POLICY ISSUE
INFORMATION

March 22, 2002 SECY-02-0051

FOR: The Commissioners

FROM: Janice Dunn Lee, Director
Office of International Programs

William D. Travers
Executive Director for Operations

SUBJECT: ANNUAL PAPER - NRC STAFF PARTICIPATION IN IAEA AND NEA ACTIVITIES

References:
(1) Annette L. Vietti-Cook to Janice Dunn Lee and William D. Travers, "Staff Requirements Memorandum M010312B," dated April 24, 2001

(2) Annette L. Vietti-Cook to Janice Dunn Lee and William D. Travers, "Staff Requirements Memorandum M010814," dated September 4, 2001

(3) William D. Travers to Samuel J. Collins, Ashok C. Thadani, and Martin J. Virgilio, "Procedures for International Interactions," dated August 29, 2001

PURPOSE:

In Reference 1, the Commission directed the staff to submit an annual paper to the Commission addressing NRC's specific goals and objectives in various international fora (particularly the IAEA and NEA) and strategies for accomplishing those goals and objectives. In Reference 2, the Commission reiterated its earlier direction and, further, asked the staff to outline methods to involve the Commission early enough in the process to allow it to provide policy guidance and influence the outcome of standards and guidance as they are developed. The Commission noted its particular interest in policy issues relating to the development of standards and guidance for waste, orphan sources, clearance of radioactive material, transportation, and standards that the NRC, by law, would have to adopt. This paper forwards to the Commission the first annual paper responding to these requests.

CONTACT: E. Doroshuk, OIP
415-2775

DISCUSSION:

In response to the Commission's guidance in References 1 and 2, the staff has prepared the information in the attachments to summarize NRC's primary ongoing and projected IAEA and NEA activities and to identify areas where we would expect Commission engagement. It is noted that there are other programs that are sponsored by OECD/NEA. For example, the programs at the Halden Facility near Oslo are considered to be research programs, rather than working group/committee activities, which are the focus of this paper.

Attachment 1 provides a summary of specific objectives for each area and identifies near-term policy issues on which we would expect to involve the Commission at the appropriate time in Calendar Year 2002.

Attachment 2 is a more comprehensive documentation of staff activities in these fora for Commission information. They are provided by program offices (NMSS, NRR, RES). For each activity, the following information is provided: (1) a general description of each activity, (2) link to NRC Goals and Strategies, (3) its relationship to other agency activities, (4) the long-term and short-term objectives and approaches for accomplishing the agency's goals integral to the activity, (5) NRC role in relation to that of any other U.S. agencies, (6) opportunities for Commission involvement in the near-term, (7) opportunities for Commission involvement in the longer term, (8) plans for Commission notification, (9) level of effort, and (10) the primary staff contact(s).

The information in Attachment 2 is meant to present the essence of work in progress under the activity, not to be an analysis of underlying policy and technical positions or of how they compare with NRC policy and positions. For those issues that are of particular interest to the Commission, the staff will make meeting agenda and draft papers available to the Commission at the earliest opportunity and seek the Commission's guidance, when appropriate, relative to developing policy and technical positions. An example of the way in which the staff would expect to inform the Commission and seek its guidance on an international activity where the U.S. might be expected to comply with decisions reached is the way the staff has informed the Commission and sought guidance through the body of correspondence on the Convention on Nuclear Safety (CNS).

Attachment 2 begins with an index listing the committees within which the ongoing IAEA and NEA activities are being conducted, along with a reference to the corresponding page in Attachment 2. Some of the IAEA and NEA activities in which NRC participates include development of standards that NRC may have to consider adopting and high visibility policy areas such as waste, orphan sources, clearance of radioactive material, and transportation. In particular, the following IAEA and NEA activities involve these sensitive areas: the IAEA Radiation, Waste and Transportation Standards Committees (RASSC, WASSC, and TRANSSC), the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, and the NEA Radioactive Waste Management Committee. The NMSS activity descriptions in Attachment 2 include identification of opportunities for Commission engagement in these areas. Other activities that may be of particular interest to the Commission include the following:

NEA Committee on the Safety of Nuclear Installations (CSNI) - Workshop on Safety Issues for Advanced Reactor Designs in February 2002 (RES);

IAEA International Nuclear Safety Advisory Group (INSAG) Meeting in March 2002 (RES);

IAEA CNS - National Report Review Meeting in April 2002 (NRR/OIP);

IAEA Nuclear Safety Topical Meeting in September 2002 (NRR);

IAEA Operational Safety Review Teams (OSARTs) and International Regulatory Review Teams (IRRTs). As a follow-up to the January 2000 OSART mission to the North Anna plant (the plant), IAEA will return from April 4 - 12, 2002, to evaluate how the plant will implement IAEA recommendations. Additionally, NRC Regional staff are supporting IRRTs in Armenia and Hungary in 2002. A policy question is under review of whether to pursue an IRRT in the U.S. (NRR).

The IAEA is developing a proposed expanded program in the effort to combat terrorism. This expanded program, once approved, may require additional technical support from the NRC. Some of the IAEA activities identified in Attachment 2 reflect activities that are, or may be, affected by these efforts; for example,

Radiation Safety Standards Committee (RASSC) addressing orphan sources and clearance issues - It is anticipated that higher priority and urgency will be placed on the action plan for control of radiation sources and, possibly, additional activities may be pursued as a result of decisions made concerning proposals for expanded IAEA activities to address perceived vulnerabilities to a terrorist threat.

International Physical Protection Advisory Service Missions (IPPAS) - It is anticipated that there will be an increase in these missions with a likely increase in requests for NRC support.

Convention on the Physical Protection of Nuclear Material (CPPNM) - It is anticipated that there may be competing impacts. For example, a desire for expedited consideration of the amendment to the Convention is anticipated but, at the same time, there will be a need to address interests to broaden the scope of the amendment (which could cause serious delays if not indefinite postponement).

NEXT STEPS:

This is the first Annual Report in response to the Commission request and the staff has learned from the preparation of this report. We believe the information provided to the Commission and the Commission's guidance to the staff would be improved by taking a number of additional steps in the future. In the fall of each year, the International Council (IC) will review the inventory of activities focusing on what has been accomplished in the prior year to meet NRC objectives and what we would like to achieve in the year ahead. At that time, the IC will identify, on the basis of available information, the need for Commission involvement in significant policy matters and items of interest. That review will help shape the next Annual Report and the staff's engagement with the IAEA and the NEA in the year ahead.

In Reference 3, the EDO directed the staff to immediately implement certain principles and procedures for improving the conduct of international interactions. Additional guidance, in four separate areas, is being developed at the office level to address office-specific types of interactions and needs for improving the conduct of NRC's international activities: (1) fuller and more consistent reporting of the results of foreign travel, (2) prompt notification of the Commission in advance of planned interactions involving sensitive issues, (3) establishment of prioritizing and resource-allocating processes for international activities, and (4) more effective coordination and communication in the conduct of NRC's international activities. The staff intends to provide the Commission with an assessment of the effectiveness of the procedures in June 2002.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection.

CONCLUSION:

The attachments provide a summary of NRC's specific goals and objectives for IAEA and NEA activities and strategies for accomplishing those goals and objectives. This is the first step in the continuing process of bringing better and more timely information in these areas to the Commission. It is intended to provide a compendium of the primary international organization activities, including lead contacts and upcoming meetings, in which the staff is engaged. As the year progresses, further developments regarding policy issues will be brought to the attention of the Commission. Emerging issues, as they arise, will also be brought to the attention of the Commission and we will identify those matters on which the staff will be seeking the Commission's guidance and input.

It should also be noted that, although OIP activities in support of the IAEA and the NEA are not detailed in the attachments, OIP plays a central role in coordinating, facilitating, and providing policy guidance to the overall management through its participation in the IAEA Board Meetings and NEA Steering Committee Meetings.

/RA/

Janice Dunn Lee, Director
Office of International Programs

/RA/

William D. Travers
Executive Director for Operations

Attachments:
As stated

cc w/attachments:
SECY
OGC
CFO
OPA
RES
OCA
OIG
NRR
NMSS
IRO
Regional Administrators

Near-Term Policy Issues Associated with IAEA and NEA Activities for Calendar Year 2002

Anticipated near-term policy issues associated with NRC staff participation in IAEA and NEA activities are identified below. They are grouped under the four broad activity categories used in SECY-01-0209, "Framework for International Activities."

Area of Activity/ Near-Term Policy Issue:	**Int'l Forum**
A. Carry out export licensing, international safeguards and international reporting and consultative activities mandated by U.S. law, international treaties or international conventions, or required pursuant to Commission-approved agreements or policy directives.	IAEA
Near-Term Policy Issues:	
! Provision of robust NRC participation in the CNS Review Meeting in April 2002	
! Monitoring of and participation in amendments to the CPPNM	
! Monitoring of U.S. ratification of the Waste Convention	
! Monitoring of proposals to develop international instruments for research reactors and radioactive sources (Code of Conduct)	
! Facilitation of IAEA inspections at the BWXT Downblending Facility	
! Monitoring of and participation in U.S. ratification of the Additional Protocol	
! Monitoring of and participation in U.S.-IAEA-Russia development of a new international verification agreement	
! Evaluation of international safeguards for the Rokkasho Reprocessing Plant	
B. Obtain and use non-U.S. safety and safeguards information that will alert the NRC to potential safety and security problems and threats, help identify potential accident precursors, and provide accident/incident analyses, including lessons learned, directly applicable to the safety of U.S. nuclear power plants and other facilities, and the use of nuclear materials.	IAEA NEA
Near-Term Policy Issues:	
! PBMR development and licensing	
! Control of export of significant sources	
! Waste safety regulatory approaches	
! Elimination of unnecessary duplication of effort by IAEA and NEA on societal issues	
! Protection of information by the IAEA	

C. Assist other countries to prevent accidents, radiological sabotage, and the loss or diversion of sensitive nuclear materials, and to develop or improve associated foreign regulatory capabilities, regulatory independence, and nuclear safety/safeguards cultures. IAEA NEA

Near-Term Policy Issues:

- Development of the Action Plan for Protection of Patients
- Development of the Action Plan for Occupational Exposure of Workers
- Revision of Action Plan for Control of Sources to address security issues
- Terrorism: Address IAEA and NEA proposals to respond to terrorism threats to nuclear materials and facilities and other radioactive material, and ensure that they are compatible with U.S. views and concerns
- Life extension of Soviet-designed reactors
- Coordination of support to the Russian regulator Gosatomnadzor (GAN) and to other countries' regulatory agencies, as appropriate

D. Influence international safeguards and nuclear safety regulatory standards, policies and practices. IAEA

Near-Term Policy Issues:

- Waste: Development of international standards on High-Level Waste (HLW) repositories
- Radiation Safety: Development of international standards for scope of control of radioactive material (clearance)
- Transport: Completion of the latest revision to the international standards
- Terrorism: Development of international standards for material control and accounting, physical protection, and detection of illicit trafficking of nuclear materials
- Safeguards: Evaluation of the framework, guidance, and proposals for implementing IAEA integrated safeguards
- Safeguards: Development of IAEA safeguards for geological repositories

ATTACHMENT 2 INDEX

Activity	NRC Office	Int. Org.	Page #
Radiation Safety Standards Committee (RASSC)	NMSS	IAEA	1
Waste Safety Standards Committee (WASSC)	NMSS	IAEA	4
Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention)	NMSS	IAEA	7
Transportation Safety Standards Committee (TRANSSC)	NMSS	IAEA	10
Nuclear Safety Standards Committee (NUSSC) - Fuel Cycle Facility Safety Standards Subgroup	NMSS	IAEA	14
Strengthening International Safeguards	NMSS	IAEA	16
Convention on the Physical Protection of Nuclear Material (CPPNM)	NMSS	IAEA	20
International Physical Protection Advisory Service (IPPAS)	NMSS	IAEA	22
Radioactive Waste Management Committee (RWMC)	NMSS	NEA	24
Committee on the Safety of Nuclear Installations (CSNI) - Fuel Cycle Facility Safety Subgroup	NMSS	NEA	27
Committee on Nuclear Regulatory Activities (CNRA)	NRR	NEA	29
Working Group on Inspection Practices (WGIP)	NRR	NEA	31
Other Nuclear Safety Activities	NRR	IAEA	33
Committee on the Safety of Nuclear Installations (CSNI)	RES	NEA	35
CSNI Program Review Group (PRG)	RES	NEA	37
CSNI Working Group on Risk Assessment (WGRISK)	RES	NEA	39
CSNI Working Group on Analysis and Management of Accidents (GAMA)	RES	NEA	42
CSNI Special Expert Group on Fuel Safety Margins (SEGFSM)	RES	NEA	44
CSNI Working Group on Integrity and Aging of Components and Structures (IAGE)	RES	NEA	46
CSNI Workshop on Advanced Reactors - Organizing Committee	RES	NEA	49
CSNI Working Group on Operating Experience	RES	NEA	51
CSNI Special Expert Group on Human and Organizational Factors (SEGHOF)	RES	NEA	53

International Nuclear Safety Advisory Group (INSAG)	RES	IAEA	55
Nuclear Safety Standards Committee (NUSSC)	RES	IAEA	57
Integration Group for the Safety Case (IGSC)	RES	NEA	59
Ad Hoc Technical Committee Meetings and Consultants Meetings	RES	IAEA	61
Committee on Radiation Protection and Public Health (CRPPH)	RES	NEA	63

IAEA RADIATION SAFETY STANDARDS COMMITTEE (RASSC)

NRC Office: NMSS International Organization: IAEA

General Description

RASSC provides direction and recommendations to the IAEA Secretariat on all aspects of radiation safety, regulation and guidance development, research, and developing nation support. RASSC meets twice each year and reports to the Committee on Safety Standards (CSS). The current RASSC chair is Dr. Ches Mason, Australia.

