

U.S. NUCLEAR REGULATORY COMMISSION  
BRIEFING ON STATUS OF  
DECOMMISSIONING ACTIVITIES

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MONDAY  
DECEMBER 11, 2006

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The Commission convened at 1:30 p.m., Dale E. Klein,  
Chairman, Presiding.

NUCLEAR REGULATORY COMMISSION:

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

Stakeholder Panel

Michael T. Ryan, Chairman, Advisory Committee on Nuclear Waste (ACNW)

Chuck Sans Crainte, Dairyland Power Cooperative (La Crosse)

Patricia A. Rivers, U.S. Army Corps of Engineers

E. Kurt Hackmann, Westinghouse

Raymond C. Vaughan, West Valley Citizen Task Force

NRC Staff Panel

Luis A. Reyes, EDO

Keith McConnell, Deputy Director, Decommissioning, FSME

Larry Camper, Director, DWMEP/FSME

George Pangburn, Deputy Director, FSME

Alexander Adams, NRR

## PROCEEDINGS

CHAIRMAN KLEIN: Good afternoon. The Commission is meeting today to hear from the Advisory Committee on Nuclear Waste and other stakeholders and will discuss perspectives and experiences on various aspects of decommissioning, and from the Office of Federal and State Materials and Environmental Management Programs on the status of our decommissioning activities. This is an annual update that is provided to the Commission, and we look forward to your comments.

NRC staff also recently completed an integrated decommissioning status report for the fiscal year '06, which will soon be published as a NUREG and available on the NRC's website. We will hear from the staff today about the continued positive progress that has been made, such as a resolution of a number of complex decommissioning sites and consolidation of decommissioning activities to increase the program's effectiveness and update of decommissioning guidance.

We are particularly interested in hearing from the staff, our stakeholders, and the Committee on the challenges ahead for the decommissioning program and the ways we can meet these challenges and maintain the program's continued high performance.

It is very important that the decommissioning program continues to be forward looking, especially as we move into the period of new reactor and fuel cycle applications, and regulations and industry

alike need to take our past experiences and apply them in a design, operation and oversight of new facilities to minimize future decommissioning burdens. Any comment from my fellow Commissioners?

COMMISSIONER MERRIFIELD: Yes, Mr. Chairman, I would like to open with a few remarks. First off -- and I'm not going to make a practice of this, but I am going to in this particular case. This is -- I'm entering my final year on the Commission, final almost six and a half months at this point. This will be the last time I will have the opportunity to meet with our decommissioning folks regarding the issues that have been underway here.

When I came on board the Commission in 1998, it was after the time I had served as counsel to the Senate Super Fund Subcommittee on Super Fund Waste Control and Risk Assessment, where I spent all of my time worrying about dealing with cleaning up environmental contamination. And it was with that experience, I brought with me to the Commission, a belief that we needed to put more focus on area here in the agency.

Beginning not too long thereafter, we begin to have a series of meetings and more focus on decommissioning issues. And for a long time, I think this agency had put decommissioning, as many do, on the back burner. I want to take the opportunity to credit our staff for, I think, an extraordinary amount of work to get a much better focus

on what we have in the universe of sites that we have to worry about relative to decommissioning, whether that's the reactor sites that take up much of our time, or whether it is small sites that are a legacy of the days from the Atomic Energy Commission.

We cleaned up a lot of those. I think we have a much better road map today than in 1998 about where we need to go. I think that is a good thing. We have a much better handle around what that universe is, and that is a credit to the work undertaken by our staff.

As you know, I take great pride in telling people that I have spent a lot of time on the road going to operating reactor sites. What I don't necessarily state quite as evidently is, as much as I have been to all the operating nuclear reactor sites in the U.S., save the three sites, which are already decommissioned, I have also been to all of the former sites at which we had operating nuclear power plants. The purpose of which was to understand what we were doing during decommissioning.

During those meetings and during that engagement, my intention was to encourage those licensees who were involved in decommissioning to really embrace decommissioning as an effort to close the circle to make it clear to the public who live and work around those reactor sites that we had as an agency and our licensees had in their role a priority to make sure that those facilities were appropriately dealt with. I remember a number of years ago, having a conversation

with folks at First Energy encouraging them when they finally shut down the Saxton site and completed the remediation at that site that they ought to have a celebration, that they ought to bring folks together to talk about having closed that circle.

I was pleased to have been invited to speak as a keynote speaker at that site and I thought it was a good opportunity to reflect on the lessons learned and to reflect on the success of putting that back into a green field status. I made similar recommendations to a variety of other of our licensees not only to get a sense of lessons learned, but also to treat the end of that process as a celebration.

One of those that I spoke to in my visit was the folks at Big Rock Point. I don't know if folks have seen it, there was, in fact, an article in the November issue of Nuclear News talking about Big Rock Point from ground breaking to Greenfield; and in fact, it was very much a report about the celebration of the hard work that went into bringing that reactor back to a green field status. I would -- there is a very good article in here, Mr. Chairman. I would like to have that included in the record of the Commission meeting today, and I would like, again, to express my gratitude for all the work of our staff and of the licensees to make decommissioning more of a priority, and to make sure we meet that part of our mission in protecting public health, safety, and the environment. With that, I thank you.

CHAIRMAN KLEIN: Thank you.

COMMISSIONER McGAFFIGAN: Mr. Chairman, could I just play off of one point that Commissioner Merrifield made. I also note that there has been some recent press reports. The State of Michigan was hoping to take that green field site that has some remaining spent fuel on it and use it for the benefit of the people of Michigan in terms of recreation. And it is now totally inappropriately been demonized by certain groups in such a way alleging radioactive contamination where there is none. In such a way that they have, at least, initially blocked that transaction that I think would be an official to the vast majority of the population of Michigan who are interested in being able to have a wildlife nature access.

So it's a good news story. The decommissioning is definitely a good news story. The fact there is some spent fuel pad still there is an element of our failed national policy, but most of that site outside of 300-meter perimeter around that spent fuel site and probably more, I'm sure they have margin, should really be able to be used as a park by the people of Michigan as I hope continues to be the intention of the Michigan Government.

Since I have been saying it last Wednesday, I figure I might as well speak truth.

CHAIRMAN KLEIN: Thank you. Annette, did you have any comments before we start?

MS. VIETTI-COOK: Yes, I just wanted to say that a statement has been provided by the Organization of Agreement states Chair, Mr. Paul Schmidt, and it's going to also be made part of the record.

CHAIRMAN KLEIN: Great. I think we will start with you, Mike, and appreciate you being here on behalf of the Advisory Committee.

DR. RYAN: Thank you, Mr. Chairman. It's a pleasure to be here, and Commissioners, thank you very much for the opportunity to be with you today.

Our efforts on the ACNW in the decommissioning area have been sustained and technically are incisive and meaningful for us and has helped us provide advice now over several years. Our efforts have been led by Dr. Jim Clarke who is sitting behind me, and I'm glad he is here with us today to participate.

What I would like to do in the next few minutes is just highlight some of our successes and then give you a view of where the committee is looking ahead toward further work in the decommissioning area. The next slide. Thank you very much.

The Advisory Committee on Nuclear Waste has coordinated several activities with the staff that have provided both the staff and the ACNW alike with various input from various stakeholder groups. We have some key activities in the recent past include a

working group meeting on the License Termination Rule in March of 2006; a briefing by staff and stakeholders on the rulemaking and guidance for prevention of legacy sites in July of 2006; and a working group meeting on using monitoring to build model confidence just recently in September, 2006. We are preparing a letter on that working group meeting. I think some interesting insights will come from that activity. Next slide, please.

One very important outcome came from a panel of experts that participated in several of the committee's working groups. I think one key success was we had very involved stakeholders who were willing to give of their time at three different meetings over many, many months to see the beginning of the decommissioning rulemaking and to participate all the way through the final rulemaking.

I'm thrilled to tell you that they reported to us at the final rulemaking working group that, in fact, the comments that they offered to us at the preliminary meeting on the draft guidance had been addressed, and that they felt that the guidance was now better risk informed because of their participation.

Very much technically detailed information was given to us, put in our letters to you and they reacted very positively to the fact that the staff, in turn, had recognized those issues in creating the final guidance. So from my standpoint, that is a great success for the

Committee, I think, also for the staff that we had a real meaningful and sustained stakeholder participation.

Additionally, some insights came out of those meetings. One was that on-site disposal was not a favorite option. People were turning away from that as a reasonable option for final disposition of materials. They are looking for disposal sites that are in the business of managing waste.

On the next slide, they also pointed out that it's important to focus on the prevention of releases, on early release detection and incentives for early remediation. The last part intrigued us in that, you know, what kind of incentives might they be talking about? And they gave an example that incentives could take the form of reduced financial assurance for facilities and sites that perform well in these other matters of detecting releases early, preventing them all together and those kinds of things. So we had some in sight there that if there was a benefit, people could actually spend a little bit of time, effort, and resource on doing a better job in the early period of a facility's life.

So that is an intriguing idea. We are going to continue to deal with that as we move into next year's agenda for the Committee. I would like to just close my first few minutes and then hear from these other experts around the table as well as having you hear it that there were several effectiveness factors for the Committee. One was our early involvement with the staff.

We attended the very first -- I know Commissioner Merrifield, you were the keynote speak at the first briefing across the street as the decommissioning effort kicked off almost two years ago, maybe a little more now. We been involved with the staff and their outreach ever since. That's been very effective for us in a number of ways. We heard what they heard as they heard it. So we got good insight from that.

The second was it was a very efficient process for to us hear the same thing at the same time. We didn't have to have second briefings, and it was very timely for us to be involved all the way along the way. That was a sustained effort on our part. And I really appreciate and want to recognize to you, the staff's commitment to that ongoing dialogue with the Committee and the Committee staff.

Our participation in workshops and then the continued participation of an expert panel throughout several of our workshops really helped us develop a rapport with key stakeholders and stakeholder groups, and really better understand what some of their issues might be. That sustained communication, I think, has allowed to us give you better letters, and hopefully, has allowed the staff to create better decommissioning guidance that is now in final form. With that, I will defer to my other colleagues at the table and take any questions you might have at an appropriate time.

CHAIRMAN KLEIN: Thank you very much. We will next hear from Chuck from Dairyland.

MR. SANS CRAINTE: Good afternoon, Mr. Chairman, Commissioners, I am delighted to be here. With me is our project manager, Mr. Mike Brasel and I am hopeful that between the two of us, we can respond effectively to any questions you may have. Let's begin with the first slide which is a photograph of Dairyland's Genoa Generating Site. And often times you may hear our staff comment about the limitations of our facility's site. And this makes this quite evident.

The area that's outlined is about a little over 2-acres and it effectively encompasses virtually all the facilities associated with the La Crosse Boiling Water Reactor.

COMMISSIONER MERRIFIELD: Mr. Chairman, I can attest as to its diminutive size.

MR. SANS CRAINTE: That is the Mississippi River there; Burlington, Northern Santa Fe Highway and other facilities constrain that.

You're aware that we have been shut down since 1987 and we have been in safe store since that time. Beginning in about 1998, our staff began a systematic dismantlement of retired systems. And to date, as indicated on the slide, nearly, one-and-a-half million

pounds of waste has been shipped from the site. I think our staff today schedules about 40 percent of their time to that effort.

And following that --

COMMISSIONER MERRIFIELD: Your existing staff there at the site? How many people do you have, approximately?

MR. SANS CRAINTE: Twenty-seven, approximately.

The next couple of slides are simply photographs illustrating the before and after conditions. You can peruse those at your convenience. I am sure you have seen them elsewhere, but it is a good testimony to the work that's been done.

So let's go directly to the reactor vessel removal. I would like to use this slide to just indicate where we are today, and that is that we are preparing to remove the reactor pressure vessel. Our intent is to ship it to Barnwell, South Carolina in advance of their announced closing to parties outside their compact in June of 2008. So we have a reservation in summer of 2007.

As indicated on the slide, access to the reactor building is complete. Today, we are installing rolling steel doors, which will enable or facilitate the mobilization of a heavy lift crane system, much like you see illustrated here, for removal of the reactor pressure vessel, which is today filled with light weight grout, and later mobilize again for the removal of fuel.

COMMISSIONER McGAFFIGAN: It is filled with grout, did you -- the reactor vessels internals were removed?

MR. SANS CRAINTE: They were not.

COMMISSIONER McGAFFIGAN: They were not removed, so it just pulled them out, the nickel, whatever is no longer much a condition?

MR. SANS CRAINTE: I'm not the technical person to respond to that, but I understand that it's characterized and effectively analyzed so that in mass, it is acceptable to Barnwell.

COMMISSIONER MERRIFIELD: It is similar to the process that they used for Trojan, in terms of treating it as one system.

