UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Title: BRIEFING BY DOE AND NRC ON REGULATORY OVERSIGHT OF DOE NUCLEAR FACILITIES

Location: Rockville, Maryland

Date: Friday, September 19, 1997

Pages: 1 - 55

ANN RILEY & ASSOCIATES, LTD.
1250 I St., N.W.,Suite 300
Washington, D.C. 20005
(202) 842-0034

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

- - -

BRIEFING BY DOE AND NRC ON

REGULATORY OVERSIGHT OF DOE NUCLEAR FACILITIES

- - -

PUBLIC MEETING

Nuclear Regulatory Commission

One White Flint North

Rockville, Maryland

Friday, September 19, 1997

The Commission met in open session, pursuant to notice, at 10:14 a.m., Shirley A. Jackson, Chairman, presiding.

COMMISSIONERS PRESENT:

SHIRLEY A. JACKSON, Chairman of the Commission

GRETA J . DICUS, Commissioner

NILS J. DIAZ, Commissioner

EDWARD McGAFFIGAN, JR., Commissioner

STAFF PRESENT:

JOHN C. HOYLE, Secretary of the Commission

KAREN D. CYR, General Counsel

PRESENTERS:

Nuclear Regulatory Commission:

HUGH THOMPSON, Deputy ED for Regulatory Programs

CARL PAPERIELLO, Director, Office of NMSS

JOHN AUSTIN, Chief, Performance Assessment & HLW Integration Branch, NMSS

Department of Energy:

TARA O'TOOLE, Assistant Secretary for Environment, Safety and Health

RAY BERUBE, Deputy Assistant Secretary for the Environment

JOHN TSENG

P R O C E E D I N G S

[10:14 a.m.]

CHAIRMAN JACKSON: Good morning.

This morning the Commission will be briefed by officials of the Department of Energy and NRC staff on the status of the DOE and NRC Task Force activities to date to identify policy and regulatory issues needing analysis and resolution as part of examining NRC's seeking oversight responsibility for Department of Energy nuclear facilities.

Before we begin, I would like to provide a little bit of background. Maybe I'll do your job, Hugh.

MR. THOMPSON: I always appreciate that.

CHAIRMAN JACKSON: The Department of Energy made an announcement on December 20, 1996, that it intended to submit legislation to the Congress to transfer oversight of DOE nuclear safety to the NRC.

The DOE announcement was made after the completion of a study by an independent advisory committee and a follow-up study by a DOE working group on external regulation.

The Commission considered the matter as part of its strategic assessment and rebaselining initiative. Public comment was solicited on the issue and the public strongly encouraged the Commission to pursue the external regulation of DOE.

The DOE's working group's recommendation that NRC be given regulatory oversight of DOE nuclear facilities along with the strong public support for the NRC assuming that responsibility influenced the Commission's final decision, which was issued in March of this year.

The Commission directed the staff to establish a task force to identify the policy and regulatory issues that needed to be resolved for this initiative to be successful. The Commission also instructed the staff to develop a joint memorandum of understanding (MOU) with the DOE to establish the framework for the legislative and follow-on phases of the project.

A former under secretary of DOE, Tom Grumbly, and Mr. Berube provided a briefing to the Commission on March 31, 1997, outlining DOE's vision for implementation of the working group recommendation.

At a meeting in June of 1997 DOE Secretary Pena and I on behalf of the Commission met and agreed to pursue NRC regulation of DOE nuclear facilities on a pilot program basis. For the near term, the two agencies are preparing an MOU to establish the framework for cooperation in proceeding with a pilot program.

It is the intent of this program for NRC to simulate regulation of DOE facilities on a series of pilot facilities over about a two-year period to help both

agencies gain experience related to potential NRC regulation of DOE.

Today's briefing will provide a status report on the NRC and DOE task force's activities to date to address the issues that would need resolution between the two agencies as the pilots move forward.

Unless my fellow Commissioners have any comments they would like to add, we will proceed. I understand that DOE Assistant Secretary Tara O'Toole would like to make a few opening remarks before Mr. Thompson proceeds.

Dr. O'Toole, I'm going to call upon you to give us some introductory comments.

MS. O'TOOLE: Thank you, Madam Chairman.

Commissioners, colleagues, I am very pleased to be here today, which I believe marks another milestone in our mutual journey to seek responsible regulation for the operations of the Department of Energy.

The Chairman has done some of my work for me too in her elegantly succinct summary of how we got here.

CHAIRMAN JACKSON: I tend to do that.

MS. O'TOOLE: We all appreciate it. Let me just add a few more comments.

As the Chairman noted, in 1993 then Secretary of Energy Hazel O'Leary committed the Department to being regulated like everybody else. It was thought that with the

end of the Cold War it was time to move into a new phase and move out of the self-regulatory approach that the Department of Energy and its predecessor agencies had pursued since the 1940s. Secretary of Energy Pena has reaffirmed this decision.

I was a member of the external regulatory advisory committee chaired by Dr. Ahearne and Mr. Scannell and have had time now to think repeatedly of the rich exchanges of perspectives that were offered in that very interesting advisory committee. I have also participated in the DOE task force headed by Mr. Grumbly and have contributed to the reflections by the National Academy of Public Administration who have been helping the Department of Energy and the Department of Labor think through issues that might arise in transitioning to regulation by the Occupational Safety and Health Administration.

I would like to review for the record the three issues that compelled the most discussion and anguish among these various groups and that indeed resulted in the famous, or perhaps I should say infamous, hung jury on the Ahearne committee as to whether or not the Nuclear Regulatory Commission or the Defense Nuclear Facilities Safety Board was most suited to be the DOE's regulator in matters nuclear.

There were really, as I said, three issues that

people struggled with mightily.

The first was the recognition that we needed to find an efficient and flexible regulatory approach that could accommodate the variety of work and circumstances and dynamism of DOE operations now and in the future. Added to that was the need for value-added regulation, as it was called, which meant not just cost-effective regulation that did what it meant to do, but regulation that addressed matters on a risk-based basis.

The second issue that engaged us in much discussion was the need to engineer a very smooth transition without overwhelming either DOE or the regulatory agency or jeopardizing the core missions of those agencies.

The third matter was the imperative to maintain momentum within the Department of Energy in improving the internal management of all aspects of safety stewardship in the Department of Energy.

We have struggled and we are struggling still to ensure that work is properly planned, that hazards associated with our work are identified and amply controlled, and that those controls are continuously reassessed for effectiveness and efficiency in DOE.

We are endeavoring to make all of our managers and workers understand that one cannot inspect in safety; one must continuously, as it were, remember to be afraid and

work every day towards the end of preventing accidents and injuries and mishaps from happening. We are committed to maintaining this momentum while going forward with external regulation.

At the same time, all of the committees mentioned were mindful of the great benefits of external regulation and strongly supported and reiterated their endorsement of external regulation for DOE, and that decision has been revisited, reiterated and re-endorsed by Secretary Pena and the leadership of the Department of Energy.

In the past months the very able and hardworking staffs of the Nuclear Regulatory Commission and the Department of Energy have worked to design a path forward. I think we are nearing the completion of a memorandum of understanding between the two agencies that provides an opportunity to gather real world evidence of how we might shape possible NRC regulation of the Department of Energy.

I believe that the steps put forward in the draft MOU do chart a way for the Department of Energy to emerge into the light.

CHAIRMAN JACKSON: The light of NRC regulation.

MS. O'TOOLE: The full spectrum of light and warmth that external regulation and excellent internal safety management bestows on all recipients. I think that the public trust and recognition of effective safety

management within DOE cannot come without external validation by an expert regulatory agency that that system is indeed in place.

As we all know and as we have had reason to recognize in the past months of working together very constructively, our agencies have different customs and habits and paces and levels of formality. I am persuaded that each of our agencies harbors enormous talent and a shared commitment to safety and a desire to go forward with external regulation.

So I am here today to tell you that we are eager and committed to taking the diverse talents and experiences of these agencies of common ancestry, an ancestry that is founded in a belief in the power of science and reason and in the worth of defending participatory democracy, and we are ready to evolve again into a new day and to devise a new regulatory framework for the 21st Century.

CHAIRMAN JACKSON: Thank you very much, Dr. O'Toole. I must say I have a question I would like to ask.

MS. O'TOOLE: Already. Go ahead.

[Laugher.]

CHAIRMAN JACKSON: You outlined the three issues that kind of led to the hung jury relative to which entity should regulate. Could you edify us a little bit as to how

you migrated from that position to the one that said we would go forward with the NRC, at least to the point of where we are today?

MS. O'TOOLE: In reading through the transcripts of your meeting with Mr. Grumbly, I think some of that journey was mapped in the exchange that you had with him at that time.

I must say personally that I think that whether it should be NRC or DNFSB was the wrong question. I think what people were struggling with was not the worth or the appropriateness of one agency over the other. That was kind of the simplistic distillation of this very rich and complex exchange that went on for many months. I really think that what happened was that the complexities of those three issues, which themselves have many questions embedded them, as I said, got distilled in Washington to that overly simplified sound bite of NRC versus DNFSB.

The path forward that we have drawn now recognizes the benefit of the Defense Board maintaining some hold into the near future over defense agencies, defense facilities within DOE, while the near-term benefits of the Nuclear Regulatory Commission picking up facilities within the energy, research and nuclear energy programs of DOE are also recognized and acted upon.

As I believe Mr. Grumbly described last time, over

the next several years we plan to decommission and decontaminate hundreds of facilities within the Department which heretofore were part of the defense facilities complex. As those facilities are cleaned up and dismantled, they will be regulated principally by the Environmental Protection Agency, which is the custom and habit that have evolved up until now.

That legacy of facilities in DOE will thus diminish; there will not be nuclear operations going on in those buildings. At the same time, we expect that new construction in DOE where it involves anything nuclear will be regulated by the NRC.

So by having a more nuanced look at the past and the future, I think the question of how best to make use of the Defense Board's talents and understanding and commitment to defense facilities, which, as I said, will diminish in number, while taking advantage of the Nuclear Regulatory Commission's powers as we go forward with the missions of energy, research, nuclear energy and other new nuclear enterprises is the way to go and is a very kind of neat evolution and more elegant splicing of these issues.

CHAIRMAN JACKSON: Thank you.

Mr. Thompson.

MR. THOMPSON: I think Tara has also done some of my work as well as the Chairman's.

CHAIRMAN JACKSON: We can then get to the heart of it.

MR. THOMPSON: Then we can get to the heart of the discussion today. That really does bring us down to about the area of slide 6 in the presentation, which is the memorandum of understanding. We did talk about many of the activities that we have --

CHAIRMAN JACKSON: Maybe you could review slide 2. I think that might be useful. I think the ones that we reviewed are really slides 3 and 4. So maybe we could do 2 and them jump to 5.

