International Policy Statement

I. Background

The Nuclear Regulatory Commission's (NRC's) international activities are wide-ranging, encompassing treaty implementation, nuclear nonproliferation, export-import licensing for nuclear materials and equipment, international safeguards support and assistance, international safety cooperation and assistance, international regulatory/safety information exchange, and cooperative safety research. These activities support the NRC's domestic mission, as well as broader U.S. domestic and international interests.

The NRC's participation in international activities has evolved since the establishment of the agency in 1975. By statutory mandate, Congress made the NRC the export-import licensing agent for the U.S. government for nuclear materials and equipment. As authorized under U.S. Government-negotiated agreements pursuant to Section 123 of the Atomic Energy Act of 1954, as amended, or through its own statutory authority, the NRC issued, and continues to issue, licenses authorizing export of U.S. nuclear power technology and nuclear material globally. This, in turn, resulted in many countries' nuclear power programs being based on or derived from U.S. technology or being dependent on supplies of U.S.-origin fuel, equipment, maintenance, technical expertise, and other support services. This exporting of U.S. nuclear technology created a much larger operational experience base for U.S. technology than existed in the U.S. alone. These developments directly supported and influenced the NRC's domestic activities. For example, the NRC sought close engagement, primarily through conduct of joint research and exchange of operational experience information, with foreign regulatory counterparts that had oversight of nuclear power technology comparable to that in the U.S. This cooperative relationship included both short-term and long-term working assignments at the NRC for international regulatory counterparts.

Since its inception, the NRC has also maintained extensive engagement with international organizations such as the International Atomic Energy Agency (IAEA) and the Nuclear Energy Agency (NEA) of the Organisation for Economic Cooperation and Development. In 1981, the NRC and IAEA signed their first Memorandum of Understanding (MOU). This MOU allowed the NRC's regulatory and safety expertise to be shared with the IAEA and, subsequently, the world. Further, the agreement between the United States and the IAEA covering application of safeguards in the United States, consistent with the Nuclear Nonproliferation Treaty, entered into force in late 1980. This agreement granted the IAEA permission to apply safeguards to many NRC-regulated nuclear facilities and activities. Internationally, the Convention on Physical Protection of Nuclear Material was adopted.

Starting in the late 1980s, in recognition of changes in the U.S. domestic nuclear power program and the international nuclear community occurring as a result of both the Three Mile Island and the Chernobyl accidents and significant foreign policy events such as the dissolution of the Soviet Union, the NRC's international engagements significantly expanded. The NRC, in close coordination with other parts of the U.S. Government, established a nuclear safety cooperative effort with its (then) Soviet regulatory counterpart. This effort later evolved to include providing information, knowledge, and training to international regulatory counterparts with oversight of Soviet-designed reactors to assist them as they developed their national regulatory infrastructure and programs. Internally, NRC Management Directive 9.14, “Organization and Functions, Office of International Programs,” was developed to reflect the NRC's steadily increasing and continually evolving international activities and to establish roles and responsibilities for international activities among the various NRC offices. Internationally, the NRC, as a U.S. Government lead agency, actively supported both the Convention on

Assistance in the Case of a Nuclear Accident or Radiological Emergency and the Convention on Early Notification of a Nuclear Accident or Radiological Emergency.

Also, beginning in the late 1980s, as the NRC's cooperation activities with other mature nuclear regulatory programs continued to grow, the agency added a broad program of safety and, after 2001, security assistance activities. These activities are focused on providing information, knowledge, and training to other countries to assist them as they develop their national nuclear regulatory infrastructure and programs. These resources are expended without the expectation that the exchange will provide immediate benefits to an NRC regulatory program area. However, such exchanges are viewed by the Commission, the larger U.S. Government, and the international community as invaluable tools for establishing multilateral coalitions, enhancing global nuclear safety and security, and strengthening regulatory programs for nuclear power plants, research reactors, and radioactive materials.

In the 1990s, the breadth and scope of the NRC's cooperative efforts continued to expand. Regulatory counterparts in countries to which U.S. nuclear technology had been exported had now gained ten-plus years of experience in oversight of the design, construction, and operation of this technology. The NRC also gained knowledge and operating experience information from other countries and applied this knowledge and information directly to its domestic regulatory program. Internationally, both the Convention on Nuclear Safety and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management were negotiated and entered into force.