MR. SANS CRAINTE: Let's move ahead to used fuel status. I wanted to comment briefly on the fact that our fuel is in wet storage there. The pool is within the reactor building. It is a very small pool. That is one of our site constraints. I think the surface area is 11 feet by 11 feet, to give you an appreciation of that. One of our unique challenges.

The bottom of this slide indicates that we have pursued alternative solutions. I think those of you that know or heard of Dairyland know that we have been a champion of the Yucca Mountain project consistently. We have been a participant in Private Fuel Storage since its inception. We have had a couple of attempts at legislative solutions and encouraged negotiations and discussions with

the DOA to try to advance the removal of fuel to the benefit of our consumer members.

Quickly, on decommissioning, I'll skip down to the planning, I guess. To date, we have not submitted a License Termination Plan. It is our intent -- we anticipate doing that upon completion of the removal to dry storage of the fuel. And the final bullet is on waste disposal processing. Of the lessons learned, I guess, a decision was made at our facility early on to not segregate, classify and decontaminate waste at our site, because of the obvious limitations, but to ship it elsewhere to do that. So that has allowed us to maintain the reduced size of our work force.

And finally, under lessons learned, which is our final slide, I just wanted to skip to the bottom in the interest of time, and indicate that the effort that our staff has undertaken, scheduling about 40 percent of their time for limited dismantlement will, we are convinced, yield economic benefits in the final analysis. There will be substantial cost reductions. And a corollary benefit to that is the reduction of dose that our staff is being exposed to, and also that of our contractors. So I think it has been a beneficial experience to date.

CHAIRMAN KLEIN: Thank you very much.

COMMISSIONER MERRIFIELD: Mr. Chairman, if I may,, before we go on to Pat Rivers, I did have a chance to visit La Crosse site about a year and a half ago, I think. I would attest to the -- you

know, they do have a few pictures here. And it is hard to necessary gauge from that fact what they have accomplished. And I think that they present an accurate representation of the work that they have accomplished there in terms of trying do that decommissioning part time with a small work force. And I think it is a -- they talk about it as lessons learned. I think it is a useful lesson for other members in the industry to recognize. And I think they do have quite a bit to be proud of there of what they have been able to accomplish, despite the fact it is not that many people.

CHAIRMAN KLEIN: Thank you. Next, we will hear from Pat.

MS. RIVERS: Good afternoon, Mr. Chairman, Commissioners. Thank you for the opportunity to share my thoughts and experiences with the Formerly Used Sites Remedial Action Program or FUSRAP related to decommissioning. Even though in FUSRAP, we don't perform true decommissioning. Instead, we achieve site clean up subject to the Comprehensive Environmental Response Compensation and Liability Act of 1980, CERCLA or Super Fund.

Compared to DOE's broad authorities under the Atomic Energy Act, our FUSRAP authorities are limited. We have the authority to select the appropriate response action and to carry out the selected clean up. Some FUSRAP sites are licensed creating overlapping missions for the Corps and the Nuclear Regulatory Commission. By

policy, FUSRAP does not include any sites with active licenses or sites eligible for clean up under other programs. However, four FUSRAP sites are in some way related to licensed sites; two at advise statute.

This creates a situation where both CERCLA and the NRC decommissioning processes could be used to clean them up. Thus, our agencies negotiated and implemented Memorandum of Understanding to coordinate activities affecting the health and safety of the public and common defense and security. Because maintaining safety is a paramount, our agencies have been cooperating to control costs, by minimizing dual regulatory efforts and implementing risk informed management practices.

Under the MOU, the licensee and the NRC stepped back from their normal roles in decommissioning process to allow the Corps to proceed with its FUSRAP clean up while satisfying the NRC's health, safety and security responsibilities. Although, we are exempt from actual licensing under CERCLA, we must still meet the substantive requirements of the applicable or relevant and appropriate requirements establishing clean-up standards for the sites. This process ensures safety and minimizes the time and cost of dual regulation.

We're currently working with the NRC staff on our first action under the FUSRAP MOU, which is abeyance of the license at the Maywood site. This means that we will soon begin work on the last

phase of this very large three phase project located in New Jersey, and the first real test of the MOU.

We depend on limited congressional appropriations to fund FUSRAP, and must maximize the use of taxpayer dollars. One major clean up cost is waste disposal and we are working with the NRC to define safe and economic disposal practices for FUSRAP waste. The March 2006 National Academies report improving the regulation and management of low activity radioactive waste addresses some of these issues.

The overall intent of the academy's recommendations is regulating disposal of low activity waste, based on its health and safety characteristics and not its pedigree. These recommended processes can all be implemented by cooperating agencies within the current regulatory structure.

While I believe all of the academy report recommendations are valuable, I want to highlight two of the five recommendations as guiding principals for the Corps and the NRC in working on FUSRAP. The first recommends using risk informed regulation of low activity material through integrated strategies. We value the NRC's willingness to consult with us on difficult issues and to consider alternative management options, given that we are not a licensee and recognizing that our unique relationship may require innovative solutions. Continued cooperation between our agencies is

vital if we are to ensure our joint efforts are safe, legally compliant and result in real protection of the public at the best possible cost.

The second recommendation states that Government agencies should continue to explore ways to improve their efforts to gather knowledge and opinions from stakeholders, particularly the affected and interested public, when making low activity waste risk management decisions. If we are to achieve clean-ups that are accepted by the public, we must first earn and then keep their trust. We, the Federal and State agencies, must not merely ask for comments from communities on our finished product, we must also help communities understand what we are doing and why so that they can more easily understand the risk posed in different situations and how different remedial alternatives or decommissioning actions can impact that risk in order for them to have meaningful participation.

The complicated nature of different authorities, the various definitions, and the complex relationship of the laws and Regulations that govern what we do can alienate the public. We are trying to address this challenge and understand that we must work closely with you, the US EPA, and State agencies if we are to be successful.

Although, our agencies have similar mandates to protect the health and safety of the public, we also must recover our clean up costs. We work with the Department of Justice to recover costs from parties responsible for contributing to the contamination. This is always

a sensitive matter and adds a time consuming dimension to FUSRAP projects that may not exist in NRC decommissioning.

Despite these challenges, I believe that with the continued support of the NRC and the other involved Federal and State agencies, we will continue to make progress toward remediating all of the FUSRAP sites in a safe and effective manner. To date, we have disposed of 1.3 million cubic meters of contaminated materials from FUSRAP sites, completed remediation at five sites, are actively cleaning up eight more sites, and we are studying the remaining 13 sites to identify contaminated areas and evaluate clean up alternatives.

Currently, we are negotiating a new MOU with your agency that will allow the Corps to perform environmental and engineering work in support of your nuclear reactor related work. We look forward to supporting the NRC in this area. Thank you again for the opportunity to share my ideas and FUSRAP experiences. Ongoing dialogue between our agencies to identify and resolve unique issues is important to the safe economical and timely clean-up of the licensed FUSRAP sites, and I'm always available to answer any questions that you may have.

CHAIRMAN KLEIN: Thank you. Next, we will hear from Kurt.

MR. HACKMANN: Once again, Westinghouse thanks you for giving us the opportunity also to participate in this briefing.

First few slides, just a little bit about background.

Hematite is a former fuel fabrication facility that has been operated under a special nuclear material license. Hematite is considered a complex site with contaminated ground water. The project is regulated by both the NRC and Missouri Department of Natural Resources.

Primary site conditions of concern are buried radiological waste consisting of large volumes at low concentrations. We have got buried chemical waste containing volatile organic compounds and groundwater contamination.

As far as a time line, the plant was opened in 1956 supporting Government contracts involving high and low enriched uranium. In 1974 Government operations ceased, and the site at that time only supported commercial nuclear fuel, which contains low enriched uranium. Westinghouse acquired the fabrication business in 2000, terminated manufacturing in 2001 and has since performed several site clean-up projects under our license.

The Hematite decommissioning plan has been conditionally accepted for technical review, and we are forecasting plan approval in December 2007.

As far as lessons learned, the following are ones that we have identified on the Hematite project. The first is the importance of having continuity of NRC project management in order to maintain consistency of regulatory strategies and project direction. We realize

NRC organization has been restructuring; however, the Hematite project had many NRC project managers since 2001.

CHAIRMAN KLEIN: How many?

Eight. From Westinghouse's perspective, this has resulted in problems with the transfer of information, such that it is like starting over with each project manager. The turnover has led to confusion over the acceptance of previous agreements, the format and content of submittals and changes in position regarding key issues.

Need for improvements of the guidance for electronic submittals. Our experiences is that guidelines are confusing and contradictory. It is our understanding also that we are not alone in that perception. Westinghouse followed the current guidance documentation when submitting the decommissioning plan this last summer. The submittal was not accepted. Through our investigation of the issue, it identified that in most cases we felt we were in compliance with the guidelines.

Ultimately, it was more cost effective and timely to resubmit hard copies of the documents. NRC must continue to emphasize the allowance for flexibility in dealing with issues faced by the licensee for complex site situations will arise that are outside the realm of standard practices that will require NRC approval.

Hematite had proposed to perform additional characterization of the burial area waste by the method of trenching.

NRC approval of the trenching methodology would have required revisions of site programs that were currently under development for approval of our decommissioning plan, which would have delayed the start of this work. Alternatively, core boring was used since it is an acceptable activity under our current license. That is just, like I said, challenges with complex sites that we have different conditions that we need to be a little more flexible with.

Physical security. The current heightened concerns over national security have resulted in reassessment of the site's physical security plan requirements, including whether it should be treated as safeguards or classified. In order to excavate the buried waste from former Government operations, the site is required to develop and implement a higher level of security not previously needed for the site. The ability to perform certain decommissioning work under the license after ceasing license operations allows the licensee to maintain experienced staff and knowledge while the decommissioning plan is being prepared and approved. NRC authorized Westinghouse to conduct such work pursuant to its license. Because of this approach, Westinghouse was able to reduce the site inventory of uranium to just residual contamination and to remove most of the process systems and equipment in a very timely manner.

COMMISSIONER MERRIFIELD: Just to clarify, then, this is one that we got it right?

MR. HACKMANN: Yes; that's okay. Sorry. These last ones are more positive.

Also, establishing and maintaining good communication between the licensee and NRC is most important. We believe that due to significant efforts by both NRC and Westinghouse, current communications are very good. We have established biweekly conference calls and have successfully worked through significant project issues and regulatory strategies. Open and frequent communications is a critical element for successful decommissioning projects.

In addition, the NRC, Westinghouse and the State have worked very well together in hosting and participating in public meetings. So these are all more positives.

As far as opportunities, these next two are very important to us. Regulatory exemptions for low concentrations of fissile material are needed for the decommissioning of an enriched uranium facility. In particular, facilities which use on-site burials will result in a generation of large volumes of waste containing low concentrations of uranium. Even though the concentrations are low, the accumulated mass of contained uranium can be significant. The regulations related to physical security, nuclear material control, and nuclear criticality safety are based on mass volumes, which establish regulatory controls that

are not commensurate with the risk of low concentration of diffused material.

Westinghouse believes that when uranium waste concentrations meet the definition of fissile exempt material for transportation purposes, certain regulatory requirements should be reduced without impacting public health and safety. Westinghouse will be making future submittals concerning this issue for our project.

And of course, the costs of waste disposal continues to be a major consideration of decommissioning projects. Actions that the NRC can take to foster the expansion of alternate waste disposal options will be important to allow decommissioning projects to proceed in a more cost effective manner.

CHAIRMAN KLEIN: Clarifying question, are you sending your waste off-site?

MR. HACKMANN: Yes.

CHAIRMAN KLEIN: Where do you send it?

MR. HACKMANN: We are looking at several different options, but we are considering primarily the normal facilities of EnviroCare, – and we're also considering Nevada test site. We are exploring right now our best options for disposal. There are several measures that can be taken by the NRC that would improve the timing of the approval process for decommissioning plans. Early approval of the release criteria and project management control measures, such as

your quality assurance, radiation protection, could be accomplished under the license. The current guidance requires that these aspects be approved as part of the decommissioning plan review; however, an early approval, particularly of the release criteria, would improve the licensee's planning efforts without impacting the review and approval of those aspects of the decommissioning plan related to the work to be conducted under that plan. Thank you.

CHAIRMAN KLEIN: Thank you very much. Raymond?

MR. VAUGHAN: Yes. Good afternoon. I am Ray Vaughan speaking on behalf of the West Valley Citizens Task Force, which is a stakeholder group convened by, and supported by U.S. DOE and New York State Energy and Research Development, which I will refer to as NYSERDA. Next please.

This is an aerial photograph superimposed with rough curie values for some of the remaining waste facilities, the main facilities.

COMMISSIONER McGAFFIGAN: This is not La Crosse.

MR. VAUGHAN: A little bigger complex. A lot to do there. Next please.

This is a very busy set of maps that I won't try to review in detail without a pointer. On the one map that's in the upper right-hand corner, the site is the red dot, but as you can see, it is in the western part of New York State, south of Buffalo. Next please.