MR. THOMPSON: Slide 2 is the outline of what we are going to talk about today. What we really did was have some background, which I think has been covered.

The potential benefits were ones which have been articulated partly here as well the advisory committee's report, and they are listed both in the Commission paper, which I think we forwarded, as well as in the slides there. These were ones which focused on having the stability of a regulatory program, the openness, the predictability and the cost-effectiveness.

As Tara so eloquently discussed, there are lots of complex interactions between stakeholders that are involved in this, and I think that is where there is some of the desire to bring some clear focus on the stability of the

program, a clear understanding of the safety issues to be regulated, and a recognition that there are many existing facilities out there today that aren't new, that have not been covered with this regulatory regime.

And there has to be a process. As we have stated frequently, we have to have a transition period if NRC is to be the external regulator as well as adequate resources both on our part and on DOE's part to ensure that their facilities, as we make this transition, are adequate to protect public health and safety as well as not to disrupt the ongoing efforts that DOE has underway to improve the safety management at the DOE facilities.

CHAIRMAN JACKSON: Or disrupt our mission responsibility.

MR. THOMPSON: That is absolutely correct. That is one of the critical issues that was in the dynamics of all the discussions, the importance of us not diverting our own attention from our current mission as we add potentially new roles and responsibilities.

Obviously some of the roles and responsibilities we are accepting, such as the Hanford tanks, which is outside of this particular pilot program, as well as even some consultation with DOE on the Brookhaven reactors are independent of what I will call a very structured, very detailed approach, with an objective to determine whether

legislation would be appropriate for class of facilities or maybe overall other facilities.

I don't know how I got to slide 6 so quickly.

We did have quite a bit of interaction and there has been quite a bit of dialogue between the NRC staff and others on the potential for the program.

I think the evolution that the Commission and Secretary Pena moved to, to have a pilot program approach, was one in which the proof will be in the pudding. Performance is as performance does. I think we will take a look at an approach to be able to say our vision is that it's there; this is the way we will add some meat to those bones.

The memorandum of understanding that we have been working on very diligently focuses on the pilot program, the objectives, and we will cover the scope. A very critical part is the stakeholder plan. The stakeholders are varied, they are wide-ranging, and their interests are quite diverse in certain cases, and I think it's important that we recognize those, have those inputs, and obviously the decisions will be ones that the Commission and the Secretary will have to make.

CHAIRMAN JACKSON: When do you expect the MOU to be ready for official review by the Commission and by the Secretary?

MR. THOMPSON: My expectation is early October. We don't have any specific areas of disagreement. It's an element of ensuring it gets a full review both in the Department and within the NRC.

CHAIRMAN JACKSON: So you are scrubbing it out at this point.

MR. THOMPSON: We are scrubbing it out. It is, quite frankly, very close to final as far as both of us are concerned. Unless something comes up, we think it should proceed fairly smoothly up to the Commission and to the Secretary.

CHAIRMAN JACKSON: Commissioner Dicus.

COMMISSIONER DICUS: If it is delayed, do you anticipate delay in starting the pilot project, or is that going to go ahead on course?

MR. THOMPSON: My understanding is that we really want to have the framework in place, but we are poised such that we would hope to begin about one week after the memorandum is executed and signed. We have had a lot of dialogue. We aren't sitting around basically waiting, but we really won't start anything. We really do need to make sure that the Commission and Secretary are in synch.

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: Is part of the delay just waiting to see which funding approach the

appropriations committees take, whether it's directly appropriated to us or appropriated to DOE for transfer to us?

CHAIRMAN JACKSON: Calendars.

MR. THOMPSON: My own sense is there are a lot of individuals in DOE. DOE is a bit more diverse in this matter than NRC is.

MS. O'TOOLE: We have more people to get on board. I think it is very important that the decision-makers and the policy executors in the Department, which is a wide-ranging family, be very familiar with the MOU. I have read it many times. I have gone over it in detail with both Ray and Hugh and others. I see no impediments to this being signed.

As you know, both the Chairman and the Secretary of Energy are on airplanes for most of the next two weeks, and I do think it is worthwhile in the Department of Energy for the Secretary to have the opportunity to discuss this with a number of people. So this is more a scheduling and calendar issue than anything else. As I said, I see no substantive impediments to going forward. We are poised to move.

MR. THOMPSON: Slide 7 gets into the scope of what we are looking at in the pilot program. We are trying to have a range of facilities that give us a view of the types

of facilities and the challenges that may exist. We are looking at having about three facilities this year in the area of nuclear energy, energy research, and environmental management facilities. As Tara said, we really are not looking at any of the defense program type facilities as part of this pilot program whatsoever.

As we gain experience this year we expect to expand this to maybe six to ten facilities by the end of FY 1999.

The types of facilities that we are looking at would be ones that essentially are similar to NRC facilities, and, as Tara also mentioned, where there is a value added to the regulatory program. We think it's important that there be value added. I think all the stakeholders want to see some value added.

Another key element is facilities that are willing to participate. It's going to take their time, their effort, their enthusiasm in order to be able to address the multiple issues that are going to be raised. We can sometimes address the technical issues fairly easily.

There are other dynamics with respect to the environments that we live in today. States have a lot of interest. You have received a lot of correspondence from the states.

Obviously there are concerns within the Department

of Energy with respect to other aspects of worker health and safety, like the OSHA responsibilities. Those are very clear ones. We have an agreement typically with OSHA how we handle radiation protection for workers. We have to understand and coordinate well with OSHA to see if that's the model that would work best for these activities.

CHAIRMAN JACKSON: What is the enticement or the motivation for facilities, since you have identified willingness to participate as a key element?

MR. THOMPSON: In my view, the enticements are those things that we talked about earlier, the stability in the regulatory program, the value added, a clear understanding. Some of these facilities, like the national labs, part of their facilities are already regulated, some by agreement states, for example, in a regulatory program that they are somewhat familiar with.

CHAIRMAN JACKSON: You're saying that the benefits of external oversight are the same as the enticements for facilities to want to participate or be willing to participate in the pilot.

MR. THOMPSON: I have people who are very capable of adding to this dialogue, so I would encourage Ray or Tara to add anything to that.

MR. BERUBE: I agree absolutely that the benefits are the enticement.

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: In terms of what we are going to do afterwards, which is try to convince Congress to take progressive steps in this direction if the results of the pilots are appropriate, does getting only facilities that are willing to participate run you into the danger that a congressional staffer in 1999 says to you, well, will it be more difficult at the places that weren't willing to participate?

I forget what it's called in statistics, but there is an effect where you get good results even if you do nothing just because the spotlight shined on you. Are you worried about the representability of what we are doing?

MR. THOMPSON: Obviously that is a concern. We would hope that the effectiveness of the review teams and the participation of those would provide a solid and sound foundation to be able to articulate that. I do think it's important that we recognize and address, as we talked about earlier, the issues and the costs.

I think costs are probably one of the key driving issues associated with those who may be reluctant. As you well know, this Commission and others are in tight budget times. In order to be regulated in a much more open environment some facilities, maybe lots of facilities, are going to have to spend some monies to get their programs up.

I think that's an issue that we have to be able to articulate. Both the oversight committees and OMB are going to want to know what the cost is going to be.

COMMISSIONER McGAFFIGAN: I understand this year trying to get pilots. You are hoping to start some of these pilots in a few months, but when you are choosing pilots for the following year, for FY 1999 implementation, somewhat less willing participants might be a useful part of the program.

MS. O'TOOLE: First of all, it is our hope that once the benefits of external regulation and some of the questions about how it will go forward are demonstrated in the pilots we will have more volunteers for pilots than we can handle. I think that actually might be the case.

As Hugh said, some of the reluctance has to do with some facilities just having so much on their plate right now that the challenge of diverting resources -- I think actually people are at least as precious as money -- that could actually interface with the pilot program is one concern of people.

I think a second issue is questions about how exactly will this work out. Will the external regulatory framework get in the way of or set back efforts already underway to bring what we call integrated safety management into being? How much will it cost? Will it be cost-

effective?

I am hoping that we will get data on all those questions that is reassuring and encouraging, or at least that beats down some of the bogeymen that people may be fearful of. I really do expect that we shall and that there will be more volunteers. So I think the selection criteria, the variable of selecting people against their willingness to participate is a legitimate one.

Generalizability, however, is a fair question. One of the characteristics of DOE is the great variety of operations. It may be that it is reasonably straightforward to figure out how to regulate multipurpose energy research laboratories and much more difficult to figure out how to regulate some of our singular nuclear operations that derive from past experiences that are unique to DOE. Hopefully those questions too, how singular is DOE, will be answered in part by these pilots.

COMMISSIONER McGAFFIGAN: There is another pilot going on that is outside of this framework, and that is the tank waste remediation work that we are involved in. I hope that gets integrated somehow with whatever we are learning there.

The other pilot that may be relevant, although it's not with regard to DOE, is the work we may do with DOD on the reactor at McClellan Air Force Base. Keeping DOE

fully apprised as to whatever we are doing there might help. Any comments?

MR. THOMPSON: We have often discussed the applicability of that effort with DOE. We have also at times discussed the desirability of having a non-power reactor as part of the pilot program. Recognizing those issues at this time, the McClellan Air Force reactor is well on its way, quite frankly, and that's a very mature effort.

We also have other areas where we are having experience interfacing with DOE that is going to be valuable to have. The TMI-2 spent fuel effort in Idaho. It's really not part of the pilot; it's actually part of the overall licensing responsibilities that we have under current statutory responsibility. That is valuable information to have available to us and to DOE as we consider the elements there.

CHAIRMAN JACKSON: I think what comes out of this discussion is the need to ensure that where you have these other distinct activities going on that you specifically pay attention to and have a mechanism for having the lessons learned propagate into how you shape the pilots and the questions and how you try to go about addressing issues of value added and all the other criteria that we are looking at, but to do it consciously as opposed to saying that these other activities are over here. I think that's the point

the Commissioner was trying to make.

MR. THOMPSON: Our knowledge of DOE facilities is somewhat limited. Ray has been thoroughly looking at these for many years, and we will utilize all of that wisdom and expertise as we go forward to try to identify the uniqueness of particular areas.

CHAIRMAN JACKSON: I don't want to preempt anything you were going to be discussing later. Presumably you are going to be laying out a very structured process with questions and issues that you would be trying to get at. A useful exercise is simply to say if I take those and I look at what is already happening or what has already happened, say, with the air force reactor, and move along with the Hanford tank waste remediation system, what do they tell us in terms of the answers? All I am saying to you is that you have to do it in a structured way, because if you don't, it won't happen.

