ORIGINAL

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Title: MEETING WITH ORGANIZATION OF AGREEMENT STATES AND CONFERENCE OF RADIATION CONTROL PROGRAM DIRECTORS PUBLIC MEETING

Location: Rockville, Maryland

Date: Wednesday, October 20, 1999

Pages: 1 - 97

ANN RILEY & ASSOCIATES, LTD.
1025 Connecticut Avenue, NW, Suite 1014
Washington, D.C. 20036
(202) 842-0034

DISCLAIMER

This is an unofficial transcript of a meeting of the United States Nuclear Regulatory Commission held on October 20, 1999, in the Commission's office at One White Flint North, Rockville, Maryland. The meeting was open to public attendance and observation. This transcript has not been reviewed, corrected or edited, and it may contain inaccuracies.

The transcript is intended solely for general informational purposes. As provided by 10 CFR 9.103, it is not part of the formal or informal record of decision of the matters discussed. Expressions of opinion in this transcript do not necessarily reflect final determination or beliefs. No pleading or other paper may be filed with the Commission in any proceeding as the result of, or addressed to, any statement or argument contained herein, except as the Commission may authorize.

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

OFFICE OF THE SECRETARY

***

MEETING WITH

ORGANIZATION OF AGREEMENT STATES AND CONFERENCE OF RADIATION CONTROL PROGRAM DIRECTORS

***

PUBLIC MEETING

Nuclear Regulatory Commission
One White Flint North
Rockville, Maryland
Wednesday, October 20, 1999

The Commission met in open session, pursuant to notice, at 9:27 a.m., Greta J. Dicus, Chairman, presiding.

COMMISSIONERS PRESENT:

GRETA J. DICUS, Chairman of the Commission
EDWARD McGAFFIGAN, JR., Commissioner
JEFFREY S. MERRIFIELD, Commissioner

ANN RILEY & ASSOCIATES, LTD.
Court Reporters
1025 Connecticut Avenue, NW, Suite 1014
Washington, D.C. 20036
(202) 842-0034

STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE

ANNETTE L. VIETTI-COOK, Secretary of the Commission

STEPHEN G. BURNS, Deputy General Counsel

STANLEY R. MARSHALL, OAS Chair.

ROBERT M. HALLISEY, CRCPD Chair-Elect.

EDGAR D. BAILEY, OAS Chair-Elect

RICHARD A. RATLIFF, PE, LMP, OAS Secretary

ROLAND G. FLETCHER, OAS Past Chair

DAVID K. WALTER, Chair, SR-6 Committee

P R O C E E D I N G S

[9:27 a.m.]

CHAIRMAN DICUS: Again, good morning, ladies and gentlemen.

On behalf of my fellow Commissioners, I would like to welcome representatives from the Organization of Agreement States and the Conference of Radiation Control Program Directors to discuss topics of particular interest to our regulatory programs.

I would like to recognize that this briefing is part of an ongoing constructive dialogue on a continuing exchange of information between the states and the NRC concerning areas of mutual interest.

Today, we will hear from the OAS, Organization of Agreement States, and the CRCPD, Conference of Radiation Control Program Directors, regarding several issues, including the OAS resolution in support of NRC's budget, the DOE pilot program as it relates to the states, NRC's allegation protocols, a petition for rule-making on the topic of source material, 10 CFR Part 40, continuing off-run source initiatives, release levels for solid materials, and the Part 35 medical rule-making proposed draft final rule.

I would ask that, before you begin each of your presentations, please introduce yourselves, provide your affiliation, either the OAS or the CRCPD, and identify the

state that you are from, and we may stop your presentation from time to time to ask questions, however we will try to let you get through your presentation with minimal interruption and save our general questions till the end of each of your presentations.

Do any of my fellow Commissioners have any opening remarks they wish to express?

COMMISSIONER MERRIFIELD: Madam Chairman, I'd like to add my appreciation for the representatives to come in today. I think the relations between the NRC, the agreement states, and the CRCPD are important. I look forward to having an opportunity for a good dialogue today.

In a clarification, I take it that Madam Chairman's intention is for us, at the end of each of the presentations, to have an opportunity to ask questions on the areas in that presentation?

CHAIRMAN DICUS: That's my intent, if everyone is willing to do that, because each one is addressing a particular subject. So, rather than hold the questions to the end, I think at the end of each subject, it would be appropriate to address the issues.

COMMISSIONER MERRIFIELD: I think that's fair.

CHAIRMAN DICUS: All right.