The site just happens to be in the Cattaraugus Creek Watershed that EPA last year -- or actually earlier this year rated as one of the best in the Great Lakes, and the best, actually, in the eastern Great Lakes. It is within the watershed that is colored green along the Lake Erie shore. So it's definitely a watershed worth saving. There are both public health issues and ecological issues here. Next please.

As you already know, I am sure, this is a complex site with overlapping U.S. Department of Energy and NYSERDA responsibilities to deal with the reprocessing plant and two burial grounds. Next please.

The oversight is equally complex with EPA, NRC, State agencies involved. The West Valley Demonstration Project Act governs many of the current activities, but also a lot will be coming up with respect to the Part 50 license now in abeyance, and you can see the other things that come into play as well, including RCRA; certainly, LTR is big. Next please.

As you know, there are separate closure end points for DOE and NYSERDA and the decommissioning decisions are still at least a few years away. And unfortunately, we are dealing with a serious current impasse between DOE and NYSERDA regarding their respective responsibilities, the validity of erosion modeling, and so on. So we need to get that resolved as quickly as possible. I know that's not primarily your bailiwick, but that is a serious problem. Next please.

The main physical problem with the site is erosion as NRC and other parties recognize quite well. Based on that, based on the fact that uncontrolled erosion produces unacceptable results, the West Valley Citizens Task Force is clearly on record as saying the wastes need to be removed from the site eventually. Not necessarily immediately, but the only final resolution for the site is for waste to be removed. Next please.

This is the first of the numbered points that are written out in more detail on the three page written statement that I think you also have.

On the point of whether decommissioning plans for the two agencies, DOE and NYSERDA should be concurrent or sequential, we don't have a clear opinion on that; however, if, as NRC prefers, they are sequential, it is important for the decommissioning requirements to be uniform for the two agencies. And there is also a big looming question about how the Part 50 license will be recreated, basically, after the demonstration project is financed. This license is now in abeyance and really needs to be brought back into force in a way that is going to need a lot of careful public scrutiny. Next please.

This is the second now of our points in the written statement. In evaluating erosion and the radiological impacts that come from uncontrolled erosion, it is important to carry evaluations past 1,000 years. And this needs to be done in all of the evaluations that relate to

erosion and impacts. The West Valley final policy statement certainly gave some recognition to the need to carry evaluations past 1,000 years. Next please.

The third point is that it's important for NRC to adhere to the distinction between decommissioning and disposal. These are very distinct requirements in the West Valley Demonstration Project Act. And even though there may be some overlap between the concepts of decommissioning and disposal, certain things like the elaborateness and the requirement for having extensive barriers is one of the things that is generally considered to be a distinguishing feature between those two. Next please.

We have previously raised the point, and will continue to raise the point about WIR being an inappropriate reclassification method especially at West Valley where there is a separate law, the West Valley Demonstration Project Act, that sets forth the waste categories. Next please.

Fifth point is the ongoing problem that we are facing with the Strontium 90 contaminated groundwater plume. This is a problem that came from a leak during the operation of the reprocessing plant in the late 1960's. Was not really recognized until DOE was on-site during the demonstration project. At that point, the license was in abeyance. We, thus, have a fairly significant regulatory gap that means that DOE is not dealing effectively with getting at the concentrated heart of the

plume. NYSERDA and NRC say they can't really go in and take a proactive role because of the fact that there is no license in effect right now. But it is a decommissioning issue in terms of the increasingly large amount of soil that will need decommissioning. Next please.

The final picture is just a couple of beautiful pictures of what the Cattaraugus Creek looks like about 20-miles from the site. It also illustrates the general nature of the drainage downstream from the site. Thank you very much.

CHAIRMAN KLEIN: Thank you. I would like to thank all of you for your comments today and we will begin our questioning with Commissioner Merrifield.

COMMISSIONER MERRIFIELD: I will start with Mike Ryan. Mike, you spoke about the notion of incentives for early remediation, including potential for reduced financial insurance requirements. And I'm wondering if you could expand on that point a little bit more in terms of your thinking?

DR. RYAN: Sure. I think we heard from a variety of stakeholders for a variety of range of facilities that if they do a good job, for example, and don't have underground tanks or have exposed piping rather than buried piping and there is a high degree of assurance with regard to they haven't had any leaks, if they have had some spill or leak, they have remediated it properly, and they are heading toward a much better profile from materials that would have to be managed

perspective, that it would be worth while to think about how one could be incentivized to do that up front.

There are decommissioning requirements, certainly costs associated with preparing for decommissioning, and if somehow recognition of good performance through a facility's life could be recognized, whether its through the inspection process or some other mechanism, that would be something that would give every site incentive to actually do a better job as the facility went through its life.

COMMISSIONER MERRIFIELD: Is there any hesitation -- I think in some cases there is a concern that if your decommissioning fund is not fully funded that you have to wait. You wait until everything is ready and then you can start. Was there any exploration of the notion of getting started on some remediation like activities despite the fact that the decommissioning trust fund had not been fully funded?

DR. RYAN: I took away two kind of views on that very question. For folks that didn't have a lot of current problems, the idea would be let's get out ahead of it. For folks that had, perhaps, a bigger set of problems to address because they had had some period of time in their decommissioning, questions were more complex, there was a tendency to say, well, let's wait and capture it all when we really get into the full blown decommissioning efforts.

So I think there would be two kind of alignment of sites. Those that have current decommissioning questions that are substantive, and perhaps, more complicated; and those in the earlier phase or a less -- a phase with less contamination or less issues to worry about. So we heard kind of both views on that.

COMMISSIONER MERRIFIELD: Pat, you presented some written information to the Commission in addition to your statement. One of things -- of course, now that I am looking for it, I won't be able to find it. You made a mention of the fact that the ability to have sites where the material can go has had an impact on your ability conduct the clean up.

You mentioned the fact that two RCRA hazardous waste facilities had been added as disposal options for the majority of FUSRAP materials. That was on the second page of your printed testimony at the bottom. And you go on to say, this helped the Corps make significantly more clean up progress than would otherwise have been possible within the same time frame within the constrained budgets.

Can you relate which facilities those were, and can you explain a little bit more about how that process has been helpful in utilization of limited Corps dollars to effectuate unenhanced clean-up ability.

MS. RIVERS: Thank you. I can talk generally, then I will ask some of my program management team to give me the specific locations. The challenge that we face is working to deal with the material based on its characteristics. It gave us the opportunity to approach the program when the Corps began working on it to introduce competition for disposal of the waste. And we ended up with a reduction of about 50 percent in the cost, because we were able to manage the waste based on its nature. And so one of the challenges that we want to continue to work with the NRC on is looking at disposal of waste based on its characteristics, and our largest volume waste streams were low-level material or mixed with other types of contamination. So that was an opportunity, and I'll ask --

PARTICIPANT: U.S. Ecology Site in Grandview, Idaho, and the Waste Control Specialists site in Texas.

COMMISSIONER MERRIFIELD: In Texas. Well, Mr. Chairman, this would not be the first time that Pat and I have had a discussion on these issues. I remember before I came to the Hill working for then Senator Bob Smith and then Senator John Chafee in context with the Senate Armed Services Committee looking at are there ways of effectuating a greater diversity of sites.

I think an important point that is made through the comment made by Pat Rivers is that because of that flexibility, they have been able to take the dollars further, have been able to get the

clean-ups to occur faster, and presumably have been able to take those dollars in a way that is cleaned up more sites in a better way than they otherwise would have had. That is an issue, I think, as Commissioner McGaffigan would recognize, I think we have grappled with a lot over these years to make sure, consistent with our requirements, that we can find disposal options that would meet that need.

Going to Kurt, I appreciate the recommendations and the lessons learned, some of which for us like project managers, some of which were things that we have done well, and I appreciate those as well.

I guess many of these sort of focus on things that the NRC can do. And I appreciate learning those, because we can take those away; but given the fact that you work for Westinghouse, which, obviously, still operates -- has operating fuel facilities down in Columbia, South Carolina. Can you talk at all about any of the lessons you have learned internally that would be useful for the ongoing operations as they would think about legacy issues before they stopped production at some point down the road?

Not that that is impending, but the notion being are there modifications in their ongoing operational activities that could enhance their ability do decommissioning whenever that would be?

MR. HACKMANN: Let me say without being able to address that specifically, because I'm not involved in our fuel site there;

I mean, specifically, just good -- I mean, good housekeeping practices is always the most important for decommissioning. That, you know, you minimize spills, you keep control of material, and I'll just say good housekeeping practices in order to reduce ultimate decommissioning costs.

For our site specifically, really what we are dealing with primarily is the legacies of the government work that was done in the 60's time frame. And truly, what's left of our project at this point really is focusing on those legacy items. The work that we did so far under our license pretty much completed most of the process systems and removal of that.

COMMISSIONER MERRIFIELD: Well, your answer answered part of my question. One of the things that I think I try to encourage our operating licensees to do is to recognize the lessons from the reactors that have shut down, because that will put them in a better stead, eventually, when those operating reactors shut down. And it would seem to me -- maybe the next time I talk to Steve Tritch -- I think maybe Westinghouse, you and your counterparts down in South Carolina ought to think a little stronger about some of these issues, and are there things that are you identifying now and lessons that you can take back to those folks in South Carolina, such as whenever that plant were to shut down, they would benefit both financially and planning wise in making all that happen. I think you probably know a lot more

than you are letting on; and certainly, making sure that that gets to your counter parts would be helpful.

MR. HACKMANN: I want to say too, let me also potentially defer this question to Joe Nardi. I brought Joe with us. He has actually been involved in all our Westinghouse clean-up projects and licensing.

MR. NARDI: I do understand your concern about making sure that the information does get to the other sites. We have been trying to do that with some of the lessons learned, telling the, particularly the Columbia site, what we been finding and what is needed.

The real place that would help a lot would be in the next design of a plant. Both plants, Columbia is fixed in design in many ways; and it's also an old plant. Hematite also has some very unique challenges in that it has a long history of not only low enriched uranium, but high enriched uranium. So there is very unique conditions at Hematite that don't apply to Columbia.

COMMISSIONER MERRIFIELD: Well, we do -- I'll stop here. You can sit back down. I think in terms of lessons learned, there are internal lessons learned that are useful. There are also lessons learned with your counterparts. And while Hematite may be unique for Westinghouse and having both low and high enriched uranium, we have got other facilities in the fuel cycle arena that also have that high

level challenge. And it would be useful for them because two of those are currently operating to consider those lessons down the road as well. Thank you Mr. Chairman.

CHAIRMAN KLEIN: Thank you. Commissioner Jaczko.

COMMISSIONER JACZKO: I think I'll start just by making a couple of comments. I appreciated hearing from a lot of the speakers here, actually from all of them. One of the issues that strikes me as an area of concern is really, how much cost drives the clean up activities at most of these sites. And that cost seems to be the cost related, not necessarily to actual remediation activities, but the cost of ultimate disposal of the material and whatever source that may be. And Commissioner Merrifield made the comment, or I think, Ms. Rivers, you made the comment about increasing competition can help with that issue of cost. That is certainly something I agree with.

I think it is something that we need to look at as a Commission really, in particular, for low-level waste disposal facilities. Right now, we have, essentially, three sites for low-level waste disposal. One of them is Envirocare, I think someone mentioned will be closing down out of compact waste at some point.

I think that it is certainly important for us to take look at how we can generate more of these low-level waste disposal sites. In particular, I think one of the things I think came out at one of your meetings, Dr. Ryan, is the idea that transportation is really one of the

large drivers of cost. So having sites closer to -- or having disposal sites closer to the clean-up locations could help alleviate a lot of those concerns.

And I think one of the things that that gets you, is it gets you -- a lot of people also mentioned this idea of stakeholder involvement is very important. And you can have resolutions to issue that are much more satisfactory to a lot of stakeholders, I think, if a lot of this material can be disposed of. So I don't really have a question there, but more just a comment. I did have a couple of specific questions.

Ms. Rivers, I believe you mentioned the -- you talked a little bit about public trust and about engaging stakeholders and trying to communicate. Maybe you could talk a little bit more about some of your experiences and how we can do better or how we can do a better job of encouraging that public trust or encouraging the stakeholder participation in some of these decommissioning activities.

MS. RIVERS: I think there are two obvious areas, the beginning; in other words, the site where the material currently is located. Working to have a clear understanding about the licensee's responsibilities, the conditions of the NRC license, and the approach that we are using to look at the Corps CERCLA remediation process and the implications that might have, and explaining that collaboratively among our Federal organizations and with the State regulators so that

the public is confident that we are providing a safe and effective clean up is critical.

Since there are administrative procedures surrounding all of the programs, helping the community to understand how we are managing those administrative procedures appropriately and how the technical work, the actual remediation work is being done safely and effectively is one end. The other end that you were just referring to, which is confidence in the public that the disposal of the waste, that the material is being placed in a disposal site where they are fully protected based on the nature of that disposal site, and management and regulation of that disposal site is equally critical.