MR. THOMPSON: That is right. We intend to have a very structured approach.

CHAIRMAN JACKSON: Structured cross feed. I'm not talking about your structured approach within the pilot; I'm talking about structured cross feed.

MR. THOMPSON: That's right. The concept of self-assessment and those types of things are also valuable for those who may be doubtful as to whether they want to

volunteer. We will eliminate some of the unknown factors of what will actually occur.

CHAIRMAN JACKSON: I think Commissioner Dicus had a question.

COMMISSIONER DICUS: We talk about classes of facilities. I think you have also used the term "types of facilities." Is class and type the same thing?

MR. THOMPSON: The way I use them they basically are.

COMMISSIONER DICUS: We may need to stick with one term and then clearly define what that term is. I think in this agency we sometimes use our terms and we haven't defined exactly what we are talking about.

The second part of the question is, do we have a definitive list of these classes of facilities? Have we defined what classes we are talking about?

MR. THOMPSON: John.

MR. AUSTIN: We have broken down the facilities in various categories, by nuclear energy, energy research, environmental management. We have broken them down by state.

COMMISSIONER DICUS: What do you mean by state?

MR. AUSTIN: Facilities within agreement states, non-agreement states.

COMMISSIONER DICUS: You consider that a class of

facility?

MR. AUSTIN: No. We have attempted to say national laboratories as a class of facilities, but that brings in a mixture of defense programs, energy research, and given the direction that we are going in in excluding defense program facilities, that breakdown didn't help very much. We gave up on the effort of trying to characterize that.

CHAIRMAN JACKSON: The question is, are you doing it by regulatory class? For instance, broad scope materials licenses, non-power reactors, et cetera.

MR. AUSTIN: Or fuel cycle facilities.

CHAIRMAN JACKSON: Or fuel cycle facilities.

MR. THOMPSON: In the broadest sense, that is the way we were looking at those, those that would fit within the broad scope material licensing umbrella, those that may be just a specific license under material approach, those that would be non-power reactor, and there were those that would fit more into the fuel cycle facilities. Then you have to think if you were to go into other things such as low level waste burials or something. Those are ones that typically fall within my kind of thinking on this process. We weren't trying to get too much outside of that box.

CHAIRMAN JACKSON: Is it fair to say that to some extent the identification of classes is evolving and will

come out of the pilot?

MR. THOMPSON: That's probably the way to look at it, but we are trying to get a broad range right now so that we just don't all look at kind of the broad scope licensees.

MR. BERUBE: If I could add. This is an example of what Tara was talking about, where the cultures need to merge. The classifications that NRC uses we've not used, for obvious reasons. We classify them a different way. But we are understanding one another. I think out of this will evolve a classification system for those facilities.

CHAIRMAN JACKSON: Okay.

COMMISSIONER DICUS: Just a follow-up. It is important. I am looking at this product that we are going to have when we finish the pilot. How are we going to use it? Where do we make the transition we have been talking about from knowledge that we get from the pilot to using it to the next step or the next goal that we have?

I think at the front end we should recognize the classification problem and merging so that when a facility enters the pilot program we have a good idea what classification it's in so we can better use the information we get from it.

CHAIRMAN JACKSON: It has to be part of decision-making.

MR. THOMPSON: That's right. I think that really

comes to both the Secretary and to the Commission when you contemplate any kind of legislative approach. Anything that we do is going to have to be able to be conducted with the legislative imprimatur.

MR. BERUBE: Along those lines, we are hopeful that the pilot at Lawrence Berkeley National Laboratory will serve that purpose with respect to the rest of the non-weapons laboratories in the DOE system.

CHAIRMAN JACKSON: I think the point being until you have entered the pilot there are some questions that can't be answered. I think the message is that you need to be keeping that at the forefront and developing a coherent and consistent among everybody definition of class but also being able to say how that parsing into class facilitates decision-making, including any issues vis-a-vis enabling legislation as well as regulatory approach.

Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: The one other pilot that I think we've had is USEC. I hope you all have looked at that example as well.

MR. THOMPSON: We both have clearly looked at that and know there are lessons there for both of us.

COMMISSIONER McGAFFIGAN: Good.

CHAIRMAN JACKSON: Why don't we move on.

MR. THOMPSON: We have talked about the objectives

of the pilot program. There are a couple of things on here I really do want to highlight. One of them is the issue in the middle, evaluate alternative regulatory relationships.

What that means for the purposes of this pilot is, how do you really license the types of complexes that DOE is responsible for? Do you issue a license to DOE? Do you issue a license to the M&O contractor? Do you issue a license to both? Do you have some type of bifurcation of how you would expect regulatory responsibilities to be carried out?

Quite frankly, one of the areas that we will have some early input on making decisions on that one is the Idaho TMI-2 spent fuel facility and even some of the Fort St. Vrain spent fuel storage facilities.

CHAIRMAN JACKSON: You may have more than one license.

MR. THOMPSON: We may have more than one license. We got that a little bit with the U.S. Enrichment Corporation where we had to decide who is going to be the licensee. Martin Marietta is the primary operator. So we have kind of faced it, but I think that we ought to look at that carefully for this particular arena.

CHAIRMAN JACKSON: Your last two bullets speak to not interfering with ongoing safeguards and security program and not interfering with current regulatory and other

oversight authorities for DOE nuclear safety. I guess the real question is, can you flesh out what the concern is there, and how are you addressing the issue? What are you doing in order to address that concern? What is the concern and how are you addressing it?

MR. THOMPSON: There are two elements in this. Obviously the defense program facilities are not going to be included in the pilot program. That's obviously one of the objectives; if there is some tangent that is involved with those, that we be fully aware of that and make sure that we don't inadvertently have some issue that may have a significant role with the defense programs.

Likewise, as you may recall, there were some concerns about the special nuclear material, weapons type grade material. There is a very strong and active DOE responsibility associated, an integral part of their defense programs that protects that material even when it's in weapons form or even when it's available there. That is such an integrated part of many of those facilities. We didn't want to try to interfere or interrupt that overall responsibility because that is clearly DOE's regard now.

The security programs typically related directly with the safeguards.

That doesn't mean that at places like Lawrence Berkeley, which are much more like an NRC type license

facility, that we would not preclude or we would likely include that as part of our pilot program to look at that, because that wouldn't have the sense of having a direct concern with the national defense and security programs.

CHAIRMAN JACKSON: What about the last bullet?

MR. THOMPSON: The last bullet is one that is very clear to all of us. During this pilot program DOE and its M&O contractors are responsible for the health and safety activities. This is in no way intended to interfere with their day-to-day responsibilities in that regard, as well as the non-radiological activities that DOE is responsible for. The intent of that bullet is to ensure that what we do there has no negative impacts on other activities.

Tara.

MS. O'TOOLE: That's quite right. The responsibility of the Department and its contractors to ensure the health and safety and environmental integrity at its sites is in no way diminished or held in abeyance by these pilots. That is the first point.

Secondly, we are in discussions with the Department of Labor about moving DOE to external regulation by the Occupational Safety and Health Administration. It is our hope and my expectation that some of these pilots will be joined by OSHA. We have had one OSHA pilot at the Argonne National Lab, which was quite helpful and

successful.

The time line is slightly lagging compared to the NRC/DOE enterprise, but I would think that some of these pilots would also pick up OSHA participation. That will, of course, give us some experience with questions about how NRC and OSHA might interface with DOE at our operations.

So it isn't so much a question of interfering there as interfacing and integrating.

CHAIRMAN JACKSON: Commissioner Diaz.

COMMISSIONER DIAZ: Going back to the objectives, I wanted to emphasize that the determination of costs of regulations might be a very critical issue. I think the methodology that will be used in how to extrapolate the costs from pilots to a more global issue is not a simple issue, and we should pay attention to that from the beginning. That is going to be the bottom line eventually.

MR. THOMPSON: That's true. As we talk about the other one, the stakeholder involvement and a lot of effort, there are going to be up-front planning costs on these things that will be important, but they don't get, as you say, precisely to the issue of the cost of regulation.

There are two elements that I think are going to be very critical. One is the cost to DOE of getting their facilities up to meeting whatever the standard is. Our experience with U.S. Enrichment is that there is a real

cost. Not necessarily at all facilities, and it probably varies. There is probably a wide range of variance, depending on the age of facilities and some of the activities that they were involved in.

Secondly is the cost to NRC, which is very important to us. I think many of these facilities are sufficiently similar to NRC facilities that we would have a reasonable understanding what the steady-state cost is. There is transitional cost.

We had some significant efforts with respect to the U.S. Enrichment Corporation in getting our own regulatory framework in place. We put a new regulatory framework in place for those facilities, and the new approach, the certification, which we did not have for other facilities. We obviously have that experience behind us, but it was one that did cost, and we will be careful to do that.

MS. O'TOOLE: I think that's a very important point, Commissioner. I think we also need to keep in mind that the costs are going to have a different complexion, depending upon how tightly they are linked to value. The value added for a given price tag will be very important to highlight for observers of these pilots.

I have some concerns that it would be very difficult for the pilots to adequately illuminate the value

of the investment the country might make in external regulation over time. I think we need to be very kind of up front and forthright about what in our judgment, based upon these pilots, we think the worth of external regulation might be.

I think the Congress, for example, would be quite willing to pay the cost of external regulation if they had an opportunity to think through what benefits might derive over time. For example, if it were to prevent a cleanup such as the one now being managed by the Office of Environmental Management, that might be a very good deal.

Predicting the future is always hard, of course, but we ought to keep in mind the difficulty of linking costs to value and the need to do that in some way with these pilots.

CHAIRMAN JACKSON: I think there is the need to do it. The way I would put is that one has to give definition to what value added means, because one does not want to advertise this as being without cost.

MS. O'TOOLE: Precisely.

CHAIRMAN JACKSON: The issue is, what regulatory approach makes sense? Then, having decided that, what definition do you give to value added in that situation? Because there is a price tag. If the idea is that it doesn't cost anything and that's the metric, then we might

as well go on back upstairs and you can go back downtown.

MS. O'TOOLE: Deal.

MR. THOMPSON: She can go back and get in the traffic.

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: I'd like to go back to the point you were making earlier about evaluating alternative regulatory relationships and the issue of who is the licensee. It strikes me in the two pilots we know we are going to have we already have two different ways.

At Lawrence Berkeley we are going to evaluate whether it should be University of California or DOE, but it's the whole site, and that's what the pilot is.

