UNITED STATES NUCLEAR REGULATORY COMMISSION

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BRIEFING ON FEDERAL AND STATE MATERIALS AND

ENVIRONMENTAL MANAGEMENT PROGRAMS (FSME)

PROGRAMS, PERFORMANCE AND FUTURE PLANS

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TUESDAY,

MAY 11, 2010

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The Commission met at 9:30 a.m., the Honorable Gregory B. Jaczko, Chairman, presiding.

COMMISSIONERS PRESENT:

GREGORY B. JACZKO, Chairman

KRISTINE L. SVINICKI, Commissioner

GEORGE APOSTOLAKIS, Commissioner

WILLIAM D. MAGWOOD, IV, Commissioner

WILLIAM C. OSTENDORFF, Commissioner

NRC STAFF:

BRUCE MALLETT, Deputy Executive Director for Reactors, Preparedness Programs

CHARLIE MILLER, Director of FSME

JENNIFER GOLDER, Director of Program Planning/Budget and Program Analysis, FSME

ROBERT LEWIS, Director Division of Materials Safety and State Agreements, FSME

MARK SHAFFER, Director, Division of Intergovernmental Liaison and Rulemaking, FSME

LARRY CAMPER, Director, Division of Waste Management and Environmental Protection, FSME

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

CHAIRMAN JACZKO: Good morning, everyone. The Commission will meet today to have a program briefing from the Office of Federal and State Materials and Environmental Management Programs. It is probably the only time I have ever said the complete name for FSME.

By working with the Office of Nuclear Materials Safety and Safeguards and the Office of Nuclear Security and Incident Response, FSME -- I will call it from now on -- is responsible for carrying out the agency's important responsibilities for ensuring the safety and security of nuclear materials.

There are thousands of hospitals, universities and other locations across the country that use these materials for medical, academic, industrial and commercial activities. The NRC must sustain a diverse array of regulatory capabilities in order to oversee such a large number of facilities and users.

And these capabilities include our ability to work effectively and collaboratively with a broad range of stakeholders, including other Federal agencies, both Agreement and non-Agreement States, Native American Tribal Governments and the public.

And I want to recognize the outstanding efforts that FSME has made in conducting these important communications and outreach efforts. In addition to the work

that they do in the materials area, they have the responsibilities for decommissioning programs for a wide variety, really, of programs and activities at the agency. And today we will hear about that those important issues.

And I know we have upcoming some specific issues on specific topics, so I think the staff will not necessarily hit on those today, but it just shows the breadth and the depth of the work that's done in the office.

Before we turn to that, I thought I would just comment on an important milestone. Today is, I believe, the last appearance that Bruce Mallett will have in front of the Commission in a meeting. He will be retiring next month, and I'm not sure if he was prepared for this.

He has served the agency with tremendous distinction in a variety of capacities, as Deputy Executive Director for Operations, as a Regional Administrator, and in many other positions he has held in the agency. And he has certainly in all of those positions made a tremendous contribution.

So, Bruce, we want to thank you for all of your hard work, your professionalism, and your commitment to public service throughout your career. Congratulations and good luck in getting through the next couple of weeks.

DR. MALLETT: Thank you, Mr. Chairman.

CHAIRMAN JACZKO: If any of colleagues have any

comments. Commissioner Svinicki.

COMMISSIONER SVINICKI: Thank you. I would just add again my personal thanks to Dr. Bruce Mallett. And I know sometimes he doesn't -- I call him Dr. Mallett and he thinks that it's because he is going to get in trouble about something.

But Bruce has been a wonderful resource to me and my work as a Commissioner and really an outstanding example of the type of work that all the NRC employees do.

And just on FSME, Mr. Chairman, I appreciate that you emphasized the important communications and liaison work that FSME undertakes. I think sometimes as difficult as doing the complex mission we have here is the ability to effectively communicate about it. So, I really appreciate that a lot of the FSME folks are doing the day-to-day liaison work with so many of our important partners. So, thank you for that.

CHAIRMAN JACZKO: Commissioner Apostolakis.

COMMISSIONER APOSTOLAKIS: I would join my colleagues in wishing you well, Bruce. I have known you for a while now, and you have always been very supportive and helpful to me. Thank you.

CHAIRMAN JACZKO: Commissioner Magwood.

COMMISSIONER MAGWOOD: Thank you, Mr. Chairman. Let me also echo the Chairman's comments about FSME, and I won't even attempt to pronounce the whole

thing. Since I have been here, I have had an opportunity to meet with many of the FSME staff, and have been quite impressed with the breadth of activities that they are pursuing, and particularly interested in the work they are doing in the sources area. And we will talk more about that today.

I also appreciate the fact that they supported the quick visit to local sites to look at some of the sources. That was very, very helpful, so appreciate that.

But in closing, let me also recognize Bruce in his long service. I did try, Bruce, to get a quorum of the Commission to vote against your retirement. So far I have been unsuccessful.

But Mr. Chairman, I do intend to continue to press for this, because I think it is very important to the future of the country that Bruce stay through the rest of my term.

CHAIRMAN JACZKO: I think the key vote is probably the vote of his wife, who is in Atlanta and continues to maintain their home down there. And so I would say that is where you want to start strategically.

CHAIRMAN JACZKO: Any other comments?

COMMISSIONER MAGWOOD: No. Thank you, Mr. Chairman.

CHAIRMAN JACZKO: Commissioner Ostendorff.

COMMISSIONER OSTENDORFF: Thank you, Mr. Chairman.

Bruce, thank you for your service, really appreciate it. I have had a chance to travel out in the field with FSME team members and visit the staff in headquarters, and in all of the diverse set of issues you deal with on a daily basis and appreciate what all of you are doing. Thank you.

CHAIRMAN JACZKO: With that, Bruce, we will turn it over to you.

DR. MALLETT: Thank you. Good morning, Chairman Jaczko and Commissioners. Thank you for your kind comments, but I would not have been successful in this agency without the numerous staff in the agency that supported me over the years and even argued with me over the years. But I think out of that argument comes a good consensus of things, and I really appreciate working for this agency.

Today's brief is one of a series of briefings that we have had with the Commission on various offices' programs, their challenges, and their path forward on issues. And this program, as you said, Mr. Chairman, is with FSME. I will not attempt to say all -- you did a good job saying the parts of this program.

I did start in this program many years ago when I joined the NRC. And I would have to say I have observed it over the years, it has made significant progress. I think some of that progress you will hear about today. And definitely

improvements. And a lot of that is due to the leadership sitting at this table, and the staff in the Office of FSME and also the staff in the Regional offices. And I think Charlie intends to introduce some of those people today.

Before I start, I would highlight a few things, Mr. Chairman you already mentioned, but I think they are important of repeating.

One is this program does deal with a variety of licensees and a broad breadth of licensees. And, in fact, the challenge is, there are different levels of sophistication in these licensees that are regulated, so it challenges the regulators to set programs for the different levels of sophistication.

We do also, as you said, it deals with the significant number of licensees. And also, the office conducts a significant level of outreach to various stakeholders not only in the States but other Federal partners and the Indian Tribes. And you will hear about some of that.

I would also highlight the role of the Agreement States. The staff in the NRC as well as the staff in the Agreement States really deserve a credit for the oversight of this program, ensuring that licensees are safe and secure in their operations.

And last, I would say that I believe that reduced effort in this area does result in both safety and security. If you have reduced effort in this area, you can result in a significant impact

on individuals, which is a unique part of this program. And as workers and members of the public, those individuals can be impacted.

With those few opening remarks, I will turn it over to Dr. Charles Miller, the director of FSME.

DR. MILLER: Thank you, Bruce.

Good morning, Chairman, Commissioners.

It has been my pleasure to serve as the Director of FSME since its inception in October of 2006. And as Bruce mentioned and, Chairman, as you mentioned in your opening remarks, we have a broad range of responsibilities and activities in FSME. We set program direction for our Regional offices that regulate nearly 3,000 NRC materials licensees. We ensure consistency and technical adequacy of 37 Agreement State programs, which regulate approximately 20,000 licensees across the United States.

The uses of radioactive material that FSME oversees include industrial, medical, and research. We have rulemaking responsibility for our own programs and for those at NMSS and some of NSIR that fall in the materials area. We do intergovernmental liaison work, especially with the states and with Native American Tribes.

Our environmental reviews for all of our programs and FSME are a big part of what we do.

We also support NMSS with regard to the environmental reviews that are needed to support the fuel cycle facilities.

We have low level waste responsibility, decommissioning of both reactors and non-reactor sites, as well as uranium recovery licensing and the decommissioning activities related to not only licensing, but the decommissioning of uranium recovery activities.

First, I'd like to take a moment to introduce the team at the table with me today that will address the various aspects of our program that I have briefly summarized. To Bruce's right is Larry Camper, who will discuss the waste decommissioning and environmental and waste incidental to processing activities.

Larry is the Director of the Division of Waste Management Environmental Programs.

To his right is Mark Shaffer, who will discuss a series of safety and security rulemakings that we are engaged in, as well as our outreach and liaison efforts. Mark is the Director of our Division of Intergovernmental Liaison and Rulemaking.

To my immediate left is Jennifer Golder, who will address some cross-cutting issues that are important to FSME and to the whole agency.

These are issues that are integral to her everyday activities as our Director of our program planning and budgeting and program analysis staff, which is our

PMDA staff in FSME.

To her left is Rob Lewis. Rob will discuss a series of materials topics in safety and security. Rob is the Director of the Division of Material Safety and State Agreements.

I would be remiss if I didn't introduce some of the people behind me. Behind me sits my deputy, Cindy Carpenter, who ably serves me every day to keep FSME going, as well as we are happy today to have our Regional materials directors with us, John Kinneman from Region I, Steve Reynolds from Region III and Art Howell from Region IV.

In addition, we have some of the deputy directors who support our directors and some of our offices that we deal with today that are here to answer any questions that you might have.

On Slides 2 and 3, there is a brief summary of the agenda that we will cover today. Some of our programs, such as uranium recovery and low level waste have been the focus of recent Commission meetings. Others such as blending, the Energy Policy Act Task Force, Agreements State programs will be the subject of some upcoming meetings. So we do not plan on spending a lot of time focusing on those today, since we will have had or will

have had topical meetings.

So, today we want to concentrate our focus on a set of topics that may not get discussed elsewhere but are nevertheless as important as the topics that we have for topical meetings. And these are very important with regard to our regulatory responsibilities.

May I have Slide 4, please.

Let me begin by discussing a few of our cross-cutting issues from my perspective as the Office Director. FSME continues to address a large number of policy issues that cover complex policy subjects. This results in a large number of issues requiring Commission decisions on these policy matters.

To achieve success, we have to continue to do our best while keeping within our budgeted resources and schedules. This work involves a large effort to reach out to our internal and external stakeholders to get their perspectives and to develop information so that we may make the best policy recommendations to the Commission.

Our activities in the international area are noteworthy. Larry Camper and Rob Lewis serve on safety committees at the International Atomic Energy Agency. I represent our interests at the Nuclear Energy Agency

Steering Committee. Our senior level employees in our office are involved in the basic safety standards at the IAEA. They are involved in UNSCEAR and ICRP activities and represent us very well.

