

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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BRIEFING ON NMSS PROGRAMS,  
PERFORMANCE, AND PLANS -  
WASTE SAFETY

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ROCKVILLE, MARYLAND

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TUESDAY, FEBRUARY 15, 2005

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The Commission met in open session at 9:30 a.m., at the Nuclear Regulatory Commission, One White Flint North, Rockville, Maryland, the Honorable Nils Diaz, Chairman of the Commission, presiding.

COMMISSIONERS PRESENT:

NILS DIAZ	Chairman of the Commission.
EDWARD MCGAFFIGAN	Member of the Commission
JEFFREY S. MERRIFIELD	Member of the Commission
GREGORY JACZKO	Member of the Commission
PETER LYONS	Member of the Commission

(This transcript was produced from electronic caption media and audio and video media provided by the Nuclear Regulatory Commission.)

STAFF AND PRESENTERS:

LUIS REYES, EDO

MARTY VIRGILIO, DEDMRS

JACK STROSNIDER, Director, NMSS

MARGARET FEDERLINE, DD, NMSS.

LARRY CAMPER

BILL REAMER

PAUL LOHAUS

BILL BRACH

## PROCEEDINGS

CHAIRMAN DIAZ: Good morning, and welcome everybody to the Commission meeting on the Nuclear Material Safety and Safeguards, especially on the waste safety arena. Today is the first time that we have a full Commission. And I would like to welcome Commissioner Jaczko and Commissioner Lyons that have just recently joined us. We are now five strong.

I would like to also to welcome back Commissioner McGaffigan and Commissioner Merrifield, which we have shared this podium for a few number of years now. And we are pleased that you are able to join us today.

This is one of our annual briefings. We begin the cycle in which the staff briefs the Commission on particular areas in which the Commission has interests and they have many, many uses. This, of course, allows the Commission to see how an area is progressing and what are critical areas that needs our attention or policy areas.

Of course, in the area of this particular arena, waste, we have several significant developments. One of those developments is the decision of Congress to place NRC in a consultative role regarding the waste incident to reprocessing, something that came out of the blue sky. And we are now trying to deal with it.

There are many, many other areas and we look forward to the staff to cover them, so the Commission can put them in the proper perspective.

Many of these areas of waste are not only, you know, really related to what we do, but it involves federal agencies, the states, local government as well as international organizations.

So with that, I want to ask my fellow Commissioners if

they have any introductory comments. Commissioner McGaffigan?

COMMISSIONER MERRIFIELD: Mr. Chairman, I would only add my comments to yours to welcome Commissioner Jaczko and Commissioner Lyons to a full strength on our August panel. It's a pleasure to have them here. It takes some of the burden off of the three of us which I'm happy to share. So I look forward to a positive relationship with the two of them as we move on.

The other thing I would say is, Mr. Chairman, this is, as you know, the area of waste -- such as decommissioning that has been of high interest to me during my time here on the Commission. So I'm very much looking forward to the presentation of our staff today. Thank you.

CHAIRMAN DIAZ: Thank you. Mr. Jaczko?

COMMISSIONER JACZKO: I don't have any comments.

CHAIRMAN DIAZ: With that, Mr. Reyes?

MR. REYES: Good morning, Chairman, Commissioners. We are here today, the staff, to brief you. I have members of the Office of the Nuclear Material Safety and Safeguards, which I will refer to them as NMSS for the rest of the presentation.

And the waste activities regulated by NRC are broad and diverse. And they include high-level wastes, radioactive material transportation and spent fuel storage, low-level waste and decommissioning. Another major activity is environmental assessment which supports our licensing activities.

The waste safety program is one in which there have been many successes, both programmatic and technical, as well as one which there remains many challenges. These challenges posed in the waste area are unique, technically complex and are of significant

stakeholder interest.

In today's presentation we will try to identify some of the key challenges we see for the future and our strategies for addressing them. And at the risk of coming across as a negative presentation, I have asked the staff to make sure we highlight to the Commission the challenges we have in front of us. We are not going to spend as much time telling you all our accomplishments, but we are going to bring up to you challenges and policy issues that may be forthcoming in front of you.

We want to recognize that all the activities in the waste program are not performed by NMSS alone. But our accomplishments have been achieved in large part through good coordination between the various headquarters and regional offices. And behind us we have a support group of representatives from all these offices in case we get into very detailed questions.

These offices have forged a strong partnership with NMSS to help us obtain success in our waste activities.

At the table with me today I have Marty Virgillio, who is the Deputy Executive Director for Materials, Research and State Programs; Jack Strosnider, the Director of NMSS; and Margaret Federline, the Deputy Director. I will turn the program now to Jack.

MR. STROSNIDER: Thank you, Luis. Good morning. Today, we will be briefing you on the waste safety program. On March 17th, we will be briefing you on the material safety program.

Before I begin, I would like to again acknowledge the contribution of other offices to these programs. And I won't read through the whole list because I don't want to leave anybody out, for one thing. But I think the message is that these programs truly are a

team effort and we appreciate all the support we get from the other offices.

With us today, as Luis mentioned, are managers from NMSS, Larry Spitsberg from Region IV, Marc Dapas from Region III, and representatives from the other headquarters offices.

An underlining theme of today's presentation on the waste program and the upcoming presentation on materials program is our commitment to continuous improvement. We recognize that the ever-changing environment will continually create new challenges in these areas.

In order to meet these challenges, we are committed to continually looking for ways to improve these programs so we can accomplish our strategic and performance goals in the most effective and efficient way possible.

We will highlight some of our successes today. But as Luis indicated, more importantly, we hope we can provide an understanding of some of the challenges that we see ahead and our strategies for successfully addressing those.

And with that, I would like to turn the presentation over to Margaret Federline, Deputy Director of NMSS.

MS. FEDERLINE: Good morning, Chairman, Commissioners. Today we will be briefing you on the status of our waste activities, as Jack and Luis said.

May I have slide two, please?

The waste safety area includes a broad range of activities. It includes regulation of high-level and low-level waste disposal, certification of spent fuel storage, cask systems, regulation of independent spent-fuel storage installations, certification of radioactive

material transportation packages, environmental assessments and environmental impact statements which support our licensing activities.

It also includes decommissioning and license termination for materials and reactor sites. Today I will share with you some of our major accomplishments. But I will emphasize our challenges and some of the approaches for achieving success in these areas.

I will also outline the policy issues that we will be talking with you in the next 12 to 18 months and indicate also some longer-term policy issues which we think will be of interest to the Commission.

Slide three, please.

From the list that I described you can see that NMSS's responsibilities are unique because of the diversity of activities that we regulate. The waste program encompasses a wide range of materials including contaminated soils, sealed sources, all the way to spent fuel, which covers a wide range of potential risks and hazards.

Many challenges are involved in addressing these diverse waste activities. For example, for a long lived waste disposal we must evaluate performance over very long time frames.

Also we have a challenge of making sure that our decisions are realistically conservative and that our regulatory reviews are focused on the most safety significant aspects of our reviews.

A changing landscape and significant stakeholder interests pose additional challenges to the program. Congress has provided significant guidance in the Nuclear Waste Policy Act, in the Low-Level Waste Policy Act, and most recently through giving us responsibility for DOE's program on waste incidental to reprocessing.

Uncertainty about the availability of storage and disposal

in the long term has influenced industry's desire for flexible options for storage and disposal, both for existing and future wastes. Signs of a reawakening nuclear program, both domestically and internationally, are influencing the public's awareness of waste and decommissioning issues.

Also the global economy is affecting the future of uranium mining and milling as well as enrichment and fuel fabrication. This in turn influences the waste picture.

Finally, stakeholders are aware of approaches to protection of public health and safety worldwide, and this makes our involvement in the development of international standards very important.

All of these factors combined make the policy and technical arenas very complex. And we certainly appreciate the involvement and early guidance that the Commission has given us in many areas.

Slide four, please.

NMSS working with other organizations has met our 2004 strategic and performance goals. For example, in the area of safety and security, we have identified prudent measures to enhance security and staff is subsequently analyzing specific areas to determine if additional measures are needed.

Also we have safely terminated licenses of four complex material sites. In the area of public confidence and openness, we have developed outreach methods with the University of New Mexico to enhance our staff communication skills. And we have participated in more than 30 public outreach meetings per year addressing spent fuel storage, spent fuel transportation and radioactive material



transportation.

In the area of efficiency, effectiveness, realism and timeliness, we have also issued rules of engagement in the spent fuel area to focus and streamline our safety reviews. And in the management area, we have spent significant time recruiting critical skills and in the development of staff. For example, by utilizing the skills of our performance assessment staff in the decommissioning area, we have prepared those staff members to work in the high-level waste area where those skills will be critically needed in the future.

