## UNITED STATES NUCLEAR REGULATORY COMMISSION BRIEFING ON OFFICE OF INTERNATIONAL PROGRAMS (OIP) PROGRAMS,

## PERFORMANCE AND PLANS

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THURSDAY

JULY 27, 2006

9:30am - 11:00am

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The Commission convened at 9:30 a.m., Dale E. Klein, Chairman,

presiding.

NUCLEAR REGULATORY COMMISSION:

DALE E. KLEIN, CHAIRMAN EDWARD MCGAFFIGAN, JR., COMMISSIONER JEFFREY S. MERRIFIELD, COMMISSIONER GREGORY B. JACZKO, COMMISSIONER PETER B. LYONS, COMMISSIONER PRESENT:

JANICE DUNN LEE, DIRECTOR OFFICE OF INTERNATIONAL PROGRAMS MARTY VIRGILIO, DEPUTY EDO MATERIALS, RESEARCH, STATE & COMPLIANCE PROGRAMS

1	P-R-0-C-E-E-D-I-N-G-S
2	CHAIRMAN KLEIN: Good morning. It is a pleasure for me to be here today.
3	I think most of you realize that this is my fourth week of school, so this is an exciting
4	time to be at the Nuclear Regulatory Commission. I think the next five years should
5	be exciting, not only for us, but for the international community as well.
6	So we will hear today about the international programs. I think our
7	collaboration and the leadership that the Nuclear Regulatory Commission provides
8	in an international forum has been well recognized, so it is certainly good to hear
9	about our programs today.
10	So today, our briefing will give us an annual update on the major international
11	programs. This supports both our domestic program as well as our broader domestic
12	international interests.
13	It is my understanding that this program has increased over the years, and
14	I think it will probably continue to do that as the world looks at increased nuclear
15	power generation. It also means that we have to make sure that we continue to have
16	safe and secure programs, and this is of interest not only to the United States, but to
17	the international community.
18	So the Commission looks forward to the staff presentation today to hear
19	about our current and future programs. Any comments from our
20	COMMISSIONER MCGAFFIGAN: Mr. Chairman, I'm going to do something
21	a little bit out of order, which is to welcome you on behalf of the Commission and
22	staff. We had an adjudicatory affirmation meeting yesterday, but almost nobody ever
23	attends those, so I held off until today.
24	I do want to tell you, I'm tremendously impressed by you in your first four

weeks on the job. I think you are immensely qualified to lead NRC during the coming

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times that we're going to have. They're going to be challenging times. Former 1 2 Chairman Diaz always used to try to categorize me as the pessimist on the 3 Commission. I always tried to correct him to say I was the realist on the Commission. But however you characterize folks, the former Chairman Diaz left a few issues for 4 5 you to deal with. Not all problems have been solved. I'm sorry to let you know that. 6 You're going to preside over the greatest demographic shift in NRC's history, with the 7 loss of a large number of very experienced staff and the need to train larger numbers 8 of incoming staff.

You're going to preside over the largest increase in NRC's workload in its
 history. We have got a few other problems -- FISMA, office space -- that will keep
 you fully occupied.

12 Together, I think we can meet those challenges, and I pledge to you that I, 13 my fellow Commissioners, and the staff will do everything we can to make your 14 tenure a successful one.

CHAIRMAN KLEIN: Thanks. I appreciate those comments, Commissioner
 McGaffigan.

17 COMMISSIONER MERRIFIELD: If I, Mr. Chairman, may make a comment: 18 I think Commissioner McGaffigan has gone into great detail in welcoming you. I won't 19 try to top it. I will say that I would concur with his comments, for the most part.

One of the things that you will you find is that on either side of you, you will have two members who is will frequently and politely disagree with certain elements of the other's statement, one of which is, as Commissioner McGaffigan did correctly repeat, that former Chairman Diaz did refer to him as the pessimist on the Commission. Given his own claims, I have to certainly claim, in the opposite stance, that I think I'm a realistic optimist on the Commission. Needless to say, we can 1 quibble with these things going forward.

There is a lot of work ahead of us. I think we are, as a Commission as a
whole, committed to continuing to oversee the change in this institution and make
sure it is meeting its safety mission in the way that the public expects and that the
Congress anticipates.
So I look forward to our continuing to serve together. We have a lot ahead
of us, and it's something I think jointly we all can work on. So I thank you.

8 CHAIRMAN KLEIN: Thank you.

9 With that, let's proceed forward. We will hear from the Director of our 10 International Programs, Janice Dunn Lee, and then later from Marty.

11 MS. DUNN LEE: Thank you very much for that introduction. I'm very

12 pleased to be here today. As you said, with me is Marty Virgilio, who is the

13 Executive Director for Operations for Materials, Research, State and Compliance

14 **Programs**.

15 The Commission's international program today is more than ever the result 16 of a closely coordinated effort across the entire agency. Our joint presence here 17 with the Commission signifies this unified approach.

18 While I will present the bulk of today's briefing, I would like to note at the 19 outset that this is your first public meeting, and I welcome you to this. I'm happy that 20 you're here, and I hope that this introduction into the myriad of NRC's international 21 activities will be useful to you as you start your tenure here.

Today I will discuss the NRC's international activities, specifically, the accomplishments of the last year and the challenges ahead for FY 2007. The overarching goal of our program is to help the U.S. Government collaborate with

national and international civilian nuclear regulatory programs to achieve,

commensurate with its risks, appropriate levels of safety, security, and emergency
 preparedness.

As the Commission and the staff know from its own international interactions, the NRC is considered the premier nuclear regulatory authority in the world, and its views are actively solicited and copied. It is also true that through these interactions, NRC is influenced, in turn, and learns from the experiences of others.

8 For this ongoing interaction to be effective and efficient, it requires 9 Commission and management leadership, skilled and engaged staff, sustained 10 funding, and the ability to set priorities and to manage complex programs in a 11 dynamic environment.

To set the stage for my presentation, I would briefly like to outline the roles of the NRC's various offices in formulating and implementing the NRC's international programs. And I do this really for the edification of Dr. Klein, since this your first sort of introduction to it.

Under the Commission's direction, the implementation of our international
 efforts is jointly led by the Office of International Programs and the Executive
 Director for Operations.

The Office of International Programs, reporting directly to the Commission, provides policy guidance to the program offices, is responsible for the agency's import and export activities, carries out the day-to-day interactions, with bilateral and multilateral partners, implements certain bilateral assistance programs, and supports the Commission in the planning and execution of its international activities. The EDO, through the program offices which report to it, provides technical advice and expertise as NRC implements U.S. Government legal obligations and 1 participates in bilateral and multilateral activities, including joint research programs.

As a result of the close coordination among OIP, the EDO, and program

3 offices, NRC has maintained a position of influence, both within the U.S.

4 Government interagency process and with our international counterparts.

5 I am proud to note that the staff embraces the Commission's demonstrated

6 leadership in international activities and the fact that we have taken a leadership role

7 in the world in nuclear safety and security matters.

8 Let me begin by briefly describing the major international program

9 accomplishments over the last year, recognizing the success of our ability to lead

10 and influence.

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11 For consistency, I will bend these activities in the categories which are used 12 now agency-wide, allowing us to systematically account for how we spend our

resources and how we plan, prioritize, and budget for the future.

14 Our program consists of export/import licensing, treaties, conventions and 15 legal obligations committed by the U.S. Government, bilateral activities, multilateral 16 activities, and research cooperation.

17 NRC's ability to shape and guide the U.S. Government and its international

18 partners is most clearly demonstrated in the field of export and import licensing. In

19 support of the U.S. Government's commitment to implement the IAEA's Code of

20 Conduct on the safety and security of radioactive sources, the Commission

approved expedited rulemaking. I would like to right now personally thank

22 Commissioner McGaffigan for his leadership in this activity, as he encouraged and

helped create the momentum which placed the U.S. Government in the forefront of

the world in implementing the Code.

25 Staff efforts in the development of the National Source Tracking System and

outreach to Agreement States, industry, and other stakeholders have ensured input
 and understanding to the new regulations. As a result, the United States has been
 among the lead in this important effort.