In addition, the FSME staff is involved in many consultancies at the IAEA and the NEA, as well as review of safety documents.

Also, we participate in a number of bilateral agreements and participate in a lot of bilateral meetings with our partners internationally who are regulators.

These international collaborations are critical with regard to our international nuclear safety and security.

With that brief notes, I would like to now turn the presentation over to Jennifer Golder.

MS. GOLDER: Good morning.

The first topic I'll talk about are the FSME results on the Office of Inspector General Climate Culture Survey, and then I will talk about the information technology investments we're making within FSME to support our programs.

So, this past year, this was the first time that we participated as an office in the OIG climate and culture survey since we were created in 2007. We had approximately an 85 percent participation rate in the

survey. And our results fit in closely with the agency's results.

There were approximately 140 questions that were grouped into 17 categories and in all 17 categories, FSME scored at or above the agency benchmark. And in particular there was one category, working relationships, where FSME scored well above the agency benchmark.

And there was little distinction within FSME regarding the divisions, grade levels or years of service.

And we have developed action plans to address some of the areas that we found we wanted to focus on. And these areas include such things as improving communications of our internal web page. We're also improving our communications with the staff regarding management changes. We're also enhancing some training opportunities to ensure that our staff is aware of and understands agency processes such as the differing professional opinions process, the alternate dispute resolution process, the non-concurrence process.

So, we have developed five action plans.

We worked with staff and obtained their input and the action plans are posted on our internal web page and we are marching ahead to meet all the actions.

The next thing I'm going to talk about are our IT

investments. I'm first going to talk about the National Source Tracking System also known as NSTS. And I'm also going to talk about the License Tracking System, also referred to as LTS, and then I'll finish with the Integrated Source Management Portfolio, also known as ISMP. So I'll be using a lot of acronyms.

The National Source Tracking System is a national centralized database that tracks individual category one and two sealed sources over their life span from manufacturer or import all the way through to disposal or export. And the Energy Policy Act of 2005 required the NRC to establish regulations to issue a mandatory tracking system.

So it took three years to develop and we deployed the system in December of 2008 so, we have been operating for approximately a year and a half.

And the NSTS in combination with physical security requirements significantly increases the security of the category one and two sources and provides an up-to-date accounting of all of these sources. And we have approximately 1,400 licensees reporting on over 70,000 codes. And we also have over 1,000 transactions processed a week, or approximately 200 transactions a day.

And we do collaborate within FSME. Particularly, I work, Rob Lewis and I work very closely together on the system and our staff work closely together on this system and we also work closely with Office of Information Services, Office of Administration, Computer Security Office, General Counsel and the regions. And their support is critical to the success of all of our systems and we do appreciate their efforts.

We've had a number of accomplishments since the system was deployed.

First, we have a Change Control Board that was established, and this is a one of a kind Change Control Board. And that includes representation from the NRC Agreement States and also industry, and they meet throughout the year to talk about changes that they all want made to the system. They prioritize the changes and approve -- and vote and approve them. And it makes the changes systematic and organized.

And I think this is the first Change Control Board that actually includes outside stakeholders.

We have also had two maintenance releases. In the fall we had our first maintenance release called Version 1.1 which corrected some errors that we did not find during the initial testing of the system. And it also improved the

batch upload capability. And the batch upload capability is a -- is a system -- the batch upload capability basically takes, allows the users from outside the NRC to take their -- they have databases that have all their information in it and it allows them to put it into a single file and upload it into the system. So it streamlines it and makes it a little more efficient for them.

We also had a maintenance release in December that did a couple of things. It added a screen on a report that supported the annual reconciliation that occurred in January, and it also provided a warning message for inactivity. The system would shut down if nothing was going on and someone was just reviewing the screen.

So, now it provides a popup warning.

We also supported the contractor in moving their backup data center site from one location to another location. We worked with the Computer Security Office on this and there was no disruption to the NSTS service. In addition, we have over 800 users credentialed to use the system, and over 500 individual licensees have at least one user accessing NSTS.

There have been a number of challenges with NSTS over the last year and they have been primarily focused in the credentialing arena. And you can bend them into two

categories, credentialing process challenges, and we have had a few technical challenges with credentialing.

Regarding the process of credentialing -- and when I mean credentialing, that means the access, the authorization to get someone access into the system. And it takes approximately 30 days to get someone the initial access into the system, and first, they do an online application. And when that is approved, it is followed up with a paper application.

Once the paper application is approved, they go through an authorization process. They are mailed a card reader and they have to download certificates.

So that takes approximately 30 days.

And where the technical challenges enter into the process is when they connect their card reader or middleware to their operating system. There are many, many operating systems out there and not everyone uses the same operating system that the NRC uses. And sometimes the middleware or card reader does not necessarily connect to their operating system.

We're also working on -- another challenge we faced is encouraging users to use the system online rather than faxing or mailing their information in.

And When you fax or mail in paper information, that

sometimes information can be transposed or impacts data entry and sometimes faxes are received and they're not very clear.

So, we are -- that's still a challenge.

And the future of NSTS, we are working to streamline their credentialing process. We work very closely with the Office of Information Services to seek efficiencies and we are currently doing that right now. And we're also -- Rob Lewis's division has done a lot to do outreach to users to make sure that they understand their credentialing process.

They have had webinars, seminars, one-on-one training sessions. We have a blog that they have on the public website, a brochure as well.

The Version 2 of NSTS will be deployed in mid-to-late 2011 and this will allow for automated e-mail alerts in case there's overdue shipments instead of doing things manually. So we look forward to that.

Next thing I'll talk about is the license tracking system which supports the tracking of material licenses through the life span of that process.

And the current LTS is on a 25-year-old mainframe through NIH and it is obsolete and outdated and not sustainable. And we don't have an authority to operate.

So we have something -- our new system is called LTS2, simply, and we worked with the State of Ohio to obtain their Radmat, their State material licensing system. We obtained through a licensing agreement the source code and we have converted that onto a server here. And we obtained the authority to operate in December of 2009. And we've converted all that data from the current LTS and we're doing parallel processing right now of both systems. And we expect to deploy, to decommission the old LTS and to go full on with the new LTS2 shortly.

And the biggest challenge we face there is simply change management.

The new LTS will be user friendly, web interface at a person's desk top versus manual paper reports. And just simply getting people to adjust to a new system is a challenge in itself.

And LTS2 will be the basis or infrastructure for the new web-based licensing system which is part of the integrated source management portfolio which is the last thing I will touch on.

And the Integrated Source Management Portfolio, also known as ISMP, will house the NSTS, Web-based Licensing, and License Verification System, all together under one common platform. And the License Verification

System will be the bridge between both systems, the LVS, the NSTS and the web-based licensing system.

And the ISMP will enable the NRC to monitor the location, possession, transfer and disposal of high risk radioactive sources throughout the country. And it will also improve the accountability and alert regulators to tracking discrepancies.

And that effort gets underway shortly. And we expect WBL to be deployed towards the end of 2011 and LVS in 2012.

And With that, I will turn it over to Rob Lewis.

MR. LEWIS: Thank you, Jennifer.

Good morning, Mr. Chairman. Good morning Commissioners.

As has been mentioned, the NRC material program covers a broad range of medical, industrial, and academic uses of radioactive material.

It's also a program that's undergoing a great period of change at this time because of NSTS and other issues that I'll touch on.

So, my division, together with the three divisions of nuclear material safety in three regions and together with the 37 Agreement States are charged to make those changes to the program and at the same time remain

vigilant to current safety concerns and security concerns related to sources.

Today, I'm very happy to be here to highlight three particular areas of the program.

The first two, source security and Agreement State interactions are led by Terry Reese and his staff out of our national material program directorate. And a third area, NRC's regulation of medical uses of radioactive materials led by Jim Lehman and his staff out of our licensing and inspection directorate.

Can I have Slide 8, please?

First, I'll talk about security issues for sources. The Radiation Source Protection and Security Task Force, which was mandated by the Energy Policy Act of 2005, consists of 14 Federal agencies and two State organizations and is the primary means by which, throughout all the different agencies and roles and responsibilities, we advance source security issues through the Federal Government.

They issued a report to Congress and the President in 2006. That report had ten recommendations and 18 actions.

Since 2006 we've been working on those with other agencies. And I am happy to report we believe we are on

track, have a good plan to deliver the next report in August of this year to the President and the Congress.

The interagency coordination area is an area that I would like to highlight in particular because of the task force and many other forms of engagement at all levels of staffing management, up to and including the Chairman, with other agencies has really improved the way that the Federal Government speaks with one voice on source security issues over the last few years.

Probably just three years ago we were seeing many cases of statements made in public, statements made in media outlets by several different agencies that didn't reflect the roles and responsibilities of all the agencies and what was actually being done on source security. And I think we have come a long way. We don't see that anymore. And it's an area that I'm very proud of all the work that's been done to coordinate.

We also coordinate interagency in terms of international coordination. And I want to mention some special guests we have in the audience today from our French regulatory counterpart, ASN. They are sitting to the Commission's left.

And they are here this week for bilateral with me and my staff on source security. They are embarking

upon developing the French Regulatory Program for Source Security, they are getting some new authorities potentially in the future. So, we are working closely with them so that we have a global approach to source security.

On cesium chloride, cesium chloride is a particular chemical form of one of the nuclides that is in the IAEA Code of Conduct on the safety and security of radioactive sources that forms our framework for source security in the United States.

This chemical form has made us question whether - made us look carefully at this chemical form to make sure that that framework adequately protects security for that particular chemical form. And we've worked very closely over the last few years through the task force and through some other activities, including a major stakeholder meeting last year, to develop and deliver to the Commission, a policy statement on the use of cesium chloride in the future. We look forward to Commission direction on that policy statement so we can move that issue forward.

Infrastructure. We are -- my last bullet involves infrastructure, our qualification guidance, our licensing guidance and our inspection guidance that we have within

the NRC, but it was also used by the Agreement States.

About three years ago the Government Accountability Office conducted a sting operation in which they obtained a license from the NRC under fraudulent pretenses and proceeded to order radioactive material.

That operation identified vulnerabilities in our program and a need to correct our guidance, our infrastructure, to include security aspects. We're embarking upon developing that guidance.

Another aspect of that program was the ISMP that Jennifer mentioned that we're moving forward with. So our integrated approach to close the vulnerabilities that were identified, we had near term actions to close the immediate problem, but we have long term actions that are before us now and over the next few years. We'll work closely with the Regions and with the States. All of our activities will be done through working groups.

Turning now to States, speaking of States.

Since the last program brief I think we have two new Agreement States, so we have an unprecedented period over the last few years of new Agreement States coming on. New Jersey and Virginia are the 36th and 37th Agreement States. Now 87 percent of the 22,500 licensees, material licensees around the country are in

Agreement States.

There are no new Agreement States on the horizon.

Michigan has indicated some intent, but I think the economic situation, they are not moving forward very quickly on their issue.

We have at Commission direction reinstituted our Agreement State training program. In this program we pay for Agreement State staff to attend the NRC licensing and inspection qualification training activities through the TTC and PDC with the Office of Human Resources.