The next slides will talk very briefly about some specific accomplishments in each of the areas.

Now, determining the acceptability of a proposed Yucca Mountain high-level waste repository is a major issue for the nation. And we believe that we have prepared NRC to perform an independent, objective review of the safety and environmental aspects of license application.

We have successfully paved the way for an efficient review by improving public access to over 25,000 high-level waste documents through the Licensing Support Network.

In addition, we have focused on openness and stakeholder understanding of the licensing process using innovative publication techniques and ensuring more interactions with the Native Americans and increased interactions with the affected units of local government.

We have also conducted independent reviews of DOE technical reports. And through those reviews it resulted in an integration by DOE and an improvement in their technical documentation.

Through prelicensing consultation over 200 of the original key technical issue agreements have been addressed. At our Center for Regulatory Analysis, which is our Federally-funded research and development center in high-level waste, is recognized worldwide in a wide variety of technical disciplines that we will need to conduct the licensing review.

Now, although our efforts in low-level waste are currently small, the uncertainty and changing low-level landscape, which I will speak about later in the briefing, will require perhaps a larger role for NRC in the low-level waste area in the future.

Turning to slide six, storage and transportation.

Since a decision on the acceptability of the repository is yet to come and assuring safe storage of spent fuel by current technologies is an important part of our mission. The safe transportation of spent fuel and other forms of radioactive materials is also a major activity. For example, staff continues to work closely with OGC on the PFS hearings. We are awaiting the ASLB decision, expected in February 2005.

We have also enabled nuclear power plants to continue to move spent fuel to dry cask storage by providing a timely regulatory process to support cask certificates and independent spent fuel storage licensing. At the end of 2004, there were 34 licensed and/or operating ISFSIs. And based on current industry projections, we expect by 2010 there will be over 50 ISFSIs.

We have also have completed a safety and environmental review of Foster Wheeler Environmental Corporation ISFSI at the Idaho National Laboratory. Foster Wheeler will construct and operate this facility as part of DOE's privatization program. We

have also improved regulatory stability by working jointly with the Department of Transportation in revising both agencies' regulations for transportation.

These regulations, which are based on IAEA transportation regulations, serve as the basis for NRC, DOT, and foreign country regulations to ensure consistency around the world.

I would also like to mention the effective working relationship and timely support that we receive from the Office of Research. They have supported us in materials issues relevant to the Surry ISFSI license review and on other technical issues related to dry cask storage and transportation.

Now, with the expected completion of two licensing actions related to Surry later in February, we will have no outstanding old cases in the spent fuel area. And that's really a significant accomplishment for us.

Turning to environmental. Environmental assessments under NEPA are a key part of our licensing process. And they have to be high quality and timely in order to avoid delays in our licensing activities.

We have had a number of accomplishments in 2004 and '05 which reflect the high-quality and timeliness, but I will only mention one or two.

We have completed the Louisiana Energy Services draft EIS ahead of schedule. And EPA recognized the quality of the EIS by giving it its highest rating.

We have also completed the Foster Wheeler final EIS ahead of schedule and under budget, and the Mixed Oxide facility final EIS.

Also in January 2005, headquarters, working together with Region II, conducted a successful scoping meeting for the environmental impact statement for the American Centrifuge Facility in Piketon, Ohio.

Also I want to thank the Commission. With your guidance and direction, we were able to influence ICRP's recommendations on environmental protection. And we really appreciated the support in that area.

In the decommissioning area, of course, end of life activities are essential to ensure safety and public confidence in the full life cycle of our facilities. Decommissioning of facilities can also have large financial impacts, both on the licensees, the regulators and the public. So it's to everyone's advantage to have an effective process.

Now, in alignment with Commission direction, we have achieved improvements in implementing the license termination rule. We have developed more realistic exposure scenarios. We have used soil mixing as a technique for more realistic analysis. And we are also experimenting with options to make real restricted release more of an option to those who wish to exercise it.

We have also streamlined and improved our comprehensive decommissioning program processes. We have included a self-assessment process, and also we are emphasizing a communication strategy in this area.

Through these program improvements, we have achieved more timely reviews of our decommissioning plans and license termination plans resulting in a greater number of site terminations. For example, in 2004, we terminated four sites. And this was in comparison to earlier years when we were only able to terminate one.

And our goal for this fiscal year is 10, termination of 10 sites.

We talk about efficiencies all the time. But a question is raised are we actually achieving, can we measure these efficiencies. And I just wanted to give you one or two examples in the decommissioning area.

We developed an integrated plan for each decommissioning site. And using enhanced project management tools and streamlining licensing and inspection we have saved two FTE's in 2004, which we were able to reinvest in looking at ways that we can implement the license termination rule more effectively. Also by reducing the scope and the frequency of inspections, we are also saving one FTE.

So as our tools grow and enable us to measure the outcomes more effectively, we will be able to demonstrate additional efficiencies as well.

I want to get into our challenges now because these are the things that are really important, and these are the areas where we are going to be asking for Commission support and guidance. I want to focus on the four challenges that I have listed here on the slide.

First, the volume, scope, and complexity of emerging work continued to be a challenge. For example, since 1999, we have seen almost a threefold increase in the number of spent fuel storage facilities. And as power plants continue to operate, increase spent fuel storage capability will continue to grow. We are going to continue to see this growth in ISFSIs over time.

Also high-level waste poses a unique and complex challenge for us. As a performance-based, risk-informed regulation, it's the first time that we will have licensed a facility of this complexity. And

it presents a great challenge.

Also you are aware as a result of the court decision, we must revise our regulations to be consistent with any changes that EPA makes in their regulations.

And the Chairman, in his opening remarks, mentioned in the environmental area new legislation has given us oversight responsibilities for DOE's waste incidental to reprocessing in South Carolina and Idaho.

So you can see that emerging work is really a critical issue for us.

A new challenge also involves balancing openness and security. We have been very vigilant in both areas, safety and security, and we have always given high priority to openness with our stakeholders. However, since 9/11 with the increased concern with regard to security and terrorism, it's been necessary to reassess the boundary between openness and security. And this poses a particular challenge in the protection of sensitive information and the need for openness in our regulatory activities.

Another challenge relates to attracting and maintaining critical skills. The waste program, as you can imagine, requires many unique skills such as vulcanism, hydrology, performance assessment, criticality. These types of skills are very difficult to find. Many skills must be learned on the job after graduate education.

With increased volumes of work, we see the demands for these specialized skills increasing. One area where we admit that we need to make additional improvement is in the development of staff guidance and updating the infrastructure. This is very important because we are hiring more entry-level staff. And without this

infrastructure to support the staff, it will require more management focus to ensure timely and high-quality products.

We have had to defer some of our resources for the development of this guidance in past years. But we are looking at new and improved ways to develop the guidance which will be less resource intensive.

Let me now turn to the trends in our activities.

The overall context that we see in the waste area is the desire for licensees, for more flexibility and more options for decommissioning storage and disposal of waste. In the area of waste disposal we are expecting to receive a high-level waste application by the end of 2005 and, of course, the additional unplanned work of the EPA standard as a result of the Circuit Court decision.

Also based on industry projections and actual data from licensed ISFSIs, we expect continued demand for licensing in this area as well. And in the environmental area, we have been conducting environmental reviews to support an increased number of licensing actions. And I just mentioned our new responsibilities under the waste-incident-to-reprocessing.

In decommissioning, although we continue to terminate licenses at an increased rate, we also see more sites being identified on a yearly basis. So we expect some stability in that workload. However, we do expect to see a trend in reactor decommissioning as a result of license renewal.

So the message on this slide, the workload in each of the major programs is either increasing or stable, and more of our licensing activities are increasingly complex. So I wanted to indicate that there are other factors as we decide on how many resources and which

resources must be used for each job. Other factors are important here in terms of critical skills, the approach to doing the work and the changing environment. These are all resource determiners as well as the case load.

Let me turn now to slide 11 and talk about some of our strategies for success.

First and foremost, we believe that strategies must emphasize flexibility and management focus to deal with the changing landscape. The overarching strategy for addressing our diverse responsibilities is continuous improvement through increasing organizational capacity.

Doing this ensures that our staffs can be prepared to deal with multiple assignments at the same time, can be engaged in cross training to work more effectively in more than one area.

Also from an agency perspective, we realize that resources cannot continue to increase across all three arenas, even though we see increasing work. In spite of this, we acknowledge that we are accountable to deliver our goals.

And just to give you an example, although resources were budgeted for only one environmental impact statement to support one gas centrifuge in Richmond application, we are completing both on an accelerated schedule as a result of improving our processes, reducing the scope of other and reprioritizing other work.

So we know we have to work smarter and that's one of the big management challenges.

