and the IAEA will be notified that the person should not be designated as an inspector to the United States. In fact, the United States has already informed the IAEA that no individuals from states sponsors of terrorism would be allowed to serve as inspectors in the United States. We will continue to employ these vetting procedures to ensure sensitive information and activities are protected.

In order to gauge risk at specific locations, vulnerability assessments will be conducted at potentially declarable sites that have national security equities. Once our implementation guidance has been clarified, and implementing legislation passed, we will revisit and update assessments that have been previously conducted. We are also reviewing what other sites may require vulnerability assessments. These assessments will vary based on the nature and location, among other things, of the site or activity. Some will be fairly simple, while others will require a more detailed examination.

The key point is that the United States will complete all necessary assessments and implement all required security procedures prior to submitting our first Additional Protocol declaration, as due to the IAEA.

Of course, the Nuclear Regulatory Commission, the Department of Energy, and the Department of Commerce are responsible for conducting vulnerability assessments for locations under their jurisdiction. Nevertheless, the Defense Department will work closely with these agencies on those locations with Defense equities to ensure these assessments are thorough and timely.

Finally, it is important to note that the United States may remove locations from our Additional Protocol declaration at any time for national security reasons, and will do so as necessary. And because of the constantly changing security environment, the vulnerability of all declared locations will be reviewed regularly. In short, vulnerability assessments and security planning will continue to play an integral part in the preparation for making declarations to the IAEA, and allowing IAEA access to declared locations.

One of the United States concerns is the protection of declared data once it is submitted to the IAEA. The United States, through its voluntary contributions to the IAEA, has provided technical assistance to the IAEA to improve its information security and its safeguards information systems. The IAEA makes regular reports to the Board of Governors on its progress in implementing security improvements in this area.

The United States declaration submitted to the IAEA will be based on data provided by each agency to the Department of Commerce's Additional Protocol Reporting System. Before the Defense Department submits its data into that system, we will develop our

own procedures and systems to evaluate relevant declaration data, individually and aggregated, to mitigate any risks. Further, the Defense Department will work closely with other agencies to review draft declaration inputs to ensure no Defense Department sensitive or classified data is collected in the APRS.

In conclusion, Mr. Chairman, the administration believes that Senate advice and consent to ratification of the U.S. Additional Protocol will advance the national security interests of the United States. Ratification of the Additional Protocol demonstrates United States leadership in, and commitment to, non-proliferation. The United States ratification of the Protocol may also encourage some non-nuclear weapon states to do the same. As a result, universal adoption of the Additional Protocol will provide the IAEA an important tool to help detect or prevent proliferation of the technology and material needed for nuclear weapons. At the same time, adequate protections have been incorporated into the protocol signed by the United States to allow us to prevent the compromise of sensitive activities and information.

Thank you, Mr. Chairman. I look forward to your questions. [The prepared statement of Mr. Esper follows:]

PREPARED STATEMENT OF DEPUTY ASSISTANT SECRETARY MARK T. ESPER

Mr. Chairman, Senator Biden, Members of the Committee:

Thank you for the opportunity to testify before the Senate Foreign Relations Committee in support of the United States-IAEA Additional Protocol. My testimony will address the purpose and benefits of the Additional Protocol, the likely impact of the Protocol on the Department of Defense, and the role of the Department in implementing the Protocol.

PURPOSE AND BENEFITS OF THE ADDITIONAL PROTOCOL

The Defense Department supports ratification of the Additional Protocol because doing so demonstrates the United States' leadership in nonproliferation, and may encourage non-nuclear weapon states to do the same. Widespread adoption of the Additional Protocol by other nations—and particularly by states of proliferation concern—would help the International Atomic Energy Agency (IAEA) detect or prevent the proliferation of the technology and material needed for nuclear weapons.

Even though the United States, as a declared nuclear power, is under no obligation to adhere to the Protocol, by voluntarily imposing these requirements on ourselves, we are in a stronger position to press other members of the Non-Proliferation Treaty (NPT) to follow our example. In doing so, we are supporting the work of the IAEA in verifying the absence or diversion of nuclear materials in non-nuclear weapons states.

The universal acceptance of the Additional Protocol will help improve shortfalls in the IAEA's standing Safeguard Agreements. These deficiencies were highlighted by the discovery of Iraq's nuclear weapons program after the first Gulf war, as well as by recent revelations of illicit nuclear activities by states under existing safeguards, such as Iran and Libya. The Protocol's declaration requirements and access provisions will make it harder for states to conceal such illicit activities. Not only must more nuclear-fuel-cycle-related activities be declared, but the IAEA will also have intrusive rights in non-nuclear weapons states to investigate inconsistencies and suspicious activities.

During the negotiations of the Model Protocol, many NPT States Parties pushed to water down provisions of the document, arguing that the intrusiveness of the Protocol's measures and the costs to industry would be too great. This, they argued, would place them at a commercial disadvantage with respect to the United States. To defuse this argument, the United States pledged to accept the Protocol in its entirety, even though the United States is an acknowledged nuclear weapons state. Our only changes were the addition of a national security exclusion and managed access provision, both of which are necessary to protect information of direct national security significance. As a recognized nuclear weapons state, these changes are both necessary and logical.

PROTECTING NATIONAL SECURITY EQUITIES UNDER THE PROTOCOL

The Administration fully recognizes that adopting an instrument designed to detect the diversion of nuclear material in non-nuclear weapons states is not without risk. The potential intrusiveness of the Additional Protocol both in terms of declaring activities and allowing access by inspectors is significant. However, we are confident that liberal use of the protections afforded the United States by way of the national security exclusion and the use of managed access to protect sensitive information and activities can mitigate this risk. We believe that these measures and others will form an integrated framework to protect our equities. The interdependent nature of these measures requires that all of them be employed in order to effectively manage the risks.

The United States will make full and repeated use of these provisions in order to protect information, locations, and activities of direct national security significance. Decisions regarding the use of these provisions are a unilateral prerogative of the United States; they are not subject to interpretation by, or justification to, any other party, including the IAEA. As this is an area of particular importance for the Department of Defense, I will speak to it at some length.

National Security Exclusion

The national security exclusion is a critical protection for the United States. Under this provision, the United States can exclude information and activities from declarations and deny access to IAEA inspectors anytime, anyplace. In the declaration process, the national security exclusion will be used to exclude locations, activities, and information of direct national security interest.

The United States, unlike non-nuclear weapons states, has and will continue to have undeclared nuclear material and activities outside the scope of the Additional Protocol. Certain activities that occur at locations that are part of the United States civil nuclear program may also be excluded from the declaration and access provisions of the Additional Protocol in accordance with the terms of the national security exclusion.

Since the United States will have undeclared nuclear activities, IAEA activities directed toward the detection of these activities in the United States are not considered necessary to enhance nonproliferation, or to serve the purpose of the Additional Protocol. Rather, the United States expects the IAEA to seek access in the U.S. for the purpose of increasing the effectiveness of IAEA safeguards at facilities in non-nuclear weapons states, and enhancing the capability of the IAEA to detect undeclared nuclear material and illicit activities in such states.

resolution. Rather, the United States expects the IAEA to seek access in the U.S. for the purpose of increasing the effectiveness of IAEA safeguards at facilities in non-nuclear weapons states, and enhancing the capability of the IAEA to detect undeclared nuclear material and illicit activities in such states.

As a general rule, declarations will not be made for any sites, facilities, or locations that are owned or operated by the Department of Defense, or for other locations that have sensitive Defense Department equities associated with them. The most likely exception may be the Department of Energy sites to which we currently allow limited IAEA access in fulfillment of our existing Voluntary Offer. Adoption of the Additional Protocol will in no way expand IAEA access or rights at Department of Energy locations associated with sensitive Defense Department equities.

The United States, as a nuclear weapons state, has different prerogatives than non-weapon states, and will, as Ambassador Brill has already made clear in writing to the IAEA, make "full and repeated use" of the national security exclusion and managed access to protect those prerogatives.

Managed Access

The concept of managed access provides an additional method to protect sensitive information and activities at all locations. These measures range from shrouding and closing doors, to tuning off computers and other equipment to prevent IAEA inspectors from coming into contact with sensitive information. As with the national security exclusion, managed access measures will be applied liberally to ensure sensitive information is protected.

Of course, it is important to note that before and during inspections, any agency with a national security equity may either declare a national security exclusion or employ managed access procedures, even if it is not the lead agency. Article 1 of the Additional Protocol allows the U.S. to invoke managed access to ensure that national security information is protected. The specific measures taken will be site-specific.

In addition to this provision, Article 7 permits the United States to invoke managed access to prevent the dissemination of proliferation-sensitive information, to meet safety or physical protection requirements, or to protect proprietary or commercially sensitive information.

Moreover, inspectors will be escorted at all times when at, or in proximity of; inspected locations. For those possible few activities with a Defense Department eq-

uity that DOD allows to be declared, the Department will have experts on the escort team, in addition to the Defense Threat Reduction Agency (DTRA) personnel who

will take part in the inspection.

Environmental sampling is performed by the IAEA to detect the presence of undeclared nuclear activities. As a nuclear weapon state, the United States is allowed (and expected) to have undeclared nuclear activities. The United States does not foresee circumstances in which the IAEA would propose to conduct wide area environmental sampling in the United States, and believes that IAEA requests for location-specific environmental sampling in the United States would be unlikely.

While such sampling would have little utility for Additional Protocol purposes in the United States, it could reveal information of direct national security significance, including the presence of sensitive undeclared activities. Therefore, in accordance with the national security exclusion, the United States will not allow locationspecific environmental sampling with respect to such locations, information, and activities.

In addition to the national security exclusion and managed access measures, the United States will continue to review the IAEA list of inspectors nominated for inspection duty in the United States. This is a process that begins when the IAEA identifies staff for designation as inspectors and provides their names to the IAEA Board of Governors for approval. This list, which is normally submitted to IAEA Member States approximately one month before the Board of Governors meeting, is forwarded to the United States IAEA Steering Committee for interagency review.

Within the executive branch, concerned agencies will then conduct separate checks. Any inspector suspected of being a national security risk will be flagged and the IAEA will be notified that the person should not be designated as an inspector to the United States. In fact, the U.S. has already informed the IAEA that no individuals from state sponsors of terrorism would be allowed to serve as inspectors in the United States. Within the last decade, the U.S. has rejected approximately 10 proposed inspectors. We will continue to employ these vetting procedures to ensure sensitive information and activities are protected.

Vulnerability Assessments

In order to gauge risk at specific locations, vulnerability assessments will be conducted at potentially declarable sites that have national security equities. Once our implementation guidance has been clarified and implementing legislation passed, we will revisit and update assessments that have been previously conducted. We are also reviewing what other sites may require vulnerability assessments. These assessments will vary based on the nature and location, among other things, of the site or activity. Some will be fairly simple, while others will require a more detailed examination. The key point is that the United States will complete all necessary assessments and implement all required security procedures prior to submitting our first Additional Protocol declaration as due to the IAEA.

Of course, the Nuclear Regulatory Commission, the Department of Energy, and the Department of Commerce are responsible for conducting vulnerability assessments for locations under their jurisdiction. Nevertheless, the Defense Department will work closely with these agencies on those locations with Defense equities to en-

sure these assessments are thorough and timely.

Finally, it is important to note that the United States may remove locations from our Additional Protocol declaration at any time for national security reasons, and will do so as necessary. And, because of the constantly changing security environ-ment, the vulnerability of all declared locations will be reviewed regularly. In short, vulnerability assessments and security planning will continue to play an integral part in the preparation for making declarations to the IAEA and allowing IAEA access to declared locations.

IAEA Protection of Declared Data

One of the United States' concerns is the protection of declared data once it is submitted to the IAEA. Because information submitted to the IAEA under the Additional Protocol will be more detailed, there are penalties-to include potential exposure to civil and criminal action—for IAEA officials found to be in breach of their

The United States (through its voluntary contributions to the IAEA) has provided technical assistance to the IAEA to improve its information security in its safeguards information systems. The IAEA makes regular reports to the Board of Governors on its progress in implementing security improvements in this area.

The United States' declarations submitted to the IAEA will be based on data provided by each agency to the Department of Commerce's Additional Protocol Report-

ing System (APRS). Before the Defense Department submits its data into that system, we will develop our own procedures and systems to evaluate relevant declaration data, individually and aggregated, to mitigate any risks. Further, the Defense Department will work closely with other agencies to review draft declaration inputs to ensure no Defense Department sensitive or classified data is collected in the

That said, it is also important that the implementing legislation for the United States' Additional Protocol exempt information provided by U.S. entities to the United States Government in execution of Protocol obligations from disclosure under the Freedom of Information Act.

CONCLUSION

In conclusion, the Administration believes that Senate advice and consent to ratification of the U.S. Additional Protocol will advance the national security interests of the United States. Ratification of the Additional Protocol demonstrates the

United States' leadership in, and commitment to, nonproliferation.

United States' ratification of the Protocol may also encourage non-nuclear weapon states to do the same. As a result, universal adoption of the Additional Protocol will provide the IAEA an important tool to help detect or prevent proliferation of the technology and materiel needed for nuclear weapons. At the same time, adequate protections have been incorporated into the Protocol signed by the United States to allow us to prevent the compromise of sensitive activities and information.

Thank you, Mr. Chairman. I look forward to the Committee's questions.

