

May 2, 2005

MEMORANDUM TO: Chairman Diaz
Commissioner McGaffigan
Commissioner Merrifield
Commissioner Jaczko
Commissioner Lyons

FROM: Luis A. Reyes */RA/*
Executive Director for Operations

SUBJECT: INITIATIVES FOR INCREASING AGREEMENT STATE
PARTICIPATION IN THE CONTROL OF SOURCES

On April 19, 2005, the staff briefed the Commission, in closed session, on a proposal for increasing Agreement State participation in the control of sources. The Commission requested the staff prepare a paper to provide the Commission with additional information about the staff's proposal. The Commission wanted this information before it would allow the staff to proceed to discuss this issue with the States. The purpose of this memorandum, and the attached paper, is to provide the additional information requested by the Commission to further inform the Commission's decision.

SECY, please track.

Attachment: As stated

cc: SECY
OGC
DOC
OCA
OPA
CFO

CONTACT: Andrew N. Mauer, STP
301-415-3962

INITIATIVES FOR INCREASING AGREEMENT STATE PARTICIPATION IN THE CONTROL OF SOURCES

BACKGROUND:

In a Note to Commissioner Assistants dated October 6, 2004, the staff summarized the 2004 Organization of Agreement States (OAS) Meeting. The keynote address, delivered by Mr. William Kane, indicated that NRC staff will work with OAS to consider ways to allow States to increase their participation, on an optional basis, in the regulation and oversight of security activities, in parallel with their public health and safety responsibilities. The keynote address reflected direction provided by the Commission in a Staff Requirements Memorandum (SRM) dated September 17, 2004, which indicated that "the staff should work with OAS and OGC to develop optional mechanisms to allow States to have greater participation in the regulation of the common defense and security activities being undertaken by their licensees."

The Commission directed that the staff keep the Commission Technical Assistants informed as options are developed. On March 28, 2005, the staff briefed the Commission Technical Assistants. On April 19, 2005, the staff briefed the Commission in closed session, and the Commission requested that staff prepare a paper with further details on the staff's proposal.

Post-9/11, the U.S. Nuclear Regulatory Commission (NRC) has implemented security measures based on NRC's common defense and security authority. The NRC staff indicated in a meeting with State representatives in June 2003 that the decision to use this approach was based on timeliness, consistency, and effectiveness. Under the current implementation approach, Agreement States have the option to perform inspections for and on behalf of NRC, on a voluntary basis, by entering into Section 274i Agreements.

The staff, during the April 19, 2005 briefing, sought permission to discuss with the Agreement States an approach which would allow the States to have greater participation in the oversight of control and security of radioactive material. This approach would involve discussion on enhancing current safety requirements to ensure an adequate level of control and tracking over radioactive materials in the post-9/11 environment, building upon the public health and safety-based security and control requirements in place for years before 9/11/2001, in 10 CFR Sections 20.1801 (*Security of stored material*) and 20.1802 (*Control of material not in storage*). The enhanced requirements would ensure safety in the use, possession, and control of radioactive materials, and, at the same time, adequately ensure sufficient security and control of the material. This approach can be accomplished without compromising the Commission's exclusive common defense and security authority under the Atomic Energy Act.

ATTACHMENT

DISCUSSION:

Rationale

Prior to 9/11, several national and international efforts were underway to address the potentially significant health and safety hazards posed by uncontrolled sources. These efforts recognized the need for increased control of high-risk radioactive materials, to prevent inadvertent and intentional unauthorized access, primarily due to the potential health and safety hazards posed by the uncontrolled material. Following 9/11, it was recognized that these efforts should also include a heightened awareness and focus on the need to prevent intentional unauthorized access due to potential malicious acts. Although the outcomes of these efforts, such as the IAEA Code of Conduct, recognize the need to provide adequate security to prevent malicious acts, their primary focus remains on increasing the control over sources to prevent unintended radiation exposure.

Similarly, ensuring adequate control of radioactive material has always been a mission of the NRC. Prior to 9/11, NRC had also focused efforts on the control of radioactive sources to prevent adverse health impacts. This included focusing not only on control of radioactive materials to prevent unintentional exposure, but also on preventing malevolent acts of intentional contamination. The events of 9/11 did not change NRC's mission or its focus concerning control of sources to prevent adverse health effects. A licensee's loss of control of high-risk radioactive sources, whether it be inadvertent or through a deliberate act, has a potential to result in significant adverse health impacts. Addressing these risks through an integrated approach that recognizes the complementary nature of safety and security requirements, can meet the Commission's desire to enhance the control of sources in today's environment. This approach can ensure adequate control of sources to prevent both adverse health impacts and, as an additional, complementary benefit, prevent potential malevolent use of radioactive sources.