To date, this fiscal year, in the last six months we have trained 142 Agreement States. We train about 400 a year. The last six months of the year, it always ramps up because of the Christmas season, there are not a lot of classes.

And that program is going very well. We get good feedback from the States. We are giving the right training. We are giving enough training. I mean, they always want more, but we are giving enough.

They are very happy for the program.

In fact, many States have told me, State program directors have told me that had it not been for NRC's program, they would not be able to train their people. So this program has a real impact on public health and safety.

Turning now to page 10. We have a very active Agreement State website which is our primarily tool to communicate with the Agreement States.

We get about 30,000 hits per month on this site. And it includes all aspects of our Agreement State program, our IMPEP activities, all our guidance. We recently posted low level waste guidance on how to store low level waste long term. We posted travel and training information to make travel and training easier. And we added a password protection website feature to this site so we can share OUO information through the site just this year.

We worked carefully with the Agreement States to prioritize all the working groups.

I mentioned before that all the guidance and all the regulations in the material program are developed with joint working groups between the FSME staff, the Regional staff and the Agreement State staff.

Every six months, the leadership of the Agreement States meet with myself and Mr. Shaffer to talk about the priorities for the coming year amongst all of those working groups. And we have some good examples of putting the right people on the right projects so that they come to fruition without a lot of concerns by the States raised at the

11th hour. Part 37, I think, is a shining example of that.

We worked very closely with the States and there were only a few issues, all of which were identified in the package that we delivered to the Commission.

And our IMPEP Program is moving along smartly. We use that program to provide our oversight and assure national adequacy and compatibility amongst all the programs, including the three NRC Regional programs and the headquarters Sealed Source and Device Program.

We are embarking upon a major project to perform a self-assessment of IMPEP as a continuous improvement activity and put in place an ongoing self-assessment process, as well as we move forward over the next few years.

I will turn now to the medical program. The medical area, hospitals and private medical facilities use radioactive material in a number of different fields: cardiology, oncology, nuclear medicine, radiology, hematology labs have blood irradiators and probably more that I can't think of right now, but it's widely used.

There is a shared regulatory authority. The FDA, for example, Food and Drug Administration, approves devices and radiopharmaceuticals as safe for human use, but they do not regulate the users of the devices; the NRC or the

States would do that.

We have a Commission policy statement on the medical use of byproduct material that defines how Part 35 is written and how our guidance is written.

Probably more than most policy statements, you can actually see in the guidance, tangible evidence of the policy statement. And the policy statement in particular is that the NRC's policy is not to intrude on the medical judgments affecting patients except insofar as it affects worker and public safety.

And what that means, we base our regulatory approach on ensuring that the prescribed, the Doctor's prescribed activity is carried out.

We don't have any role under the policy to determine whether that prescribed activity was clinically adequate or clinically appropriate. We leave that to the medical judgment and the practice of medicine.

Part 35 is under revision in the medical events area which I will cover in a minute, and I'll revisit this concept as I do that.

The Advisory Committee on Medical Uses of Isotopes provides us medical expertise at the staff Advisory Committee under the Federal Advisory Committee Act. And they have physicians and other

experts, radiation safety officer, Agreement State representatives, patient rights advocate. And on our staff we do not have any medical expertise so we rely heavily on the ACMUI to provide that to us as we prepare rule packages and guidance.

They last met with the Commission in June of 2009 and the Chairman of the ASMUI mentioned to me that -- and I offered to mention that he and the committee look forward to continuing to engage the Commission and welcome the new Commissioners.

Turning now to some issues facing us in the medical program, on Slide 12.

There is rising patient doses and overexposures. Last year, the National Council on Radiation Protection published their NCRP Report 160 which showed that over the last 20 years the average public exposure to radiation around the country has increased by a factor of seven, and the increase is not attributed to any occupational exposure. The increase is almost entirely attributed to rising use of diagnostic radiation such as computed tomography which is machine produced radiation that the NRC does not regulate, but the States do.

Recent media interest has put a spotlight on the medical use of machine-produced radiation and also some

of our regulated activities in the medical area.

That media interest attributed, as the New York Times and several other newspapers have attributed the causes of overexposures and patients who got burned or did not get the right treatment at the right time, to the patchwork of regulations surrounding the medical use of radioactivity.

There have been Congressional hearings on this topic and I believe there may be more planned.

So, the NRC staff is following this issue closely and working with the FDA who is in more of a lead role amongst the Federal agencies on this point.

Turning now to medical events, we have a rulemaking underway specific to prostate implant brachytherapy and we have delayed delivering the rule to the Commission in light of the events surrounding prostate implant brachytherapy at the Pennsylvania Veteran Administration Medical Center over the last couple of years.

The rule specific to prostate implant brachytherapy medical events will be up to the Commission soon. But there is a broader issue on medical events and I think it is broader -- different types of modalities than medical in that the medical field outpaces our ability to write regulations,

or our ability to write guidance.

And that's not just NRC, I think that's all government interface with the medical area. And we will be looking carefully over the next several years as we do Part 35 rulemakings to ensure that we are in the right place as an agency on when a medical event needs to be reported to NRC, because medical events drive our reactive inspection effort, so it's a resource issue. There are medical events that need to be reported to NRC that aren't clinically significant. There are clinically significant events that may occur that would not be medical events.

So, whether the agency's really in the right place on that whole topic I think is ripe for some investigation and some staff research, and ACMUI input.

Patient release: Part 35, 10 CRF Part 35.75 permits patients to be released from care of the facility provided that the facility can demonstrate no member of the public would receive 500 millirem or greater from that patient that is released that received the treatment.

Usually, this rule is used for radioiodine treatment for thyroid disorders. The hospital in most cases has to give instructions to the patient. There's been a lot of Congressional correspondence, first with NRC and now with all of the Agreement States questioning whether this

rule is protective of children, whether it meets international standards, whether it's protective of members of the public like hospital cleaning, hospital cleaners if the patients were to check themselves into a hospital or if multiple patients were to go to the same hotel -- I'm sorry, I said "hospital" but I meant hotel.

Once I think that all of the responses from the Agreement States are sent to Congress, I believe there probably will be more correspondence with the agency to ask us to look into this issue.

It's on the ACMUI agenda in the meeting in two weeks.

My last slide covers new modalities.

First, I already mentioned this; modality is simply the way the medical isotope is used, the type of treatment.

They, the medical area is very fast paced. There are new treatments developed all the time.

Our regulations and our guidance are always in catch-up mode. And working with ACMUI, we somehow have to get ahead of that curve.

The Veteran Administration lessons learned program. That is a task group that I have chartered to answer to my deputy that is looking at internally within the agency, did we follow our procedures in responding to the

VA events as they unfolded? Could we have detected it? Were our processes internally a part of the issue that need to be changed?

Once that group completes their work, we will be turning in that project to the Agency Lessons Learned Oversight Board for further evaluation.

And they are finishing their project in, I believe, in the early summer.

The FDA interface is also an area of change. We have a Memorandum of Understanding with the FDA basically to share event information on devices. We're updating that MOU, and are working closely with FDA. It has gone well from our perspective, that interface, and we want to continue it.

FDA I believe wants some changes to the MOU which we are considering. I have not seen the particulars of it yet.

That concludes my remarks. I look forward to responding to any questions you may have.

And Mark Shaffer is next.

MR. SHAFFER: Good morning, Chairman, and Commissioners.

My portion of this presentation will very briefly cover three main topics: Our rulemaking efforts over the past

year, including some rules that are before the Commission now, as well as some that will be coming before you soon; an update on our outreach activities with regard to interface with Native American Tribal Governments; and then lastly our coordination efforts with the Governor-appointed State Liaison Officers.

Can I have Slide 15, please?

As Dr. Miller mentioned, FSME is responsible for the coordination of safety and security rulemakings in the materials area, the waste, decommissioning, transportation, and storage.

So this covers being the lead for FSME as well as the Office of Nuclear Materials Safety and Safeguards, the Office of Nuclear Security and Incident Response, and also some technical assistance to the Office of International Programs.

It has been a very busy year in rulemaking for FSME, but with the time that I have this morning, I'm just going to cover a couple of the rules that you either have before you or will be coming before you, and in particular those that are aimed at providing consistency and some stability in the materials security area.

One of those that Rob mentioned earlier was Part 37, physical protection of byproduct material. This rule, as

you know, the Commission just recently voted and approved us to move forward with a proposed rule.

And I believe that this rule, I think you will find, will be an example of how to do an enhanced participatory process for rulemaking.

If you look back at the beginning of this rule, we started very early on with stakeholder inputs including the States, the licensees, the public, other Federal agencies, to gain information from them on the development of the technical basis before we went to a proposed rule.

So I think you will find that we have gained a lot of information during that process that fed into the text that is now the proposed rule. We will be sending that out for public comment shortly.

Also, I would point out, again, as Rob mentioned, that there is substantial input from the organization of Agreement States and also the Council of Radiation Protection Program Managers on those working groups.

Considering that they own or have their licensees, or the majority of the licensees in the materials area, it is critical to us, particularly in this area, that we have input early and substantial input from them throughout the process. And I think that worked very well in this rule.

And lastly, I would point out that the staff also

developed guidance that will be going out for comment, as well, so the guidance for licensees on this proposed rule as well as for the NRC to follow, that draft guidance we expect to put out during the proposed rule phase, and I think that also adds a lot to the process.

A couple of other rules I'd mention.

CHAIRMAN JACZKO: Mark, I just want to correct something. I think everyone has voted the Part 37 rule but I don't know we have finalized the SRM yet.

MR SHAFFER: That is correct.

CHAIRMAN JACZKO: Just so we have that clear. Thanks.

MR.SHAFFER: Another rule I would point out is Part 73, physical protection of irradiated fuel and transport. That is aimed at enhancing the security requirements for spent fuel.

I'd mention the general license restriction rule that is a final rule that is working its way through the process and we hope to have up to the Commission this year as well. That limits the quantities of material that is contained in the general licensed device.

More on the safety side of the house, you have Part 72 rulemaking, that affects the license and certificate of compliance terms from 20 years to 40 years. Again, Rob

mentioned the Part 35 rule, the medical event rule. We have had a substantial effort on that in the last year taking a look at lessons learned, reviewing multiple medical events over the last couple of years and trying to ensure that we're in the right place on this rule.

That I expect to be coming forward shortly, as well.

I'd also mention the Part 40 groundwater protection for in-situ recovery facilities. There was a Commission meeting recently with the industry and the staff that talked quite a bit about interest in uranium recovery, and during that meeting I think you heard from the staff, NRC staff and as well as EPA staff, on significant coordination we've had with them on that rule. We continue to move forward with that in coordination with them and hope to have that proposed rule to you shortly as well.

Last item I'd mention, certainly not least, is where we're at on moving forward with developing a regulatory basis for the ICRP 103 recommendations.

You recall the Commission approved us to move forward to speak with stakeholders, try to gather information from various parties on whether or not there's a regulatory basis for the NRC to take a look at Part 20 and Part 50, whether there should be any revisions to that and how we might move forward.