Well, if there are no further questions or comments, then, Mr. Marshall, will you please proceed with

the briefing?

MR. MARSHALL: Thank you.

My name is Stan Marshall, from the State of Nevada, and I'm pleased to be here as Chairman of the Organization of Agreement States.

I'd like to quickly introduce Ed Bailey, Chair-Elect for the Organization, Secretary Richard Ratliff. David Walter from the State of Alabama is also here. We understand Roland Fletcher is en route to the meeting, and also Bob Hallisey as Chairman for the Conference of Radiation Control Program Directors from the State of Massachusetts.

The purpose of the OAS briefing today is to provide an update to the Commission about OAS concerns and issues in support of the state-Federal relationship in a longstanding national radioactive material program.

Briefing topics today will include Department of Energy regulation and external regulation -- the external regulation pilot program status, by Ed Bailey; source material exemptions, by Richard Ratliff, State of Texas; comparisons of Part 35 and Part G, David Walter from Alabama; and NRC allegation protocols, Roland Fletcher; lastly, my closing remarks of the Organization of Agreement State resolution to support the NRC proposed budget.

I'd like to turn this over to begin the

presentations.

MR. BAILEY: My name is Ed Bailey, and as Stan mentioned, I am with the State of California Radiologic Health Branch and here representing the Organization of Agreement States.

Today I'd like to make a short presentation on the external regulation project of DOE facilities.

I believe you have copies of the slides. Simply note the facilities that have been looked at in pilot projects: Lawrence Berkeley National Lab, Oak Ridge National Lab, Radio-Chemical Engineering Development Center, and Savannah River Site for Receiving Off-Site Fuel.

California is particularly interested in the external regulation of DOE because we have seven DOE sites in California. Some of those are fairly unique in that two of those sites are actually on State of California land; three of them, the employees at the labs are State of California employees, not private contractors, not DOE employees.

When we get into the models that were presented in the pilot studies, that becomes important, because Federal OSHA does not cover state employees, so that OSHA would not be a viable regulator for the people at Lawrence Berkeley National Lab, Lawrence Livermore National Lab, as it turns out, Los Alamos National Lab, because they're also employees

of the State of California, and the smaller lab, the Laboratory for Energy-Related Health Research at the University of California at Davis.

The reason we are interested in this, in regulating DOE, is that a rem is a rem is a rem, and it doesn't matter where it comes from, whether it's from AEA materials, whether it's from accelerator-produced radioactive material, whether it's naturally-occurring, or whether it's from machines, and we feel that there should be consistent regulation of all these sources of ionizing radiation, not only at our licensees' facilities but at Federal facilities.

The next part of my presentation, I'm going to concentrate primarily on Lawrence Livermore -- I mean Lawrence Berkeley National Lab, because that's where we did the pilot project.

CHAIRMAN DICUS: Before you go further, I'd like to acknowledge that Commissioner Diaz is on the bridge, and it is a two-way communication, that he can hear you and we should be able to hear him. I'd like for you to be aware of that.

MR. BAILEY: Okay.

CHAIRMAN DICUS: Please continue.

MR. BAILEY: All right.

The Berkeley Lab was founded in 1931, is the

oldest of the national labs. It, of course, is named for Earnest Orlando Lawrence, the inventor of the cyclotron.

It's an unusual lab, because nine Nobel prizes have been awarded to researchers at that particular lab. Also, when we look at all the trans-uranic elements, almost all of them were discovered at Lawrence Berkeley National Lab -- americium, californium, berkelium.

They've recently discovered two more elements there, I think 116 and 118.

So, it's been a focus of primary physics research for a long time.

As I mentioned earlier, it is managed and operated by the University of California. The work at Lawrence Berkeley National Lab is basically unclassified research in basic sciences.

Presently employee over 3,000 people, sits in the Berkeley Hills across the bay from San Francisco, totally surrounded by the University of California at Berkeley, and as I mentioned earlier, it has little or no weapons-related work.

University of California has nine university campuses and three national lab campuses. The national lab directors are on the same level, have the same status as the chancellor of each of the U.C. campuses. So, it's truly integrated into the U.C. system.

Lawrence Berkeley Lab is a rather unique facility in that it has, as I've said, very little weapons-related material, and for the most part, it works with materials that are not normally regulated by the NRC.

I've given a list here of the primary sources of radiation that exist there: the advance light source; the Bevatron, which is not in production now; PET accelerator; heavy ion accelerator.