At Oak Ridge we are looking at a single actinide facility and there is no illusion that any time soon we are going to get the entire Oak Ridge site with the Y-12 plant and all of that. If Congress wanted to say, okay, that site and maybe similar sites should be regulated by NRC, you'll have to figure out how that would be done with DOE maintaining ongoing regulatory oversight over the rest of the site.

We have that somewhat in the USEC case, as I understand it. So this is not unprecedented, but you will have parallel systems in place for some period of time until you complete the entire transition, and I hope you all think

about that and the legal and contractual implications. I think you have both.

CHAIRMAN JACKSON: You are saying there is the issue that you can do a site license or a facility-specific within a site.

COMMISSIONER McGAFFIGAN: Right.

CHAIRMAN JACKSON: In a certain sense the Hanford situation provides another example that we are de facto working up on; the TMI fuel facility, which is one that we are involved in at any rate in Idaho. All of these provide examples. It's a question of distilling the collective wisdom.

Commissioner.

COMMISSIONER McGAFFIGAN: The latter is obviously the much more difficult than the former.

CHAIRMAN JACKSON: Right, the facility-specific.

COMMISSIONER McGAFFIGAN: The former we probably all think we know how to do; the multipurpose laboratory looks like a university oftentimes, smells like a university, and can probably be licensed like a university.

CHAIRMAN JACKSON: Some would say is a university.

COMMISSIONER McGAFFIGAN: The latter is going to be where a lot of the legal talent goes.

CHAIRMAN JACKSON: Why don't we go on.

MR. THOMPSON: The next slide basically kind of

sets out the approach that we are contemplating for the pilot reviews. We are looking at this as kind of a joint assessment. It's not quite a self-assessment, but it has many of those elements where we are going to be involving the facility and the DOE site people as well as NRC people from headquarters, NRC regional inspector specialists on this.

The teams will be co-chaired by John Austin, who is here, and John Tseng, who is back there, for DOE, who is also the co-chair with Ray Berube of the DOE task force.

CHAIRMAN JACKSON: Why don't you come sit at the table.

MR. THOMPSON: We were waiting for Mary Anne Sullivan. John, come up.

What we want to do is an assessment. It's information gathering. It's not trying to be a gotcha type of an approach. We are trying to evaluate the efforts. To do this, we will look at documents, do some up-front reviews, do some management planning on this aspect, and develop our sense of understanding of the profile of the activities there and what's really conducted, and then do some onsite work with the combination of teams that we talked about.

The criteria that we will be looking at is NRC, DOE and particularly any of the national or state standards

that might be applicable. I say that with respect to state standards. The Berkeley lab has accelerators, and obviously those are elements that we don't normally regulate, and to a certain extent we are going to have to make some evaluation. There are some thoughts that a state could regulate the entire facility when it has those types of characteristics, which is obviously a very different model than we have for most all other federal facilities that have Atomic Energy Act material which we regulate separately.

We do expect the team to prepare a report about two months after the completion of each of the pilot programs. In an ideal world those will be quicker than later. Obviously it will depend on the complexity of the facility as well as the stakeholders and how many dollars we need in order to get the buy-in.

As I said earlier, we expect the first pilot to begin approximately one week after we sign the MOU. I think that's the full planning element associated with that.

CHAIRMAN JACKSON: Commissioner Dicus.

COMMISSIONER DICUS: Going up to the third bullet, on risk-informed, performance-based approach, have you fleshed out how you plan on using those concepts that we have to focus the pilots on the areas of greatest significance?

MR. THOMPSON: The answer is I'm probably going to

ask somebody else to answer it. There is a key element we recognize that DOE has, their integrated safety management approach, which really is a parallel to the concepts that we have been using with our own kind of risk-based approach, ensuring that we evaluate --

CHAIRMAN JACKSON: Risk-informed approach.

MR. THOMPSON: Risk-informed approach that we have been working on and I'm learning to say properly, I think. If I slip up again, I'll cut part of my tongue off.

[Laughter.]

MR. THOMPSON: John.

MR. AUSTIN: As you know, we have a draft regulatory guide out for comment. In that draft regulatory guide there are some principles and a framework, a logical structure to making regulatory decisions. We plan to apply those in looking at the pilot facilities.

MS. O'TOOLE: We have spent a great deal of time, blood and toil in the last several years at the Department of Energy trying to construct a common grammar, which you have just demonstrated is difficult, so that we all are proceeding along some similar lines in terms of following principles of managing safety.

We have made some progress, as Hugh mentioned, constructing what we call the integrated safety management wheel, which is not magic; it is not new; it is very

familiar to most people who work in any realm of safety management. It basically says that safety is not a matter of simply checking off a list of standards that come down from on high. It must be a continued dedication to proper work planning, to a considered analysis of the hazards associated work, to the implementation of appropriate controls to manage those hazards, to the assessment of the efficacy of the controls selected, and then feeding back those assessment into the next work planning cycle.

We have tested that out in various modalities and with different models at different levels of the agency, at the task level, at the facility level, at the site level, and to a much lesser extent at the program level. We have gotten a lot of buy-in and a lot of benefit, I think, from the beginnings of this evolution of a common language, which I think, Madam Chairman, as you have just noted, is very, very important.

So what we are eager to embark on is a shared discovery of what iteration of the next common meta-language or grammar might come out of this that is indeed risk-informed and performance-based.

CHAIRMAN JACKSON: One could in fact, and I will just assert, that a risk-informed, performance-based approach, one could argue, is a methodology or an element of integrated safety management. So you need not have to worry

about meta-languages.

MS. O'TOOLE: Absolutely.

MR. THOMPSON: I think that is one of the fundamental things. It is really an underpinning of both our activities and efforts in this area.

The next slide focuses a bit on the stakeholders. We mentioned earlier how important the stakeholders are in this overall effort.

Overall project activities. Both organizations are responding to congressional oversight committees and their staffs on questions concerning where we are headed. Obviously there is legislative actions up on the Hill as we speak.

The Office of Management and Budget is a key player in this, and we will obviously keep them informed. They have requested a status briefing once we proceed a little bit further with our memorandum of understanding so that they are on board with it.

Likewise, the agreement states. We plan to give presentations to the Organization of Agreement States at their annual meetings with the Council of Radiation Control Program Directors.

COMMISSIONER DICUS: It's Conference of Radiation Control Program Directors, not Council.

CHAIRMAN JACKSON: Common language.

[Laughter.]

MR. THOMPSON: That concludes my briefing.

[Laughter.]

MR. THOMPSON: I've got three pages left.

The other element that is important is OSHA, but also EPA. We do want EPA to be aware of what we are doing. It's important to both our organizations that EPA understand where we are going and how we intend to move forward.

As far as informing the public in general, we plan to have a Federal Register notice, but we collectively will try to identify those independent organizations that may not normally just read the Federal Register like I do every morning to pick out those things that may affect NRC.

CHAIRMAN JACKSON: Is that what you mean by the directed mailing?

MR. THOMPSON: Right. There are stakeholders that would be potentially like organizations that are already set up around sites that DOE has. DOE has a fairly aggressive -- aggressive is the wrong word --

MS. O'TOOLE: Robust.

MR. THOMPSON: Robust. There you are. I knew I would make one more mistake before this thing was over. That's it. No more mistakes.

[Laughter.]

MR. THOMPSON: A robust list of stakeholders at

particular facilities, like the agreement states.

CHAIRMAN JACKSON: Is there going to be a joint list?

MR. THOMPSON: It should be a joint list.

With individual pilot facilities, we want to brief the appropriate state regulators, both radiological and maybe dealing with other activities; invite the states to participate as observers or participants. We need to work out the details on how that would work.

Citizens groups are particularly important. In fact, as we both know, it is important to have the union representatives. Sometimes there may be multiple union interest in a particular site or facility, and so it's important that they have a particular role.

COMMISSIONER DICUS: Also, in all of the activities that are ongoing there is the question that I had asked earlier in another briefing, coordinating with our affected regions.

MR. THOMPSON: Yes.

Finally, kind of like what's behind door one, door two and door three, we actually have two doors. Behind door number one is Lawrence Berkeley. They are our first pilot program. As we discussed earlier, they essentially do multidisciplinary research in energy science and general science and the biosciences. That is very similar to what

we have at many of our universities. They actually have about 440 graduate students and have some 100 or so students that get a graduate type degree each year.

They have things like the national tritium labeling facility, and as I mentioned, also they have the accelerator which provides a unique area that we typically never in the past have done any particular reviews on.

We did have the spent fuel dry transfer and storage facility in Idaho early on, and I think that's identified in the Commission paper that we sent up as a candidate. We really did give this a lot of review early. Because it was a new facility, it would be one that would have us looking at some of the DOE spent fuel that is not typical for what we normally look at.

Then, as we looked at what we would gain from a pilot program, we came to realize that most of anything we would gain in a pilot program we would gain during the actual licensing, because it was a modular concept. They were going to the TMI-2 module first. This would be at a much later date. So we thought it would be a better pilot project that would be a similar type facility.

The other aspect of it was we didn't really want to interfere with the ongoing licensing review responsibilities, which is our statutory responsibility, and I think DOE agreed that they wouldn't want to see anything

interfere with that schedule because they have commitments also that we are trying to be sensitive to.

CHAIRMAN JACKSON: Does DOE expect to provide a replacement for the Idaho site that will meet the proposed schedule for the pilot program?

MS. O'TOOLE: Yes.

CHAIRMAN JACKSON: And you expect that you might have that done before the MOU would be signed?

MR. BERUBE: At this point I would be concerned that that could delay the MOU. I actually think the MOU can proceed and we can identify the third pilot. In fact I would like to take additional time to make sure that we get a pilot that is going to work.

CHAIRMAN JACKSON: But you expect it to be part of the pilot for this FY-98?

MR. BERUBE: Yes.

MS. O'TOOLE: Oh yes.

MR. BERUBE: I would say shortly after the MOU is executed. Maybe toward the end of October or sometime in November we should have it identified.

MR. THOMPSON: Right now we aren't looking at doing three pilots simultaneously. There is a staggering of the approach. Before we finish one we will start the planning for the second, because there will be different technical experts, different facilities. There are a lot of

things we can do, but we did have a sequencing approach that we were going to look at.

The third facility is the Radiochemical Engineering Development Center at Oak Ridge, Tennessee. As I mentioned earlier, it's a facility that processes and utilizes a lot of DOE heavy element research. It would give us some experience looking at how they work with irradiated fuel assemblies and some experience with hot cells, though we do have some experience with hot cells, and some heavy elements.

To summarize where we are today, we are preparing the MOU for the Commission and Secretary Pena's approval early in October. We will select the three to six facilities for the program in 1999.

We look forward to proceeding on this and certainly would respond to any Commission questions.