There's a substantial effort over the last year to move that forward, gather a lot of information. We'll be continuing that this year, and are on track to provide recommendations to the Commission by late next year.

The next slide, please.

On this slide, I want to point out the outreach efforts with Native American Tribal Governments. NRC has had a longstanding and ongoing relationship with several Tribes that have interest in NRC activities.

Some of the examples include the Prairie Island Indian community with obvious interest in the Prairie Island Nuclear Generating Station, the Navajo Nation, the Hopi Tribe and multiple other Tribes that are interested in uranium recovery, and the Yucon River Watershed Council who represents multiple Tribes that have an interest in the potential siting of a small reactor in Galena, Alaska.

Those are just a few. We have multiple continuing interactions and we continue to expand that program.

In January 2009 the Commission directed the staff to develop and implement internal protocols for interactions with Native American Tribes. We spent a lot of effort last year looking at our practices internal to the NRC, through doing research and interviews with the staff

that have done this activity.

We also went outside the agency to multiple agencies that have interactions with Native American Tribes trying to gather best practices on how they go about business, as well as gaining insights from interviews with multiple Tribal leaders to try to get that insight, as well.

In December of 2009 we delivered an information paper to the Commission that outlined our efforts on this. One of the outcomes of that paper, as well, was the development of a Tribal protocol manual to be used by NRC staff as we move forward with interacting with the Tribes.

If I can, the Tribal protocol is -- and I will read from the manual as we describe it," is a set of practices, communication skills, cultural sensitivities and other considerations that will foster and promote effective interactions between NRC and Native American Tribal governments".

I believe we've put into place in this manual, significant enhancements. And this year we will be rolling that out to the staff.

We've got it distributed to the staff. We're trying to meet individually with the program offices and try to roll that out in some one-on-one training and interactions and

you'll see a lot more of that this year.

Lastly, on the slide, I'd point out our continuing relationship with the National Congress of American Indians.

Earlier this year Chairman Jaczko sent a letter to Jefferson Keel, who is the president of the National Congress of American Indians reaffirming our commitment to work on a government to government relationship with the Tribes.

That letter I know was very well received. Myself and my staff have met with staff at the National Congress of American Indians. They thanked us for the letter. We sort of described what I have to you over the last year what we have done, and I think we are continuing to grow that relationship.

And the last slide, please.

On this slide, I just wanted to point out and emphasize our close relationship with the Regional State Liaison Officers.

> As noted by the Regional Administrators during the Commission meeting just a few weeks ago, the Regional State Liaison Officers play a key role in communication and getting information out to the State Liaison Officers.

FSME and in particular, my division, serves as a support role for that liaison activity, a customer service role, if you will.

We try to be responsive to the Regions when they are trying to run down information from multiple program offices, to get them information on press releases, and things that are important in real time to get to the State Liaison Officers.

We work on a variety of issues. As you can imagine, each Region is a little bit different on their information needs, whether it is ground water protection or emergency response or what have you. We try to be there to help the Regional State Liaison Officers in their day-to-day work.

And in that line, I'd like to point out lastly in August of 2009 we hosted the National State Liaison Officers Conference here in Rockville. That was a two day conference that brought in the State Liaison Officers for each of the States, provided them an opportunity for us to give then updates on NRC activities and also activities from other agencies.

Chairman Jaczko gave the keynote address at that conference, but we also had representatives from the White House Office of Science and Technology Policy,

had the Department of Homeland Security, the Environmental Protection Agency, Bureau of Indian Affairs, multiple other agencies. Very well attended and the feedback that we received from the participants was really good.

We followed up on some of the action items that came out of that to help us do a better job, but I think it was very well received and we continue to look forward to putting on another one these. We do them periodically, about every two years. We're taking a look at, you know, what topics we have now and looking forward to putting on another one of these.

So, with that, I will cede the rest of my time to the gentleman to my left, Larry Camper.

MR CAMPER: Thank you, Mark. Good morning, Commissioners,

In keeping with what you have heard so far, within my division alone, for example, we have six primary areas that we deal with: low level waste, all decommissioning, uranium recovery licensing, environmental reviews, waste incidental to reprocessing and an awful lot of international activities as well.

There has been a lot of Commission interest in this division over the last two years. For example, there are

two briefings on the Uranium Recovery Program, there was one briefing on the low Level Waste Program, and you certainly have policy issues that have been before the Commission either recently or now, things such as disposal of large quantities of depleted uranium, or the blending of low level waste to reduce the class of waste which we will be talking to you about in June, as Dr. Miller pointed out in his remarks. What I want to try to do this morning though is cover some things that you haven't heard about for a while.

And there are three things. There is the NEPA, National Environmental Policy Act compliance and the support we provide to the Office of Nuclear Material Safety and Safeguards. I also want to talk about our waste incidental to reprocessing program, WIR, and last but not least, our comprehensive decommissioning program.

Slide 19, please.

Our division serves as a center of excellence for environmental reviews for our office as well as for NMSS.

In terms of NMSS, you see three categories depicted on this slide, the first being enrichment and fabrication facilities. For that particular area we are conducting the environmental impact statement for the GE Silex facility in Wilmington, North Carolina, and the

AREVA Eagle Rock facility in Idaho, and we are also conducting an environmental impact statement scoping process for the international isotope facility to be located in New Mexico.

In terms of operating fuel facilities and renewals, we are currently doing an environmental assessment for the NMSS Erwin site, the license renewal. We are also going to support NMSS in the environmental impact assessment or supplemental environmental impact statement for the LES facility should they decide to increase the production capability.

And In terms of spent fuel storage and reprocessing, we do environmental assessment for independent spent fuel storage installations when they are renewed. We do one on two of those per year, and we will provide the support to NMSS to conduct the environmental impact statement should the Commission direct the staff to proceed with the rulemaking for reprocessing.

Slide 20, please.

NEPA coordination: This is an area the Chairman has a lot of interest in, it was certainly something he identified in his list of priorities and goals he wanted attention to be focused on.

We have, in fact, devoted much efforts to the NEPA

compliance arena in the recent past.

In 2008 and 2009 we conducted an internal audit of our program. This was a self-initiated audit using contractor support to look at the program. A number of recommendations were identified and we have been implementing those recommendations to improve the efficiency and effectiveness of our NEPA program.

Duke University NEPA training certificate; this is a very interesting program for us. We have entered into an arrangement with the university under a five year contract whereby the university staff comes here, provides training to our staff -- this is for all offices that conduct NEPA work -- and just turns out FSME does coordination and management of that contract.

It's a five year contract. Over the course of five years, some 600 of our people will cycle through this program. There are multiple courses in the program. It has a graduate level certificate. We will save about $1.2 million over five years by having the university provide that training here.

It's an opportunity for the staff to maintain current awareness of NEPA issues and to broaden their understanding of the implementation of NEPA. It has been working very well for us.

In terms of the Environmental Protection Agency, we do have a number of interactions with the EPA, as you might imagine.

For example, we did interface with them extensively on the generic environmental impact statement for in-situ recovery licensing for uranium. And we are currently interfacing with them on three supplemental environmental impact statements that we're doing for in-situ uranium recovery in Wyoming, that being Lost Creek, Moore Ranch and Hank Nichols Ranch facilities.

We have formed both a working group and an executive steering committee. The working group consists of branch chiefs who identify a number of issues in NEPA that warrant coordination. The executive steering committee is at the division director level, it has division directors from all the programs that conduct NEPA activities along with the Office of General Counsel. And the idea is to bring issues before the ESC so that we can ensure consistency in the program, make programmatic changes if necessary, so that we're all doing this as much as possible across the board in the same way.

In terms of CEQ interface, we know that the Council on Environmental Quality has a lot of interest in our agency because we are an independent Federal regulator.

We do some things in NEPA differently than other Federal agencies. And what we are doing is increasing our efforts to better understand CEQ guidance, CEQ interest and to interface with CEQ.

I was elected as the first Chairman of the ESC and will go downtown in June to talk with CEQ to make them aware of the about the various things we are doing in our NEPA program.

Next slide, 21, please.

Waste incidental to reprocessing, WIR, this is a very complicated program involving our agency and the Department of Energy, but I think it's a success story. I think it's a program that has done an awful lot to enhance public confidence in the process for conducting waste determinations as the Department of Energy goes about cleaning up cold war legacy waste in the tanks and particularly in South Carolina and Idaho as covered by a particular piece of legislation.

We have been involved with DOE for a long time through interagency agreements. Going back as early as 1993, we had an IA with DOE to do some WIR work at Hanford. We have also done some WIR work at the Idaho National Lab and the Savannah River site previously under an interagency agreement. In fact, we first identified

WIR criteria back in 1993 for the Hanford site.

In 2005, the National Defense Authorization Act, the Ronald Reagan National Defense Authorization Act was put in place and it brought our two agencies together in a relationship that we had never had before. It laid out certain responsibilities and charges for each of the two agencies.

In terms of the Department of Energy, Section A of 3116 of that act requires the Secretary of Energy to consult with the Nuclear Regulatory Commission when it goes about performing waste determinations for the Savannah River site and the Idaho National Laboratory.

Section B of that act requires us to monitor those determinations once they have been completed in perpetuity, for all intents and purposes, and to assure that we assess for compliance of the four performance objectives that we have in Part 61 of our regulations. And our review is, in fact, subject to judicial review to ensure that we carry out our monitoring responsibilities under that Act.

In this process, as you might well imagine, we interface not only because the legislation tells us to so, but we interface extensively with the States, in particular under that Act, the States of South Carolina and Idaho.

These states have permitting processes they bring to bear for these sites, and much of our review also is designed to aid them in their permitting process. There is a great deal of extensive, a great deal of extensive interface with the States of South Carolina and Idaho.

Slide 22 deals with our decommissioning program.

Again, I think it's fair to say that this is a success story. It is a comprehensive program today that deals with all phases of decommissioning.

Decommissioning by its very nature is protracted and it involves many steps along the way.

Historically, we used to focus on only how many sites can we get decommissioned in a given year. There is much more to it than that. And today, I think we indeed operate a comprehensive decommissioning program.

There have been a couple of decades of progress in decommissioning. If one goes back to the 1980s, this is when many of the complex sites were identified and placed on the site decommissioning management plan list, some 30 of them or so.

In the 1990s is when we developed our regulatory infrastructure and put in place the financial assurance requirements, the program that we use for decommissioning nuclear power plants, timeliness

requirements and the license determination rule which identified our standard for decommissioning these sites.

The program has evolved, as I said, to a comprehensive program that looks at all aspects of decommissioning. And along the way to get there we made a lot of process improvements.

We took steps back in the period of 2001 through 2003 to make a lot of changes in the program. We looked at the workload that we were facing and simply realized we would never get it done if we did not make a lot of adjustments in our process.

We focused upon assuring we received high quality submissions from the applicants by conducting acceptance reviews, we updated guidance and modernized guidance. And I do think it's fair to say that we have reaped a tremendous return on investment as the next slide will show you in a moment.

I think it's also fair to say that we occupy a position of leadership today.

We have today decommissioned 41 sites in total. Many countries come to us for assistance. We provide a lot of assistance to the IAEA, the NEA, foreign representatives come here and learn from our staff. And so we do a lot to assist internationally as well.