The staff continues its efforts to ensure consistent implementation of the rule. There are unique challenges in this effort, from developing a common understanding of consent and notification, and acquiring sufficient knowledge of other countries' regulatory infrastructure to make licensing determinations. I would like to note the close attention and support of Commissioner Jaczko to both the licensing and source tracking arenas as he strives to ensure that efforts

are consistent with those of our international counterparts.

11 In spite of these challenges, the Commission's goal of ensuring

12 uninterrupted, legitimate commerce, while enhancing security, is being achieved.

13 Since December 28, 2005, issuance of the new rule, the staff has authorized over 60

14 licenses for risk-significant radioactive sources.

15 In addition, the staff has processed almost 100 licenses, including two

16 high-profile, highly enriched uranium export cases, a license to export a nuclear

power reactor to China, and issued byproduct material export licenses for the first

18 time to Libya and India.

19 The U.S. Government has committed itself to a variety of legal instruments,

and relevant Executive Branch and independent agencies are tasked with

21 implementing these obligations.

I will next discuss several significant activities in FY '06 which required legal,
 political, and technical knowledge, dedicated resources, and close coordination with
 NRC's sister agencies. And I would like to note at this point, there are members of

our sister agencies in the audience today, and I wanted to welcome them.

NSIR provided technical expertise in the U.S.-led effort to amend the 1 2 Convention on the Physical Protection of Nuclear Materials. The ratification package 3 for the revised convention is being prepared by the Department of State. In the meantime, NSIR is taking a leading role within the U.S. Government in parallel 4 5 efforts to revise the IAEA Information Circular 225, Revision 4, which establishes 6 guidelines for countries to implement the CPPNM. NSIR is also working with the 7 interagency to ensure consistency within the family of IAEA security documents. 8 Also noteworthy are the multiple IAEA related safeguards activities 9 underway. For example, while the Executive Branch and Congress consider the 10 legislative package for the additional protocol for the agreement between the United 11 States and the IAEA for the application of safeguards in the U.S., NSIR's staff has prepared the requisite rulemaking in parallel with the Department of Commerce and 12 is working with licensees, which will report their activities under the additional 13 14 protocol. The staff is also working with the IAEA to prepare the new Louisiana 15 Enrichment Services facility for selection of IAEA safeguards. Our close 16 17 coordination helps to ensure that if LES is selected, the facility is constructed so that the information and access needed for implementing state-of-the-art processes are 18 built in. 19 20 In April of 2006, the Office of Nuclear Material Safety and Safeguards represented the Commission at the triennial review meeting for the Joint Convention 21 on the Safety of Spent Fuel Management and the Safety of Radioactive Waste 22

23 Management.

The Executive Branch turned to the NRC for both expertise and leadership,
 with NMSS's Deputy Director Margaret Federline delivering the U.S. national report.

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Let me also acknowledge NRC's continued support for two conventions which we hope to never have to use but which prepare us to respond in case of a nuclear-related event. These are the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency.

OIP and NSIR have ensured that the capabilities and activities needed to
 satisfy NRC commitments are incorporated into NRC's incident response program.
 These capabilities were most recently used in October 2005, when NRC shared its
 experience in preparing for severe weather events with our Mexican counterparts as
 tropical storm Stan approached the Laguna Verde nuclear power plant.

In March 2006, NRC concluded a nuclear safety technical exchange
 agreement with Ukraine, which put our 15-year relationship on a formal, regularized
 basis. We are now working on a similar arrangement with the Russian Federation
 and Bulgaria, which we help to complete in time for signing at the upcoming IAEA
 general conference in September.

This will bring our total number of agreements to 40 for technical information exchange. The completion of these agreements signifies a major step towards a more mature relationship and less of one of assistance.

NRC's program of cooperation with countries with mature nuclear programs
 is continuing, as well. A key leadership activity has been the international rollout of
 NRC's security assessments, most recently, through high-level briefings with
 selected countries.

This program is a result of a two-year planning and coordination effort. The Commission has also supported foreign counterpart observation at force-on-force exercises with licensees and the sharing of technical tools, including modeling, with various countries. The response from these briefings and interactions has been
 extremely positive.

The major program offices continue to regularly engage with counterparts in France, Finland, Taiwan, South Korea, and Japan, to discuss operating experiences, power up-rate process, the status of risk-informed regulation, and construction and inspection programs. These exchanges are widely supported because the information received from our counterpart organizations has often had direct benefit to our domestic program.

9 In 2006, our international activities expanded as a result of the Commission's authorization of funding, specifically for bilateral nuclear safety 10 exchanges. Funds have been used on several fronts to broaden NRC's cooperation 11 with India in support of the Administration's initiative, including our participation in 12 negotiating the Peaceful Uses of Nuclear Energy Agreement, to fund radioactive 13 waste regulation work in Irag, and also to develop a program of support to Georgia 14 and Azerbaijan in reviewing the legislation and regulations, training staff, and setting 15 16 up regional offices.

With regard to multilateral activities, NRC primarily works with the IAEA
 Nuclear Energy Agency. Over the past year, the staff has been fully engaged in
 supporting the work of the IAEA's Office of Nuclear Security, from reviewing its five year action plan, to development of international guidance, to participation in
 assessment missions.

In this regard, NSIR's staff has helped to refocus IAEA documents on the security of sources, design bases and insider threats, sabotage and security of transportation. In the safety area, NRR and most notably, Frank Gillespie, led the successful, several-year effort in the study of license renewal, an activity which will

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1 be sunsetted at the IAEA general conference this September.

The Commission should be proud to know that we set the model for license renewal through this activity for the rest of the world. Similarly, NRC influence came to the fore in the December 2005 meeting on the IAEA Code of Conduct on the safety of research reactors. NRC staff, in close interagency coordination, achieved consensus on refocusing the meeting from reporting, as done in the Convention on Nuclear Safety, to finding an effective means of sharing information through existing agency activities.

9 The staff's contribution the U.S. review of the IAEA's safety fundamentals 10 document was key to presenting a cogent analysis and consensus path forward.

11 This document is one of the cornerstones of IAEA's guidance to member states.

12 And, through the leadership of Marty Virgilio, on the IAEA Committee on Safety

13 Standards, NRC developed a consistent message, which kept the focus on effective

and efficient practices in nuclear safety.

As part of its continuing activities in support of the work of the NEA, senior staff have emphasized greater coordination prior to and after attending NEA meetings. Research is leading an effort to ensure NEA activities support the greatest benefit to NEA member states and the U.S.

OIP also led the effort to have a U.S. official head the NEA Steering
 Committee, which will enable the U.S. to retain a leadership role in this important
 organization.

22 Staff has also coordinated the initial phase of the multinational design 23 approval program with the NEA. As the MDAP secretariat, NEA hosted a meeting of 24 ten countries in June of 2006 to roll out Stage 2. Stage 1 is also well underway, with 25 bilateral meetings with France and Finland. There are also a number of multilateral activities not encompassed by either
 the IAEA or the NEA which we follow because it has potential impact on U.S.
 regulatory programs.

In July, 2005, senior staff had their first meeting with representatives of the
European Commission, which focused on safety and security initiatives. The
reciprocal EU visit to NRC just happened yesterday, and there were staff discussions
on safeguards practices in the U.S.

8 NMSS staff has also worked closely with the International Commission on 9 Radiological Protection to ensure that the latest ICRP recommendations have 10 practical application. At the end of August, the NEA and the ICRP, with NRC 11 participation, will co-host here in Rockville one in a series of three conferences to 12 address the latest ICRP recommendations.

13 One crowning moment demonstrating NRC leadership is our

recommendation for and execution of the first IAEA-sponsored senior nuclear

regulators conference in February in Moscow. This activity was deemed so

successful that it will be convened on a triennial basis.

As the Commission heard in a briefing by Research in January of 2006, NRC's program of approximately 90 bilateral and multilateral agreements with 22 countries enables us to have access to state-of-the-art facilities and to cooperate with counterparts in cost-saving programs.

