

1 UNITED STATES OF AMERICA  
2 NUCLEAR REGULATORY COMMISSION  
3 OFFICE OF THE SECRETARY

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5 NRC STAFF BRIEFING ON NRC INTERNATIONAL ACTIVITIES

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7 PUBLIC MEETING

8 Nuclear Regulatory Commission  
9 One White Flint North  
10 Commissioners Hearing Room  
11 11555 Rockville Pike  
12 Rockville, Maryland  
13 Tuesday, August 15, 2000  
14

15 The Commission met in open session, pursuant to  
16 notice, at 9:30 a.m., the Honorable RICHARD A. MESERVE,  
17 Chairman of the Commission, presiding.

18 COMMISSIONERS PRESENT:

19 RICHARD A. MESERVE, CHAIRMAN

20 NILS J. DIAZ, Member of the Commission

21 EDWARD MCGAFFIGAN, JR., Member of the Commission

22 JEFFREY S. MERRIFIELD, Member of the Commission  
23  
24  
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1 STAFF AND PRESENTERS:

2 WILLIAM TRAVERS, Executive Director for Operations

3 ANNETTE L. VIETTI-COOK, Secretary

4 SAMUEL COLLINS, Director, NRR

5 JANICE DUNN LEE, Director, OIP

6 ASHOK THADANI, Director, RES

7 MARTIN VIRGILIO, Deputy Director, NMSS

8 KAREN D. CYR, General Counsel

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## P R O C E E D I N G S

[9:27 a.m.]

CHAIRMAN MESERVE: Good morning. This briefing is an annual report to the Commission on the Agency's international programs.

I'd like to note at the outset that this is first of our Commission meetings that in a public way is being available for media streaming. And as those at the table know, this is our vehicle or a vehicle that we are using to try to enhance the capacity to the public to understand and participate in some way in our activities.

This is an appropriate occasion for media streaming, in that this is a very important activity of the Agency that we are discussing today. Our program of international activities is a very important corollary to our domestic regulatory program.

It's a program that serves many purposes. First, our international programs provide health and safety information and assistance to other countries, thereby enhancing global nuclear safety and security.

I think, as all of those in the room understand, a nuclear incident anywhere in the world has domestic repercussions, even if there is not a physical or chemical result.

Second, international programs enable us to

1 leverage our research dollars and programs through joint  
2 cooperative activities.

3 Third, they enable us to keep abreast of  
4 regulatory activities in other countries, which may enable  
5 us to improve our own activities.

6 Fourth, they provide us with access to a broader  
7 base of data on U.S.-origin operating reactors, and the  
8 broader the database we have, the better our capacity to be  
9 able to analyze the possible vulnerabilities of systems that  
10 are operating in the United States.

11 Finally, and perhaps equally as important to all  
12 the others, is that international programs assist the U.S.  
13 Government in implementing our nuclear safety and  
14 nonproliferation policies around the globe.

15 So, the international programs serve many and  
16 important purposes, and the broad scope of these activities  
17 demonstrates why this briefing will be conducted not only by  
18 the heads of the Office of International Programs, but also  
19 Nuclear Reactor Regulation, Nuclear Materials Safety and  
20 Safeguards, and Research and our Executive Director of  
21 Operations, Dr. Travers, is also here.

22 Let me remind everyone before we get started that  
23 this is an unclassified briefing. Classified or sensitive  
24 issues are ones that can be raised at a later time under  
25 appropriate circumstances.

1           Before we get started, let me turn to my  
2   colleagues to see if they have any opening comments.

3           COMMISSIONER MERRIFIELD: Mr. Chairman, I would  
4   like to take this opportunity to second your comments. I  
5   believe this is a very positive briefing for us to have  
6   today.

7           The involvement that we have internationally  
8   serves both to enhance our own programs, as well as to  
9   provide benefits to those countries that we have  
10   relationships with, both on a bilateral basis, as well as  
11   others.

12          So I think it's a good program today, and I look  
13   forward to the main briefings that we will have, and I think  
14   it's very positive.

15          Thank you very much, Mr. Chairman.

16          CHAIRMAN MESERVE: Thank you. Why don't we  
17   proceed?

18          MS. DUNN-LEE: Chairman Meserve, Members of the  
19   Commission, I'm very pleased to be here today to represent  
20   the NRC's Office of International Programs and discuss the  
21   NRC's international activities.

22          Today marks the second annual public briefing on  
23   NRC's international programs. The last one took place on  
24   June 18th, 1999.

25          I'm pleased to have at the table with me, the EDO

1 and representatives of the major NRC Program Offices which  
2 support and conduct the Agency's international activities.

3 With me are Dr. William Travers, the Executive  
4 Director for Operations, Mr. Samuel Collins, Director of the  
5 Office of Nuclear Reactor Regulation, Mr. Ashok Thadani,  
6 Director of Office of Nuclear Regulatory Research, and Mr.  
7 Martin Virgilio, Deputy Director, Office of Nuclear  
8 Materials Safety and Safeguards.

9 Let me take a moment to thank them for being here  
10 today, because it is they who truly represent the NRC in the  
11 conduct of the majority of our international programs. This  
12 is a fact that is generally overlooked.

13 Their central role in the international area was  
14 recognized in the NRC's strategic plan. Our single goal in  
15 the international arena is to support U.S. interests in the  
16 safe and secure use of nuclear materials and nuclear  
17 nonproliferation, both at home and abroad.

18 Today we will discuss these activities that are  
19 mandated by statutory requirements, U.S. obligation and  
20 commitments, international treaties and agreements, and by  
21 Executive Orders and Presidential Decision Directors.

22 We will also discuss activities that are supported  
23 in the interest of international health, safety, and  
24 security, and are conducted under the Commission's  
25 discretionary authority.

1           I will focus on the major activities in the Office  
2 of International Programs, noting some successes and future  
3 challenges. My colleagues will then comment on activities  
4 of special importance to them.

5           This way, you can get a snapshot of the breadth  
6 and scope of our international activities, and the  
7 highlights of this past year.

8           These activities arise from U.S. and NRC interests  
9 and are carried out in a variety of ways. For some, we  
10 receive outside funding; for others, not.

11           Some are of short duration; others -- in some we  
12 are proactive and play a prominent role; in others, our role  
13 is often quite modest.

14           Usually we do not expend significant resources in  
15 these matters, but in any case, we look for ways to achieve  
16 our objectives at low cost.

17           Prioritization of our activities is an ongoing  
18 challenge that we are looking at anew. We will be  
19 discussing priorities with the Commission in the coming  
20 months.

21           If there are no immediate questions, I will  
22 proceed.

23           CHAIRMAN MESERVE: Please do.

24           MS. DUNN-LEE: NRC international activities  
25 represent a low-cost, high-impact program. For all the

1 attention it gets, the international area represents one  
2 percent of the NRC's FY2000 budget.

3           This one percent is spread throughout our major  
4 Program Offices and are included in the International  
5 Reactor, Materials, and Waste arenas in the NRC's strategic  
6 plan. The \$4.7 million includes salaries and benefits for  
7 39 FTE.

8           We cover a wide range of important activities  
9 under the one-percent budget. I have divided them into four  
10 major categories for you:

11           The technical information exchange and cooperative  
12 safety research activities directly support and enhance the  
13 domestic program.

14           The safety and nonproliferation support activities  
15 are more externally focused for the greater good.

16           I should point out that Research has its own  
17 budget. My intent here is to reflect the full scope of  
18 NRC's international activities.

19           Let me start with our statutorily-mandated  
20 activity, export licensing: I'd like to take a moment to  
21 highlight some major cases which the Commission reviewed  
22 this past year.

23           These include the export of HEU to Canada for  
24 medical isotopes. This was subject to an intervention by  
25 the Nuclear Control Institute and the topic of two



1 Commission meetings.

2           We also had a case for a large amount of source  
3 material to Russia which was approved under an NRC license  
4 for general distribution. This case was unique because it  
5 did not come under an agreement for cooperation.

6           We also saw our first export of material to  
7 Kazakhstan under an agreement for cooperation. We also  
8 reviewed several Part 810 technology transfers to China.  
9 Final action is withheld, pending receipt of additional  
10 assurances.

11           And we also reviewed a peaceful use agreement with  
12 Turkey, however, most of you know that the nuclear power  
13 plant project has been postponed indefinitely there.

14           With respect to our other nonproliferation  
15 activities, NRC provided assistance to the State Department  
16 in support of the NPT Review Conference held this Spring in  
17 New York.

18           The NPT Review Conference was successful in  
19 reaching agreement on a final document which emphasized the  
20 importance of continuing multilateral programs under the  
21 International Atomic Energy Agency.

22           With regard to core conversion, the technical,  
23 financial, and political aspects of the core conversion  
24 project have proven to be far more challenging than  
25 previously thought.

1           Efforts are now focused on developing new,  
2 non-nuclear sources of heat and electricity for the Thompson  
3 regions.

4           The projected cost of core conversion has now  
5 become comparable to that of non-nuclear alternatives.

6           With respect to strengthening IAEA's safeguards,  
7 NPT and assistance the FSU and Physical Protection  
8 Convention, I will just note here that NMSS has the lead for  
9 these at NRC, and they will be covered more specifically in  
10 the NMSS presentation.

11           Our former Soviet Union Nuclear Safety Assistance  
12 Program is a major activity where we work with regulatory  
13 entities in Russia, Ukraine, Kazakhstan, Armenia, and six  
14 countries in Central and Eastern Europe.

15           The goal of our assistance is to improve the  
16 safety of Soviet-designed reactors. Some of what we believe  
17 to be the more notable achievements of this efforts include  
18 the recent Ukrainian decision to permanently close the  
19 Chernobyl reactor by the end of this year.

20           There was also an April 1999 Kazakh government  
21 decision to permanently close the BN-350 fast breeder  
22 reactor near Aktal.

23           We've also seen the graduation of the Czech,  
24 Hungarian, and Slovak regulators from assistance activities.

25           I'm also very pleased to note that at the last

1 Nuclear Safety Assistance Coordination meeting that was held  
2 in March of this year in Brussels, the U.S. delegation  
3 successfully advocated that the group be discontinued over  
4 the next year in favor of other existing international  
5 groups that also coordinate nuclear safety assistance  
6 activities.

7 In my role as Vice Chair of the West, I am  
8 involved in laying the groundwork for what I hope will be a  
9 successful exit strategy.

10 There are still significant challenges facing this  
11 effort, and this includes closure conditions which have been  
12 imposed by grant funds provided by the Nuclear Safety  
13 Account of the European Bank for Reconstruction and  
14 Development, to make safety improvements to these high-risk  
15 reactors.