COMMISSIONER JACZKO: On that last point, what do you think we can do as an agency for situations in which there may not be an option to move material off-site. The Commission has approved a long term control license. What kinds of things could be done to work on that public trust issue in situations where that may be the option that the Commission decides is an acceptable option for decommissioning?

MS. RIVERS: My recommendation is to focus on two principal areas. The technical side, which helps people to understand what exactly the risk is, and what risks are posed by having the material in place, and compare that with the risks that might be posed by trying to move that waste or the challenges presented by moving that waste to a different location, or the fact that there are no other viable options.

The second part is to help the stakeholder --

COMMISSIONER JACZKO: I'm sorry; I don't mean to interrupt you. I think that is an important point. I think that is one of the challenges we have that often, I think, as I said, what defines a viable option tends to be cost. In that case, that's not necessarily a health based risk decision. It is a larger risk benefit analysis that we are doing. How do you sometimes communicate that if, from the one hand -- it seems to some extent what we are doing is justifying an option rather than explaining the risk of a particular option. How do you, perhaps -- and again, this is a pretty heavy question. I suppose if we all knew the answer to this, we would not necessarily have to have this meeting today, but.

MS. RIVERS: To quote a friend of mine, if it was easy anybody could do it. But under the Super Fund Law, a no action option is always required to be evaluated. No action does not mean leaving the material in place. No action means take no remedial response at all. Because of the Super Fund law, the CERCLA statute and the requirements to evaluate different alternatives based on their risk, cost is one element that gets calculated, but the risk analysis happens based on its own merit.

I think the challenge that we have to be clear about is the fact that there may only be a small range of viable risk management alternatives; but the secondary piece that we are responsible for, given

the fact that these are appropriated funds that come from the taxpayers, is then demonstrating within the eligible safe and effective remediation options, we can analyze the alternatives and look at the costs and then recommend a cost effective approach.

That's the basis of risk and residual risk, and the life cycle analysis of that long term management gets back to the second half of your question. The concept of describing the administrative and management procedures that ensure that material that is left in place is -- that are procedures that are safe and effective for a long period of time is the second half of creating and sustaining that trust. But I'm preaching to the choir on that one.

CHAIRMAN KLEIN: Commissioner Lyons.

COMMISSIONER LYONS: I would like to start by, first, thanking all the speakers. I certainly learned something from each one of you and I really do appreciate it.

I would like to start, first, not with a question, but following up on the dialogue between Pat and Greg just now, that brought in the issues of costs and risks in many of the disposal issues. And I only wanted to mention that Mike Ryan will be back here later this week speaking more specifically on issues related to ACNW and something I wanted very much to explore with Mike and that meeting ties in with your dialogue, and that is the absolute dearth of scientific evidence on the risks of low radiation doses, and it seems to me that the question

you are debating here on costs and risks is very hard to quantify the risk component of that when we have such tremendous uncertainty remaining in what the risks truly are from low doses of radiation, whether to use the LNT model or, as the French academies would say, that it is seriously flawed.

So just a comment. And I'm hoping to get into this more with Mike on Thursday when we have that opportunity. By way of questions, I had one question, Kurt, on your presentation. You talked about difficulties with electronically submitting documents. I'm just curious if you could add a few sentences on that. What's the problem?

MR. HACKMANN: I'll defer to Joe on this one.

COMMISSIONER LYONS: Well, what's the problem and how can we fix it, I guess.

MR. NARDI: It should not be a problem. But the guidance that we found in trying to prepare documents, I'm talking particularly, very large documents, and to get them in a convenient electronic format versus hard copy. Following the guidance, when it came in to the NRC, it just didn't pass all of the tests. We went around and around on it. Eventually, we just gave it in as hard copy. We just could not figure out what it is that the NRC wanted.

Now, I understand there's been some improvement in the guidance information, but what I'm told is that it is still conflicting and difficult to manipulate information to get it to you in a convenient form.

COMMISSIONER LYONS: Perhaps, rather than belaboring that in this meeting, I would appreciate -- and I guess I'm not the only one sitting on this side of table who would really appreciate, perhaps, a little bit more information from your perspective as to what some of those difficulties were, and then, perhaps, together with staff, we can work to address them.

COMMISSIONER McGAFFIGAN: Could I just without interrupting -- was your original submission on CD or DVD in some format?

MR. NARDI: We submitted it in a CD format.

COMMISSIONER McGAFFIGAN: A CD. So it could fit on a CD?

MR. NARDI: And going through the process of reviewing the files that were submitted, there were a lot of error reports issued that said that we had not followed the format when we really believed we had. It is very confusing and very conflicting, very difficult to do it. And I understand we're not the only ones.

MR. HACKMANN: I will go ahead and take that and get you feedback on that specifically.

COMMISSIONER LYONS: I truly appreciate it, and I guess I am not the only one.

CHAIRMAN KLEIN: You absolutely are not the only one.

COMMISSIONER LYONS: With my remaining time, I did

have a question, Mike, for you, and I will save LNT questions for Thursday. In your October 17th letter that you briefly referenced, that October 17th letter was on the prevention of legacy sites. Certainly upgrade interest to all of us.

In your June 9th letter, you talked a little bit about how on-site disposal tends to lead towards the potential for legacy sites. And in these letters, and in some of your comments, you have referenced an ongoing process by which the staff is trying to improve with the help of ACNW in this particular area of avoiding the occurrence of legacy sites.

I just wondered if you could share anymore comments or suggestions. I know it is an ongoing process, but it is also a very, very important issue.

DR. RYAN: Let me preview what will also just take a minute or two on Thursday, and that is that we are considering how to formulate a white paper to actually look at the interaction of these many issues. Decommissioning is not separate from disposal. Legacy sites certainly is integrated. Cost of disposal. Meeting disposal site requirements. There are lots of different variables that one has to meet, transportation programs, the availability of casks to actually do the shipping, sometimes dictates how you decommission, because you may or may not have the right shipping casks to move the material around.

So there are an awful lot of variables that deal with the movement of material that has no further use, yet it is radioactive. Whether it is the very low end of dilute solids, whether it is the concentrated end of irradiated hardware. So we are kind of wrestling with the exact question you are posing to me, and we think a good way to do it would be to systematically go through and see if we see and can advise you on any patterns.

Where are the common threads? You know, where is the real opportunity to make an improvement, and the very points you made, for example, that if you have on-site disposal, you know, one of my own history, just being at Georgia Tech in Atlanta; Emory, actually, had an on-site disposal. They really sort of lost track of it until they broke ground for a new building.

COMMISSIONER LYONS: And then they found it.

DR. RYAN: So there is a little bit of that. It was a minor kind of clean up, but certainly one that impacted the costs and schedule of the new construction.

So there are a number of those things, and we are seeing kind of -- not necessarily a pattern yet, but we getting vignettes of lots of things saying, well, that is related to this -- excuse me -- or the waste disposal here really drove the bus on how they decommissioned it. Or do I clean it up now? How much scabbling do I do, because I might not want to generate thousands of cubic meters, I might want to only

generate a few hundred cubic meters? How much can I leave behind if I am going to have a reuse of a facility, all those kinds of things; and over the now two years we have been looking at this, we really see a pattern.

So we exploring and hope to explore with you a little bit more in detail on Thursday, how can we formulate our plan to look at this in an integrated way, not losing the detail, but trying to squeeze out a pattern and you know, what's the right path forward.

COMMISSIONER LYONS: I'll look forward to more discussion later in the week, and certainly avoiding legacy sites has to be very, very high on our priority.

DR. RYAN: Indeed. Thank you.

CHAIRMAN KLEIN: As often times happens, my colleague, Commissioner Lyons had asked one of the questions that I was ready to, and that is on the electronic submissions. It's baffling to me that in today's electronic world that we cannot articulate our requirements clearly on an electronic submittal and you would have to do paper copies. So I will look forward to finding out why we are not more clear in our guidelines. I look forward to seeing that.

You had -- Kurt had made another comment that we had eight project managers?

MR. HACKMANN: Yes.

CHAIRMAN KLEIN: Over what period of time?

MR. HACKMANN: From like 2001.

CHAIRMAN KLEIN: Since 2001. So more than one a year.

MR. HACKMANN: Yes. And I think it also shifted to -- some point -- part of a region also had to lead for a while. We just kind of switched around a little.

CHAIRMAN KLEIN: Since our EDO is appearing next, we can defer that a question to him as a follow up.

MR. HACKMANN: I will say things are working very well now. Finally, we're on track.

CHAIRMAN KLEIN: I was curious on your comment about security, is that because of the HEU?

MR. HACKMANN: Yes, the concerns of potentially -- I'll say we do have buried wastes, burial pits. We have logs. There were procedures that were done, material control accountability, but I think we are really -- a lot of it is just playing into, what if we find something that was not documented? So that is kind of what's giving us that elevation.

CHAIRMAN KLEIN: Are you making progress on that?

MR. HACKMANN: Yes. We are in agreement on how to move forward with it, and we are in the process of upgrading our plans right now, and our programs.

CHAIRMAN KLEIN: Mike, I had a question in general. From your perspective, are there any overlapping regulations between the NRC, and for example, EPA in our low level waste disposal?

DR. RYAN: I would not go so far as to say necessarily overlapping; they certainly regulate some of the same activities. I think sometimes, the numbers are different. We know of a couple of cases where the dose standard is a little bit different, and I think some of the approaches may be different where EPA fundamentally uses a risk range in which they regulate. We tend to use a dose standard, and sometimes those line up well and sometimes they do not line up so well. So I think those are things to think through.

I agree with the comment that having an open discussion of how do we get to a risk informed and integrated view, not necessarily finding one acceptable and this is not acceptable, but how do they work together is the reasonable approach. Having been a practitioner, I can tell you when you go to the table, that's certainly what you are looking for, how can we integrate our thinking on managing the risks as the appropriate strategy forward.

COMMISSIONER MERRIFIELD: Mr. Chairman, this is an issue that will seem very familiar to Commissioner McGaffigan. We have had an ongoing dialogue for a number of years with our counterparts over at the EPA regarding the appropriate standards. I would have to say -- and then staff can go into more detail -- I think our

relationship with EPA and the way in which we are managing that issue is better today than it was five years ago. But clearly, there were sites like Haddam Neck and Yankee Rowe in Massachusetts where that was a challenge, where there were conflicting sets of standards. I think what the staff is engendered to do was to create a process, I mean, Marty Virgilio can talk to this briefly. A process will allow us to meet our regulatory requirements to keep the EPA fully informed and hopefully end up in a situation where there is not a conflict that involves our licensees.

CHAIRMAN KLEIN: So I assume, Pat, that might have -- did that conflicting or dual regulations impact some of your work as well.

MS. RIVERS: The concerns are particularly focused around the four sites where we have NRC licenses that apply to the locations where we will be doing remediation. So what we hope to continue to do working with NRC is establish conditions where the license might be held in abeyance while we perform our remediation action, and then the license is reinstated with the recognition that we would negotiate based on a risk management approach, and ensure that we meet health and safety requirements and follow good procedures, but not have to deal with administrative requirements that the licensee would have to pursue at the same time that we are having to follow administrative requirements of the CERCLA Act.

CHAIRMAN KLEIN: Thanks, Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: I will join the chorus that it would nice to have a risk based approach, rather than a legacy approach. Unfortunately, we often times run afoul of statutes. You mentioned the Maywood sites -- everything that the Corps has said to us is absolutely, completely, and totally reasonable. Then there is the law, which may not be. And I think we're still struggling with that, the last time I checked, which is several months ago.

I regret if we don't get to a rational solution there. I also agree that it would be very nice to have additional disposal options, and totally agree with Commissioner Merrifield that the RCRA subtitle C sites and you Pat, -- the excellent place for low activity material with absolutely no risk to the public or absolutely manageable risk to the public. These after all -- these sites take materials like mercury and lead and arsenic that have infinite half lives and will be dangerous to people forever. And they have adequate safeguards for that, so they probably have adequate safeguards for slightly contaminated material.

There is an entity, Energy Solutions, that does all it can to eliminate all competition in this area by predatorily going into States, stirring up people, whatever. You guys try to go to Colorado and Energy Solutions was clearly behind the efforts to prevent that. So that is just a fact of life, and we have to deal with Energy Solutions as a monopolistic predatory practitioner of capitalism, and we will see what happens; but, it's unfortunate.

One site you didn't mention was -- you know, you also -- there is a RCRA subtitle C site in California you briefly used for lack of, one, the material, and it was also safe going there. They take far more dangerous material from the oil and gas industry in California that happens to be labeled T-norm, and therefore can go into that site. If you look at the radium content of it, it is vastly many orders of magnitude more dangerous than anything you guys ever put in there, but that's again, politics, and you eliminated California from your list of RCRA sites fairly quickly on, I believe. That's more a speech than a question, but I am with you guys. I just don't know how to get there given some of the political and legal constraints that we have today, and I don't know whether we can get the law changed to treat material based on risk as opposed to based on origin, because the current law suits certain parties.