Examples of strategies which we believe are essential in the current environment include eliminating activities that do not contribute to our goals and a commitment to look for new ways to do



work. For example, improvements in our decommissioning regulatory program to conduct more risk-informed and more realistic analysis enabled us to make a decision that no more action was needed at the Kiski Valley water pollution control authority site.

Also improving both internal and external communications is a major contributor to our effectiveness. We have an ongoing communications initiative which included the development of communication tools and techniques which were designed to overcome day-to-day barriers to effective communication. Some of these seem very simple like developing standard E-mail guidance and developing guidance for conducting meetings and for clearly defining the scope of expectations for work assignments. But by standardizing many of these things, we have been able to achieve efficiencies in our ability to communicate.

Also in our decommissioning program, we are working to improve communication with stakeholders. For instance, we work closely with the Nuclear Energy Institute to define lessons learned from decommissioning so that we don't lose the body of experience that we have gained from this first series of decommissioned facilities.

The regions have also worked to improve communications. Prior to releasing use of a licensee's former depleted uranium production facility, Region III staff, with the assistance from NRR and OPA, conducted successful public meetings to address significant local communities and congressional concerns.

Next, having a flexible infrastructure is very important to our success. We have reaped benefits in the high-level waste program for ensuring the integration between our business processes and our information technology systems to address all required functions in a

time frame when they were going to be needed.

As I have mentioned, recruiting and retaining critical skills is also critical to delivering our goals. It's difficult to compete for some of these highly-specialized skills because only a few universities turn out graduates in these areas. And we are actively working to develop relationships with these universities and also relationships with the students during undergraduate time so that they will view NRC as a positive alternative for a career opportunity.

I would also like to add another strategy for success which positions us for looking ahead. A good manager has to know what's going to be coming down the pike, which may affect his or her future. And, for example, we are working very hard to influence international standards. We are understanding that these standards can very much affect our regulations. And by investing a little time up front, we prevent a lot of additional time when the standards come out and we can't use them in our regulatory process.

Turning to the next slide.

I specifically wanted to mention risk-informing, our risk-informing strategy. We have developed a systematic risk-informed framework to improve our regulatory activities. And we are working to implement this on a day-to-day basis through our division responsibilities.

The staff plans to use these risk-informed methods where appropriate to focus resources on the most important aspects of our work. For example, in the decommissioning, we used risk rankings to prioritize inspections and to focus licensee monitoring and reporting to avoid future legacy sites.

Also our Spent Fuel Project Office and the Office of

Research are working together to develop a spent fuel storage probabilistic risk assessment which can be used in the future to better understand where our regulations can be streamlined and improved. And we are also considering an EPRI methodology as we develop and consider our own methodologies.

In the high-level waste area, we have completed the risk insights baseline. This was a document that integrated all of the work that came out of the key technical issues to make sure that we had a system's perspective on what was going on at the site.

Turning to slide 13.

I want to emphasize one thing that's extremely important in our office because of the diversity of the activities is the integration that goes on and the close cooperation between staff and management in all of our activities. For example, to achieve communication and connectivity, we are organized as an executive team, which is Jack and I; the leadership team, which is composed of the division directors; and a management team; which is composed of all the branch chiefs and deputy division directors.

We all share accountability on delivering our performance goals. And we pay close attention to the impact of one program on another, for example, the link between transportation, waste disposal and decommissioning. Although they may be located in different organizational units, we make sure that the objectives are tied to one another and that the resources needed to deliver these goals are there.

We look holistically at resource and critical skill needs such as health physics and criticality, which are important skills across the whole office. We look for ways to cross train those skills so staff are ready and fungible to move from one area to another.

We are also looking for opportunities for cross fertilization. We recently had an opportunity to select six section leaders. And when we selected them, we made sure that they were all from outside the selecting division to ensure cross fertilization.

We are also working effectively with other offices. For example, with Research we worked on the package performance study. And we are working very closely with the regions in our complex decommissioning program.

Staff and the Center for Nuclear Waste Regulatory Analysis are also looking at transferring knowledge that they gained in the PFS hearings to the high-level waste staff so that their knowledge of hearings can be recent and first-hand as they approach the high-level waste area.

Let me turn to slide 14.

I mentioned that we were going to continue to need the Commission's help. As part of our continuous improvement activities, we viewed that it's very important to engage the Commission early on some of these very difficult issues to make sure we understand your views and we can incorporate them in our plans.

Examples where we expect to interact with the Commission over the next 12 to 18 months include our high-level waste standard revisions, Part 63, and we plan to talk with you frequently in the low-level waste areas. We see the landscape changing in that area.

Also in storage, we would plan to prepare licensing recommendation for PFS following an Atomic Safety and Licensing Board decision if that's appropriate. Staff is also currently evaluating potential paths to address the issue of moderator exclusion for Part 71

fissile packages, that will also involve coordination with the Commission.

And decommissioning decisions on termination of complex materials, as the Commission has directed, if any site exceeds 25 millirem or if there is a plan to use restricted release, we will certainly coordinate with the Commission on that. And we expect that there could be one or two sites this year which may opt to use restricted release and will require that coordination.

Also we see potential legislation on West Valley remediation on the horizon. That's another area where we would certainly communicate with the Commission.

And finally, I want to mention just a few very future looking issues that we need to keep on the horizon. We need to be aware of these future policy issues so that we can get your guidance, understand your view on these issues and make sure we are prepared when the time comes.

For example, fuel vendors are developing new cladding materials to support industry's desires for improved fuel performance and higher burn-up fuel. These new technologies may raise technical and policy issues regarding the storage and shipment of spent fuel.

Also new issues are likely to emerge as staff prepares to license new reactors. Such fuel cycle issues might include volumes of spent fuel, new storage cask designs, decommissioning issues and transportation issues related to fuel enrichment.

And finally, over the last year there's been a great deal of attention focused on the issue of low-level waste. The landscape is changing with Barnwell potentially closing in 2008, with the waste control specialists having submitted an application in Texas, with

Enviracare indicating that it's only going to be accepting class A waste. There is a lot going on in the area. As you are aware, GAO recently issued a report which included a recommendation to Congress that NRC would have a larger role in assessing the inventories of low-level waste in the country.

Congress also held hearings this past September on the GAO report. And during that hearing, it was recommended that Congress consider approving a new low-level waste site on Federal land, which could potentially be licensed by NRC.

So with all of this, we expect there may be new hearings coming down the pike where NRC may be asked to testify. And it's likely that as a result of some of these actions, there may be a larger role for NRC in the low-level waste policy area.

Finally, I want to summarize. New challenges will continue to arise. It's just without doubt that NMSS is going to continue to see a changing landscape and the diversity of activities and NMSS is going to continue.

Secondly, we think it's extremely important that the Commission be involved and that the staff understand very early on what the Commission's view is on many of these issues. That's going to be very important to our success.

And finally, we are committed to pursuing continuous improvement so that we will be positioned to meet these new challenges and accomplish our organizational goals in the most effective and efficient way possible.

That completes the presentation and we would be happy to answer any questions.

MR. REYES: Mr. Chairman, we stay in the green and we

wanted to -- [Laughter] -- we wanted to afford as much time as the Commission needs for that. So we kept our remarks limited, just hoping that the background material was informative to you and we have plenty of questions. So we turn over the meeting to you.

CHAIRMAN DIAZ: Thank you, Mr. Reyes and Margaret. We appreciate you staying in the green. We will remember that across the board of activities, all right. Especially in budget space.

[Laughter].

MR. REYES: I'm afraid it will be a different color in the budget.

[Laughter].

CHAIRMAN DIAZ: I was afraid of that.

Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: I guess I have the right color pen for budget purposes.

Let me ask a question. We have some useful backup material, as you said. And we are also in the process of voting on budgeted assumptions and goals. What do you call it? Measures for next year.

And it strikes me in one of the backup slides you give us 45 projects, not all of which are as important as others in budget space. But at the moment we are dealing with planning assumptions and other things.

How useful would it be for us to go through these 45 projects, put one, two, three, next to each of them, see where the consensus of the Commission is?

Because my problem with the current budgeting process is that, you know, we vote on an assumptions but we don't vote on

which things are more important. That's left to you guys. Then we vote in July. But that's sort of late in the process.

If you go through the trouble of producing a 45-item list and we prioritized it in this time frame, you would have a pretty good shot in the PRB to put a budget together that wouldn't have a lot of Commission changes.

MR. VIRGILIO: Actually I think we have asked for some feedback on the assumptions. And I think from that we can then lay out what are the work activities that we are going to do to match the targets and goals.

If we could agree on a process, I think it would be more helpful to the staff than a prioritization scheme that --

COMMISSIONER McGAFFIGAN: Might limit your flexibility.