CHAIRMAN JACKSON: I guess my question at this stage of the game is, how does this track to decision-making?

MR. THOMPSON: The approach that we see right now is that once we get the first pilot report out, it may in fact be able to give us sufficient information and recommendations with respect to that group of facilities. What is the right word, class?

CHAIRMAN JACKSON: Those facilities or classes of

facilities.

MR. THOMPSON: Those classes of facilities. In fact it may be sufficient in itself to justify the Commission and the Secretary considering legislation to include those classes of facilities in a transition period. I don't know that we have to wait for the entire program to be completed.

On the other hand, if there are questions about the value added, we may need to have the results of more pilot programs, more understanding of the costs that are going to be associated with it before we proceed. That's the way I would see it.

CHAIRMAN JACKSON: Cost is a big issue. We have had a robust discussion. Perhaps I would ask Carl Paperiello to comment. To a certain extent it strikes me that in terms of what you advertise that costs are a function of a decision about what regulatory approach makes sense. It is not until you go in and do a more detailed assessment than what you are going to be doing in these pilots, it seems to me, and work out what the transition plan is that you really know what the costs are and certainly what the costs are on a per-fiscal year basis, because the transition plan is predicated on some assessment of where the facility is today, to what extent it meets the standards it would need to meet, and then what things it

would need to do if there are changes, and over what period.

I'd like to hear some commentary. I would like to begin, if I may, having Carl perhaps make some edifying comments from your experience with the USEC gaseous diffusion plants.

MR. PAPERIELLO: That's right. I thought about that as we were discussing lessons learned from USEC that are applicable to it. I think that we are going to see significant differences, I would expect, between Lawrence Berkeley and the Radiochemical Engineering Development Center. It deals with issues of hardware versus the performance standards.

I think from everything I have read --

CHAIRMAN JACKSON: Don't make predictions about specific facilities. I'm more interested in your generic lessons learned in terms of how these things fall out, because you haven't looked at the facilities yet.

MR. PAPERIELLO: That's exactly right. It's how many things look like systems that we are already used to and what we find that fits into our regulatory structure, how many things, even if they don't fit into our regulatory structure, are just a different way of doing something to get to the same end point.

When you look at risk-informed, performance-based, if they are achieving the results that we both agreed are

acceptable, even if the methods are significantly different than meet our conventions, if we are flexible enough to accept that, that is certainly going to influence the cost of taking over the regulations of these facilities as well as the time line to do the integration, because procedures won't have to be changed; things will not have to be changed.

The approach that we have to the initial one, which is Lawrence Berkeley, is to give ourselves a period of learning rather than going in and saying, okay, is this place good or bad or meeting some objectives? How do you do understanding them and how do you achieve your goals? What are your goals and how do they compare to our goals?

My first impression -- I'm will tell you it's only a first impression -- from downloading the radiation safety manual for Lawrence Berkeley is it looks quite --

CHAIRMAN JACKSON: I'm trying to steer us away from talking specifically about facilities that the task forces as task forces have yet to really do the full evaluation on. I guess what I was really trying to elicit from you is, what are those kind of key lessons learned in terms of how one has to look at facilities that you have gotten out of the experience that you may have had with the USEC. Maybe I would like to hear from the Assistant Secretary.

MS. O'TOOLE: I think that there may be two different decision levels to which matters of cost pertain. I would hope that the pilots would give us some ballpark figures that would be generalizable to the class of facilities that the pilots inhabit. That might inform the decision whether or not to go forward with authorization legislation.

I think questions about how much money we ask OMB for is a separate issue that will probably need more nuanced analysis and will come later, but hopefully the pilots will arm us to at least suggest to Congress whether or not external regulation is a good thing and get that in motion.

CHAIRMAN JACKSON: Commissioner Dicus.

COMMISSIONER DICUS: One question. As part of our definition of simulated regulation we use the term "regulatory concepts." Have we really defined the term?

MR. AUSTIN: Under regulatory concepts, one would be the risk-informed, performance-based. We will be trying that out. Another regulatory concept would be certification versus licensing. So it's in that nature that we would be testing these.

COMMISSIONER DICUS: Do you think you have a complete list of these regulatory concepts, or is this work in progress?

MR. AUSTIN: Work in progress. It would be

tailored to the individual facility. We will have a work plan tailored to each one but which contains common elements in order to reach these general decisions in the future.

CHAIRMAN JACKSON: Assistant Secretary.

MS. O'TOOLE: I would note, Commissioner, that we have a few regulatory concepts ourselves which are codified in our internal independent oversight template that we would like to explore or use elements from.

COMMISSIONER DICUS: I want to be sure that that is coordinated.

CHAIRMAN JACKSON: So out of this you are going to come up with the regulatory guide.

MS. O'TOOLE: Yes, a robust set.

CHAIRMAN JACKSON: That word again.

[Laughter.]

CHAIRMAN JACKSON: Commissioner Diaz.

COMMISSIONER DIAZ: I've got a question for Dr. O'Toole. I was looking at this interesting use of the word "common," common grammar, common principles, a common desire to serve the people of this country. There was something that you said at the beginning. I'm not quoting, but it would be close, and it impacts on an area which we are highly sensitive to. Hundreds of facilities will be decontaminated and regulated by EPA. What do you see the role of the NRC in the decontamination of facilities and

regulation of the facilities in that sense?

MS. O'TOOLE: I don't see a prominent, immediate role. Right now most of that work, indeed I believe all of that work, is going on within the purview of the Office of Environmental Management.

There is an external regulatory framework that governs that work. That is in the hands of the Environmental Protection Agency. The Superfund laws, the RCRA laws, Resource Conservation Recovery Act laws, and other statutes are on the books that govern those kinds of operations. We are not proposing to alter that significantly.

There may be offshoots of that work having to do with handling and deposition of materials that evolve into wastes once they are taken out of the building that come under NRC purview. For example, some of our materials will be going to Yucca Mountain.

COMMISSIONER DIAZ: The actual status of a decontaminated facility, which we normally have a stake in our facilities, you presently don't see a role for the NRC in that respect?

MS. O'TOOLE: The overall concept advanced by the Grumbly task force was that over the next several years the decontamination and decommissioning work will progress, thereby decreasing the number of facilities that are

contaminated in the Department, and that much of that work will be accomplished in the next decade. It was thought that it was probably not worth the effort to fold the Nuclear Regulatory Commission into that endeavor. Given that it is already overseen by EPA, there is already external regulation of DOE operations in those spheres to a very great extent, instead we would focus the NRC resources on those aspects of DOE operations that will be ongoing missions in the future and that do not now at present have any external regulatory oversight.

COMMISSIONER DIAZ: Thank you.

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: Two questions. One that may not come up naturally in the pilot program but it would be interesting to see how it works is the enforcement policy. I have been watching in the press some of the enforcement actions of DOE vis-a-vis some of the labs, Sandia or Los Alamos, or whatever. You exercise enforcement discretion, as we do. In some cases you increase penalties; in some cases, et cetera.

It might be interesting to just have the two enforcement groups talk to each other to see whether there are discrepancies at all in how we would approach an individual case. Not how we would govern, but just so you would understand our enforcement policy should external

regulation come into effect and any differences that there might be at the moment. We are not planning in the simulation at the moment to do any enforcement.

The other suggestion I have for you -- I know the issue of timing of legislation has come up in the staff discussions. I just want to make a pitch for trying to have something ready in calendar 1999 for the FY-2000 congressional process, the 106th Congress first session.

Having started in 1993, as the Assistant Secretary said earlier, in this process, if anything is going to be in place in the 21st Century, given the multi-committee nature of jurisdiction in both houses, at least three authorizing committees and an appropriation committee in each house, if it isn't ready in 1999 and we send it up in 2000 in a short session, with the complexity of the congressional jurisdiction, it will be well into the 21st Century and a different presidency before Congress gets to actually authorizing some external regulation.

I don't know hard and fast, but I think a target should be to try to do something in calendar 1999 and the FY-2000 legislative process.

MS. O'TOOLE: I think that's very reasonable. I am quite hopeful that the pilots will give us sufficient information to allow us to do that and to propose informed legislation.

I share your concern about time ticking away and the difficulty of getting through the various congressional committees.

It is important to many of our stakeholders and indeed some significant players in Congress that we genuinely take heed of what we learn in the pilots, and that it is not to be construed as a kind of make-work exercise, and that we really do take the pilots seriously and closely ponder the question of whether to go forward with external regulation, that threshold question of yes or no, and then how.

But I agree with you, Commissioner. If we are going to do this, we need to move promptly, and 2000 sounds about right.

CHAIRMAN JACKSON: A lot of being able to take seriously the results of the pilots is a function of how you structure what you are asking going in. That's the key, as you know, to success, I think.

I would like to thank Assistant Secretary O'Toole, Deputy Assistant Secretary Berube, Mr. Tseng, and the NRC staff for providing a very informative briefing.

As I indicated in my opening remarks, the Commission continues to endorse the Department's proposal for evaluating the benefits of external regulation by conducting the pilot program we have discussed today.

As the Commission anticipated, both of our staffs have worked together in an open and cooperative manner on a very challenging project, and so I would like to commend both sides, because the Commission recognizes the complexity of the tasks that lie ahead for DOE, for NRC, and for all of our stakeholders.

Finally, in light of Assistant Secretary O'Toole's recent announcement of her resignation as Assistant Secretary for Environment, Safety and Health at the Department of Energy -- I was told I could say that, and I asked specifically -- I would like to take this opportunity to personally commend and thank Dr. O'Toole for providing her leadership and guidance in launching a major overhaul of the Department's internal safety program for addressing conditions to improve the Department's nuclear sites and nuclear activities. I am speaking on behalf of all of my colleagues in that regard.

Your efforts and vision and tenacity have provided a driving force in bringing about a new paradigm of safety within the Department of Energy. So I wish you luck in all of your future endeavors.

Unless my fellow Commissioners have any comments, we are adjourned.

[Whereupon at 11:36 a.m. the meeting was concluded.]

CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING BY DOE AND NRC ON REGULATORY OVERSIGHT OF DOE NUCLEAR FACILITIES

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Friday, September 19, 1997

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: Michael D. Paulus

Reporter: Michael D. Paulus

TASK FORCE ON EXTERNAL REGULATION OF DOE

DOE/NRC COMMISSION BRIEFING

September 19, 1997

Hugh L. Thompson, Jr.
Deputy Executive Director
for Regulatory Programs

OUTLINE

- Background
- Potential Benefits of Nuclear Regulatory Commission Regulating Department of Energy (DOE) Facilities
- Memorandum of Understanding
- Objectives of Pilot Program
- Types of Pilot Facilities
- Approach
- Stakeholder Plan
- FY 1998 Proposed Pilot Facilities
- Status of Task Force Activities

BACKGROUND

- DOE self-regulates since Atomic Energy Act of 1946
  - Exception is environmental protection
- Legislation proposed in 1994 to require study of external regulation
- DOE created in January 1995 the Advisory Committee on External Regulation of DOE nuclear safety
- Recommended: Essentially all aspects of safety should be externally regulated
- Committee divided on what entity should regulate
- Secretary O'Leary accepted and endorsed the report
- Formed DOE Working Group on External Regulation to recommend how to implement

BACKGROUND (CONTINUED)

- Working Group recommended NRC be the regulator with a phased transition
- In September 1996 - NRC published DSI 2 on options for taking a position on regulating DOE
- Public comments favorable to NRC oversight of DOE
- December 1996 - Secretary O'Leary announces intent to seek legislation to transfer oversight to NRC
- March 1997 - Commission endorsed the proposal and formed a Task Force to address issues
- June 1997 - Secretary Peña and Chairman Jackson, representing the Commission, agreed to refocus the effort on a pilot program

POTENTIAL BENEFITS OF EXTERNAL REGULATION OF DOE NUCLEAR FACILITIES AS IDENTIFIED BY THE DOE ADVISORY COMMITTEE AND WORKING GROUP

- Discipline And Accountability
- Enhanced Credibility And Openness
- Stability And Predictability
- Application Of Cost-Benefit Analyses
- These Are Expected To Lead To Enhanced Safety

MEMORANDUM OF UNDERSTANDING

- Focuses on Pilot Program
- Objectives
- Scope of Pilot
- Stakeholder Plan

SCOPE OF PILOT

- LIMIT:
  - Nuclear Energy, Energy Research and Environmental Management facilities
  - 3 facilities in FY 1998, 6-10 Facilities total
- FAVOR
  - Facilities similar to current NRC licensees
  - Facilities where NRC regulations will have value added
  - Facilities that are more likely to meet NRC standards
  - Facilities that are willing to participate
  - New facilities, or facilities that would be operated for a long period of time

OBJECTIVES OF PILOT PROGRAM

- Determine value added
- Test regulatory approaches
- Determine status of a set of DOE facilities
- Determine costs of regulation
- Evaluate alternative regulatory relationships
- Identify issues for transitioning
- Identify legislative and regulatory changes
- Evaluate stakeholders involvement
- Not interfere with ongoing safeguards and security program
- Not interfere with current regulatory and other oversight authorities for DOE nuclear safety

APPROACH

- Joint self-assessment
- Pre-licensing Model
- Risk-informed, performance-based
- Examination of documents, Interviews, Direct Observation, Demonstrations, Independent measurements
- Criteria: DOE requirements
  NRC requirements
  National or State standards
- Brief Examination of Accelerators during one of the pilots
- Team to prepare report on major findings
- Schedule: Complete report 2 months after end of each pilot

STAKEHOLDER PLAN

- Overall project
  - brief Congressional Committees and Office of Management and Budget
  - brief Council of Radiation Control Program Directors and Organization of Agreement States
  - coordinate with relevant Federal agencies (EPA and OSHA)
  - Federal Register Notice on overall plan
  - directed mailing of Federal Register Notice
- Individual pilot facilities
  - brief appropriate State regulators
  - invite State representative to participate or observe (on a site specific basis)
  - coordinate with relevant Citizen Groups (local as well as national)
  - coordinate with relevant Union(s) for each facility

FY 1998 PROPOSED PILOT FACILITIES

- Lawrence Berkeley National Laboratory (California)
  - Performs research in energy sciences, general sciences, and biosciences
  - Develop and operate unique national experimental facilities
  - Test broad-scope license approach and identify issues associated with accelerator regulation
- Spent Fuel Dry Transfer and Storage Facility (Idaho)
  - Store DOE Spent Fuel
  - Regulatory experience with wide variety of fuels

FY 1998 PROPOSED PILOT FACILITIES (continued)

- Radiochemical Engineering Develop Center (Tennessee)
  - Production, storage, and distribution center for DOE heavy-element research program
  - Process irradiated fuel assemblies
  - Regulatory experience with hot cells and heavy elements

STATUS OF TASK FORCE ACTIVITIES

- Preparing MOU, Interagency Agreement for fiscal year (FY) 1997 reimbursement, Pilot Program Plan, Stakeholder Plan
- Anticipate signing MOU in early October
- Will select 3 to 6 additional facilities in FY 1999
- Begin first pilot (LBNL) - 1 week after signing of MOU
- Begin information gathering for second pilot (REDC) - January 1998
- Third pilot to be consistent with DOE schedule

POLICY ISSUE
(Information)

September 12, 1997 SECY-97-206

FOR: The Commissioners

FROM: L. Joseph Callan
Executive Director for Operations

SUBJECT: STATUS REPORT OF THE NUCLEAR REGULATORY COMMISSION TASK FORCE ON OVERSIGHT OF THE DEPARTMENT OF ENERGY, IN RESPONSE TO COMSECY- 96-053 - DSI 2

PURPOSE:

The purpose of this paper is to inform the Commission of the status of the work of the Nuclear Regulatory Commission Task Force formed to identify, in conjunction with the Department of Energy (DOE), the policy and regulatory issues needing analysis and resolution, before seeking NRC oversight responsibility for DOE nuclear facilities.

BACKGROUND:

In 1994, legislation was introduced in the House of Representatives, that would have subjected new DOE facilities to immediate external regulation by the NRC and would have created a Congressional Commission to study possible external regulation of existing facilities. As an alternative to such a Commission, Hazel O'Leary, the Secretary of Energy at that time, in January 1995 created the Advisory Committee on External Regulation of DOE Nuclear Safety (hereafter, Advisory Committee). The Advisory Committee was charged with providing advice and recommendations on whether and how new and existing DOE facilities and operations might be regulated to ensure nuclear safety.

CONTACTS: John H. Austin, NMSS
(301) 415-7275

Patricia A. Rathbun, NMSS
(301) 415-7178

NOTE: TO BE MADE PUBLICLY AVAILABLE IN 5 WORKING DAYS FROM THE DATE OF THIS PAPER

In its December 1995 report, *Improving Regulation of Safety at DOE Nuclear Facilities,* the Advisory Committee recommended, among other things, that essentially all aspects of safety at DOE's nuclear facilities should be externally regulated. Secretary O'Leary accepted and endorsed the Advisory Committee's report; she further created the DOE Working Group on External Regulation (hereafter, Working Group) to provide her with recommendations on implementing the Advisory Committee report. The recommendations made by the Working Group in its December 1996 report were: (1) NRC should be the external nuclear safety regulator, and (2) the move to external regulation should be phased-in over several years. Both the Advisory Committee and the Working Group concluded that the transition to NRC regulation would involve significant legal, financial, technical and procedural adjustments for both agencies.

In September 1996, NRC published for comment a series of Direction Setting Issue (DSI) Papers under the Strategic Assessment and Rebaselining initiative. One of the issue papers, DSI 2, addressed options for NRC's position on the regulation of DOE facilities. In March 1997, after considering public comments, as well as the December 1996 DOE decision to seek transfer of oversight to NRC, the Commission endorsed seeking the transfer to NRC of responsibility for the regulatory oversight of certain DOE nuclear facilities, contingent on adequate funding, staffing and a clear delineation of the authority NRC would exercise over these facilities. In addition, the Commission directed the staff to convene a high-level NRC Task Force to identify, in conjunction with DOE, the policy and regulatory issues needing analysis and resolution.

At a meeting in June 1997, both DOE Secretary Peña and NRC Chairman Jackson agreed to pursue NRC regulation of DOE nuclear facilities, on a pilot program basis.

DISCUSSION:

The original DOE Working Group proposal for NRC external regulation assumed a phased-in approach over a ten-year period, with Congressional authorization occurring in fiscal year (FY) 1999. The transition from DOE regulation to NRC regulation of DOE Nuclear Energy and Energy Research nuclear programs and activities was to be completed during the first five years (FY 2000-2004), with transition to NRC regulation of DOE Environmental Management nuclear programs and activities during the second five-year period (FY 2005-2009). NRC would not regulate Defense Programs facilities until FY 2009. However, NRC and DOE now believe that a pilot program of simulated regulation, in which regulatory concepts are tested, should be conducted before seeking legislation. Currently, the Task Force plans to conduct a pilot program of simulated regulation at three facilities, in FY 1998. In FY 1999, additional pilot sites/facilities of a different nature will be added to this program.

STATUS OF MEMORANDUM OF UNDERSTANDING

The DOE and NRC Task Forces are developing a draft Memorandum of Understanding (MOU) to establish the overall framework for cooperation in a pilot program of NRC simulated regulation at selected DOE nuclear facilities. The August 13, 1997, draft MOU was submitted to the Commission for comment on August 19, 1997. The working version of the MOU defines

"simulated regulation" and describes the scope and objectives of the pilot program, including stakeholder and public interactions. NRC and DOE have no significant disagreements regarding the contents of the MOU. However, because of the need for extensive coordination among DOE Headquarters, field offices, and contractors, the MOU will not be ready for formal Commission and Secretary of Energy review for a few weeks.

STATUS OF THE INTERAGENCY AGREEMENT FOR FY 1997

DOE and NRC are drafting an Interagency Agreement for reimbursement of NRC costs, incurred in FY 1997, for NRC Task Force activities associated with preparing the MOU and creating a pilot program plan. The Agreement is being patterned after similar agreements between NRC and DOE, and is expected to be signed by September 30, 1997.

STATUS OF PILOT PROGRAM

The objectives of the pilot program are to determine the desirability of NRC regulatory oversight of DOE nuclear facilities and to support a decision on whether to seek legislation to authorize NRC regulation of DOE nuclear facilities. This program is designed to gather quantitative and qualitative information on external regulation, upon which to base a legislative decision. The pilot program will, wherever applicable, use risk-informed, performance-based concepts to focus the pilot program on the areas of greatest significance. The base case will be the existing requirements placed on the facility. The staff will attempt to use the principles and methodologies contained in draft Regulatory Guide DG-1061 ("An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Current Licensing Basis") to determine the value (or lack thereof) of making changes to conform to NRC requirements. Further, the staff will use risk insights to help focus the pilot program on those areas most important to safety.

