

International Safeguards Additional Protocol Implementation in the Department of Energy and National Nuclear Security Administration

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Abstract

In 1998, the United States signed its Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency for Application of Safeguards in the United States of America (“Additional Protocol”). In May of 2002, President Bush sent the Additional Protocol to the United States Senate for its advice and consent to ratification requesting its early and positive resolution. The U.S. Additional Protocol is now awaiting Senate action.

In preparation for the entry-into-force of the Additional Protocol, the U.S. Department of Energy has undertaken an ambitious program to prepare the DOE Complex for the entry-into-force of the Additional Protocol and to manage the implementation of the Additional Protocol after it enters into force. In addition, the Department is undertaking a nascent project to provide technical training and equipment to states in order to assist and encourage them to implement the Additional Protocol.

The Additional Protocol implementation program has five main projects:

- Domestic Outreach and Training
- Additional Protocol Reporting System (APRS)
- Revision of DOE Orders and Guides
- Additional Protocol Field Trials
- Foreign Technical Assistance

The U.S. National Laboratories are providing technical support to facilitate coordination and implementation of the IAEA Additional Protocol at DOE/NNSA sites.

Introduction

The international community negotiated the Model Additional Protocol following the discovery of clandestine efforts to build nuclear weapons in Iraq, a signatory to the Non-Proliferation Treaty (NPT). The Model Additional Protocol amends existing bilateral safeguards agreements between individual states and the International Atomic Energy

Agency (IAEA). The goal of this enhanced safeguards environment is to reduce the threat posed by clandestine efforts to develop nuclear weapon capabilities. This is achieved by giving the IAEA the ability not only to detect the diversion of declared materials but to detect undeclared nuclear activities. As of June, 2003, 73 states had signed the Additional Protocol, and 35 are implementing. Nearly 80 countries are in the process of negotiating Additional Protocols with the IAEA. More than 70 countries, including the United States, have signed bilateral treaties.

The “Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency for Application of Safeguards in the United States of America,” as the U.S. Additional Protocol is formally known, was signed in June 1998. President Bush submitted the Additional Protocol to the U.S. Senate for advice and consent to ratification in May 2003. Entry into force will make it a legal requirement for the United States to provide the IAEA with an expanded declaration of activities related to the nuclear fuel cycle and other nuclear activities, and to provide access to the IAEA to allow them to verify the completeness of these declarations. The signing and ratification of the Additional Protocol is a manifestation of U.S. support for Article IV of the NPT.

Goals and Objectives

The U.S. Department of Energy’s Additional Protocol Implementation Program’s primary goal is to prepare the Department of Energy Complex for the entry-into-force of the Additional Protocol and its subsequent implementation. A second goal of the program is to assist other countries, through the provision of skills training and/or equipment, to enter into force and implement the Additional Protocol. These objectives will be realized by:

- Domestic Outreach and Training
- Additional Protocol Reporting System (APRS)
- Revision of DOE Orders and Guides
- Additional Protocol Field Trials
- Foreign Technical Assistance

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Domestic Outreach and Training

The primary objective the domestic outreach project is to provide information and initiate guidance to the DOE complex on the rights and responsibilities under the Additional Protocol. This project will also produce in-depth training on various aspects of the Additional Protocol, such as declarations and complementary access; prepare question-and-answer packages for the complex; and provide support for U.S. Senate hearings in preparing its advice and consent to ratification.

Additional Protocol Reporting System (APRS)

To manage the Department of Energy's declaration under the Additional Protocol, the Office of International Safeguards has initiated the development of the Additional Protocol Reporting System (APRS), which will manage the DOE portion of the U.S. declaration. The APRS is a secure internet-based information system designed to collect DOE declaration data, manage and warehouse the information, and transmit the complete DOE declaration to the central United States Government system maintained by the Department of Commerce.

Revision of DOE Orders and Guides

The Department of Energy issues directives (Policies, Orders, Notices, Manuals, and Guides), to provide to direct, guide, inform, and instruct the DOE complex. The current Order (1270.2b) covering the IAEA is in the process of being updated (142.2A) to reflect legal requirements and guidance on implementing Additional Protocol provisions. This update follows and augments recent revisions to the Order (142.2) following the creation to the National Nuclear Security Administration. In parallel, a manual is being prepared to give further implementation direction.

Additional Protocol Field Trials

Field trials intended to simulate IAEA complementary access visits will be conducted to test and evaluate procedures, information systems, notifications, and interagency coordination. The first field trial will consist of a DOE table-top exercise, followed by an on-site field trial for U.S. personnel at a typical DOE nuclear facility. Follow-up field trials may expand to additional field trials at other facilities or in conjunction with IAEA representatives.

Foreign Technical Assistance

In an effort to expand worldwide adherence to the Additional Protocol, DOE is preparing technical competencies modules to give states the technical skills and knowledge required by the Additional Protocol; in some cases, equipment may also be provided to states to implement the Additional Protocol.

Summary

The Department of Energy, Office of International Safeguards is the lead office in DOE complex preparation for entry into force of the Additional Protocol. Activities are well underway to prepare the complex and support the new requirements of the Additional Protocol.