NRC Goals and Strategies Met/Involved/Implemented

- Nuclear Materials and Waste Safety Arena: Maintain Safety. First Strategy: We will continue to improve the regulatory framework to increase our focus on safety and safeguards, including incremental use of risk-informed and, where appropriate, less prescriptive performance-based regulatory approaches to maintain safety.

- Nuclear Materials and Waste Safety Arena: Make the NRC activities and decisions more effective, efficient, and realistic. First strategy: We will continue to improve the regulatory framework in order to increase our effectiveness, efficiency, and realism.

- Nuclear Materials and Waste Safety Arena: Reduce Unnecessary Regulatory Burden on Stakeholders. First strategy: We will continue to improve our regulatory framework in order to reduce unnecessary regulatory burden.

- International Nuclear Safety Support Arena: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation. First strategy: We will continue to take a proactive role in strengthening safety, safeguards, and non-proliferation worldwide.

Relationship to other NRC Activities

The U.S. does not specifically incorporate IAEA basic safety standards into its regulations. However, many of the issues, including occupational and public exposure, exemptions, clearance, emergency preparedness, and other activities are designed to be complementary to and consistent with the IAEA standards. Many NRC and U.S. policy issues are being addressed in parallel with the IAEA reviews.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

- Encourage stability of regulations
  - Existing regulations are mature and time-proven.
  - All proposed changes to the regulations should have a risk informed evaluation and cost/safety justification.
  - IAEA should strictly adhere to the structured and disciplined revision process

- Actively participate in discussions of revisions as scientific evidence and ICRP recommendations become available.
  - S Development of clearance policy and technical values must be coordinated with corresponding U.S. initiatives. Active participation should ensure that technical models and approach is defensible and transparent.
  - S Changes to regulatory system must be carefully considered to reflect up-to-date science and sound protection theories.

- Continue support for IAEA efforts to improve regulatory programs for the control of sources and materials.
  - S NRC activities should support orphan source and lost source initiatives and action plans.
  - S Activities should support and implement INES reporting of events, and RADEV database efforts to catalogue events.

NRC Role vis-a-vis Other U.S. Agencies and Other Organizations

The NRC representative is the U.S. Government representative on RASSC. NRC coordinates positions and actions with the Environmental Protection Agency, Department of Energy, and Agreement States. Support for specific topical meetings in the radiation safety area may come from multiple organizations, with positions coordinated as approval is sought at RASSC.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. The next meeting of RASSC will be during the week of March 25, 2002. There will be opportunities for involvement and engagement on some of the specific issues before that time, but they will be related to a specific issue meeting, not the RASSC meeting. Specific issues of interest are the action plan for control of radiation sources, including the code of conduct, source categorization, and clearance related activities, particularly in light of the events of September 11, 2001.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. Specific policy and technical positions, including clearance, scope of regulatory standards, orphan sources, and emergency response have been, and will continue to be areas of specific Commission involvement.

If yes to either, how and when will the Commission be notified and their input sought?

Staff will make meeting agenda and draft papers available to the Commission as they are provided by IAEA in advance of meetings. In many cases, development of specific documents will be done outside of the RASSC meetings, and will be coordinated and reported by the traveler attending the technical committee or advisory group. Information will be provided to the Commission at the earliest opportunity.

Level of Annual Effort:

- 2 meetings, with a total of 4-6 staff weeks of effort.
- Additional 3-4 weeks of effort to be expended for each issue in which staff separately participates, e.g., participation in technical committee or consultants' meetings on scope of radiation standards, clearance, etc.
- Approximately 4 foreign trips per year.

Primary Staff Contact: Carl J. Paperiello, Deputy Executive Director for Materials, Research and State Programs, (301) 415-1705

WASTE SAFETY STANDARDS COMMITTEE (WASSC)

NRC Office: NMSS International Organization: IAEA

General Description

WASSC provides direction and recommendations to the IAEA Secretariat on all aspects of waste safety: regulation and guidance development, research, and developing nation support. WASSC meets annually and reports to the Committee on Safety Standards (CSS).

NRC Goals and Strategies Met/Involved/Implemented

- Nuclear Materials and Waste Safety Arenas: Maintain Safety. First Strategy: We will continue to improve the regulatory framework to increase our focus on safety and safeguards, including incremental use of risk-informed and, where appropriate, less prescriptive performance-based regulatory approaches to maintain safety.

- Nuclear Waste Safety Arena: Maintain Safety. Fourth Strategy: We will respond to operational events involving potential safety or safeguards consequences.

- Nuclear Waste Safety Arena: Maintain Safety. Fifth Strategy: We will evaluate potential new information from research, new safety issues, changing external factors, international programs, and licensee experience so that improvements can be made to maintain an adequate regulatory framework.

- Nuclear Materials and Waste Safety Arenas: Make the NRC activities and decisions more effective, efficient, and realistic. First strategy: We will continue to improve the regulatory framework in order to increase our effectiveness, efficiency, and realism.

- Nuclear Materials and Waste Safety Arenas: Reduce Unnecessary Regulatory Burden on Stakeholders. First strategy: We will continue to improve our regulatory framework in order to reduce unnecessary regulatory burden.

- International Nuclear Safety Support Arena: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation. First strategy: We will continue to take a proactive role in strengthening safety, safeguards, and non-proliferation worldwide.

- Nuclear Waste Safety Arena: Reduce Unnecessary Regulatory Burden. First strategy: We will continue to improve our regulatory framework in order to reduce unnecessary regulatory burden.

Relationship to other NRC activities

The U.S. does not specifically incorporate IAEA basic safety standards into domestic regulations. However, many of the issues, including waste minimization, long-term isolation of waste, institutional controls, design of waste disposal packages, occupational and public exposure, remediation and cleanup, and other activities are designed to be complementary to

and consistent with the IAEA standards. Many NRC and U.S. policy issues are being addressed in parallel with the IAEA reviews.

Long Term and Short term (FY 2002) objectives and approach for accomplishing goals

Objectives and approaches of the U.S. with respect to WASSC activities include:

- Encourage stability of waste regulations:
  - All proposed changes to the regulations should have a risk informed evaluation and cost/safety justification.
  - Waste management requirements and guidance should be sufficiently broad to allow for realistic implementation within the confines of individual Member States' resources and specific conditions. The NMSS staff intends to interact with the IAEA Division of Radiation and Waste Safety regarding the IAEA's plan to prepare draft Safety Requirements for Geologic Disposal of Radioactive Waste. The draft requirements are scheduled to be provided, as informational material, to WASSAC in early 2002 for informal review and comment.
  - The RADWASS publication program should be revisited to insure that it is consistent with the provisions of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention).
  - IAEA should strictly adhere to the structured and disciplined revision process

- Continue to encourage IAEA technical cooperation programs assistance to Member States in establishing and implementing radioactive waste management safety programs.
  - Encourage developed Member States participation in expert assistance activities.
  - IAEA waste safety resources should be balanced between guidance development and guidance and implementation assistance.

- Increase public access and provide member states adequate opportunity to seek and provide comment on documents prior to meetings.
  - Member state solicitation of comment by stakeholders and or public is a matter of sovereignty, but IAEA should facilitate information and technology transfer.
  - Oppose attempts to introduce redundant public participation and stakeholder confidence guidance development, which is being addressed adequately by the OECD/NEA forums.

NRC Role vis-a-vis other U.S. Agencies and other organizations

NRC provides DOE with technical support on radioactive materials waste issues, in cooperation with the EPA. DOE is the U.S. competent authority before IAEA on waste safety matters. (A. Wallo, DOE, and J. Greeves, NMSS, are the U.S. Co-representatives to WASSC).

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. Specific policy and technical positions, including geologic disposal, restoration of contaminated areas, scope of regulatory standards, waste packages, and decommissioning have been, and will continue to be areas of specific Commission involvement.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. In conjunction with the Joint Convention and on the Safety of Radioactive Waste Management, the NRC will need to support the U.S. State Department in the treaty obligations of the Joint Convention. This may spin off modifications to current NRC regulations to comply with these obligations. Furthermore, there is an obligation on the NRC to contribute to the preparation of an annual report every 3 years; this is addressed in the Activity Form for the Joint Convention. Re-issuance of the IAEA Basic Safety Standards may impact waste safety provisions in NRC regulations; a rulemaking will be required to harmonize with IAEA waste safety regulations

If yes to either, how and when will the Commission be notified and their input sought?

The staff will provide a 30-day pre-meeting notification to the Commission materials assistants prior to each WASSC meeting with an agenda (if available), to ensure the Commission has adequate opportunities to participate. The staff will be prepared to provide briefings for Commissioners or their assistants on request.

In addition, trip reports from WASSC and other significant meetings will be provided to OIP, with a recommendation, where appropriate, regarding providing the information to the Commission.

Level of Annual Effort:

- About 4 to 5 staff weeks
- About 2 to 3 trips per year

Primary Staff Contact: John Greeves, Director, Division of Waste Management, (301) 415-7437

JOINT CONVENTION ON THE SAFETY OF SPENT FUEL MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT (JOINT CONVENTION)

NRC Office: NMSS International Organization: IAEA

General Description

The Joint Convention is an outgrowth of the Convention on Nuclear Safety, which specified the need for a convention addressing the issues associated with radioactive waste management, including disposal. Additionally, disused sealed sources are addressed in Joint Convention. The Joint Convention, sometimes referred to as the Waste Convention, also covers the management of spent fuel because convention participants could not agree on whether spent nuclear fuel should be treated as a waste. The Joint Convention entered into force on June 18, 2001. The U.S. has not yet ratified the convention.

NRC Goals and Strategies Met/Involved/Implemented

- Nuclear Materials and Waste Safety Arenas: Maintain Safety. First Strategy: We will continue to improve the regulatory framework to increase our focus on safety and safeguards, including incremental use of risk-informed and, where appropriate, less prescriptive performance-based regulatory approaches to maintain safety.

- Nuclear Materials and Waste Safety Arenas: Make the NRC activities and decisions more effective, efficient, and realistic. First strategy: We will continue to improve the regulatory framework in order to increase our effectiveness, efficiency, and realism.

- International Nuclear Safety Support Arena: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation. First strategy: We will continue to take a proactive role in strengthening safety, safeguards, and non-proliferation worldwide.

Relationship to other NRC activities

The U.S. is a contracting party for the Convention on Nuclear Safety and needs to ratify the Joint Convention in the near future in order to be a party in the review of other national reports on the inventory and status of radioactive waste management and to be privy to organizational and review meetings. In order to benefit from the knowledge of waste programs in other nations and to influence the conduct of waste management on a global basis, the U.S. needs to have full standing as a contracting party to the convention. The U.S.'s leadership role in the international nuclear energy community necessitates it's full standing as a contracting party.

