STATEMENT SUBMITTED

BY THE

UNITED STATES NUCLEAR REGULATORY COMMISSION

TO THE

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

SUBCOMMITTEE ON OVERSIGHT OF GOVERNMENT MANAGEMENT, THE FEDERAL WORKFORCE, AND THE DISTRICT OF COLUMBIA

UNITED STATES SENATE

CONCERNING

INTERNATIONAL EFFORTS TO SECURE THE HIGHEST PRIORITY RADIOLOGICAL SOURCES THROUGH REGULATORY STRENGTHENING

PRESENTED BY

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INTRODUCTION

Mr. Chairman and Members of the Subcommittee, thank you for inviting the U.S. Nuclear Regulatory Commission (NRC) to discuss the vital role that it plays in international efforts to enhance security of risk-significant radioactive sources. As requested, we will discuss the recently released Government Accountability Office (GAO) Report GAO-07-282 "The Department of Energy's International Radiological Threat Reduction Program Needs to Focus Future Efforts on Securing the Highest Priority Radiological Sources," and NRC's relationship with the work of the International Atomic Energy Agency (IAEA) and the Department of Energy's National Nuclear Security Administration (DOE/NNSA) in this area.

At the outset, I would like to highlight that the Commission fully supports the suggestion made in the GAO Report that Congress consider providing NRC with the authority and a direct appropriation to conduct international regulatory development activities to improve security over radioactive sources. NRC estimates that a modest increase – estimated at $2 to $3 million per year in non-fee-based funding – would allow us to continue this successful effort to create sustainable national regulatory programs integrating safety and security controls over these widely used sources.

The NRC's current assistance program has contributed significantly to the overall U.S. effort to strengthen control of sources around the world. The success of the NRC assistance program derives from our 32 years of experience as the U.S. regulator of civilian uses of radioactive material, including radioactive sources. We seek to create effective, sustainable national regulatory infrastructures by paying close attention to regional needs and cultures as well as coordinating our efforts with other federal agencies' and international efforts.

The best way to demonstrate how NRC has cooperated with other Federal agencies and the IAEA to enhance security of risk-significant sources globally is to discuss NRC's specific activities in these areas. I will briefly describe NRC's participation in the development and implementation of the IAEA's Code of Conduct on the Safety and Security of Radioactive Sources, a successful ongoing pilot project started by NRC in 2002 in Armenia, and work begun in 2006 to support the Iraqi nuclear regulator.

RECENT DEVELOPMENTS

A. The IAEA Code of Conduct on the Safety and Security of Radioactive Sources

The NRC, and Departments of Energy and State, all played key roles in developing the IAEA Code of Conduct on the Safety and Security of Radioactive Sources. The Code was adopted by the IAEA in September 2003, endorsed by the Group of Eight Industrial Nations in 2004, and, with the associated Guidance, was fully implemented by the NRC in December 2005. So far, 88 nations have made a commitment to implementing the code. The Code provides a reinforcing framework of sound international export controls on radioactive materials that could be used to construct devices for malicious purposes. The NRC was also active in developing the categorization of sources, upon which the Code was based, using its technical expertise, and work being done to support our domestic program. Further, the enactment of the Energy Policy Act of 2005 codified certain of the Code's import-export restrictions for risk-significant sources. The NRC has used the Code as the underlying principle for the security enhancements of licensees possessing risk-significant sources.

The U.S. has worked to promote the Code's implementation worldwide. As the government agency responsible for import-export licensing of radioactive sources, the NRC has coordinated extensively with its international regulatory counterparts to assist them in understanding both changes in U.S. regulations and the responsibilities associated with implementing the Code in their countries. In this effort, the NRC has partnered with the regulatory authorities of the United Kingdom, Canada, and Australia, among others, on projects to secure, protect, and monitor radioactive sources.

The NRC staff maintains a close partnership with the IAEA on other source-related issues, participating regularly in international meetings to develop safety and security guidance documents. NRC staff, and senior staff from Agreement State programs, have also participated in Radiation Safety and Security Infrastructure Appraisal (RaSSIA) missions, which assess the effectiveness of individual nation's regulatory infrastructure for the safety and security of radioactive sources.

Our success in controlling high-risk radioactive sources internationally is by large measure dependent on our success in controlling them domestically. Some examples of NRC efforts include the plan to implement the National Source Tracking System; our issuance, together with the Agreement States, of legally-binding requirements for increased security of high-risk sources to nearly 3,000 licensees; the Radiation Source Protection and Security Task Force; our Rulemaking on Secure Transfer; and NRC's partnership with Customs and Border Patrol to validate the authenticity of radioactive material shipments.

B. Pilot Program in Armenia

In early 2002 NRC performed an assessment to identify regions of the world within which an attack using radioactive materials might be conducted, or that might have risk-significant radioactive sources that could be used for such devices. This assessment drew on NRC's knowledge and experience working with its regulatory counterparts throughout the world, country-specific information regarding the existence -- or the lack thereof -- of national nuclear regulatory authorities, in-country availability of radioactive sources in quantities of concern, known incidents or events involving radioactive sources and country-specific security, threat, illicit trafficking and other intelligence-related information. NRC staff also consulted with the Departments of State and Energy to ensure that its assessment did not duplicate any activities underway by those agencies.

NRC's focus turned to a number of the newly independent states of the former Soviet Union, especially countries in the Caucasus and Central Asian regions, as likely areas of high risk for either experiencing a Radiological Dispersal Device or Radiological Exposure Device attack, or for being the source of radioactive material that might be put to malicious use elsewhere. NRC sought to utilize over a decade's worth of assistance activities relating to strengthening national regulatory authorities in the region as part of the U.S. Government's nuclear safety initiatives.

