

**ORAL STATEMENT BY LINTON BROOKS
ADMINISTRATOR,
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U.S. DEPARTMENT OF ENERGY
BEFORE THE
SENATE FOREIGN RELATIONS COMMITTEE
January 29, 2004
Summary of Major Points in Testimony**

Policy Overview

- Universal acceptance of the Additional Protocol, which will be enhanced by U.S. ratification, is a very important Presidential national security goal. The Additional Protocol will provide important tools that can be used to help address unanswered questions about undeclared activities in non-nuclear weapon states. DOE has a great deal of experience working with the IAEA on inspections in the United States while protecting critical national security equities.

Impact on the Department of Energy Complex

- The exact number of sites and declarations subject to the Additional Protocol is not known at this time, but the declarations are expected to cluster in civil nuclear fuel cycle research, manufacturing, and export reporting.
- The upper limit of the cost estimates for DOE preparations for entry into force of the Additional Protocol is \$3.5 million for Headquarters and \$10 million for the field operations.
- The ongoing annual cost is estimated to be approximately 10% of the preparation costs for the first few years, and less in the out years.

Protection of National Security Equities

- DOE has had the most experience of any U.S. agency in hosting IAEA inspections. Currently, DOE hosts inspections at three sites in the United States.
- The National Security Exclusion is a very powerful tool that DOE will use to protect national security equities at DOE sites.
- Based on past arms control vulnerability assessments, DOE is confident that it can manage the risk associated with the Additional Protocol. Additional Protocol specific vulnerability assessments and guidance on annual OpSec reviews of Additional Protocol related security is forthcoming in the near future.

Department of Energy Preparations

- DOE is developing an Additional Protocol Reporting System to collect, store, and update the DOE portion of the Additional Protocol declaration.
- DOE has hosted one Additional Protocol tabletop and one field trial and expects to host more in the future.
- DOE is undertaking an intense outreach program to educate DOE sites and operations about the Additional Protocol.
- The Additional Protocol's provisions affect more than just DOE. For that reason, DOE is working with other agencies on Additional Protocol implementation.

**WRITTEN TESTIMONY OF LINTON BROOKS
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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' compliance 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 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 Protocols.

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 safeguards regime might be needed.

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' compliance 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, manufacture 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, Tennessee; 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.

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 declarable 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 Reporting 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.