Ray, I'm not going to leave you out. The last time you were here, as I said to him, he didn't testify at a Commission meeting, but I think I paid his way and he got to the microphone at one point. At West Valley, you face all of these issues you talked about. Which is most important?

I mean, we have limited resources -- I'm sort of the asking this as a public servant as opposed to an NRCer, because we don't have responsibility at the current time. The license will be renewed, will be put back, taken out of abeyance at some point, depending on the

war between NYSERDA and DOE. But is it cleaning -- is it the NRC disposal area, is it the State disposal area, or is it the tanks? If you had to put which things really have to be dug up? The tanks are the most -- a lot of things are expensive, but the tanks if you require them to be totally taken off the site, it is real dose for real people trying to do that job and grouting those tanks and all that as we are going to do in Idaho -- DOE is going to do in Idaho and South Carolina, it seems to be a pretty good option. And maybe we can focus on things that were improperly buried, and may have a decent source term attached to them.

So where would your priority be if you were directing resources for the next 100 years?

MR. VAUGHAN: If you are asking me to choose geographically, I'm not going to do that. I am speaking partly on behalf of my own point of view, but also, this task force has not made a decision on geographically which is the top priority.

CHAIRMAN KLEIN: I think radiologically, which is in your mind the top priority?

MR. VAUGHAN: It depends on the exposure scenario. The 1996 West Valley draft decommissioning EIS showed extremely unacceptable exposures for an intruder from the tank. Also, very unacceptable exposures for downstream exposures from the results of

loss of institutional controls. So those are two different exposure scenarios. So I think both need to be taken very seriously.

COMMISSIONER McGAFFIGAN: I was hoping based on your oral comments that you were going to put the downstream ahead of the intruder. Because I think the intruder scenario can be handled within the realm of government possibility by perpetual licenses, as long as there is going to be civilization in western New York, which I hope is a long, long time, you could be monitoring to prevent the intruder. You can't necessarily protect the down gradient folks from the some of the things that are at that site.

MR. VAUGHAN: But part of the uncertainty does come back to the question of whether there will be a government we recognize and can trust in western New York for, you know, the indefinite future. That was one of the points that was debated in developing the License Termination Rule and it wisely put some limits on that reliance. So the question, for example, of whether the erosion modeling, either as done for the 1996 draft EIS or as is being redone now and it's part of the base of the controversy between DOE and NYSERDA, the question of whether that erosion modeling really gives you trustworthy results is a big one. One of the concerns in the 1996 modeling, as severe as its predictions were for the burial grounds was it's absence of any feature that allowed new ravines to form and grow.

COMMISSIONER McGAFFIGAN: I wanted to get one more quick question in. Westinghouse; did you have any idea what were you were getting when you got the Hematite facility, and was there any decommissioning assurance in whatever contract you had with the former owner?

MR. HACKMANN: Yes, we did due diligence and evaluated the site. I think we are seeing where our costs are. At this point, just now relooking at things, but it's more than, I think, what we had anticipated would be there, but with our sales agreement, we do have protection.

CHAIRMAN KLEIN: Okay. And, you implied at one point that some of your more difficult problems going ahead are legacies of when the site basically worked for the U.S. Government. Is there a lawsuit there too?

Are you guys going to some day try to say that this is not entirely of our predecessors doing? We did what the Government told to us to do, what the AEC told us to do?

MR. HACKMANN: Well, let me say there is, I think, existing litigation being considered in the courts at this time.

COMMISSIONER McGAFFIGAN: Okay. Thank you very much I figured there was.

CHAIRMAN KLEIN: Thank you. I think Commissioner Merrifield had one last question.

COMMISSIONER MERRIFIELD: Yes, Mr. Chairman, I'll just close it out with this, I appreciate, Chuck, your coming in and explaining a little bit about all the work your staff has been doing. At this point, do you feel you are really capturing lessons learned and incorporating those into the industry way so that the things you are doing now could benefit future licensees down the road, or existing licensees as it relates to their current units. Are you in the process of trying to do that?

MR. SANS CRAINTE: I would have to answer that negatively. I think we are looking at what has been reported as lessons learned, and in our discussions with other licensees that have been through decommissioning, and we are incorporating those in our practices, but not into the design of new, next generation facilities.

COMMISSIONER MERRIFIELD: Well, no, I'm sorry, I didn't articulate that right. Really what I want to know is, are you taking the lessons that are you are learning and bringing those back under the context of NEI so that other folks can benefit from that going forward?

MR. SANS CRAINTE: To the degree that we can, we been relating them, yes.

COMMISSIONER MERRIFIELD: Well, I would certainly want to continue to encourage you doing that down the road.

CHAIRMAN KLEIN: I think Commissioner Jaczko had one last question.

COMMISSIONER JACZKO: I have a very brief question, perhaps, for Dr. Ryan and Mr. Vaughan. Mr. Vaughan, you brought up the issue of modeling and uncertainties in modeling. Maybe you could briefly comment, maybe you could, Dr. Ryan, as well, about what you see that -- you from a perspective as working on a citizen task force, and Dr. Ryan with your expertise, where do you think the state of modeling is with dose modeling, and what kind of certainty people have or acceptance of a lot of that modeling, and just very briefly.

MR. VAUGHAN: The biggest difficulty at West Valley is the erosion modeling thousands of years into the future that precedes the dose modeling per se, and that's where the experts have disagreed rather violently, as to whether you can really model that far into the future in terms of land form evolution. If you can't, what's the conservative or appropriate thing to do?

COMMISSIONER JACZKO: Has the task force taken a position on that, or right now you are waiting to see how the technical debate resolves itself?

MR. VAUGHAN: Largely waiting to see how the technical debate works out. I mean, in essence, there are three points of view. One is the 1996 draft EIS, which used one type of model based on actually a Corps HEC model. The second is what was being developed until NYSERDA left the EIS process, and that is the so-called Siberia land form evolution model; but that has some clear deficiencies as we

now understand in terms of its inability to represent the sort of gully growth that I was talking about a moment ago.

And the third point of view is what NYSERDA, if I'm understanding correctly is saying that there is just not enough certainty, not enough faith you can put into long term modeling. The risk is clear, but when it's going to happen and how severe it is going to be is very difficult to predict. So the CTF is waiting to hear further opinion on that.

COMMISSIONER JACZKO: And just briefly, if you have anything to add, Dr. Ryan.

DR. RYAN: Sure, I think, clearly, I defer to our colleague who is at West Valley and knows it intimately better than I do.

COMMISSIONER JACZKO: You could comment more generally.

DR. RYAN: Yes, more generally. I think there are techniques to take deterministic modeling forward into a risk informed environment, and then to take a risk informed model into, perhaps, a more probabilistic risk assessment kind of view. I think with those approaches if you can tease out a little bit of what are risk significant issues among the many and sometimes hundreds of variables that you deal with particularly in a complex and dynamic environment, such as West Valley. You might be able to float to the top of things that you really need to figure out from the things that may or may not be as

significant to the ultimate risk that you are assessing, and you know, whether it is PRA or Bayesian or other more elaborate techniques.

We have heard several briefings from staff and from the Research office. In fact, when they are doing that kind of thinking, how do we really use a Bayesian approach or other PRA approaches to do a better job of understanding what is significant to risk, and then focus on, well, how do we reduce the uncertainty in those significant things.

So I think there is a path forward. It certainly is a quite a challenge and I think takes some creative thinking. But it is not unlike the thinking that has gone on with our colleagues at ACRS and how they thought about reactor analysis and other activities. I think if we could move some of that capability and talent to think about the environmental questions, we have the opportunity to move the ball forward.

CHAIRMAN KLEIN: Well, thank you very much. On behalf of the Commission, I would like to thank you for your time and your responses. It's been very helpful as we move forward with our decommissioning activities.

We will now move to the staff and we will get to ask Luis about the project managers.

COMMISSIONER MERRIFIELD: Mr. Chairman, while the staff is getting itself seated, I just wanted to put a note that you are aware of, unfortunately, because of an emergent conflict, I will only be

able to be here until no later than 3:15. As the staff can well realize, it is not because of lack of interest, but unfortunately -- because something else came up.

So if you see me duck out, it -- I will be here in spirit.

CHAIRMAN KLEIN: With that, Luis.

MR. REYES: Good afternoon, Chairman and Commissioners staff is ready to brief the Commission on the status of our decommissioning program. We met with you about a year ago, gave you a briefing on where we are. Today, we are going to highlight some of the actions we have taken to leverage what we have learned in the past. We are going to talk about increasing effectiveness and efficiency of the program and talk about some organizational changes we made that we think are going to help us in that direction, and we are going to talk about some of the accomplishments since last we briefed you.

Before I turn it over to staff, I just want to acknowledge comments from both the external stakeholders that were here this afternoon and the other stakeholders that were with us during the last year or so. I think they have helped us shape how we execute the policies with the decommissioning program, and I think you are going to see in the presentation the amount of activity we have had in that department. With that Keith is going be doing our presentation.

MR. McCONNELL: Thank you, Luis. If we can move to slide two, please.

In this year's annual decommissioning briefing we will address four major topics. First, we will provide an overview of the program, describing who is involved, how the program is integrated and what the scope of the program is, and that has been changing over the past year, as I will describe later. Then, move on to a program status, and I will describe the fiscal year 2006 accomplishments and the fiscal year 2007 outlook by program area.

In other words, by power reactors, research and test reactors, complex material sites, uranium recovery sites and fuel cycle facilities. I will then briefly discuss some of our programmatic activities, and this includes such things as our international activities and our interface with the Agreement States and other Federal agencies.

Finally, I will discuss the program very briefly in terms of our strategic goals to demonstrate to you all that we believe that we are fulfilling the agency's mission and the strategic goal.

The message we intend to convey at today's briefing is three fold. First, that progress is being made in the decommissioning program. Decommissioning activities are being completed and licenses are being terminated. Second, that we have a continuous improvement program in place that is bearing fruit, as evidenced by the increased effectiveness of the program, and finally, that the program faces many

challenges, both in terms of budget and scope, and we are managing to those challenges.

So if I can move on to viewgraph number 3.

The Decommissioning Program regulates the decontamination and decommissioning of civilian nuclear facilities with the ultimate goal of license termination when they meet our criteria. Since the reorganization of the Office of Nuclear Material Safety and Safe guards this past year in October, the principle responsibility for the Decommissioning Program now rests in the Office of Federal and State Materials and Environmental Management Programs. Specifically, within the division of waste management and environmental protection.

However, the Decommissioning Program is multifaceted and is generally a cooperative effort with other NRC offices and the regions. And as I will describe in more detail later, we are expanding the program to include information provided by the Agreement States on their decommissioning activities. Just by way of background, I will just run through quickly, some of the responsibilities. Again, the principle programmatic responsibility rests in the Office of Federal and State Materials and Environmental Management Programs. The regions have project management responsibility for some of the complex sites. They also perform the inspections on decommissioning sites; and also, they form most of the routine decommissioning activities for sites that require little to no remediation.

The Office of Nuclear Material Safety and Safeguards has retained responsibility for decommissioning activities at three fuel cycle facilities that are currently operating. Office of the General Counsel provides us legal guidance on the decommissioning program, and the Office of Research helps us in maintaining and updating our analytical tools.

I would note that we also rely on the Advisory Committee on Nuclear Waste to provide an independent view of our decommissioning program. The program itself is integrated in a number of ways. In particular, we have a formal mechanism called the Decommissioning Management Board that meets every other month. At that meeting, all the involved parties are present and we discuss the various issues that are at hand and come up with ways to pass forward to resolution.

We also have a number of more informal ways to integrate the program, including the joint writing and review teams, such as that was composed to revise our decommissioning -- our consolidated decommissioning guidance, which was just recently published as NUREG-1757 in September.

And basically that describes who is involved and how the program is integrated. We will move on the next slide which is viewgraph four, to discuss the scope of the program. And I will note that, although, approximately, 200 materials licenses are terminated

each year, most of these license terminations are routine, and as I mentioned, require little, if any, remediation to meet our unrestricted release criteria.

Rather, the decommissioning program focuses more on the complex sites and the termination of licenses that are not routine. That is those sites that involve more risk significant issues, like ground water contamination, and other complex decommissioning activities. Most of these require a decommissioning plan or License Termination Plan.

Currently, as noted in the slide, there are approximately, 77 non-routine sites that are actively decommissioning under NRC jurisdiction. I would note that the decommissioning activities at the fuel cycle facilities are limited and I don't plan on discussing them any further in this briefing. If we could move on the next viewgraph.

This year, we began the effort to move toward a more national view of the decommissioning program and have included some initial information on decommissioning activities in the Agreement States. In that regard, our goal for future reports is to work with the Agreement States to provide a more comprehensive discussion of Agreement State decommissioning activities.