MR. VIRGILLIO: But it would establish a framework for us to make decisions in the future. And I think that would be the most helpful thing for the Commission -- for us to agree on, is that it is a process, that it would be a framework to allow the staff to go forward and make these kinds of decisions and find success in engaging the Commission in the future. As opposed to going through line item by line item and getting the feedback.

COMMISSIONER McGAFFIGAN: 45 isn't that many line items. We see a lot more line items come July when we get the budget. And 45 seems to me sort of a manageable number of projects for us to give you some guidance as to which is more important.

I mean, I know it was mention made earlier of being able to adjust the environmental program to do both the LES and USEC environmental impacts in a timely way. And I think we communicated



to you on that by order. I forget, but I think, because it's in the adjudicatory process, we made it clear that we wanted those reviews to be done promptly. I won't say anything more than that.

But that was a predictable thing in some sense. I mean, you know, to take another one, you know, the MOX program moving to the right in time space has been a predictable thing probably because the Russians have been slow.

And so, you know, in some sense you can say this is a place where I want to put resources and this isn't. And the only chance the Commission gets to do that is in July, this enormous budget, and you all having, laid out in great detailed including where you would add and where you would cut.

But I think if we gave more than just assumption guidance at this point whether the assumptions seem correct, it will be more useful and there would be less disconnect.

MR. STROSNIDER: Maybe I could just share an observation in terms of how the offices interacting with the PRC and how that works. We are working on common prioritization and coming up with lists of how we see the priority things. And we provide that to the PRC.

But we ask when we do that don't take this list one to N and assume that if we need -- if we don't have all the resources that we are going to start at the bottom and eliminate those, because it's more complex than that. In terms of the level of granularity, if you will, in terms of what we presented. Sometimes, you know, we can go back and we can look within programs and say this portion of it is more important than that, and so we can dissect it more finely.

So I think the guidance is helpful --

COMMISSIONER McGAFFIGAN: We are on a tight schedule. I think I have a minute and a half left. So let me mention, the GAO, you mentioned that they had suggested that NRC assess inventories of low-level waste.

My recollection is our comment to GAO, which they didn't accept, was that that is a more appropriate role for DOE and gets us crosswise with our regulatory role. So just a clarification there.

In one of the backup documents it says 201 of the 293 KTI's have been resolved at this point, you know, the way you're put on the shelf. I'm not sure what the right word is because they are not resolved in any final agency sense. What is the plan for the remaining 92?

MR. STROSNIDER: We are on schedule to have all those completed by June I believe is the date.

COMMISSIONER McGAFFIGAN: That will be the end of my questioning.

CHAIRMAN DIAZ: Can I just say, is this grouping in some one or two areas -- just piggybacking on Commissioner McGaffigan's comment -- the 92 that you are going to finish in June, are they grouped?

MR. REAMER: Commissioner McGaffigan, Bill Reamer, NRC staff.

There are 293 agreements. The department has provided its input on all of those. We have done a review with respect to 221 and provided feedback. That means we have 72 remaining. We will complete those by the middle of April. That's our goal.

With respect to the 221 that we have provided a response to DOE, in 15 of those agreements we have asked or identified

additional information that we need.

CHAIRMAN DIAZ: Thank you. Commissioner Merrifield?

COMMISSIONER MERRIFIELD: Mr. Chairman, relatively recently the NRC revised its regulations to conform to the IAEA guidance in the transportation arena. The end result is that there are a variety of existing transportation containers that are no longer going to be certified for use unless they can pass the new standards.

And what I would be interested in knowing is what the staff is doing to avoid a possible last-minute crash of work in that area.

MS. FEDERLINE: Let me just start and then turn to Bill Brach for the answer.

We have been working closely with DOE talking about the future needs. You are aware that when the rule was published, there was an advanced notice of what canisters would not be available. So we did have some good idea at that time. But we have been working with DOE and I'll turn it over to Bill.

MR. BRACH: Bill BRACH, NRC staff, Spent Fuel Project Office.

As Margaret said, we have had continuing dialogue with the Department of Energy but as well with the industry, broader industry, if you will, with regard to packages that were certified to the older standards that come 2008 would no longer be certified either by NRC or by DOT for use.

You may recall that during the rulemaking process this was a topic of significant amount of industry interest and engagement. And the NRC and DOT in response in part to some of the comments raised did extend the period of time from three years to four years from the date of the effective date of the regulations, which was October

2004, to allow a longer time period again for the industry to further reassess and determine which package designs they wished to resubmit in accordance with the new transportation standards for review and certification, as well as allowing additional time for design or development of new package designs to meet industry needs.

So there is an expanded time frame that's been allowed as well as ongoing dialogue with the staff and industry in this regard, including Department of Energy who has needs in that area as well.

COMMISSIONER MERRIFIELD: I think where I would leave on this, I think it would be helpful and I don't want anyone to respond to this. But I think it would be helpful to get a little bit more detail from the staff in a written form as to what our expectations are, what are the number of casks out there that we may have to be concerned with, to get some better picture and flavor for where we are going.

Second question I have, in the notes noted that were provided to the Commission, it noted that members of our staff participated in a transport safety approved service or a TRANSAS mission to France. And I'm wondering if there's been any consideration with our staff of perhaps volunteering to participate, have one of those missions here in the U.S.?

MS. FEDERLINE: Bill, would you like to handle that?

MR. BRACH: Yes, Commissioner. We have participated both in TRANSAS missions conducted in the past in France as well as the UK in support of the IAEA and a TRANSAS mission recently in Panama also. And have plans to support a future TRANSAS mission in Japan.

The TRANSAS missions -- a couple of aspects. One,

they are useful both to the agency as well as to the NRC.

With regard to your question of conducting a TRANSAS mission in the U.S., this would be an activity that we have had discussions with Department of Transportation. It's one that NRC and DOT in the area of where we co-regulate the transportation of radioactive materials would have a significant engagement.

We have looked at what might be the benefits to the U.S., to NRC or DOT, at our level and have determined that much of the interests and much of the engagement and purposes of the TRANSAS mission is to provide assistance to other member states who either have questions or have evolving programs. The Panama program is an example, and I believe Turkey as well.

Looking with regard to what technical capabilities we can bring to assist the agency as well as assist the member states who might be developing the program. That's not to say that a TRANSAS mission in the U.S. will not be useful to us. But we were looking at what might be the resource costs to both us, NRC, as well as DOT in carrying out a mission here in the U.S.

It's a question that has been discussed. There's been no definitive decision made yes or no to that question. But we have looked at what might be the costs to us and what might be the benefits that we might receive from a review of the U.S. program by an IAEA TRANSAS mission.

COMMISSIONER MERRIFIELD: This is one I would like to get some follow-up from the staff. It was mentioned to me that France, for example, thought this was a useful exercise to have gone through as a prelude to submitting to an international regulatory review team, which has been an issue that the Commission has had under

consideration for some time.

Last question I have got. I note that seven Agreement States have not adopted any of the requirements of the general license tracking system regulations. And I would like to know what the staff is doing to correct the situation and do you need any other additional guidance from the Commission to move forward in this area?

MR. STROSNIDER: Charlie?

Or did you want to answer that one, Paul?

MS. FEDERLINE: This is actually in our materials briefing. We had planned to cover this in the materials area, but we will be happy to answer it today.

COMMISSIONER MERRIFIELD: Well, Mr. Chairman for the -- maybe Paul can just sort of briefly provide some prelude to the more detailed briefing we will receive later on.

MR. LOHAUS: Thank you. Paul Lohaus, NRC staff.

This is a troubling area given the national significance of this. And one of the things we have done is provided two letters to the Agreement States urging them to continue their efforts to adopt the rule. There is a concern that the states have relative to the compatibility levels that are identified for both 31.5 and 31.6. That's part of the area or part of the reason that there's been a delay in their action. But we are urging them to move forward in this area. And given the compatibility level, this may be an area where further Commission interaction and guidance would be a benefit in working with the Agreement States.

COMMISSIONER MERRIFIELD: All right. Thank you, Mr. Chairman. I appreciate that answer. And as I said, I look forward to a fuller explanation of where we are. It strikes me with additional

authority, certainty that which we have supplied to the Agreement States, also comes responsibility. And we will need to probe that one a bit further.

COMMISSIONER McGAFFIGAN: Mr. Chairman, if I could just pile on very quickly.

I think it is outrageous. I think it should have been probably called to our attention earlier that the states were essentially in civil disobedience, as many of them in this area, that they were even talking about going to Congress to change things.

We made a conscious decision, we talked to the Agreement States folks about -- it was called Compatibility B designation because we thought that you needed to have a uniform system. We did something similar in the medical area with regard to training, so we didn't have a doctor who was qualified in Virginia and not in Maryland or vice versa. And every time we choose Compatibility B, which is a hard compatibility, the states do descent, civil disobedience or whatever. And they seem to have no consequences in INPEP.