The CHAIRMAN. Well, thank you very much, Secretary Esper, for

As all of you observed, the Protocol touches upon the responsibilities of many Departments of our Federal Government. The witnesses today represent four prominent Departments, namely State, Energy, Commerce, and Defense. The Chair would recognize, as I started the hearing and received testimony from various other agencies, which will be part of the record, that there are several more agencies involved. Indeed, if we had included at the table today all the agencies that felt they had a stake and wanted to testify on behalf of the Protocol, plus a good number of very important private groups who likewise share the sense of urgency of this, why, our hearing would have been more extended. Nevertheless, we have been assured by the administration that the four of you are very good representatives of the feeling of the President of the United States and his administration.

Let me say, at the outset of these questions, that I have a set of questions that I will read, because they have been carefully prepared by staff, many of them in consultation either with you or your staff. In this forum, for those looking at the record and wanting a specific answer, whether it be a Senator, on either side of the aisle, or a staff member, or a member of the administration, they

will be able to easily find it.

My first two questions are for you, Secretary Burk. The first is, do the Secretary of State and his Under Secretary for International Security and Arms Control, John R. Bolton, fully support U.S. Senate ratification of the Additional Protocol, consistent with President Bush's letter of transmittal, which states that universal adoption of the Protocol is, "a central goal of my nuclear non-proliferation

Ms. Burk. Thank you, Mr. Chairman.

I actually met with Secretary Powell last night in preparation for this hearing, and he made it clear that I should reaffirm the support he and the Department—his full support for the administration on this issue. And I have addressed Under Secretary Bolton's position in my testimony specifically. So I hope that answers the question.

The CHAIRMAN. And so the answer is yes. [Witness nods her head, affirmatively.]

The CHAIRMAN. Now, the second question, Will the Secretary of State and his Under Secretary for International Security and Arms Control, John R. Bolton, agree to support the committee's resolution of ratification, once agreed with the administration, without changes?

Ms. Burk. My understanding is yes.

The CHAIRMAN. Thank you very much for that testimony.

Ambassador Brooks, Secretary Lichtenbaum, and Secretary Esper, given that the first United States declaration must occur, under Article 3 of the Protocol, within 180 days of its entry into force, and assuming Senate ratification of the Protocol within the next 2 months and favorable congressional consideration of its implementing legislation, will the panel now comment on whether they believe all such preparations will have occurred so as to enable the United States to meet its obligations under the Protocol?

Ambassador Brooks, do you have a response?

Ambassador Brooks. The answer, Mr. Chairman, is that we will not allow it to enter into force until we are fully prepared to meet our obligations, and I see no reason why we won't be fully prepared. So, yes, we'll meet our obligations, but we control the timing of actual entry into force, and we would not allow it to enter into force until we were prepared to meet our obligations under that.

The CHAIRMAN. I thank you.

Secretary Lichtenbaum, do you have a response?

Mr. LICHTENBAUM. I would concur with that assessment, and note, as stated in the written testimony submitted, that in order to ensure that proper protections are established and that industry has adequate time to understand and implement its reporting obligations, entry-into-force will not occur until Commerce publishes its regulations in final form and vulnerability assessments at declared locations of direct national security significance are completed.

The CHAIRMAN. I thank you.

Secretary Esper.

Mr. ESPER. Yes, sir, that is correct. As I also said in my opening remarks, we will ensure that all security procedures and vulnerability assessments are done prior to entry into force.

The CHAIRMAN. I thank you for your response.

Now, this question is directed to Ambassador Brooks and Secretaries Burk and Esper. As you have noted, IAEA inspections now occur in the United States for highly enriched uranium and plutonium declared excess to United States defense needs. Secretary Burk, your statement notes that over 250 facilities are now eligible in the United States for inspection under our Voluntary Offer. Do any of you expect, as a result of United States ratification and implementation of the Additional Protocol, the list of eligible sites to grow? And, if so, by how much? And, furthermore, will any provision of the Additional Protocol harm United States stockpile flexibility or our ability to ensure a safe, secure, and reliable nuclear deterrent?

Ambassador Brooks.

Ambassador Brooks. The list of sites will obviously grow. We don't know by how much. An order or magnitude, for this Department, is about a hundred. I want to distinguish between lists of sites and presence of IAEA inspectors. I anticipate the International Atomic Energy Agency will be very sparing in seeking to exercise its rights, since, after all, it already knows we're a nuclear weapon state.

With regard to your question about whether there will be any

harm to U.S. security, the answer is absolutely not.

The CHAIRMAN. Secretary Burk.

Ms. Burk. I agree with Ambassador Brooks completely, and I also would note that the IAEA had not been conducting safeguards inspections in the U.S. since 1993 until we asked them to come in to inspect. So I would agree with his comment on the frequency, as well.

The CHAIRMAN. Thank you.

Secretary Esper.
Mr. Esper. Thank you, Mr. Chairman. As I said in my opening remarks, we do not envision declaring any DOD-owned or operated sites, either former or current. That said, there may be some additions based on sites that other agencies might declare that have DOD equities if we should decide then to allow them to be declared. That would, of course, then require managed access procedures to be implemented. In both cases—or I should say, in all cases—with liberal use and repeated use of either the national security exclusion or the managed access procedures, we are confident that we can protect national security equities. As such, we don't foresee any harm to U.S. security, provided we employ those techniques appropriately.

The CHAIRMAN. Thank you.

Now, one further question. As the United States nuclear stockpile ages and changes over the course of the next several decades, do we anticipate that more materials will be declared excess to United States defense needs?

Ambassador Brooks.

Ambassador Brooks. It's reasonable to assume that, but I want to be very careful not to prejudge decisions that the President hasn't made. As you know, the President, in the Treaty of Moscow, has implemented a radical reduction in operationally deployed weapons. And the two Departments continue to assess, continually, as part of a normal process, our needs. So it's certainly reasonable to assume that there'll be some additional materials, but I wouldn't speculate on amounts or timing.

I would say that it does not appear to me that any plausible future declarations would alter the subject that we are discussing today. I mean, excess nuclear materials in the future will go where excess nuclear materials now go. So I don't believe that any hypothetical future declarations of excess material will alter the wisdom of the course we're recommending to you. But, of course, if it does, we have this freedom, under the national security exclusion, to deal

with anything.

The CHAIRMAN. Secretary Burk, do you have a further comment on that question?

Ms. Burk. I would not have any further comment on that.

The CHAIRMAN. Secretary Esper.

Mr. Esper. No, sir.

The CHAIRMAN. Well, thank you very much.

Let me ask this question. It arises from the testimony. I made a note, as you were testifying, Secretary Burk, discussing early IAEA inspections in Iraq. And you mentioned: Due to the lack of authority to be more intrusive, it may be that inspectors in Iraq have felt that they do not have permission to go to additional buildings on one site that you mentioned. Can you amplify this more?

Obviously, the inspection by IAEA in Iraq is a topical subject of other committees' hearings, as well as our own. Yet clearly one of the reasons for the urgency of this Protocol and its consideration is because the American public, and the rest of the world, are deeply concerned about the effectiveness of these international inspections. The Libya situation offers another avenue for taking a look at what IAEA does. Likewise, Iran, as we've all mentioned today. There may be others to come. The agency has been out of North Korea for a few months; at some point, it may return.

If you can, would you flesh out, even more, what this means and what the reasons are for why the United States believes that a more comprehensive inspection authority is required? Why we are likely to be safer, and why would the rest of the world be safer,

if that authority is, in fact, a part of this entire picture?

Ms. Burk. I would be happy to try to amplify it, and I could always provide more information, because there are—I have people that are far more expert than I am. But my understanding, the safeguards, originally and traditionally, were used and applied to nuclear-material facilities that were declared by a state. And so the IAEA, in carrying out its safeguards function, would visit those facilities that a state had identified for it to visit. What we discovered, much to our horror following the first gulf war, was that there were activities right there onsite that were not declared. The IAEA did not have the right to go and visit those buildings. And so the members realized—the U.S., in particular, leading the charge—that we needed to strengthen their authorities and their ability to search out these other facilities to deal with this problem.

I'd like to offer a more detailed response on the history of this that would be far more technically accurate, if you'd like.

[At the time of publication the response had not been received.] But I think we've tried to close a gap, which we, again, as you've mentioned, have seen reflected in the Iran case, in the Libyan case, and so forth. And I would just offer an observation that these developments, I think, will give far more impetus to the Additional Protocol, the Model Protocol, among the member states as states begin to appreciate that these are not theoretical problems we're trying to solve, these are real problems, and that we may see greater adherence to the treaty.

So I think we're going from simply declared facilities to now giving them the authority to ask questions about facilities that have not been so declared, and hopefully close that gap. It'll never be perfect, it'll never be watertight, but we believe it will give them a far greater reach that will enable them, we think, to find some

of the things that we're finding out now, at a much earlier stage so we can deal with them before they're more advanced.

The CHAIRMAN. I think that you've testified quite accurately, just as a historical matter, that after the first desert war with Iraq we discovered—despite the fact that IAEA had the right to take a look at certain facilities in Iraq—we were surprised that there were a lot more. And, in fact, there was not authority. And so, at that time, they were not discovered. So there's a certain sense of shock that all of this has been going on unknown to us. Of course, since there was a fairly well-developing nuclear program, it was of spe-

cial import.

Let me just say, on a personal note, that Ambassador Brooks first came into my life because President Reagan named a bipartisan Senate Arms Control Observer Group sometime in the circa 1985-86 period, when there were new opportunities with the former Soviet Union, including a Gorbachev invitation that looked as if perhaps we were going to have intensive arms-control talks. I remember seeing Ambassador Brooks in his office on the second floor of this nondescript building in Geneva, where he held forth for quite a period of time in one capacity or another, and was instructive to Senators, and a mentor, as we got into the weeds of these very, very tough negotiations that did not happen right away. It went on and on, like the brook, for months and for years.

I have commented, apropos of your testimony, Secretary Burk, to those who are impatient as to why arms inspectors, if they have access to sites, don't simply fall over the materials and what have you. In almost each instance in which I personally have been involved in-in Russia, for instance, in recent years, on the sites, particularly of chemical and biological weapons situations, if I had not had a very friendly Russian on the left hand and the right hand, both pointing out to me the where and the what and the history and what was done and buried and what is still alive and so forth, in most cases I would have been none the wiser. This is, to say the least, even for somebody in the IAEA who makes a profession of this, an extremely artful experience to know what you're looking at.

Now, to be denied sites, to have buildings out there that you don't even have a chance to take a look at, even if you did not have cooperative witnesses on the right and left hand, is really a speculative business.

And so, obviously, as I understand it—it's in layman's language-we're talking today about how the world, not just the United States—the United States is actually offering an example of how to be forthcoming—but how the world finds out, with situations where countries are declaring, "We don't have it. We've never seen it," or says, "We have a very limited program, but that's all," and defies the rest of the world to find the rest. Now, even this protocol, at its best, is not going to satisfy all of our curiosity, but it is really an international attempt to try to get to the heart not only of what is there, but, as you pointed out in your testimony, of illicit trade, the movement of whatever, which might be a substance for the development of a weapon or the machinery or the mechanics, even the ideas that are involved. It's an extremely important point,

in terms of our national security, not only in the war against terrorism, but also for the future of safety of our country.

This is not an anecdotal situation; you're offering a historical one—but try to amplify why, at least in my own judgment, this is probably very important.

Ambassador Brooks, do you have any further comment about this

general area?

Ambassador Brooks. As is often the case, Mr. Chairman, you make our case better and more eloquently than we, ourselves.

The CHAIRMAN. Untrue, but you're very generous. Let me just ask this, for the benefit of a layperson listening to this and hearing all of you offer, as you should, important reasons why United States security would not be compromised by the Protocol, or United States business would not be disadvantaged in competition with others, as we are all involved in international trade. From the standpoint of persons from another country listening to this testimony, what would you say to a question with regard to its neutrality, in terms of their competitive efforts?

If, for example, you were a businessman or you were head of the Department of Commerce of another state, and so forth, what is the lay of the land here that offers a sense, to other nations, of fairness and of equity, as well as-obviously, this is the reason we all get involved in this—the safety of the country, the security of the country? That's enhanced by international cooperation—188 nations, as I mentioned, involved in the first go, and hopefully the same number, or more, involved in the second. But is this fair? And if you're listening, as I say, from another vantage point, other than the United States, do you have confidence in the fairness of it?

Secretary Lichtenbaum, do you have a thought about that, from the standpoint of the Commerce Department? Others of you may

have some thoughts.

Mr. LICHTENBAUM. Let me offer my thought, and then perhaps others would care to offer theirs, as they would have had direct ex-

perience in the negotiating process with other countries.

My reaction is that that is a very important question for us to ask, but, indeed, that that is an important part of the reason why we are accepting these obligations, in order to show to other countries that we are willing to impose the same burden on our industry as will be imposed on their industry. In particular, the rights that we have under this treaty to minimize the burden and protect confidential information for industry are rights that are available to other countries, so it's not that we have a right to minimize the burden or protect confidential information that they do not have.

The CHAIRMAN. Well, that's a very important point, that even as you are assuring United States Senators, the United States public, that these are not excessive burdens on us, if others were offering testimony, as they will need to, in their legislatures, they can make these assurances to their publics.

Mr. LICHTENBAUM. Exactly right.

The CHAIRMAN. Well, it's an important issue, because obviously our focus today is to provide assurances to all of us.

Mr. Lichtenbaum. Right.