16 While such grants have been provided, to date  
17 these closure commitments have not been successful.  
18 However, a significant change is occurring. Many of the  
19 Central and Eastern European countries now aspire to join  
20 the European Union, including countries in which high-risk  
21 Soviet-designed reactors are being operated.

22 The EU has made gaining closure of these reactors  
23 a condition for EU accession; thus, these countries must now  
24 weigh perceived benefits from continued operation of these  
25 high-risk reactors, which is worth potentially tens of

1 millions of dollars, against the benefits of EU membership,  
2 which is potentially tens of billions of dollars.

3 In the Ukraine, there are large numbers of  
4 significant activities underway or planned. These include  
5 Chernobyl closure, the Shelter Implementation Plan, possible  
6 completion of two reactors, and the development of safety  
7 analysis reports for existing reactors.

8 This is a huge burden and a challenge to place on  
9 a regulatory body of approximately 75 people.

10 NRC has made significant progress addressing  
11 concerns regarding the use of fee-recovered funds for FSU  
12 assistance activities. NRC's FTE costs associated with this  
13 program are now derived from NRC's general fund  
14 appropriation.

15 Meanwhile, funding support from USAID is  
16 decreasing and it's affecting our program. The bulk of the  
17 approximately \$45 million received since 1991 was received  
18 prior to 1996.

19 As you know, the GAO recently completed an audit  
20 of our efforts to improve the safety of Soviet-designed  
21 reactors. A concern was highlighted regarding the division  
22 of responsibilities here at NRC for the implementation of  
23 our program.

24 The GAO recommended that this division of  
25 responsibilities be eliminated and that activities be

1 consolidated. The Staff agreed with this recommendation,  
2 and in response, we have consolidated responsibility in my  
3 office, the Office of International Programs.

4 The next two slides reflect possible exchange  
5 activities for the future. They are highlighted because  
6 they occurred during this past year.

7 South Africa is interested in developing a  
8 pebble-bed modular reactor. A U.S. team, which included  
9 NRC, visited South Africa to review the project's status in  
10 February.

11 The team concluded that the project could be  
12 successful, but formidable developmental and licensing  
13 issues lie ahead.

14 The Commission sent a letter to South Africa,  
15 indicating that both organizations might benefit in  
16 developing the licensing approach for an advanced reactor  
17 such as PBMR. We have not received a reply to that letter  
18 yet.

19 Separately, the South African National Nuclear  
20 Regulator has expressed interest in having NRC participate  
21 with them in the development of the licensing approach.

22 Two countries are moving towards nuclear power  
23 programs with likely requests for nuclear safety assistance.  
24 I would just briefly mention that the first is Vietnam. We  
25 have begun a nuclear safety dialogue with them. The IAEA

1 hosted a senior scientific visit to the U.S. in May of this  
2 year. The group visited Washington, D.C., a number of  
3 federal agencies, and they also took a tour of facilities  
4 around the country, including fuel facilities, research  
5 reactors and power facilities.

6 On North Korea, there is a request pending before  
7 the Commission for nuclear safety assistance. This  
8 assistance is related to the two 1,000 megawatt electric  
9 lightwater reactors being supplied under the 1994 U.S. DPRK  
10 agreed framework.

11 The current schedule calls for operation of Unit 1  
12 in 2008 and Unit in 2009. The Commission will soon receive  
13 a paper analyzing the request from the State Department and  
14 KETO for expanding nuclear safety assistance with a  
15 recommended course of action.

16 The NRC hosted nine foreign assignees this year.  
17 I am not going to dwell on the foreign assignee experience  
18 because it will be discussed by some of my colleagues. But  
19 let me add that the NRC foreign assignee program promotes  
20 direct and effective interaction with the international  
21 nuclear community. It has been an excellent mechanism for  
22 developing top quality, long-lasting relationships with key  
23 personnel in foreign regulatory agencies.

24 At last year's briefing, the Commission expressed  
25 an interest in the number of foreign visits to the NRC. A

1 procedure for collecting visit information was initiated in  
2 October of 1999 and so far in FY 2000, we have received  
3 approximately 100 foreign visits. The total is grouped by  
4 number of visits and not by number of visitors.

5           The next two slides with address our important  
6 participation in multilateral organizations. NRC has a lead  
7 role on a wide range of activities in connection with the  
8 International Atomic Energy Agency. We have a nuclear  
9 safety attache who is stationed at the U.S. mission in  
10 Vienna and plays a key role in coordinating our nuclear  
11 safety activities.

12           The NRC supports U.S. adherence to several  
13 conventions through the IAEA. These include the Convention  
14 on Nuclear Safety, where NRC has the lead in writing the  
15 national report; the Waste Convention, which was recently  
16 submitted to the U.S. Senate for ratification; and the  
17 Supplemental Liability Convention, which is in the final  
18 stages of preparation for ratification.

19           A number of NRC staff, including the EDO,  
20 participate, often in lead roles, in a number of advisory  
21 and support committees to the IAEA. NRC also participates  
22 in several safety services provided by the IAEA Department  
23 of Nuclear Safety. These include the International  
24 Regulatory Review Team Missions, they are called IRRTs, the  
25 Operational Safety Review Team Mission, the OSRTs, and the

1 Integrated Safety Assessments of Research Reactors. As most  
2 of you know, in February of this year, the North Anna  
3 Nuclear Power Plant hosted the fourth OSRT at a U.S.  
4 reactor.

5 In addition to the work with the IAEA, the NRC  
6 plays a key role in the conduct of many of our activities in  
7 the OECD NEA. The NEA is an organization of committees,  
8 which I will not mention by name, but only note that NRC  
9 representatives occupy leadership positions in those with  
10 most relevance to the NRC. The program office directors  
11 will be highlighting some of their committee work this year.

12 I would note that the activity within the NEA  
13 promotes our international cooperation. It encourages the  
14 development of international consensus, and it allows an  
15 opportunity to weigh the benefits of different regulatory  
16 approaches. The challenge we face as a consequence of our  
17 participation in both the IAEA and the NEA is to avoid  
18 duplication of effort.

19 The success of NRC's Y2K early warning system has  
20 generated worldwide interest in a permanent Internet-based  
21 information-sharing system. I just want to take a moment to  
22 recognize a member of my staff, Clarence Breskovic, who is  
23 our resident webmeister, who actually was the founder of the  
24 YEW system, and I am very proud of the fact that it has  
25 gotten the attention of the international community and that



1 they are very interested in advancing it.

2 A proposal was endorsed recently to place the INES  
3 events on the Internet instead of using a facsimile. NRC  
4 presented a proposal for an integrated information-sharing  
5 system at a recent June meeting with representatives of the  
6 IAEA and the NEA. The new system is going to be called the  
7 Nuclear Information Exchange System, which is NIXS, and with  
8 DOE funding, NRC would like to provide the YEWS code and  
9 technical support to the international community to  
10 facilitate the development of this prototype system.

11 The next slide represents foreign travel required  
12 by NRC staff in the conduct of our international activities.  
13 The number of foreign trips is divided into separate columns  
14 that represent trips paid for by the NRC and trips paid for  
15 by others such as USAID and the IAEA. International travel  
16 represents approximately 7 percent of the NRC's FY 2000  
17 travel expenditures.

18 My last slide is titled "Improvement Plan" and  
19 highlights some of the challenges and changes that we  
20 currently face. This past year has been a time of  
21 tremendous change in the Office of International Programs,  
22 with major shifts in personnel and management.

23 In my small office of 25 staff members, I have  
24 selected and hired more than 10 individuals to fill vacant  
25 positions over the course of the last year. This office has

1 placed considerable emphasis in improving our performance  
2 both in terms of responsiveness to the Commission and  
3 coordination of the agency's international activities among  
4 the program offices.

5           We have reorganized in the Office of International  
6 Programs and created two teams and augmented staff in key  
7 areas in order to accelerate the licensing, export licensing  
8 process, to improve the management of our nuclear safety  
9 assistance program, to tighten budget controls and to  
10 improve resource management, and we are actively reaching  
11 out to internal and external groups to create new and  
12 improved existing information exchange channels. We are  
13 also redefining -- or redesigning the internal OIP web site.

14           One of the strategies that was recognized in the  
15 NRC strategic plan in the international arena is to enhance  
16 the integration and coordination of NRC's international  
17 activities. For this purpose, we have established an  
18 International Council whose primary members are sitting at  
19 this table. I think we all agree that our expectations are  
20 high for ensuring that the NRC's international activities  
21 result in a consistent program focused on its strategic  
22 goals.

23           I will turn to my colleagues now for their  
24 presentations, after which I would like to offer some  
25 closing remarks. If possible, we ask that most of the

1 questions be held until we have completed the other  
2 presentations. If that is okay, I would ask Dr. Travers to  
3 speak.

4 DR. TRAVERS: Thank you. As Janice's presentation  
5 indicated, technical staff, particularly program offices,  
6 play a fundamental role in furthering our international  
7 strategic goal related to nuclear nonproliferation and the  
8 safe and secure use of nuclear materials. And as you know,  
9 over the years the NRC and its personnel have really  
10 maintained a significant stature for technical and  
11 regulatory excellence around the world. And I think this  
12 has been a principle reason for our success, really, in  
13 influencing other countries' incorporation of effective  
14 policies and practices to improve safety and to reduce the  
15 potential for proliferation.

16 Our broad programs related to safety, cooperation,  
17 information exchange and cooperative research have also, of  
18 course, benefitted our domestic programs. And as you will  
19 hear in a moment, each of the program offices plan to give  
20 you a little bit more information on that.

21 Before I turn to Marty Virgilio, I would like to  
22 endorse the comments that Janice made related to improving  
23 our integration overall of international activities.  
24 Certainly, in an era of ever-diminishing resources, we have  
25 to provide a constant focus for the effective use of limited

1 resources in these areas, and we intend to do that.

2 I think overall PBPM and the International Council  
3 that Janice has instituted is playing a role in establishing  
4 and improving the effectiveness of the way we focus our  
5 resources on these important activities.

6 And with that introduction, let me turn it to  
7 Marty Virgilio.

8 MR. VIRGILIO: Thank you, Dr. Travers.

9 My presentation this morning is going to be broken  
10 into basically three parts. I am going to speak about the  
11 reasons why NMSS is involved in the international  
12 activities. I am then going to speak about how we are  
13 involved in this activities. And then I am going to touch  
14 on a few examples of accomplishments that we have achieved  
15 in the past year. Next slide, please.