The one facility that would be regulated normally by NRC if it were a private business is the National Tritium Labeling Facility, which literally sits in a building not much larger than this room we're meeting in today, has an 88-inch Cyclotron there.

The next slide shows sort of the history of the Department of Energy and its self-regulating programs, starting in 1946 with the Atomic Energy Act and going to 1977, where DOE was created as a cabinet-level agency.

The external regulation of DOE is already occurring. The Clean Air Act Amendments extended NESHAPS to DOE sites, and California is now in the process of signing an agreement with EPA to assume regulatory authority under NESHAPS.

So, we will be into the national labs. We will be going and seeing anything that we would see regulating the radioactive materials or other radiation sources there.

Also, the Federal Facilities Compliance Act places DOE sites under RCRA. We are involved in -- or a signer to a Federal Facilities Agreement for the Lear facility at the University of California, Davis, which is cleanup.

There are also existing NRC and agreement state oversights at other DOE facilities, and there's a list of them there.

I would mention just in passing that the fusion facility at General Atomics in San Diego -- I don't know whether they messed up, but they registered all of their x-ray machines with the State of California, and we regularly inspect those facilities.

The drivers for external regulation -- this is from the Ahearne Committee -- were safety, credibility, and stability, and I think we will see that those can be afforded.

We have been involved at LBNL for quite some time. There's a list of different projects we've been involved with as the State of California at Lawrence Berkeley Lab.

The external regulation pilot, phase one -- that's when we met with NRC and did the original pilot.

After Congress said, hey, we want more involvement by OSHA, we went back, and one of the big problems with having OSHA involved at all was, if you're not familiar, OSHA is still on the 12-rem-per-year quarterly dose-based

system.

Their regulations are terribly out of date, and so, it was really interesting to see them go in there and try to apply their regulations to a national lab. It just didn't work.

In fact, after the second day, the people from my team that were there called and said, please, may we come home, because we're looking at ladders, we're looking at electrical cords, we're not doing anything in radiation. So, I let them come home.

The external regulation process -- the next slide gives sort of a brief oversight of what has happened, including the phase two pilot study.

A few of these slides, including the next one, were given to me by DOE.

It doesn't show up well, but you can look at it in your packet. This was presented by one of the people from DOE at a meeting I was at recently.

The diagram on the left represents the DOE structure for regulating and controlling radiation protection, environmental protection, and waste management under the present system.

This person, who is the radiation safety officer at one of the national labs, says, under external regulation, which this particular lab very much favors, all

of the sudden all of these three things that we normally think of as being under some sort of radiation safety head come together under a radiation safety committee regulated by an external regulator.

The next slide shows some of the jurisdictional issues. The top shows NRC and OSHA, OSHA covering NARM, radiation-producing machines -- and this is at the present time -- whereas the states have a continuing spectrum of regulation throughout.

A few quotations that have gone along with it:

The external regulation of DOE -- essentially all aspects of safety at DOE's nuclear facilities and sites should be regulated externally.

"Mr. Chairman, the Department is ready to move forward now to work with you and others to develop a path forward to externally regulate single purpose Energy Research laboratories," and I think that's important.

The weapons program is sometimes held up as a red herring.

None of these external projects involved the weapons program, it was always the energy program, although we could get into a discussion of the weapons program, because we also regulate facilities, just as you do, which are involved in weapons production -- namely, some of the aircraft companies, shipbuilding yards, and so forth.

So, if clearances are needed, we and you have those clearances; it's not a matter of national security, really.

The next slide are statements that were put into the draft final report out of LBNL, and I want to read these two.

The first one is "LBNL agrees with the DOE Team preference that LBNL should be regulated by the same regulators as private industry and academia. LBNL believes that there would be a smooth and seamless transition to external regulation if the regulator were the State of California."

The next slide, "LBNL considers that the benefits of external regulation are strongly dependent on the licensing model. LBNL believes that the only license model that represents a clean break from DOE's self-regulation is the model in which the University of California-LBNL is licensed directly by the NRC or the State."

The main issues from our standpoint are who would be the regulator, would it be the NRC, would it be OSHA, would it be California Radiologic Health, would it be California OSHA?

Next issues are who would be the licensee, would it be the U.S. Department of Energy, University of California, or the lab itself?

I might mention that each of the University of California campuses holds a separate license to do their operations. So, this would be just like adding another license to their pile of licenses.

NUREG-1708 just recently was published, and there is one huge disappointment in that document to the states, and that's the statement which follows.

"With respect to state regulation of DOE facilities, sovereign immunity should not be waived and the states should not regulate DOE facilities."