One example of a successful program is the Holden Reactor Project. In addition to a broad range of research findings, a major benefit of participation is access to facilities not available elsewhere. Since its initial startup, the Holden boiling water reactor has been progressively updated and has now become one of the most versatile test reactors in the world. The NRC uses products and information generated by the reactor when developing analytical tools and as the
 technical basis for certain regulatory positions.

Research staff is also taking a fresh look at existing programs to ensure that they meet the NRC's strategic plan goals. The staff is mindful of the benefits gained from participation in bilateral and multilateral research efforts, and at the same time NRC is setting priorities for participation in the many research forums, both here and abroad.

8 We also would like to take a moment thank Commissioner Lyons for his act 9 of support for a robust research cooperative program. Staff has formed a close 10 working relationship to ensure that all agreements are initiated and maintained in a 11 timely fashion. NRC intends to send the Department of State a proposal that allows 12 for increased efficiency, both at NRC and State, so that the renewal process for 13 agreements is expedited.

I would like to briefly summarize policy issues that may be brought to the
 Commission for its consideration over the next six months to a year. In the export
 licensing area, based on past events, staff believes that there will be between three

and five licensing actions for which we will have only short notice and fast

18 turnaround.

19 Excuse me. I think my briefing is out of order. I'm sorry.

20 CHAIRMAN KLEIN: If yours is out of order, so is ours.

MS. DUNN LEE: Maybe it's not. Okay. I think we're on track. I could not remember if I had talked about another area. Okay.

23 So these are the anticipated policy issues that are on the horizon. In the 24 export licensing area, based on past events, staff believes there will be between 25 three and five licensing actions for which we will have only short notice and fast 1 turnaround.

The staff is continually working with other agencies to limit the number of these requests. In the area of legal obligations, the staff notes that two major peaceful use agreements of the Section 123 agreements that are currently under negotiation with India and the Russian Federation. The Commission will be called upon to review and comment on the terms and conditions of these agreements and other policy considerations.

In the area of bilateral activities, the ongoing rollout of security assessments
will pose significant procedural, scheduling, and logistical uncertainties.

In the area of multilateral activities, staff notes that programs and processes
 at both the IAEA and NEA entail challenges. The Commission has supported the
 work of both agencies but is aware of deficiencies in the timely receipt of documents
 and the need for early interagency coordination and advance notice of meetings so
 that staff can budget appropriately to participate.

A further challenge will be preparing the NRC to handle MDAP-related
 requests from foreign counterparts from both budgeting and resource standpoints.

Finally, in the area of research cooperation, the Commission will be asked to provide guidance on future projects and staff participation based on NRC's limited resources.

Let me now address the longer-term challenges ahead. In preparing for this briefing, we asked ourselves how the next year will be similar to or different from the previous year and what future Commission decisions will arise from ongoing activities.

Throughout this briefing, I hope to demonstrate that this relatively small agency exerts a powerful presence both in the U.S. and abroad.

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I spoke of our leadership role in the world in the implementation of our 1 2 bilateral and multilateral activities. Leadership has another attribute: being chosen 3 by peers to lead. To be chosen, one must have exhibited the ability to listen, to learn, to understand, and to act upon the concerns of others. 4

5 Our biggest institutional challenge is the capacity to acknowledge that we do 6 not have all the answers. While we may be the premiere nuclear regulatory agency 7 in the world, we do not have the current experience in many areas, such as 8 regulating construction, licensing new designs, and regulating recycle facilities.

9 Like the rest of the world, we have embarked on new approaches to security to nuclear power plants and radioactive sources in quantities of concern. There are 10 11 new countries with which we will be requested to interact, and that too will require listening and learning. 12

The staff will continue to work with the Executive Branch to advocate 13 increased adherence to the Code of Conduct on the safety and security of 14 radioactive sources and to develop an international consensus on its

15

16 implementation.

17 This is an area in which we must proceed with diligence but also with caution because the uninterrupted supply of radioisotopes for medical and industrial uses 18 directly impact the quality of human life. 19

20 The Commission, following the lead of Commissioner Merrifield, has

requested that staff work with the Interagency to establish a role for the Institute of 21

Nuclear Power Operations to participate in the convention on nuclear safety. This 22

will enable industry to provide its prospective on the U.S. national report, and in the 23

discussions at the 2008 review meeting, as is done in many other countries party to 24

CNS. 25

In our bilateral activities, the agency must prepare itself and plan for
 increased international information exchanges in the area of new reactor
 construction and licensing.

The prioritization of this anticipated international work will require not only Commission guidance, but also extensive staff coordination. A good example of where NRC can benefit from technical exchange will be if China decides to construct and operate an AP-1000, as that will undoubtedly predate any decision to build in the U.S.

I note the developments of a few new countries that may lead to requests for
 general technical information exchanges. For example, Turkey is making a third
 attempt at starting a civilian nuclear power program. The Turkish regulatory agency
 has contacted OIP to inquire about possible assistance.

Libya has expressed a special interest in setting up an independent 13 14 regulatory organization. The Department of State has contacted OIP to inquire whether NRC could assist in the development of a regulatory infrastructure. 15 Recently, the German regulatory authority formally invited NRC staff to 16 17 consider working for an extended period of time. Such staff exchanges may appear to be problematic as managers consider current workloads. However, if 18 implemented, the knowledge gained will provide us with a cadre of staff with 19 20 specialized experience that will benefit NRC as it positions itself for the future. In the multinational arena, the Global Nuclear Energy Partnership, GNEP, 21 will test NRC's ability to develop legislation, revise regulations, understand new 22 technology, and license first-of-a-kind facilities. It will also require interacting with 23 many diverse countries on both a bilateral and multilateral basis. We anticipate that 24 interactions will continue to increase, assuming that there will be new construction of 25

1 nuclear power plants in the U.S., even absent the GNEP.

This is an opportunity for the staff at all levels to be exposed to counterpart regulatory programs and should be viewed as beneficial for the development of the individual, of the agency, and of the U.S. energy program as a whole.

5 Another area of concern is that of continuing to monitor and actively engage 6 in the development of the IAEA's program in safety and security. The NRC must 7 remain vigilant in assuring the independence of compliance with legal obligations 8 from unilateral incorporation of the IAEA safety standards, which are voluntarily 9 adopted.

10 While NRC accepts the desirability of developing international standards 11 with broad applicability, it does not accept the linkage between the safety standards 12 and demonstrating a successful safety or security program.

Another area that I have not touched upon is that of transportation security. The harmonization of regulations and control of transportation of nuclear materials affects commerce around the world, including in the U.S. While NRC does not have the lead in this area, it does have significant equities, which are ably expressed under the leadership of Bill Brach in NMSS.

Transportation issues require close interagency coordination to establish a
 single U.S. position, which takes time and resources to accomplish.

Let me also mention some management and resource challenges. In May 2006, Secretary of State, Condoleezza Rice, wrote to all U.S. Government agencies 22 to request that they place a high priority on ensuring that the United States is 23 equitably represented on the staffs of the United Nations and other international

equitably represented on the staffs of the United Nations and other international

organizations.

NRC's ability to place people at multilateral organizations and provide

funding for those organizations will enhance its ability to influence them. Recently,
we have been made aware of a number of positions at the IAEA, some of which are
in the senior ranks, in which the NRC issues could be brought to a fore. We should
be prepared to act on these opportunities.

5 Another possible avenue for NRC to support Secretary Rice's initiative is to 6 consider creating an international career path within NRC. This will create depth and 7 breadth in the technical staff to meet future needs in all subjects. The staff would be 8 encouraged to apply for specific assignments, rotation, and opportunities to interact 9 with international counterparts, including working at organizations such as the IAEA 10 and the NEA.

11 The NRC would need to assure the individuals who participate in this 12 program and their international work would be put to good use upon their return to 13 the agency.

Similarly, we are looking at how best to replace others who have gone to work at the IAEA and NEA and are now interested in returning to the NRC. We have to demonstrate from the top down that we value the international experience.