16 There are a number of purposes associated with  
17 NMSS's international activities and most are outlined in  
18 NRC's strategic plan. In the interest of safety, our  
19 involvement allows NRC to gain access to non-U.S. safety  
20 information. This information could alert us to potential  
21 problems applicable to NRC programs and licensees, or expose  
22 us to new concepts that would lead us to improvements in our  
23 safety programs.

24 Our involvement allows NRC to assist other  
25 countries in developing their regulatory programs, and our

1 involvement allows the NRC the opportunity to influence  
2 international regulatory standards, policies and practices  
3 through our technical expertise and bringing to bear the  
4 operational experience that we have had in the U.S. Next  
5 slide, please.

6 In the interest of international safeguards and  
7 nonproliferation, our involvement is instrumental in  
8 enabling the U.S. to implement treaties and agreements and  
9 international obligations. Our involvement supports  
10 strengthening domestic safeguards in other countries. And  
11 finally, we work to support and strengthen the  
12 nonproliferation regime. Next slide, please.

13 I will now speak to how NRC is involved in the  
14 international program activities. NMSS activities align  
15 under two of the strategic plans in international arena  
16 activities. The first strategy that we align under is we  
17 will continue to take a proactive role in strengthening  
18 safety, safeguards and nonproliferation worldwide.

19 I will hit these in reverse order. With respect  
20 to strengthening nonproliferation, the first line, NMSS  
21 participates in IAEA missions as requested by member states  
22 to evaluate their physical protection programs. NMSS has  
23 been an active participant in activities to enhance IAEA's  
24 convention on physical protection and associated guidance  
25 documents. And at the request of the Commission, NMSS is

1 now assessing the approach other countries are taking today  
2 to protect against acts of theft and sabotage to identify  
3 opportunities for improving our own programs here in the  
4 United States. Next slide, please.

5 With respect to safeguards, NMSS provides support  
6 to the IS -- IAEA and their efforts to strength  
7 international safeguards. NMSS provides the U.S.  
8 representative to the Director General's Standing Advisory  
9 Group on Safeguards Implementation. NMSS, through DOE, is  
10 currently participating in a program to support Russia, the  
11 Ukraine and Kazakhstan in implementing their material  
12 protection control and accounting programs. And NMSS is  
13 participating in a U.S. government agency-wide working group  
14 negotiating an agreement with IAE in Russia to provide and  
15 place U.S. and Russia fissile material under IAEA  
16 verification programs.

17 The next slide, with respect to safety, NMSS  
18 provides technical support to the Department of  
19 Transportation and IAEA in developing transportation  
20 standards and reviewing package designs, and responding to  
21 technical issues that arise. NMSS is an active participant  
22 in the IAEA Waste Safety Standards Advisory Committee. And  
23 NMSS is also an active participant in the IAEA's Radiation  
24 Standards Advisory Committee. Next slide, please.

25 NMSS participates in fuel cycle and waste

1 information exchanges, for example, those promoted by the  
2 Nuclear Energy Agency on deep geological disposal of high  
3 level waste. NMSS participates in activities associated  
4 radiation source and radioactive material security that are  
5 derived from the IAEA's action plan on this topic. NMSS  
6 also participates in a limited extent on the Lisbon Program  
7 safety support initiatives, providing safety assistance to  
8 Russia and the Ukraine. The next slide, please.

9           Our second strategy under the strategic plan that  
10 our activities are aligned under is that we will focus  
11 appropriate regulatory activities and resources on  
12 significant international obligations and the U.S. and NRC  
13 international priorities.

14           NMSS conducts import-export licensing reviews,  
15 confirming that appropriate IAEA safeguards and programs are  
16 in place for those receiving material generated in the  
17 United States. The United States has also entered into  
18 agreements for peaceful nuclear cooperation with more than  
19 20 countries. NMSS conducts various activities under these  
20 agreements, including ensuring that foreign materials are  
21 being handled in accordance with agreements and conditions  
22 that we have obligated ourselves to for receipt of that  
23 material.

24           The U.S. IAEA safeguards agreement obligates the  
25 U.S. to make certain U.S. facilities applicable for IAEA

1   safeguards. Among other things, NMSS reviews the IAEA  
2   proposal for the application of safeguards at these selected  
3   facilities and helps coordinate the activities associated  
4   with their implementation.

5               On the next slide, the U.S. maintains a national  
6   system for accounting for nuclear materials, it is called  
7   the Nuclear Materials Management and Safeguards System.  
8   This system is jointly funded by the NRC and DOE, and NMSS  
9   is the NRC project manager for this system.

10              Finally, NMSS is an active participant in the U.S  
11   activities associated with the international treaty on  
12   nuclear waste safety that Janice mentioned earlier.

13              The last of the three areas I wanted to talk about  
14   is our accomplishments. NMSS is involved in many long-term  
15   projects. However, there are milestones and deliverable  
16   products that do show we are making progress. I have  
17   highlighted three examples here on this slide. In May of  
18   2000 we saw the completion of Project Sapphire, which was a  
19   downblending of HEU, high enriched uranium, from Kazakhstan  
20   at a U.S. facility. NMSS helped facilitate the IAEA  
21   safeguards that were applied to that project.

22              Last summer IAEA published a new revision,  
23   Revision 4, to its IAEA Info Circ 225. This is IAEA's  
24   physical protection guidance document on sabotage, and NMSS  
25   served a leadership role in the development of this



1 document.

2           And finally, last month NMSS entered into an  
3 agreement, it is an interagency agreement with the  
4 Department of Energy for reviewing NRC's efforts associated  
5 with providing material, protection control and  
6 accountability support to Russia, the Ukraine and  
7 Kazakhstan.

8           This completes my prepared remarks. I will now  
9 turn this program over to Ashok Thadani, who will speak  
10 about the Office of Research's international activities.

11           MR. THADANI: Thank you, Marty.

12           I will briefly go over the efforts that were  
13 involved in terms of the scope of our activities, the value  
14 of our international programs, and then also briefly touch  
15 upon what I see as some of the future challenges as we go  
16 forward.

17           Now, about 80 percent of the reactors worldwide  
18 are, in fact, based on U.S. lightwater reactor technology,  
19 so there is a considerable amount of experience, not just in  
20 this country, but in other countries as well. International  
21 communities are also expending significant resources on  
22 safety research. Thus, having access to the foreign  
23 experience and research facilities is of considerable value  
24 to us. We receive important information and knowledge  
25 bearing on safety. Sometimes safety issues requiring

1 following actions are also identified.

2           This access allows us the option of not having to  
3 generate all the necessary information ourselves. We have,  
4 in fact, increased cooperation to more effectively and  
5 efficiently utilize our resources. I will come back and  
6 give you some examples of that.

7           Finally, cooperative efforts lead to a better  
8 shared understanding of safety matters. Of course, these  
9 agreements also offer opportunities for networking for  
10 technical staff and experts, and I believe that is also a  
11 very important part of our cooperation. Next chart, please.

12           The Office of Nuclear Regulatory Research manages  
13 and coordinates 78 bilateral and multilateral agreements  
14 covering 25 countries. I might note that we have increased  
15 our cooperation. Last year we had 64 such agreements. We  
16 are currently working on about 13 additional agreements  
17 which we hope to complete in the near-term.

18           International participants contribute  
19 approximately \$1.7 million to our programs related to codes,  
20 computer code assessment, particularly two major programs,  
21 code assessment and maintenance program on thermal-hydraulic  
22 analyses, and the severe accident research program.

23           There is a downward trend, I might note. Last  
24 year the contribution was \$2 million and it has gone down to  
25 \$1.7 million this year. Of course, we have a large number

1 of cooperative agreements. As I noted, we contribute  
2 approximately \$4 million to this cooperation with the  
3 international community. And for that \$4 million, I think  
4 we benefit greatly with the total cost of research amounting  
5 to about \$55 million.

6 As Janice noted, we are also very active in our  
7 interactions with both NEA and IAEA. We participate  
8 particularly at the NEA, research is more active. We  
9 participate both at the committee level, as well as at  
10 working level. And as Janice noted, that allows us an  
11 opportunity to influence what happens in terms of the focus  
12 of research.

13 May I have the next chart, please?

14 This chart shows really four examples of areas of  
15 cooperation. The scope of our cooperation is broad, and you  
16 can see, it really does cover essentially all areas of  
17 interest to us. This includes conducting experiments,  
18 generating data that we believe is appropriate, using that  
19 information in developing models and then that is having the  
20 right analytical tools that reflect good understanding, and  
21 then exercising these models, both ourselves as well as  
22 other countries, and we do learn a great deal from  
23 exercising of these models. And, in fact, there have been  
24 cases where some limitations have been identified, and the  
25 community works together to make enhancements to these

1 computer codes. In fact, the next chart shows some examples  
2 of values program.

3 As I said, so the result of our cooperation is  
4 that not only do we learn from broader experience as to what  
5 important safety issues need attention, but we are also able  
6 to develop a sound technical basis for issues of concern to  
7 us at a lower cost to us. For example, fuel performance  
8 issues such as impact of high burnup fuels on safety, we are  
9 able to develop information so that we can make realistic  
10 decisions.

11 Similarly, in the case of fuel, we also have a  
12 cooperative agreement where we get data from other countries  
13 such that we can give appropriate credit for burnup in terms  
14 of cask designs.

15 As I mentioned, cooperative agreements in terms of  
16 code assessment and maintenance and severe accident program  
17 allow us to understand from use of these codes by various  
18 countries as to important issues that we need to be worrying  
19 about.

20 We do get considerable experimental data to have  
21 better understanding of ultimate capability of various  
22 structures, systems and components. I might note that is  
23 important as we move forward applying risk-informed thinking  
24 to our regulations, and that the cooperative program that we  
25 have had in structural, seismic, environmental and radiation

1 effects on structures, systems and components has been very  
2 valuable to us also in our license renewal activities. Next  
3 chart, please.

4           Now, I did want to say a few words about the  
5 outlook and then the challenges. I think everyone here  
6 knows that worldwide there has been a decline in research,  
7 research budgets, except for a few selected countries where  
8 the budget has not declined. What is happening is -- and  
9 NEA has taken a leadership role in looking around, both in  
10 Europe, Japan and U.S., looking at various facilities, their  
11 availability or potential loss of those facilities over the  
12 next few years. They will be issuing that report at the end  
13 of this calendar year, and that report is expected to  
14 identify some of the facilities that may well be shut down  
15 because of declining budgets.