This finding in the NUREG seems to have some contradictions.

I do not believe that that was the conclusion of the LBNL site team from NRC. This was not the conclusion of the DOE Oakland operations. This was not the conclusion of LBNL, and this was not the conclusion of the State of California.

The question, then, is whose conclusion was it?

In a humorous vein -- I hope you'll take it this way -- as we were going through the phase one or phase two of the external regulation projects, one of the people from the lab said to me, "I don't want to replace one regulator in Washington with another regulator in Washington," and I think that sort of sums up how some of the labs feel in that they would like to be treated as just any other commercial

establishment or academic establishment in the state.

In closing, the Organization of Agreement States recommends that the NRC aggressively seek regulatory authority over DOE and its contractor facilities and, secondly, that NRC include the regulation of DOE contractor-operated facilities in the agreement state program, and I hope it goes without saying that the Organization of Agreement States continues to encourage NRC to become the sole regulator of all sources of radiation, whether they be AEA materials, NARM, or machine-produced.

I thank you. I'd be happy to take any questions or comments.

CHAIRMAN DICUS: Okay. Thank you. Appreciate that.

Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: The answer to your question is, I guess, us.

[Laughter.]

COMMISSIONER McGAFFIGAN: And I want to explore that with you.

The big issue that you didn't come back to is who's the licensee, and one of your diagrams shows that it was a relatively clean diagram, whether it was the agreement state or NRC, and it is the strongly held view of DOE -- well, they don't want anything, but if there was going to be

something, it had been their view all along that they would be the licensee, in which case you get the smorgasbord box rather than the clean diagram.

So, that's an important issue. We're, I think, in agree on that, that the licensee needs to be -- and I guess you didn't come down as to what the university or the lab -- it probably doesn't matter that much between those two, but it is not DOE, and that's your recommendation, right?

MR. BAILEY: Yes, that certainly would be -- my recommendation is that these laboratories, which to the best of my knowledge are almost exclusively run by a contractor rather than by DOE -- that the contractor be the licensee, that the contractor being held responsible for compliance with regulations, just as you see with the Department of Defense where they have essentially captive laboratories or captive manufacturing plants, and they don't exclude those from regulation.

COMMISSIONER McGAFFIGAN: You just mentioned the Department of Defense, and that leads to the next issue. The VA and the DOD medical centers in your state and around the nation are regulated by us, and we have not -- I mean that's a longstanding approach, and it has some real benefits, you know, for the VA in terms of dealing with a single regulator, namely us, that has, you know, whatever rules we have applying Part 35 -- applying to their

facility, and that was, I think, the main thing that motivated us and the Commission and, I think, the senior staff.

I don't know what the team that was involved in the program review -- but that's what was motivating us to think in terms of this other model, that we would -- and obviously, if you do this other model, then we have to have the ability to deal with the accelerators, because a rem is a rem is a rem, we agree with that.

But there is this other model, which is widely used for other Federal licensees, and why doesn't that model -- why can't that work in this case, and why can't that be a real advantage for DOE in terms -- and its licensees in terms of having a single regulator across the country? U.C. should not face New Mexico rules in New Mexico and California rules in California. They could face NRC rules in both places.

MR. BAILEY: I'd like to address that.

The two examples you mentioned, DOD and the VA, again to the best of my knowledge, in both cases those facilities are operated by VA or DOD employees, not by contractor employees. In other words, the VA does not go out to UCLA, for instance, and say come across the street and run VA-Wadsworth. It just doesn't happen, so that you are directly regulating a Federal agency, and we think

that's proper.

COMMISSIONER McGAFFIGAN: But are oftentimes -- I don't know the deal in California, but in New Mexico, the big VA medical center in Albuquerque has all sorts of -- it's right in a whole hospital complex, I'm sure they tend to be, and there's all sorts of work between the -- joint work between the VA medical center and the large hospitals, with one being regulated by us and the others being related by the State of New Mexico, and it seems to work. You know, somehow, when things get to be joint between the two, we somehow make it work.

MR. BAILEY: Well I think there are numerous examples -- almost every university reactor ends up having a line painted on the floor that says here's NRC jurisdiction and here's state jurisdiction.

We could look at the fusion facility, General Atomics. We've got a working agreement now. That's a facility -- that's an NRC licensee, a State of California licensee, and a DOE facility, just as E-Tech -- used to be Rocketdyne.

All three entities operate there, and you have licenses, we have licenses, and DOE has their little niche carved out.