The pilot program will test regulatory concepts at certain DOE nuclear facilities, through simulated regulation, by evaluating a facility and its standards, requirements, procedures, practices, and activities against the standards that NRC believes would be appropriate to ensure safety at that pilot facility. Implementation details for pilot facilities will be negotiated by DOE, NRC, and DOE contractors, in individual work plans for each pilot facility. However, each plan will contain a consistent set of core questions and issues that need to be addressed for all facilities, to make the broader decision on whether to seek regulatory jurisdiction over DOE nuclear activities.

The pilot program will begin in FY 1998, with three DOE pilot facilities selected by DOE and NRC. The objective is to complete between six and ten tests of simulated regulation by the end of the two-year pilot program. Pilot facility evaluation will be staggered throughout the two-year period, but must be completed within two years.

The three sites proposed for the first year of the pilot program are: Lawrence Berkeley National Laboratory (LBNL); the Spent Fuel Dry Transfer and Storage Facility (for DOE spent fuel), at Idaho; and the Radiochemical Engineering Development Center (REDC) at Oak Ridge National Laboratory. (See Attachment 1 for a description of the nature of activities at these facilities.) Because of potential scheduling difficulties, DOE is reconsidering whether to include the Idaho

facility within the pilot program. However, if DOE does not include the Idaho facility, the NRC would expect DOE to provide a replacement facility. The LBNL site will provide NRC experience in testing the broad-scope license approach at a complex DOE laboratory; the Idaho storage facility will provide NRC experience with regulating a wide variety of fuels that are not in the commercial sector; the REDC will give the NRC experience with hot cells for processing, storing, and packaging very heavy elements that are somewhat rare. The proposed sites were selected based on the following criteria: 1) Limit the pilot program in FY 1998 to three non-Defense Programs facilities; 2) use facilities similar to current NRC licensees; 3) use facilities where NRC has existing regulatory requirements and guidance that could be applied through a program of simulated regulation; and 4) use facilities that would be operated for a long time or new facilities; and 5) use facilities that are willing to participate in the pilot program.

STAKEHOLDERS

Although there will be a modest effort to provide notification to stakeholders on a national level about the overall plan for the pilot, stakeholder involvement activities will focus on the stakeholders at the location of the pilot facilities. To the extent practicable, the existing DOE institutional structure for stakeholder involvement at each pilot facility (for example, DOE Site Specific Advisory Boards or similar institutions), will be used to coordinate the public involvement effort. A key issue for the pilot project, and for the external regulation of DOE generally, is the appropriate role of the State government in that process. Staff efforts to involve States in the pilot projects will generally focus on consultation with the State where the facility is located. The nature of this consultation will be tailored to such factors as the type of facility involved, and the existing relationship between the DOE facility and the State agency.

Agreement State jurisdictions do not extend to Federal government licensees, such as Veterans Administration hospitals, or military licensees. For example, even though some physicians at the University of California at Los Angeles (a California licensee) also practice medicine at an adjacent Veterans Administration hospital (an NRC licensee), the State of California is not involved with the latter and this two-license approach is working. Agreement States do not have jurisdiction over nuclear reactor licensees, although NRC does allow Agreement State representatives to accompany NRC on inspections of the reactors. This model, coupled with periodic consultations with the pilot-facility host State, is currently the approach NRC and DOE intend to take in the pilot program for DOE facilities.

The Task Force will contact the Organization of Agreement States, the Conference of Radiation Control Program Directors, and State representatives in the States where DOE facilities are located to define a role for the States during the pilot program.

RESOURCES

The staff estimates that it will require approximately $1 million and 5 FTEs to carry out the pilot activities in FY 1998. On July 16, 1997, the Senate passed the FY 1998 Energy and Water Development Appropriations Bill (S.1004). In the report accompanying the Bill, the Senate Committee noted with interest the DOE/NRC joint efforts to develop a small pilot program to test regulatory concepts for DOE nuclear activities and facilities, and recommended five objectives for the program. The Committee further noted its belief that the work would be

performed under a reimbursable arrangement from DOE to NRC. The Committee recommendation included $1 million within DOE's appropriations for these activities.

On July 25, 1997, the House of Representatives passed H.R. 2203, FY 1998 Energy and Water Development Appropriations Bill. According to the accompanying Committee report, FY 1998 appropriations to NRC include $1 million to provide the resources needed to evaluate the costs and benefits of establishing independent oversight of certain DOE nuclear facilities. In August 18, 1997, letters to the Senate and House Subcommittees on Energy and Water Development, the Chairman requested that the $1 million for the NRC activities in support of the pilot be included in the NRC appropriation as was done in H.R. 2203. In either case, the agency's FY 1998 FTE ceiling does not include the 5 FTEs for this work. These FTEs will be identified in the paper being submitted to the Commission on reimbursable business-like activities.

The FY 1999 resources to add additional pilot sites/facilities to the program are being requested from OMB based upon the Commission's decisions on the Executive Council's July 15, 1997, FY 1999-2001 Budget Proposal.

STATUS OF TASK FORCE

In a Staff Requirements Memorandum (SRM) dated March 28, 1997 (on DSI 2), the Commission recognized that there are likely to be many significant legal, procedural, and technical issues that must first be identified, thoroughly evaluated, and resolved before seeking oversight responsibility for any DOE facility. To implement this SRM, a Task Force was formed in April 1997, and a work breakdown structure and Gantt Charts with tasks, assignments, and schedules, were prepared. At that time, about 26 individuals were assigned to the Task Force, with the expectation that most individuals would need to devote only a limited amount of time to Task Force activities in their area of expertise, whereas a few individuals would be essentially full-time. In June of this year, the NRC and DOE Task Forces began to focus specifically on the MOU and the pilot program. NRC and DOE now believe that a pilot program, in which regulatory concepts are tested, should be conducted to address the identified issues prior to seeking legislation. Thus, the NRC Task Force has been scaled back to approximately 2 FTEs in FY 1997 and 5 FTEs in FY 1998. The primary focus of the Task Force in FY 1998 will be on the pilot program. Preparation of issue papers on actual regulation of DOE facilities will be postponed until FY 1999. The schedule for completing the analysis of issues in the March 28, 1997, SRM is given in Attachment 2. The budget request for FY 1999 includes resources to address these issues. The staffing estimates for FY 97 and 98 were based on starting work on all three pilot facilities in late FY 97 or early FY 98. However, the schedules included in Attachment 1 would stagger the start dates of the pilot plants. Therefore, the staff FTE estimates for FY 98 will need to be reevaluated.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection.

The Office of the Chief Information Officer (CIO) has no objection to this paper. The CIO notes that an assessment of the information management activities will be needed during the pilot program.

The Office of the Chief Financial Officer has reviewed this Commission Paper for resource implications and has no objections.

L. Joseph Callan
Executive Director
for Operations

Attachments: 1. Nature of Activities ongoing at Facilities Proposed for Pilot Program
2. Schedule for Completing Analyses of Tasks in 3/28/97, SRM

DISTRIBUTION:
Commissioners
OGC
OIG
OPA
OCA
CIO
CFO
EDO
SECY

NATURE OF ACTIVITIES ONGOING AT FACILITIES PROPOSED FOR PILOT PROGRAM

LAWRENCE BERKELEY NATIONAL LABORATORY

This summary was submitted by the Department of Energy (DOE) Berkeley Site Office. Because of the dynamic variety of research conducted at Lawrence Berkeley National Laboratory (LBNL), broad categories of tasks are identified. A specific commitment has been made not to possess, handle, or store critical mass quantities of fissile special nuclear material (SNM). This commitment preludes operation of high risk facilities, such as power reactors, and precludes classified Department of Defense projects involving critical mass quantities of fissile SNM at LBNL.

Since its establishment in 1931 as a single-purpose accelerator-based University research facility, LBNL has evolved into a multi program national laboratory with a mission to:

- Perform leading multi-disciplinary research in the energy sciences, general sciences, and biosciences in a manner that ensures employee and public safety and the protection of the environment. The energy sciences include materials research, chemistry, earth sciences, and energy and environmental research. The general sciences include nuclear and high-energy physics and accelerator research. The biosciences include the life sciences and structural biology research.

- Develop and operate unique national experimental facilities, for use by qualified investigators from around the world. These facilities include the Advanced Light Source, the 88-inch Cyclotron, the National Center for Electron Microscopy, and the National Tritium Labeling Facility.

- Educate and train future generations of scientists and engineers. Over 440 graduate students pursue research at LBNL, with about 100 students receiving advanced degrees each year. Pre-college programs are conducted for science educators and students.

- Foster productive relationships with industry. The Center for Advanced Materials, the Center for X-Ray Optics, and the California Institute for Energy Efficiency are examples of collaborations with industry. Technology transfer programs promote the application of research results.

To support the national infrastructure for fundamental science and engineering research, LBNL provides a range of unique research facilities and centers to investigators from industry, universities, and government. In fiscal year (FY) 1992, LBNL had over 200 facility users and signed 43 user agreements, for a total of $3.3 million. The major national facilities available to qualified users include:

- The Advanced Light Source (ALS) which provides photon beams of unprecedented brightness and coherence and with picosecond time structure. The Injector was commissioned in FY 1992 and the storage ring was commissioned in FY 1993. The facility began operation in the fall of 1993.

- The 88-inch Cyclotron provides light ions, polarized protons and deuterons, and intense and high-charge-state beams of heavy ions (up to krypton) at energies up to about 35 MeV per nucleon. The cyclotron facility has experimental areas for conducting nuclear science experiments, as well as research in other areas such as life sciences, atomic physics, and radiation damage in semiconductors.

- The National Center for Electron Microscopy consists of the High Voltage Electron Microscope which operates at up to 1.5 MeV (the highest energy in the United States); the Atomic Resolution Microscope offers 1.5-angstrom resolution; and analytical microscopes and support facilities. An upgrade of the facility is planned.

- The National Tritium Labeling Facility provides advanced instrumentation to investigators needing high-specific activities of tritiated compounds as tracers in chemical and biomedical research.

  In addition to these national facilities, other research facilities involved in collaborative research include the Center for Computational Seismology, the Sky Simulator, the Mobile Window Thermal Test Facility, and the Low Background Counting Facility. The Laboratory has established programmatic research centers with the specific objectives of fostering collaborative research with industrial and educational institutions. These Centers include, for example, the Center for Advanced Materials, the Human Genome Center, the Center for X-Ray Optics, the Center for Computational Seismology, the Center for Building Sciences, and the Center for Isotope Geochemistry. In addition, at LBNL, radiochemical and radiobiological studies are performed in many laboratories in a controlled environment and typically research projects use extremely small (millicurie) quantities of a large number of radionuclides. At the accelerator facilities, radiation fields are well characterized and controlled.