Long Term and Short term (FY 2002) objectives and approach for accomplishing goals

- Encourage harmonization of the level of safety in world-wide management of waste safety.
  - S RADWASS requirements and guidance needs to be revised to reflect the provisions of the Joint Convention.

- S IAEA should strictly adhere to the structured and disciplined revision process in modifying and generating safety standards series documentation consistent with the Joint Convention.

- Ensure that IAEA activities and guidance adhere to the scope established by the Joint Convention.
  - S The convention excludes NORM from its provisions, as well as defense-related materials. The IAEA should avoid expanding the scope of its radioactive waste management activities, beyond the constraints established in the convention.

- Increase public access and provide member states adequate opportunity to seek and provide comment on documents prior to meetings.
  - S Member state solicitation of comment by stakeholders and or public is a matter of sovereignty, but IAEA should facilitate information and technology transfer.
  - S Oppose attempts to introduce redundant public participation and stakeholder confidence guidance development, which is being addressed adequately by the OECD/NEA forums.

NRC Role vis-a-vis other U.S. Agencies and other organizations

NRC provides the U.S. State Department (DOS) with technical support on radioactive materials waste issues, in cooperation with the EPA and DOE. DOS is the U.S. competent authority before IAEA on the ratification of the joint convention. R. Stratford, DOS, is the U.S. designee for matters concerning the Joint Convention. J. Greeves, NMSS, and J. Lieberman, OIP, are the NRC points of contact.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. U.S. compliance with the provisions of the Joint Convention will necessitate the consideration of the current U.S. regulatory infrastructure in regulating the management and disposal of radioactive waste. This may entail changes to NRC regulations and practices. Specific policy and technical positions, including geologic disposal, restoration of contaminated areas, scope of regulatory standards, waste packages, and decommissioning may be affected, and as such, will continue to be areas of specific Commission involvement.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. In supporting the U.S. obligations associated with The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, the NRC will need to support the U.S. State Department in the treaty obligations of the Joint Convention. The Commission will be notified of U.S. ratification, and constraints imposed by the U.S. Senate, as well as the ensuing process for NRC's role in supporting the State Department. Furthermore, there is an obligation on the NRC to contribute to the preparation of an annual report every 3 years; this process will likely replicate the notification protocol for the NRC's role in the Convention on Nuclear Safety.

If yes to either, how and when will the Commission be notified and their input sought?

The staff will provide a pre-meeting notification to the Commission materials assistants prior to the planning and review meetings, which will be held on a 3-year cycle. Following each review meeting, the staff will provide a summary of the results of the reviews of pertinent national reports. The staff will be prepared to provide briefings for Commissioners or their assistants on request.

In addition, trip reports will be provided to OIP, with a recommendation, where appropriate, to OIP regarding providing the information to the Commission.

Level of Annual Effort:

- About 5 to 10 staff weeks
- About 4 trips per year

Primary Staff Contact: John Greeves, Director, Division of Waste Management, (301) 415-7437

TRANSPORTATION SAFETY STANDARDS COMMITTEE (TRANSSC)

NRC Office: NMSS International Organization: IAEA

General Description

TRANSSC provides direction and recommendations to the IAEA Secretariat on all aspects of transportation safety: regulation and guidance development, training, research, and developing nation support. TRANSSC meets annually and reports to the Committee on Safety Standards (CSS). The current TRANSSC chair is Mr. Clive Young, U.K.

NRC Goals and Strategies Met/Involved/Implemented

- Nuclear Waste Safety Arena: Maintain Safety. Fifth Strategy: We will evaluate potential new information from research, new safety issues, changing external factors, international programs, and licensee experience so that improvements can be made to maintain an adequate regulatory framework.

- Nuclear Waste Safety Arena: Reduce Unnecessary Regulatory Burden. First strategy: We will continue to improve our regulatory framework in order to reduce unnecessary regulatory burden.

- International Nuclear Safety Support Arena: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation. First strategy: We will continue to take a proactive role in strengthening safety, safeguards, and nonproliferation worldwide.

Relationship to other NRC activities

International modal organizations (e.g., International Maritime Organization, International Civil Aviation Organization), whose requirements are binding on certain U.S. carriers of radioactive material, incorporate IAEA regulations into their transportation requirements. Accordingly, periodic rulemaking is required to reflect these aspects of IAEA transportation regulations (TS-R-1) as they are revised. The U.S. incorporates or harmonizes IAEA transportation regulations into domestic regulations of the DOT (49 CFR 171-185) and NRC (10 CFR 71) to the maximum extent considered appropriate, utilizing the rulemaking process to consider IAEA transportation regulation revisions.

Long Term and Short term (FY 2002) objectives and approach for accomplishing goals:

(1) Encourage stability of transportation regulations.
- Existing transportation regulations are mature and time-proven.
- All proposed changes to the regulations should have a risk informed evaluation and cost/safety justification.
- IAEA should strictly adhere to the structured and disciplined revision process.
- Oppose attempts to introduce new Modal-specific packaging requirements, unless proven necessary from a risk and commerce perspective.

(2) Continue to treat radioactive material transport as a subset of dangerous goods.

- Encourage international acceptance of the regulations based on safety and technical reasons, eliminate political posturing.
- IAEA transportation regulations should conform to international modal organization regulations (including UN Model Regulations, ICAO, IATA, IMO) and TS-R-1 should be published in standard ("orange book") format.
- Existing Conventions on international commerce (e.g., SOLAS [Safety of life at sea] and Chicago Convention (air transport) adequately cover radioactive materials.

(3) Increase public access and provide member states adequate opportunity to seek and provide comment on documents prior to meetings.

- Member state solicitation of comment by stakeholders and or public is a matter of sovereignty, but IAEA should support required timeliness.

The following topical areas are being addressed by TRANSSC in the short-term and have particular interest to the Commission:

2003 regulatory revision cycle

There are 12 proposed changes in the 2003 edition of the IAEA regulations still being considered, as described in SECY-01-0158. In FY02, IAEA will convene the following meetings/actions:

TRANSSC meeting (final vote on 2003 changes) will be held March 4-8, 2002. (Technical Committee Meeting (TCM) to revise the regulations (resolve comments on 2003 changes) was held on November 12-16, 2001.)

A TCM for Developing Guidance in Support of the Application of the Revised Transport Regulations will be held May 13-17, 2002.

2005 Regulatory Revision cycle

The call for proposals will be put forward in early 2002 and the submission date for proposals to change for 2005 edition of IAEA regulations will be in Spring 2002.

A TCM to revise the regulations (i.e., to consider and pass or reject the 2005 proposals) will be held Sept 2-5, 2002.

Co-ordinated Research Project (CRP) on the Radiological Aspects of Package and Conveyance Non-fixed Contamination

In addition to the U.S., France, Germany, Japan, Sweden, UK, and the World Nuclear Transport Institute (WNTI) will establish package contamination research agreements with IAEA under this CRP. The U.S. research should provide early development of the capability to evaluate spent fuel shipment dose impacts associated with current contamination limits, and possible alternative approaches, and would be developed while the European efforts initially focus on revising the model for contact-handled packages. Research Coordination Meetings are anticipated to be scheduled at 6 month intervals. The U.K. hosted the first Research Coordination Meeting in London during November 7-9, 2001. The meeting participants decided

to review, and suggest modifications to, a recently UK developed contamination model. In the future, features of the Japan and WNTI contamination models may also be incorporated in the UK model. The U.S. will be providing comments to assure that the model properly addresses contamination considerations related to spent fuel shipments. The next meeting is tentatively scheduled for the week of June 21, 2002.

NRC Role vis-a-vis other U.S. Agencies and other organizations

NRC provides DOT with technical support on radioactive materials transportation issues through an interagency memorandum of understanding.

U.S. Department of Transportation is the U.S. Competent Authority before IAEA on transportation matters. The NRC is the technical contact on fissile and Type B packagings in support of DOT.

Dr. R. McGuire, DOT, and Bill Brach, NRC/NMSS, are the U.S. designees to TRANSSC.
Mr. Ronald Pope is the Head of the Transport Unit (accountable to TRANSSC) at IAEA and is a U.S. citizen.

The World Nuclear Transport Institute (WNTI) was formed in 1999 and includes representatives from U.S. industry. WNTI is represented at IAEA meetings.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. On February 15, 2002, the staff forwarded a C-Note to the Commission informing it of staff's participation in the March 4-8, 2002 IAEA TRANSSC meeting. As stated in the C-Note, the changes to TS-R-1 being considered, as an outcome of the November 2001 revision panel meeting, are the issues that the staff identified to the Commission in SECY-01-0158. The staff does not object to the IAEA proceeding with these changes. Due to the minor nature of the changes, TRANSSC will consider issuing an amendment to TS-R-1 to include the changes, rather than a new edition issuance of TS-R-1. With regard to the 2002/2003 review process, the NRC staff has suggested previously that the IAEA include a risk informed approach to their transportation standards and will communicate that view again at the March 4-8, 2002, meeting.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. DOT domestically incorporates revisions to IAEA Transportation Regulations, unless impracticable to do so. In most cases a periodic joint NRC-DOT rulemaking will be required to harmonize with IAEA transport regulations

If yes to either, how and when will the Commission be notified and their input sought?

The staff will provide a 30-day pre-meeting notification to the Commission materials assistants prior to each TRANSSC meeting with an agenda (if available), to ensure the Commission has adequate opportunities to participate. The staff will be prepared to provide briefings for Commissioners or their assistants on request.

In addition, trip reports from TRANSSC and other significant meetings will be provided to OIP, with a recommendation, where appropriate, to OIP regarding providing the information to the Commission.

Level of Annual Effort:

- 4 to 6 meetings per year, with a total of 8 to 12 staff weeks of effort

Primary Staff Contact: Bill Brach, Director, Spent Fuel Program Office, (301) 415-8500

NUCLEAR SAFETY STANDARDS COMMITTEE (NUSSC):
FUEL CYCLE FACILITY SAFETY STANDARDS SUBGROUP

NRC Office: NMSS International Organization: IAEA

General Description

The IAEA is developing fuel cycle facility safety standards in the form of a requirements document and subsidiary Safety Guides. The Safety Guides will focus on the following types of facilities: (1) uranium fuel fabrication for light water reactors, (2) plutonium-uranium mixed oxide fuel fabrication for light water reactors, (3) reprocessing, (4) waste treatment and storage, and (5) isotope separation.

NRC Strategic Plan Performance Goals and Strategies

NRC participation in this activity in the nuclear materials and international nuclear safety support arenas meets the NRC's strategic plan performance goals by:

- primarily strengthening safety at nuclear fuel cycle facilities in the U.S. and worldwide,
- making NRC's activities more effective, efficient and realistic,
- increasing public confidence, and
- reducing unnecessary regulatory burden

Relationship to Other NRC Activities

Information exchanged with foreign regulatory counterparts supports NRC's ongoing review of the mixed oxide fuel fabrication facility license application, licensing and inspection of uranium fuel fabrication facilities and development of NRC's guidance documents such as the standard review plan for 10 CFR Part 70.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

Participate in developing requirements and guidance documents for uranium fuel fabrication and mixed oxide fuel fabrication facilities. NRC's approach is to either participate in the IAEA's consultants meetings to draft these documents or review documents drafted in these meetings and provide comments to the IAEA.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

NRC may be the sole U.S. representative in these activities because of NRC's expertise and regulatory perspective. However, participation of NRC licensees and applicants, such as representatives of the six existing uranium fuel fabrication licensees and the mixed oxide fuel facility applicant would also benefit the IAEA and contribute in meeting NRC's strategic plan goals and strategies.

Are there possible opportunities for Commission involvement on this issue either now or in the near term?

No. The NRC staff does not anticipate the need for Commission involvement on this issue. This is because the NRC staff does not anticipate any new IAEA requirement or guidance to contradict the rigorous regulations and comprehensive guidance documents that the NRC has established for fuel cycle facilities, and therefore, adversely affect safety at NRC-licensed facilities.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

No. The Safety Guides are guidance only and are unlikely to raise any issues that would be problematic for NRC's fuel cycle facility licensees.

If yes to either of the last two items, how and when will the Commission be notified and their input be sought?