16           They have also done a study recently, and I  
17 believe you have seen that, it is a big report, but a  
18 summary of that is in this Nuclear Education and Training:  
19 Is There Cause for Concern for Future? The key element in  
20 this is concern about the loss of infrastructure over the  
21 next several years unless focused attention is given to this  
22 matter. What that means is that our international  
23 cooperation becomes even more important than it has been.  
24 With limited resources, we have to pull those resources to  
25 attempt to deal with some of the issues that we anticipate.

1 Next chart, please.

2 We do recognize that the industry is maturing, but  
3 there are significant continuing challenges and future  
4 challenges. I am not going to go through the list that is  
5 on the chart and the next chart except to note that we do  
6 have considerable issues in front of us which will require  
7 this infrastructure to be able to deal with them over time.

8 Next chart, please.

9 I want to make a couple of points on this chart.  
10 I think the increases in risk assessment, it's been  
11 typically only on the quantification side that we need to  
12 develop methods to quantify probabilistic aspects.

13 But really, it's much more than that. One needs  
14 to have very sound understanding. And when one wants to  
15 make realistic analyses, it, in fact, requires additional  
16 information and not less information.

17 And that focuses on various analytical tools,  
18 thermal hydraulic codes, severe accident codes, fracture  
19 mechanics and so on. And our international cooperation is  
20 very essential in trying to develop some of the information.

21 Clearly, deregulation will lead to a continuing  
22 desire by the industry to optimize, and that we do need to  
23 be confident that the changes that we're making are well  
24 grounded in terms of a good understanding of safety, that we  
25 have adequate data in front of us as we move forward.

1           Now, many of these challenges are also being faced  
2 by other countries, so this sharing of information through  
3 cooperative programs is not just a good thing to do, but I  
4 think it's an essential thing to do. I don't believe we  
5 have much of an option.

6           Thank you. Those are my comments. Next, Sam will  
7 discuss the NRR international activities. Sam?

8           MR. COLLINS: Thank you, Ashok. Good morning,  
9 Commissioners.

10           My goal in the next slides is to provide a brief  
11 overview of the description of the NRR's programs in the  
12 international area, including the benefits, the investments,  
13 and the outcomes.

14           I intend to do that in the following three slides,  
15 with some elaboration with notes. As Ashok mentioned, the  
16 world nuclear power industry is based predominantly on  
17 western technology.

18           Ashok's team in Research and the NRR team benefit  
19 greatly from not only the experience, technically, but also  
20 the operational experience.

21           We also acknowledge that there is a number of  
22 developing regulatory programs, as well as developing  
23 nuclear programs in countries, and most of the technology  
24 that is cutting edge to date for new construction is being  
25 built overseas.

1           We're dealing predominantly in the U.S. market  
2   with retrofitting of advanced technology into the existing  
3   power plants.

4           NRR could not accomplish its mission without the  
5   support of the Office of International Programs. We rely  
6   heavily on Research to provide input to our technical  
7   programs.

8           Some of that, as Ashok mentioned, is based on  
9   international experience. The Office of NRR has a senior  
10   level technical position, Dr. Cullingford, dedicated to  
11   international programs, and we also rely on the  
12   participation of the Regions, Regional Administrators, and  
13   the technical staffs, not only to host foreign individuals,  
14   but also to provide for technical expertise throughout our  
15   missions in the world.

16           In Slide 36, I would acknowledge that our  
17   activities cover three broad areas: The bilateral technical  
18   exchange; our participation in the multilateral technical  
19   working groups and committees; and also specifically our NRC  
20   and foreign assignee programs.

21           Slide 37 covers briefly the foreign assignees.  
22   This is a list of countries which have sponsored foreign  
23   assignees to the U.S., with the broad areas of expertise.

24           By way of background, I would acknowledge that  
25   over the past three years, 19987 to present, we have had ten



1 foreign assignees representing seven countries. By our  
2 estimate, the investment of NRC FTE in this area is  
3 approximately .5 or one half of an FTE.

4 Our actual budget model with our operating plan  
5 assumes and investment of .2 FTE per year for the  
6 coordination of foreign assignees.

7 As a result of those ten individuals, we have  
8 received approximately nine to ten years, depending on  
9 travel time, of expertise.

10 The reason I mention that is because the  
11 individuals we receive are very carefully screened. They  
12 are typically highly professional, in most cases, highly  
13 placed individuals within the international communities.

14 They have very good speaking skills in our  
15 language. If not, that training is provided prior to or  
16 during the assignment.

17 Each individual is given a work plan with an  
18 expected output and a contribution to the Agency, as well as  
19 a very carefully screened security program in concert with  
20 our Office of Administration and Tim Martin.

21 Mike Cullingford supervises each one of these  
22 individuals, and they are provided a mentor and coach during  
23 their stay.

24 We currently have two countries represented within  
25 our foreign assignee program, China and Spain. Japan had an

1 additional assignee that ended in June. France had an  
2 assignee that ended in May.

3 France will start a slot in October, and we expect  
4 representatives from Turkey and Egypt to also start this  
5 year.

6 The NRC contributes with our resources,  
7 specifically in 1999, Bill Jones, who is a previous Resident  
8 Inspector, and is now one of our reactor analysts. He was  
9 recently promoted in Supervisor in Region Iv.

10 Bill Jones partook as an observer with the French  
11 Nuclear Safety Authority, DSIN in 1999 during power reactor  
12 inspections.

13 More recently, Mike Tschiltz in 2000 participated  
14 as an observer, again with DSIN, with inspections of the  
15 power reactor program, fuel production, reprocessing MOX  
16 fuel and facility dismantlement.

17 Early in 2001, we are now working on the third NRC  
18 foreign assignee. That will be in the area of MOX and  
19 decommissioning, and we're coordinating those with our team  
20 members in Research and also in NMSS.

21 Slide 38 indicates bilateral support. We really  
22 have areas here where we supplement those efforts from our  
23 Office of Research, in that we look at the application of  
24 the regulatory programs and the application of the  
25 technology benefit that Research provides to us.

1           Examples of that would be the digital INC, the  
2 actual application of our Chapter 7 development of the  
3 Standard Review Plan as a result of that Standard Review  
4 Plan being modeled by other countries. It's being applied.  
5 We can provide for lessons learned in the application and  
6 retrofit that into the U.S. regulatory guidance.

7           Again, high-burnup fuel, as Ashok mentioned; also  
8 looking at material issues such as steam generator, reactor  
9 vessel internals, the French have the lead in those  
10 technical areas, specifically.

11           In the bilateral support, as Ashok mentioned, we  
12 gain predominantly as a result of worldwide industry  
13 experience. Developing countries such as Japan and Taiwan,  
14 are modeling the advanced reactors such as the advanced  
15 boiling water reactor, and as was mentioned by Janice, there  
16 are a number of countries who are entertaining new  
17 construction of reactors as well, with, in some of those  
18 cases, technology not yet utilized.

19           In the multilateral area, we are the members of  
20 numerous working groups. I am a Bureau Member of CNRA of  
21 NEA. That deals predominantly with regulation.

22           As an Agency, we also contribute specific staff to  
23 IAEA. David Lange, for example, is going back to IAEA for a  
24 rotation. We have Harold Eichenholz from Region I, past  
25 Senior Resident Inspector who is a member of the IAEA

1 International Regulatory Review Team.

2 Those individuals are an investment by the NRC.  
3 We gain when they come back and bring those insights to the  
4 Agency. There are also points of contacts on an ongoing  
5 basis for us to glean information as they perform their  
6 roles overseas.

7 I know that travel is an area that's been  
8 discussed by Janice, and I'd like to acknowledge that in the  
9 NRR operating plan, we track our resources in the  
10 international arena in multiple ways.

11 We have four FTE that are dedicated on an annual  
12 basis to our international programs. We track the  
13 expenditures of those on a quarterly basis. Our most recent  
14 third quarter indicates that we'll expend, on a projection,  
15 approximately 3.3 FTE this year in the international arena.

16 That's broken down in a budget sense; the four FTE  
17 budget assumption with two FTE for the Russia/Ukraine,  
18 that's an OIP initiative; regulatory exchange overseas, are  
19 1.6; regulatory exchanges at NRC is .2; and foreign  
20 assignees is .2.

21 Our travel budget for international programs is  
22 approximately \$138,000; that's against a backdrop of  
23 approximately \$1.8 million in the general travel budget for  
24 Travel Office of NRR.

25 And as of 8/7, we have expended a little less than

1 half of that, \$64,000, so we're below projection in our  
2 travel for foreign support.

3 I'd just like to close by acknowledging the number  
4 of trips that we have as budgeted in two ways: We have core  
5 and non-core. For the purposes of today, we're including  
6 the Canadian trips into the core. Typically the Canadian  
7 trips would be called non-core, but we're budgeting it in a  
8 different way.

9 We are at 74 trips, as indicated in the graph, and  
10 it looks like our actual numbers will be less than that. We  
11 budget those on an annual basis with a projection. We brief  
12 the EDO on those trips and their mission, and they are  
13 carefully screened. Each one results in a trip report, as  
14 provided to the Office of International Programs and the  
15 other stakeholders.

16 We look for value, we judge that value against our  
17 four outcome measures. And to my way of thinking and to the  
18 Office, our support for international programs not only in  
19 the community for OIP mission, but in deriving the benefits  
20 for the Office, specifically, is a net gain for the Office  
21 of NRR.

22 At this point, I'd like to turn the agenda back  
23 over to Janice. Thank you.

24 MS. DUNN-LEE: Thank you. I'd like to take care  
25 of some closing remarks here to discuss some of the

1 challenges ahead.

2           We are, without a doubt, in a period of change and  
3 transition, both externally and internally. We are  
4 witnessing the evolution and the role of nuclear power in  
5 advanced countries as well as in the developing world.

6           We are impacted by restructuring of electricity  
7 markets, nuclear accidents, and incidents occurring  
8 worldwide; license renewal activities, and nuclear power  
9 phaseout in some countries.

10           The question of U.S. leadership in the market and  
11 in standard-setting continues to remain at the forefront.

12           We are also concerned about safety and security of  
13 nuclear materials at home and abroad, the declining dollars,  
14 as Ashok talked about, and the desire to effectively and  
15 efficiently incorporate our best practices, both  
16 domestically and internationally.

17           NRC has been a leader and retains a position of  
18 influence in the international nuclear community. We  
19 regulate the safe operation of 25 percent of the world's  
20 operating reactors.

21           In addition, the U.S. continues to be the world's  
22 largest exporter of nuclear fuel, technology, and equipment.