The CHAIRMAN. At the same time, if this is to be effective, and our leadership with regard to the other 187 countries is to be effective, they must understand the fairness to all of them, too. In a sense of evenhandedness, I wanted to add that aspect to this, because I suspect that this hearing, although it deals with very technical matters, will be followed by a good number of other embassies and publics of other countries, who will be deeply interested in our discussion and how we look at it.

As all of you have mentioned, one difference with the United States is that, from the beginning of this discussion, we were a declared nuclear power. We, in fact, demonstrated that in the second world war. So there is not a sense that somehow, in a covert way, this country is beginning to develop weapons of mass destruction. It has been very clear that we have them. We've been leaders in this. A great deal of our authority has come from both the fact that we had these weapons and the fact that we are restrained in our advocacy of controls. And I think that's important, too. This is not a situation where all of the countries start at the same point, namely a half a century of development of these weapons.

Now, at this point in history, many nations, although not all, would like to see the number of countries that are developing weapons decline in number. That's one reason why we welcome the Libyan declarations in the same way we have welcomed declarations of other countries, who thought about it, may have proceeded through certain stages, but ultimately decided that this was not in their security interest, certainly not in the interest of their international relations with others. IAEA is involved in this business of trying to constrain the development of countries that have declared that they really don't want to go there. A part of what we're looking at here is not a situation of everybody at the same point of development.

Having said that, you know, a question will be raised, obviously, by those who have weapons: "Are there the same security safeguards for us?" For instance, in the Russian Duma, if their foreign relations committee was to have a deliberation like this, would the administration witnesses be making the same assurances to Duma members that you have been making to the Senate today?

Ambassador Brooks.

Ambassador Brooks. Well, actually, because the Russian Federation, for whatever reason, chose to adopt a much narrower protocol, they wouldn't have to. The reason we're making these assurances goes back to the point that several of us has made about United States leadership. We chose to adopt the entire Additional Protocol, with only the addition of a national security exemption. It's not a national-inconvenience exemption, it's not a national-burden-on-somebody-who-has-to-fill-out-a-form exemption; it's a national security exemption. So we have chosen to accept the burdens that we ask other states to accept, and we've done that for the reason I alluded to in my testimony, that, as a practical matter, we are, in these areas, the preeminent nation in the world, and so our example matters more than other people's examples.

So I think that if my colleagues in Russia were testifying, they would say that they had adequately protected national security. But I think, actually, they went much farther than would have been appropriate for us, as a global leader.

The CHAIRMAN. Where would the Chinese be on this same scale? What kind of assurances do they have?

Ambassador Brooks. Their protocol is also far more circumscribed than ours, and also includes, as I recall, the national

security exemption.

So I don't believe any of the five nuclear weapon states under the Non-Proliferation Treaty is approaching this question with any disregard for security. The difference is much in our willingness to accept burdens, inconveniences, extra work in order to demonstrate that that's not incompatible with the position of commercial leadership; and, thus, take not so much the other nuclear weapon states, but the more advanced non-nuclear weapon states. And, we believe, although one can never prove these things, that our willingness to do that has already had an impact on some states that have chosen to adopt Additional Protocols. And we believe, with the further impetus that Senate advice and consent will give us, that we will also be able to garner in some more folks.

The CHAIRMAN. So, as you've all testified, essentially, even though others who are nuclear powers may not have gone so far, we have done so deliberately. We are attempting to take a leader-ship situation. This, as I understand it, is the President's position, and it is why he feels strongly that this is important at this particular time, not only in negotiation with others, but, as you said, Ambassador Brooks, in setting an example, which may lead other nations to have an internal debate. It may be a very covert, private debate right now, but one in which the intensity of our feeling about this is exemplified by the example that we are prepared to set, despite the real political considerations of others who might also go that far, who may be stimulated to do more, once again, by our example. Is that a fair summation of the situation?

Ambassador Brooks. Yes, sir.

The CHAIRMAN. Let me just ask whether there are any other additional comments any of you would like to make, beyond your statements or your responses to questions that I've raised this morning.

Well, if not, I thank you——

Yes?

Ambassador Brooks. Yes, sir. You commented earlier on the absence of your colleagues, and I just wanted to say, on behalf of the administration, how grateful we are to you. I know that these other demands are extremely important, and the administration and all of us here are grateful to your recognizing the importance of this and continuing to hold this hearing. On behalf of the administration, I want to thank you, sir.

The CHAIRMAN. Well, thank you very much, Ambassador.

But let me just say, I, reciprocally, would like to say how much I appreciate the administration's emphasis in this area. I think it already is bringing about some results in the world that are extremely important. And topically, as we note the materials coming into Oak Ridge, Tennessee, yesterday from Libya, for example, this is not an abstract question. Very important.

Thank you for coming. Thank you for your testimony. We will share it with our colleagues.

And the hearing is adjourned.

[Whereupon, at 11 a.m., the committee adjourned, to reconvene subject to the call of the Chair.]

Additional Statements Submitted for the Record

PREPARED STATEMENT OF HON. RONALD F. LEHMAN, Ph.D.

Mr. Chairman, Members of the Foreign Relations Committee:

I am pleased to provide this statement on the US-IAEA Additional Protocol and its strategic context. These are my personal assessments and are not necessarily the views of any administration, organization, or institution with which I am now or have been associated. Of course, my views are heavily influenced by my experiences, many of which I have shared with you in the past.

Let me be very clear. I would urge the Committee to report favorably on consent to ratification of the US-IAEA Additional Protocol. The Additional Protocol is a valuable enhancement of our nuclear nonproliferation tool kit and will promote stronger cooperation around the world on nuclear nonproliferation. The Additional Protocol does not solve all of our nonproliferation problems, but it will help. Like all nonproliferation tools, the Additional Protocol carries with it some costs and risks, but in this case they are very manageable. Indeed, the process of optimizing the applica-tion of the Additional Protocol as it applies to others and applies to us will further enhance our cooperation with the IAEA, our conduct of other inspections, and our own confidence that we can secure sensitive information. The gains far outweigh the costs. The details of implementation are important and must be considered carefully on their own merits. Still, it would be a mistake to let the technical nature of the document mislead us into underestimating the strategic importance of the Additional Protocol. The Additional Protocol is both a symbol of the need for bolder action on nonproliferation and a catalyst for further measures.

The Additional Protocol is an important milestone on a long journey toward removing the threats posed by nuclear proliferation. For the last year and a half, I have been involved in a number of studies looking at the consequences of the "Atoms for Peace" speech delivered by President Dwight David Eisenhower on December 8, 1953. Fifty years ago, President Eisenhower offered his vision of how to manage the risks and opportunities created by nuclear technology. He correctly predicted that this technology would spread widely. In retrospect, he may not have anticipated that more countries would have had nuclear research or power reactors at the turn of the century than there were members of the United Nations at the time he spoke. Eisenhower, in that speech, called for the creation of an "international atomic energy agency." Eisenhower envisioned that, from the beginning, what became the International Atomic Energy Agency (IAEA) based in Vienna, Austria, would have two missions; namely, to help strengthen international security and to promote the peaceful applications of nuclear technology. There is an inherent tension between these two missions, but synergy as well.

At the risk of great oversimplification, let me assert that the history of the IAEA has been one of bringing nonproliferation from a de facto secondary priority to the highest formula de facto secondary priority to the highest factor highest functional priority. This is a process still underway and its tools and standards are almost certainly well short of what is necessary to deal with some of the potential proliferators and proliferation-enabling technologies we face today and will face tomorrow. Nevertheless, the IAEA has come a long way. The IAEA is not the only nonproliferation tool available to nations, but an enhanced IAEA can better complement the broader range of actions necessary. We will continue to need a comprehensive nonproliferation strategy involving more than the IAEA. In undertaking a more comprehensive approach, it is important to recognize that judgments made and actions taken multilaterally and unilaterally can be strengthened as a con-

sequence of implementation of the Additional Protocol.

Certainly, the IAEA cannot be relied upon alone to prevent proliferation. Nevertheless, a strong IAEA is important to the task. In its earliest days, governments pressed the IAEA to focus primarily on the peaceful applications of nuclear technical process. nology in energy, agriculture, industry, and medicine. Today, advocates of peaceful applications of nuclear technology increasingly understand that they must address concerns about nonproliferation and vulnerability to terrorist exploitation or attacks. Today, the IAEA has modernized its agenda to address these concerns. It needs the tools, however, for the modern age in which our prosperity, health, and freedom are dependent upon technologies that can be destructive in the wrong hands. The Additional Protocol is one of the tools we need to give us greater confidence that technologies will be used for beneficial and not malevolent purposes.

The completion of the Nuclear Non-Proliferation Treaty (NPT) was the major step in bringing nonproliferation into balance with the facilitation of peaceful applica-tions as an IAEA priority. Over time, the NPT has been adhered to by all nations with significant nuclear capabilities except three, and even these have relations with the IAEA. Still, the NPT took many years to reach the current state of near universality. France, China, Brazil, and Cuba, for example, joined very late. The problem, then and now, is that one size does not fit all. Negotiating provisions that are accepted as fair by all nations does not necessarily result in measures that are effective in the prevention of proliferation in certain nations. As a result, early safeguards provisions erred on the side of restraint. The Additional Protocol is designed to help correct this error resulting from too narrow a focus.

A major manifestation of that restraint was the preoccupation with fissile material and declared facilities. The message of the Manhattan Project and the comparable Soviet effort was that grand facilities and great resources were needed to produce the nuclear material needed for weapons. The spread of nuclear knowledge and many technologies related to nuclear weapons (computations, precision machine tools, etc.) seemed inevitable, so why not concentrate on controlling material that is produced in unique, relatively visible facilities. Focusing on declared facilities involved with material had the additional advantage of not bothering nations at other locations where those nations are engaged in sensitive military or commercial activities. The problem with this scoping of the problem is that it is incomplete and becoming more inadequate every day. The Additional Protocol is the product of recognition that circumstances have changed and technologies are advancing.

Not too long ago, I was involved in a study of nuclear verification as it related to North Korea. Our effort looked at scenarios under which Pyongyang might divert nuclear material out from under the watchful eye of IAEA safeguards. Scenarios were identified, but so were the fixes. In general, the problem is not diversion in were identified, but so were the fixes. In general, the problem is not diversion in the face of IAEA inspections at declared facilities. The real problems were undeclared activities, third-party assistance, and breakout from Treaty obligations, all dangers for which the IAEA had not been given a sufficiently clear mandate. Even intense implementation of the Additional Protocol in countries of concern cannot guarantee against these possibilities, but the Additional Protocol does give us greater ability to discover evidence early and take more unified and decisive action to turn things around. The Additional Protocol is not the only source of IAEA authority to pursue these concerns, but it will strengthen the IAEA's hand in investigating undeclared activities, unreported imports or exports, and preparations for breakout.

Indeed, a strong case can be made that many of the developments that are increasing the latent capacity of nations to produce nuclear weapons cannot be addressed without tools such as the Additional Protocol. I have in mind not only advances in lower cost and easier weapons technologies, but also such developments vances in lower cost and easier weapons technologies, but also such developments as global talent pools and brain drain, international capital flows and great wealth in some nations of concern, outsourcing of components and off-shore production, gray and black markets in high technology including weapons, agile manufacturing, just-in-time inventories, and rogue resources in failing states. Business as usual at the IAEA cannot address these problems. While it is vital to understand what happened in Iraq over the last dozen years, it is even more important to recognize that uncertainty about Iraq is part of the predictable pattern of uncertainty that has been illustrated in Iran, North Korea, Libya, and earlier in Iraq after the Gulf War. In nearly all these vital cases, the problem has been that the IAEA could not discover what in fact was there. Also, the IAEA has had little leverage on alleged shipments from countries such as Pakistan. The Additional Protocol will not make these problems go away, but without the Additional Protocol the IAEA will be far less able to help in dealing with these challenges.

As one who has spent much of his life negotiating agreements, I remain interested in how the document is crafted, what it means, how it will be implemented, and what the consequences will be, even at the technical level. One issue that seems technical, nevertheless, fits into the broader strategic perspective I wish to present—managed access. Managed access is not a new issue. The US Government spent years assessing this problem as we negotiated the INF and START treaties and the Chemical Weapons Convention. In theory, every facility that might be visited under the Additional Protocol is subject to challenge inspections under the CWC. Still, one might expect a different probability and focus under the Additional Protocol. The National Nuclear Security Administration (NNSA) has had to deal with the issue of the CWC and rightly has begun a new set of studies and field exercises to deal with new possibilities. There are real risks and costs that must be managed. At the same time, my own experience leads me to believe that we need to be making these preparations in any case in support of our own national security.

When we did the managed access studies for the CWC we discovered counter-intelligence weakness that had to be addressed, whether or not we faced managed access because of one or another treaty obligations. In addition, we learned much about how to conduct inspections in other countries under the conditions of managed access

Increasingly, as we seek to deal with the dangers associated with the spread of dual-use technology and the increasing latency of weapons capabilities, we need to develop the professional expertise to address threats to security while protecting sensitive information. This is not a theoretical problem to be dealt with in paper studies. The problem of balancing transparency and security requires the interaction of experts with diverse objectives. This means we must bring together in the field, at real locations and facilities, production managers, security officers, intelligence specialists, and the like. This is another reason why the costs and risks of the Additional Protocol, even though they must be managed, nevertheless also constitute a benefit. The Additional Protocol will help prepare us for the real world of dual-use latency that is emerging in a way that better protects both innovation and

Most debates concerning the role of the IAEA focus on supply-side controls over fissile material. In reality, the primary drivers of proliferation are to be found on the demand side, primarily regional security calculations and the nature of the regimes in power. The Additional Protocol would seem to be of limited importance here because it is a supply-side tool. Such a conclusion would be a mistake. In fact, the Additional Protocol may help both with efforts to improve regional security and to promote policy or political change in the regimes of concern.