I would also briefly note that our successful foreign assignee program has
 become a management challenge, as the agency struggles with finding sufficient
 space to accommodate a growing staff. Supervisors must also maintain an
 increased level of security awareness to ensure that assignees have a thorough on-

the-job training experience without compromising the NRC's more stringent

safeguarding of sensitive information.

NRC's international activities are prioritized within the current program and
 within a level budget. Prioritizing and strategizing are a challenge for any program,
 domestic or international. OIP and the program offices under the EDO, use a

1 number of tools to ensure that the budget reflects NRC's priorities.

In closing, I wish to note that the prosperity of modern business in the nuclear arena is contingent upon successful globalization. No matter how large your domestic market is, it is dwarfed by the global marketplace. To neglect or reject the opportunities in the international arena is, in essence, to reject the very future of our business.

NRC has demonstrated leadership in a wide variety of international forums,
 and we need to continue to do so, to collaborate with our counterparts and to
 participate in new developments in which we can affect others and which will, in turn,
 affect us.

11 This concludes my presentation, but let me turn to Marty Virgilio for his 12 remarks.

MR. VIRGILIO: Thank you, Janice. I would like to extend a good morning to
 Mr. Chairman and members of the Commission here with us today.

Part of my presentation will duplicate some of what Janice has already said, but I will try to get into a little bit more detail on some of those issues. The staff has continued to take actions toward improving the performance of our international programs, and what I want to highlight are some of this things that we have done just

19 over the past year since our last meeting with the Commission.

When I'm talking about our programs, I'm talking about some of the same elements that Janice talked about: the bilateral and the multilateral activities that we engage in; our cooperative research activities; some of the training missions that we participate in, as well.

24 What I want to do is talk about some of the areas where we've improved the 25 controls over those activities and, in fact, improved the quality of our products. I also want to just focus in on five areas that I believe will be policy issues
 that we'll be engaging the Commission around over the next several months to the
 next year.

First of all, focusing on actions that we have taken to improve our performance: The technical program offices -- and in this regard, when I talk about the major offices, I'm talking NSIR, NRR, Research, and NMSS. They have all increased their focus on prioritizing and scheduling work in the international arena and have increased their focus on the quality of the products and cost of the products that we are producing.

OIP and the program offices have been working very collaboratively to develop new measures for our operating plans, measures of success in the international activities, and templates for prioritizing work. And as Janice said, this is one of our challenges. We have a certain amount of resources and we have a lot of demands from the international arena. And we have to balance that and make sure that we are investing in the areas where we get the most benefit.

Other things that we are looking at is improving our time and labor accounting. As Janice mentioned, the resources that we are expending in this area have increased over the last several years, and it is important to know and manage those increases.

The next area is, we have taken a number of steps to improve the effectiveness of our international interactions. And we have broken it down into a number of steps. First, we need to make and we are making more choiceful decisions around where we participate. This goes back to the prioritization issue. We want to be careful and, again, choiceful about who we select to represent us at these international exchanges. There is a balance here, and in some areas this is an ideal opportunity to develop our staff, as Janice has said. In other areas, you want a more senior technical staff representative or senior manager to participate in the international activity. I think, over the last year, we have improved our performance in this area significantly.

6 Another area is, making sure that we have clearly-defined purposes and 7 objectives for each international interaction that we undertake and that the people 8 that are representatives are aligned to the Commission policies. And in that regard, 9 something that we have done, just a little tool that we've put into place, is what we call the pre-trip notifications. This is a wonderful tool for internal communications 10 because, 30 days before any traveler goes out on a trip, what we do is announce 11 who is going, why they are going, what's the objective of this trip, what are the 12 individual's roles and responsibilities? So it gets out to a wide distribution both within 13 the staff and on the Commission staff as well. It allows us to weigh in to make sure 14 that the traveler is aware of a particular issue that might be coming up or a particular 15 interest that any one of us might have and I know we do that. So I think that is 16 17 working very well.

Prompt feedback of information that we gather on the trips: We have now put in place quick-look trip reports. So within ten days after the traveler completes the trip, the expectation is, there is a quick-look report that's a page, a page and a half that sort of summarizes against what was sent out in the pre-trip notification. What did the traveler do? Were the objectives met? This has been a very good tool, as well.

The last stage of this is then taking that feedback from whatever interaction we have and incorporating it into our programs, which is something that I think we

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1 have done better at over the last year as well.

2 Now, I wanted to talk a little bit about some of the committee interactions 3 and the multilateral interactions that Janice spoke about, both at the IAEA and NEA. We have, I think, done a tremendous job of increasing our internal coordination 4 5 around our objectives in multilateral exchanges. I'll point to an example. When we 6 were working this year on the safety fundamentals, a document that IAEA has just 7 recently published -- and I believe it will be endorsed at the general conference in 8 September – it just could not have worked out better in term of coordination. 9 Janice was at the NEA steering committee meeting and made sure our 10 interests were known. At the committee meetings that we have on radiation 11 protection, transportation, waste safety, and materials safety, each of our committee representatives had the same issues, the same theme. So we went in with a 12 consistent set of comments, a consistent set of objectives. And when that document 13 came forward to the Commission on Safety Standards that I sit on, it was resolved. 14 They had pretty much endorsed and accepted all of our recommendations. So it 15 was a wonderful, well-coordinated and just an example of, I think, what we are doing 16 17 today, which is very different than I think we handled our international interactions as I look back three or four years ago. So that has gone very well. 18

Each of the IAEA committee representatives today is doing that. They are implementing what I would consider complementary strategies toward a given set of objectives that we define at the beginning of each year and as we go, as new issues emerge.

What we need, our challenges today, I think, with the IAEA, and in that forum, we still want to see better work plans coming from the IAEA to allow us an opportunity to plan, to strategize, to make sure that we're most effective when we

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1 engage with the IAEA.

9

We are also trying to urge IAEA into a more cooperative sponsorship around the IAEA standards, engaging organizations like ICRP, NEA, WENRA, the EU, getting that -- instead of fighting one another and arguing about positions or having contrary views out, to try to consolidate and have one view around international standards. Another area that we are working with the IAEA on is, what is the role of the IAEA standards when it comes to a well-developed member state like the United

programs, not a checklist or some document where you prescriptively benchmark
 against the programs.

States? In our view, it is a tool to be used to assess the effectiveness of our

Again, what we are trying to do here is focus on outcomes; make sure that the underlying interests are, in fact, satisfied. Parallel to these efforts at the IAEA, if we look at the NEA, our committee representatives there are in parallel

15 implementing some complimentary strategies towards some very specific objectives

that we have in mind with respect to those programs.

The first I would point to is the Committee on Nuclear Regulatory Activities, the CNRA. Our objectives here are to implement a recently approved operating plan that they have put into place, to now see that the value associated with increased discipline and focus on specific areas bears fruit.

If we look at the other major committee within NEA, that is the Committee on the Safety of Nuclear Installations. Their operating plan is nowhere near as mature as what we have on the other side of the house. So our efforts here are focused on leading and supporting the NEA and bringing that plan to the same level of maturity. So we have plans, focus, we know we're focusing on the highest priority areas at the

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1 CSNI.

Another issue for the CSNI, which is more of the research side of the organization, is to make sure that our sponsorship and international sponsorship and participation in the physical facilities, the research facilities, are the right areas to focus on, and that we are not inadvertently or even deliberately keeping facilities alive without good purpose. So those are our challenges and our focus areas at the NEA.

I just want to now focus on maybe five of what I would consider are near term policy issues, where we are going to be engaging the Commission and looking
 for your assistance and feedback. The first Janice mentioned is the International
 Commission on Radiation Protections recommendations. They are now in the
 process of consolidating all the advice that they have developed since the 1990's,
 ICRP 60 time frame, and formulating a set of recommendations.

In addition to this consolidation, what they are doing is, they are looking at
 the fundamental principles around justification, optimization, and dose limitation.

16 They are updating and enhancing those. They are also looking at updating the

biology and physics associated with radiation exposure and developing a framework

18 for an approach for protecting non-human species.

We are examining the bases very closely for these recommendations, and we are looking to see if they suggest that changes need to be made to our regulatory programs.