N. A.

Level of Annual Effort:

- 2 meetings, with a total of less than 4 staff weeks of effort
- 2 foreign trips per year

Primary Staff Contact: Michael Weber, Director, Division of Fuel Cycle Safety, (301) 415-7212.

STRENGTHENING INTERNATIONAL SAFEGUARDS

NRC Office: NMSS International Organization: IAEA

General Description

International safeguards activities are directed to the prevention of the spread of nuclear explosives capability and to verify State's commitments on the peaceful use of nuclear materials. The NRC supports the strengthening of the IAEA safeguards program through participation in interagency groups as well as in activities directly supporting the IAEA.

NRC Goals and Strategies Met/Involved/Implemented

International Nuclear Safety Support Arena Strategic Goal: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation. Strategy 1: We will continue to take a proactive role in strengthening safety, safeguards, and nonproliferation worldwide.

Relationship to Other NRC Activities

One of the common goals across all of NRC's strategic arenas is promoting the common defense and security in the use of nuclear materials. International safeguards contribute to the assurance that the common defense and security of the U.S. is not weakened by the loss of control over nuclear materials in other countries or by a State-level diversion of nuclear materials from peaceful programs to the manufacture of nuclear explosives.

Long-Term and Short-Term (FY 2002) Objectives and Approach for Accomplishing Goals

NRC's involvement in the IAEA's international safeguards and nonproliferation activities are implemented through cooperative technical work with other Federal agencies, other countries, and the IAEA. The short-term and long-term objectives are to continue to coordinate with and provide technical support to the IAEA, other Federal agencies, and other countries to strengthen international safeguards.

The following areas of activity support the strengthening of IAEA safeguards:

<u>Implementation of US-IAEA Safeguards Agreement:</u> IAEA safeguards inspections are conducted at the BWX Technologies Downblending Facility in Lynchburg, VA., to demonstrate the U.S. commitment to nonproliferation of nuclear weapons. The NRC facilitates the implementation of safeguards by resolving operator-IAEA safeguards implementation problems that occur at the facility. Short-term objective: Increase operator attention to their responsibilities as a facility undergoing IAEA inspections and resolve IAEA equipment problems. Long-term objective: Maintain compliance with the U.S.-IAEA safeguards agreement.

<u>Submittal of Additional Protocol to Congress:</u> In June 1998, the U.S. and IAEA signed the Additional Protocol to the U.S.-IAEA Safeguards Agreement to demonstrate the U.S.

commitment to IAEA safeguards. Differences in Federal agency perspectives of how the protocol should be submitted to the Senate for approval have been raised to the National Security Council (NSC). Short-term objective: Resolve options for submitting the Protocol to the Senate and resolve Federal agency responsibilities for implementing the protocol. Long-term objective: Implement the Additional Protocol measures at affected licensee locations.

Standing Advisory Group on Safeguards Implementation (SAGSI): SAGSI plenary and working group meetings take place periodically to provide recommendations to the IAEA Director General on current IAEA safeguards issues. Short-term objective: Assist IAEA in the integration of safeguards strengthening measures into the existing safeguards system. Long-term objective: Continue to assess the effectiveness and efficiency of safeguards measures to meet the IAEA's technical objectives.

Geological Repository Safeguards Experts Group: Expert group meetings take place periodically to develop recommendations to the IAEA on the implementation of the safeguards approaches for spent fuel conditioning plants and for pre-operational, operational, and closed geological repositories. Short-term objective: Evaluate and make recommendations on the role of geophysical monitoring in geological repository safeguards and on the implementation of safeguards measures for pre-operational facilities. Long-term: Continue to evaluate and make recommendations on geological repository safeguards implementation activities and measures.

U.S. Subcommittee on International Safeguards and Monitoring: Develops and facilitates U.S. policy on IAEA safeguards and related nonproliferation issues and meets with IAEA and other Governments to coordinate U.S. Government policy and implementation activities. Short-term objective: Develop and coordinate U.S. policy on IAEA strengthened safeguards and integrated safeguards issues and pursue ratification of Additional Protocol to US-IAEA Safeguards Agreement as a treaty. Long-term objective: Continue to identify international safeguards issues, to develop appropriate U.S. policy and responses with respect to the issues, and to coordinate U.S. policy goals with the policy goals of the IAEA and other key States.

U.S. Subgroup on Safeguards Technical Support: Evaluates and funds U.S. technical support to enhance the implementation of IAEA safeguards and periodically meets with IAEA to receive and discuss technical support proposals. Short-term objective: Support IAEA development tasks to implement the strengthened safeguards measures. Long-term objective: Continue to support IAEA development tasks to increase the effectiveness and efficiency of IAEA safeguards.

State System for Accounting and Control Training: Provide instructors to the international training courses presented by IAEA on national systems for monitoring the use of and tracking nuclear materials within a State and for reporting information to the IAEA. Short-term objective: Maintain training materials and presentations. Long-term objective: Provide training as courses are scheduled.

Development of US-Russia-IAEA Trilateral Verification Initiative: Meetings are held with IAEA and Russia to develop and implement a new verification agreement to assure that quantities of HEU and Pu placed under the agreement (i.e., excess material from the U.S. and Russian nuclear weapons programs) are not returned to military uses. Short-term objective: Obtain U.S., Russia, and IAEA/international approval of the new verification agreement and of the

technical measures for its implementation. Long-term objective: Implement the new verification agreements at affected NRC-licensee facilities.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

NRC works in close cooperation with the Department of State, Department of Energy, Department of Defense, and Intelligence Community in developing and implementing U.S. international safeguards and nonproliferation policy and in support of the IAEA Safeguards Department. NRC has lead responsibility for implementing international safeguards and nonproliferation policy at the NRC-licensee facilities. NRC also provides the U.S. representative to the IAEA's Geological Repository Safeguards Experts Group.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. A detailed description of NMSS international safeguards activities was provided in SECY-00-0163. This information continues to reflect staff's current activities in this area, and no substantial changes are anticipated in the near term. Current issues of which the Commissioners are being kept informed relate to submittal of the Additional Protocol to the Congress and IAEA safeguards implementation at the BWXT Downblending Facility. If other issues arise in the near term, staff will inform the Commission of these issues, and seek Commission guidance.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. Explanation: For any significant new initiatives that will have a direct impact on NRC and its licensees, staff will inform the Commission, and seek Commission guidance.

If yes to either, how and when will the Commission be notified and their input sought?

The staff will provide a 30-day pre-meeting notifications of foreign travel to the Commission materials assistants prior to each international safeguards meeting, with an agenda (if available), to ensure the Commission has adequate opportunities to participate. The staff will be prepared to provide briefings for Commissioners or their assistants on request.

In addition, trip reports from international safeguards meetings will be provided to OIP, with a recommendation, where appropriate, regarding providing the information to the Commission.

As noted above, for any significant new initiatives that will have a direct impact on NRC and its licensees, staff will inform the Commission and seek Commission guidance.

Level of Annual Effort:

- During FY 2001, approximately 1.8 FTE and $62K in contractor support funds were expended for activities in support of strengthened international safeguards
- 12 foreign trips per year

Primary Staff Contact(s):

Bruce Moran, Senior International SG Analyst, Division of Fuel Cycle Safety and Safeguards, (301) 415-7871
Michael Kelly, MC&A Physical Scientist, Division of Fuel Cycle Safety and Safeguards, (301) 415-8137
Theodore Sherr, Senior Technical Advisor and NMSS International Liaison, Division of Fuel Cycle Safety and Safeguards, (301) 415-7260

CONVENTION ON THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL (CPPNM)

NRC Office: NMSS International Organization: IAEA

General Description

The CPPNM is an international convention negotiated under International Atomic Energy Agency auspices in the late 1970s. The U.S. ratified it in 1982, and the Convention entered into force in 1987, with the deposit of the 21st instrument of ratification. Since 1998, the U.S. led an effort to revise the CPPNM in order to strengthen obligations for the physical protection of nuclear material in domestic use, storage, and transport, and for the protection of nuclear material and nuclear facilities from sabotage. Revising the Convention will fulfill U.S. interests in strengthening safeguards in other States.

Goals and Strategies

International Nuclear Safety Support Arena: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation. First strategy: We will continue to take a proactive role in strengthening safety, safeguards, and nonproliferation worldwide.

Relationship to other NRC activities

The Convention could impact NRC regulations for Physical Protection, 10 CFR Part 73, although such an impact is not anticipated.

Long Term and Short Term (FY2002) objectives and approach for accomplishing goals

Objectives are to ensure that NRC interests are represented and to not require unjustified changes to NRC regulations. With the acceptance of “flexibility” and “graded approach” (as proposed in the revision), NRC staff believes that current NRC regulations meet the intent of the proposed revision to the CPPNM and also that future contemplated changes to the regulations will continue to meet the intent of the proposed revision.

An open-ended drafting group of legal and technical experts will meet at the IAEA in Vienna during the week of March 11-15, 2002, to continue preparation of a draft CPPNM revision proposal for subsequent consideration by States Parties as to whether to convene a Revision Conference pursuant to Article 20 of the CPPNM. The IAEA has produced and distributed a “Rolling Text” of the CPPNM for the review of the States. The participating Federal agencies are coordinating comments on the “rolling text.” Additional meetings are anticipated to be held over the course of the next year; however, dates and agendas of meetings have not been set.

NRC Role vis-a-vis other U.S. Agencies and other organizations

The revision of the Convention is an interagency effort with participants from the Departments of Energy, State, Justice, and Defense and the NRC. NRC provides technical expert advice to the Department of State to ensure that NRC’s interests and views in the physical protection arena are sufficiently represented and reflected.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting now or in the near term?

Yes. Explanation: An open-ended legal and technical experts meeting is scheduled for the week March 11-15, 2002, at the IAEA in Vienna. Prior to the meeting, the U.S. is reviewing and will make comments on a "rolling text" version of a well-defined amendment to the CPPNM provided by IAEA. A copy of the rolling text reflecting the most up-to-date version of the proposed amendment was provided to the Commission in mid-February.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. The Commission will need to approve the U.S. adoption of the revised Convention since the Convention is a treaty obligation and will impose requirements on NRC.

If yes to either, how and when will the Commission be notified and their input sought?

A copy of the "rolling text" version for a well-defined amendment to the CPPNM has been forwarded to the Commission offices in preparation for the March 2002, meeting. The Commission will be kept abreast throughout the process of revising the Convention either through memoranda or briefings to the Commission.

Level of Annual Effort:

- Approximately 3 meetings per year, with a total of 9-12 staff weeks of effort
- 3 foreign trips during FY02

Primary Staff Contact: Nancy Fragoyannis, Physical Protection Specialist, Division of Fuel Cycle Safety and Safeguards, (301) 415-8108

INTERNATIONAL PHYSICAL PROTECTION ADVISORY SERVICE (IPPAS)

NRC Office: NMSS International Organization: IAEA

General Description

The IPPAS missions provide advice to Member States to assist them in strengthening the effectiveness of their national physical protection system while recognizing that the ultimate responsibility for physical protection is that of the Member States. The IPPAS is a voluntary service and is initiated at the request of the Member State.

NRC Goals and Strategies Met/Involved/Implemented

International Nuclear Safety Support Arena: Supports U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation. First strategy: We will continue to take a proactive role in strengthening safety, safeguards, and non-proliferation worldwide.

Relationship to other NRC Activities

Participation in IPPAS missions reflects knowledge of the NRC and U.S. physical protection programs.

Long Term and Short term (FY2002) Objectives and Approach for Accomplishing Goals

Continue to participate at the request of IAEA on IAEA-organized teams in response to country requests. Proposed next IPPAS mission is to the Czech Republic in 2002. NRC participation was requested in Fall 2001 for the visit to the Czech Republic; however, the trip was postponed.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

NRC works in close cooperation with the IAEA technical advisor for IPPAS missions, and coordinates participation with the Departments of Energy and State.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. When participation is requested, and a schedule established, the Commission will be informed of staff plans.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes, if the outcome could involve a matter of Commission sensitivity.

If yes to either, how and when will the Commission be notified and their input sought?

The staff will provide a 30-day pre-meeting notification to the Commission materials assistants prior to participation on IPPAS missions. The staff will be prepared to provide briefings for Commissioners or their assistants on request.