The 1990s also saw the foreign nuclear safety, security, and nonproliferation policies of the broader U.S. Government directly impact the NRC. A key nuclear security and non-proliferation foreign policy objective of the U.S., for example, was elimination of stocks of excess highly enriched uranium (HEU) from defense programs of the Russian Federation, also known as the Megatons to Megawatts Program. Achieving this policy goal entailed downblending this HEU into low enriched uranium (LEU), transporting the resulting LEU to facilities in the U.S. for conversion and processing, and eventually utilizing the resulting LEU as fuel in commercial nuclear power plants. This activity impacted the NRC's export-import licensing functions as well as the NRC's safety, security, and safeguards responsibilities covering transport of nuclear materials, fuel cycle facilities, and commercial nuclear power plants. In addition, the Commission supported greater controls over HEU exports to eliminate possible stockpiling of this weapons-usable material in other countries while recognizing that the manufacture of medical radioisotopes in existing research reactors would require ongoing HEU exports as these essential medical supplies no longer were manufactured in the United States. The NRC also shared its regulatory expertise with foreign counterparts as research reactors around the world are retooled to use LEU fuel, further promoting U.S. nonproliferation goals.

Finally, in the last two decades, several momentous events have significantly changed the landscape within which the NRC conducts its domestic and international activities. These events include the terrorist attacks of September 11, 2001, and the subsequent increased focus on securing radioactive materials of concern. In response to the latter, countries made political commitments to implement the IAEA’s Code of Conduct on the Safety and Security of Radioactive Sources beginning in 2004. The Energy Policy Act of 2005 ensured the United States adopted the Code in its entirety, which resulted in extensive revisions to NRC’s export-import requirements. Further, there has been a resurgence of new build for commercial power reactors in the U.S. and abroad, including the significant number of "new entrant" countries seeking nuclear power programs. As a result, the manufacture of nuclear parts and the provision of nuclear services have been significantly reduced in the U.S. for domestic nuclear power reactor construction, which has created dependence on the global marketplace among

U.S. nuclear power plant owners/operators. Also, first-of-a-kind construction of new nuclear power plants, including technologies under consideration for use in the U.S., is now occurring outside of the U.S. and sensitive nuclear technology (including enrichment technology) has been imported into the U.S. Finally, the March 2011 Fukushima-Daiichi accident following the Great East Japan Earthquake and Tsunami had a deep impact on the international community which is still absorbing the "lessons learned" from those events. All of these trends have sharply increased the visibility of international standards and international peer reviews, the need for strengthening and harmonizing the international export-import regime, and the need for strong, independent regulatory authorities.

II. Statement of Policy on International Activities

International activities are integral to the NRC's public health and safety and common defense and security mission and directly support U.S. foreign policy objectives. Specific elements in which the NRC will engage include:

- Implementing obligations pursuant to international treaties and conventions and, with U.S. Government partners, supporting development and adoption of those pertaining to the NRC;

- Providing international assistance to foreign regulatory counterparts for improving safety and security of civilian uses of radioactive materials;

- Fostering international technical cooperation, sharing regulatory and operational experience, and supporting collaborative research for the mutual benefit of NRC programs and those of our international counterparts;

- Enhancing development of global nuclear safety, security, and safeguards regulatory partnerships; and

- Demonstrating leadership on regulatory issues, both within the international community and the U.S. Government.

III. Discussion

The policy statement provides four key, inter-related elements within which international activities are examined, prioritized, and conducted as an integral component of the NRC's mission. These components must be balanced in effective agency programs that reflect current Commission and U.S. Government priorities and the range of organizational and technical priorities and objectives. As used in this policy, the term "radioactive materials" is intended to cover all aspects of use, including the fuel cycle, nuclear power generation, and medical and industrial applications.

International activities are best conducted in an ongoing, collegial manner in which the NRC is proactively engaged to provide information and learn from others for the mutual benefit of all participants. In certain cases, the NRC is requested to, and frequently does, provide leadership for activities that reflect a high degree of technical expertise or a focus upon process and solutions that are of mutual benefit and a clear understanding of the cultural, political, and technical needs and solutions.

The policy elements are not a specific priority ranking of activities, although obligations mandated by law, treaties, and conventions will be given the highest priority. Implementation of this policy requires consistent dialogue and consultation across organizational lines to ensure that the NRC's response to issues and requests reflects both internal NRC and broader U.S. Government priorities.

International activities is a very general term that includes a variety of activities and program elements. Some of these elements represent the changing marketplace and the globalization of the supply chain. For example, regulatory activities that were previously conducted exclusively within the United States, such as activities in support of licensing and inspection, are now being conducted internationally. Likewise, research on various issues is being conducted both within the United States and internationally, and the most effective leverage of resources and expertise will dictate a particular approach for any given situation. All of the above are international activities but are intertwined with domestic activities.