We will be sharing our views on the ICRP proposal within this next week coming up with the Commission, and that will set us up and hopefully get feedback from the Commission. We have an NEA-sponsored North American Forum. That's coming up here August 28th and 29<sup>th</sup>. Commissioner Lyons is going to be giving the

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keynote address at that forum. I'm going to be chairing it. It is going to provide us
an opportunity to engage with all the stakeholders locally. And this is, as Janice
said, one of three of these forums that they are going to have internationally, and
hopefully share our views, hear the views of others, and then help shape the final
recommendations that are due out sometime over the next year or so.

The second issue is very related to that. That's IAEA's safety standards for
protection against ionizing radiation and the safety of radiation sources. It's known
as the BSS.

9 The IAEA has begun a program, and what they want to do is start updating 10 the BSS. Again, they want to do this based on the safety fundamentals document 11 that I spoke of earlier, and they want to do it based on the changes to the ICRP 12 recommendations. Here again, we want to make sure that any changes that are 13 being made to the BSS, are based on sound science, because they will, in fact, have 14 an impact on our programs.

We have continued to provide IAEA comments on some of their security documents. I know Commissioner McGaffigan has been very engaged as we have worked on a document called Security of Sources, it was Tech Doc 1355, for those of you who have been engaged in this in the past. It provides – it's just a generic framework for the requirements that one might impose on the security and safety of radiation sources of the highest category, the IAEA categories 1, 2 and 3.

So that is a very important issue, and we will be bringing forward recommendations to the Commission on how to proceed on that probably within the next several weeks. That will be our first round of comments, and then that document will go out for member state review. So we will have a second set to comment, or opportunity to comment.

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The next area is the IAEA's Integrated Regulatory Review Service, the IIRS. The NRC has made a commitment to do a self-assessment in the reactor arena in this area. We will use the IAEA standards as a point of reference in assessing our programs. Again, we want to avoid that becoming a checklist against which we judge our programs. We are here looking at outcomes, looking at what the underlying interests are. And it will provide an opportunity for the NRC to assess our programs against those standards.

8 The last issue Janice mentioned is, we do need to look more closely with the 9 IAEA on the selection and implementation of safeguards. The first step is going to 10 be LES, and it's our understanding that the Director General now has that under 11 consideration as to whether they will impose safeguards and, if they will, whether it 12 will be as part of the base program or voluntary program.

Following that, we are going to have to look at the USEC enrichment facility, and following that, we will have the high-level waste repository and the GNEP

facilities to consider as well. All of these, I think, will present policy issues for which
 we will be needing the Commission's advice and guidance.

17 That's all I wanted to say about the program at this point in time. Let me turn 18 it over to Janice again before we respond to questions.

MS. DUNN LEE: Thank you, Marty. I just want to really take this time to note Marty's really active participation in the international area. His leadership has made a big difference, I think, in terms of how we coordinate with one another here at NRC. We have a much more disciplined approach. We are much more well coordinated, and he's very supportive of how we get to our priorities. So I want to thank him for his active involvement. Now we are ready to answer questions.

25 CHAIRMAN KLEIN: Thank you, Janice and Marty, for that update. One of

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the questions that comes up -- and both of you touched on it near the end -- is
coordination and communication. And I guess, Janice, the question for you is:
nuclear issues are really worldwide, as you know, even though we have no RBMK's
in the United States, the fact that there has been an accident with an RBMK has an
impact on nuclear worldwide.

How do you communicate safety issues, safety culture, on what works in the
United States, and then how do you communicate those issues with other countries
so we can take good practices that they have? How do you gather those, and then
how do you feed those into Marty's activities?

MS. DUNN LEE: Well, I think it happens regularly by our participation in all of these multilateral and bilateral activities that we do. It give us the forum to exchange information, to impart practices, to look for best practices. We come back, we talk with our staff, we try to inform the Commission of the things that we learn and how it might influence our regulatory program.

So it would really happen in these multilateral and bilateral activities, which
 are numerous. They go on every day and all around the world with nuclear
 programs.

We try to obtain efficiencies by participating in the multilateral fronts because 18 that is where a greater number of countries are able to gather together to benefit 19 20 from the information that is exchanged. But we really do treasure our bilateral assistance activities with the countries that we have similar programs and 21 philosophies, and we learn certain technical areas that they might be focusing on, 22 and it really helps to enhance our ability to address similar problems. 23 MR. VIRGILIO: Just to add: On a day-to-day basis, the IAEA has 24 established a forum for that notification, and to most of our desktops today, we get, 25

as events occur internationally, that information popping up. You will get an e-mail
 notice that there is an event. We take that information and respond immediately.

We think about, what are the impacts for our program. Similarly, events that occur in
the United States go up on that same database.

5 So on a day-to-day basis, for the fast-breaking events that have significance, 6 that is another area I would add to what Janice said, which is more programmatic.

MS. DUNN LEE: And I think our ability to communicated is better today than
it was three years ago. We have the ability to video conference almost immediately
if there is a need to exchange information. So I think there are tools that are
available now that enhance the ability to communicate.

11 CHAIRMAN KLEIN: Obviously, in a era of budgeting, we all would like more 12 money to do things. If you had a budget -- and I'll ask both of you the question – I'll 13 ask Janice first. If you had a budget increase, what is your number one priority?

MS. DUNN LEE: I think if we had a budget increase -- money is everything, okay? And it talks, and it talks big. And I think that's where we are a little bit

hindered in our ability to influence more. If we had more money, we could actually

make contributions to these big programs, such as the IAEA's security program,

18 where we have had a lot of focus.

19 I think we would be taken, not more seriously, but we would have greater
20 weight in terms of who's paying the bill. So I think that it would help our ability to
21 influence more.

With regard to staff, I think if we had more money, we would think about placing more people in these organizations, because it is all about money and people. And so I would say that's how I would address it.

25 CHAIRMAN KLEIN: Marty?

MR. VIRGILIO: Thank you, Chairman. I think we have to prioritize our 1 2 international interactions. There are trips that we do pass up on -- training 3 opportunities, meetings, exchanges, where we can give information and receive information. I would work us down further in the prioritization list because at some 4 5 point, we have to cut it off because we do have limited funds. Today, I think there is 6 a desire on the part of the international community to see us get more involved in 7 training and mission activities. They serve a benefit both looking outward and back 8 into the staff. And we do have to draw the line.

9 MS. DUNN LEE: One more thing I would say is, research is a pretty 10 important area in terms of, if we had more money, I think we could be more fulsome 11 in our support of some of these programs that are out there that we have to really 12 take hard looks at in terms of what benefit we are getting.

13 CHAIRMAN KLEIN: Commission McGaffigan?

14 COMMISSIONER MCGAFFIGAN: Thank you, Mr. Chairman. Janice was 15 being delicate there. I will always be a little bit more blunt. Congress, over the years, 16 because we are a largely fee-based agency, has tended to give missions to the 17 Department of Energy that arguably should have been given to us. We arguably

18 should be the lead agency because we are the lead agency domestically for the

19 safety and security of sources. Yet, Congress, through the Armed Services

20 Committee, have given a major role to the Department of Energy there. Clearly, they

can be very helpful, and clearly, we need to work together as the two agencies. But

DOE has all the money, and we have all the knowledge about how we actually

regulate domestic commercial activities in the source area.

MS. DUNN LEE: Be careful, we have DOE people in the audience..

25 COMMISSIONER MCGAFFIGAN: And they've heard me before. We

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1 worked out -- I think things are working out much better now. I commend

2 Commissioner Merrifield for his diplomatic skills in working with DOE. But that is the

3 delicate point. If Congress would just give us the money in areas where we have the

4 expertise rather than giving it to AID and having AID give us the money, or giving it to

5 DOE and having DOE sort of work with us, it would be nicer.

But that has not been the history. The history has been to give it to DOE.
So that's the non-delicate version.

I do want to say, in my brief time, that I think that we are infinitely better off
 today than when I joined the Commission in 1996. We really do have an integrated
 effort today, and I want to commend Janice and Marty. It has been consistently
 getting better.