23           Today, many reactors operating outside the U.S.  
24 are of U.S. design, and new technologies developed in other  
25 countries are being used in our domestic program.

1           This is all the more reason for our continued  
2 participation in exchange activities and cooperation in a  
3 wide but carefully selected range of safety and safeguards  
4 assistance.

5           Let me close by saying that it is in our direct  
6 interest to maintain a solid program for NRC's international  
7 activities. Let us not lose sight that our efforts to  
8 strengthen regulatory practices worldwide is a shared  
9 benefit to global nuclear safety and to the U.S. domestic  
10 industry.

11           I thank you for this opportunity, and we would be  
12 pleased to answer any questions at this time.

13           CHAIRMAN MESERVE: I would like to thank the  
14 entirety of the panel. This is a very impressive array of  
15 activities that you have described for us today.

16           I know we all have many questions. Let me turn  
17 first to Commissioner Diaz.

18           COMMISSIONER DIAZ: Mr. Chairman, first I want to  
19 thank Ms. Dunn-Lee for not only presenting the OIP look but  
20 to bring at the same an integrated look at all of the  
21 activities. I thought that was very good and it gives us a  
22 very good overall quick look at what is going in all of the  
23 offices.

24           I would like to second what the Chairman said in  
25 his remarks and Mr. Travers, that, of course, we are a

1 domestic agency and we have a small part of our statutory  
2 activities dedicated to exports and how that influences  
3 nonproliferation, and, therefore, we continue to have a  
4 focus on how our international activities benefit our  
5 domestic activities. And I think that has been clearly made  
6 and I totally agree with that.

7 I would like to turn to your Slide Number 2, Ms.  
8 Dunn-Lee, on international arena share of NRC Fiscal Year  
9 2000 budget, because Mr. Travers made a comment, and you  
10 have made a comment to me that you are trying to see how you  
11 integrate your activities within the agency to become more  
12 efficient, try to avoid duplications and so forth. And this  
13 slide says that the -- I may have been not understanding  
14 that the total international arena share of the NRC's budget  
15 is 4.7, or about 1 percent. Do you mean that all of the  
16 activities that were described by all these offices are  
17 approximately \$4.7 million?

18 MS. DUNN-LEE: Yes. With the exception of the  
19 research.

20 COMMISSIONER DIAZ: With the exception of the  
21 research contracts.

22 MS. DUNN-LEE: Yes.

23 COMMISSIONER DIAZ: So all of the FTEs from NMSS  
24 are all included in this budget?

25 MS. DUNN-LEE: 39 FTEs, that's correct.



1           COMMISSIONER DIAZ: Very good. Then I have a  
2 problem with all of the other offices, because if you  
3 conduct all these activities as 1 percent of the budget, I  
4 would like to know what we do with the other 99 percent of  
5 the budget. So you have created a problem if you conduct  
6 all these activities with this little amount of money, maybe  
7 it is not the international arena that needs increased  
8 efficiency, but it is the rest of the other offices that  
9 need efficiency.

10           So I would like to suggest that we hold a one week  
11 meeting, look at the 99 percent of the rest of the budget  
12 and determine where can we make efficiencies.

13           Having that said, Ms. Dunn-Lee, now that you  
14 have --

15           COMMISSIONER MERRIFIELD: It may take more than a  
16 week. Considering it took an hour to do 1 percent of our  
17 budget, 99 hours for the remaining part may not be the best  
18 use of the Commission's time.

19           COMMISSIONER DIAZ: The mathematician in the  
20 Commission corrected me, we will need a month-and-a-half to  
21 conduct this.

22           DR. TRAVERS: Commissioner, if I might make one  
23 comment, the FTE that we have presented today, because of  
24 the way we account for our budget, that would include some  
25 of the management time that is spent, Sam, myself and

1 others, in attending some important meetings that we go to  
2 in IAEA and some of the exchanges. So, I just want to make  
3 sure that even though I can't give you sort of a crisp  
4 rollup of what that is, that I account for the fact that  
5 there is some significant amount of management time that is  
6 spent in connection with the direction of international, and  
7 in fact, in some cases, participation directly in some of  
8 these international activities.

9 COMMISSIONER DIAZ: And that includes the regions  
10 and so forth.

11 DR. TRAVERS: That's right.

12 COMMISSIONER DIAZ: Okay. So we are -- this is  
13 accounting for direct FTEs in the budget and travel, and  
14 contracts, except the reserves. Okay. That is a good  
15 clarification, I appreciate that. That is a good point.

16 Having looked at all these things, Ms. Dunn-Lee,  
17 as a whole blanket, do you have any recommendations for the  
18 Commission in how we can better situate, you know, our  
19 efforts? Is there anything that you recommend that we  
20 should do that will actually make not better utilization of  
21 resources, because it seems to me you are doing quite well,  
22 but to better, you know, have resource from our efforts,  
23 maybe it is in the form of a union, maybe -- you know, what  
24 is, you know, from your perspective, what is it that we can  
25 do better?

1           MS. DUNN-LEE: Well, I would comment that we could  
2 do a lot of things better. We certainly are working in an  
3 effort to --

4           COMMISSIONER DIAZ: You want to speak in the  
5 microphone, I think it is -- maybe we can move this forward  
6 to you.

7           MS. DUNN-LEE: We have a vast program, as you have  
8 heard, and we are always looking for ways to improve the  
9 method in which we conduct our business. I think the first  
10 step that we have taken is the establishment of the  
11 International Council where we have actually learned a lot  
12 from one another just in the short time that we have  
13 established ourselves with respect to our programmatic  
14 activities.

15           I think there are some efficiencies that can be  
16 gained in our international programs. One area that comes  
17 to my mind specifically is perhaps in the conduct of our  
18 export licensing activities. They are currently split among  
19 two program offices, OIP and NMSS. And I think that if we  
20 took a hard look at the examination of some of those  
21 functions, we might be able to streamline and better serve  
22 the Commission in terms of our resource application. That  
23 is one particular area.

24           I think that there is lots of room for improvement  
25 in the communication aspect and I hope in the coming months

1     that as we work and bridge our programs closer together that  
2     we are going to find more and more ways to operate more  
3     efficiently.

4                 COMMISSIONER DIAZ:   Going back to my first  
5     statement, are we making a direct effort on determining and  
6     assessing and using the value of our international  
7     activities for our domestic, you know, industry?

8                 MS. DUNN-LEE:   Oh, I clearly think so.   I think  
9     that that is clearly at the forefront of many of the  
10    decisions that we make in the use of our resources in the  
11    international area.   Does it have a direct bearing on our  
12    domestic program?   I think that is a first consideration.

13                COMMISSIONER DIAZ:   Okay.   I know it is a first  
14    consideration.   Are we documenting any specifics, you know,  
15    values being derived?   I know that you can't do in every  
16    place, but any benefits that are derived from international  
17    activities into domestic, are we trying to separate and  
18    document them?   I think Ashok did some, you know, of that  
19    specifically.

20                MS. DUNN-LEE:   Yes.

21                COMMISSIONER DIAZ:   But are we doing it across the  
22    board?

23                MS. DUNN-LEE:   I would invite my colleagues to  
24    comment on that for the Commission, because they do conduct  
25    primarily those programs which have direct effect on the

1 domestic programs. So if anybody would like to answer that.

2 MR. COLLINS: Thank you, Janice. I think there is  
3 a number of ways that can be acknowledged. You asked us if  
4 it is documented. We have a table here that we would be  
5 glad to share with the Commission of the benefits of each of  
6 the foreign assignees, for example, where they have  
7 contributed to ongoing reviews up to and including  
8 inspection programs, for example, and digital I&C reviews,  
9 technical review of license renewal AP600.

10 The individuals that come have talents. Dr.  
11 Calingford screens these individuals very carefully and  
12 negotiates the level.

13 Then there is the intrinsic value of the  
14 individuals learning our processes, the establishment of  
15 personal relationships, if you will, that carry on through  
16 the professional years. There are a number of individuals  
17 now who are the heads of regulatory agencies who have been  
18 assigned to the NRC, who understand our processes and have a  
19 very close relationship with us, both technically and  
20 personally, and that helps to, I believe, contribute to an  
21 understanding of the programs and the transfer of that  
22 information.

23 In a technical sense, I will let Ashok speak to  
24 the hard technical areas and the application of the  
25 regulatory program. We have derived a great benefit in the

1 revised reactor oversight process from Mike Johnston being  
2 on the international working group for inspection programs.  
3 He has been able to use the resources from other countries,  
4 this is a committee from the CNRA, to screen the revised  
5 reactor oversight process and to challenge that process, to  
6 bring in different insights. And in some cases, it is  
7 looked at quite closely, with a lot of scrutiny and a lot of  
8 doubt.

9           So those types of insights are invaluable to us,  
10 as well as the willingness of countries to in some cases  
11 adopt our programs. Spain, for example, has a mirror  
12 program. Our partners in Mexico follow our programs very  
13 closely. So we tend to get to second check on our  
14 regulatory programs and their application and the feedback  
15 of is it working outside of our closely held domestic  
16 market, in a similar market, and that is of value to us.  
17 That is just a few examples.

18           MR. THADANI: I might just note that last year, I  
19 think you know fairly well we do have fairly well-defined  
20 cooperative programs, but last year we had two foreign  
21 assignees, one from Spain and one from Switzerland. And as  
22 Sam noted, they usually are highly qualified people and  
23 these two individuals were very helpful to us. They were  
24 both working in one branch, working on thermal-hydraulic  
25 codes. And they had specific tasks, they completed those

1 tasks on time, prepared their reports prior to going back.

2           So I think it was a very positive experience, I  
3 believe not only for them, but I certainly know it was for  
4 us, because they made a real contribution to what we are  
5 trying to do. We are expecting an assignee now from IPSN,  
6 he has got significant background in digital technology and  
7 that is an area of great interest to us. So, once again, I  
8 expect that that will add a fair amount of value to us.

9           I think it is very important to note that we are  
10 quite active at the committee and working group levels, as I  
11 said. We are able to really influence areas that should be  
12 pursued under international agreements.

13           COMMISSIONER DIAZ: And be influenced.

14           MR. THADANI: I'm sorry?

15           COMMISSIONER DIAZ: And be influenced.

16           MR. THADANI: And be influenced, yes. We are  
17 getting more influenced as time goes on, I want to say.

18           But I think it is important that the management, I  
19 know at Research and other offices, is quite active in  
20 trying to have an early say in what areas are to be pursued.  
21 And then at CSNI, certainly, where I am quite active myself,  
22 we have developed a process that we will go through to make  
23 sure that the areas we are focusing attention on are  
24 important areas to us.