This year, the Agreement States have reported that there are 48 decommissioning facilities and 12 States, and this includes both materials and uranium recovery sites. I'll now move on and briefly

discuss decommissioning accomplishments and outlooks in terms of the various programs.

COMMISSIONER McGAFFIGAN: Do they use the same criteria -- do the States use the same criteria? These are in active decommissioning and similar complexity to the ones that we report?

MR. McCONNELL: I don't think they go one by one; but certainly, there is a parallel. That's the type of information, I think, we intend to develop over the next year.

COMMISSIONER McGAFFIGAN: You can tell us whether we are dealing with apples and oranges, or apples and apples?

MR. McCONNELL: Correct. Right now, all we have is basically a listing, but our goal is to make it more transparent. For power reactors, the fiscal year 2006 accomplishments include the termination of the Saxton license. This was done under the auspices of the Office of Nuclear Reactor Regulation; although, the Division of Waste Management and the Environmental Protection had input into that decision.

We were also able to release the nonimpacted portions of Yankee Rowe license for unrestricted release. The outlook for fiscal year 2007 includes the completion of the decommissioning activities at the Big Rock Point Nuclear Power Plant. I think Commissioner Merrifield mentioned that earlier in the briefing. We also, although, it is

not on the slide, we are projecting with some confidence that we will also see the end of decommissioning activities at the Connecticut Yankee Haddam Neck Power Plant and also the Yankee Rowe facility. There is some uncertainty in that, and it could actually slip over into fiscal year 2008, but right now, we are somewhat confident it can be completed in 2007.

We also expect to complete the review of the Rancho Seco License Termination Plan in fiscal year, 2007. With that in mind -- with that License Termination Plan in mind, I would like to discuss what we think are increased effectiveness of our reviews of License Termination Plans. So moving on the to viewgraph seven.

On this slide, we illustrate the progress that has been made through our program improvements in the review process over the past several years. These improvements include being more proactive, in interfacing with the licensees, developing detailed guidance for staff and licensees, and identifying, documenting lessons learned.

In that regard, we are projecting that we will complete our detailed technical review of the Rancho Seco License Termination Plan in one year. That is one year after we accepted the License Termination Plan for detailed technical review. If this is accomplished -- and we believe it will be -- this will be the fastest review and approval to date and will confirm what is depicted on this graph as a downward

trend in our review time, a substantial down downward trend. I would also note that this downward trend or this improvement was done without impacting safety.

Based on the outcome of our review effort for the Rancho Seco License Termination Plan, we intend to reevaluate our performance measure as it relates to our review to see if it is still challenging. On that, I'll move on to research and test reactors on viewgraph eight.

The fiscal year 2006 accomplishments include the termination of three licenses. This was, again, also done under the Office of Nuclear Reactor Regulation before the program transitioned to the Division of Waste Management and Environmental Protection. Those reactors were the research reactor at Manhattan College and two reactors at the University of Virginia.

In addition, in fiscal year 2006, we transitioned the decommissioning of research and test reactors to the Division of Waste Management and Environmental Protection. To facilitate that transition, we performed a number of actions. We met with the test, research and training reactor's owner's group to discuss the transition. We sent a representative of the staff to the owner's group annual meeting, again, to discuss the transition.

Project managers have been assigned, and they have been in contact with the licensees, and by the way, we do have AI

Adams here from the Office of Nuclear Reactor Regulation to talk about or answer any questions related to research and test reactors prior to the transition.

CHAIRMAN KLEIN: I should make a comment that in my former life, when I was a director of a research reactor, Al assisted us both decommissioning a reactor and licensing a new one. So I'm very familiar with his capabilities. He is a good guy. Of course, we don't want to say that too much with bonus time coming.

MR. McCONNELL: I am sure he is looking forward to your questions.

The fiscal year 2007 outlook in research and test reactors includes the completion of the integration of the program into the Division of Waste Management and Environmental Protection, and we intend to continue to meet with the test research and training reactors owner's group, and also have the project managers visit the sites at the next planned inspection.

We also expect that we will be able to complete decommissioning activities at up to, it should be three reactors at two sites. That is the University of Washington reactor, and two at Cornell University.

COMMISSIONER MERRIFIELD: Mr. Chairman, this is -- I'm going to break in for a moment, because unfortunately, I do have to leave.

I want to say, I think the slide -- the previous slide, slide 7, is a real good indicator of the amount of accomplishment that the staff has made in terms of its timeliness. The fact that we reduced our license termination procedures fully within meeting our health and safety requirements, but within that kind of time line, I think, is very noteworthy for the staff.

I think it sends out a real signal to our licensees that if they are to enter into this decommissioning process, that they will have a process that is timely on our part, and certainly not where we were some years ago. So I do want to leave that particular note. I don't have time to listen to the answer.

I would be interested in at some point hearing about two issues. One, there are some licensees that have formerly operating reactors that have not chosen to decommission as of yet, and I would be interested at some point today for the record if you could, perhaps, explain what incentives or what things the staff is doing to engage with those utilities to encourage them to move forward with decommissioning, given the level of accomplishment that we have had. And I was the one who actually asked that Al be sitting here at the table, and I'm sorry I'm not here to hear more of what he had to said.

The reason I wanted Al to come here, there is going to be some work to be undertaken with the Savannah, which is the sole floating reactor that we regulate, and I think since that we will be

making some noteworthy -- most likely be some information to the press on that issue, perhaps, I was hoping for a brief update from AI for the record as to where that stands and where things may be going over the course of the next year or two; but unfortunately, I can't stay to hear the answers to those questions, but again, I do thank the staff for all the work they put into this important issue. Thank you, Mr. Chairman.

CHAIRMAN KLEIN: Continue.

MR. McCONNELL: If we could move on to viewgraph number nine, and complex materials sites. Fiscal year 2006 accomplishments include the completion of decommissioning activities at 7 sites, and I note that is one more than fiscal year 2005. In addition, the number of sites with inadequate financial assurance has been reduced from 12 to 8. That results from three sites completing decommissioning activities, and one site being able to come up with additional funding.

The fiscal year 2007 outlook includes completion of decommissioning activities at eight sites. Again, one more than was done in fiscal year 2006. In addition, as you all may be aware, this is our initial consideration of the use of a long term control license under the restrictive release option of the License Termination Rule. And what I'm referring to here is the Shieldalloy Decommissioning Plan, which asked to use the long term control license as the institutional control under the restrictive release option in License Termination Rule.

And we -- last Tuesday, we held a public meeting on our decommissioning plan review process and there will be another public meeting tomorrow night on the environmental impact scoping for this decommissioning plan review.

As with the reactor decommissioning program, I would now like to digress for a moment and discuss the effectiveness gains we have achieved in terms of completing decommissioning at complex materials sites. If we could move to the next viewgraph.

In this slide, we illustrate the trend and the number of completions of complex site decommissionings per year. As you can see, the trend is up, and it is expected to continue into fiscal year 2007, as I mentioned. This is another representation of the culmination of our past investments in improving our process.

I would like to clarify that in the period from 2001 to 2003, that was the time of our investment in the decommissioning program. As you can see, only one site per year was completed, which was the goal at that time to remove sites off of what was then called the site decommissioning management plan. However, it was during this period that we completed an analysis of the issues impacting the implementation of the License Termination Rule, and an evaluation of the decommissioning program that has led to the improvements in the effectiveness that we are now seeing.

COMMISSIONER McGAFFIGAN: I think what he is saying is that it was a good investment to take a couple of years off. We are getting a pay back that we could not have conceived of in 2001.

MR. McCONNELL: Thank you. That was a better articulation. If we could move on to the next viewgraph in uranium recovery sites undergoing decommissioning. In fiscal year 2006, 30 licensing action were completed. These were completed when the program was in th Office of Nuclear Material Safety and Safeguards in the Division of Fuel Cycle Safety and Safeguards. The program as of October 1st has transitioned to the Division of Waste Management and Environmental Protection.

Again, to facilitate the transition, Jack Strosnider attended the National Mining Association meeting last June to discuss the transition. Our project managers in the Uranium Recovery Branch are interacting with the licensees individually, again, trying to smooth the transition. And we in the Office of Federal and State Materials and Environmental Management Programs will attend the May meeting of the National Mining Association.

The fiscal year 2007 outlook includes the expected termination of one license. This is the Bear Creek Mill in Wyoming. We also expect to continue to develop a proposed rule for in-situ leach facilities. As you all are aware, this is rulemaking to reduce the potential for dual regulation in the well field as it relates to restoration --

ground water restoration. And we have initiated our review of the Department of Energy's draft remedial action plan, for the Atlas tailings. That is moving the tailings from a site near Moab on the banks of the Colorado River, approximately 30 miles to the northwest to a site near Crescent Junction Utah.

Actually, we just held a meeting out with the Department of Energy this past week to discuss that plan.

COMMISSIONER McGAFFIGAN: Could I clarify, DOE is paying for this, right?

MR. McCONNELL: That is correct. If we could move on to slide 12. I will now discuss our programmatic activities. First, is our continuous improvement program or known otherwise as the integrated decommissioning improvement program or IDIP. This is our analysis base and our road map for progress improvement. In fiscal year 2007, we have taken a number of actions. We have revised our consolidated decommissioning guidance. This was published again in September of this year.

This guidance had additional information on implementation of the restricted use option in the License Termination Rule, the use of on-site disposal, the use of realistic scenarios and intentional mixing. In addition, we have initiated efforts to develop a proposed rule to prevent legacy sites, and revised our inspection and

enforcement guidance to enhance monitoring and reporting, again, to prevent legacy sites.

Moving on, in fiscal year 2006, our office and management Performance Assessment Rating Tool review was scheduled. That was subsequently delayed by the Office of Management and Budget and is now scheduled for fiscal year 2007. We have done a substantial amount of preplanning for that review, and we expect to begin the review in earnest in the spring of calendar year 2007.

Moving on, as I mentioned earlier, we are consolidating the decommissioning activities within the Division of Waste Management and Environmental Protection. That includes the research and test reactor decommissioning and uranium recovery decommissioning activities. And also, as I noted earlier, we intend to interact with the Agreement States to continue to expand the information that is available in the annual report and provide a more national perspective on decommissioning.

International activities. We perform a number of international activities. In fiscal year, 2006, we participated in the Joint Convention on the safety of spent fuel management and radioactive waste management by completing the Joint Convention country report reviews and attending the second review meeting of the convention. In addition, we participated in the twice yearly meetings of the

International Atomic Energy Agency, Waste Safety Standards Committee, which addresses decommissioning in the waste safety arena.

Finally, we supported a mission to the Ukraine to provide expert assistance in the development of a draft decommissioning plan for units one through three of the Chernobyl Nuclear Power Plant. We interfaced with Agreement States in a number of ways. The Organization of Agreement States is participating in the working group to develop the proposed rule to prevent legacy sites. Agreement States also serve on our writing and review panels like our consolidated decommissioning guidance revision as well as our lessons learned documentation.

We interact with other Federal agencies in a number of ways. I think you have heard one of them earlier today. We interact with the Corps of Engineers through an MOU for those sites where the formerly utilized sites remedial action program is involved. We also interact, again, as it was mentioned earlier this afternoon with the Environmental Protection Agency through the NRC/EPA decommissioning MOU.

I would note that in this past year, we did complete level two consultation under that MOU with the EPA, and that related to the Kerr McGee Cushing site, and we felt that was a successful implementation of the MOU.

We also interact with the Department of Energy in a number of ways, including, as Ray indicated, the West Valley Demonstration Project Act. We are a cooperating agency on the environmental impact statement and are involved in other activities, such as the core group that looks at specific issues at the West Valley site. And also we interact with the Department of Energy in our Title I and Title II uranium recovery act.

If we could move on the next slide. I will start discussing the program in terms of the strategic goals of the agency.

In terms of the safety strategic goal, we complete a significant number of actions that ensure that decommissioning is completed safely and in accordance with our regulatory requirements. This includes our financial assurance reviews, which ensures sufficient money is available for the decommissioning option that is proposed. In addition, we perform decommissioning plan reviews that ensure licensees have a plan to decommission safely. The regions inspect to ensure that licensees are performing the decommissioning safely and we perform our final status site survey reviews that ensure final clean up criteria are met before the site is released. All of the above activities ensure that the license terminations are based on a determination that the site is safe for its intended release option.

If we could move on to viewgraph 14, and the openness strategic goal. In this past fiscal year, we have completed -- particularly

the regions – have completed 62 inspection reports, all of which can be found in our ADAMS system. We will publish the annual decommissioning report as a NUREG document after the Commission reviews and approves it.

We have revised our consolidated decommissioning guidance through a public process that included soliciting public comments on the policy issues that were involved. We held a number of public meetings and have interacted with numerous stakeholders over the past year. And finally, we have enhanced our web site to include decommissioning lessons learned as well as links to other applicable information.