12 You did not see the dark days when we sort of had a Director of International 13 Programs, who will remain unnamed, who sort of conducted the program on his own,

14 with relatively little discussion with the Commission and almost no information

15 systems about what was going on in international programs.

16 That day is long past us, and I think I see continued improvement.

17 Particularly, I see people around the audience -- Don Cool has been central on the

18 ICRP issue, and he's worked with ACNW. We're going to have a conference, and

19 I'm sure he is going to have a role in the conference in late August. We have been

20 consistently a little bit skeptical of where ICRP has been going, and deeply skeptical

when it comes to flora and fauna; skeptical in other respects. We have a sister

agency, OSHA, that is very interested in updating its archaic standards for

23 occupational dose that go back to --you know, ancient ICRP documents that were

promulgated in the 60's and OSHA's rules in the 70's.

And Don was, again, a person who constructed NRC's comments to OSHA

about how, if we are going do that, if we're going to update occupational dose
standards, which may well be reasonable -- DOE has talked about it, as well. We
might want to do it as a combined government.

We might want to update President Reagan's 1987 guidance first, then, 4 5 once we update the Presidential guidance, NRC, EPA, DOE, and OSHA could all 6 update their guidance. Every agency but OSHA updated their guidance to the 1987 7 President Reagan guidance. OSHA didn't, and so we have issues there. But Don 8 has been great, Cindy Jones, who I don't see in the audience, has done a great job 9 in updating the IAEA Tech Doc 1355, and she has been on the committee that has been doing the consultancy. She had a very good meeting. I guess we are still 10 11 looking for the result of that meeting to make sure it is consistent with what she thought was the result of the meeting, and we will see that very shortly. 12

But we have -- I think, sort of across the board, we do really have now an integrated effort that thinks about what we want to accomplish and then ties it back to our domestic regulatory responsibilities, not only for us, but oftentimes for the government as a whole.

17 In the area of transportation, which Bill Brach is in charge of, we have a law that requires us to update our standards consistent with the IAEA standards. We did 18 that. The Ninth Circuit just recently tossed out a challenge by certain groups to the 19 20 DOT and NRC rules that were promulgated in response to the last go around. So those are now on a firm basis. I suppose they could be appealed to the Supreme 21 Court. It doesn't seem likely. I'll stop there. We are in better shape. There wasn't a 22 question there. It was more soliloguy, but it's part of the education effort for a new 23 Chairman. Thank you. 24

25 COMMISSIONER MERRIFIELD: So in terms of – I want to start off with

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1	some comments. Janice, I appreciate your comment relative to INPO. Prior to the
2	Chairman joining the Commission, the previous Commission did unanimously
3	agree – I think it was unanimous
4	COMMISSIONER JACZKO: It was not unanimous.
5	COMMISSIONER MERRIFIELD: It was not unanimous. Sorry.
6	COMMISSIONER MCGAFFIGAN: Almost unanimous.
7	COMMISSIONER JACZKO: I'm not going to say who was the un-
8	unanimous.
9	CHAIRMAN KLEIN: I think even I know that answer.
10	COMMISSIONER MERRIFIELD: to a proposal that would allow INPO to
11	collaborate. This is something that our international counterparts urged at the last
12	convention. I think your staff is working hard with our counterparts at State and
13	elsewhere to make that happen, and I look forward to our being able to coordinate
14	with INPO to have a robust presentation at the next convention.
15	In terms of rotational assignments, Janice, you talked a little bit about the
16	need to make sure we do provide those opportunities for our staff.
17	Just a comment on my part. I do think, while I appreciate, Marty, your
18	comment about the need to place appropriate senior folks in various positions, I do
19	want to make sure that we are not erring too much on that side. There is a general
20	tendency to have folks who are closer to their retirement than nearer to it participate
21	in those. I do think we need to have appropriate opportunities for younger members
22	of our staff to do those rotations, as well.
23	Related to our international counterparts, I do think it is very helpful. We
24	have trained a number of regulators around the world. I forget the last count, but I
25	think it was over 600 folks that we have hosted over the years. We do have some

pending requests, I know, from Spain, Germany, Korea and Japan. For my part, I do
think we need to be open, in particular to countries which have developing programs.
The aforementioned group obviously has robust programs, and we certainly want to
provide bench markings opportunities and learning opportunities for them, but there
are a lot of countries, some of which you mentioned, Janice, where I think we do
need to provide opportunities for the emerging folks.

7 In terms of a comment you made on slide 11, Janice, relative to some of the 8 timing, the short turnaround licensing actions, I do reflect on a discussion I had with 9 Dick Stratford a couple of months ago at this point. I think Dick was unaware to the 10 degree to which the Commission was being given some very short turnaround times by his staff. My hope is -- and certainly, if we've got State Department folks sitting in 11 the room, I hope we can resolve that. The Commission deserves an appropriate 12 amount of time to review those requests, and Dick agreed that a request for 24-hour 13 turnaround time for a five-member Commission, it seems to be to be personally 14 inappropriate. 15

Marty, turning to you, I appreciate the discipline that you have talked about in focusing on how we deploy our activities, both on a Research basis and on an NRR basis. I know you are responding to the desire of the Commission for more robustness in the planning of those activities and the reporting of that.

My concern is that we not overcompensate in that regard. We learn a lot from our international counterparts. Janice mentioned the need we will have to learn relative to new reactor orders, a lot of the inspection work we have not done on new reactors in a long time. Certainly on the research front, I think we have all, particularly Commissioner Lyons, made comments about the need to really

understand what is going on internationally in the research arena.

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And finally, I think we have to be very careful about simply picking topics that we are going to be involved with because we can put our finger on a demonstrable return on investment. This is something that we can certainly use and measure as to our program. I think there's a lot of occurrences in which we have a lot to share internationally, and we should do that.

6 There are also cases where we may have a particular given issue that we 7 feel resolved on, but a lot of activity in international codes could influence where 8 that's going to go. If we are not there, we could see a blowback on that later on.

So I just want to have you sort of comment on some of that and give me a
 better comfort level that we are looking at this in a more balanced and harmonized
 way.

MR. VIRGILIO: We are. I didn't mean to come across as being prescriptive about cost/benefit on each trip or each international activity that we take. We recognize that, in some of the engagements, we are well past this. We have developed and implemented our programs, and there is something to be given. And then we also realize that -- we are not so arrogant as to go forward without recognizing that we have a lot to learn.

So we do try to – again, it is the prioritization issue. At some point, 18 resources do limit our ability to engage in all the areas where we would like to 19 20 engage, but while we are putting discipline in the process, we are looking at opportunities to get the staff out -- as you have suggested, some of our junior staff --21 to get them out into the international arena, to prepare them and to help develop 22 them as well. So that is another area where we can, we will, in fact, get people out in 23 an area where, well, gee, maybe that individual does not have a very well-defined 24 25 role for that meeting other than to learn, but we will do that.

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1 COMMISSIONER MERRIFIELD: I appreciate that comment.

2 CHAIRMAN KLEIN: Commissioner Jaczko?

3 COMMISSIONER JACZKO: I had a question about the Code of Conduct. The Commission has been getting regular reports from your office, Janice, which I 4 5 certainly appreciate, and I'm sure the rest of the Commissioners do as well, about 6 the status of other countries implementing the Code. I think, in the latest paper on 7 that, certainly there is some progress on the part of G8 countries, but there's also 8 some shortfalls. For instance, I think, in the UK, they have implemented some aspects of the Code, but not all aspects of the Code. Other countries, in Europe in 9 particular, may be following the HASS directive, which has some slight differences 10 from the Code of Conduct, as well. 11

So I'm wondering if you can comment at this point on what kinds of things you think the Commission can be doing right now to really kind of revive this effort to get good compliance with the Code and really get – in particular, the G8 countries, which have made commitments to implementing the Code, to get them to fully implement the Code so that we have more of a level playing feel when it comes to these import/export issues?