Slide 23, please.

Slide 23 is designed to show you a couple of things. It shows you the period of 2001 through 2003 in which stopped, talked to the Commission and said we need to stop trying to get three sites done per year, make an investment in the program, and we believe we can reap a huge return on investment.

We have done that. Between 2004 and 2010 we decommissioned 43 sites.

The drop off that you see on the right-hand side of the graph was expected. We knew that would happen because we pushed through as many of the complex sites as we could.

The sites that remain today that are complex sites have significant groundwater contamination, subsurface soil contamination. There are no easy sites left.

But what we now doing is to focus upon our Title 1 and Title II uranium recovery sites in the same way we did by making an investment in the program that we believe will see a similar curve in the future as it relates to uranium recovery sites.

I do want to mention quickly the support we received from the Regions with this program, they do project management for certain sites, they inspect the sites, and

we interface routinely, and we would not have the success without the regions.

Slides 24: I won't spend a lot of time on the slide, numbers speak for themselves.

What you see is that we have 72 sites in our decommissioning universe including West Valley. I would say that we have made a tremendous amount of progress at West Valley recently by receiving the decommissioning plan from the Department of Energy and reviewing and commenting upon it. And we have a lot of work to do in the future.

I think at this point what I would do is stop given the time and go back to Dr. Miller who has a few comments about challenges we face.

CHAIRMAN JACZKO: Larry, if you want to take the time to go through the last slide, that's fine.

MR CAMPER: Okay, sure.

I think that I would make a couple more points. One is that we do identify all of these sites on the web page. We have a NRC web page, and we update the site summaries quarterly, so the public is aware of where these things stand.

If I can make a comment or two about the UMTRCA sites, we have 21 Title 1 sites and 11 Title II UMTRCA

sites. Those deal with conventional mills on the Title II side, things that are pre '78 on the Title I side. And even when we transfer them to the Department of Energy, we're not out of the game because site reclamation plans change, cleanup of surface water and groundwater changes and we continue to be involved.

The Agreement States, you 63 sites identified for the Agreement States. What we've now done in the last three or four years is focus also and we provide the annual report to the Commission, we identify the sites that are contained within the Agreement States as well. It is important, we thought, to see the overall national perspective.

The other point that I was going to make that we do in our program that we did not have time to address today is we conduct financial assurance on the order of $2.4 billion worth of financial assurance.

And if the Commission is interested in receiving any information about that financial assurance review work, we will be happy to do that, but time did not permit today.

Thank you, Chairman, for the extra time.

Thank you, Charlie.

DR. MILLER: Thank you, Larry.

May I have slide 25, please. I would like to sum by

just going through some of the challenges you heard today.

We've got to stay vigilant in our safety and security responsibilities.

The implementation of our ISMP, our integrated source management portfolio, over the next number of years is going to be critical to the future of not only our program, but the modernization of some of our Agreement States' programs with regard to tracking and accountability for sources.

Completing uranium recovery licensing activities, including the safety and the environmental reviews, in a timely manner will be a challenge, especially in light of the fact of the uncertainty with regard to how many will undergo hearing.

Our continuing long-term monitoring, as Larry talk about at the Savannah River site to assure that the performance objectives of Part 61 are met is another challenge, and determine through our work if the performance objectives are challenged as we attend to our legislated duties.

We must achieve this and as you all know, with what will be a flat budget for the next number of years. So we have to be efficient in what we try to do, and likely will

not be able to do all that is on our plate should we get the number of uranium recovery activities that some of the potential applicants have indicated.

Slide 26, please.

In my closing remarks, I wanted to focus on two things. First, I want to make sure that I place an emphasis that while the volume and the diversity of the FSME work is large, I want you, the Commission to know that I have the confidence in my managers and staff that we're able to meet that challenge.

I'm very confident that we can continue to do this under the leadership that you see at this table and their subordinate managers, but most of all through our staff which is the backbone of our work.

The staff of FSME are very dedicated, they're very talented and they're very energetic, and that is what keeps me coming to work every day.

I would be remiss if I didn't acknowledge the contributions of other stakeholders both internal and external.

Our Regional staff are our eyes and our ears in the field. We couldn't get our job done without them.

The Agreement States are working closer with us than they ever have.

As Rob pointed out, the majority of licensees, the vast majority of licensees are now in Agreement States. And so we have to make sure that we keep our eye on that focus with them.

Finally, support organizations such as CSO, OIS are very much important to our mission, especially as it relates to our IT projects.

And finally, NMSS and NSIR, our sister offices, we work very closely with them in order to be able to achieve our mission.

That concludes our presentation, Mr. Chairman, Commissioners, we are ready for your comments. Thank you.

CHAIRMAN JACZKO: Thank you, Charlie, and thank you, everyone, for a comprehensive and thorough presentation.

I will start with Commissioner Magwood.

COMMISSIONER MAGWOOD: Thank you, Mr. Chairman, and let me echo the Chairman's comments, I appreciate the comprehensiveness of the presentations today, very good today and I appreciate it, especially for those of us who are still learning these things.

Let me make a comment. You mentioned early on that there are significant international activities going on

and I wanted to commend you for that. Sometimes I think people don't understand how the international sphere, it isn't so much of a reaching out to the international sphere, the international sphere is reaching into us and we need to be involved with it very closely as things go forward.

So I think increasingly over time we will find that the international community is going to play a big role in all of our radiological activities, and this clearly is happening in nuclear power plant side, but I think it's going to happen in a lot of other places as well.

Let me talk a little bit about sources. As you pointed out, the tracking system currently covers Category 1 and Category II sources.

There are stakeholders which some of us have talked to in recent times that think the system should be expanded to cover a much broader array of sources.

I know that when the Commission dealt with this previously, there was a long discussion about Category III.

Let me ask two questions in that regard.

First, can you review for us what it would take to include Category III into the tracking system and what kind of human resource requirements and what kind of financial requirements, just give us a sense of the difficulty doing that; and, secondly, have you given thought to, perhaps, a

less rigorous but still meaningful approach to dealing with the broader range of sources, even the smaller sources like Category IV and Category V? Has there been any thought given to that? Just like to hear your thoughts on that.

MR. LEWIS: Thank you for the question.

I think I'll try to respond to the last part first.

And we to have, to complement the National Source Tracking System, we have the general license tracking system and registration of devices that capture many Category IV and V sources, but not all, because there are specific license sources, but the general license sources we do have a complementary system and we look at both as a total.

Our obligation, I think, to the IAEA and based on the Energy Policy Act for the National Source Tracking System was to have a national registry of sources and we define that as dangerous sources.

So, Category 1 and II sources is what we started with.

According to the Code of Conduct, Category III source is a dangerous source, it may be two curies of cesium or a curie of cobalt, or around that range of activity. So it is a dangerous source to an individual may not rise to

the security considerations of much bigger sources.

We tabled the consideration of expanding NSTS to include Category III and the Agreement States were very supportive of that.

And the basis was we weren't ready with Category 1 and II. And I would say in my personal opinion -- and Charlie and Jennifer can add in, or the Regional people -- but I think we're still not ready to expand it. We're still in much of a surge start-up mode for NSTS. At this point, we're trying to do additional outreach. I think we have about 200 transactions a day. Most of the transactions are iridium sources, radiography cameras, and so we're going to focus our outreach on trying to get radiography users to use the online system.

If we expand to Category III, we'd be bringing in other types of licensees, a lot of fixed gauge licensees and licensees that currently don't have to do anything with regard to security. So there will be a steep learning curve. There will be a credentialing process learned all over again by a new set of licensees, and there will be a lot of faxes again. We will have a manual reporting by fax for a long period of time.

So what I would suggest, from the staff's point of view, is that we give the Category 1 and II system a little

run time and try to see if the outreach efforts are successful to get more online use before we reopen expanding to Category III.

But in terms of the budget and the resources, I believe that we had planned for expansion to Category III. So if the Commission were to direct it, we could accommodate the IT aspect of it.

The outreach aspect, we would have to staff up and get the states on board with Category III and that would be a big challenge.

COMMISSIONER MAGWOOD: Thank you.

I appreciate that.

I may follow-up with a few more details about the -- what plan you have done in the Category III area. I'd like to understand a little bit more to see what might be entailed if we were to take that step. But I appreciate your comments about absorbing the Category 1 and Category II phases first.

Let me shift to the question about the Medical Isotope Advisory Committee.

The experience I guess I have had in the past is that when you bring the medical community into an environment dominated by engineers, they often end up feeling a little bit like the redheaded stepchildren of the

family. No offense to redheaded stepchildren out there.

Just to give me your sense, does the committee feel that they are receiving -- and I appreciate hearing there was a recent briefing. But does the committee generally feel they get enough opportunity to have its voice heard by the Commission and is it feeling that we are being responsive to their concerns, just a general....

MR. LEWIS: My sense is that the committee is very happy at this current time with their interactions with the NRC in general.

They would welcome opportunities, I know that they would welcome opportunities to engage the Commission more often.

They do get to comment in draft form and on all of our policy documents as they come up, anything related to Part 35 basically. So, we're working on that process to make sure that we capture their comments and present to the Commission a fully informed point of view from them, from the staff, from the Agreement States, and all the stakeholders, and sometimes there is some tension there. It's healthy tension.

The committee, for example, may feel like their comment was paraphrased or it was not exactly their view. Sometimes that's an individual physician and not the

committee view, so there's an issue there that we work through.

But in general, I believe that the interactions are going very well with the Committee and much improved from the past. And I credit that current Chairman and the committee members for their collegial approach to work on issues.

DR. MILLER: Commissioner, I'd just augment that a little bit.

One of the things we have tried to do over the last number of years to increase the comfort of the committee to the Commission's hearing their views is where there are situations where the committee has a different view than the staff conclusion with regard to policy, we try to get that view up unfettered so that you have that before you and for your considerations in making policy decisions.

It's a constant work in progress, but, I think we made a lot of progress in that regard, and I think that's to a large degree improved our relationship to the committee, which at one time was fairly adversarial.

COMMISSIIONER MAGWOOD: Thank you.

Just for my information, how often does the committee meet and when is its next meeting?

MR. LEWIS: They meet twice a year in person and

twice a year by phone, and their next meeting is in two weeks, Monday and Tuesday, two weeks from today.

COMMISSIONER MAGWOOD: Here?

MR. LEWIS: Yes, it is here in the ACRS hearing room, I believe.

COMMISSIONER MAGWOOD: Thank you.

MR. LEWIS: I'll get the information up to the Commission.

COMMISSIONER MAGWOOD: Mr. Chairman, my time is short, but I will try to ask this last question very quickly.

Regarding the WIR monitoring, I was looking at the actual language of the law and it does make some pretty clear specifications about what our responsibilities as far as reporting any concerns we have.

Have we made any reports under this legislation?

DR. MILLER: Reports to Congress, do you mean?

COMMISSIONER MAGWOOD: Well, to Congress, to states, to a variety of stakeholders.