So I agree entirely with Commissioner Merrifield and we will look forward to a further discussion.

CHAIRMAN DIAZ: Thank you. It is a very particular issue that we need to grab and go for it. Commissioner Jaczko?

COMMISSIONER JACZKO: The first question I wanted to ask. This came up in the discussion. You talked a little bit about recruitment. And one of the things, Margaret, you made the comment that what you are trying to do is make it clear to graduates that the NRC is a positive career opportunity for them.

Do you have information right now that tells you it's not?

Or how are grads viewing the NRC as a career opportunity right now?

MS. FEDERLINE: No, my experience -- and I have been with Luis on a number of recruiting trips, but my experience is that they are finding it as a positive career opportunity. The thing that we are finding that attracts the graduates is the technical work that we do here, the fact that the staff are involved in doing the technical work is of great interest to them.

MR. REYES: The challenge sometimes, Commissioner, is looking for the skill that a lot of people also are looking for. We were on a recruiting trip looking for a volcanologist. Not a lot of resumes that have that. And the individuals that have that have plenty of opportunities. We have secured one. We are very proud of the individual we hired. But it's that kind of effort. It needs a lot of effort to get those skills.

COMMISSIONER JACZKO: I assume it's a salary or compensation is often the biggest lure that takes them in a different direction?

MR. REYES: We have enough flexibility now to be very competitive.

COMMISSIONER MERRIFIELD: I think the simple answer to your question is yes. In a recent visit I had to a university, it was explained to me that nuclear engineers, for one example, were among the highest paying of engineering disciplines now, which has not been the case, necessarily, in the last 10 years. So I think that and the nature of the economy right now, we are very competitive, which is good for us.

MR. STROSNIDER: And I would just add two points. I think, one, if you look at some of the recent statistics, you will see that



we have a pretty good retention rate now. And a lot of us have been here a long time. It's a good place to work. But the other thing that I would mention is -- and people coming in tend to want to stay.

But the other thing I would mention is it's also part of the training program that we give once they get here. And we need to be sensitive to that, because that does take resources to support that. But I think it's an investment for the future that's very important.

COMMISSIONER JACZKO: Thank you. Then kind of on a slightly different topic.

One of the issues, the background slides, that's important is the financial assurance for decommissioning. And one of the things that I'm trying to get a little more information about is how this plays in with the situation that may be kind of looming on the horizon with the lack of low-level waste disposal sites.

Is that going to have an impact on the cost of decommissioning -- particularly for some of these licensees that are already in trouble when it comes to meeting their decommissioning costs?

I mean, there may be, if there's, you know, lack of disposal sites or disposal sites in different locations that require extra transportation or things of that sort.

MS. FEDERLINE: Yes. The cost is a big factor. Although a lot of the material that we see in these decommissioning sites can go to Enviracare. We are looking for other opportunities for low activity waste, you know -- facilities and other options where the waste could be disposed.

COMMISSIONER JACZKO: And particularly, I think there are seven or so risks that have been identified. Is that one of the risks

that you have identified in particular is this situation with potentially losing Barnwell in 2008?

MS. FEDERLINE: Well, one thing that we are doing is looking at the cost of disposing -- we have made an effort to get more robust cost estimates of these decommissioning sites to try and understand what the implications of costs would be. I don't know, Larry, did you want to add?

MR. CAMPER: Larry Camper with the Division of Waste Management and Environmental Protection. Good morning.

The first problem to think about when you think about financial assurance is to look at the legacy sites that we have. These are sites that go back into the '40s and '50s that were processing uranium and thorium. In many cases today, the people who occupied the sites were not the creators of the waste. And in many cases when they took over the sites, they didn't even know what was there.

So characterization of these sites is a real problem. Then you have all types of financial problems with the ownership of the sites currently. And that's why we have taken in the last few years to analyzing the sites and we have provided -- there are three categories.

There is category one, which we only have one site in Safety Light.

Category two which has 13 sites. And those are sites in which we monitor constantly what financial assurances and mechanisms they have available to them. Some are going through bankruptcy. That's flexible and it varies. Some have parent companies which can provide varying levels of support for decommissioning.

So monitoring that financial assurance has many fronts.

With regard to the waste question, I think your question is

right on the mark. I mean, if there are fewer sites for low-level waste disposition, that certainly can drive up the costs and over time can make it more expensive to decommission those sites.

COMMISSIONER McGAFFIGAN: But as a clarification, I'm pretty sure that all 13 of those sites that are in your category two are uranium and thorium contaminated. And uranium and thorium contaminated soils can be disposed of at Envirocare and RCRA subtitle C sites.

MR. CAMPER: You are right. It's more the question of the varying financial capability of those companies --

COMMISSIONER McGAFFIGAN: But the low-level waste site is more other materials?

MR. CAMPER: Correct.

COMMISSIONER JACZKO: I think that's all I have.

CHAIRMAN DIAZ: Commissioner Lyons?

COMMISSIONER LYONS: Thank you, Mr. Chairman.

This is my first meeting of this type with the Commission and I would like to compliment the staff for the effort that you put forth in organizing this material and presenting it. I certainly found it very useful.

By way of a comment and then a question. I was very interested in some of the backup material to note the plans for a full-scale cask, high-level waste cask test at some point in the future. I very much agree that it's important that we do have such a full-scale test and not rely on -- well, not rely entirely on scale model testing.

I would be curious if you could share, though, approximately what you are thinking in terms of dates for such a test. I don't see it as tremendously urgent. I think it's important that it be

done. But I was just curious when you are planning.

MS. FEDERLINE: NMSS has worked closely with the Office of Research. I'd ask Dr. Paperiello if he would like to answer?

CHAIRMAN DIAZ: Carl?

MS. FEDERLINE: Bill?

[Laughter].

MR. REYES: We have a question for you, Carl.

[Laughter]

MR. REYES: While you are walking to the podium. Here is the question.

[Laughter]

MR. REYES: Full-scale testing of the cask. If you can give Commissioner Lyons some general information in terms of what time frame are we talking about.

DR. PAPERIELLO: I'm sorry, what was the question?

CHAIRMAN DIAZ: The schedule for the full-size -- package performance study.

DR. PAPERIELLO: We owe you a paper, I believe, by the end of March on the -- on how we would proceed with the package performance study. But I don't know right now what we have as a schedule in there. I'm sorry, I haven't seen the paper at this point.

COMMISSIONER McGAFFIGAN: My recollection is that DOE, a year ago was telling us they would contribute, and more recently they are saying they can't contribute anything. And that would almost surely extend the time period for this.

MR. REYES: We are trying to leverage other testing that has been done.

DR. PAPERIELLO: If you take a look at the budget right

now, there's just enough money for the most part for procuring a package. We are talking about a substantial cost just to buy a package. And I know we just got in from one vendor cost estimates or something along that line. And at least one vendor is not interested in making a proposal, I know that.

COMMISSIONER MERRIFIELD: This has been an area of significant interest of the Commission over the course of the last few years. And there has been a variety of papers that have been provided from the staff to the Commission to bring us along in that area.

I think some of the initial expectations of the scope and cost were questioned by the Commission. And that's why I think we are waiting for an additional submission from them.

I would suggest this may be one of those areas that would be very helpful for the staff to give you a personal, perhaps both you and Commissioner Jaczko, a personal briefing to sort of bring you up to speed in terms of where we have been. This is a well-trodden path.

COMMISSIONER LYONS: At least for now I would like to endorse the plans for such a test without specifying that it needs to be at any particular time. I think it's a very sound idea from a policy standpoint.

MR. REYES: In the budget discussions we go into a lot more detail. But it's a matter of costs, schedule and the scope of the test, how much information that you accept that's already been tested and how much do we have to independently repeat. And that involves the costs and the schedule.

CHAIRMAN DIAZ: The involvement with DOE is if DOE could provide us with a cask, we will conduct the test. So there will be

a distinct separation between the two.

COMMISSIONER McGAFFIGAN: For my two new colleagues, there has been you unanimity in the Commission going back to when Chairman Meserve was chairman about the desirability of conducting a test, a program. The scope of the program has been something on which there has not been unanimity.

[Laughter].

CHAIRMAN DIAZ: All right. Thank you.

COMMISSIONER LYONS: Do I have time for one more?

CHAIRMAN DIAZ: Sure.

COMMISSIONER LYONS: Another question on the status of the EPA/NRC MOU. I understand that there has been an attempt to reduce some of the issues associated with dual jurisdiction. But from some of the backup information, I gather that while the MOU is in place, it is not really eliminating some of the issues that are associated with those concerns.