MS. DUNN LEE: Thank you for that question. We are very actively 18 continuing to work on the Code. Even though we have implemented the rule, there 19 20 are a lot of implementation issues that are out there that need to be addressed, and that we are having dialogue with G8 countries and others through multilateral 21 meetings on the margins of meetings related to Code of Conduct. 22 So I think those meetings are extremely important to facilitate the sort of 23 understandings or lack of understandings out there, and there are several of them. 24 We have a paper coming to the Commission which really highlights some of these 25

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1 misunderstandings with regard to adequacy of regulatory infrastructure,

authorizations for importing countries, consent, what does that mean, is there a

3 common understanding for that, notifications, timeliness, what does that mean.

So these are big issues for countries to grapple with. While we strive for consistency, every country has its own set of laws and regulations and processes for which they develop. Some may declare we're done, and we are trying to find out, what does that mean, does it track well with us. We certainly are continuing to work with the State Department to encourage more countries to sign on to the Code. That is a priority for our State Department, and certainly we are right there behind them encouraging that.

11 So I think it is important to continue actively engaging with countries not only 12 on the multilateral level, but bilaterally, too, and with the G8 countries, which we've 13 started to. We have actually had meetings with our Canadian counterparts to make 14 sure that there is a level playing field. And I think those conversations have been 15 mutually beneficial to both sides. And we continue that, and we continue to learn 16 from that.

17 COMMISSIONER JACZKO: Thank you. I want to switch gears just a little bit. Marty, I had a question for you. Well, actually both of you certainly can 18 comment on it, but I think maybe, Marty, it's a little bit more specific to you. This has 19 20 to do with a lot of the work that is going on in international research. And I really have two guestions there. Well, one is really the extent to which we are really having 21 to rely more and more now on international research facilities because we don't have 22 the capabilities here domestically, to conducts some of the research that we need. 23 And, really, two is to the extent to which that is hampering our ability 24

sometimes to get access to information that we need. The example I'm thinking of is

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2 think a decision by the Department of Energy not to purchase the data for that. 3 Certainly, I was somewhat surprised that that data would need to be purchased more than anything, given a lot of the work we do from a research 4 5 standpoint and collaborations we have with lots of countries. We certainly provide a 6 lot of data and a lot of research to other countries, and it would seem that it would 7 certainly be appropriate to get access to data from other countries without having to 8 expend several million dollars to do that. So maybe you can just comment a little bit 9 on some of those points.

MR. VIRGILIO: Sure, Commissioner. With respect to the international research activities, for what we invest, which is roughly \$4 million a year by accounts -- and we don't have exact measures -- we reap on the order of ten times that in terms of benefits to our programs. A lot of that does come about through leveraging and collaborating, using international research facilities.

I would say, however, that there are a number of international research facilities that are still operating today for which we are not getting any benefit, and maybe other countries are not either. So I think, again, it's a term of -- our interest right now, particularly through CNRA, is to try to focus in on which of those facilities that are benefitting not only us but the rest of the world and which ones are not, and to try to make sure that we internationally maintain the focus on the ones that are providing us the most benefit.

Yes, you pointed to a very good example with regard to high burn-up fuel, of where our ability to change our regulations now depends on our ability to get data. And we thought we had a source of data and we had that all lined up. It's coming from an international experimental facility.

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the problem with the data on the high burn-up work that was done recently, and I

1

Now that that -- at least now, for the moment, we have our challenges 1 2 around getting that data, but we are still going back, and we are still working 3 strategies, both domestically, to look at if there is a source of data within this country, and back internationally to see if we can go back to that facility and obtain the data. 4 5 COMMISSIONER JACZKO: Do we have the facilities, with that specific 6 example, to do the kind of research to obtain the data that we would need? 7 MR. VIRGILIO: I would have to ask Jim if he would know the answer to that 8 or if we could get back to you. Jim Wiggins, Deputy Director of our Office of 9 Research. MR. WIGGINS: Jim Wiggins from Research. We did find a source to make 10 11 up the data from France that we didn't get. So we have a path forward on that. But it is a general area that's worth review. We just a recent, within the last year, 12 problem that developed with data that results from a domestic facility not being 13 14 available to us at Argonne. We had to scramble again in a relatively short period of time to try to come up with an alternative. So it is an increasing problem. 15 But given – I think I would like to reinforce what Marty is saying. In Research, 16 17 we take a strong look at what the work is and where it's happening. There are a lot of experiments going on internationally that, frankly, we don't really need the data. 18 It's not an arrogance issue; it's just, we have got plenty of it already. There's a lot 19 20 just to keep momentum going on experiments, and we try to determine whether that's the case or not before we decide whether to participate. 21 22 COMMISSIONER JACZKO: Thank you. COMMISSIONER MCGAFFIGAN: Mr. Chairman, could I just ask a follow-23 up question? They may not have the answer, but: If we look back, did we have an 24

opportunity to participate in the experiment that produced this data on high burn-up

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fuel, and did we – I mean, the fact that we are having to pay a lot now must mean
that we were not part of the collaboration that generated it. Did we miss an
opportunity? Just look back at the history – and I don't expect you to know that off
the top of your head, but we get those ten-to-one ratios when we pay the up-front
costs. If we don't pay the up-front cost, then we are the Johnny-Come-Lately for
whom they try to charge full cost.

7 CHAIRMAN KLEIN: Commissioner Lyons?

8 COMMISSIONER LYONS: Thank you, Mr. Chairman.

I would like to start by thanking Janice and Marty for really a very excellent
 presentation.

I wanted to add my commendations for some of the very impressive
 accomplishments that you have already highlighted, Janice. But if I were just to
 mention a few of them, I think the export/import rulemaking, the implementation, the
 national and international leadership on the Code of Conduct, the bilateral and the
 multilateral activities -- absolutely critical.

Personally, I always appreciate the preparation that I get for the OIP staff for international interactions, whether they are taking place here or whether they are taking place many thousand miles away. I always feel well prepared, and your staff does an excellent job in making sure that we are well briefed.

20 Support for MDAP, I think, has been very, very important. I appreciate your 21 JDL grams, the NOSIS reports, the weekly reports you've been giving us -- all very, 22 very positive.

You did mention my interest in the research aspects of the program, and I
 very much appreciate the support in that area. As Commissioner Jaczko mentioned,
 there are just all too many cases where we simply do not have the facilities in this

country to accomplish important experiments, and it is critical that we do support
 those.

And as Commissioner McGaffigan mentioned, I'm guessing, although I don't know, that you described exactly accurately why there is now a question about paying for that data. Whereas while it would have been -- I'm guessing it would have been a whole lot cheaper some time ago.

I also wanted to add emphasis to some of the things that you raised, Janice.
On slide 12, you mentioned the MDAP-related requests from foreign countries. And
I have noticed an increasing number of international interactions that I'm asked off
line by international regulators, well, what if our country were interested in a reactor
of U.S. design; is the U.S. prepared to exercise MDAP in a reciprocal way, just as we
are benefitting now from MDAP interactions with Finland and France.

And I think, to tie in with your comment on globalization, it is very likely to be increasing requests where MDAP-types of international flow of data on regulatory activities on particular designs are going to flowing both ways. Right now, we are the beneficiary, but I think there are many cases that are coming where we may not be the beneficiary, and we will have to be prepared to reciprocate.

Janice, you commended Commissioner Merrifield for to INPO inclusion in CNS. I had that down, too, with a big star beside it because I think that is very, very important, and I think that came out of one of your trips last year, Jeff. To me, that is an extremely important area.

And also, on your slide 14, you referred to the importance of developing international career paths. I very, very strongly support that, and I support the comment that Commissioner Merrifield and maybe others made: to balance junior and senior staff in the international interactions because that really does give folks an opportunity to start looking towards possibly that career path.

2 Okay, enough in the way of comments and accolades.

One question. On the Code of Conduct and in one of your recent reports, Janice, you highlighted a very impressive – well, you highlighted a number of concerns, as Commissioner Jaczko noted, with various countries. But you also noted very impressive performance in Canada, and you indicated that Canada is moving ahead with a secure web-based tracking system, and at least in reading the words in your report, it sounded an awful lot like what we are trying to develop.