MR. CAMPER: No. What we have done, we have conducted I think on the order of five monitoring visits to the Savannah River site, at least three, perhaps four, to the Idaho National Laboratory site. We record our observations, we then enter into discussions with DOE

about those observations. We have not -- nothing has triggered the reporting requirement to Congress or the states or to DOE, i.e., a failure to ensure compliance with the performance objectives of Part 61.

That has not occurred, no. But there have been routine monitoring reports provided.

COMMISSIONER MAGWOOD: Thank you very much. Thank you Chairman.

CHAIRMAN JACZKO: Commissioner Ostendorff.

COMMISSIONER OSTENDORFF: Thanks, Mr. Chairman.

I want to pick up with where Commissioner Magwood left off, if I could, with Larry, just a comment.

This time of the year, six years ago I was involved in drafting the House version of the 3116 legislation when I was at Counsel for House and Armed Services and I've watched this with a great deal of interest over the years as to how, you know, this works out. And I know at that point in time there was a lot of challenges in the relationship between the States and the Department of Energy and I wanted to comment for the record here that one of the primary motivations for us to put that legislation in place with NRC's role was the high regard that the Congress and the States had for the NRC's technical competence

and objectivity. And I just wanted to make that comment here today. So I thank you for what you have done to make that work.

I want to comment also to Rob just in three separate trips outside of headquarters, I have had nothing but very strong, positive comments from the Agreement State partners on the training you and your team have provided, and I just wanted to say how important I think that is personally. I know the Commission has strong support for that training program and I think it is vital for us to continue to do that.

Start some questions.

Jennifer, in your area, I was listening to your comments about the Change Control Board and I thought from a management perspective that was an excellent lesson to have learned. And I wanted to see if there were any other lessons that you're learning or have learned from NSTS that will impact how you move forward with ISMP?

MS. GOLDER: Thank you for that question.

There have been a lot of lessons that we have learned as an office and as an agency about NSTS. Number one, we definitely need to do our outreach and factor in our stakeholder comments early on into the

process. That's very key to success. And also working with the other offices is critical.

So, I don't know if you want to --

DR. MILLER: Commissioner, I think that I could sit here all day talking about lessons learned, I think, from NSTS. And I think some of the biggest lessons we've learned were -- we learned a lot as an agency, I think we embarked upon this, and this was probably the first of its kind for the Federal Government where you had the necessity to develop a system that required a large number of users to input information.

That information had to be protected, so there were high security requirements on the ability of those users to access the system to be able to do that and provide the information. Jennifer commented a little bit in having the users do that electronically. When we created the rule, we allowed for people to submit information by paper in recognition that there would be some users out there who may have not had, believe it or not, computer equipment to be able to do that.

I think what we found as a big lesson was that we probably over anticipated in the beginning how many users would electronically report that information without a lot of care and feeding by the staff to help them along to

become more comfortable.

And that's a big work in process, following Commissioner Magwood's question, getting people to use the system electronically,

For those that make many transactions, that's something that is of high focus. For those that maybe make one transaction a year, there's just not an incentive for them, because by the time the next cycle comes around or they have to enter the system to do their annual accountability as we all have a tendency to do, they have forgotten how to use it or to get in it. So that is a challenge we have ahead of us.

Dealing with the credentialing where we needed external help in doing that through contractors. Getting people credentialed took an awful lot of effort with regard to making sure that they were who they said they were, getting their documentation notarized. So these were many things upfront that I think that had we been visionaries and seen that, we might have been able to offset, especially as we let the first contract.

So, taking all of that as a family of things, we learned a tremendous amount that we hoped that we can apply to the development and implementation of the rest of the ISNP portfolio.

DR. MALLETT: And if I could add something to what Charlie said, the one lesson we have to remember, this system today is a far better system than the old manual system we used to have. And so even though we criticized ourselves, it does tremendous things that we were not able to do when we had to do it manually checking on things.

DR. MILLER: And the things that we have overcome we couldn't have done, I mean across the agency, with our IT people from OIS and CSO as well as my staff and the staff of the Regions, and the Agreement States. And some day for this to be a national system, we really need the buy in of Agreement States so we try to encourage them every place we go.

MS. GOLDER: And I just want to add, I'm sorry, to not undervalue the change management and making sure you understand the different culture and different perspectives of our stakeholders. And that is why understanding where they are coming from and spending time to make sure that they understand or are aware and are educated is really critical to the success.

COMMISSIONER OSTENDORFF: Thank you.

Rob, this next question I will ask you, but others feel free to supplement as appropriate.

And I was struck by your comment about the patch work of regulations out there and some of the areas with respect to medical technologies and practices.

And recognizing that the NRC does not necessarily have the lead on certain issues here and the FDA has a very prominent role, the Agreement States have control over a lot of the machine and type issues.

Just at a high level, I would be interested in your perspectives and that of any others, are there any big philosophical differences to the approaches being taken external to the NRC in these areas compared to the approaches that FSME takes?

MR. LEWIS: Well, I think there are depending on what you mean by philosophical. But I think we have a very rigorous licensing program of users and authorized users that mirrors how we license any other activity for medical. And I think in terms of non-radioactive material uses like X-rays, dental X-ray, and CT use, that some States register the user and some States don't even do that. Some States license the facility or the user. And I think it is variable across the country. And that's one of the things FDA is looking at. And they held some workshops at the end of last month on that very topic.

I'd also think that how events are captured and

tracked, and not only the events but an important aspect is the denominator of how many successful procedures occurred, because then you can look across different medical programs, not only radiation use.

And that's a key issue and I think that the Conference of Radiation Control Program Directors is looking to advance that issue significantly, working with some of the professional societies to collect information on events from machine produced radiation, work with FDA very carefully on that, and work with NRC, because I think they would like to see, as well, the events that we already capture from NMED be a part of that process and not create a duplicative process or not to create a redundant, conflicting process, but to make sure it is all seamless.

But right now there is a lack of information on systematic information on medical events nationwide. So we hear these anecdotal stories and the big picture isn't captured. So I think that philosophically that will change things if that event database comes to fruition.

COMMISSIONER OSTENDORFF: One last question here.

Does anyone else want to add to that?

I have time for one last question here, and Charlie, I'll direct this to you,

Looking at the broad range of issues that FSME is involved in with a whole host of different organizations and that some of these involve issues of significant risk, some of them have lesser risk, can you talk just very briefly about how you and your team communicate the risk of the issues that you deal with to the public?

DR. MILLER: Yes. What we try to do is to try to put the risks in perspective. But we try to put those risks in perspective by being truthful to the public and not trying to have -- not trying to have them overreact, because we have to do this in layman's language for many members of the public.

Generally If you start talking what I call nuclear-ese, we lose them. So we try to put the risks in perspective that if, you know, radiation can harm you if you receive it in certain things. And it can also help you, especially in the medical application. So we want the public to have the confidence in what we do by putting that risk in perspective,

We try, sometimes successfully, depending upon the audience, sometimes not, depending upon their interests to try to have them realize that there is great degradation, gradation, not degradation, in the various applications of what can harm you and what cannot, and

try to have them to have confidence that as a regulator we try to set our standards in place and enforce our standards in such a case that if we do that, their public health and safety is protected.

One of the challenges from our area, and I'm sure this will be something Commissioner Apostolakis would be interested in dialoguing in the future is getting the risk perspective from materials licensees since it's just a broad sweeping variety of licensees can be analytically challenged. So many times we end up in qualitative discussions of risk which are not necessarily easy to articulate to the public.

So, that's some of what we do.

COMMISSIONER OSTENDORFF: Thank you, Mr. Chairman.

CHAIRMAN JACZKO: Commissioner Svinicki.

COMMISSIIONER SVINICKI: I would like to start by recognizing the FSME staff and your partners in OIS for the maintenance releases on NSTS. Again, I know it is not a terribly exciting topic, maybe, but I think that action and the progress that you reported here today on that, and one of those releases includes the batch upload capability. My note here says batch upload of the fact that I know for our large users of the system that's something they have

been wanting since the initial roll out. And also, the coming release of the LTS 2.0, I think it's very complicated to migrate from these old, it's a 25-year-old platform that system is on, and I know we will be as an agency looking to upgrade the ADAMS system.

I think we are going to experience, maybe there's some lessons learned that we can share with the folks that take on the ADAMS upgrade, as well. But, I guess the good news/bad news is that the agency was an early adopter of some of these technologies, but now we do have some of these legacy systems to upgrade. So I want to compliment FSME and OIS and your other partners, I think that is significant progress that you are reporting here today, and there are so many topics I didn't want to lose sight of recognizing that.

I would ask you, Jennifer, the annual reconciliation process on NSTS, how did that go compared to what we thought, you know, like our labor hours were going to be on it or for the users of the system, did we find complications or that it took longer than we thought, or was it fairly smooth?

MS. GOLDER: I will try to address that, and Rob may need to help me out here on this one, and we may turn to some staff to help me.

I think it was, I think overall it was successful. I think was harder than anticipated. I think just overall capturing the data and making sure that we had everything was a challenge, and there were some challenges that we learned along the way regarding what was submitted to the contractor and making sure we understood the information that was provided.

I'm not sure that everyone provided the right information, and perhaps we underestimated or didn't really figure out how to best communicate upfront what we were looking for exactly. But overall it was very successful.

MR. LEWIS: I would agree.

I think we had, leading up to the reconciliation, we had an intensive effort to improve the data quality. We had, I think, a seven person team dedicated for about three months to make sure that the data was of quality sufficient for the licensees to reconcile.

And we got to that point right around Christmas time. So by the end of January when the first reconciliation was required, I think the number of licensees that had not reconciled at that point was in the tens, so that's a compliance issue that is a relatively minor compliance issue. Of course we wanted everyone. But if

you have 1,500 licensees and we are in the tens of licensees that didn't get it done, that's pretty good.

COMMISSIONER SVINVCIKI: And you have really gotten to the heart of it in terms of data quality, because the point is not just to have a system that functions seamlessly and we can have data and we can enter transactions, but it's to know that at the end of the day that what's represented there is what we would find if we went to a licensee location and looked to see the accuracy and integrity of the data that we have there.

So, I appreciate that we've got one under our belt. So, I know we will be looking to improve that in the future.

The Commission, will meeting in the coming months with OAS and CRCPD but I wanted while you all are here to just talk a little bit about IMPEP which I forget exactly what that stands for, but it's our systematic evaluation of the Agreement States, both I think the term used was national adequacy and consistency of Agreement State programs with the requirements that we have.

I feel that, again, State budgets are very stressed and I predict that's something that's going to continue for a number of years, so I think although perhaps in our relationship with Agreement States or our IMPEP reviews, we have to date probably seen some of the manifestations

of the budget stresses at the State level, but I predict that there may be a really persistent stress on State budgets.

So when you look forward, what do you think will be the legacy of, you know, I guess some of it, and this is all hypothesis on my part, but States probably have lost some of their very experienced staff in their Agreement State programs. Training we've talked about they do not necessarily have funds to do the necessary training, and Rob talked about that.

But, as you look at this self assessment of our IMPEP program, I'd be curious as to what your approach is, are you getting perspectives as we do the self assessment from those not familiar with the IMPEP Program, are we trying to get some outsider views on that assessment; and then what do you think will be the enduring kind of manifestations of what's been happening with State budgets?