And I wondered if the staff is considering any other remedies to perhaps address the dual jurisdiction issue and whether the staff anticipates any further issues in trying to implement that MOU?

MS. FEDERLINE: The staff really is in a place now -- the MOU is facilitating our communication on these sites. We feel that it has really promoted a positive relationship with EPA. And at least on the few sites that we have coordinated with, it has provided a smooth path.

I do think, though, that for the future, the answer is legislation -- it's very difficult to eliminate dual regulation without legislation.

Let me ask Larry if he wants to add anything.

MR. CAMPER: The MOU has, as Margaret said, has facilitated the interaction between us and EPA. While we used to have a lot of interaction between the various EPA project managers for specific sites and our project managers, there was never a higher level interaction between the agencies in which we said these are the sites that trigger the threshold that were agreed upon in the MOU.

We have communicated on six sites. We have two more sites that we are about to communicate on. Those are so-called category one sites, which means that they have triggered the threshold in the MOU during remediation, but not at termination which is so-called category 2. Those interactions with EPA have been gracious. They have been effective.

It has not, however, taken away the potential for EPA in the eleventh hour to say we have a concern at this site under CIRCLA that's the same. Only legislation, as we have talked about before, as the Commission itself has talked about during the briefing last fall. Commissioner Merrifield pointed out that the industry, for example, can do more to cause something to happen in this arena.

So only legislation will truly fix the dual regulation aspect. However, we think that the MOU has been successful for what it was intended to do. And it is working reasonably well.

COMMISSIONER McGAFFIGAN: Could I ask a follow-up?

You described the interaction as gracious. I will be the judge of that.

[Laughter].

COMMISSIONER McGAFFIGAN: Kirkland Air Force

Base is one of the places we asked them about and it was absolutely trivial. It barely triggered -- I think it was uranium, or thorium or whatever, I forget what radionuclide, but one radionuclide.

Did they come back and say it looks great on Kirkland formally?

MR. CAMPER: Let me ask Dan. Having only been there a month --

COMMISSIONER McGAFFIGAN: And I would be interested, Saxton. Saxton had maybe two radionuclides that were above the MOU threshold, both of which had 30-year half lives. If you waited three years we would be below. Did we get a gracious response from EPA saying Saxton was good to go or did they noodle you guys for months about what the problem was?

MR. GILLEN: No. Because this was the first level of interaction, we haven't gotten to the end of decommission at either one of those sites. The letters that we got back from EPA were basically -- you know, pointed out some of the issues that EPA may have if you get to the end and still are exceeding some of those nuclides identified in the first letter.

But we don't expect that at either one of these sites we will have that problem when we get to the end.

COMMISSIONER McGAFFIGAN: These are very straightforward sites, those two. I mean, as opposed to Haddam Neck, which is more complex. But whatever.

CHAIRMAN DIAZ: We do hope to continue streamline and effective interactions with EPA.

COMMISSIONER MERRIFIELD: In a constructive way.

CHAIRMAN DIAZ: In a constructive way.



COMMISSIONER MCGAFFIGAN: Gosh, we talk in tongues.

MR. REYES: The more we interact, the more decayed time. So that's a --

[Laughter].

COMMISSIONER MERRIFIELD: The sites are on us.

[Laughter].

CHAIRMAN DIAZ: Commissioner Lyons, thank you very much. Let's see. I think it's my turn now.

Looking at some of the issues as they were framed in the presentation regarding the storage of spent fuel, I think slide 6, you are talking about the fact that your actions has been timely and I agree.

In slide number 10, you talk about increasing caseloads for transportation. And then on page 26, it says that this issue of additional information will be a major challenge.

Is this a forewarning of a problem that is coming or it's something that you are managing? You know, are we being able to continue a timely program or are we going to have a problem in this area?

MS. FEDERLINE: I think it's fair to say that we are continuing a timely program, but we need to look for new ways to do our work in order to continue that timely program. We are not making a plea for resources, but we are just giving you some insights that we may be talking to you about some different ways.

We had a meeting on February 8th that I participated in with industry and stakeholders. And they had some very good ideas about ways that we could improve the licensing process. And we are going to take those ideas seriously and look to see if we can make

some improvements.

But, of course, before anything major was done, we would certainly consult with the Commission.

MR. STROSNIDER: I would just add that this is an area where I think you can see some evolving technologies. You know, licensees are interested in off loading fuel earlier, perhaps more fuel. They are looking at burnup credit. They are looking at new cladding material.

So this is not just the same sort of review over and over again. There are new issues that will come up and this is where we look at changing technology and we have to be prepared for that. And we are planning for that. We are looking at it.

CHAIRMAN DIAZ: Okay. The area of additional information you talk about a series of policy issues or policy challenges. And in a certain way it -- I found that it was -- I'm not here.

[Knocking on the wall.]

[Laughter].

COMMISSIONER McGAFFIGAN: I think they are hanging pictures or something.

COMMISSIONER LYONS: The clock is still running?

CHAIRMAN DIAZ: Yeah. She keeps it running.

I wonder if you can provide me with a little bit of specificity in here. Have these policies, have they been categorized in a manner, in a near time frame that the Commission will know which one of those issues is really a challenge in the policy area?

There were generic. Do we have any in-depth knowledge of which ones of those that are going to be a challenge to the Commission -- for the Commission as far as policy?

MS. FEDERLINE: And this relates to the future policy issues that you were talking about?

CHAIRMAN DIAZ: Right.

MS. FEDERLINE: I think we see the low-level waste issue as being on the immediate horizon. We see things happening on that in the next 12 to 18 months. And the question is, what would NRC's role be in working with DOE or others?

I think we are seeing in the spent fuel storage area, as Jack said, increasing moves by vendors to get more out of the fuel. And so we just need to make sure. And we are working with Research to make sure we understand any impacts of those changes on storage and transportation packages. So that, I would say, is an intermediate term.

The longer term issue, I think, is the impacts of new reactor designs. We see some things out there. In some of the designs it's not entirely clear to us yet which of those designs are going to come to fruition and which time frame. But we are staying cognizant of it to make sure we don't miss anything.

CHAIRMAN DIAZ: Yeah. But that seems to be a longer term issue. I think one of the things that the Commission is really concerned about is are we going to find something in the next few months? And if so, we want to know ahead of time so we can act expeditiously on it.

MR. VIRGILLIO: Can I add a few to Margaret's list then?

If I look ahead to waste incidental to reprocessing, that's an area where as we start to do the reviews, I would anticipate that we would see some emerging policy issues. We have got greater than class C waste coming forward.

DOE now, I think committed, fully committed to moving forward with an environmental impact statement and making some decisions that I think are going to be near term to the Commission. And in the presentation, we spoke to West Valley, which I also see with New York State coming forward with their legislative proposals. In the very near term us having an engagement with the Commission to get your feedback on how best to respond to some of these issues.

Those are just a few I would add to Margaret's list.

MS. FEDERLINE: Yeah. The ones that I think we think are very imminent are on slide 14, the near-term Commission interactions. And if it would be helpful, we could provide you a list of those things that we see very near term.

CHAIRMAN DIAZ: Okay. Yeah, I think that is important.

I noticed also that, you are really trying to determine which of these projects or programs could be eliminated at the times that you need to move them. I think you have four fewer waste safety projects than you had last year.

But, I don't see, or couldn't find in the package, some specific effort to say this project is really eliminated. And I wonder if the staff just has them and, we didn't put them in here. I think it is important for us to know that there are some things that are terminated and need to be done with and which ones are --

MR. VIRGILIO: Chairman, we are working those but we have before the Commission right now an example where we have requested the Commission to allow us to stop a reporting requirement that we have been doing with regard to management of one of our contractors.

This reporting requirement was set up early on when we

established the contract. Now we have got a lot of experience in implementing that contract. And it would save us -- that's a small example, but it's one example of an annual paper and a study that we have to do which we are looking forward to a feedback from the Commission and hopefully you will agree with the justification we put forward to say we no longer need to do that.

So as they come up -- I think to answer your question, as they come up we want to move forward to the Commission promptly and get your feedback as to whether we can stop doing this particular activity.

CHAIRMAN DIAZ: Because every little bit in here -- in your case, you have so many different cases that every single one of them requires not only the staff, but it requires management attention. And it's a domino effect. So every single one that can be sunset is important. Yes, Jack?

MR. STROSNIDER: Yeah, the goal we set is in terms of continuous improvement, our vision is to have an environment in which everyone on the staff feels empowered and challenged to increase our capacity by identifying work we don't need to do, eliminate frustrations and that sort of thing.

Some of these things may be just in some of the procedures and processes. And we can do that internally.

Some of them may be larger pieces. And as we go through our budget activities and look at that, we will work at identifying those.