Move on to viewgraph 15. In terms of effectiveness, we are performing our 90 day acceptance reviews for decommissioning plans and License Termination plans, and these are fairly rigorous reviews to ensure that when we get into the detailed technical review of those documents, that we only require one additional or one request for additional information.

And this, basically, brings discipline into the system so that when we get into the detailed technical review, it does not go on forever. I think this -- in terms of the second bullet, this has led to, in large part, to our ability to decrease the time required for reviewing the decommissioning plan and License Termination Plan. And finally, as

noted earlier, we are increasing the number of sites completing decommissioning.

So, if I could move on the to viewgraph 15 and just summarize. We believe that the substantial investments in improving the NRC's decommissioning process over the past several years have borne fruit as evidenced by the increased effectiveness in the program.

Like other programs we face challenges. Those include managing the reductions and resources that we have experienced, ensuring the seamless implementation of the programs that we have acquired over the last year, and maintaining the momentum on our process improvements. I would note in closing that we are addressing the budget reductions we received from fiscal year 2006 to 2007 by adjusting how our activities are performed and focusing on site completion activities. That is those sites that are nearing the completion of decommissioning activities.

However, further budget reductions in future years could prohibit us from completing action such as our confirmatory surveys, which in the end could delay completion of decommissioning activities at nuclear power plants and other facilities. That is the end of my remarks.

MR. REYES: Mr. Chairman, Commissioners, that concludes the staff presentation, and we are available for questions.

CHAIRMAN KLEIN: Thank you, we will start with Commissioner Jaczko.

COMMISSIONER JACZKO: A couple of quick questions. On slide number 7 where you showed the timeliness improvements. If you were to characterize it, is there one or two things that have led to the improvements there that you could point to? Either actions that we've taken or actions that licensees are taking or other stakeholders? Is there anything you can point to?

MR. McCONNELL: I think the two things that I would point to are the early and frequent interactions we have with licenses to ensure their License Termination Plans are complete and sufficient for our review, so we don't have to go out with multiple requests for additional information. That's principal.

The second is our acceptance reviews. I think the fairly rigorous review we give at the acceptance review stage allows us to ensure that when we get into the detailed technical review, again, we don't go on forever in terms of going back and forth with requests for additional information.

COMMISSIONER JACZKO: I think that is very helpful, and there is certainly non concepts that are used in other areas of any of the offices. I think those are some useful lessons here that may be applicable in other places.

Next question I had, this was an issue that, I think, came up after last year's decommissioning meeting. The staff was asked to evaluate lessons learned from, I think it was Maine Yankee and Trojan's decommissioning, to see if there are ways to improve stakeholder interactions. And I have not seen a response yet from the staff. I am not sure if you have a response that is close to being ready. If there is, is there anything you can shed at this point on the staff's response to that particular direction?

MR. McCONNELL: I will let Larry address the specific issues, but I can tell you we have documented our lessons learned, and they are on the website. In addition, we have interacted with licensees like Big Rock Point, which had a very successful decommissioning program, and learned what they did right in terms of getting the program done and done in a very timely fashion.

COMMISSIONER JACZKO: This was specifically more directed toward improving stakeholder interaction, and certainly if it is one that the staff is working on, that's fine too.

MR. CAMPER: Yes, I would add, we do have compiled lessons learned on those two reactors, but what we have done in compiling our lessons learned at-large, whether they be when they go out in regulatory information summaries on the website, participation in scientific meetings and what have you, we always touch upon those lessons learned, including stakeholders.

I think what we have found, frankly, on the stakeholders -- let's take reactors, for example, when you go out, when there is a License Termination Plan presented as called for in the regulations, there is an opportunity for stakeholder input. There is an opportunity, obviously, for a hearing request, if the stakeholder is so inclined. And then we invite comments along the way. We make it a point to accept comments for some period of time. And we try very hard to get out and interface with groups, such as the Citizens Task Force at West Valley, as an example, we go to meetings that they have routinely. So there is a number of issues and outreach areas that we try to do and embody in all of our lessons learned guidance.

MR. McCONNELL: If I could, I just want to point out, again, kind of bringing us back to Big Rock Point, I think one of the things we recognize was that Big Rock Point was very effective in interacting with the community, and that smoothed the decommissioning process, and that is something we recognize, and I think that is something the industry recognizes.

MR. PANGBURN: If I could add to that as well, from the Maine Yankee experience -- the Maine Yankee experience was simply one where the licensee had established a citizens advisory panel; and at that time, I was in the Region I office. The region made a concerted effort to assure that we had a consistent presence at those meetings and establish relationships with local constituents, so that when issues

became difficult, they felt they could talk to the NRC through the presence of that individual at the meetings.

COMMISSIONER JACZKO: I appreciate that. I think that, certainly, the direction from the Commission in that SRM was really to take some of those lessons learned in particular with the stakeholder and improve and trying to incorporate those. And so I do hope to see something from the staff along those lines.

MR. CAMPER: If I may, one of the keys, another step too that is behind the scenes, when we have meetings that are facilitated, the facilitator reaches out to all of the stakeholders ahead of time to try to find out, who they are? What are their issues? Invite them to participate actively in our meetings, and try, given that some stakeholders are more prone to speak out than others, to try to put their issues on the table and challenge the staff with addressing those issues during some of our public meetings, so that happens as well, but it is behind the scenes.

COMMISSIONER JACZKO: Thank you. The last question has to do with an issue that was hinted at, to some extent, by the previous panel. That has to do with issues of trying to minimize waste -- not waste necessarily, but minimize or improve activities on-site to minimize future decommissioning activities, both at reactors and at material sites.

One of the areas, certainly, in our regulation that in a very performance based way points people in that direction is -- I think it is 20.1406 in Part 20. I'm wondering if staff can just update me on where the staff is. I believe the staff is taking a look at that provision and particularly how to apply it, I think, certainly, to newly licensed facilities since it only applies, I think, to facilities licensed after 1997. And if there is any consideration to try and implement some of those ideas for existing sites that may be decommissioning in the near future.

MR. McCONNELL: Well, we are pursuing -- that what we call our rulemaking to prevent legacy sites. We do have the initial stages of a proposed rule. We intend to have a public meeting in January to discuss the proposed rule. It has been discussed with the advisory committee, so I guess we are progressing.

COMMISSIONER JACZKO: Of course, there is a current provision, which I think is a fairly performance-based way of dealing with some of these issues. Will the -- maybe you can characterize a little bit more the flavor of the new rulemaking. Will it essentially take this provision and extend it backwards or how will it differ from what is already existing in our regulations?

MR. McCONNELL: We are trying to kind of scope out the scope, if I can say that right now. What we are looking at are a couple of things first, should it apply to all facilities and not just new licenses, that's one of the things. And when you think about that, it becomes a

little bit complex, because facilities are already designed, and they are already operating, and they might already have operating procedures in place. So again, that is part of the scope. There are also other activities that could be improved, such as monitoring, better monitoring. If operational events do occur, better response action so that any contamination is minimized. So that's the thrust of the rulemaking at this point.

COMMISSIONER JACZKO: Okay. Appreciate that.

Thank you.

CHAIRMAN KLEIN: Commissioner Lyons.

COMMISSIONER LYONS: Keith, thank you for a very good briefing. I have just a few questions. One of them would be -- well, partly on your slide 15, but in general, you talked about a number of activities that have been undertaken to improve the effectiveness and efficiency of the overall decommissioning process, and certainly, very, very impressive. I'm just curious if you think you are essentially at the end of that process? Are there still opportunities for further efficiencies or have you got most of the obvious efficiencies under control now?

MR. McCONNELL: I think we are flattening out in terms of the benefit that can be achieved, but there are still additional opportunities. We do intend to revisit our integrated decommissioning improvement plan, to bring it up to speed, more up to date; and so we are, I think, going to expand where we think improvements can be

made. So, it could be a better stakeholder interaction, or more frequent stakeholder interaction or other things like that.

MR. CAMPER: Let me add to that, if I may. Over the last several years, as you know, Commissioner, by the results, we have made a lot of changes in the program. I mean, we really have dissected ourselves and analyzed ourselves and made a lot of changes, but we are not content. We do continue to look for areas -- and one area that we initiated an analysis just this year is to look at our dose modeling. I mean, we use dose modeling an awful lot, of course. We use a lot of different computer models. We believe we use them well, and a lot of people in industry come to us and view us as having the expertise, but we are challenging ourselves to ask ourselves, are we, indeed, state of the art? Are we using the best possible techniques? What others models are being used out there? What other techniques? Who is doing other types of analyses? Dr. Abu-Eid, our senior level scientist has the lead this year in doing that, and at some point we intend to communicate with the Commission about that outcome. And if we find we can make improvements in the dose modeling, we will do that. But that is an area, thus far, where we have not challenged ourselves and fully turned ourselves inside out and we are going to do that.

COMMISSIONER LYONS: Sounds good. Another question, I don't know if this will go to Keith or George. On slide five,

where you talk about further steps to integrate the Agreement States into the overall annual reporting.

Keith, if I understood correctly, you indicated the process to involve the states is fairly early. And I was just curious if you could describe what types of interactions are going on with the States, and I would be curious to what extent the States -- and this may be where George comes in -- to what extent the States are embracing, supporting that initiative?

MR. McCONNELL: You are correct. It is the initial stage of our interactions with the States. And I don't think they have a full understanding of where we would like to go with this. And so it's our intent over the next year to begin the dialogue with the States to express what we believe should be in the next annual report, but I'll let George --

MR. PANGBURN: I think that's accurate. We are at the very first stages of this, we have gotten some information that we included in the report and we expect to improve that dialogue and increase it over the next year and beyond. But at this point, there has not been a lot of discussion with the States about that part of their program.

COMMISSIONER LYONS: I would hope that the States view this, perhaps, as a way of better sharing information, perhaps, so

that there are benefits back to the States as they participate in this program.

MR. PANGBURN: I think it is fair to say it will be a fairly sensitive discussion, because, in part, we are looking at part of their program that we have not heretofore looked at. These are licensing actions in most states. And we have not really gone in under the IMPEP process and looked in detail at individual licenses and licensing actions, looking at where they stand in the overall process. So there may be some degree of sensitivity, and I think that is a challenge for us in working with the States.

[As a point of clarification, the NRC reviews the quality of the licensing and inspection of selected licensees in Agreement States (including decommissioning plan reviews, financial assurance, closeout surveys, and license terminations). These reviews are conducted through the Integrated Materials Performance Evaluation Program (IMPEP). Since each Agreement State is reviewed on a frequency of once every 3-4 years, the IMPEP process does not provide current information (status) of decommissioning sites in all 34 of the Agreement States. NRC is developing an annual information collection process through which we will be able to collect and present a national perspective (including Agreement State decommissioning information) for the decommissioning program.]

COMMISSIONER LYONS: If you see ways that the Commission can help in some way on those sensitivities, I hope you will

let us know, because I do think that the kind of information that you will be obtaining from the States has the potential to be important, certainly, to us and important to other States. So I hope there is enough in it for the States to see benefits to participating.

MR. PANGBURN: I trust there will be.

COMMISSIONER LYONS: The only other questions I had on your slide three, Keith, you listed the different elements of the integrated decommissioning program, but you didn't list NRR. I was just slightly surprised. Maybe that was just an oversight, but I would have thought that NRR would have a number of ways where they could be contributing in their current activities with ongoing reactor operations contributing to minimizing future decommissioning challenges, perhaps.

MR. McCONNELL: You're correct. We probably should include NRR as well as NRO in this, because in terms of the new licensing, the applicability of 20.1406, which is minimizing contamination in terms of designing facilities. Certainly, that has a key role in our decommissioning program too.

COMMISSIONER LYONS: Things like the ongoing tritium issues would certainly be a prime example.

MR. McCONNELL: And we are involved in those programs with NRR.

COMMISSIONER LYONS: Thank you. That is all I had sir.

CHAIRMAN KLEIN: I have got a couple of questions for Luis to start with.

One, could you talk about the eight project managers in five years.

MR. REYES: I am going to let Larry start, and then, I will close.

MR. CAMPER: It will be my pleasure, sir. Well, I hate to hear the number eight. I wish it were three or four, obviously, but I take Kurt's word on that.

I think that those kind of turnovers result from a number of things. First of all, the classical staff turnover that you would expect, project managers change jobs. Some of them may have come from some of the reorganization and restructuring that we were doing within the division to better accommodate decommissioning in large and get to some of the places you have seen today.

Some of it comes from delays. Licensees have an expected date, by which they are going to respond, delays occur. Given the number of sites that we have, and the resources we have to cover all that work, we make a lot of movement around project managers and particular expertise, whether it be groundwater hydrology or health physics, so some of it results from delays. I'm not suggesting that that particular site was tardiness delay, but I am just saying in general that happens. But I think the point that I would make

on this is while I don't like to see eight PMs in that period of time any more than you do, I suspect, what is important is that we strive for a great deal of consistency in the program.