With the support of the State Department's Office of the Coordinator for Assistance to Europe and Eurasia, NRC expanded the use of State Department-provided Freedom Support Act (FSA) funds to include development of a pilot project to strengthen the capabilities of the Armenian Nuclear Regulatory Authority (ANRA) to exercise effective nuclear safety and security regulatory oversight of radioactive sources. The project focused on two of the principal

measures identified in the IAEA-sponsored Code of Conduct, to establish a national registry of radioactive sources, and to develop and implement legislation and regulations that prescribe and assign government responsibilities for the safe and secure use of radioactive sources.

Since mid-2003 this project has produced a stream of significant, measurable results. ANRA became one of the first regulatory authorities in the Caucasus region, if not the world, to successfully complete development and implementation of a national radioactive source registry. ANRA now has current information on the type, owner and use of the approximately 1,200 radioactive sources in over 275 sites in Armenia. Disposition of these sources has been verified by ANRA through on-site inspections. Periodic updates of the radioactive source registry ensure its accuracy. ANRA adopted several new radioactive source-related safety and security regulatory requirements and procedures to license users of radioactive sources. Workshops were conducted to familiarize users with the new safety and security requirements. ANRA's legal authority was also significantly strengthened when amendments to Armenia's basic nuclear law were adopted in late 2005.

The effectiveness of this project was independently assessed in mid-2005 by an IAEA-sponsored RaSSIA mission. The mission highlighted how the legislative and statutory framework enhancements "fully addresses the radiation safety principles set out in international standards." The RaSSIA mission also positively noted how ANRA had developed its own registry of radioactive sources. Further, the new regulatory controls in Armenia support NRC's ability to make positive licensing decisions when evaluating applications to export Category 1 and 2 radioactive sources under the revised U.S. controls consistent with the Code of Conduct.

These results were achieved at a total cost to the U.S. taxpayer of around $500,000 over 3 years, using FSA funds. NRC utilizes a significant portion of available funding, typically over 60%, to utilize in-country technical expertise and resources needed for project implementation. This results in the use of technical expertise comparable to that available in the United States at one-twentieth the cost. This also ensures both short-term and long-term sustainability of assistance results, as the expertise resides in-country even after U.S.-funded assistance efforts have been completed.

C. Support for the Iraqi Radioactive Source Regulatory Authority

In 2004, the Departments of State and Energy began work with the Iraqi government to secure nuclear materials, to catalog sources and their whereabouts, to secure sources of concern, and to create an Iraqi regulatory authority with responsibility for radioactive materials. Iraq has several thousand sources primarily used in the oil industry and medical applications. Identifying, tracking and securing sources has been a top priority for the newly-formed Iraqi Radioactive Source Regulatory Authority.

In support of these U.S. Government initiatives, the NRC is providing regulatory assistance on the review of the country's national legal structure and is helping to develop regulations for disposal of low-level radioactive waste and storage of unwanted sources.

CHALLENGES

NRC is now receiving requests for similar support from regulatory authorities of other countries in or near the Caucasus and Central Asian regions, including, but not limited to, Georgia,

Azerbaijan, Ukraine, Moldova, Kazakhstan, Uzbekistan, Tajikistan and Kyrgyzstan. The State Department's Office of the Coordinator for Assistance to Europe and Eurasia has determined that limited FSA funding is only available to support similar radioactive source-related regulatory assistance in Georgia and Kazakhstan, due to budget constraints.

As detailed in the GAO Report, NRC is seeking to identify potential sources of funding that could support provision of radioactive source-related regulatory assistance to these Caucasus countries, as well as other areas of the world. While we have not been successful to date in obtaining this funding, NRC remains committed to assisting its international counterparts in developing, implementing and sustaining the security-related regulatory infrastructure needed to ensure both the short-term and long-term safe and secure use of risk significant radioactive sources.

Receiving direct appropriations from Congress for assistance-related activities, as recommended by GAO, is the only viable mechanism for providing the stable, predictable funding needed to effectively implement these activities. This approach would produce a resource saving for NRC, as approximately one-quarter of NRC's assistance-related staff time focuses on identifying, obtaining, and accounting for funding from other U.S. Government agencies. And, as noted in the GAO report, our efforts are often unsuccessful.

An increase of $2 to $3 million per year in non-fee-based funding appropriated directly to NRC would provide the basis for a stable, sustainable assistance program. NRC believes the conclusions reached in its 2002 assessment are still valid, and direct funding would enable us to expand ongoing or planned radioactive source-related regulatory strengthening activities. NRC would work in parallel with other parties in the U.S. and the international community, such

as the IAEA and the European Commission, to identify other countries that could benefit from regulatory strengthening assistance. NRC would also work closely with the regulatory authorities of key countries to which U.S.-manufactured radioactive sources are exported to ensure that the U.S.-origin radioactive sources of highest concern are used safely and securely.

CONCLUSION

NRC is uniquely qualified to assist its international counterparts in developing, implementing and sustaining the security-related regulatory infrastructure needed to ensure both the short-term and long-term safe and secure use of radioactive sources of highest concern. Congressional authorization and appropriation of an increase of $2 to $3 million per year in non-fee-based funding appropriated directly to NRC will help reduce the likelihood of radioactive sources falling into the wrong hands and supports creating an enduring infrastructure to enhance global security.

We appreciate the opportunity to testify today and look forward to working with you on this important topic.