DR. MILLER: I guess I'll start and let Rob augment me.

You are very accurate, I'll start with State budgets, Commissioner. State budgets are tight. Unlike the Federal budgets, States are required to balance their budgets. And so that becomes a big challenge especially when the Governor and the legislature sometimes end up

at odds over state budgets in trying to reach compromise, which is, you know, is just indigenous to government.

That said, the radioactive programs and the Agreement State programs become what I will call, you know, victims of the State budget, as everyone else.

Many times, whatever restrictions are put on State budgets are put on them. That sometimes manifests itself in their abilities to travel. It sometimes manifests itself in their ability to conduct all of their programs in a timely manner for some States. Keeping salaries to a point where they can continue to attract and retain talent is all over the board. Some States are much able to do that and other States have real challenges in that regard. So, all of those things manifest themselves.

With regard to IMPEP, I wanted to make sure that it was also clear that IMPEP is not only evaluation of State programs, but it is a peer review of our own programs, also, with Agreement States staff participating in teams that evaluate our Regional programs. So we self evaluate ourselves. And I think that is one of the strengths of the program, that these teams that are comprised of both NRC people and Agreement State people go out as a team. And I think that that helps bring more synergy among the States and us.

But I see the State budget situation continuing to manifest itself in the future. I don't see any necessary relief. It's one of the areas we have to pay close attention to. And many times when we find States that are put in what we call monitoring or heightened oversight, they are stressed budget wise.

COMMISSIONER SVINICKI: Okay. Well, again, I appreciate that it sounds like it is very much front of mind issue for those who are working in IMPEP reviews, so I think we just need to keep an eye on it and work with the States.

Rob, did you want to add something?

MR. LEWIS: If I could just add a quick thought that although our IMPEP is our primary tool for evaluating the performance of the State by looking at licensing and inspection, timeliness and things like that, incident response, we have daily contact with all of the States through our Regional State Agreements Officers, so we hear about budget issues early, much before we go every four years for IMPEP, and the States are very much communicating with each other in trying to brainstorm on collective ideas.

Some of the newer States have fee recovery, much more mature fee recovery than some of the original earlier

agreements, and so there is a wide spectrum amongst the States on how their budget fairs in the radiation control program.

COMMISSIONER SVINCKI: Thank you.

And there's been a number of you who have touched on international involvement and international safety standards and NRC representatives who lend their expertise to the development of international standards. Is there anything that you would highlight for me as issues where you see perhaps the world diverging from the NRC's established views of something, or perhaps where convergence is coming about that has long been needed?

So I'm just, you know, at a high level, I know that staff participates in many different ways in international standard setting bodies. But for the areas under FSME's purview, what would you highlight as one or two very top level issues?

DR. MILLER: I'm going to make one comment and ask both Rob and Larry to comment because both of them participate in international safety committees.

One area that I've noted that the world may be diverging some from the U.S. on is protection of the non-human species.

We have always done our regulations based upon

the human being. You know, if we protect the human being, we are protecting the environment. And in some countries, there is a growing consensus, I would say, internationally, absent the United States to look at that more closely and see if more should be done to do that.

I'll ask both Rob and Larry to contribute from their perspectives of having served on these committees with many countries present.

MR. LEWIS: I would just add one thought that's consistent with that and where that comes from, the United States is increasingly farther and farther behind the state-of-the-art in radiation protection based on the international conference of radiation protection recommendations.

The new recommendations that have come out, ICRP 103, we have a project underway to evaluate the domestic adoption of those and we are working extensively with stakeholders. But when we look at the rest of the world, they are already using ICRP 60, which in many cases, we are not even to that, and that's not a problem intrinsic to NRC I would note.

Many other agencies around the government had a role in radiation safety standards and they're equally or further behind in the ICRP compared to the current ICRP.

Now the counter argument is always is there is adequate safety using what we have in our current framework. So the cost benefit of changing is the discussion that needs to occur with the stakeholders. But in the materials area, it's more and more so every day an international business, as was mentioned.

Our source providers sell their sources around the world today and they are probably ahead of the curve on reactors, if I might say on that aspect.

Transportation occurs around the world today, so many examples.

COMMISSIONER SVINICKI: Okay. And I just want to be clear that I would advocate personally for that kind of thoughtful evaluation, I think, just because they are international standards doesn't mean that we should immediately move to their adoption. I think we have to undertake an assessment of these standards, and I know that's part of what you are doing with ICRP-103.

Larry, did you want to add something real quick?

MR. CAMPER: I think two come to mind. I think there is always a bit of healthy tension with regard to the level of prescriptiveness that is embodied within IAEA standards or even guidance. I know we constantly wrestle with.

We obviously take a more risk informed performance based approach and that is something I see some tension around a lot. There is a tendency to be more prescriptive I think.

The second one deals with waste classification. The IAEA recently updated its waste classification scheme. At the low end, there is an exempt or clearance approach. We do not have that, obviously as an organization, but is something we have wrestled with from time to time over the years. But there is a fundamental difference in the waste classification scheme with regard to the very low end of waste that they exempt or clear, which we do not, of course.

COMMISSIONER SVINICKI: Thank you, Mr. Chairman.

CHAIRMAN JACZKO: Commissioner Apostolakis.

COMMISSIONER Apostolakis: Thank you, Mr. Chairman. Thank you for a very informative presentation.

My first question is related to Commissioner Ostendorff's question regarding risk communication.

You are dealing with thousands of real people. And as you know, in the reactor area, we have had some incidents that, while we are claiming they are of low risk significance, they create a public uproar in some quarters.

And the tritium leaks, of course, are a good example of that.

Do you have incidences in your areas where things happen, according to scientists, the risks are low and yet the public is very upset and how did you handle those?

DR. MILLER: I guess I will start.

Some that come to mind to me, Commissioner, are especially since 9/11 concerns about source security.

There are various, there are various what I would call so-called authorities out there who get into the press with regard to dirty bombs and what can create a dirty bomb. And we have seen everything from smoke detectors can make a dirty bomb to something that really could.

So one of our challenges is trying to communicate the risk of what really constitutes a significant dirty bomb. And that's been something we've been trying to work across the Federal Government to try to see if we can get some kind of common understanding and communication in that regard.

Another area that we would see, I think, is in the medical area. And I'm not sure there's a public outcry unless there's something that goes on that harms a number of people.

And the one area, the one thing that makes medical different than anything else we regulate is radiation is given to people intentionally. We spend the rest of our time trying to help people avoid coming in contact with the radiation. In the medical area, it is done for health purposes. So to have them understand how the radiation, you know, can be helpful to them is the medical communities.

What we have to make sure that we articulate from a risk perspective is the doctors make the decisions on that. We look to make sure it is administered appropriately as they do that.

When they do that, we want the public to understand that that can be a benefit to them.

So there are two areas if they go the wrong way, I think, cause a fair public outcry.

The third area probably with regard to waste, and the long term effects of storing or disposal of wastes and what that means to the public, especially publics that live in the general community of that and whether or not they're concerned about whether that waste being disposed there results in any groundwater contaminations.

So we have to make sure that we clearly articulate the communication with regard to the risk in that regard.

Rob or Larry, I don't know if you have anything to augment?

MR. CAMPER: I think Charlie, Dr. Miller is right, I mean we often encounter a misunderstanding about the legal of risk associated with the disposal of low level waste.

We're going to be having a conversation with you next month about a topic called "blending," and one of the observations that I have made there is a great deal of misunderstanding about what is involved with that conceptually. And it really has to do with the fact that concentrations of waste change. They change all the time in the course of operations.

And what drives the dose associated with waste disposal is the concentrations of material that are disposed, of course, in quantity. But that concept in terms of risk at times can be very challenging to communicate.

The other thing I would observe, and this is based upon many, many years of public meetings in a number of different regulatory arenas, when you start to talk to people about pure risk, as we do as scientists, and we talk about risk coefficients and the like, you have lost them. They just don't understand it.

If you can use analogies and draw some reference

to exposure and what it means by something they can relate to, you are far better served in that regard.

But as technical people, that sometimes is challenging for us. Because we are purists to a large degree. But it is a challenge.

COMMISSIONER APOSTOLAKIS: Thank you.

Coming back to the medical delivery of doses, you, Charlie, mentioned it and also Mr. Lewis, that the doctor specifies the dose and we make sure it is delivered appropriately.

I am puzzled by that. Why is it our business to do that? Why isn't it the business of the hospital or the doctor or somebody? Why should the NRC do that?

DR. MILLER: Well, I will let Rob jump in, but two things that come to my mind are one, our duties as a regulator not only protect the patient but we have to protect the occupational workers that are working in the hospitals, also. So, they receive doses. And then we also have to determine, not only the patient themselves, but in many cases when a parent is hospitalized, there are going to be family, caregivers, friends that visit them, so there has to be radiation protection concerns.

So our focus is on radiation protection of not only the patient, but on the occupational workers and members

of the public.

That said, from my experience in this area, which is more limited than many of my staff, I found that what we have learned, especially through our advisory committee is, is doctors are trained, you know, they go through medical school, they are trained, they become board certified, their curriculum is so tight that there isn't an awful lot of time to focus on radiation protection, believe it or not, because they have so many things they have to learn and accomplish in that time.

So, there are mixed views. There have been mixed views for many years. Various members of the Commission that have sat there long before you had different views, perhaps as to whether we should regulate this or not. The pendulum swings back and forth. But the bottom line is radiation protection from my perspective.

Rob?

MR. LEWIS: Yeah, I think I would agree with everything you said and I would note that the dose actually given to the patient is what the doctor prescribed or wrote as a directive. And there is a chain of people involved. I mean it's sometimes not the doctor that is actually doing the activity, the doctor that prescribed it.

So, our regulatory role is to protect the chain of

people involved and make sure that the whole doctor's instructions were followed, not necessarily -- and we limit ourselves to not weighing in on the actual dose to the parent except in some rare case where the patient may be harmed.

You know, if a patient was prescribed a dose and the radiation caused the patient to die, we are questioning, you know, was it a terminally ill patient? Did the cancer cause it or did the radiation cause it?

We would enter into our event response mode and look at all those questions. So that is the one exception.

COMMISSIONER APOSTOLAKIS: That is very helpful. I misunderstood, I guess, what you meant by -- let's coming to the cross-cutting issues.

Cross-cutting issues, typically people mention safety, culture, human error, corrective action program, these are from the reactor arena.

Do these concepts apply to you? I mean do you make sure that hospitals have corrective action programs? Or -- and how do you deal with the culture issue? I mean that's really -- you are dealing with thousands of licensees. I'm wondering how you do that.

MR. LEWIS: Well, we -- yes, we definitely ensure that a hospital takes corrective action if a violation is

found. That's part of our enforcement and response to the NLV.

In the area, the broader area of safety culture for material licensees, we are behind the reactors. We're just embarking upon what that means and how it can be, what it means in practice.

And we're working a lot with our stakeholders through the effort led by the Office of Enforcement agency wide effort on external safety culture. We're involving our stakeholders in trying to capture what is safety culture for material licensees.

The Agreement States, of course, play a big role in defining that as well.