25           MS. DUNN-LEE: Can I just add one comment to that?

1 When we were working on the international arena in the PBPM  
2 process of the strategic plan, we consciously had a  
3 discussion and made a decision to incorporate the  
4 international activities in the domestic arenas, because  
5 there is such a close linkage. And I think that we wanted  
6 to tie the benefits together, and that is really sort of one  
7 place you could find the linkages. Maybe they are not as  
8 clearly articulated as they should be, but there definitely  
9 was the decision made to make that linkage to the domestic  
10 program, and, therefore, each of the program offices have a  
11 discussion of the international.

12 COMMISSIONER DIAZ: Thank you.

13 CHAIRMAN MESERVE: Let me turn not to Commissioner  
14 McGaffigan.

15 COMMISSIONER MCGAFFIGAN: Let me follow up by just  
16 commenting on Commissioner Diaz's line of questioning. I  
17 think it is very important that we be open to being  
18 influenced. At times, because we were the 800 pound gorilla  
19 once, you know, there could be a certain hubris associated  
20 with that, and I think there is a lot we can learn from the  
21 others.

22 And my first question, and Sam answered it in part  
23 in his presentation, when I was looking at the slide about  
24 foreign assignees that Janice presented, it was assignees to  
25 here, and there was very little of us going there. Now, Sam



1 mentioned, in the case of France at least, there have been  
2 at least three -- or two, and I guess one planned, trips in  
3 response to Mr. Lecoss presumably urging that we send some  
4 people his way. I don't know how long our assignees have  
5 been there. Have they been relatively short?

6 MS. DUNN-LEE: About a month, I believe.

7 COMMISSIONER McGAFFIGAN: About a month. Whereas  
8 theirs come here for a year or nine months.

9 MS. DUNN-LEE: The last one was here for three  
10 years.

11 COMMISSIONER McGAFFIGAN: Three years, okay. I am  
12 not going to necessarily endorse three year assignments, but  
13 I think that we could -- I honestly think we could do more  
14 of that, not just with France, but with the U.K., there is  
15 clearly no language problem in the U.K., and perhaps other  
16 Western countries. I think it gets to be harder in Japan or  
17 Korea, or other nations where there may be significant  
18 linguistic issues, but we also have staffers from those  
19 countries who may speak that language.

20 So I would be interested, and I notice NMSS has  
21 been quiet through this entire discussion. It isn't clear  
22 -- I know people like Margaret Federline participate, she is  
23 in Research now, but participate in evaluating the Swedish  
24 waste program. But it isn't clear whether NMSS has thought  
25 about placing people in other countries to learn from their

1 experiences in decommissioning, for example, or repository  
2 design or whatever, repository licensing.

3           So how can we do more? And I know there are  
4 budget restraints. But if we are getting benefits, how can  
5 we do more to place some of our people in these foreign  
6 regulatory bodies?

7           DR. TRAVERS: Well, maybe I can answer generally.  
8 As you point out, budgetary constraints are a reality that  
9 we deal with and, in the main, what we are looking to do is  
10 provide a balance between what some would like to see in  
11 terms of longer-term assignments or experience overseas with  
12 carefully placed and focused assignments of the type that  
13 Sam was talking about, managers traveling to participate in  
14 meetings, tour nuclear power facilities to understand things  
15 like security systems and other safety issues that arise in  
16 connection.

17           But in the main, we have not had a tradition of  
18 budgeting for longer-term assignments overseas. We have  
19 actually had some discussions, with the French, notably,  
20 for, on their part, a hoped for change in that policy. We  
21 haven't done it yet. It is certainly something we could  
22 think about and perhaps in connection with the International  
23 Council we could do that.

24           But they do have some fairly significant budgetary  
25 implications for us. So right now our posturer is more

1 aligned to shorter stays, optimizing these shorter stays,  
2 including inspections, to achieve the sorts of outcomes that  
3 we have identified in the PBPM process.

4 We are always open, though, to the possibility.

5 COMMISSIONER McGAFFIGAN: I am open, I think we  
6 should reconsider that, to be honest with you. I mean if  
7 other countries -- it is a place where we are differing from  
8 at least some of our foreign colleagues who see a clear  
9 benefit in placing people here. And I think we should think  
10 about how to place some of our people there, at least once,  
11 and see whether there is, you know, a commensurate benefit.

12 We do spend money to send people to IAEA, and I  
13 think that is fine and that is expensive, although sometimes  
14 IAEA pays for it, I guess. But we may well benefit more, or  
15 at least as much, by dealing with an individual peer  
16 regulator and having somebody there for an extended period  
17 of time, if there is interest.

18 Another question, you know, I, again, was  
19 interested in Sam's remarks about how Mike Johnston  
20 benefitted from working on the new reactor oversight  
21 process, the inspection part of it, with his peer group. It  
22 strikes me, you know, in looking at the strategic plan, one  
23 of the goals that I think comes from Research, or it is in  
24 the reactor arena, I think, is to look systematically at our  
25 rules and see whether we should change any of them, or

1     whether we are getting the benefits that we projected.

2             Is there any systematic look at our practice  
3     vis-a-vis international practice to see whether we need to  
4     make changes? You know, if there is a consensus abroad and  
5     a certain approach, that we are the outlier, do we have a  
6     program of saying, okay, well, why do we continue to be the  
7     outlier or vice versa? Do we help them figure out whether  
8     they are an outlier?

9             I mean part of this is motivated by, you know, the  
10    Tokimura event where, you know, clearly, the international  
11    system failed the Japanese in the sense of not pointing out  
12    to them that their regulatory program for inspecting and  
13    licensing fuel cycle facilities was very different from  
14    everyone else's and make them think about whether it should  
15    be. Now it isn't. Now Meady is going to be in charge and  
16    it is going to look like our program and the European  
17    programs.

18            But we also are outliers in a bunch of areas, and  
19    it would be interesting to, you know, sort of go through the  
20    intellectual rigor of justifying why we continue to be  
21    outliers and in some sort of systematic way. So, evaluating  
22    areas where we are different and making recommendations as  
23    to whether we should continue to be different is something  
24    that might be worthwhile.

25            DR. TRAVERS: As you pointed out, in the case of

1 events like Tokimora, we specifically look at the program in  
2 place in the foreign country to make an assessment against  
3 our -- and we did that, and we came to the Commission, and  
4 we presented --

5 COMMISSIONER McGAFFIGAN: But the question is,  
6 could we have done that in advance? Could somebody have  
7 been sitting at all those meetings that you all go to at  
8 IAEA or whatever and say, gosh, why are you so different in  
9 Japan? Have you thought about why you don't inspect fuel  
10 cycle facilities?

11 DR. TRAVERS: In terms of a systematic approach to  
12 that, I would say that we don't have that, but we do carry  
13 out that sort of thinking in connection with all of the work  
14 that we do at IAEA and other places.

15 An example of that would be the need to establish  
16 transportation regulations. Right now the Commission is in  
17 the midst of rulemaking that will be necessary to align the  
18 transportation regulations in this country with the  
19 international community to establish free flow of trade.

20 COMMISSIONER McGAFFIGAN: But there is a statutory  
21 mandate to do that.

22 DR. TRAVERS: That's right.

23 COMMISSIONER McGAFFIGAN: Congress could pass a  
24 law telling us that we need to periodically look at foreign  
25 regulations, but I'm not sure that we want that.

1 DR. TRAVERS: Systematically, I would say that we  
2 don't dedicate a lot of resources to that sort of review.  
3 On the other hand, in connection with the interactions that  
4 do take place, we do that sort of thinking all the time.

5 And could we do more of it? Perhaps. But there's  
6 a cost to it.

7 COMMISSIONER MCGAFFIGAN: There's also a benefit  
8 if it brings us more into alignment and we save ourselves  
9 from making a mistake.

10 DR. TRAVERS: Well, another example of where I  
11 think we are trying to get a better understanding is the  
12 question of free release of materials, an understanding of  
13 where the international community is, generally, versus the  
14 sorts of reviews and considerations going on within the  
15 Commission right now.

16 COMMISSIONER MCGAFFIGAN: Let me just try to wrap  
17 up by asking three specific questions:

18 One has to do with the OSART report that Janice  
19 mentioned when she was dealing with Slide 12, which is not  
20 final yet, but which we have in the draft form. There are  
21 two recommendations -- or I think they're called suggestions  
22 to the NRC in the draft report that I'm sure will be in the  
23 final report.

24 One has to do with the adopting IPR-60 as part of  
25 Part 20. We got similar advice in the review conference on

1 the Nuclear Safety Convention a couple of years ago.

2 And then the second had to do with various  
3 emergency planning practices in this country where they  
4 suggested that international practice was ahead of us. Now,  
5 that partly may be the federal/state system in this country  
6 that may prevent us to some degree from adopting  
7 international best practice.

8 But when the OSART report is final, do you intend  
9 to report to the Commission on whether we should adopt those  
10 two suggestions and analyze whether we should go ahead?

11 MS. DUNN-LEE: Yes, we plan to do that.

12 COMMISSIONER McGAFFIGAN: How promptly?

13 MS. DUNN-LEE: That would be probably in the  
14 November timeframe.

15 COMMISSIONER McGAFFIGAN: The second -- and this  
16 may be Janice or maybe no one will know the answer -- but I  
17 saw a report recently that the Russians had decided that GAN  
18 Military was going to be responsible for the Northern Fleet  
19 cask safety, rather than the GAN that we deal with.

20 Do we deal with GAN Military at all? Has anybody  
21 peer-reviewed the GAN Military?

22 MS. DUNN-LEE: No.

23 COMMISSIONER McGAFFIGAN: And know whether their  
24 cask standards are up to snuff or whatever?

25 MS. DUNN-LEE: We do not interact with GAN

1 Military. That's a completely separate entity. We know of  
2 them, but it's really more a DOD linkage. We work with the  
3 commercial GAN.

4 COMMISSIONER McGAFFIGAN: Okay, does anybody --  
5 but they are a regulator?

6 MS. DUNN-LEE: Yes, they are.

7 COMMISSIONER McGAFFIGAN: Does the NASB work with  
8 them, or --

9 MS. DUNN-LEE: I think it's primarily the Defense  
10 Department, and maybe some of DOE and some of EPA.

11 COMMISSIONER McGAFFIGAN: Not a lot of a  
12 regulators at DOD that I'm aware of. The final issue is, on  
13 page 8, you mention the pebble bed modular reactor.