Level of Annual Effort:

- At present, NRC has not been formally requested to participate in IPPAS missions in 2002. However, with an anticipated increase in IPPAS missions, as part of the expanded IAEA program for protection against nuclear terrorism, it is likely that NRC assistance will be requested.

Primary Staff Contact: Nancy Fragoyannis, Physical Protection Specialist, Division of Fuel Cycle Safety and Safeguards, (301) 415-8108

RADIOACTIVE WASTE MANAGEMENT COMMITTEE (RWMC)

NRC Office: NMSS International Organization: NEA

General Description

The goal of this NEA activity is to assist Member Countries in the area of radioactive waste management, i.e., to support development of safe management and disposal strategies for spent fuel, long-lived waste, and waste from the decommissioning of nuclear facilities. The RWMC oversees three specific subgroups, having NRC staff involvement: The Integration Group for the Safety Case (IGSC), the Forum on Stakeholder Confidence (FSC), and the Working Party on Management of Materials from Decommissioning and Dismantling (WPDD). Although the RWMC has recently focused primarily on technical aspects related to deep geologic disposal, it has extended its activities to the interfaces between technical advances, regulatory developments, societal concerns and their input to the decision making process.

Goals and Strategies

- International Nuclear Safety Support Arena: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation. First strategy: We will continue to take a proactive role in strengthening safety, safeguards, and non-proliferation worldwide.

- Nuclear Waste Safety Arena: Maintain safety, protection of the environment, and the common defense and security. Fifth strategy: We will evaluate potential new information from research, new safety issues, changing external factors, international programs, and licensee experience so that improvements can be made to maintain an adequate regulatory framework.

- Nuclear Waste Safety Arena: Increase Public Confidence. First strategy: We will make public participation in the regulatory process more accessible. We will listen to their concerns and involve them more fully in the regulatory process.

Relationship to other NRC activities

The activities undertaken by the three working parties (IGSC, WPDD, and FSC) complement NRC activities in three areas of increasing importance:

- disposal of high-level waste (HLW)
- increasing public confidence
- integrating and documenting the current knowledge on decommissioning

The ISGC is a successor to previous NEA HLW activities involving the NRC (PAAG and SEDE). The goal of this group is to integrate performance assessment and site characterization activities and focus on repository safety; these efforts provide parallel confirmation to the domestic activities for HLW.

The FSC affords staff members the opportunity to share experiences in communication about the NRC's HLW regulatory program, as well as to learn from the experiences of international counterparts. The NRC delegate is also the head of the HLW public outreach team within NMSS and serves on the NMSS communication team and represents the U.S. on the core working group of the Forum.

As NEA's primary direction-setting body on decommissioning issues, the WPDD is positioned to develop and review documents and issues related to decommissioning, as well as create and influence international positions on decommissioning and dismantling issues. Although it will focus on reactor decommissioning, it will also address materials decommissioning and research issues, so it's scope cuts across NMSS, NRR, and RES decommissioning programs. In addition, the WPDD includes a representative from the IAEA, so the WPDD may serve an international liaison function between IAEA and NEA, which would impact other NMSS and OIP activities (such as participation on IAEA's Waste Safety Standards Committee).

Long Term and Short term (FY 2002) objectives and approach for accomplishing goals

These three working parties are expected to define, oversee and carry out work program activities, as assigned by the RWMC, in order to increase the efficiency of the RWMC and NEA in areas of repository development, increasing public and stakeholder confidence, and R&D. In particular, the purpose is to analyze and comment on policies and strategies for step-wise accomplishment of the work program activities in these areas of radioactive waste management. This includes collection of technical and societal experience in these areas, as well as documentation, and where appropriate, the development and/or maintenance of relevant databases. A common goal, both short- and long-term, is to foster international consensus on important issues related to radioactive waste management.

These working parties generally meet on an annual basis, as well as sponsoring ad hoc workshops on specific topics. In its initial phase, the WPDD will meet twice annually. Moreover, the RWMC also meets separately, and on the average annually, to address the overall program of radioactive waste management.

NRC Role vis-a-vis other U.S. Agencies and other organizations

The U.S. Department of Energy is an active participant in the IGSC; in fact, the first chairman, Abe van Luik, is from the USDOE's Yucca Mountain Project. Budhi Sagar (CNWRA) and Ralph Cady (RES) are the NRC representatives.

The NRC delegate (Janet Kotra) represents the U.S. on the core working group of the Forum. The U.S. is also represented on the FSC by the U.S. Environmental Protection Agency (Ms. Mary Kruger), and by the U.S. Department of Energy (Allen Benson, with Robert Levich attending on his behalf).

The NRC delegate to the first WPDD , Scott Moore, was the NRC and only U.S. representative for the first meeting. The U.S. Department of Energy was invited (William Murphie), and may participate in future WPDD meetings.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

No. The RWMC subgroups (IGSC, FSC, and WPDD) will focus on technical and programmatic issues that will provide valuable input to the staff for day to day activities, such as conducting technical reviews and public outreach activities. These subgroups will not make policy recommendations. The work of these subgroups is provided to the RWMC. Decisions affecting policy are made by the RWMC. For issues that could affect policy, the RWMC would issue a collective opinion. For example, three major collective opinions have been completed, which indicate that geological disposal can provide long term safety, methodologies exists for assessing long term safety for waste disposal, and geological disposal is ethically and environmentally safe. These collective opinions have been the cornerstones in legislative and policy discussions. Currently the RWMC is not working on any collective opinions; Ms. Margaret Federline, Deputy Director of NMSS is currently the Chairman of the RWMC. Any collective opinions involving policy impacting issues will be raised to the Commission early in the process to ensure the Commission is afforded an opportunity to comment. Trip reports will be routinely provided to OIP, with a recommendation, where appropriate, to OIP regarding providing the information to the Commission.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

No. See above.

If yes, to either, how and when will the Commission be notified and their input sought?

Any collective opinion involving policy impacting issues will be raised to the Commission early in the process to ensure the Commission is afforded an opportunity to comment.

Level of Annual Effort:

- About 7 to 10 staff weeks
- 4 to 6 trips per year

Primary Staff Contact(s):

Margaret Federline, Deputy Director, Office of Nuclear Material Safety and Safeguards, (301) 415-7358
Ralph Cady, Senior Performance Assessment Analyst, Division of Systems Analysis and Regulatory Effectiveness, Office of Nuclear Regulatory Research, (301) 415-6249
Janet Kotra, Systems Performance Analyst, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, (301) 415-6674
Scott Moore, Section Chief, Division of Industrial and Medical Nuclear Safety, Office of Nuclear Material Safety and Safeguards, (301) 415-7875

COMMITTEE ON SAFETY OF NUCLEAR INSTALLATIONS (CNSI):
FUEL CYCLE FACILITY SAFETY SUBGROUP

NRC Office: NMSS International Organization: NEA

General Description

The NEA Fuel Cycle Safety Subgroup of the Working Group on Operating Experience of the CNSI promotes the exchange of technical information. Activities include updating the "Red Book" on fuel cycle safety, exchange of information on criticality safety, and maintenance of the Fuel Cycle Incident and Assessment Notification System (FINAS) data base.

NRC Goals and Strategies Met/Involved/Implemented

NRC participation in this activity supports International Nuclear Safety Support Arena strategies of strengthening nuclear safety and safeguards and Materials Safety Arena Performance Goals of: (1) Maintaining Safety, (2) Enhancing Public Confidence, (3) Increasing Effectiveness, Efficiency, and Realism, and (4) Reducing Unnecessary Regulatory Burden.

Relationship to Other NRC Activities

Information exchanged in this activity with foreign regulatory counterparts supports NRC's ongoing licensing review of the MOX fuel fabrication facility, licensing and inspection of uranium fuel fabrication licensing and inspection, and development of NRC's guidance documents such as the Standard Review Plan for 10 CFR Part 70.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

Participate in the preparation and finalization of the Fuel Cycle Safety Handbook, FINAS, and technical exchanges on criticality safety.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

NRC is the sole U.S. representative in these activities because of NRC's expertise and regulatory perspective.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

No. Not currently working on any policy issues or topics that would be an opportunity for Commission engagement in this Subgroup.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

No. Unlikely to raise policy issues due to technical nature of the information exchanged in this subgroup.

If yes to either, how and when will the Commission be notified and their input sought?

N.A.

Level of Annual Effort:

- 1 meeting, with a total of less than 2 staff weeks of effort
- 1 foreign trip per year

Primary Staff Contact: Robert Pierson, Deputy Director, Division of Fuel Cycle Safety and Safeguards, (301) 415-7213

COMMITTEE ON NUCLEAR REGULATORY ACTIVITIES (CNRA)

NRC Office: NRR International Organization: NEA

General Description

The CNRA is responsible for the NEA program concerning regulation, licensing and inspection of nuclear installations with regard to safety. The CNRA constitutes a forum for the exchange of information and experience among regulatory organizations. The committee reviews developments which could affect regulatory requirements with the objective of providing members with an understanding of the motivation for new regulatory requirements under consideration. The CNRA reviews current practices and operating experiences with a view to disseminating lessons learned. Samuel J. Collins, Director of Nuclear Reactor Regulation, is a Vice Chairman of the CNRA.

NRC Goals and Strategies Met/Involved/Implemented

- Maintain safety, protection of the environment, and the common defense and security.
- Gather international safety and regulatory information and, where appropriate, use the information to assist in:

  - maintaining safety, protecting the environment, and the common defense and security;
  - increasing public confidence;
  - making NRC decisions more effective, efficient and realistic; and
  - reducing unnecessary regulatory burden.

By using appropriate information from international safety and regulatory experience, NRC will increase its ability to maintain safety and reduce unnecessary regulatory burden and the associated costs. Because there are more than three times as many power reactors operating outside the U.S. as within the U.S., international operating experience based safety information yields significant safety insights of benefit to the NRC.

Relationship to other NRC Activities

Close coordination is sought with the Committee on Safety of Nuclear Installations (CSNI). CNRA identifies research, the results of which will assist in making risk informed regulatory decisions. NRR continuously monitors the safety programs of the IAEA and seeks to influence the CNRA to prevent any unnecessary duplication of the IAEA and NEA programs.

Long Term and Short term (FY2002) Objectives and Approach for Accomplishing Goals

Long Term: The CNRA will continue to seek information from NEA Member States that will identify emerging safety issues.

Short Term: The CNRA will continue to focus on measuring the effectiveness of regulatory inspections, inspection of maintenance during operation, and will consider inspection of pre-construct, site selection, and construction.

NRC Role Vis-a-vis Other U.S. Agencies and Other Organizations

Coordinate safety and regulatory activities with the Department of State.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. Policy issues will be elevated to the Commission for guidance and information.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. On policy issues, the Commission will be informed. Recommendations for Commission involvement will be made on a case-by-case basis and are anticipated in the future.

If yes to either, how and when will the Commission be notified and their input sought?

The Commission will be notified well in advance either through the EDO or the Director of OIP.

Level of Annual Effort:

- Attend 2 CNRA meetings; 1 Bureau meeting and four working group meetings (preparation and follow-up: six person weeks = 0.2 FTE).
- Support selected task groups of special interest to the NRC: 3 meetings (preparation and follow-up: 4 person weeks = 0.1 FTE).

Primary Staff Contact: Samuel J. Collins, Director, Office of Nuclear Reactor Regulation, (301) 415-1270

WORKING GROUP ON INSPECTION PRACTICES (WGIP)

NRC Office: NRR International Organization: NEA

General Description

The WGIP was formed in 1990 and is the only working group under the direction of the CNRA. The mandate of the WGIP is to concentrate on the conduct of inspections and how the effectiveness of inspections can be evaluated. The WGIP receives guidance from and makes proposals to the CNRA. As part of its mandate, the WGIP is tasked with identifying commendable inspection practices which can be used as a reference when each country improves its inspection practices. The commendable inspection practices identified by the WGIP are not intended to be imposed on member countries which should determine their inspection practices according to their needs and historical backgrounds.

NRC Goals and Strategies Met/Involved/Implemented

- Maintain safety, protection of the environment, and the common defense and security.
- Gather information on international inspection practices and, where appropriate, utilize this information to assist in:

  - maintaining safety, protecting the environment and the common defense and security;
  - increasing public confidence;
  - making NRC decisions more effective, efficient and realistic; and
  - reducing unnecessary regulatory burden.