And many of our licensees do have safety culture. If you look, for example, the types of events that happened 20 years ago versus the types of events today, empirically they say, hey, you know, we have improved our safety culture. And hospitals, of course, argue they do have a good safety culture. Their whole business is to save people's lives.

And, maybe there's an intersection of that definition of safety culture and an NRC regulatory definition. And we you really need to explore those ideas over the next several months and years.

DR. MALLETT: Yeah, I would add though some of those facilities, including medical centers that are large enough, have radiation safety committees and we require that, as well as universities as you know, and those radiation safety committees do look at what you are talking about, what events have occurred, how do we prevent them from occurring again, how can we improve our programs. And we look at that during our inspection process, as well.

COMMISSIONER APOSTOLAKIS: Thank you. And I have a last comment, Mr. Chairman.

Mr. Lewis mentioned that the Advisory Committee on the Medical Uses of Isotopes is happy. I must say that statement comes to me as a shock. I know of no advisory committee that is happy.

CHAIRMAN JACZKO: Thank you, Commissioner Apostolakis.

I thought I'd just touch on a comment Commissioner Svinicki had -- some interesting questions about the IMPEP program, and Charlie, perhaps you are too modest, but you did have your IMPEP review in the past year and maybe you can let folks know how your review went.

DR. MILLER: Yeah. I mean without trying to brag, I

guess, I think our IMPEPs for the NRC usually turn out well. There's an IMPEP that's conducted in my office for the sealed source and device program. There's an IMPEP conducted of every region, and I think we try to take pride as a Federal agency of setting the standard for the Agreement States, so we come out all satisfactory in each regard. Satisfactory is the best you can do in IMPEP, fully satisfactory.

So that's a real tribute to not only my staff but to the staff of the regional offices who take this very seriously.

Many of the people in our regions and my staff serve as team leaders and members of an IMPEP team, and they bring that back, and that's one aspects I didn't mention of IMPEP.

One of the things we get out of it is not only to find where there are weaknesses and correct them, but we find sometimes in looking at both our programs and Agreement State programs, good practices that people do, that people can take back that are members of the team to their own State or to the NRC that improve programs across the nation.

CHAIRMAN JACZKO: Thank you.

Rob and Jennifer, I think I would certainly echo Commissioner Svinicki's comments that I think a lot of

progress has been made with National Source Tracking.

One of the challenges continues to be the credentialing process. Have we thought about the possibility of changing the security rating or the security STS, or whatever we call it, the security level for the system as a way to perhaps for some users, even perhaps as Commissioner Magwood raised the issue of perhaps someday moving to Category III, that that might be an element to the system that wouldn't need the same level of security and could perhaps facilitate others using the systems. What is your sense about that?

MS. GOLDER: Yeah. We've had a lot of discussions internally about the computer -- the security categorization of STS and we also had a lot of discussions with the computer security office. And the security categorization is based on three factors: Confidentiality, integrity, and availability.

And we are planning on going back and looking at the system itself and the different categories, and that does take time and resources, and we are planning on embarking, you know, on that process, in the next, perhaps in the next year. And some things we're thinking about, perhaps changing, if it is possible, to change the security categorization based on user roles. So we're not

there yet, but we are having a lot of discussions.

CHAIRMAN JACZKO: Well, it's certainly something I think that there is value in having discussions about, and in the end it may not come out that way given the important information that's contained in the system, but perhaps there are some ways that can be facilitated.

Turning to a different topic. Larry, you showed a very nice graph of what we have done on decommissioning, and I think the staff certainly should be congratulated, and I would say, it really predates my time, but the Commission also had a strong role in putting in place the right framework to make that kind of progress.

And as you look in the out years, we are now, I think, have dealt with the low hanging fruit. What kinds of things can the Commission be doing now to try and help facilitate resolving, say, those 22 remaining complex decommissioning sites or some of the other sites that are now really much more challenging from a variety of factors, the least of which in some cases is just lack of financial resources?

MR. CAMPER: Thank you, Chairman

Let me first echo, I would agree that there have been critical junctures along the way in which the staff has gone to the Commission on the decommissioning program

and said we need some help.

I mean for example, I was citing during that 2001 and 2003 period when we undertook the investment in the program. Well, the other part that occurred in 2005 was we went to the Commission and said this program simply needs more resources and the Commission responded. So, in the wallet where it helps the most.

The other thing that happened, has happened from time to time, and may happen again in the future, is, there are sites that we are involved with where we get to a point, for example, that the EPA is there, for example. They might be there under CIRCLA cleaning up lead for example, and we get to the point where we say through negotiations with EPA say, look, EPA if you'll clean this site up, we are prepared to back off as a regulator, provided you'll clean it up to satisfy our decommissioning standard.

And when we do that, we come to the Commission and we say, for that particular site this is what we would like to do.

An example that comes to mind was the Lake City Army ammunition plant, which was an incredibly complicated site, multiple State regulators, several Federal regulators, and so the Commission agreed with the staff

proposal.

So, there may be times when we come to you and we say for a particular site, we think this is the most intelligent way to deal with it and we will seek your support in that type of proposal. We have done that before, several times.

CHAIRMAN JACZKO: Are there any of those sites right now, those 22 remaining complex decommissioning sites where you think they are ripe for some kind of Commission involvement to move those ahead in a more timely way?

MR. CAMPER: Yeah, there are two or three in the mix where I would not be surprised if we don't find the need to come to communicate with the Commission in the near term. And the other problem you get into on some of these sites is simply a lack of money to clean up and therefore we have to pursue some alternate pathway.

CHAIRMAN JACZKO: Have we ever thought about trying to seek funding from Congress to -- I mean, well, in many cases for the sites, it may be a significant amount of money. One never knows what a significant amount of money is to Congress these days. In the grand scheme of some of our budget and other programs in the Federal Government, that may not be significant chunks of

change.

Are there any that you think fall in that category where we're talking a couple million dollars and you've got the ability to clean up the site or are they in the tens of millions mostly?

MR. CAMPER: The simple answer to your question is no, we have never gone to Congress and said provide us with some funding to support actual remediation and clean up for these sites. What we do is, there are a handful of sites that we provide a report every year to the Commission on that are stressed financially to varying degrees.

What generally happens is when there is no other pathway available, it is a default to EPA cleanup, you know, being added to a list of the EPA for clean up. Safety Light comes to mind for example.

But generally what happens is we work with them and monitor their performance and try to figure out ways to get them remediated.

Now, having said that, there are certain sites where the difference because of legacy going a long time ago, the amount of funds that are available to successfully decommission the site as compared to what it would take to do it, there is a mismatch. There just is.

Shieldalloy in New Jersey, comes to mind, for example. That was really, for all intents and purposes, a site where they were pursuing a restricted release which would leave a huge slag pile on site because it was about a $25 million problem. So some of them can be terribly expensive to remediate.

But, no, we have never gone to Congress and said here is another avenue of appropriations which would be helpful.

CHAIRMAN JACZKO: Thanks.

Just a couple more questions.

I am pleased to hear about the work on the NEPA effort. I have always believed that NEPA is an agency-wide activity and it should be consistent across different offices. So it's good to see the work that you are doing with that program to try and ensure some consistency. I think that will help with efficiencies. In the end, it will help with the product, too, that we'll have better, more defensible products as we go forward.

An issue we didn't really touch a lot on in the time here is the issue of low level waste.

In 2007, the staff brought to the Commission a strategic assessment for low level waste and listed, I think there's about seven high priority activities that the staff

was going to undertake.

Off the top of your head, if you are familiar with those, maybe you can comment on where you think we are in accomplishing some of those and what is still left to work through in the next couple of years.

MR. CAMPER: I think in total we evaluated something like 20 to 22 items. I think we identified ten, seven were high priority. Of the seven, we have done three or four of them. Probably the one that's -- the two big ones coming to mind, we did, of course, provide the SECY on the depleted uranium issue, Commission direction to proceed with the rulemaking that was a huge issue.

The other one that is very big and is near term, is updating the branch technical position on concentration averaging of waste.

We're on schedule to actually complete that this summer but of course now that we are going to be communicating with the Commission on this issue called blending, we have delayed that updating until we receive direction from the Commission as to how it would like to proceed on this topic called blending.

But that is another high priority item near term. And so our interface in June, and the ultimate Commission

decision, will influence that particular product very much so.

CHAIRMAN JACZKO: Thanks.

And, again, I think it is an area where we have made significant progress and I think it's one with some of the Commission action this summer, we will continue to move forward on those.

With that, I appreciate the presentations. I would say we have a few minutes for discussion if there are any issues that my colleagues wanted to raise or discuss for discussion.

COMMISSIONER SVINICKI: Could I just, this is more for this side of the table, but on the ACMUI interaction, I don't remember the date when the staff will have a new update to Part 35 to the Commission, but I would benefit and I will try to do some thinking about how the Commission could benefit from the medical expertise we have in the ACMUI.

I know it would probably inform my vote on that. And again, Mr. Chairman, I can't remember if this is say something that was related to you, but you said that it's very complex when we get these updates to Part 35, the Commission tends to find we are trying to catch up on like 30 different items or something. So I'm looking forward to

that and thinking that it's going to be pretty complicated given we don't have any M.D.'s on this side of the table either. So if there's anything we can do.

CHAIRMAN JACZKO: We never have.

COMMISSIONER SVINICKI: So that will be, I think, a significant lift for me personally, so I will looking to find opportunities to see if the ACMUI have some views to help inform.

CHAIRMAN JACZKO: Well, one of the things -- and I don't know if Commissioner Magwood if you were heading in that direction -- we can put into kind of the meeting planning process an ACMUI meeting. That is something we could easily do.

COMMISSIONER MAGWOOD: I would support that, Mr. Chairman.

COMMISSIONER JACZKO: I will propose some ideas, then, at agenda planning.

DR. MILLER: Mr. Chairman, could I interject? If I may, please, excuse my indulgence here, or give me your indulgence.

One of the things that helps, because many of the members of the ACMUI are in medical practice, so they are advisors by day and licensees by night in some cases.

And so, it helps for your consideration for agenda

planning, if you do consider having such an interaction, if at all possible to time it with their meetings. They're in town, and they can set aside some time to meet with you while they are in town. If it is outside of that, we don't necessarily get the full committee.

Commissioner Apostolakis, you can appreciate this from your previous --

CHAIRMAN JACZKO: Your happy days, or your unhappy days.

DR. MILLER: It is something we have always strived for in working with the Commission with agenda planning, to try to have the coincidence of their meeting and --

CHAIRMAN JACZKO: We can certainly work to accommodate that.

DR. MILLER: Within whatever time period you want.

MR. LEWIS: Actually, Charlie, thank you. A good example, we did invite Dr. Malmud, the Chairman of ACMUI to come today, but he is seeing parents today, so he was unable to make it and passed on some words for me to convey when I met with him two weeks ago.

CHAIRMAN JACZKO: Thank you.

That is good input, I appreciate it.

Any other items?

Well, again, thanks, everyone, and I will just say I am happy that we were able to save Commissioner Apostolakis from his unhappy existence before.

(Whereupon, the meeting was adjourned)