- A new Hazardous Waste Handling Facility (HWHF) has replaced the existing HWHF. The new HWHF is located at the east end of the site and is built to meet the latest waste management requirements incorporating improved facility safety design for worker and environmental protection and complete multiple waste-stream capability.

Some examples of anticipated future activities and facilities at LBNL include:

a. Human Genome Laboratory

The Human Genome Laboratory will be a large three-story building located near the Biomedical Laboratory and the Cell Culture Laboratory. This state-of-the-art molecular genetics research facility will contain open laboratory areas furnished with modular wet benches and desks. Support facilities, including cold rooms, darkrooms, cell tissue rooms, autoclaves, and laboratories for radiological work, robotics, instrumentation and computation, will be adjacent to the laboratory area.

b. Chemical Dynamics Research Laboratory

Located in a new three-story large building adjacent to the ALS, the Chemical Dynamics Research Laboratory (CDRL) will be a state-of-the-art national facility for chemical-dynamics research using laser and synchrotron radiation. The laboratory includes an infrared free-electron laser, ALS beamlines optimized for chemical sciences research, advanced lasers and molecular-beam apparatus, universal-particle mass detectors, computer-based modeling systems, and auxiliary instrumentation. The building includes eight support laboratories, and 40 offices.

c. Building Technology Initiative

A new light laboratory and office building, the Energy and Environment Facility, will support Energy and Environment Division programs in building energy conservation, solar heat technologies, electrochemical energy storage, and thermal energy storage. In progress is a conceptual design for a building to provide offices and laboratory space for Environmental Protection; Occupational Safety; Radiation Assessment; Environmental Health and Safety (EH&S) Training, and EH&S Division Administration.

The pilot program at LBNL will begin one week after the Memorandum of Understanding is signed.

RADIOCHEMICAL ENGINEERING DEVELOPMENT CENTER

The Radiochemical Engineering Development Center (REDC) is the production, storage, and distribution center for the DOE heavy-element research program. The facility, composed of two buildings adjacent to the High Flux Isotope Reactor, processes irradiated fuel elements and targets for DOE programs. Base funding comes from Energy Research, with supplemental funding coming from Defense Programs and Environmental Management. The Transuranium Element Program processes irradiated targets to chemically separate and purify berkelium, californium, einsteinium, and fermium for shipment to the research community and other end users. The Mark 42 Processing Program entails processing ten Mark 42 assemblies, which were irradiated at the Savannah River Site in the early 1980s, to recover plutonium-242, americium-243, and curium-244. One assembly per year is processed, with the radionuclides being shipped to Los Alamos National Laboratory for a classified end use. One of the two-story buildings contains three hot cells dedicated to target fabrication, four for chemical processing,

and one each for analytical sample analysis and waste-handling. The other building contains six heavily shielded hot cells, one unshielded hot cell, and a water-filled pool, used as a storage basin for fabricated neutron sources.

The pilot program at REDC will begin five months after the start of the LBNL pilot, in order to take advantage of the experience gained at the latter facility.

IDAHO SPENT FUEL DRY TRANSFER AND STORAGE FACILITY

The Idaho Spent Nuclear Fuel Program provides safe interim storage for a wide variety of fuel. The program is currently focused to provide interim dry storage of spent nuclear fuel (SNF) at the Idaho National Engineering and Environmental Laboratory (INEEL). The program will place fuel into road-ready containers suitable for interim storage in Idaho followed by eventual shipment to an off-sight location as required by a court settlement agreement with the State of Idaho.

The Idaho DOE fuel is currently in a variety of storage configurations. DOE plans to place all SNF in a central, NRC licensed dry storage facility, once a regulatory framework allows the NRC to regulate DOE fuel. DOE is evaluating several facilities for the NRC external regulation pilot program to conduct simulated regulation on DOE generated SNF. An earlier candidate was found to be unsuitable due to the commercial nature of the SNF currently included in the scope of that project. Fuel at the INEEL range from well-characterized, dry fuel, with cladding intact, to breached, saturated fuels that have been previously canned. Well-characterized DOE fuel, with quantities that minimize licensing issues with the NRC, are being sought for the scope of the pilot program candidate.

DOE has two applications submitted to NRC. One for a license to store TMI-2 fuels at the INEEL and another for the license transfer to DOE to operate the Fort St. Vrain dry storage facility in Colorado. The TMI-2 facility license is an important part of meeting the requirements of the settlement agreement between DOE and the State of Idaho. The pilot program will be scheduled such that it will not interfere with the active license process underway and in accordance with DOE's schedule.

SCHEDULE FOR COMPLETING TASKS REQUIRED BY MARCH 28, 1997, STAFF REQUIREMENTS MEMORANDUM

SRM1 **FY97 MOU/IAG (Tasks 18, 24)***

In fiscal year (FY) 1997, initiate development of a Memorandum of Understanding (MOU) and Interagency Agreement (IAG) with the Department of Energy (DOE) to establish framework and obtain necessary budgetary resources from DOE.

SRM2 **FY97 Budget/FTE (Tasks 46,31)**

Seek to obtain budgetary resources from DOE and relief from personnel full-time equivalents (FTEs) ceilings from the Office of Management and Budget.

SRM3 **FY97- Inform Commission**

Periodically inform the Commission and seek approval and guidance; DOE & Nuclear Regulatory Commission staff brief the Commission.

SRM4 **FY99 - Legislative Language (Tasks 142,134)**

Develop legislative language laying out scope and extent of NRC authority, relationship with other regulatory agencies, and consider the effect of existing statutes on NRC oversight of DOE facilities.

SRM5 **FY97 - Facility Identification**

Carry out an initial identification of DOE facilities' activities that would be subjected to NRC regulation

SRM6 **FY97-99 - Identify Regulatory Relationship/Stakeholder Involvement (Task 109)**

Analyze the relationship with other regulators of DOE facilities, including the need for MOU's with the Occupational Safety and Health Administration, the Environmental Protection Agency, the Defense Nuclear Facilities Safety Board, and the States. Discuss the "lead agency" concept.

SRM7 **FY 99 Transition Schedule (Task 157)**

Consider the potential schedule for transition of the identified facilities and activities to NRC regulation.

*Task numbers in parentheses refer to the May 13, 1997, detailed schedule.

Attachment 2

SRM 8 **FY 99 Assess Resources (Task 37)**

Provide a realistic assessment of the financial and personnel resource needs for NRC oversight.

SRM9 **FY 97-99 Assess Funding (Task 46)**

Assess methods of funding NRC oversight (e.g., direct appropriations, fees paid by DOE contractors, etc.).

SRM10 **FY 99 Issues/Approach (Tasks 65-95)**

Consider technical/regulatory issues related to external regulation, and potential methods (licensing, certification) of regulation and the transition from current DOE order system, implemented by contract clauses, to the NRC regulatory framework.

SRM11 **FY 99 Working Group Report (Tasks 62-69)**

Assess the details of the DOE Working Group Report and advise the Commission on policies, procedures, and approaches to the issues.

SRM12 **FY 97-99 Maintain Credibility (Task 95+)**

Describe how NRC will maintain credibility and have an immediate positive effect.

SRM13 **FY 97-99 Agreement State Consistency (Task 87)**

Describe how consistency among the Agreement States will be ensured.

SRM14 **FY 99 Enforcement (Task 85)**

Describe how NRC will effectively enforce its requirements.

SRM15 **FY 97-99 Maintain Safety Focus (Task 95+)**

Describe how NRC will maintain high standards, avoid degradation of safety performance and dual standards.

SRM16 **FY 99 Security/Safeguards (Task 77)**

Consider DOE proposal to retain regulatory authority on security and safeguards.

SRM17 **FY 99 D & D (Task 78)**

Consider NRC role in decontamination and decommissioning (D & D) of DOE facilities.

SRM18 **FY 99 Use of 10 CFR 2.206 (Task 89)**

Consider whether to use the 10 CFR 2.206 petition mechanism, or to use "citizen suits."

SRM19 **FY 99 NARM (Task 81)**

Consider possible regulation of naturally occurring and accelerator-produced radioactive materials.

SRM20 **FY 99 Accelerators (Task 80)**

Consider regulation of accelerators.

SRM21 **FY 99 MOU Legislative Phase (Task 151)**

Develop MOU with DOE for the legislative phase.

SRM22 **FY 99 Resource Legislative Phase (Tasks 31-57)**

Develop a plan for obtaining resources for the legislative phase of the project.

ORIGINAL

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Title: AFFIRMATION

Location: Rockville, Maryland

Date: Friday, September 19, 1997

Pages: 1 - 3

ANN RILEY & ASSOCIATES, LTD.
1250 I St., N.W.,Suite 300
Washington, D.C. 20005
(202) 842-0034

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

- - -

AFFIRMATION

- - -

PUBLIC MEETING

Nuclear Regulatory Commission

One White Flint North

Rockville, Maryland

Friday, September 19, 1997

The Commission met in open session, pursuant to notice, at 11:46 a.m., Shirley A. Jackson, Chairman, presiding.

COMMISSIONERS PRESENT:

SHIRLEY A. JACKSON, Chairman of the Commission

GRETA J . DICUS, Commissioner

NILS J. DIAZ, Commissioner

EDWARD McGAFFIGAN, JR., Commissioner

STAFF PRESENT:

JOHN C. HOYLE, Secretary of the Commission

KAREN D. CYR, General Counsel

P R O C E E D I N G S

[10:46 a.m.]

CHAIRMAN JACKSON: Good morning, ladies and gentlemen. This is an affirmation session. We have one item to come before us this morning.

Before I ask the Secretary to lead us through the item for affirmation, do any of my fellow Commissioners have any opening comments they would like to make?

If not, Mr. Secretary, please proceed.

MR. HOYLE: Thank you. Chairman and Commissioners, the paper before you is SECY-97-209 concerning the Louisiana Energy Services case. In this paper the Commission is being asked to act on an order responding to a motion for reconsideration by the Citizens Against Nuclear Trash of the Commission's order of September 3, 1997, that remanded one issue on waste disposal and decommissioning funding to the Atomic Safety and Licensing Board.

Each of you has voted to approve the order denying the motion for reconsideration. I ask you to affirm your votes.

CHAIRMAN JACKSON: Aye.

COMMISSIONER DICUS: Aye.

COMMISSIONER McGAFFIGAN: Aye.

COMMISSIONER DIAZ: Aye.

MR. HOYLE: Thank you.

CHAIRMAN JACKSON: Is there anything else to come before us today?

MR. HOYLE: Nothing today.

CHAIRMAN JACKSON: We stand adjourned.

[Whereupon at 11:47 a.m. the meeting was concluded.]

CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: AFFIRMATION

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Friday, September 19, 1997

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: Michael Paules

Reporter: Michael Paules