Current Implementation Approach

The staff has continued progress, consistent with Commission direction, in developing the protective measures (PMs) to impose on licensees in Groups 1-5. (In parallel, the staff has also developed the alternative approach discussed below.) Although most of the security measures also increase safety, the current approach for implementation draws and focuses on NRC's common defense and security authority to impose the enhancements. More than half of eligible Agreement States have executed Section 274i Agreements. Staff expects additional States will sign Section 274i Agreements for other categories of licensees. However, NRC will retain implementation responsibility for Agreement State licensees in States which do not sign Section 274i Agreements. In addition, under the current approach, NRC retains broad oversight and implementation responsibility for Agreement State licensees in States signing Section 274i Agreements. This includes, for example, issuance of final inspection reports, issuance of enforcement actions, inspection accompaniment of State inspectors, and contractual oversight.

Advantages of the Current Implementation Approach

- Consistent with Commission direction provided in SRM-COMSECY-03-0005: “Future materials CMs should be based on NRC’s Common Defense and Security Authority and the Agreement States should be so informed.”
- Staff has already developed Section 274i Agreements (i.e. basic infrastructure already exists) in coordination with the Agreement States, and over half of eligible Agreement States have executed Section 274i Agreements.
- Ensures national consistency in implementation.
- Provides a timely, quick, and enforceable method of enhancing security.

Disadvantages of the Current Implementation Approach

- Considerable need for expansion and indefinite commitment of NRC resources to implement additional regulatory activities associated with security measures for Agreement State licensees. These resources would be needed to fund the Section 274i Agreements, and NRC inspection and follow-up actions in States not signing Section 274i Agreements.
- NRC would have continued need to maintain administrative and contractual oversight costs for Section 274i Agreements.
- It will be difficult to overcome existing Agreement State bias and Agreement State legal prohibitions (regarding increasing staffing and resources for the purpose of doing inspection for and on behalf of NRC under Section 274i Agreements) against this approach. The OAS and several Agreement State representatives have not adopted this approach based on a fundamental disagreement with the division of the roles and responsibilities between the NRC and the Agreement States.
- May be less effective in meeting the NRC goal of integrating safety, security, and emergency preparedness.
- May foster a perception of dual regulation, especially by small licensees, where the State currently performs inspections of its requirements, and NRC would perform new security inspections.
- For States which have not signed a Section 274i Agreement, there is no integration of State inspections with NRC inspections. In these cases, a concerted effort on the part of NRC would be required to coordinate inspections for safety and security.

- A potential difficulty exists for licensees who work in multiple States in the case where neighboring States had issued reciprocity licenses, but all of the States had not signed the security portion of the Section 274i Agreement.

Alternative Approach

The alternative approach involves maximizing Agreement State participation through their current Section 274b Agreements, by enhancing current health and safety requirements in 10 CFR Sections 20.1801 (*Security of stored material*) and 20.1802 (*Control of material not in storage*) to include those aspects necessary to ensure adequate control and tracking of radioactive materials in the current post-9/11 environment, as a measure of protection of the public health and safety. Thus, by addressing new health and safety needs and requirements in a post-9/11 environment, most, if not all, needs for control and tracking of materials would also be adequately addressed. In those prospective cases where the need for new additional requirements is identified to promote the Common Defense and Security, the NRC retains its authority to impose such requirements under its common defense and security authority.

This approach recognizes the complementary nature of safety and security in the control of radioactive materials. In almost all cases, actions that increase control, tracking and recovery (e.g., of lost sources) of radioactive sources, contribute to both safety and security. Under this approach, enhanced controls would be imposed to protect the public health and safety. Agreement State implementation under Section 274b authority would be maximized by expanding current safety requirements to include those aspects necessary to ensure adequate control, possession, and use of high-risk radioactive sources in the post-9/11 environment.