I have been concerned about the time it is taking us to develop that tracking
 system, and I'm just curious if you or Marty can comment on whether we have asked
 whether there are any lessons or information we can gain from the success that
 Canada has apparently demonstrated.

MR. VIRGILIO: I would like to respond to that, if I could. Yes, there is a lot to 13 14 be gained from the Canadian experience. I just sought pre-trip notification, one of those 39-day advance notices, that the team that is working both on the IT side and 15 the rule side from NMSS and other organizations, are on their way up to meet with 16 17 the Canadians and try to extract as much knowledge and lessons learned as we possibly can about their system. Their system is advanced beyond where we are 18 today, and I think there are learnings around what they have done for a National 19 20 Source Tracking System that we are in the process of developing.

MS. DUNN LEE: Just to add to that, I think that between the U.S. and Canada, the U.S. sort of made a decision that we would really focus on our rulemaking, and we placed that as a priority, and we got that out -- not that the National Source Tracking isn't important. It is very important. Canada is a little bit ahead of us on that, but we are sharing information on both fronts. They want to

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know what we are doing, how our rule is being implemented, and they have lots of
 questions about that. So that dialogue is very robust, and as Marty said, it is
 happening in a very – in a few days to focus specifically on the National Source
 Tracking System. So we will learn some things up there.
 COMMISSIONER LYONS: I appreciate that response. And if we can learn

anything that advances our timetable at all, I hope we do that.

CHAIRMAN KLEIN: Thank you. We just have just a few minutes left, so we
 might do just a real quick follow-up if there are any questions.

Let me make a couple of comments on the INPO activities. I would like to
 congratulate you for doing that and encourage you to expand the INPO activities. I
 in a former life had served on the National Academy of Training for a number of
 years. There are a lot of lessons I think the world can learn that the utilities here
 have learned, on how to enhance our operational activities. And that benefits all of
 us, not just in the United States, but worldwide as well.

The other comment I would like to make is on people. It should be a benefit as they look at international assignments. It should be career enhancing not career limiting. So we should not wait until the end of one's career to have an international assignment. So I think that as an agency, we should look at that. So I think the Commission should focus --

MS. DUNN LEE: We have taken our first giant step in that direction with the designation of Heather Astwood as the Nuclear Safety Attaché. She has many years ahead of her, so we are placing her – she is well positioned to serve our interests over there now, but also return and have a fulsome career here. CHAIRMAN KLEIN: We have just a few minutes left. Any final comments?

25 COMMISSIONER MCGAFFIGAN: Mr. Chairman, Heather Astwood was my

executive assistant until I gave her up for this assignment, and I'm glad to do so. I
think it will be good for the agency. I do want to associate myself with Commissioner
Lyon's comments.

I think what we are doing with Heather needs to be the precursor to other
activities. I do think we need to develop an international path, career path here, and
I think it would be useful to place people -- I know it is expensive with the Euro where
it is in the UK, France, and Germany. And you mentioned the Germans, but I think
there's a standing invitation at NII and ESN to have Americans for long-term
assignments, as well.

I think we will really benefit from placing people strategically in those
 organizations, in the right place. We pay a cost initially because, you know, we are
 scaling up, and we are losing people, and we have got this demographic transition to
 manage.

But if we could just think a little bit further ahead, I think this stuff will be very,
very beneficial.

I also finally want to associate myself with Commissioner Lyon's comments
 about the Canadians. I think your will find, Mr. Chairman, Linda Keen will be a very
 – she's the head of the Canadian nuclear regulatory agency – she will be a very
 strong partner with you throughout your term and her term, however long it is. And
 we and the Canadians tend to think very, very similarly on almost all matters.

I think what the team is going to find out when they go up to Canada about
why they could do the source tracking faster than us is that the alphabet soup of
laws that we have to comply with -- the FISMA's, and GISMA's, and God knows
whatever else there is -- tends to constrain our ability to do IT things on a rapid pace.
But maybe we could find -- get leave to do a few experiments, to do things smarter.

With that, again, I have managed to go through here today without ever
 asking a question, but I pass.

3 COMMISSIONER MERRIFIELD: Quick remarks. I concur with the issues 4 relative to Canada. We made a lot of progress in the last eight years. We had a 5 trilateral initiative that also included Mexico. I think those efforts really contributed to 6 the intense engagement that we have.

I concur on the issue of the international track. I think it is the right way to
go. I don't think we should be Eurocentric, however. I think we should also inclusive
of our strong partners in Asia, notably Korea and Japan.

Once again, I think Pete did a good job of making some very appropriate compliments to the IP staff, all of which I concur in. The only one in which I would add is kudos to Mary Carter, who does a lot of work for us to make sure we get to the right place. Thank you, Mary.

I'm pleased we've got some folks from State, DOE, and other counterpart
 agencies here. The Commission does make its grumblings, but I do think the nature
 of the relationship between our agencies is much stronger today than it was in years
 past. That's a lot of hard work on both parts.

Last comment. Janice, I appreciate the work that went on with the Senior 18 Regulator's meeting. Mr. Chairman, you are also going to be involved in activities 19 20 associated with the International Nuclear Regulators Association. I was the first non-chairman actually to represent our agency. With the senior regulators group, 21 there is a tendency, because most of the regulatory bodies are headed by a single 22 chair, to focus on that. We are part of a growing group, France being added to the 23 U.S., and Spain most notably, of regulatory bodies being headed by a Commission. 24 So I think we need to make sure that the staff is working forward on our interactions 25

in those areas, that we carve out an appropriate role for non-chairmen for those
bodies like ours, where it is headed by a Commission, not by a single administrator.
Thank you.

COMMISSIONER JACZKO: I would just briefly echo some of the comments 4 5 that were made. It's certainly about having an international track. I think that's 6 important. I also think that one of the things we may want to try to consider is, 7 perhaps, shorter-term assignments, too, as a way to get people into international 8 bodies, but then bring them back in a way that, perhaps, creates less disruption back 9 at the agency. And it is a way to begin to get people comfortable with the benefits that they will receive when those people return to the agency. So rather than always 10 11 having to have very long, extended positions, there may be a way to look at some shorter assignments, to start to realize some of those benefits, but I also say that 12 perhaps it's a way to solve all our space problems. 13

14 (Laughter)

15 COMMISSIONER JACZKO: We could send all our staff overseas. The 16 other point I certainly would want to echo is the comment that Commissioner Lyons 17 made: if that there are things that we can learn from our Canadian counterparts 18 which could help accelerate the National Source Tracking, I think we should, as he 19 said, take every opportunity to take advantage of those as we work to get that 20 implemented.

Again, I would certainly want to also say thanks to your staff for the work that they have done on trips that I have taken, and just in general, keeping the

23 Commission informed of their activities.

COMMISSIONER LYONS: Janice and Marty, perhaps just a couple of
 comments to emphasize – as you already did on your slide 11 -- the importance and

the challenge of the security assessments as we share them and roll them out in the 1 2 international community. Even in my limited experience overseas -- and many of my 3 colleagues have far more -- the differences around the world in how security is handled are vast, which is putting it mildly. And I think it is important that we share 4 5 our perceptions, at least our understandings in this country, and try to provide that 6 information to other countries so they can make their own assessments; that the 7 recent practice or the recent possibility of inviting some of our partners to actually 8 learn of our security activities I think is very, very positive.

They have to weigh that in terms of the situation in their own country. But I 9 think it is important that we do share that and at least provide that information. So I 10 can only imagine the challenge. Even on my last trip, I had a country express great 11 interest in participating in such activities and I hope it will be possible. Thank you. 12 CHAIRMAN KLEIN: I would like to thank both Janice and Marty for their 13 14 presentations today. I realize that these briefs are not without effort to get the material and the issues before us. So thank you for your activity. I would also like to 15 thank you for what I observe as a program that's on a positive slope. We would like 16 17 to keep it there, and we would like to do it better. So thanks for your assistance in making the agency more effective in its international arena. We do need to work 18 with our colleagues in international programs to make things better for all of us. 19 So on behalf of the Commission, thanks for all your efforts. The meeting is 20 adjourned. 21 (Whereupon, the meeting was adjourned.) 22

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