CHAIRMAN DIAZ: Okay. All right. Well, I want to tell you that the staff and the Commission has been very efficient today. And, therefore, we have time for an additional round of questions.

Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: Greater than class C waste, the backup material and I think during your presentation you mentioned that. And that's been around almost as long as I have been here as a potential issue where DOE might do an EIS. It is probably useful. I think the backup slides say that they have shifted responsibility for the program to environmental management from the Office of Civilian Radioactive Waste Management.

But are they actually budgeted to do anything?

MS. FEDERLINE: Yes, they are. And Jack has a new initiative in working with DOE that I will let him talk about that really identifies strategic issues and strategies for resolving those and that's one of the issues. Would you like to --

MR. STROSNIDER: That's right. We are looking at issues that we have mutual agreement. This is one of them, and talking about the what are the next steps and strategies. We do expect to get from them a letter inviting us to be a cooperating agency on the environmental impact statement.

So, they are working it.

CHAIRMAN McGAFFIGAN: That's pretty resource intensive if they actually -- a cooperating agency is a resource intensive approach as opposed to being a commenting agency.

We also have regulatory issues. Whatever, but we can talk about that. Most of the greater than class C waste is in casks at power plants or it's in DOE labs in appropriate containers. And, you know, the urgency of dealing with it -- I think we need to deal with it -- but in budget space that for years has gone down the list at DOE and why won't that happen again.

MS. FEDERLINE: Well, one of the urgencies is greater than class C sealed sources. DOE takes them and does not have storage capability for them. And so we need --

COMMISSIONER McGAFFIGAN: If they are going to do a generic EIS with cooperating agencies leading to a decision, that's years away. I mean, look at West Valley and how long that has taken, you know all the fits and starts involved there.

So they have to deal with their short-term issue at the DOE facilities almost no matter what. And then the greater than class C waste that we have is largely in those casks at Maine Yankee or Haddam Neck or it's the internal of the reactor that don't qualify for low-level waste. And then they look just like everything else in the casks if the casks look identical, right?

So I just question how much resource we need to put in there until we really see where DOE is going. We sometimes get excited they are going to do something and commit resources. The next thing you know another four years have passed. So...

MS. FEDERLINE: Well, one of our hopes is that if we invest in being a cooperating agency, it would enable us to adopt the EIS in our regulatory action which would actually save resources.

I agree with you, though, we do need to be prudent and careful.

COMMISSIONER McGAFFIGAN: One more question. Decommissioning complex sites. There are some you know, information in the backup slides. I hope Big Rock Point, which was to be completed -- it was completed in early 2004. It really is behind us, the licensing termination plan? Okay.

You mentioned something like 10 complex sites coming

off the list per year. And I remember in the past we used to talk about one or two. Is that a definitional issue or -- you know, SDMP sites used to come off in quantities and all you would commit to in briefings was getting one or two finished per year. And now we are using numbers like 10. I just trying to understand that.

It could be a tremendous success for our program. In which case, we should be crowing about it. But I just also worry that it's --

COMMISSIONER MERRIFIELD: Part of it is a change in nomenclature because we got rid of SDMP.

MR. CAMPER: You will recall, of course, that we eliminated the SDMP listing. We moved those into the complex site listing, which is a population of like 43 at this point.

The reason that you are seeing 10 -- you are right. It used to be once upon a time we were charged with removing three from SDMP. Frankly, over time as many of the easier sites -- if that's the right way to classify them -- were, in fact, cleaned up and remediated or removed.

We were then left with the ones that were very, very difficult; gross contamination, ground water contamination, characterization problems and the like.

The reason that we are able to project 10 this year -- it's a goal, we cannot guarantee that, but that's a goal, we have three thus far -- is what you are seeing is the culmination of several years of staff efforts to improve the process. If you go back to our program evaluation -- I mean, this started around 2000. So it has taken several years to get the momentum.

And also, frankly, on behalf of the licensees or the owners



of the sites, they have been working these sites for years as well. I mean the SDMP goes back to about 1990.

COMMISSIONER McGAFFIGAN: We should not continue to expect 10 per year?

MR. CAMPER: Probably not.

MR. REYES: Let me make a plug here. Since you opened the door, I'm going to jump in.

But I think this is an example where in the budget when we have to put money to improve the infrastructure, it doesn't pay you right away, but it pays you several years down the road. So when I come to you with a budget -- I just want to make a point --

[Laughter]

MR. REYES: When I come to you with a budget and ask for money and resources for infrastructure improvement, and then you ask me what are you going to do with it, I will say, well, three years down the road, four years down the road, we should see -- is that the kind of input that --

MR. McGAFFIGAN: I think you have a future as a car salesman, Luis.

[Laughter].

MR. REYES: I never miss a moment.

CHAIRMAN DIAZ: No comment. Commissioner Merrifield?

COMMISSIONER MERRIFIELD: Mr. Chairman, a couple of questions and then a couple of comments.

The staff has discussed a number of issues involving preparing environmental impact statements. And there's a quote in the materials that says there is little margin in the staff's resources and

schedules for critical and visible EIS's.

Now, it strikes me that this is an area in which backlogs can develop quickly. And I'm wondering what kind of management controls you all have put in place to make sure that this is appropriately controlled. It would seem to me that if a licensee has got resources, they have got a commitment to complete licensing actions in a timely manner, being held back by NRC not having sufficient resources to conduct timely reviews is not where we want to be.

So could you briefly talk about that?

MS. FEDERLINE: Yes. Let me start out, then I will ask Larry. Some of the things that we have done is to try and identify experienced contractors with the right talents to support us, so that we have a combination of staff resources that are skilled and contractor resources that are ready to go.

One of the problems is that if you work with a single contractor, often the capability isn't there as we have seen for multiples. So we have tried to get a number of contractors in place.

Also, we do rigorous management reviews. Our management in that area goes through following the operating plan. We use the operating plan rigorously to follow milestones and to ensure that if there is a problem, that it's raised early to management's attention and can be dealt with.

Let me see if Larry wants to add some specifics.

COMMISSIONER MERRIFIELD: Very briefly because I'm on a short time clock.

MR. CAMPER: The other thing that I would add to what Margaret said in terms of terms of carefully allocating staff resources and management oversight, recall that two or three years ago now, one

of the things we did was before we launch in EIS's is to make sure that, in fact, that the financial assurance question is adequate. Because what we found in the past was we would put a lot of resources into doing EIS type work and the financial assurance issue was hanging out there in the long run. So it was kind of all for nothing.

That's one of the criteria that we look at now. And that's much more efficient than it used to be in the past.

COMMISSIONER MERRIFIELD: Thank you. Right now Humbolt Bay is in the process of decommissioning. And the licensee wants to transfer its spent fuel into dry cask storage. They have some very old fuel as well as challenges with fuel segments in their spent fuel pool. And I wonder if there are any unique challenges associated with certifying a dry storage cask with this older spent fuel?

MS. FEDERLINE: Bill, would you like to handle that?

As I understand it, they do have -- because of the seismic design out there, they are developing a surface --

COMMISSIONER MERRIFIELD: Yeah, I'm familiar with that. But I didn't know if there were any other -- beyond the seismic, were there any other issues out there that were unique?

MR. BRACH: Not beyond that. So the seismic and the structure of the ISFSI with below ground cask storage are unique aspects of the application. But with regard to the older colder fuel, that really doesn't pose any different technical challenges to us in other cask designs.

COMMISSIONER MERRIFIELD: So it's a fairly straightforward process at this point?

MS. FEDERLINE: Yes.

COMMISSIONER MERRIFIELD: I just have a couple of

comments.

First, I would note that although we are receiving fewer storage license action requests in the past years, it appears given what the staff has told us that these cases have become more technologically complex. I would say as a personal note, this is somewhat of a success of our regulatory changes which is allowing licenses to make more minor changes without requiring prior NRC approval, and thus, allows our staff to focus their resources on areas that are more risk-significant issues.

So I just want to note that the staff did make a note about the complexity. But I think that glass is more half full than half empty.

The second thing I would note, I think there has been a significant improvement in the area of implementing the license termination rule. No small part due to the decisions the Commission has made over the last few years.

I think there is additional changes that we can make. But I would expect the staff to continue to display the initiative and aggressiveness in improving this process which has been important to ourselves and to our licensees.

I would finally note that I have had really no significant questions today regarding decommissioning. Although that has been an area that I have focused on quite substantially in the past. That is in part due to what I believe is substantial progress that has been made by staff in this area to better understand the scope of the issues we have before us and resolve these issues of these complicated sites. As I'm sure the Chairman is aware, I continue to believe that we must strive to capture our progress to ensure that we have identified lessons learned as well as best practices for the future. And I expect our staff

will continue to work hard to accomplish this particular goal.

Thank you very much, Mr. Chairman.