14 MS. DUNN-LEE: Yes.

15 COMMISSIONER McGAFFIGAN: And, you know, a fairly  
16 central issue -- I mean, they're talking about using a  
17 risk-informed and perhaps even a risk-based licensing  
18 process there. And a central issue where they are going to  
19 differ from everybody else on the face of the earth,  
20 potentially, is the lack of containment on that pebble bed  
21 modular reactor.

22 The Germans had containment, we had containment at  
23 Ft. St. Vrain. I understand General Atomic approached us in  
24 the early 90s about the possibility of no containment on a  
25 high-temperature gas reactor in this country, and they got



1 an answer from the Commission at some level that was  
2 unlikely to be approved.

3 And the Europeans are even stronger on  
4 containment. I remember the head of Framatone bemoaning the  
5 fact that as he was having to deal with the European  
6 pressurized reactor, the French and German regulators had  
7 imposed containment liners and corium spreaders. That's  
8 something that we had not done with the advanced designs.

9 So, there's -- if you take a risk-based approach,  
10 you could say that you don't need containment on a light  
11 water reactor, let alone a high-temperature gas reactor, but  
12 that's not consistent with the way the Europeans or we  
13 approach defense-in-depth.

14 So, how is this issue of the licensing approach in  
15 South Africa going to be brought together? It strikes me,  
16 you know, that one could claim, you know -- and the industry  
17 is off selling, and in fact, it's the South African industry  
18 itself selling this notion that we can build this reactor in  
19 a city without containment, you know, there, which they  
20 couldn't sell in Europe or the United States or Japan or  
21 whatever.

22 MS. DUNN-LEE: I think it's a little early to  
23 answer that question. We have views about these types of  
24 things.

25 We have really not engaged in a technical dialogue

1 yet. I think that there is recognition that there is  
2 benefit to that, and so I would say that it's a little  
3 premature right now to anticipate the outcome of that.

4 I think that they will definitely be the subject  
5 of technical discussions, and perhaps that would be the  
6 Office of Research that primarily plays in that arena.

7 MR. THADANI: I might just note, Commissioner,  
8 that I think there are very good reasons why we're not going  
9 forward with risk-based approaches.

10 And you're quite correct that in 1989 with the  
11 high-temperature gas-cooled reactor design, we did disagree.  
12 Our view was that you have to recognize that there are  
13 limitations in probabilistic techniques that one has to take  
14 into account, the real concept of defense-in-depth, the  
15 inherent gaps in our understanding in some areas.

16 So it was essential for us to make sure that  
17 people didn't think we were calculating ten to the minus six  
18 core damage frequency and saying, well, we really have -- we  
19 think that may be appropriate, that that may be the real  
20 underlying frequency, but there are lots of questions about  
21 what we know and what we don't know.

22 And it seems to me that if we do get involved  
23 here, it's going to be -- there will be a number of  
24 challenging issues. As Janice says, I think it will take us  
25 a little while.

1           CHAIRMAN MESERVE: Commissioner Merrifield?

2           COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman.

3 I'd like to first make a couple of comments to underscore a  
4 couple of names that have already surfaced today, the first  
5 one being Dr. Michael Cullingford. I'd like to second the  
6 plaudits that were given to him. He's provided some  
7 invaluable service in my Office, in my travels, and  
8 certainly I want to recognize that.

9           The other one is Clarence Breskovic, who is our  
10 webmaster for the International Programs Office. Not only  
11 was his involvement outstanding and hopefully he'll follow  
12 up with the NISX program, but he is also developing an  
13 ability to have many of our documents from international  
14 programs, making those palm-pilot capable and has been  
15 personally helpful to me in that regard.

16           So he is clearly a very good resource for our  
17 Agency in that way, too, so I certainly want to recognize  
18 that, and the outstanding support that all the international  
19 program staff have given to me, which I do appreciate.

20           I want to focus a little bit -- I was struck, in  
21 some of the visits that I have had recently -- we -- our  
22 Agency, as I have termed it and others have termed it  
23 sometimes, is sort of the Maytag Repairman of regulatory  
24 agencies, and has somewhat of a low profile.

25           I was somewhat surprised by the degree to which

1 some of our State Department colleagues, in countries in  
2 which we have bilateral agreements, still are not fully  
3 cognizant of the fact that we are separate and apart from  
4 DOE.

5 And I think that's an area where we perhaps may  
6 want to have some enhanced educational outreach efforts,  
7 particularly in those countries in which we have bilaterals,  
8 and countries which have nuclear reactors.

9 But it strikes me and I was struck today by the  
10 presentation we had, obviously we're a very technical  
11 agency, and the presentation we had was, I think, very  
12 positive in that it was very much directed toward the PBPM  
13 process and how we try to correlate what we're doing in our  
14 international program offices with the domestic benefits  
15 that we receive to our own nuclear power industry,  
16 correlating our research efforts with things that we need to  
17 be doing here.

18 I think we've done an excellent job of that. It  
19 was a terrific presentation. But it strikes me that part of  
20 what we do in international programs is also part of the  
21 softer science of international diplomacy where we relate  
22 with many of our international counterparts.

23 We have over 30 bilateral agreements, or bilateral  
24 arrangements with over 30 international countries.

25 And I guess the question I have out of all of this

1 is directed towards Janice. And that is, do you think, from  
2 a geographical perspective, and from a country-by-country  
3 perspective, we are appropriately balancing our  
4 international relationships, or do we have a tendency of  
5 focusing perhaps on those countries with which we have the  
6 strongest relationships?

7 I won't name them, but there are some that we  
8 visit more often than others, and do we need to take a look  
9 at the notion of perhaps making sure that our interactions  
10 with our bilateral partners aren't merely on a five-year  
11 basis, every time we sign a bilateral arrangement?

12 I just ask for some general comments in that  
13 regard.

14 MS. DUNN-LEE: Well, that's a very good question.  
15 I think we're hitting the world at about the right level.  
16 Let's not lose sight of the fact that as the discussion has  
17 occurred today, and as Commissioner Diaz has recognized, you  
18 know, that one of the huge drivers in our program is the  
19 domestic benefit and where do we get that. And that's  
20 fairly obvious -- from our major partners, Japan, France,  
21 Western Europe.

22 And so there is a lot to be gained with engagement  
23 there. That's not to say that the other rest of the world  
24 is not important.

25 But we have limited resources. We have to weigh

1 the different factors. We try to do the things that we can  
2 within the resources that we have.

3 But it's not always possible to engage like we  
4 would want to. There are problems all over the world in  
5 many countries that would love to have our help, our  
6 assistance. If not for anything else, for humanitarian  
7 reasons, it would be a good thing.

8 But our resource applications are very seriously  
9 considered here. I mean, we get down to very minute  
10 quantities of FTE expenditures, and because we're a  
11 fee-based agency, I think we have to take that into  
12 consideration.

13 So, while I agree that there are many parts of the  
14 world that I personally would like to see stronger, better,  
15 closer ties, it's not always possible because we have to  
16 have some prioritization of where we get the most for our  
17 money in our efforts. And so that's kind of the  
18 rationalization that is utilized.

19 COMMISSIONER MERRIFIELD: Do you feel comfortable  
20 -- obviously some of this is carried over into the  
21 international arena.

22 We, through IAEA and NEA, rely on our foreign  
23 counterparts to ensure that those nations with the stronger  
24 nuclear programs are able to provide assistance to those  
25 countries which have reactors or have facilities but don't

1 have the same level of resources.

2 Are you comfortable that through the IAEA and the  
3 NEA, that we are -- that those countries are being  
4 appropriately covered in the international arena, or is it  
5 useful for us to at least step back for a moment and look at  
6 that and seek our own judgment and determine whether through  
7 IAEA and NEA, we may want to see some assistance directed  
8 toward some that certainly don't have that level now?

9 MS. DUNN-LEE: The IAEA, especially, is a good  
10 starting point for culling out where help needs to be  
11 considered. I think that we use that as sort of the first  
12 point of reference.

13 I think that from there we go on to give further  
14 consideration of whether we can, in fact, provide assistance  
15 to other countries. This is really case-by-case  
16 decisionmaking. This requires Commission involvement,  
17 generally, even for any sorts of assistance.

18 We really are very conscientious about how we  
19 spend our resources. I hate to say that everything is  
20 driven by that, but to a large degree, it is, as a fact of  
21 life.

22 But I do believe that we ourselves in the Office  
23 of International Programs, don't have the resources there to  
24 just go out. I think that there's always our -- our antlers  
25 are out. We're receptive to the needs of other countries.

1 I think they're surfaced, they're evaluated, and they're  
2 proposed.

3 And it really lies with the Commission to decide  
4 whether we want to apply ourselves in those areas.

5 COMMISSIONER MERRIFIELD: Well, I know you have  
6 your new International Council, which I think is a good  
7 idea. I think one of the things that I would note is that  
8 obviously the Commission itself, the Commissioners, do  
9 engage in international travel.

10 And incorporating what we do, in a holistic sense,  
11 I think is important as well.

12 MS. DUNN-LEE: Absolutely.

13 COMMISSIONER MERRIFIELD: So as you all get  
14 together and consider those things, I think recommendations  
15 of how the Commission can use its own resources and its own  
16 travel time to most benefit the Agency would be helpful to  
17 know as well.

18 The second thing I want to get into is relative to  
19 the recent GAO report which you did reference in your  
20 overhead in the initial presentation.

21 In the Executive Summary, in the recommendations,  
22 they pointed to, as an example, difficulties that the  
23 Commission had had back in Fiscal Year 1997 and 1998 to  
24 obligate a half million dollars in accordance with a  
25 two-year statute imposed by Congress.



1           And ultimately those dollars were returned to the  
2 Treasury. In their recommendations, they recommended that  
3 we integrate the assistance activities of the Offices to  
4 implement nuclear safety assistance to avoid duplication,  
5 inefficiencies, and presumably to avoid a future occurrence  
6 of having to turn back money to the Treasury which had been  
7 obligated for specific purposes.

8           It would appear clear to me that one of your  
9 intentions of the International Council is to accomplish one  
10 of those very tasks, but I just wanted to get a sense of any  
11 further comments you'd have relative to that, and plans you  
12 have to follow through on the recommendations made by the  
13 GAO?

14           MS. DUNN-LEE: Right. Well, we took the report  
15 very seriously. The fact that we had a significant amount  
16 of money that was un-obligated, did not make me feel good,  
17 but, you know, spending government money on these types of  
18 programs is a very complicated process.