As a practical matter, safety and “security” are intertwined in the industrial, medical, and academic uses of materials, and the goal in both safety and “security” is to prevent the loss of control of material. This alternative approach is consistent with the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and the IAEA interim guidance on the Security of Radioactive Sources (IAEA-TECDOC-1355). Consistent with these documents, enhanced requirements for the control and tracking of radiation sources would be focused on preventing both inadvertent and intentional unauthorized access to radioactive materials (including access for malicious intent).

For example, the current draft PMs for additional materials licensees contain general guidance at the beginning of each group that indicates “These Protective Measures (PMs) are established to delineate licensee responsibility in response to the current threat environment. The following security measures apply to licensees who possess.....” The PMs also contain a requirement for licensees to “monitor and immediately detect, assess, and respond to unauthorized access to high-risk radioactive material.”

Under the alternative approach, many, if not all, of the specific PM requirements would remain substantially the same. The general guidance would be changed to reflect the following:

“These Protective Measures (PMs) are established to delineate licensee responsibility to maintain control of licensed material and secure it from unauthorized removal or access.”

The description of the items in the preamble to each of the five areas of the PMs would change to indicate the focus on public health and safety, as in the following:

“In order to ensure the safe handling, use, and security of licensed material in use and in storage, each licensee shall have a documented program to monitor and immediately detect, assess, and respond to unauthorized access to high-risk radioactive material.”

If the Commission approves the staff’s proposed next step to commence discussions with the Agreement States, the staff will work with the Agreement States to evaluate all elements of the PMs and discuss how they could be implemented under the alternative approach. Under this approach, staff would initiate discussions with the OAS and individual Agreement States on the viability, timing, and strategies for implementation. The discussions would involve coordinating with all of the Agreement States to ensure that they are able and willing to implement timely and adequate legally binding requirements in a time-frame consistent with Commission direction (e.g., August 2005). A materials control policy working group would be expeditiously formed to develop and propose a transition plan for Commission and Agreement State consideration.

Advantages of the Alternative Implementation Approach

- Agreement State implementation is accomplished in a timely manner, as a matter of compatibility under public health and safety authority, and is more in line with the conventional division of responsibilities with NRC overseeing NRC licensees and Agreement States overseeing Agreement State licensees, in protecting public health and safety, in the possession and use of Atomic Energy Act materials.
- Enable safety and control requirements to be inspected during the same inspection, maximizing efficiency of inspection resources and reducing travel costs.
- Supports the integration of safety, security, and emergency preparedness, in a manner consistent with the NRC’s strategic goals and recognizes the complementary nature of these requirements.
- Anticipated resource savings for the NRC (e.g., Agreement States would have oversight of Agreement State licensees).
- OAS Executive Board has independently identified this as an approach they favor (Agreement State Input).

Disadvantage of the Alternative Implementation Approach

- Notwithstanding commitments that may be made as we test the viability, the possibility exists that not all Agreement States will adopt timely and adequate legally binding requirements in a manner consistent with Commission direction. This may potentially delay implementation of additional measures or enhancements, and could be a problem for Agreement States whose programs are under stress at this time (e.g. Texas). Commission options for dealing with Agreement States who cannot, or will not comply, are limited (heightened oversight, program suspension, or revocation) and may be difficult or resource-consuming to implement.

Training

Under both implementation approaches the NRC would continue to provide training to NRC and Agreement State inspectors. The training would provide the basic elements necessary for regulatory agencies to ensure adequate implementation of protective or control measures.

Agreement State Input

Staff conducted a teleconference with members of the OAS Executive Board on January 13, 2005, seeking their views on ways to increase State participation, on an optional basis, in the regulation and oversight of security activities, in parallel with their public health and safety responsibilities. The OAS reacted favorably toward the speech given by Mr. William Kane at the October 2004 Annual Meeting. Experience with imposing security measures and the large irradiators and manufacturers and distributors of high-risk sources has provided the NRC and the Agreement States with insights about the ease with which carefully defined control measures directed at protecting public health and safety could be integrated into existing licensing programs.

The OAS indicated that they are looking into increasing health and safety requirements that could also have the benefit of effectively enhancing "security." In this regard, the OAS expressed willingness to work with NRC to draft rules that do not conflict with NRC jurisdiction with regard to common defense and security. The OAS indicated that States could draft State regulations, either independently from NRC, or with NRC, as a cooperative NRC/State effort.