CHAIRMAN DIAZ: Thank you, Commissioner Merrifield.

I think that was exactly right where we have been going to and appreciate the efforts. Commissioner Jaczko?

COMMISSIONER JACZKO: I just want to follow up a little bit on one of the questions that Commissioner McGaffigan had asked about the activities in the greater than class C waste area.

How does the staff envision that working with DOE as a cooperative agency then? Can you explain that a little bit more to me?

MS. FEDERLINE: They have the responsibility, of course, to develop a proposal for greater than class C. The Commission had envisioned that they might use the repository. And that's provided for in our regulations.

But if they propose an alternative, as we work in a cooperating way with DOE, we would be able to understand and raise any regulatory impediments as we move through the process.

So I think we see efficiency and effectiveness from cooperating. But again --

COMMISSIONER JACZKO: My question is -- I mean, does there present a challenge, then, in terms of -- obviously with our licensing responsibility for that kind of facility?

MS. FEDERLINE: OGC has told us that there is not a legal impediment to doing that. And we have strictly been looking at it from, you know, once we got OGC's advice. I think there is a perception -- I mean, we could talk about the perception question. And we have tried to weigh the perception versus the value from eventually being able to adopt the IES.

So it's still an open question. We will receive a letter from DOE, and we can certainly consult with the Commission.

MR. STROSNIDER: But our participation as a cooperating agency is not unique in this case.

MS. FEDERLINE: Right.

COMMISSIONER JACZKO: Yeah. I mean as you --

MR. STROSNIDER: Quite a number of actions.

COMMISSIONER JACZKO: As you know, often perceptions in these kinds of things can be just as damaging as actual problems. So I think certainly this is an area where I would like to be kept informed.

COMMISSIONER McGAFFIGAN: In the Yucca Mountain EIS my recollection was that we were a commenting agency rather than a cooperating agency; isn't that correct?

MS. FEDERLINE: We have been directed to adopt their --

COMMISSIONER McGAFFIGAN: By the Congress?

MS. FEDERLINE: Right.

COMMISSIONER McGAFFIGAN: To the extent feasible.

MS. FEDERLINE: Right.

COMMISSIONER McGAFFIGAN: But while that long process was underway, we were a commenting agency as opposed to a cooperating agency, isn't that correct?

MS. FEDERLINE: Yes.

COMMISSIONER JACZKO: Thank you. That was the only question I had.

CHAIRMAN DIAZ: Commissioner Lyons?

COMMISSIONER LYONS: I wonder if you can expand a

little more on some of the earlier comments on the waste incidental to reprocessing? I guess I'm anticipating that that is likely to be a substantial issue for NRC. And I'm curious whether you have begun to formalize a cooperative arrangement with DOE?

MS. FEDERLINE: Let me start and then I will have Larry pick up.

Of course, we have been working with DOE on an interagency agreement basis in the past looking at waste incidental to reprocessing on a site-by-site basis. We have now initiated a process for establishing an interagency agreement and I believe that's near fruition.

Is that correct, Larry?

MR. CAMPER: Commissioner, thank you for the opportunity to address this topic. I knew it would come up and the Chairman raised it in his opening remarks.

The waste incidental to reprocessing issue for us is a huge deal. And it is an issue in which we are going to be communicating with the Commission about in the very near term.

For example, we have developed an implementation plan that is underway currently. We have had two meetings thus far with the state of South Carolina and with the Department of Energy. In fact, just last week we were down at the site, spent a day and a half with DOE and got a very thorough explanation of the extent of the problem at the site.

We are going to be meeting with them again this week on Thursday. We have invited South Carolina to that meeting.

In the meeting with South Carolina last week, we tried to make it very clear to them that we viewed them as having a very key

role in this process, that we are cooperating together, as the legislation requires us to do, to monitor this process.

And what we want to do in the SECY that we will provide to the Commission, hopefully within the next 30 to 45 days, in fact, is to lay out for you the entire implementation plan that we are using to carry out our responsibilities under the Act.

And we hope that in that paper we will lay out the process in a thorough manner that will explain our technical review so that you can adopt that process, give the staff the go-ahead for that process or suggest changes, of course. And then we can use that process for all the determinations that come down the pike.

The other point I would make about this, not only do we have to review the waste incidental determination that DOE develops, but we also have a consultive role, we have a monitoring and oversight role. And one of the things we have to do, which will be a real challenge for us, is to ensure that on-sight disposals are compliant with the performance criteria, performance objectives in Subpart C of Part 61.

Now, Part 61 was developed back in the '80s. We have never had to license under Part 61.

So one of the things we have to do very quickly is ensure that we have in place the infrastructure and processes that will allow us to ensure in conjunction and cooperation with South Carolina that they are, in fact, compliant.

So that's a significant policy issue that we will be exploring with the Commission as we proceed to develop that guidance. This is an issue of considerable importance to the Secretary of Energy.

The project manager last week as we were winding down



and conducting our exit, pulled me aside and indicated the Secretary has this on his personal scope of interest, and therefore, they have the appropriate level of heightened interest as do we. And indicated when we meet this week, we will have subsequent meetings if necessary or as many that are necessary to explore the technical issues.

And so we -- it's under sail. We do have the interagency agreement in place to allow the funding in the current year. Starting in '06 it is a budgeted item. And we were successful in our reclama through OMB to get the 8 FTE at about \$1.4 million in '06.

So we will be sharing that implementation plan with you in the very near future.

COMMISSIONER McGAFFIGAN: Mr. Chairman, can I qualify?

These meetings that you have been having are open meetings and whatever discussions you had down in South Carolina? Do you have an exit at the end of it or how --

MR. CAMPER: These are government to government meetings.

COMMISSIONER McGAFFIGAN: Government to government. So they face an exception under the Sunshine Act.

MR. CAMPER: -- and the one this week is not either.

All the documents, of course, that DOE submits to us, our technical evaluation and so forth, will be subject to the public process.

MR. STROSNIDER: Larry, could I add that my understanding was that the state is planning some public meetings and has asked us to participate in those?

MR. CAMPER: The state has to issue a permit to the Department of Energy for the Salt Stone Facility that will be there. And

if any tanks are left there, similarly they have to have a permit from the state. That permitting process requires a public interaction.

COMMISSIONER McGAFFIGAN: It just strikes me there may be an exception for government to government. We use it to have senior level discussions oftentimes in classified matters with other agencies. But you also could open some this stuff up and you might build more public confidence if it didn't appear like the state and the two federal agencies -- doesn't this apply to Idaho as well?

MR. CAMPER: It does apply to Idaho, correct.

COMMISSIONER McGAFFIGAN: I don't know. It strikes me that putting some -- we put some of it out in the open today, the fact that all this is going on. But I just don't know what the downside is of having more open discussions as we do on West Valley. In West Valley, we have open discussions, right, almost every time.

MR. REYES: We will take the feedback. But you need to understand that what Larry and his staff is trying to do, this is a new assignment. We are trying to go visit the sites, get a scope of what is the new work, et cetera, et cetera.

So at the beginning, it's important that we go government to government.

CHAIRMAN DIAZ: Thank you, Commissioner Lyons, for asking the last question that I was going to ask. It certainly works. But that brings another question.

The issue of low-level waste is coming back and I think we see it in different places. I don't know whether the staff has received anything, any indication that this is going to be reopened in a manner that I have not. I haven't seen any significant move from the Congress. But obviously, the interest is there.

Are you getting any special vibes from any place regarding --

MS. FEDERLINE: I think in the public media it's been reported that Senator Domenici has raised the potential for hearings coming up in this session and possibly licensing a site on federal property. Those have all been discussed in the public media.

Also the GAO report. GAO is looking at completing phase 2 by the middle of fiscal '05. And we don't have insights yet as to what the recommendations will be. But we suspect that they are going to recommend some changes related to interagency agreements that could add clarity to the low-level waste process.

MR. VIRGILIO: Margaret, you said GAO wasn't it the National Academies.

COMMISSIONER McGAFFIGAN: No, she means GAO.

MR. VIRGILIO: There's also National Academies phase 2 that's gearing up which also could, in fact, provide some additional recommendations.

Our understanding is the hearings that Margaret referred to will be paced by the two studies.

CHAIRMAN DIAZ: So fundamentally, there is enough noise in the background to make us aware that this might be an upcoming area of work.

MS. FEDERLINE: Yeah. We want you to know that we have our ear to the ground and we will let you know anything we find out.

CHAIRMAN DIAZ: And we will do the same. With that, I wonder if any of my fellow Commissioners have any final comments?

And if not, I want to thank the staff for the presentation. I

want to thank my fellow Commissioners for being so disciplined and keeping the clock on time. And we are adjourned.

(Whereupon, at 11:02 a.m., the hearing was adjourned.)