19           Our program has been one that has evolved over  
20 time. Primary responsibility for some of our major  
21 activities used to lie in the office with the Executive  
22 Director for Operations.

23           And then parts of it also lay with the Office of  
24 International Programs. You'll get varying stories as to  
25 why that happened, and I don't intend to get into that here.

1           But I will tell you that I have taken the report  
2 findings very seriously. We have taken steps to improve.

3           Dr. Travers and I have agreed to consolidate the  
4 program for management purposes in my Office. I personally  
5 am involved and feel very accountable for this.

6           We've informed the State Department, the DOE, and  
7 the USAID of this change in consolidation. I hold weekly,  
8 what I call FSU meetings to track activities, to find out  
9 where we're at on the expenditure of money.

10          I have a team leader that oversees the program of  
11 the former Soviet Union and Central and Eastern Europe. We  
12 have developed monitoring and tracking mechanisms within our  
13 Office to be sure that we don't get into this sort of  
14 situation again.

15          COMMISSIONER MERRIFIELD: Let's underscore the  
16 value of the foreign assignee program. I'm glad we were  
17 able to get some greater understanding of the level we have  
18 today. That was underscored for me by some recent  
19 discussions I had with Jukka Laksonna, who is the Director  
20 General of STUK, which is the Finnish Regulatory Authority,  
21 our partner internationally in Finland.

22          And he is a very product of that program some  
23 years ago. And so it is clear that our foreign counterparts  
24 do use that program to bring along their best and brightest,  
25 and I think it is a benefit to us and one that we will

1 continue to reap benefits from for a long time in the  
2 future.

3 Thank you, Mr. Chairman.

4 CHAIRMAN MESERVE: Thank you, Commissioner  
5 Merrifield. Let me just say on the foreign assignee point  
6 that I was intrigued by the questions that Commissioner  
7 McGaffigan had asked you about the reverse flow  
8 possibilities.

9 Although we seem to have had more reverse flow to  
10 France, I would just report that I have had some meetings  
11 with Mr. LaCoste in France, and he has very vigorously urged  
12 me to provide -- for the NRC to provide a staff person who  
13 would be available for a longer term than a couple of weeks.  
14 We customary have -- and this is a very high priority for  
15 him.

16 I'm curious whether you have received inquiries  
17 from other countries requesting that NRC staff be assigned?  
18 Or is there a sense that this is not something that we have  
19 done, and that it's not therefore something that people ask  
20 for?

21 MS. DUNN-LEE: Well, I'm aware that the Japanese  
22 regulatory agency, in particular, requested or we placed an  
23 NRC person there several years ago. This was Dr. Gail  
24 Marcus who spent about six months in Japan.

25 But that's not a regularly-occurring event. I

1 think when Mr. LaCoste had approached us about a long-term  
2 assignee, he had indicated that he was also making his  
3 people available to the regulatory bodies in the UK and  
4 state.

5 And so they are engaged in long-term assignees  
6 with those countries. Now, I'm not aware that the UK has  
7 approached us directly, but I would imagine that that would  
8 be sort of a place where we might consider such an  
9 assignment.

10 DR. TRAVERS: I don't know of any other inquiries  
11 except what we heard of today, actually, about the potential  
12 for Paraguay being interested in some NRC support on a  
13 longer-term basis that we would through IAEA, potentially.

14 But, of course, we do provide individuals to IAEA.  
15 In fact, we have encouraged NRC staff and we've leveraged  
16 some of our NRC resources, which are limited, in the  
17 direction of providing some long-term stays of several  
18 years, in fact, to both IAEA and NEA over in Paris, and  
19 we've used those agencies. Of course, we have influence by  
20 being on the Board of Governors and those things with the  
21 direction of the support that those agencies provide to  
22 other countries.

23 But we also have directly provided NRC staff who  
24 have re-employment rights and so forth to come back to NRC  
25 when their stays are completed.

1           But I'm not aware, personally, of -- maybe others  
2   are -- of requests that we've had from other countries for  
3   longer stays.

4           MR. THADANI: I may add that I did receive a  
5   request from Switzerland after the assignee left. I was  
6   asked if we could support someone from our Office going  
7   there for a period of six months or longer.

8           We've not acted on it as yet, as you know.

9           MR. COLLINS: It's the same for the Office of NRR.  
10   Switzerland would be the other alternative at this point,  
11   right.

12          CHAIRMAN MESERVE: I'd like to turn to Slide 14  
13   and just ask you a question about the Nuclear Information  
14   Exchange System.

15          I had understood, and I think you have reinforced  
16   today that the Y2K early notification system was a  
17   remarkable success in that people around the world really  
18   responded very well to an NRC initiative to provide  
19   information on nuclear events that might have been  
20   associated with the transition to the new millennium.

21          And I'm -- it seems puzzling to me, as someone who  
22   is a recent government employee, to have this be eight  
23   months later and to not have such a great success be one  
24   that's easy to implement on a more permanent basis.

25          Have there been some problems associated with

1 going forward with a broader --

2 MS. DUNN-LEE: Anytime you deal with an  
3 international, bilateral organization --

4 CHAIRMAN MESERVE: I suspected that was going to  
5 be the answer.

6 MS. DUNN-LEE: -- it's very difficult. I think  
7 actually we have made quite a bit of progress since we just  
8 transitioned into the year 2000. And the fact that we are  
9 moving towards a new system is quite monumental.

10 CHAIRMAN MESERVE: You don't have to wait till the  
11 next millennium?

12 MS. DUNN-LEE: Right.

13 DR. TRAVERS: Some of that coordination is  
14 occurring between the NEA and the IAEA, and that is part of  
15 the international issue that needs to be resolved.

16 CHAIRMAN MESERVE: This is a question for Mr.  
17 Virgilio who has not been under much fire this morning.

18 You talked about your activities in coordination  
19 with foreign countries. I'm think that you mentioned the  
20 nonproliferation area, but also the security areas.

21 I have been struck in visiting other countries to  
22 see a very different approach towards security on nuclear  
23 power plants that is followed in most other countries with a  
24 far less aggressive effort that is required in terms of  
25 protecting the facilities and assuring -- preventing acts of

1 sabotage.

2           Could you say a little bit more about the nature  
3 of the interactions you've had on this issue, what kind of  
4 responses you have had? I mean, this is probably an area of  
5 the type that Mr. McGaffigan mentioned, where we are  
6 presumably an outlier on the world scene in terms of the  
7 demands we make of our licensees in this area.

8           And that's not to say that's inappropriate, but to  
9 just observe that this is an area where we are out of sync,  
10 and I'd be curious in getting your perspectives on the  
11 issue.

12           MR. VIRGILIO: I'll do this while trying not to  
13 cross any lines that you established early.

14           CHAIRMAN MESERVE: Please do.

15           COMMISSIONER MERRIFIELD: Mr. Chairman, I just --  
16 not to -- it's not clear. I'm not necessarily -- I haven't  
17 had a chance to talk to you, but the last visit I had to  
18 Lithuania where they had an armored personnel carrier parked  
19 in their secured area.

20           And as you know, with our counterparts in South  
21 Korea, they have army units stationed very near their plant.  
22 So I don't know if you would want to necessarily leave the  
23 record that we're an outlier. There are some countries that  
24 have different security requirements than we do.

25           We have very vigorous security requirements,

1 clearly.

2 MR. VIRGILIO: On a continuous basis, and then  
3 periodically, we sit down and document and brief the  
4 Commission. We look at what we call the design basis  
5 threat. We look at how the environment, the threat of the  
6 environment is internationally and nationally, and whether  
7 our facilities are protected appropriately against that  
8 threat.

9 At the last semiannual briefing of the Commission,  
10 there was much discussion along these lines as to what's  
11 happening internationally and how do we compare? You have  
12 to look at that, both at comparing the threat and then  
13 comparing the level of protection, both, in order to do this  
14 benchmarking type assessment.

15 We're in the process of doing that work now. We  
16 will be reporting back to the Commission in the very near  
17 future as to the results of that assessment.

18 CHAIRMAN MESERVE: You could defer it until then  
19 till we understand the nature of the information.

20 MR. VIRGILIO: Yes.

21 COMMISSIONER MERRIFIELD: Mr. Chairman, just to  
22 add on, I'd be particularly interested in the report about  
23 Canada, which is just a lake away in many cases, and has  
24 wildly different security rules from us.

25 MR. VIRGILIO: We will include Canada.



1           CHAIRMAN MESERVE: I have a particular interest in  
2 MPC&A activities, some activities I did before I came here.  
3 And as you know, we do now have an MOU in place with DOE for  
4 activities in Russia.

5           And I would be curious if you could give us a  
6 quick update on the status of the activities that are  
7 underway or anticipated under that MOU.

8           MR. VIRGILIO: We have just recently signed the  
9 interagency agreement. We had DOE sign several months ago.  
10 We signed, I think it was July 7th, to continue the  
11 cooperation.

12           Basically it's with Russia, the Ukraine, and  
13 Kazakhstan. Our interest is trying to build their  
14 regulatory infrastructure to ensure that they provide  
15 appropriate levels of protection, and also to ensure that we  
16 transfer training and knowledge and skill abilities as well.

17           So it's just starting up again. Again, we signed  
18 on the agreement on the 7th of July, so we don't have much  
19 progress to report after basically a two-year hiatus as a  
20 result of not having been able to negotiate that agreement.

21           CHAIRMAN MESERVE: So at this point, is there  
22 anything specific that's been scheduled?

23           MR. VIRGILIO: Continuing meetings. I think we  
24 have a number of meetings, and we'll be starting the program  
25 up again in the very near future.

1           To go to Commissioner Merrifield's question, if  
2   there is a bias from the NMSS perspective in where we do  
3   apply our resource, it tends to go to the former Soviet  
4   Union in this particular area. And that's as a result of  
5   the economic conditions that we see over there and the  
6   events that are occurring involving loss of control of some  
7   of the materials.

8           So it's almost risk-informed when you think about  
9   how we apply approach. It's what can happen, how likely is  
10   it, and then what are the consequences? And so in this  
11   area, we're driven to apply more resources toward the former  
12   Soviet Union countries than in other areas.

13           CHAIRMAN MESERVE: Good. That's all of my  
14   questions. I would like to thank you all for a very  
15   informative briefing. This is an enormously important area,  
16   although it does not benefit from significant amounts of  
17   funds. It is one that I think is central to the  
18   effectiveness of our Agency and to the importance of our  
19   fulfilling our obligations.

20           With that, we're adjourned.

21           [Whereupon, at 11:15 a.m., the briefing was  
22   adjourned.]

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