By using appropriate international inspection practices and experience, the WGIP will increase NRR's ability and reduce the associated costs to maintain safety and reduce unnecessary regulatory burden. Because there are more than three times as many power reactors operating outside the U.S., as within the U.S., international operating experience-based safety information yields significant insights of benefit to the NRC.

Relationship to other NRC Activities

There is close coordination with the CNRA and the WGIP. Also, the NRR reactor inspection staff associated with the Reactor Oversight Program (ROP) participates in the WGIP to assure that the needs of the NRC are emphasized. In addition, such NRC participation facilitates communication of information on the NRC's ROP experience and of information about the inspection and reactor oversight approaches of other countries.

Long Term and Short term (FY2002) Objectives and Approach for Accomplishing Goals

Long Term: The WGIP will seek information from NEA Member States on experience with inspection methods and the insights gained from inspections focused on all systems and, in some cases, components of NPPs. In particular, the WGIP will seek insights from risk-informed inspections performed in Member States that have adopted risk-informed approaches to inspections.

Short Term: The WGIP will continue to focus on measuring the effectiveness of regulatory inspections, inspection of maintenance during operation, and will consider inspection of pre-construct, site selection, and construction.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

Coordinate activities with the IAEA to avoid duplication of activities.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. Policy issues will be elevated to the Commission for guidance and information.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. On policy issues the Commission will be informed. Recommendations for Commission involvement will be made on a case-by-case basis and are anticipated in the future.

If yes to either, how and when will the Commission be notified and their input sought?

The Commission will be notified well in advance either through the EDO or the Director of OIP.

Level of Annual Effort:

- Attend 2 WGIP meetings and prepare NRC input (preparation and follow-up: 5 person weeks = 0.14 FTE).

Primary Staff Contact: Samuel J. Collins, Director, Office of Nuclear Reactor Regulation, (301) 415-1270

OTHER NUCLEAR SAFETY ACTIVITIES

NRC Office: NRR International Organization: IAEA

Activities:

- Incident Reporting System (IRS)*
- Operational Safety Assessment Review Teams (OSARTs)
- Technical Committee Meetings (TCMs)
- Advisory Group Meetings (AGMs)
- International Probabilistic Safety Assessment Review Teams (IPSARTs)
- Convention on Nuclear Safety (CNS)*
- International Regulatory Review Teams (IRRTs)
- International Nuclear Event Scale (INES)*
- Incident Reporting System for Research Reactors (IRSARR)*

General Description

All of these activities involve two aspects: (1) assisting IAEA Member States to maintain and, where necessary, improve the safety of nuclear installations by communicating NRC's methods, regulations, and experience and (2) learning about safety and risk significant operating experience and licensing, inspection and assessment methods and insights from the international arena. Because it is not possible to participate in all of these activities, NRR carefully screens each IAEA activity (except those with an asterisk) to determine where, within NRR's budget, we can invest resources to achieve the greatest benefit.

* These activities are participated in by NRR and not subjected to screening.

NRC Goals and Strategies Met/Involved/Implemented

- Maintain safety, reduce unnecessary regulatory burden, increase efficiency and effectiveness.
- Increase public confidence in the NRC from both the U.S. domestic nuclear safety and International nuclear safety viewpoints.

Relationship to other NRC Activities

Close coordination is sought with the work of NEA and where NRC resources should be invested in ongoing and planned work of the NEA.

Long Term and Short term (FY2002) Objectives and Approach for Accomplishing Goals

Continue to seek information from IAEA Member States that will identify emerging safety issues that may be applicable to U.S. reactors. We will share NRC solutions to similar safety issues and NRC regulatory and licensing processes and methods.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

Coordinate activities with programs of the NEA standing committee, particularly with the CNRA and the CSNI, as well as DOE and DOS.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. The Commission participates by reviewing the U.S. report for the Convention on Nuclear Safety (CNS). In general, for the other IAEA activities, policy issues will continue to be elevated to the Commission for information and guidance.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. On policy issues the Commission will be informed. Recommendations for Commission involvement will be made on a case-by-case basis and are anticipated in the future.

If yes to either, how and when will the Commission be notified and their input sought?

The Commission will be notified well in advance either through the EDO or the Director of OIP.

Level of Annual Effort:

- Attend 15 meetings and missions
- Prepare CNS report once every 3 years = 1.4 FTE

Primary Staff Contact: Samuel J. Collins, Director, Office of Nuclear Reactor Regulation, (301) 415-1270

COMMITTEE ON THE SAFETY OF NUCLEAR INSTALLATIONS (CSNI)

NRC Office: RES International Organization: NEA

General Description

CSNI constitutes a forum for exchange of technical information and for the collaboration between organizations which can contribute in research, development and engineering to assist member countries in maintaining and further developing the scientific and technical knowledge required to assess the safety of nuclear reactors and other nuclear installations. It also reviews the state of knowledge on selected topics of nuclear technology and safety assessment. A. Thadani, Director of Nuclear Regulatory Research, was elected Chairman of CSNI in December 2000. He served as Vice-Chairman of CSNI from 1997-2000.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, including age related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.

- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.

- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.

- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

Coordination is maintained by CSNI with International Atomic Energy Agency, the Committee on Nuclear Regulatory Activities CNRA (see NRR), Radioactive Waste Management Committee (RWMC - See NMSS), and the Committee on Radiation Protection and Public Health (CRPPH) (See below).

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

We will enhance safety and efficiency by improving our understanding of problems and issues common to member states, influencing policy and programs of work conducted by the organization, gain access to international technical expertise and facilities where experiments are conducted, and obtain valuable data and technical reports relevant to our needs. NRC resources will also be leveraged to make more efficient use of available resources.

We will identify, evaluate, and resolve safety issues identified by Member states, including age-related degradation, and ensure that an independent technical basis exists to ensure that safety is maintained.

We will continue to incrementally use risk informed and, where appropriate, less prescriptive performance based approaches to assess safety.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

Coordinate activities, as necessary, with DOE, EPRI, and IAEA.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Policy issues that arise and new cooperative programs/agreements that will be initiated by the OECD/NEA Member states will continue to be elevated for information to the Commission. If opportunities arise for Commission involvement, guidance from the commission will be sought. (In June 2001, for example, Chairman Meserve was requested and agreed to participate in a CSNI/CNRA workshop on the role of research in a regulatory context.)

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

On sensitive or policy matters the Commission will be informed. Involvement will be determined on a case-by-case basis.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive policy issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Nuclear Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- Attend 3 meetings (2 full committee and 1 Bureau meeting) - preparation and review.
- 2 trips per year, coordinated with INSAG meetings.

Primary Staff Contact: Ashok Thadani, Director, Office of Nuclear Regulatory Research, (301) 415-6641

CSNI PROGRAM REVIEW GROUP (PRG)

NRC Office: RES International Organization: NEA

General Description

The PRG is composed of senior experts with broad programmatic experience and high-level responsibilities in nuclear safety technology and research. It is formed by one expert from each of the four countries with the largest nuclear safety programs (i.e., France, Germany, Japan, and U.S.) plus three experts from other CSNI Member countries chosen on a rotating basis. The PRG assists the CSNI Bureau to review proposals from the Working Groups, to ensure that proposals and reports have an appropriate focus, and to enable the review of major reports to ensure high quality. The PRG also makes recommendations regarding facilities and research programs, joint projects, centers of excellence, etc. that are potentially important for present or future international collaboration.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, and evaluate safety issues, and ensure that an independent technical basis exists to ensure that safety is maintained.
- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based approaches to maintain safety.
- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.
- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

The PRG helps ensure coordination of CSNI activities with other international groups (e.g., CNRA, IAEA, EU).

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

Short Term - Facilitate CSNI work on cross-cutting issues involving all CSNI Working Groups (e.g., Safety Margins, Advanced Reactors).

Long Term - Facilitate development of integrated work plans for all CSNI working Groups.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

RES has the lead for the representation on the PRG. No other U.S. Agency or Organization are represented.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

This group provides direct assistance to CSNI as described above. If sensitive policy issues arise, they will be forwarded to the Commission for information. None, however, are anticipated.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

This group provides direct assistance to CSNI, as described above. If sensitive policy issues arise, they will be forwarded to the Commission for information. None, however, are anticipated.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive policy issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- Approximately 4 staff weeks
- Approximately 3 foreign trips per year

Primary Staff Contact: Tom King, Special Assistant to the Office Director, Office of Nuclear Regulatory Research, (301) 415-6641

CSNI WORKING GROUP ON RISK ASSESSMENT (WGRISK)

NRC Office: RES International Organization: NEA

General Description

To advance the understanding and use of Probabilistic Safety Assessment (PSA) in ensuring continued safety of nuclear installations in Member Countries. The current program of work includes technical opinion papers, human reliability workshop, risk monitoring reports and workshops, safety assessment of programmable systems, low power/shutdown PRA, passive system reliability, fire risk analysis and data collection, probabilistic treatment of risk in nuclear activities and in installations different from nuclear reactors, quantitative safety goals in Member Countries, containment response (Level 2 PSA) and the WGRISK integrated plan. This Group is supported by three sub-groups that deal with Human Reliability Analysis, Fire Risk, and Software Reliability.

NRC Goals and Strategies Met/Involved/Implemented

- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.
- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.
- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.
- We will identify, evaluate, and resolve safety issues identified by Member states, including age-related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.

Relationship to Other NRC Activities

Close coordination has been implemented between this working group and the NRC Cooperative Probabilistic Risk Assessment (COOPRA) program. U.S. has strong leadership role on WGRISK. The Chairman of WGRISK, for the past five years, has been from NRC.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

The mandate of the WGRISK is:

- The Working Group shall report to the Committee on the Safety of Nuclear Installations (CSNI). The program of work of WGRISK will be approved by CSNI.
- The Working Group shall constitute a forum for exchange of information and experience of activities related to risk assessment in Member countries. WGRISK shall prepare Opinion Papers on questions regarding the applicability of various aspects of risk assessment, results, insights, and interactions with other analysis techniques to matters

affecting nuclear safety or nuclear safety research. This shall include identifying and prioritizing important regulatory issues requiring additional research.

- The Working Group shall prepare technical reviews (such as state-of-the-art reports, compilations of ongoing efforts and standard problems, as appropriate) of work in all phases of risk assessment where such reports are needed for further development and to assist the application of PSA. In doing so, care will be taken to avoid duplication of effort or scope with other Working Groups, or with other international bodies.

- WGRISK shall collaborate with or assist the other CSNI Working Groups, NEA committees or other international organizations. This includes assistance to the Committee on Nuclear Regulatory Activities (CNRA).

The WGRISK has generally used a task oriented approach to accomplishing it work. The approach has produced timely reports on important issues and remains the fundamental way of working issues.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

At the current time, the NRC is the only U.S. entity participating in WGRISK meetings. There has been wide participation in WGRISK sponsored workshops from DOE, and NASA and their contractors, as well as from U.S. utilities and from consultants working in the field.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

The working group focuses on preparing state-of-the-art reports and identifies where technical information is needed. If opportunities for involvement arise, Commission involvement will be sought.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

The working group focuses on preparing state-of-the-art reports and identifies where technical information is needed. If policy issues arise, the Commission will be notified and guidance sought.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- 5 to 10 staff weeks
- 4 to 6 trips per year

Primary Staff Contact: Mark Cunningham, Chief, Probabilistic Risk Analysis Branch, Division of Risk Analysis and Applications, (301) 415-6189

CSNI WORKING GROUP ON ANALYSIS AND MANAGEMENT OF ACCIDENTS (GAMA)

NRC Office: RES International Organization: NEA

General Description

To provide a further understanding for the analysis and management of accidents. The group is supported by three subgroups that deal with (1) Design Basis, (2) Severe Accidents, and (3) Fission Product Behavior.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, including age related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.

- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.

- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.

- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

These activities enhance NRC capabilities to perform independent analysis to risk inform the regulations and make risk informed safety decisions.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

The following activities to be completed in 2001-2003 include:

- Issue ISP-44 Report: KAVER experiments on the behavior of aerosol components typical of core melt under representative thermal-hydraulic conditions. (Autumn 2001)
- ISP-42: Complete PANDA containment thermal-hydraulics experiments. (Spring 2002)
- ISP-45: Complete QUENCH-06 reflood experiment. (Spring 2002)
- Complete Status Report summarizing the progress made in the last ten years through analysis of the TMI-2 accident.
- Establish a sub-group to develop a matrix of numerical benchmarks for two phase flow for 1 dimensional (1-D) and three dimensional (3-D) thermal-hydraulic codes.
- IPS-46 Complete PHEBUS-FPT1 experiment. (Autumn 2003)

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

None

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

These activities and issues are technical in nature and they leverage and enhance NRC capabilities to perform independent analysis. Most decisions involve dissemination of technical information. When that information is of a sensitive nature involving Commission policy, guidance from the Commission will be sought.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

None is anticipated. On sensitive policy matters the Commission will be informed. Involvement will be determined on a case-by-case basis.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive policy issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- 5 to 6 staff weeks
- 3 trips per year

Primary Staff Contact: Jack Rosenthal, Chief, Safety Margins and Systems Analysis Branch, Division of Systems Analysis and Regulatory Effectiveness, (301) 415-5694

CSNI SPECIAL EXPERT GROUP ON FUEL SAFETY MARGINS (SEGFSM)

NRC Office: RES International Organization: NEA

General Description

To advance the current understanding and address safety issues related to fuel safety margins and to systematically assess the technical bases for the current safety criteria and their applicability to high burn up fuel as well as new fuel designs and materials being introduced in nuclear power plants. Also, to determine the needs and priorities for future research programs in the area of fuel safety behavior .

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, including age related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.
- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.
- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.
- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

At this time, there is no direct relationship between SEGFSM and other NRC activities.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

To understand and adequately model key phenomena and to quantify fuel safety margins.

Current ongoing tasks include:

- Preparation of a CSNI report of fuel safety related R&D programs in Member countries.
- Preparation of a CSNI report on fuel safety criteria used in Member countries.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

At this time, there is no direct relationship between SEGFSM and other NRC activities.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

These activities and issues are technical in nature and they leverage and enhance NRC

capabilities to perform independent analysis. Most decisions involve dissemination of technical information. When that information is of a sensitive nature involving Commission policy, guidance from the Commission will be sought.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

These activities and issues are technical in nature and they leverage and enhance NRC capabilities to perform independent analysis. Most decisions involve dissemination of technical information. When that information is of a sensitive nature involving Commission policy, guidance from the Commission will be sought.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive policy issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- 4 staff weeks
- 2 trips per year

Primary Staff Contact: Ralph Meyer, Senior Technical Adviser, Safety Margins and Systems Analysis Branch, Division of Systems Analysis and Regulatory Effectiveness, (301) 415-6789

CSNI WORKING GROUP ON INTEGRITY AND AGING OF COMPONENTS AND STRUCTURES (IAGE)

NRC Office: RES International Organization: NEA

General Description

To advise the CSNI in the topical basis for management of aging and to propose general principles to maintain the functional and structural integrity of systems and components. This group is supported by three sub-groups that deal with (1) integrity of metal components, (2) the integrity of concrete structures, and (3) seismic behavior. Dr. Nilesh Chokshi is the current Chairman of this group.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, including age related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.

- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.

- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.

- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

The IAGE working group activities supplement a number of NRC/RES programs in areas, such as heavy steel section technology, environmentally assisted cracking, cable aging, piping integrity, concrete structures, and seismic behavior, by providing data from large-scale tests, state-of-the-art reports, and by providing international standard problems for code and analytical techniques verification. By organizing specialist workshops, the IAGE provides a forum for discussion of current safety and research issues and development of co-operative programs. The IAGE activities provide significant leverage for the NRC research efforts.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

The group has several ongoing activities as well as some new initiatives. The following are representative examples of the activities:

- The Concrete Subgroup has recently completed a draft report on long term behavior of concrete structures, focusing on the performance of waste storage and other fuel cycle structures which are required to perform a safety function over a long period of time.

- A workshop on repairs and criteria for condition assessment for concrete structures will be held in Spring 2002.

- Pipe cracking: the group is going to prepare a state-of-the-art report on non-destructive examination methods as well as risk-informed inservice inspections.

- The large earthquakes in Kobe, Northridge, and Turkey have prompted significant changes in design practices for the conventional structures. The Seismic Subgroup has undertaken a development of a Technical Opinion Paper on differences in approach between nuclear and conventional seismic standards.

- Under the Pressurized thermal shock qualification methodology, program data from several large-scale experiments will be collected and organized in such a way that it can be used to train structural analysts and verify codes.

- The metal group is setting up benchmark problems on thermal fatigue and probabilistic analysis of reactor pressure vessel integrity.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

The group activities are coordinated with activities of other organizations, such as EC and IAEA.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

This working group is primarily a vehicle for sharing information. Most of the groups' decisions involve the sharing of information. There are no sensitive policy issues that are anticipated in the near term.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

This working group is primarily a vehicle for sharing information. Most of the groups' decisions involve the sharing of information. When that information is of a sensitive nature, involving Commission policy, guidance from the Commission will be sought

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive policy issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- 4 staff weeks
- 2 trips per year

Primary Staff Contact: Nilesh Chokshi, Chief, Materials Engineering Branch, Division of Engineering Technology, (301) 415-0190

CSNI WORKSHOP ON ADVANCED REACTORS - ORGANIZING COMMITTEE

NRC Office: RES International Organization: NEA

General Description

The purpose of the Organizing Committee is to sponsor a workshop to promote early consensus among Member countries on identification of advanced reactor safety and research issues, including possible paths for their resolution. The workshop was held in Paris on February 18-20, 2002.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, including age related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.

- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.

- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.

- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Long Term and Short Term (FY 2002) objectives and approach for accomplishing goals

The objective of the Workshop is to bring together a broad cross-section of parties with a potential stake in the development and deployment of advanced nuclear power plants to:

- facilitate early identification and resolution of safety issues by developing a consensus among Member countries' safety authorities on the identification of safety issues, the scope of research needed to address these issues and a potential approach to their resolution,
- promote the preservation of knowledge and expertise on advanced reactor technology, and
- provide input to Generation IV Technology Roadmap development.

The Workshop will also try to link advancement of knowledge and understanding of advanced designs to the regulatory process, with emphasis on building public confidence.

Relationship to Other NRC Activities

The Workshop will contribute to the identification of important safety issues and research elements which should be considered for different technologies of future advanced nuclear power plants. It is important for the NRC advanced reactor programs to be aware of important safety issues in preparation of licensing advanced designs.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

At the current time, the NRC is the only U.S. entity participating in the Workshop.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

These activities and issues are technical in nature and they leverage and enhance NRC capabilities to perform independent analysis. Most decisions involve dissemination of technical information. When that information is of a sensitive nature, involving Commission policy, guidance from the Commission will be sought and the Commission will be briefed on workshop outcomes, as needed.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

None is anticipated. On sensitive policy matters, the Commission will be informed. Involvement will be determined on a case-by-case basis.

If yes to either, how and when will the Commission be notified and their input sought?

The Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- 1 staff week
- 1 to 2 trips per year

Primary Staff Contact: John Flack, Chief, Regulatory Effectiveness Assessment and Human Factors Branch, Division of Systems Analysis and Regulatory Effectiveness, (301) 415-7488

CSNI WORKING GROUP ON OPERATING EXPERIENCE (WGOE)

NRC Office: RES International Organization: NEA

General Description

Work in this area covers activities in the field of analysis of reactor operating experience and fuel cycle safety. The group selects safety significant operating experience topics for discussion and produces summary reports on selected topics. Since over half the operating experience is from outside the U.S., this activity is an efficient and effective way to gain reactor operating experience safety insights. This group is supported by two subgroups that deal with Data Bases and Fuel Cycle.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, including age related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.

- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.

- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.

- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

This activity supplements and extends the NRC activities regarding reactor operating experience analysis. The Office of Nuclear Regulatory Research has been assigned the role of independent review of operating experience and the NEA/CSNI WGOE contributes to that role since it provides new and additional operating experience information and broader perspectives that would otherwise be lacking.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

The long term goal is to enhance reactor safety in the U.S. and internationally by sharing data and analysis on operational experience. Since many safety significant reactor operational problems occur very infrequently, the larger pool of data available internationally is important.

Specific short-term goals include completion of the following reports of interest and relevance to U.S. needs:

1. Report on reactor operating events related to economic deregulation.
2. Report on reactor operating events during low power or shutdown.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

The NRC is the sole U.S. representative on this working group. NRC operating experience reports include relevant international experience and are available to other agencies and organizations.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

This working group is primarily a vehicle for sharing information. Most of the groups' decisions involve the sharing of information, which is available on the NEA/CSNI WGOE website. There are no sensitive policy issues that are anticipated in the near term.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

This working group is primarily a vehicle for sharing information. Most of the groups' decisions involve the sharing of information. When that information is of a sensitive nature, involving Commission policy, guidance from the Commission will be sought.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive policy issues arise, the Commission will be notified of any relevant policy matters which need their attention at the earliest possible time by appropriate means, such as memorandum to the Commission, notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff.

Level of Annual Effort:

- 4 staff weeks to prepare input and attend meetings
- 2 to 3 trips per year

Primary Staff Contact: George Lanik, Team Leader, Regulatory Effectiveness Assessment and Human Factors Branch, Division of Systems Analysis and Regulatory Effectiveness, (301) 415-7490

CSNI SPECIAL EXPERT GROUP ON HUMAN AND ORGANIZATIONAL FACTORS (SEGHOF)

NRC Office: RES International Organization: NEA

General Description

The group reports to the CSNI. Its objectives are: (1) to improve the current understanding of human and organizational factors, (2) to advance the development and use of methods for assessing human and organizational factors, and (3) to address emerging safety issues. The purpose of these activities is to maintain and improve safety of nuclear installations in NEA Member countries.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, including age related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.
- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.
- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.
- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

The group collaborates and responds to requests from CNRA and other Working Groups of the CSNI. Close coordination is maintained by RES with the NRR staff (who participate in the CNRA activities).

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

This working group is primarily a vehicle for sharing information and issuing reports to Member States. The reports that have been recently issues, and planned to be issued are:

- Organizational Factors, Identification and Assessment (NEA/CSNIR(99)21Vol1.
- The Impact of Human and Organizational Factors on Nuclear Plants- Transition from Operation into Decommissioning.
- Management of Change (report in preparation).

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

The Group establishes arrangements with other international organizations operating in the same area for the purpose of identifying and creating synergy and avoiding duplication. The group may also consider relevant information and co-operate with non-nuclear organizations.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

This working group is primarily a vehicle for sharing information. Most of the groups' decisions involve the sharing of information. There are no sensitive policy issues that are anticipated in the near term. If policy issues are identified, the Commission will be informed, and guidance from the Commission will be sought.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

This working group is primarily a vehicle for sharing information. Most of the groups' decisions involve the sharing of information. When that information is of a sensitive nature, involving Commission policy, guidance from the Commission will be sought.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive policy issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- 2 to 3 staff weeks
- 1 to 2 trips per year

Primary Staff Contact: Ann Ramey-Smith, Technical Assistant, Division of Risk Analysis and Applications, (301) 415-6877

INTERNATIONAL NUCLEAR SAFETY ADVISORY GROUP (INSAG)

NRC Office: RES International Organization: IAEA

General Description

The purpose of INSAG is to advise the Director General of the IAEA on important issues in the field of nuclear safety, radiation safety, and the safety of radioactive waste. Its function is to:

- Recommend principles upon which appropriate safety standards and measures can be used;
- Provide a forum for the exchange of information on generic safety issues of international significance;
- Identify important current safety issues and draw conclusions on the basis of results of safety activities worldwide, along with other information such as research and development results; and
- Give advice on safety issues in which an exchange of information or additional effort may be required.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, including age related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.

- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.

- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.

- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

At this time, there is no direct relationship between INSAG and other NRC activities.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

The purpose of INSAG is to advise the Director General of the IAEA on important issues in the field of nuclear safety, radiation safety, and the safety of radioactive waste. Current proposed activities are to issue the following draft reports:

- Key Practical Issues to Achieve a Higher Safety Culture
- Independence of Regulatory Decisions
- Maintaining Knowledge, Training, R&D Infrastructure
- Managing Changes
- Maintaining Design Integrity for Safety

Future activities may address the following safety issues:

- Safety Implications of Severe Weather Conditions
- Basic Safety Principles During the Dismantling of Nuclear Power Plants
- Indicators of Intangible Problems
- Safety Standards

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

None. A. Thadani is the designated U.S. representative to INSAG.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

None are anticipated. INSAG is an advisory collegial group providing advice to the Director General of the IAEA on important issues in the field of nuclear safety, radiation safety, and the safety of radioactive waste. If sensitive policy issues arise, the information will be elevated to the Commission. If opportunity arise for Commission involvement, guidance from the Commission will be sought.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

None are anticipated. If sensitive policy issues arise from the INSAG activities, the information will be elevated to the Commission. If opportunity arise for Commission involvement, guidance from the Commission will be sought.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive policy issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- Approximately 4 staff weeks
- 3 trips per year, coordinated with CSNI meetings

Primary Staff Contact: Ashok Thadani, Director, Office of Nuclear Regulatory Research, (301) 415-6641

NUCLEAR SAFETY STANDARDS COMMITTEE (NUSSC)

NRC Office: RES International Organization: IAEA

General Description

The Nuclear Safety Standards Committee (NUSSC) is a standing body of senior regulatory officials with technical expertise in nuclear safety.

NUSSC provides advice to the IAEA Secretariat on the overall program on regulatory aspects of nuclear safety and has the primary role in the development and revision of the Agency's nuclear safety standards.

The functions of NUSSC are to:

- recommend the terms of reference of all standards in the IAEA's nuclear safety standards program and of the groups involved in the development and revision of those standards, in order to promote coherence and consistency among the standards and between them and the other safety-related publications of the Agency;
- agree on the texts of Safety Fundamentals and Safety Requirements to be submitted to the Board of Governors for approval and of Safety Guides to be issued under the authority of the Director General, and to make recommendations to the CSS, in accordance with the IAEA's preparation and review process for safety standards;
- provide advice and guidance on a continuous program for reviewing and revising the IAEA's nuclear safety standards;
- provide advice and guidance on nuclear safety standards, relevant regulatory issues, and activities for supporting the application of the Agency's nuclear safety standards; and
- identify and advise on any necessary activities in support of the nuclear safety program.

NRC Goals and Strategies Met/Involved/Implemented

- Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation.

- Continue to take a proactive role in strengthening safety, safeguards, and non-proliferation worldwide.

Relationship to Other NRC Activities

Coordinates with participants in other IAEA activities: CSS, RASSC, WASSC and TRANSC.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

Review proposed standards to determine if they are consistent with current U.S. practice, if they should be modified, or if they suggest possible changes to the NRC’s regulatory approach.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

The NRC representative represents the U.S. No other government agencies are involved.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Draft standards are being reviewed to determine how they may differ from U.S. practice. Any significant changes will be identified. Certain standards now under development regarding the establishment and organization of the regulatory body may be of interest to the Commission. They are directed at new entries nuclear regulation. In the main, the current drafts are consistent with U.S. practices

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Draft standards are being reviewed to determine how they may differ from U.S. practice. Any significant changes will be identified. However, the Nuclear Safety Convention entails a commitment to the application of fundamental safety principles for nuclear installations rather than of detailed safety standards and recognizes that the IAEA Safety Guides which are updated from time to time, provide guidance on contemporary means of achieving a high level of safety.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- 4 to 6 staff weeks
- 1 to 2 trips per year

Primary Staff Contact: Scott Newberry, Director, Division of Risk Analysis and Applications, (301) 415-5790

INTEGRATION GROUP FOR THE SAFETY CASE (IGSC)

NRC Office: RES International Organization: NEA

General Description

The Radioactive Waste Management Committee (RWMC) of the NEA was created the IGSC in 2000 with the specific purpose of coordinating NEA studies on various aspects of the integrated safety case for high-level waste repositories and providing recommendations back to the RWMC. In addition, the IGSC includes representatives from the IAEA and the European Community, and provides a means to complement, rather than duplicate, activities of these other organizations. The IGSC provides both a forum for identifying emerging issues relative to safety cases for waste repositories as well as offering opportunities for individual national programs to raise generic issues for consideration by the IGSC and RWMC.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, including age related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.
- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.
- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.
- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

The IGSC coordinates a number of NEA activities that the NRC actively supports through staff and contractor participation. Examples include the NEA Forum on Stakeholder Confidence and the NEA Sorption Project. In addition, NRC's IGSC involvement enables NRC to keep abreast of safety-case related progress and developments in other international high-level waste programs.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

The primary objective of the IGSC is to provide recommendations for consideration by the RWMC on initiating, continuing, redirecting or terminating NEA/RWMC sponsored projects that have bearing on the safety case for high-level waste repositories. The approach to meet this objective is through an annual meeting at which ongoing technical activities are summarized and proposed new activities are presented for discussion. Recommendations derived from the annual meeting are then forwarded to the RWMC for consideration. Between annual meetings, proposals for new activities are developed by volunteers from the group membership.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

The NRC role on the IGSC is on par with that of other U.S. Federal agencies. Currently, the DOE is the only other active U.S. participant. While the current chair of the IGSC is from DOE, DOE role is represented by other DOE participants.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

No. The IGSC acts in an advisory capacity to the RWMC. Commission involvement/engagement, if any, will be at the level of the RWMC, which is coordinated by NMSS (M. Federline, Deputy Director, NMSS, is the current Chairperson of the RWMC).

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

No. The IGSC acts in an advisory capacity to the RWMC, Commission involvement/engagement, if any, will be at the level of the RWMC.

Level of Annual Effort:

- 0.1 FTE
- 1 trip per year

Primary Staff Contact: Ralph Cady, Senior Performance Assessment Analyst, Radiation Protection, Environmental Risk and Waste Management Branch, Division of Systems Analysis and Regulatory Effectiveness, (301) 415-6249

AD HOC TECHNICAL COMMITTEE MEETINGS AND CONSULTANTS MEETINGS

NRC Office: RES International Organization: IAEA

General Description:

IAEA is developing a Safety Guide on clearance, i.e., to specify concentrations of radioactivity below which materials and equipment could exit radiological regulation and enter general commerce or undergo ordinary disposal. Recently, the IAEA has promoted a more generalized approach that would specify the concentrations below which there would be no need for regulation, i.e., scope defining levels. The intent is that clearance levels would be the same as the scope defining levels.

NRC Goals and Strategies Met/Involved/Implemented

- We will continue to improve the regulatory framework to increase our focus on safety and safeguards, including incremental use of risk-informed and, where appropriate, less prescriptive performance-based regulatory approaches to maintain safety.
- We will communicate more clearly. We will add more focus, clarity, and consistency to our message, be timely, and present candid and factual information in the proper context with respect to the risk of the activity.
- We will continue to improve the regulatory framework to increase our effectiveness, efficiency, and realism.
- We will improve and execute our programs and processes in ways that reduce unnecessary costs to our stakeholders.

Relationship to Other NRC Activities

The U.S. does not specifically incorporate IAEA Basic Safety Standards into domestic regulations. However, many of the issues, including public exposure, exemptions, and clearance are designed to be complementary to and consistent with the IAEA standards and guidance. Many NRC and U.S. policy issues are being addressed in parallel with the IAEA reviews. Close coordination is maintained with NMSS for their response to the Commission on the potential for rulemaking on the control of solid materials (clearance) and for the OEDO participation in RASSAC. Import regulations likely will be affected by international clearance.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

1. Work vigorously for the harmonization of IAEA clearance levels with those of the EC and for the U.S. Harmonization would facilitate import and export with uniform criteria.

2. Actively encourage that IAEA technical bases be transparent, defensible, and explicitly state coherent systems of radiation protection principles.

3. Emphasize consideration of risk informed evaluations and cost/safety justification.

4. Promote and participate in discussions of revisions as scientific evidence and ICRP recommendations become available. Development of clearance policy and technical values must be coordinated with corresponding U.S. initiatives. Active participation should ensure that technical models and approach is defensible and transparent. Changes to the regulatory system must be carefully considered to reflect up-to-date science and sound protection theories.

These enhancements will come about through current and improved understanding of problems and issues raised by member states and from active participation to shape international policy and approaches.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

Coordination with other Federal and State agencies is maintained through the Inter-agency Steering Committee on Radiation Standards (ISCORS).

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. As the Commission contemplates a potential rulemaking on this issue, they will require current information on the international levels for clearance to assess potential impacts on import and export. The U.S. input at IAEA meetings may influence the outcome of IAEA guidance for clearance issues. Trip reports from the meetings will be written to assist the Commission to keep current. We will also brief the Commissioners as appropriate.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

Yes. The international regulations and guidance directly effect the import and export of materials and equipment with associated radioactivity. Trip reports from the meetings will be written to assist the Commission to keep current. We will also brief the Commissioners, as appropriate.

Level of Annual Effort:

- Attendance at 1 to 2 meetings per year plus preparation, generation of trip reports, debriefings, follow-up, and coordination with other Federal agencies through ISCORS requires 4 to 6 weeks of effort for the staff lead.
- 1 to 2 trips per year.

Primary Staff Contact: Robert A. Meck, Program Manager, Radiation Protection, Environmental Risk and Waste Management Branch, Division of Systems Analysis and Regulatory Effectiveness, (301) 415-6205

COMMITTEE ON RADIATION PROTECTION AND PUBLIC HEALTH (CRPPH)

NRC Office: RES International Organization: NEA

General Description

Provides a forum for the exchange of views and information between national authorities and a transfer of experiences between member countries on radiological issues and national practices.

Promotes the preparation of authoritative advice and reference documents for use by the national authorities, based on the analysis of technical problems and policies in those areas where international consensus on radiological protection standards and practices is required. Seeks international understanding and guidance, in support of national authorities, on questions of common concern regarding the interpretation and practical application of the International Committee on Radiation Protection (ICRP) recommendations.

NRC Goals and Strategies Met/Involved/Implemented

- We will identify, evaluate, and resolve safety issues, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.
- We will continue to develop and incrementally use risk-informed and, where appropriate, less prescriptive performance based regulatory approaches to maintain safety.
- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.
- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

Relationship to Other NRC Activities

We coordinate with other offices supporting similar NEA and IAEA committees and activities, such as the Radioactive Waste Management Committee, chaired by Margaret Federline of NMSS.

Long Term and Short Term (FY 2002) Objectives and Approach for Accomplishing Goals

To assist Member countries in the regulation and application of the system of radiation protection by identifying and addressing conceptual, scientific, policy, operation and societal issues in a timely and prospective fashion as well as clarifying their implications.

NRC Role Vis-a-Vis Other U.S. Agencies and Other Organizations

The United States is represented on the Committee by EPA, DOE, and NRC, and an attempt is made to present a unified position on the various issues under review, when possible.

Are there possible opportunities for Commission involvement/engagement on this issue/meeting either now or in the near term?

Yes. For example, the International Committee on Radiation Protection (ICRP) is in the process of developing new recommendations and is soliciting information from the CRPPH that will assist in the development of these recommendations. The Commission's views on this issue will be sought as progress is made on these recommendations.

For the longer term, will the outcome require Commission involvement (e.g., U.S. is expected to comply with decisions reached, known areas of sensitivity, or matters that require Commission guidance)?

The CRPPH is primarily a vehicle for sharing of information. Most decisions involve the sharing of information. When that information is of a sensitive nature, involving Commission policy, guidance from the Commission will be sought.

If yes to either, how and when will the Commission be notified and their input sought?

If sensitive policy issues arise, the Commission will be notified at the earliest possible time by appropriate means, such as memorandum to the Commission, Notes from the Assistant EDO for Operations, memoranda from the Director of OIP, briefing of Commissioners' Assistants, periodic discussions between with the Commissioners and the Office Director of the Office of Regulatory Research, or briefings by the staff, etc.

Level of Annual Effort:

- 1 to 2 trips
- 4 staff weeks

Primary Staff Contact: Cheryl Trottier, Chief, Radiation Protection, Environmental Risk and Waste management Branch, Division of Systems Analysis and Regulatory Effectiveness, (301) 415-6232