On the first point, many nations will make their decisions on their security futures, including in some cases the decision to go nuclear, based upon their own assessments of risk. A number of countries such as Japan place great importance on sessments of risk. A number of countries such as Japan place great importance on the implementation of the Additional Protocol, universally and regionally. Northeast Asia is a nuclear proliferation powder keg with many nuclear capable countries watching what other nations are doing. Of greatest concern is North Korea, but it is not the only country of concern in the region, especially to other nations in the region. Although in my opinion far more than the Additional Protocol will be needed to rollback the North Korean nuclear program, widespread application of the Additional Protocol is of particular value in this region in addressing the demand side as well

Likewise, on the matter of changes in the behavior or nature of regimes of concern, greater openness such as is associated with measures like the Additional Protocol along with any reduction in perceived threats may encourage political change even in dictatorships. Such was the contribution, however small it might have been, to the end of the Cold War regimes. Such soft regime change or reform cannot be guaranteed, but it certainly can be encouraged. We will see what happens in Libya and Iran, but clearly some political changes have been assisted by more intrusive

transparency and detailed interactions.

One significant weaknesses of the NPT has been a lack of clarity in the minds of many over what in fact is prohibited. In its crudest form, violation of the NPT has been associated with the first nuclear weapons detonation detected. In fact, the obligations under the NPT are not to acquire nuclear weapons. Programs aimed at acquiring nuclear weapons inevitably involve activities that are not concentrated at declared facilities with nuclear material, and it is often information about these activities that inform threat assessments. Loose standards of compliance and verification that fail to take into account these activities are doomed to be inadequate. The Additional Protocol embodies recognition of the tighter standards that need to be applied to nuclear programs in their entirety, especially given the advance of nuclear capability around the world. Implementing the Additional Protocol may catalyze debate about what is in fact prohibited, but the Additional Protocol itself moves the center of gravity well toward the more comprehensive perspective on what is prohibited that is shared by the US and others.

The greatest weakness in the current nonproliferation regime is clearly uncertain enforcement. It is important to remember that the IAEA can encourage compliance, but has limited ability to enforce compliance. Its actions, however, can be vital to compliance, either in setting the stage for action or, unfortunately, demonstrating that action is not likely to be forthcoming. A case in point is North Korea. The history of negotiations with North Korea is a painful one to review, but perhaps no single event was more of a tipping point than the failure of the international community to back the IAEA decisively in 1993 when the Director-General sought to conduct a "special inspection." The special inspection, consider an extraordinary measure, was requested by the IAEA because of discrepancies in North Korean declarations whose significance was magnified by other evidence of undeclared facilities

and activities. Although the deeper reasons the international community hedged its support of the IAEA in the Agency's demand for "special inspections" are fundamentally political, the surface rationale was uneasiness in pressing for this novel intrusiveness in the face of sovereign resistance. Special inspections involved a phase change in thinking about openness for many countries that had, invoking the spirit of sovereignty, resisted even less intrusive earlier practices. Had the Additional Protocol been in force at that time, the IAEA might have received stronger support and the international community might have been able to end North Korean noncompli-

In summary, ratification by the United States and other countries of their IAEA Additional Protocols would help reduce, although not eliminate, several current weaknesses in the nonproliferation regime. It would place higher priority on nonproliferation and clarify for nations and the IAEA their nonproliferation mandate. It would help the IAEA perform its nonproliferation mission, and help other nations and institutions as well. Ratification of the US-IAEA Additional Protocol would demonstrate support for a stronger international nonproliferation norm deeply in the interest of the United States, but it would also do so through an approach that recognizes that not all nations present the same problem. In particular, the Additional Protocol process recognizes that the problems to be addressed in nuclear weapons states and non-nuclear weapons states require different treatment in the interest of all. Ratification of the Additional Protocol would help us have more flexible. bility to deal with this problem that one size does not fit all. Most importantly, it would force recognition that nonproliferation action must address undeclared facilities, exports, and breakout even more than declared facilities. It would help address important demand side issues such as closed regimes or regional threats that concern allies like Japan. It would codify tighter standards at a time in which a certain enforcement fatigue has set in and a tendency to pronounce international norms from on high is followed by business as usual. It would remove at least one pretext that some nations have invoked asking why they should adhere if even the United States has not. It would facilitate IAEA cooperation on a broader range of information and sources and would encourage the introduction of more effective monitoring and control technologies. And it would strengthen the hands of those who would take the steps necessary to enforce international nonproliferation obligations.

Mr. Chairman. This concludes my prepared remarks on the strategic aspects of ratification of the US-IAEA Additional Protocol. Please let me know if you would

like me to address any other questions. Thank you.

PREPARED STATEMENT OF NUCLEAR ENERGY INSTITUTE

The Nuclear Energy Institute (NEI) is responsible for developing policy for the U.S. nuclear industry. NEI's 270 corporate and other members represent a broad spectrum of interests, including every U.S. energy company that operates a nuclear power plant. NEI's membership also includes nuclear fuel cycle companies, sup-

pliers, engineering and consulting firms, national research laboratories, manufacturers of radiopharmaceuticals, universities, labor unions and law firms.

America's 103 nuclear power plants are the safest, most efficient and reliable in the world. Nuclear energy is the largest source of emission-free electricity generation in the United States. Nuclear power plants in 31 states provide electricity for one of every five homes and businesses in the nation, and the industry continues to reach record levels for efficiency and electricity production. It is essential that Congress adopt policies that foster the safe peaceful development of this vital part of our nation's and the world's energy mix—and fulfill existing federal obligations, such as the commitment to US/IAEA Applications of Safeguards.

My statement for the record addresses three key points:

- 1. The Senate should promptly act to ratify the IAEA Protocol.
- 2. Congress should take action on the implementation legislation for the Additional Protocol.
- 3. Implementation of the protocol on the commercial sector by the Nuclear Regulatory Commission's (NRC) and Commerce Department will not impose a burden.

RATIFICATION OF IAEA PROTOCOL

The U.S. Senate must ratify the Additional Protocol in order to place it into affect. This is very important from a policy perspective. First, given the important contributions that the peaceful uses of nuclear energy makes to society, it is critical for public confidence that we have, worldwide, a robust and effective nonproliferation regime. Ratification of the "Additional Protocol" will contribute towards enhancing that worldwide regime. Second, while a number of countries have ratified the Additional Protocol a large number have not. U.S. leadership in ratifying the Additional Protocol will be instrumental in influencing the decisionmaking in some of these countries. While we understand that other countries support the concepts of the protocol, they don't want to be obligated to the IAEA for anything that the U.S. is not obligated to. Therefore, United States ratification of the Additional Protocol removes that international impediment and should result in additional countries ratifying it. The larger the number of countries supporting the Additional Protocol the more robust the nonproliferation regime and the greater the pressure on other countries to agree to comply with the IAEA inspection regime.

CONGRESS SHOULD TAKE ACTION ON IMPLEMENTATION LEGISLATION

This important legislation is needed to implement the provisions of the Protocol to the Agreement of the International Atomic Energy Agency, (IAEA) regarding Safeguards in the United States. The United States signed the Additional Protocol in Vienna on June 12, 1998. President Bush submitted the Additional Protocol to the Senate on May 9, 2002. The State Department sent the implementing legislation to Congress on November 19, 2003, and asked that it be considered in conjunction with the Senate's advice and consent on the Protocol. The adoption of this agreement is an important step in demonstrating U.S. leadership in the fight against the spread of nuclear weapons. The Additional Protocol will provide the United States and the IAEA with another tool as we attempt to secure broader inspection rights in non-nuclear-weapon states that are parties to the Treaty on the Nonproliferation of Nuclear Weapons, (NPT). When the Committee on Foreign Relations reported out the NPT in 1968, it noted that "the treaty's fundamental purpose is to slow the spread of nuclear weapons by prohibiting the nuclear weapon states which are party to the treaty from transferring nuclear weapons to others, and by barring the nonnuclear weapon countries from receiving, manufacturing, or otherwise acquiring nuclear weapons." Since the Senate ratified the NPT, we have seen 188 states join the United States in approving the treaty. But recently we also have seen a disturbing increase in the global availability of nuclear materials and reprocessing and enrichment technology. To ensure that these materials and technologies are devoted only to peaceful purposes, the IAEA must have the power to conduct intrusive inspections at almost any location in a non-nuclear-weapon state to verify state parties' commitments under the NPT. The world community has learned that existing safeguard arrangements in non-nuclear-weapon states do not provide the IAEA with a complete and accurate picture of possible nuclear weapons-related activities. It is critical tha

The United States, as a declared nuclear-weapon state party to the NPT, may exclude the application of IAEA safeguards on its nuclear activities. Under the negotiated Additional Protocol, the United States also has the right to exclude activities and sites of direct national security significance in accordance with its National Security exclusion. This provision is crucial to U.S. acceptance of the Additional Protocol and provides a basis for the protection of U.S. nuclear weapons-related activities, sites, and materials as a declared nuclear power. The Additional Protocol does not contain any new arms control or disarmament obligations for the United States. While there are increased rights granted to the IAEA for the conduct of inspections in the United States, the likelihood of an inspection occurring in the United States is very low. Nevertheless, should an inspection under the Additional Protocol be potentially harmful to U.S. national security interests, the United States has the right, through the National Security Exclusion, to prevent such an inspection.

COMMERCIAL INDUSTRY IMPACT

The nuclear energy industry supports the administration's proposal for implementation of the Additional Protocol. NEI on behalf of the nuclear industry has provided written comments to the Commerce Department on its notice on proposed concept for implementation of the Additional Protocol. NEI also has participated in several meetings with the Commerce Department and the Nuclear Regulatory Commission (NRC) discussing how the Additional Protocol will be implemented. Based on these interactions the industry recognizes it will result in additional facility reporting and facilities will have the potential for an IAEA inspection. NEI does not believe the reporting and potential inspections will result in a burden on the nuclear industry.

Therefore, NEI supports moving forward with the Additional Protocol and the legislation. We believe the benefit of the Additional Protocol to seek out clandestine nuclear programs in unstable and/or unfriendly countries out weight the minor addition reporting and minimal inspection potential. In the unlikely event that implementation of the Additional Protocol imposed an inappropriate burden on U.S. commercial interests, NEI will immediately advise the governmental entities responsible for implementing the requirements, and the congressional committees responsible for overseeing implementation.

SUMMARY

NEI supports the ratification of the Additional Protocol and the passage of the implementation legislation. This position is based on the small additional requirements placed on the U.S. nuclear industry being out weighted by the benefit to the world of the IAEA having the use of the Additional Protocol. The passage of legislation protects U.S. national security interests, while strengthening the ability of the IAEA to discover illegal nuclear weapons activities.

PREPARED STATEMENT OF AMBASSADOR NORMAN A. WULF 1

I thank the Committee for the opportunity to submit this statement for the record. I was active in International Atomic Energy Agency (IAEA) matters for some twenty years before retiring from the State Department in the fall of 2002. During that period, one of my duties was to lead an interagency delegation first to multilateral negotiations that elaborated a Model Protocol Additional to Agreements between States and the IAEA for the Application of Safeguards (Model Protocol) and subsequently in bilateral negotiations with the IAEA that led to the Protocol that is before this Committee (Additional Protocol). It is identical to the Model Protocol, except for the provisions in the first article dealing with the national security exclusion and with managed access for national security.

BACKGROUND

For the vast majority of states, IAEA safeguards flow from the obligation they assumed by becoming a party to the Treaty on the Nonproliferation of Nuclear Weapons (NPT). Article III of the NPT states:

Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards . . . for the exclusive purpose of verification of the fulfillment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons . . .

Prior to 1991, the Member States of the IAEA expected IAEA inspectors to rely on a narrow interpretation of this clause, i.e., non-diversion of declared materials. In simplistic terms, this meant the Agency did an annual inventory of nuclear materials that the State had declared and then used seals, surveillance cameras and some additional measurements to ensure that the nuclear material remained at the site until the next annual inventory. The inadequacies of this limited approach were brought home dramatically after the first Gulf War. IAEA inspectors had been going to an Iraqi facility for some years to check on declared materials in one building while the Iraqis were engaging in clandestine enrichment activities in a nearby building.

Spurred by this incident and prodded by its Member States, the IAEA systematically examined what it could do to ensure that the provisions of NPT Article III were being met in a broader sense, i.e., that States were not cheating on their obligations not to manufacture or acquire nuclear weapons through the use of covert or undeclared nuclear materials or activities. The Agency reviewed first the authority provided in existing comprehensive safeguards agreements. This led the Agency to conclude that it had the authority to take environmental samples at declared facilities and to consider third party information. The Agency also determined that it could require the provision of design information before nuclear facilities were constructed. Potentially of most significance was the determination that existing safeguards agreements provided the authority for the conduct of special inspections. The utility of special inspections was reduced when the IAEA Board of Governors

¹Although serving as a consultant to the Department of State, this statement represents his personal views and does not necessarily reflect the views of the State Department or any other part of the U.S. Government.

reaffirmed its availability but expressed the view that special inspections should be

utilized only in exceptional circumstances.
While the Agency and its Member States agreed that these existing authorities were beneficial, they were inadequate by themselves to allow the Agency to provide a meaningful assurance about the lack of undeclared nuclear activities and materials. The Agency Secretariat, following several years of drafting, circulated a draft of the additional authorities it believed were needed. This was followed by the formation in June of 1996 of a committee, open to all member states, which used the Secretariat draft as a basis for negotiating new authorities to be contained in a model protocol.