We developed a very elaborate Standard Review Plan. We took that Standard Review Plan, built upon it, and put it into NUREG-1757, which is a 3 volume document that goes and lays out the detailed decommissioning process in elaborate detail. And the idea is that as project managers change or individual reviewers change, be it now or in the future, there is a consistent approach being employed. So while I regret that many turnovers, I would think that the program has been consistent in its review process.

The other thing we try to do diligently is to continue to communicate with the licensee if there is a turnover, have communications within the outgoing and the incoming or at least with management to the incoming so there is consistency.

MR. REYES: I just want to say that we understand the impact when that happens, because simply, even though the guidance is there, the individual coming on board does not have the history. But if you look at the window that Westinghouse talk about, 2000 to 2006, and you look around this table, most of the people on this side and most of the people on that side had two jobs or maybe three in the same period of time. And my only point is that we have a big challenge in trying to keep the same individuals involved in the same projects, and

I think it is a good comment, because sometimes we do not in making our decisions, we are not sensitive to the licensee's impact and having a new person come on board. I guess there is a start up cost, and because of the dynamic situation with the agency, we just need to be more cautious about that. That's all I wanted to say.

CHAIRMAN KLEIN: I think with the number of retirees coming up, with the hirings that we are doing, we are going to see a lot of that, but just eight in that period of time seems high.

MR. REYES: Very high, and we just need to keep sensitive about it.

CHAIRMAN KLEIN: The other follow up questions was, can you tell me why the electronic --

MR. REYES: I haven't the foggiest idea, so all we have to do is we have to take it back. All I have to do is I can take that with us and find out why it didn't work; and then, perhaps, expand to the other stakeholders that were here, and see if they are having the same problem. I don't want to fix it for one, and then have the problem with the others.

MR. PANGBURN: It is an interesting concept, because at one in the same time, this year we received from Pennsylvania their application for Agreement State status, which had it not been on a CD would have probably been about this high. That was done successfully following State Agreement guidance. So I don't know what the

disconnect in this particular case, but I think we do need to perhaps understand.

MR. REYES: We are just going to take it for action, and then we will get back to the Commission on what we found.

CHAIRMAN KLEIN: Thanks. On page 7, on the slide that you talked about timeliness. Clearly, from Maine Yankee on, the slope is down. What caused it to jump up from Trojan to Maine Yankee; it went from 18 to 37.

MR. REYES: Larry is the only continuity in that time so --

CHAIRMAN KLEIN: I heard some comments about the downward slope, but also it took a big jump up.

MR. CAMPER: Let me be appropriately diplomatic. I think to some degree, if I look at Maine Yankee or Saxton, let's take both of them. First of all, I think that Maine Yankee chose a markedly different approach in its decommissioning plan; it's License Termination Plan than did Trojan.

Maine Yankee, for example, had three, if not four revisions to the plan. I think that to a large degree, that was driven by a management preference for the degree of information that it provided trying to pursue what they viewed as performance oriented approach, but perhaps it was not the level of detail that we felt that we needed. It did result in three to four revisions.

Saxton, similarly, I think it was the level of information that was provided and the number of RAIs that we had to go after. But in one case, I think, one was driven to some degree by management approach, and the other was driven by perhaps not the same level of expertise, being Saxton. But the approach, especially for Maine Yankee, was markedly different than Trojan..

CHAIRMAN KLEIN: Were there any prior to Trojan?

MR. CAMPER: No, that was the first under the license termination. The first under the License Termination Rule. The one prior to that was for Fort St. Vrain, but that was prior to the '97 licence termination.

CHAIRMAN KLEIN: Okay. I mean, clearly from Maine Yankee on, the trend looks like better more efficient, but prior to that, it looked like --

MR. CAMPER: Right. And I will say, too, I mean, in defense of Maine Yankee, we talked a lot with Maine Yankee along the way, we encouraged them to have more complete submissions to answer all the types of questions that we were raising and to realize that the type of information we were asking for was needed, but we learned from that experience as well. And we factored those lessons learned into some of our early meetings with the licensee. And by the time we moved into the Big Rock Point review, we had been through a couple of tough ones, and we were able to put all that information on

the table, and share it with Big Rock Point, and then you see the follow on. So we all learned along the way.

MR. REYES: I think Keith hit it when he said the interaction with the licensee early on, and then the very thorough review up front of the License Termination Plan, because if it's not complete, let's not start reviewing it, because you are get into false impressions here about reviewing something that we know we are going to have to go back and forth, back and forth with questions, so --

MR. CAMPER: And the other thing too, it is not just the early meetings prior to submitting the LTP; it's prior to submitting responses to RAI's. Do you really understand, licensee, the questions that we are asking? And NRC, does this seem like it's getting at what's on your mind? Is it going to be acceptable? You save an awful lot of time by doing that. I mean, do not put pen to paper until we have talked. It worked.

CHAIRMAN KLEIN: Question for Al. On the TRTR community. I know initially, there were some concern about the decommissioning moving out of the NRR area, and which I never quite understood, because that's basically decommissioning as opposed to the TRTR community that I thought would have been looking, you know, at operating. Could you explain just a little bit of why there was apprehension of moving decommissioning out of the NRR area?

MR. ADAMS: I think the apprehension came from a number of different areas. One was the uniqueness of the research reactors. They have their own regulations, 50.82(b), which is different from all reactors and material reactors. They have their own guidance, NUREG-1537, which was unique to them. And there is anti-standards that are unique to research reactors. So it was -- I think it was a concern that they would end up either being little power reactors or big material licensees. And I think -- NMSS put the homework in it to show them that was not -- either of those was not going to be the case.

CHAIRMAN KLEIN: So their comfort level is better?

MR. ADAMS: Their comfort level, I think, is a lot higher than it was.

CHAIRMAN KLEIN: Thanks. Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: Thank you, Mr. Chairman. I'm just going to comment. I think that the Trojan data point is probably bad data to be honest with you, because I think a lot of the License Termination Rule -- a lot of work had been done at Trojan before they decided they would decommission under the License Termination Rule. I mean, it was a very complex thing. We were dealing with two States, Oregon and Washington. We had reactor vessels with internals intact, disposed of at the Hanford site, and the U.S. Ecology site, and that needed all sorts of approvals; and we were involved in all that. I know at the Commission level, that one took a fair

amount of our time, which thankfully most of these things don't now do.

My guess on that, why that viewgraph looks that way is that there is sort of -- you don't really have the full impact of the Trojan decommissioning FTEs embedded in that data point.

MR. CAMPER: Well, that's a good point. The other point too, I have thought about a little bit more; I mean, Maine Yankee, for example, was dealing with a totally different set of constraints in the State of Maine as compared to the Trojan site. I mean, the State of Maine put in place a separate standard.

COMMISSIONER McGAFFIGAN: No, I understand. Not that the people of Oregon or Washington where the reactor vessel sits with its internals intact are in anyway -- their State regulators did a wonderful job there, and we did the right thing; but it was pretty complex.

I'm going to start with the budget reductions. I'm a little bit -- I don't think I was fully cognizant of them. I was not here when the fiscal '07 budget was formulated, I was in my 103 day absence, nor was the Chairman, because he wasn't here yet. So I don't know what was exactly on my colleagues' mind, but it does seem a little bit like we are punishing you for success, if that is the case.

MR. REYES: Yes.

COMMISSIONER McGAFFIGAN: And I know this is not the only part. I know that in the uranium mining area, which also falls

under this rubric, we are expecting nine applications or something in the next year, because, again, when that budget was formulated, we didn't know that the price of uranium was going to be \$65 a pound for yellowcake.

So I, for one -- we are totally in budget limbo at the moment, because we have got a CR that is going to extend for some period of time at the 2006 level, so I can't promise anything, but I have an open mind in -- whenever we get to the mid-year, which may well be June at the rate we are going, that if you guys have a case, the dollars are small. The impact on a fair number of applicants and decommissioning licensees could be large, and I, for one, am open to adjusting things.

But I don't think the adjustment is going to come now, because we are desperately trying to figure out how we are going to maintain at the 2006 level, not the 2007 level, while we getting ready for licensing new reactors and all sorts of other things. Our resources, clearly, are going to be stretched during the next couple of months; but if we get a budget from Congress and if it's like the budget that we hope to get, then, I hope this issue can be addressed. And it will still mean delays for some people, I am sure, but I just wanted to say that. You've got one vote, you've got to find two more. It sounds like you got the EDO's vote, so that is an important one.

Has the guidance finally been issued, the final guidance that updates this stuff. Is that now out?

MR. McCONNELL: It is on the website.

COMMISSIONER McGAFFIGAN: It is on the website, so it is done. It has been suggested by some stakeholder that this option for a long term license needs to be in rule language rather than guidance language, which would be, again, a burden on you all. Do you have any thoughts about that? I mean, you know, maybe Karen, but if it's going to be litigious, and it may; it strikes me that, you know, whatever decision was once made, let's try to do this in guidance, which, obviously, Mike Ryan and ACNW support as guidance, is there some reason now to think about doing this as rule language?

MR. McCONNELL: The wisdom of that will lead to others, but I think that it's certainly a comment we heard at the public meeting when we went up to Newfield, New Jersey for the Shieldalloy facility. I think from our perspective, this is one measure that we can take to implement institutional controls.

COMMISSIONER McGAFFIGAN: Right.

MR. McCONNELL: And so in that regard it doesn't -- in our view right now, it does not require rulemaking.

COMMISSIONER McGAFFIGAN: Although, it is a distant future thing, West Valley, we are going to probably need a very long

term license, whenever that license gets reinstated as part of any sort of final resolution of that site. And that's so far in the distance. But I think some of these complex sites, that needs to be an option, and if it is not an option based on guidance, we may need to make it an option based on rule.

Can one of you tell me, I mean, I heard the fellow from Big Rock say that he is hoping to get his reactor vessel into Barnwell before it closes to noncompact states. Whatever happened to San Onofre Unit 1's attempt? Did that just go down the tubes and now they are looking for some other place?

MR. CAMPER: It is still there.

COMMISSIONER McGAFFIGAN: It's still there; they can't get it around South America to get --

MR. Camper: Can't get it through the Panama Canal, can't take it around the Horn, it is still there.

COMMISSIONER LYONS: I can vouch that it's still there.

COMMISSIONER McGAFFIGAN: That's public policy making at it's -- or whatever. It is international policy. Whatever the roadblock is, this Commissioner would say it's nuts, but I guess that's life.

The final thing, this 20.1406, the Legacy Sites Prevention Rule, we have it for future folks. You dealt with it in LES and USEC licensings. One of which is complete, the other which is still in a

mandatory hearing. If you now try to take that back to existing licensees, could you tell me your strategy for justifying under 10 CFR 50.109 or 10 CFR 70 -- is it 62 or something, how that would possibly fit -- back fit test, given that when we actually looked, there is no public health and safety consequence immediate? I mean, there is a cost consequence. Licensees should do this stuff, because it's in their own interest if they want to reduce money, but given the lack of a safety nexus, how you prove a substantial increase in public health and safety?

MR. McCONNELL: I think we agree that for existing facilities, you can't make that argument, particularly, when there is no health and safety significance. And one part of the rulemaking is to have a benefits test before it's applied to a specific facility or class of facility.

COMMISSIONER McGAFFIGAN: I will look forward to it. You heard some different views around the table. I look forward -- I think that's for you, for those particular licensees, which are the most important ones, a pretty substantial block in the road unless the Commission decides to waive the backfit rules, which it could by a majority vote.

CHAIRMAN KLEIN: Okay. Thanks. And on behalf of the Commission, I would like to thank the staff for their presentations. and also, thank representatives from the Advisory Committee on Nuclear

Waste, and Industry and Agreement States for participating in today's meeting.

As we go forward, we need to continually look for opportunities to keep the public and our other stakeholders informed and involved in the decommissioning process so that we make our processes more transparent and understandable and strive for consistency.

Your presentations today demonstrate that significant progress has been made. We certainly don't want to be status quo. We want to keep continuous improvement. And I would like to commend your efforts that you have done today to fully integrate the Agreement State decommissioning experience into this meeting, and in the future, integrated decommissioning status reports. Any final comments?

COMMISSIONER McGAFFIGAN: Mr. Chairman, I just do want to compliment these folks. They have done, I think, an outstanding job in recent years, and it is beyond any expectation. I used to tease these guys about the one a year goal that they had, and when are we going to actually get real here, but they needed the time.

And there was a young woman who worked on this stuff, who I think has gone on to another SES job, you know -- what was her -- she was working for you, Larry, at the time, I thought. She was at the table one of the years. And she sort of promised if we were patient

we would get results. I think you have done an excellent job, and we don't get a chance to tell you that enough.

CHAIRMAN KLEIN: Thank you very much. The meeting is adjourned.