Other activities are more obviously identified as "international," where the specific focus involves cooperation and assistance activities with international counterparts and organizations. These may be both bilateral and multilateral in nature and may, in any particular circumstance, reflect several of the international policy elements.

Because of the breath of its programs, resources, and expertise, the NRC is often looked to for leadership in a wide variety of venues. The NRC should, when it is appropriate to do so, provide such leadership in a cooperative and collegial manner. The NRC should continue to build partnerships with our international counterparts, and should propose approaches to our counterparts that ensure equal partnerships so as to be a positive influence in creating workable technical and policy alternatives.

NRC participation in international activities should clearly reflect our role and responsibilities as an independent regulatory agency. Thus, our focus should be upon safety and security.

Satisfying international treaty and convention obligations, as well as statutory mandates, is a significant priority for both the NRC and the broader U.S. Government. For example, the NRC is a lead agency within the U.S. Government for implementation of the Convention on Nuclear Safety. The NRC has significant responsibilities supporting broader U.S. Government commitments made through the Nuclear Nonproliferation Treaty, the Convention on Physical Protection of Nuclear Material, the Convention on Assistance in Case of a Nuclear Accident or Radiological Emergency, the Convention on Early Notification of a Nuclear Accident or Radiological Emergency, and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. The NRC also has a lead role in domestic implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and the Code of Conduct on the Safety of Research Reactors. By statutory mandate, Congress made the NRC the export-import licensing agent for nuclear materials and equipment for the U.S. Government. As such, the NRC has upheld, and will continue, to uphold obligations pursuant to international treaties and conventions. Further, the NRC proactively engages with its U.S. Government partners on the development and adoption of proposed international treaties and conventions that are relevant to its mandate.

International guides, standards, and recommendations document internationally-accepted benchmarks and best practices. Such documents are relied upon by the international nuclear safety and security community. The NRC participates in the development, adoption, and implementation of many such documents. Specifically, the NRC participates in the Commission on Safety Standards; the Nuclear Security Guidance Committee; and the Nuclear, Radiation,

Transport, and Waste Safety Standards Committees of the IAEA. The NRC also participates in the work of the International Commission on Radiological Protection and the United Nations Scientific Committee on the Effects of Atomic Radiation. This participation allows the NRC to share its experience broadly with the international standard-setting community and to learn from others' experiences. As such, the Commission believes that the NRC should support such efforts, as appropriate. The Commission also expects the NRC's regulatory programs to be appropriately informed by such international guides, standards, and recommendations.

The NRC's international activities benefit, both directly and indirectly, the NRC and its stakeholders. The NRC shares its regulatory knowledge and experience with international regulatory counterparts. Likewise, the NRC also seeks knowledge and experience from international regulatory counterparts. The NRC continuously assesses, and where relevant incorporates, international operating experience and research insights into NRC's domestic regulatory program. The NRC also routinely shares international operating experience and research insights with the international community. The NRC provides opportunities for assignment to the NRC of staff from international regulatory counterparts. Likewise, the NRC seeks opportunities for assignment of NRC staff to international regulatory counterparts to broaden staff experience and perspectives. The NRC participates in international cooperative research, through the NEA and others, effectively leveraging resources and international expertise. The NRC also provides assistance to international regulatory counterparts looking to enhance their regulatory programs. Regulatory counterparts of countries considering nuclear power, for example, request advice and support for establishing their regulatory programs. Other counterparts seek NRC's advice and assistance for enhancing oversight of their existing nuclear power and research reactor programs. In addition, NRC's advice and assistance for enhancing oversight of the use of radioactive sources is often sought after globally. The Commission believes that the partnerships created by the NRC's cooperation and assistance efforts benefit the regulatory programs of the NRC and of international counterparts, as well as the global nuclear safety and security community. The Commission also supports broader U.S. Government interests within the context of a strong, independent regulatory agency.

The international community is united in its endorsement of the need for open, transparent, and effective regulatory oversight of the use of nuclear and radioactive materials. For almost 40 years, the NRC has had regulatory safety and security oversight of one of the most extensive civilian nuclear programs in the world. This includes power and research reactors, fuel cycle facilities, waste facilities, and radioactive sources. From this, the NRC has gained extensive and diverse regulatory experience. The NRC's international activities also align with broader U.S. Government foreign policy initiatives. Assisting regulatory counterparts in enhancing oversight of radioactive sources, for example, supports broader U.S. Government nuclear security initiatives by reducing the likelihood that malevolent actors could obtain such material for use in a radiological dispersal or exposure device. As such, the Commission believes that the NRC should demonstrate leadership on regulatory issues, both within the international community and the U.S. Government.