NEGOTIATION OF THE MODEL PROTOCOL

The Committee met repeatedly over the course of a year with around 60 countries participating in the negotiations. One of the first decisions was to follow the precedent established for comprehensive safeguards agreements. Rather than negotiating the final text of a multilateral agreement, the committee decided to agree upon a model and then have the individual states negotiate their own agreement with the Agency based on that model. It was understood that non nuclear weapon states under the NPT would have to accept all the provisions contained in the Model Protocol whereas nuclear weapon states and non-parties to the NPT would have greater flexibility. Once an agreement was negotiated between a State and the IAEA, the agreement would have to be approved by the IAEA Board of Governors. The negotiary ating committee also decided that what was being negotiated would not replace existing safeguards agreements but rather would be a protocol that supplemented them.

From the start of the negotiations, it was clear that the major opposition to strong provisions in the Protocol was coming from such countries as Germany, Japan, Canada, Belgium and Spain. Their opposition led other countries with nuclear programs to join their efforts to oppose or weaken the Secretariat's draft proposals. These States argued that the U.S. would have little credibility in seeking stronger provisions if they were not applicable in the United States. They argued that the U.S. should follow the precedent established in 1968 when President Johnson agreed that the U.S. would accept the same safeguards, with a national security exclusion, as non nuclear weapon states. They were also concerned that their nuclear industries would be placed at a competitive disadvantage and that they would have difficulties of persuading their legislative bodies to support an agreement from which the United States would be exempt. Faced with the prospect of no agreement or one that was very weak, President Clinton, following interagency consultations, committed the United States to accept all the provisions of whatever Protocol emerged subject to an exclusion for locations and activities of direct national security significance. Also influencing the decision was an understanding that our ability to persuade others to accept the Protocol would be significantly enhanced if the United States itself had accepted it. Without this commitment, there would not have been as strong a Protocol; indeed, there might not have been any protocol at all.

This commitment broke the logiam and the negotiating committee began making rapid progress. Throughout the negotiation, the delegation sought to strike a balance between the need for the IAEA to have strengthened capability against the need to protect U.S. security and commercial interests. Once the negotiations concluded, the Model was presented to the Board of Governors in May of 1997 and it was approved for use as the basis for bilateral negotiations with individual states.

DECLARATIONS AND ACCESS

Under pre-1991 safeguards, non-nuclear weapon states were required to declare all source or special fissionable materials within their jurisdiction and the IAEA then sought to prevent diversion of this declared material by applying safeguards to it. The Protocol focus is broader than nuclear material. It covers materials before traditional safeguards would apply and it follows materials after safeguards have been removed. For example, Protocol parties must declare such things as uranium mines and the treatment of waste products from nuclear reprocessing. Rather than a focus limited to the actual facility where nuclear material may be stored, utilized or treated, the Protocol covers components that could be used in such facilities. Thus, Protocol parties are required to declare such things as factories capable of manufacturing important nuclear components. In addition, they are required to report imports or exports of such components.

While detailed accountancy and frequent inspections are necessary when dealing with actual nuclear material or completed nuclear facilities, less is required when dealing with uranium ore or components of nuclear facilities. The Protocol recognizes this difference by providing the Agency with a right of complementary access, rather than traditional safeguards inspections. Complementary access is designed to be, and has been used as, a routine Agency activity but not one that is used to systematically verify each and every aspect of the declaration. Rather than routinely visiting every location declared, the Protocol says that the Agency should do so on a selective basis or when there is an inconsistency in the information available to it or a question about that information. And, when it makes the visit to that declared location, the Protocol specifies the activities that the Agency may conduct.

To deal with the situation where a proliferator seeks to hide its activities at or near a declared nuclear complex, as was the case in Iraq, inspectors can seek access to buildings at such sites with only two hours notice. If the Agency has information that leads it to conclude something has not been declared that should have been, it can conduct complementary access at undeclared locations but the activities that it can perform at that location are circumscribed.

EVALUATION OF THE PROTOCOL

The Protocol will significantly strengthen the Agency's ability to detect undeclared nuclear activities and materials. As such, it should deter some countries that might be tempted to proliferate while increasing the risk that if they proliferate they will be caught. The declaration required by the Protocol will give the Agency a much more comprehensive understanding of a Party's capability to support an undeclared nuclear program. The Agency has greater rights to ask questions and seek access. This is the most important contribution that the Protocol makes to IAEA arsenal. Should the State concerned refuse to answer the questions or to provide the requested access, the Board of Governors has the right to consider that refusal in determining whether to bring the matter to the attention of the UN Security Council. Moreover, many violations of the Protocol would occur at a much earlier stage in the nuclear development process than a violation of a comprehensive safeguards agreement. Thus, the international community could have more time to prevent the violator from acquiring nuclear weapons.

With respect to the impact of the Protocol in the United States, it must be emphasized that the primary purpose of the Protocol is to determine whether a Party has undeclared nuclear activities. Everyone knows that the United States is a nuclear weapon state and will not provide information or access to aspects of its nuclear weapon program. Moreover, the national security exclusion contained in the Additional Protocol clearly means that the United States will have undeclared nuclear activities. Since the IAEA already knows that the United States has undeclared nuclear activities, it is reasonable to assume that the IAEA will not spend much, if any, of its scarce resources conducting complementary access in the United States.

The IAEA will review the information we provide in our declaration primarily from the perspective of determining whether it is helpful in determining whether a non nuclear weapon state has an undeclared nuclear program. Of most relevance to that objective would be the information that is provided regarding exports of nuclear related equipment and cooperative nuclear activities. Nevertheless, prudence dictates that steps to meet all the Protocol obligations, including implementing legislation, must be taken to deal with the possibility that the Agency subsequently decides to exercise its right to conduct complementary access.

Regarding risks to U.S. national interests that might result from entry into force of the Additional Protocol, my view is that the risks presented are modest. The fact that the IAEA has little incentive to exercise its rights in the U.S. reduces these risks further. Obviously, all risk cannot be eliminated. But when those modest risks are balanced against the enhancement of our national security from the application of the Protocol elsewhere, it is clear the gains far outweigh them.

To ensure that these national security gains are maximized, the U.S. will need to exercise caution about the precedents it creates. As indicated, our Protocol is identical to the Model Protocol except for the national security exclusion and the managed access for national security purposes. No other country has these two exceptions, although Russia does have a type of national security exclusion. Therefore, what is done under those exceptions does not create a concern about establishing a precedent that others will seek to emulate. However, we need to exercise great caution in how we deal with the other provisions of the Protocol since non nuclear weapon states have identical provisions in their protocols. When implementing these other provisions, the question needs to be constantly posed whether a country like Iran, for example, should have a similar right. If it exercises that right, how would that affect the Agency's ability to find undeclared nuclear materials and activities.

CONCLUSION

The Protocol significantly strengthens the ability of the Agency to deter or detect undeclared nuclear activities and materials. That strengthening is a substantial benefit to U.S. national security. Implementation of the Protocol in the United States presents minimal risks to U.S. national interest. Therefore, this Committee should recommend that the Senate give its advice and consent to ratification of the Additional Protocol.

RESPONSES TO COMMITTEE QUESTIONS FOR THE RECORD

Administration Responses to Questions for the Record, Submitted by the Senate Foreign Relations Committee

Question 1. Beyond the terms of the Subsidiary Arrangement, what specific measures will the United States take to ensure that classified material is not compromised during inspections carried out under the Additional Protocol?

Answer. [DELETED]

Question 2. The Letter of Submittal states that the use of the National Security Exclusion by any Federal Agency "will be guided by principles developed for its application." In open form if possible, but in classified form in if necessary, please specify these principles. Will the principles apply equally to all Federal Agencies that have equities at stake in the Additional Protocol? For a case in which two or more agencies disagree on the acceptability of a proposed inspection, please lay out the process that would occur and to what extent the President could intervene to resolve the dispute.

Answer. [DELETED]

Question 3. The Article-by-Article analysis submitted with Treaty Doc. 107-7 states that the National Security Exclusion will be exercised when the application of the Additional Protocol's provisions would involve "activities with direct national security significance to the United States or to locations and information associated with such activities" (Article 1.b). What factors will go into any determination by the United States that a site or facility has "direct national security significance?" What is the meaning of the term "direct national security significance" as it is used in the Additional Protocol? Does the Administration interpret this term to mean sites and activities associated with the U.S. nuclear weapons complex and not those facilities, sites and activities associated with the U.S. civil nuclear power and research industry?

Answer. [DELETED]

Question 4. Has the U.S. Government conducted site vulnerability assessments for those locations that the U.S. Government expects to include in its initial declaration under the Additional Protocol? What is the expected length of time needed to complete those inspections? What is the utility of waiting for completion of all such inspections before the Additional Protocol enters into force?

Answer. No final vulnerability assessments have been completed. In cooperation with the lead agency for implementing the Additional Protocol at a given location, agencies with affected national security equities will be responsible for conducting or facilitating vulnerability assessments at those locations which may have activities or information of direct national security significance to the United States. As a result of these vulnerability assessments, in cases where the equity agency deems there is information, activities, and locations of direct national security significance which cannot be protected, the national security exclusion will be used.

DOD, in cooperation with DOE, conducted 10 vulnerability assessments at DOE facilities in 1999-2000. These assessments were based on preliminary assumptions that are no longer valid and will need to be revisited. This process is underway. In addition to initial assessments and procedure revisions to support entry into force, DOE sites will integrate Additional Protocol requirements into its periodic security assessment, planning, and procedure updates. Furthermore, a subgroup of the DOD Nuclear Safeguards Implementation Working Group will identify other sites that require vulnerability assessments. The completion date depends on the number of locations identified for vulnerability assessments and available resources. All necessary site vulnerability assessments will be completed by entry-into-force of the U.S. Additional Protocol.

Question 5. The Committee has been informed, through briefings, that the IAEA, to date, has a perfect record with regard to the handling of information gained in the United States during inspections and from U.S. declarations. Please provide the Committee with any past statements, reports, or other formal communications from the U.S. intelligence community regarding the IAEA's record of protection of sensitive information obtained through U.S. declarations and inspections. How has the IAEA strengthened its security regime to meet the requirements of Article 15 in the Additional Protocol? Does the IAEA need to take any further measures in this regard?

Answer. The executive branch is unaware of any statements, reports, or other formal communications from the U.S. intelligence community regarding the IAEA's record of protection of sensitive information obtained through U.S. declarations and

inspections.

During the negotiation of the Model Additional Protocol, States pushed for a more detailed system for protecting safeguards confidential information, in light of the broader declaration requirements in the Protocol. Article 15 of the Additional Protocol requires the Agency to submit its regime for the protection of confidential information for approval and periodic review by the Board of Governors, to implement measures for the handling of confidential information, to impose conditions of staff employment relating to the protection of confidential information, and to have in place procedures for breaches or alleged breaches of confidentiality. Following the Board's approval of the Model Protocol, the IAEA received Board approval in December 1997 for an updated regime for protection of confidential information. The United States joined the Board in approving the revised regime.

The new regime is substantially more detailed than what existed previously. For example, the new regime includes penalties for IAEA staff found to be in breach of their obligations, including potential exposure to civil and criminal penalties and waiver by the Agency of legal immunities. The IAEA has continued to make regular reports to the Board on its progress in implementing security improvements in such

areas

The United States has supported and participated in IAEA's efforts in this area. The United States, through its voluntary contribution to the IAEA, has provided technical assistance to the IAEA in improving information security in the Department of Safeguards, including in its safeguards information systems. The IAEA has made substantial and steady progress in implementing the recommendations made.

Question 6. Is there any need for the IAEA to amend or change its contractual arrangements with its inspectors and its staff in Vienna to reflect the additional types of information that could be obtained in the United States as a result of inspections under the Additional Protocol?

Answer. The IAEA's review of security-related issues is on-going. Article 15 of the Additional Protocol requires the Agency to submit its regime for the protection of confidential information for approval and periodic review by the Board of Governors, to implement measures for the handling of confidential information, to impose conditions of staff employment relating to the protection of confidential information, and to have in place procedures for breaches or alleged breaches of confidentiality. Following the Board's approval of the Model Protocol, the IAEA received Board approval in December 1997 for an updated regime for protection of confidential information. The United States joined the Board in approving the revised regime.

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areas.

Question 7. What is the likely impact of Article 14.b of the Additional Protocol? For example, will the United States require that certain IAEA communications be encrypted?

Answer. Under Article 14, the United States is required to permit and protect unimpeded communications by the Agency for official purposes between Agency inspectors in the United States and Agency Headquarters and/or Regional Offices. The Agency has the right, in consultation with the United States, to make use of internationally established systems of direct communications, including satellite systems and other forms of telecommunication. In so doing, however, the Agency must protect from disclosure any information that the United States regards as being of particular sensitivity. If such information is provided to the IAEA, we will ensure that they will take every necessary precaution to prevent its disclosure, including using

encrypted communications where appropriate. Protection of such information is a concern to many States under the safeguards system, and the IAEA has been highly responsive to States' concerns.

Question 8. What impact did the decision by the United States and other nuclear weapon states (NWS) to sign an Additional Protocols have on the willingness of non-nuclear weapon states (NNWS) to agree to the text of the Additional Protocol that they are urged to adopt? What is the likely impact of U.S. ratification of its Additional Protocol on those states that have not yet signed or ratified an Additional Protocol?

Answer. During the negotiations of the Model Protocol, many non-nuclear-weapon states parties pushed to water down the provisions of the document, arguing that the intrusiveness of the measures and the costs to industry would be too great, and would place them at a commercial disadvantage relative to the United States. To defuse these arguments, the United States pledged to accept the Protocol in its entirety, with the addition of a National Security Exclusion allowing the United States to exclude from the Protocol activities of direct national security significance to the United States. This offer was critical to gaining the acceptance of the Protocol by countries such as Germany and Japan, and was relied on by their governments in persuading their legislatures to approve their Protocols. Japan's Additional Protocol is already in force. Moreover, Japan's implementation of the Protocol has been instrumental in getting a large number of other states to sign protocols. Germany and nearly all other states of the European Union have completed their ratification processes; entry into force will take place once all EU states have completed their ratification processes.

cation processes.

The U.S. offer on the Protocol was an extension of the original U.S. pledge to accept the same safeguards on all of its civil nuclear facilities that non-nuclear-weapon states parties are subject to under the NPT. This pledge, first made by President Johnson and sustained by every administration since, helped the United States demonstrate that adherence to the NPT did not place other countries at a commercial disadvantage, either because of increased costs associated with safeguards or because of the risk of the compromise of proprietary information, and was critical to gaining widespread adherence to a strong NPT.

to gaining widespread adherence to a strong NPT.
U.S. ratification will put the U.S. in a better position to promote adherence to Additional Protocols by others. Waiting for still more states to ratify their Additional Protocols would not serve the nonproliferation interests of the United States.

Question 9. Please outline past, present, and planned efforts relating to U.S. diplomatic outreach in pressing for universal adoption of Additional Protocols by NNWS parties to the Treaty on the Non-proliferation of Nuclear Weapons. How will Senate ratification of the Additional Protocol benefit these efforts?

Answer. Both when the United States signed its Additional Protocol in 1998, and when President Bush transmitted the Additional Protocol to the Senate in May 2002, U.S. Embassies around the world were asked to press the host countries to adopt the Additional Protocol. We have also raised the issue at appropriate opportunities, such as Assistant Secretary John Wolf's trip to Argentina and Brazil in May 2003. Since September 2000, when the IAEA adopted an Action Plan to promote adherence to safeguards agreements and Additional Protocols, we have focused on supporting the IAEA's outreach efforts. We participated in IAEA regional outreach seminars in Japan, Peru, Kazakhstan, South Africa, Malaysia, Romania and Uzbekistan and have provided voluntary contributions to support those and other IAEA efforts.

The United States has stated its strong support for universal adherence to the Additional Protocol. Achieving this goal would be greatly facilitated by ratification of the U.S. Additional Protocol, as signed. Should the Senate give its advice and consent to ratification for the U.S. Additional Protocol, we would initiate another outreach in diplomatic channels to press states to sign and ratify Protocols.

Question 10. How will universal adoption of Additional Protocols by NNWS enhance the capability of the IAEA to detect clandestine nuclear weapons programs in NNWS party to the Treaty on the Non-proliferation of Nuclear Weapons?

Answer. Universal adoption of the Model Additional Protocol will give IAEA inspectors greater information and access to nuclear and related facilities worldwide. By accepting a new legally-binding Protocol, States will assume new obligations that will require making all their nuclear activities more transparent. It is critical to our national security to minimize the number of nations with or pursuing nuclear weapons, as well as ensure that nuclear devices or material do not wind up in the hands of non-state actors, such as terrorist groups. Promoting the widest possible application of the strongest possible system of IAEA safeguards helps us accomplish this goal.

Question 11. Please explain the background and rationale for the April 30, 2002 letter from Ambassador Kenneth Brill to IAEA Director General Mohamed ElBaradei. Has the IAEA formally or informally responded to the letter? Is there any reason to believe the IAEA does not accept any of the stipulations laid out by the United States in the letter?

Answer. The letter was sent as a U.S. initiative and not as a response to any request by an IAEA official. We wanted to inform the IAEA explicitly and directly about the U.S. approach toward the Additional Protocol and the importance of the National Security Exclusion, rather than just indirectly through the documents transmitting the Protocol to the Senate. No official response, either written or oral, to the April 30, 2002, letter from Ambassador Kenneth Brill to IAEA Director General Mohamed ElBaradei was requested or received. There is no evidence of any negative reaction.

Question 12. Please explain the rationale for the following statement in Ambassador Brill's letter:

"Certain activities that occur at locations that are part of the United States civil nuclear program may also be excluded from the declaration and access provisions of the Additional Protocol in accordance with the terms of the NSE."

Answer. [DELETED]

Question 13. Please explain the practical consequences expected to flow from this

statement in Ambassador Brill's letter:

The United States expects the IAEA to seek access to the United States for the purpose of increasing the effectiveness or efficiency of IAEA safeguards at facilities in non-nuclear-weapon states, or enhancing the capability of the IAEA to detect undeclared nuclear material and activities in Non-nuclear-weapon state[s].

Is there any reason to believe the IAEA disagrees with the substance and/ or import of this statement?

Answer. The primary purpose of the Additional Protocol in a non-nuclear-weapon state is to enable the IAEA to provide some assurance about the absence of undeclared nuclear activities in that state. This purpose does not apply to nuclearweapon states, which are understood to have extensive nuclear activities not required to be declared to the IAEA.

Ambassador Brill's statement conveys our view that, as a practical matter, the Agency's interest in the U.S. declarations would be focused on clarifying relationships we may have with non-nuclear weapons states. As such, most requests from the IAEA would likely be requests for further information rather than complementary access visits.

The Administration did not ask for or receive a reply, but has no reason to believe the IAEA disagrees with the substance and/or import of the above-referenced state-

ment from Ambassador Brill's letter. Question 14. Ambassador Brill's letter states that, pursuant to Article 1.b of the Additional Protocol, "the United States will supply information pursuant to Article 2 of the Additional Protocol only on those unclassified activities to which it has determined that it will be able to provide the IAEA with sufficient access, including with managed access, to enable it to verify the accuracy of the declared informa-

tion." Why did the United States not choose to supply information pursuant to Article 2 on all unclassified activities, even if the United States could not offer sufficient access to the IAEA necessary to verify the accuracy of declared information on some activities?

Answer. It is not the purpose of Protocol implementation in nuclear weapons states to permit the IAEA to verify the completeness of the state's declaration. The primary purpose of the U.S. Protocol is to demonstrate that we are willing to accept the same safeguards on civil nuclear activities as non-nuclear weapon states. Providing declarations on locations for which access is impossible would result in having to deny the IAEA access should they request access, and would be detrimental to U.S. policy goals for encouraging implementation of Additional Protocols and strengthened safeguards and therefore not serve the purpose of the Protocol.

Question 15. Ambassador Brill's letter states that "the United States intends to use the NSE [the 'National Security Exclusion' provided by Article 1.b of the Additional Protocol] with regard to location specific environmental sampling at any current or former nuclear weapon production complex site." What are the capabilities of such sampling, as used by the IAEA, and why do they make it unwise to permit any and all such sampling at any current or former nuclear weapon production complex sites, as opposed to a case-by-case consideration of requests to permit such sampling? In open form if possible, but in classified form in if necessary, could the Administration clarify its policy with respect to the use of sampling techniques, to include environmental sampling, to clarify the risks associated with each type of sampling technique for U.S. national security or business proprietary information? Answer. [DELETED]

Question 16. Ambassador Brill's letter states that "the United States does not foresee circumstances in which the IAEA would need to propose to conduct wide area environmental sampling in the United States" pursuant to Article 9 of the Additional Protocol. Could the Administration clarify its understanding of what the impact of this statement is expected to be, since it is not accompanied by any warning that the United States will invoke Article 1.b (the National Security Exclusion) to deny permission to conduct such sampling?

Answer. Under Article 9, the United States shall provide the Agency with access to locations specified by the Agency to carry out wide-area environmental sampling, provided that, if the United States is unable to provide such access, it shall make every reasonable effort to satisfy Agency requirements at alternative locations. Article 9 further provides that the Agency shall not seek such access until the use of wide-area environmental sampling and the procedural arrangements therefor have been approved by the Agency's Board of Governors and following consultations between the Agency and the United States. Such arrangements have not been brought before or approved by the Board. The United States has informed the Agency that even if such arrangements were approved, the United States does not foresee circumstances in which the Agency would need to propose to conduct wide area environmental sampling. If wide-area sampling is eventually approved by the Board of Governors, its use in the United States requires consultations between the IAEA and the United States. Given the requirement for consultation and therefore U.S. agreement, the United States did not feel it necessary to make a direct reference to Article 1.b.

Question 17. When does the Administration expect a definitive decision from the IAEA Board of Governors regarding the use of wide-area environmental sampling and the procedural arrangements for its use in the United States pursuant to Article 9 of the Additional Protocol? Is the Administration seeking such a decision? For locations co-located with locations that are not of direct national security significance in the United States, yet which do contain information or activities of direct national security significance, what specific procedural arrangements would the United States seek to create regarding the use of wide-area environmental sampling? Would these specific arrangements need to go beyond the right of managed access contained in Article 1.c? Why did the United States not seek a more definitive provision with respect to wide-area environmental sampling during negotiations on the Additional Protocol?

Answer. [DELETED]

Question 18. Are there any formal or informal understandings with the IAEA with regard to the use of wide-area environmental sampling in the United States? What are the expected capabilities of IAEA wide-area environmental sampling, and what potential risks for U.S. locations result from those capabilities? Has the interagency conducted an analysis of the likely impacts of wide-area environmental sampling for the United States, including any national security implications for U.S. locations? If so, please submit this analysis to the committee.

Answer. [DELETED]

Question 19. Ambassador Brill's letter also states: "The United States expects the IAEA to seek access to the United States for the purpose of increasing the effectiveness or efficiency of IAEA safeguards at facilities in NNWS, or enhancing the capability of the IAEA to detect undeclared nuclear material and activities in NNWS." Would it not be reasonable to expect that the IAEA would want to practice the use of wide-area environmental sampling in a location where a positive result might be obtained? To what extent, if any, do other NWS permit the use of wide-area environmental sampling under their Additional Protocols?

Answer. The United States has informed the Agency that, if arrangements for wide-area environmental sampling were approved, the United States does not foresee circumstances in which the Agency would need to propose to conduct it in the United States. If wide-area sampling is eventually approved by the Board of Governors, its use in the United States requires consultations, and therefore agreement, between the IAEA and the United States.

With regard to the other nuclear weapons states, the UK accepted a limited version of Article 9 that states it may accept wide area sampling if it were focused

on detecting covert activities in NNWS. No other NWS have provisions for wide area sampling.

Question 20. Please clarify the meaning of the clause in the Preamble to the Additional Protocol calling for the frequency and intensity of activities described in the Protocol to be kept to a minimum.

Answer. The full quote from the preamble reads "the frequency and intensity of activities described in the Protocol shall be kept to the minimum consistent with the objective of strengthening the effectiveness and improving the efficiency of Agency safeguards." Strengthening safeguards is the primary objective of the Model Additional Protocol. Consistent with that objective, however, the frequency and intensity of implementation of protocol measures is to be minimized. The declarations of the Additional Protocol are not to be verified mechanistically or systematically because the Protocol covers activities and materials that could contribute to production of nuclear material, whereas traditional safeguards cover actual nuclear material. As a practical matter, mechanistic and systematic verification of the Additional Protocol would require a high expenditure of IAEA effort on routine verification and would prevent the IAEA from focusing its efforts on significant questions and inconsistencies

Question 21. Have any subsidiary agreements been signed, pursuant to Article 13, other than the one submitted to the Senate with the Additional Protocol as a part the package accompanying Treaty Document 107-7? Is the Administration awaiting the outcome of Senate consideration of the Additional Protocol to begin negotiations on any further subsidiary arrangements? If not, is the Administration now negotiating any such agreements, and are those expected to be completed in the coming months? If so, please summarize them. What factors will determine whether a subsidiary arrangement is submitted to the Senate for its advice and consent to ratification?

Answer. No other subsidiary arrangements have been signed or negotiated, nor is the Administration negotiating any such agreement. The Administration is exploring the development of General Part Subsidiary Arrangements, which could include technical matters such as describing reporting formats, to facilitate implementation of the Additional Protocol. Subsidiary arrangements under the Additional Protocol, as with those that are periodically negotiated under the existing Safeguards Agreement, are of a detailed technical character and do not change the rights and obligations of the Parties. As such, Subsidiary Arrangements have not been submitted to the Senate for its approval. The normal factors for determining whether an agreement is subject to Senate advice and consent would be applied to future subsidiary arrangements.

Question 22. What is the record of IAEA inspections in the United States under the existing Safeguards Protocol? How many inspections does the IAEA normally conduct in the United States, other than those requested by the United States? Is the Additional Protocol expected to result in many more inspections of U.S. locations?

Answer. During 2003, each of the four facilities selected for safeguards (out of approximately 250 eligible facilities) were inspected once every month by the IAEA. In addition, one of the facilities that was previously inspected was decommissioned and deselected for safeguards in 2003. All of these inspections were conducted at the request of the United States in order to safeguard fissile material declared excess to our defense needs. In past years at the invitation of the United States, IAEA safeguards inspectors have conducted inspections in the United States as part of safeguards experiments. The IAEA has conducted no other inspections in the United States since 1993.

There were 86 complementary accesses world-wide by the IAEA during 2002 (the last year that we have full information). The IAEA is not expected to waste scarce resources in seeking complementary accesses in a nuclear-weapon state such as the United States.

Note: We understand the term "existing Safeguards Protocol" to mean the U.S.-IAEA Safeguards Agreement, which entered into force in 1980, not the initial Protocol to the U.S.-IAEA Safeguards Agreement, which was signed in 1977, and which does not involve inspections.

Question 23. Please explain the procedures within the executive branch for reviewing proposed IAEA inspectors to carry out the Additional Protocol and deciding whether or not to accept them, pursuant to Article 11.

Answer. [DELETED]

Question 24. For inspections in the United States under the Additional Protocol, will there be defined points of entry (POEs) at all sites where information of direct national security significance exists? To what extent will the United States inspect equipment to be used under an Additional Protocol inspection in the United States? Answer. [DELETED]

Question 25. Will all counterintelligence and security training for declared locations with direct national security significance under the Additional Protocol be completed within 180 days after the deposit of the United States instrument of ratification? Will all such planning and training be completed for possible short-notice inspections at such locations, as well?

Answer. The Administration will not deposit the United States' instrument of ratification until such time as it determines we will be fully prepared to meet required declaration timelines and ensure readiness for complementary access. We will ensure the requisite counterintelligence and security training will be done, including that associated with inspections under the Additional Protocol.

Question 26. As of today, has the Administration completed, in at least draft form, all the necessary regulation and implementation legislation? When does the Administration anticipate that all such regulation will enter into force? What regulatory changes, if any, will be required? Which of these regulatory changes, if any, will not require implementing legislation?

Answer. The only implementing legislation that should be required to implement the treaty was submitted by OMB to the Congress in November. Draft regulations are being prepared by both NRC and DOC as part of their preparations for implementation. Before the rules can be published, the information collection forms must be approved by OMB and other regulatory requirements must be satisfied, (e.g., the Paperwork Reduction Act). This approval process cannot be performed before the treaty has been ratified and legislation is enacted. DOC's proposed rule must be published in the Federal Register and will request public comments before a final rule is issued. It is expected to take less than a year from assignment of implementing responsibility by the President to NRC and DOC until the new rules are published for implementation. The regulatory changes necessary are those that establish the requirement for entities not identified on the Eligible Facilities List to report information and to provide access to the IAEA at the covered location. The Presidential assignment of responsibilities that follows upon the authority provided to him in the implementing legislation provides NRC and DOC the authority to implement their respective responsibilities. The implementing legislation also provides the legal basis for the DOC to provide the IAEA with access to locations.

Question 27. Does the IAEA accept the view of the United States that it has the right subsequently to withdraw acceptance of inspectors as needed, even if it raised no objections when the inspectors were initially designated for the United States? Is there any precedent for the rejection of inspectors after their designation and previous acceptance under any other inspection regime currently in force in the United States?

Answer. The answer for both questions is yes. Non-nuclear weapon state parties to the standard IAEA safeguards agreement pursuant to the Nuclear Non-Proliferation Treaty have the same right.

The United States reviews all inspectors proposed by the IAEA for designation as inspectors. We may reject the designation of individual inspectors to the United States for any reason or for no reason at all. Our criteria for these decisions change from time to time in accordance with policy considerations. At present, nationals of states identified by the United States as state sponsors of terrorism are automatically rejected. We also look closely at inspectors from other states of proliferation concern.

Each year a list of current inspectors designated to the U.S. is received by the U.S. and the list is reviewed. If an inspector of concern is identified on the list, the IAEA is requested to remove the inspector from designation. Within the last decade, the U.S. has rejected designations of approximately 10 inspectors, some of whom had been previously accepted. In any given year, the U.S. might reject 1-5% of the inspectors designated. The Additional Protocol will not change the basic format of the current review procedures.

Question 28. Please provide the precise number of U.S. sites currently subject to possible IAEA inspection under the Voluntary Offer, the types of sites which will be declared under the Additional Protocol, and an estimate of the number of locations of each type. If a list of such additional sites that will have to be prepared for possible inspections has been prepared, please provide it to the committee.

Answer. [DELETED]

Question 29. Please describe the U.S. Government's outreach to U.S. industry in negotiating the Additional Protocol, in drafting proposed implementing legislation, and/or to prepare U.S. industry for the possibility of new or expanded IAEA inspections. Have any trial inspections been conducted? Has any training been provided? What additional outreach activities are planned if the Additional Protocol is rati-

What outreach has occurred, or is planned, for companies that are not members of the Nuclear Energy Institute (NEI)?

Answer. Since 1997, the executive branch has held several meetings with the commercial industry through the Nuclear Energy Institute (NEI). These meetings have been with NEI and in meetings of commercial entities organized by NEI. Training and trial inspection activities have been performed at DOE facilities. In 2002, the Department of Commerce published a Federal Register notice seeking input from industry with respect to the Additional Protocol. This notice drew only two responses.

Training and trial inspections have not been conducted at commercial locations because NRC and DOC do not have the authority to implement these activities until the Additional Protocol is ratified. Should the implementing legislation be enacted, rule changes and guidance documents would then be prepared for publication and discussion with the industry and for use in training.

Question 30. What additional costs will U.S. industry be expected to bear if the Additional Protocol is ratified? To what extent will U.S. firms be able to recoup their costs (e.g., pursuant to Article 14 of the underlying Safeguards Agreement)?

Answer. The U.S. industry is expected to bear the costs of submitting declarations to the Nuclear Regulatory Commission or the Department of Commerce and for escorting/accompanying the IAEA inspectors and U.S. Government support team during access to the location. The access may include providing requested safeguards-relevant records for the review of the inspectors. There is no provision for routine access under the Additional Protocol, and implementation burdens in non-nuclear-weapon states have been minimal. We expect the Agency will seek very few complementary accesses each year in the United States.

The provisions of Article 14 of the Safeguards Agreement remain in force. If the United States or persons under its jurisdiction incur extraordinary expenses as a result of a specific request by the IAEA, the IAEA is obligated to reimburse those expenses, provided it has agreed in advance to do so

Question 31. What additional costs will the U.S. Government bear in implementing the Additional Protocol? Will such costs be absorbed within existing budgets, or will additional funds be required?

Answer. The U.S. Government Agencies will incur costs related to:

- preparing regulations and guidance
- performing training for implementing the Additional Protocol;
- collecting, evaluating, storing, and submitting Additional Protocol information; performing vulnerability assessments;
- preparing security plans;
- implementing the escorting procedures associated with IAEA access to a loca-
- supporting IAEA for implementation of the Additional Protocol in other coun-

We are still assessing the full start-up costs for implementing the Additional Protocol. We assume that once those start-up costs are finalized, approximately ten per-

tocol. We assume that once those start-up costs are finalized, approximately ten percent of that figure will be required for recurring costs in subsequent years. The Administration will allocate resources from within funds appropriated in FY2004 and the Administration's request in FY2005 to meet needs in those years. The IAEA member states decided in 2003 on an increase of \$19.4 million in the safeguards budget between 2004 and 2007. This increase would cover a variety of needs, including safeguarding large new facilities and activities as well as implementing the Additional Protocol in an increasing number of countries. We estimated that protocol implementation accounted for roughly 10% of the needed increase in resources. The U.S. share of the projected increase in IAEA costs of protocol implementation is therefore roughly \$0.5 million/year. When the Model Additional Pro-

¹One respondent does not foresee significant burden on industry from ratification and implementation of the Additional Protocol. The other respondent noted its strong support for the objectives of the Additional Protocol, but withheld conclusions on the impact of the Additional Protocol pending enactment of implementing legislation, promulgation of regulations and more information on procedures for the protection of proprietary information.

tocol was adopted, it was recognized that there would be some near-term cost increases, but the long-term goal was cost neutrality. Cost increases are expected to be offset over time by improvements in efficiency.

The United States also provides significant extrabudgetary support to IAEA safeguards, much of it for implementation of the Additional Protocol and other safeguards strengthening measures. However, there is no clear division between funding for the protocol and other safeguards support activities.

Question 32. How will the Additional Protocol affect the implementation of IAEA inspections in the United States? Will there be any changes to the use of escorts during such inspections?

Answer. IAEA inspections under our Safeguards Agreement will continue as they have in the past. At DOE and NRC facilities, IAEA inspectors are always escorted. Under the Additional Protocol our procedures will differ somewhat; however, these differences have already been discussed with IAEA inspectors who found no issue with them.

Question 33. What are the terms and procedures under the Additional Protocols with the other four NWS regarding the manner in which inspectors are escorted during the conduct of their inspections in those states? While in other NWS, are inspectors escorted while they are at the site, facility or location, or are they escorted during their entire stay, and are they under 24-hour surveillance?

Answer. Neither non-nuclear weapon states nor nuclear weapon states require 24-hour escorts for IAEA inspectors, either in practice or in their Additional Protocols. IAEA inspectors may be met at the airport for courtesy reasons or if personal safety is in question, e.g., Pakistan and Algeria, but otherwise they are on their own everywhere. No country requires escorts on a 24-hour basis. Usually the inspectors meet the government representatives at the gate to the facility/location they will be inspecting. In some countries the presence of government officials might make moving about easier, but it is not required by any state. Inspectors may be under surveil-lance, particularly in certain countries.

Article 4(f) gives parties to the Additional Protocol the right to accompany IAEA inspectors during complementary access, provided that the inspectors are not delayed or impeded in the exercise of their functions. This provision was accepted by the United States and France. The United Kingdom's Additional Protocol gives it (or the EURATOM) the right to escort IAEA inspectors during access to locations under Article 5(a) or for access involving nuclear material, provided that the inspectors are not delayed or impeded in the exercise of their functions. The Additional Protocols of Russia and China do not provide for complementary access.

Question 34. Article 16 of the Additional Protocol permits the IAEA Board of Governors to amend either of the Annexes. Can such an amendment be adopted without the approval of the United States? Has the Board exercised such powers regarding any previous U.S.-IAEA agreement? If so, has it ever adopted an amendment over U.S. objections?

Answer. Article 16.b of the Additional Protocol allows Annexes I and II to be amended by a majority vote of the International Atomic Energy Agency (IAEA) Board of Governors. It is possible that the Board could adopt amendments without U.S. consent or of a type that goes beyond that which the Senate can authorize through its present advice and consent to the Protocol. These possibilities raise concerns under Article II, section 2, of the Constitution. The Administration has proposed an understanding which addresses these concerns by making clear that amendments to the Protocol will take effect for the United States only in accordance with its constitutional requirements.

In accordance with Article 23(b) of the Safeguards Agreement, the IAEA does not have any authority to amend the U.S.-IAEA Safeguards Agreement absent U.S. agreement. Two provisions of the Safeguards Agreement call on the sides to implement available technical improvements, but the implementation of those provisions does not constitute amendments. Specifically, Article 6 gives the IAEA the authority to adopt the best available technology to implement safeguards, and Article 53 obligates the United States to adopt new measurement techniques and report new data, generally without even a Board of Governors decision. These provisions have never been implemented over U.S. objections.

Question 35. What will the implementing procedures be for invoking and arranging managed access pursuant to Article 7 of the Additional Protocol? How will those procedures differ from current procedures for implementing limitations on IAEA access (e.g., pursuant to Article 74 of the Safeguards Agreement)?

Answer. The provisions of Article 74 of the Safeguards Agreement do not affect the provisions of the Additional Protocol, with one exception. Article 74(d) of the Safeguards Agreement allows the United States to impose "extended limitations on sateguards Agreement allows the United States to impose "extended limitations on access by the Agency" in "unusual circumstances," but requires the United States and the Agency to make arrangements to allow the Agency to discharge its safe-guards responsibilities, and requires the IAEA to report all such arrangements to the Board of Governors. This provision is meant to allow for legitimate interruptions in agency of pulsar facilities and considered and states. in access at nuclear facilities, such as safety-related conditions.

The United States has the unilateral right to invoke managed access in accordance with Article 7. The U.S. Government will provide information to the reporting locations on Article 7 managed access. When required, managed access measures and procedures will be developed in advance of IAEA arrival at the location. On IAEA arrival, steps will be taken, if necessary, to permit the IAEA to accomplish their safeguards objectives while maintaining protection of information and compli-

ance with health, safety, and security regulations.

When the Additional Protocol was concluded, a Subsidiary Arrangement was agreed to between the United States and the Agency specifying, for the purposes of the Additional Protocol with the United States, as a nuclear-weapon state, measures that could be taken to manage access. These may include, inter alia: (a) removal of sensitive papers from office spaces; (b) shrouding of sensitive displays, stores, and equipment; (c) shrouding of sensitive pieces of equipment, such as computers or electronic systems; (d) logging off of computer systems and turning off data indicating devices; (e) restriction of safeguards instrumentation or environmental sampling to the purpose of the access; and (f) in exceptional cases, giving

only individual inspectors access to certain parts of the inspection location.

The managed access measures and procedures implemented at the four currently inspected facilities are not substantially different than the measures and procedures envisioned for use under the Additional Protocol.

Where there is a concern about protecting information or activities of direct national security significance to the United States, of course, the United States could invoke Article 1.c to require any necessary access restrictions or Article 1.b to exclude the location entirely from access.

Question 36. Article 4.a of the Additional Protocol states: "The Agency shall not mechanistically or systematically seek to verify the information referred to in Article 2." Equivalent language is contained in the (model) Additional Protocol that NNWS are urged to adopt. What was the U.S. position on this issue during the negotiation of the original Model Protocol?

Answer. The United States agreed with this formulation (originally put forth by the German Delegation). We believed that it was important to distinguish clearly between activities which would be carried out pursuant to access under the Protocol and those already being carried out under comprehensive safeguards agreements based on INFCIRC/153. Indeed, under the Protocol, States' declarations would relate, in large part, to activities rather than to the nuclear material present at specific locations at specific times, so that systematic and mechanistic verification would make little sense.

"Not mechanistically or systematically" is a necessary requirement for cost-effective implementation of the Additional Protocol. Mechanistic and systematic implementation would require verification levels based on the amount of information de-clared by the State. Thus, those States with the largest programs would be subject to the largest verification effort. This would force the IAEA to expend most of the Additional Protocol effort in Canada, Japan and the European Community. The countries with the significant questions and inconsistencies with regards to their nuclear programs are not necessarily those states with large established civil nuclear programs. The mechanistic and systematic exclusion permits the IAEA to focus their verification efforts on states of concern.

Question 37. Article 4.a(i) of the Additional Protocol requires that the IAEA be given certain access "on a selective basis." What is the meaning and intended impact of that phrase? Does it pertain to how the locations are chosen, or rather to the extent of access at a location?

Answer. The phrase "on a selective basis" is a term of art under the Protocol that refers to the manner in which IAEA chooses access under the Protocol.

The phrase "on a selective basis" means that the IAEA will not mechanistically and systematically seek to verify all aspects of declarations made pursuant to the Additional Protocol at all locations where nuclear materials exist. However, the IAEA has the right to access to such locations based on technical considerations or specific concerns, without a requirement for prior consultation with the State. Since the United States, as a nuclear weapon state, has undeclared nuclear material and activities, access is not expected to be of much interest under the U.S. Additional Protocol.

Question 38. How does the IAEA choose locations for inspections in the United States under the Voluntary Offer? Are there any formal or informal understandings with the IAEA regarding inspections under the Additional Protocol?

Answer. Pursuant to the U.S.-IAEA Safeguards Agreement, the United States has made eligible for IAEA safeguards about 250 nuclear facilities. These include a large number of power reactors and research reactors, commercial fuel fabrication plants, and uranium enrichment plants, as well as other types of facilities. In the case of a non-nuclear-weapon state, the IAEA would have an obligation to inspect all of these facilities, as well as many other locations where nuclear material is used. In the United States, the IAEA has the right, but not the obligation, to select facilities for inspection.

The initial facilities selected by the IAEA under the Safeguards Agreement were chosen to gain experience in inspecting the facility type and to place equal burden on facilities involved in international commerce. All six of the U.S. LEU fuel fabrication plants and the Gas Centrifuge Enrichment Plant were selected to place the same cost burden and risk to technology on these facilities as was being accepted

by similar facilities in other countries.

It is of interest to note that the IAEA, because of increasing budgetary pressures, discontinued inspections in the United States in 1992. The IAEA resumed inspections in 1994 at the request of the U.S. Government, implementing safeguards on several tons of weapons-usable nuclear material declared excess to U.S. national security stockpiles. The IAEA undertook this effort on the condition that the United States reimburse the IAEA.

With respect to the Additional Protocol, the formal understanding with the IAEA is that the U.S. will permit the application of IAEA safeguards to all locations except those of direct national security significance. There are no formal understandings with the IAEA, however, regarding the frequency with which they would seek complementary access to locations in the United States.

Finally, in a letter dated January 23, 2004, Ambassador Kenneth Brill sought IAEA confirmation that complementary access will be conducted in a manner that is consistent with the Fourth Amendment. Although the IAEA has not yet replied to this letter, we expect a favorable response, and will ratify the treaty only after we receive such confirmation.

Question 39. Article 8 of the Additional Protocol allows the United States to offer additional sites for IAEA inspection or to request particular IAEA "verification activities." The IAEA "shall, without delay, make every reasonable effort to act upon such a request." Please describe any likely or planned use of Article 8. If similar actions have occurred under the current Safeguards Agreement, please summarize U.S.-IAEA experience in this regard.

Answer. This provision merely provides an option, not an obligation. To date, the United States has no plans to offer additional locations for IAEA verification under the Additional Protocol. This type of access might prove helpful to a country that becomes the target of false allegations, allowing it to request IAEA verification to clear up specific charges. It is difficult, however, to envisage how such additional transparency would be relevant in the United States, as an NPT nuclear weapons state

Question 40. Does the executive branch have any objection to sharing with the Congress any written reports issued by the IAEA pursuant to Article 10?

Answer. No.

Question 41. Why is there an arbitrary time period for the completion of a Subsidiary Arrangement, limited to 90 days from the date upon which either the United States or the Agency indicates the need for a Subsidiary Arrangement? What will happen to a proposed Subsidiary Accord if agreement cannot be reached by the 90th day?

Answer. As a practical matter, since some declarations are required in a shorter time span than the initial declaration on locations, e.g., Article 2(a)(ix)(b), access could be sought soon after entry into force of the Protocol. The ninety day duration for completing a Subsidiary Arrangement provides incentive to both the IAEA and the State to conclude the agreement in a timely manner.

Question 42. In what manner are the Additional Protocols negotiated by the IAEA with Russia and China different from the Additional Protocol between the IAEA and

the United States.? If they are more restrictive of IAEA rights and privileges, why did the United States not seek similar safeguards?

Answer. Substantial differences exist among the Additional Protocols of the nuclear weapon states. China's and Russia's Additional Protocols are quite restrictive. Both eliminated much of the substance of the Model Protocol, sharply limiting the scope of the declarations they are required to make and eliminating all associated IAEA access rights. Despite the limited scope of its Protocol, Russia also included a national security exclusion.

China and Russia, however, did not play a leadership role in negotiations on the Additional Protocol. The United States played a significant role during the negotiation and insisted that the Protocol include robust requirements for expanded declarations and access by states. Our willingness to accept, on our civil nuclear program, all provisions of the Model Additional Protocol was decisive in achieving agreement on the Model and acceptance by key states.

The U.S. Additional Protocol, unlike the other P-5 Protocols, includes the entire text of the Model Additional Protocol without alteration. However, because the U.S. Additional Protocol contains a national security exclusion as well as providing the right to use managed access, it provides sufficient protection against access to or disclosure of information or activities of direct national security significance.

Question 43. Please outline the differences between the Additional Protocol signed between the United States and the IAEA and those Additional Protocols signed between the IAEA and the other four NWS.

Answer. In contrast to the United States, the UK and France decided to focus their Protocols narrowly on areas in which its implementation could assist the IAEA in detecting undeclared nuclear activities in NNWS. The UK and France placed some limits on the categories of locations subject to declaration and access. In some cases, the purposes specified for access rights are modified, but the access rights remain the same, including the right of the IAEA to specify locations for access under Article 5.c. The UK and France did not include a national security exclusion in their Protocols. The Chinese and Russian Protocols depart from the model much more thoroughly, in essence limiting the state's obligations to declarations related to cooperation with non-nuclear-weapon states (NNWS), eliminating IAEA access rights entirely. For good measure, Russia's Protocol also includes a national security exclusion.

The result of the UK's and France's adaptations are that almost all of the measures in the Model Protocol are reflected in the UK Protocol, but are generally altered to apply only in instances where activities have links with NNWS. For example, in the U.S. Protocol (following the Model), Article 2.a(iv) requires that we provide to the IAEA, "[a] description of the scale of operations for each location engaged in" various nuclear-related manufacturing operations. The UK Protocol requires the same information for such locations "where these involve links with fuel cycle operations in a NNWS." In the UK's view, information about its manufacturing activities with links to NNWS could provide the IAEA with useful information about NNWS activities. Some changes, however, broaden the declaration requirements in other ways, e.g., in the UK case, where nuclear-related R&D is declarable under Article 2.a.i whether or not it involves nuclear material.

The U.S. Protocol, because it contains a national security exclusion, provides more robust protection against disclosure of or access to information or activities of direct national security significance than do the UK and French Protocols. (The Chinese and Russian Protocols provide full protection by entirely eliminating IAEA access.) The U.K. and French Protocols, in contrast, do not contain an NSE or the ability to use managed access to protect information of national security significance.

The U.S., UK, and French Protocols all allow the IAEA to seek access to any undeclared location under Article 5.c (5.b in the French Protocol). This right is not absolute under any of the Protocols, but the limitations in the Protocols differ. Specifically, each protocol provides for access to "[a]ny location specified by the Agency . . . to carry out location-specific environmental sampling, provided that if the [UK/US] is unable to provide such access, the [UK/US] shall make every reasonable effort to satisfy Agency requirements, without delay, at adjacent locations or through other means." In the United States, the purpose of such access is to resolve a question or inconsistency related to U.S. declarations, and access is normally allowed only following an effort to resolve the question or inconsistency through consultations. In the UK, access is allowed where it "will contribute to increasing the Agency's capability to detect undeclared nuclear material and activities in a NNWS," but with no requirement for advance consultations—a provision the U.S. would not choose to do without. In France, access is allowed to any location specified by the agency for sampling "with the objective of enhancing the Agency's ability to

detect undeclared nuclear activities in a NNWS. As in the United States, access is allowed to resolve a question or inconsistency related to U.S. declarations, and access is normally allowed only following an effort to resolve the question or inconsistency through consultations.

Question 44. The provisions of the Additional Protocols agreed upon by the Russian Federation and the People's Republic of China with the IAEA require the two NWS to provide information to the IAEA only on nuclear exports and imports to and from NNWS, nuclear material located on the territory of other States, and international cooperation with NNWS in the field of the nuclear fuel cycle which has nuclear non-proliferation significance. Furthermore, these Additional Protocols do not provide any rights for the IAEA to implement complementary access or widearea environmental sampling.

Answer. The Administration agrees with the above statement.

Question 45. Why did the Russian Federation and the People's Republic of China insist upon, and the IAEA agree to, an Additional Protocol that only relates to their respective nuclear activities carried out for or jointly with NNWS and excludes complementary access provisions and wide-area environmental sampling?

Answer. States that are not required by the Non-Proliferation Treaty (NPT) to accept full-scope IAEA safeguards are under no obligation to accept the Model Additional Protocol as written. Rather, they were formally urged by the IAEA Board of Governors to adopt elements of the Model Protocol that would contribute to the strengthening of the safeguards system. In support of efforts to gain broad adherence to the Additional Protocol, all five NPT nuclear weapon states pledged to do so.

The United States pledged to accept all measures in the Model Protocol, subject to a National Security Exclusion, continuing the long-standing U.S. policy of making U.S. civil nuclear activities available for the same IAEA inspections as are applied in non-nuclear-weapon states. This pledge was judged necessary to bring about a successful conclusion to the negotiation of a Model Additional Protocol that includes the measures the United States considered essential for strengthening the IAEA safeguards system. Just as they did during the negotiation of the IAEA's existing safeguards system for non-nuclear-weapon states, important non-nuclear weapon states expressed considerable concern during the negotiation of the Model Additional Protocol that some of the measures proposed would place their nuclear industries at a commercial disadvantage. The U.S. pledge to accept the same measures assuaged these concerns and made agreement possible, and has been relied on by a number of states, including close allies, in persuading their legislatures to approve their Additional Protocols.

The Chinese and Russian Protocols are substantially less forthcoming than the U.S. Protocol. Those countries, however, were not seeking to lead the negotiations, and hence made no such broad pledge. They remained free to choose which of the obligations in the Protocol they consider will contribute to nonproliferation goals when applied in their states. Their approach focuses on providing information related to NNWS nuclear activities.

Question 46. Why did the United Kingdom and France also insist upon providing information to the Agency on only those nuclear activities related to a NNWS (but agreeing to complementary access and, in the case of the United Kingdom, widearea environmental sampling)? To what extent are the United Kingdom and France subject to additional international scrutiny as members of EURATOM?

Answer. Although the UK and French Protocols appear less forthcoming than the U.S. Protocol, other European NNWS seeking "parity" took into account the fact that UK and French civil facilities are under safeguards inspections by EURATOM, and in some cases by the IAEA. The UK and French Protocols, while accepting the Additional Protocol measures on only commercial locations, do not contain a national security exclusion. Because most commercial activities in these countries involve interactions with the NNWS in the European Community, these declarations are expected to cover most nuclear fuel cycle-related commercial locations in these countries. (U.S. facilities, in contrast, are eligible for IAEA safeguards, but those are presently applied only at U.S. request.) They were therefore willing to accept greater deviations from the Model Protocol than in the case of the United States.

Question 47. Did the United States consider a similar approach to that of Russia and China in their Additional Protocols with the IAEA and, if so, why was it not adopted?

Answer. No. During the negotiations of the Model Protocol, many non-nuclear weapon states parties to the NPT urged the United States, as the strongest pro-

ponent, to accept on a voluntary basis the provisions of the Model Protocol. Following the example of the Voluntary Offer, the United States stated during the negotiations that it would accept the provisions of the Model Protocol, subject to a National Security Exclusion. The United States took a leading role in the negotiation of the Model Protocol, and the success in achieving a strong Model Protocol was critically dependent on voluntary acceptance of Model Protocol measures by the United States. The U.S. signature of the Additional Protocol was a significant factor in the early decision by many non-nuclear-weapon states to accept the Protocol.