We really don't see where you're talking about a contractor operating something, that there needs to be this

issue of sovereign immunity involved. Any one of those contractors could lose that contract at any time.

In the case of the facilities we have in California -- and I'm sure it applies to other places -- those facilities are actually on State of California land, some of them. The employees are State of California employees.

We don't see why they need to be restricted to a Federal license if one occurs, and you mentioned that you do regulate DOD. We're involved in base closures in California, quite a large number of them. The major problems that we're finding at DOD base closure is not AEA material.

It's two categories of material: radium from dial operations and nuclear weapons debris which was washed off of aircraft and so forth. And I don't believe you regulate either one of those.

So, we go in and try to work on those sites. We go in with EPA teams and so forth.

We find that people are a little amazed that we don't have authority as they do under their EPA agreement to set a standard and make that standard stick, say that's a regulation, and I think that's an important aspect of a nationwide, comprehensive, radiation protection program, is that we do have authority to regulate all sources of

regulation -- most states have that in their provisions -- and that any derived authority that we have through the Atomic Energy Act, through NRC, covers all the sources that you can cover.

COMMISSIONER McGAFFIGAN: I won't pursue this much longer. Unfortunately, as you well know, the political climate in Washington, given Secretary Richardson's opposition, the prospects for this legislation passing in this Congress are not high.

I think we're in agreement more than we disagreement, namely that there would be a real benefit to external regulation, that the licensee needs to be the regulated party, because if DOE or both are the licensee, then you'll get the worst of all worlds.

So, there's a lot that we agree on. Unfortunately, it's not going to happen anytime soon.

MR. BAILEY: We recognize that, too, I'm afraid.

COMMISSIONER MERRIFIELD: I would like to explore some of the issues that Commissioner McGaffigan has gone over in some greater detail, starting with your recommendations. You've got two, and I would like to deal with them separately to the extent Commissioner McGaffigan hasn't.

First is that the NRC aggressively seek regulatory authority over DOE and its contractor facilities.

In your slides, you quote Energy Secretary Bill Richardson, in a letter that he sent to Representative Ron Packard on February 29th of this year, and in it, you quote him as saying "Many of the potential benefits that we expected to see from external regulation have not been demonstrated and appear to be outweighed by associated costs and difficulties raised in the pilot projects," unquote.

I think we, as an agency, have been relatively robust in our defense of the activities that we undertook in the course of this pilot project.

We disagree fervently with those very characterizations of Secretary Richardson.

We believe, and certainly I believe, that -- well, I should say I believe. I, perhaps, shouldn't speak for the Commission on this, but I certainly believe that the activities undertaken by our staff were, in fact, a value-added benefit, were cost-effective, and led to increased and enhanced safety for the individuals who work at these DOE facilities.

The report that we have put out relative to those pilot projects, we believe, demonstrates that the pilots were a success.

Now, I believe that -- as does -- as Commissioner McGaffigan has pointed out -- that we have a good role to play in external regulation of DOE facilities, and indeed, I

believe that the workers at those facilities deserve to have an external regulator to ensure that they have the appropriate levels of health and safety protection as they go about their jobs.

Certainly, the individuals who live around those plants, the stakeholders and the states, also deserve assurances that those facilities are managed in an appropriate fashion, and I think, in my own respect, I think external regulation could be an important enhancement of that program.

My question is -- you know, we have been very active in making our views known on Capitol Hill. I know we've testified before at least four House and Senate committees during the course of 1999 and alluded to this in our testimony.

To what extent have the views of the Organization of Agreement States been carried to Congress, and to what extent have you met, either individually or collectively, with members of your various state delegations to provide them the assurances that this is, indeed, the right direction to go?

MR. BAILEY: I think you've hit an Achilles heel there.

Fortunately or unfortunately, I think you will find that most of the agreement state programs are not

encouraged to directly contact their congressman by their administrations in the state, and often, all of those contacts go through someone far above us in government.

It is certainly a weakness, in my opinion, of the agreement state program in that we don't have that flexibility.

I think the direct answer to your question is that very few people have actually contacted their congressional delegation.

I will say that I was talking to one of our senators' offices on Monday on another issue, and it came up that I was going to be in Washington and we were going to be before the Commission, and the staffer asked, well, what are the topics, and she said would you mind giving me a call?

Well, I can respond in that way, when I get a direct request from a U.S. senator, I can call them back and say, well, we met with the NRC Commissioners and it was a very fine meeting and we brought up the issues that we discussed and I think that they agree with us on some things, but you know, I don't know, and if you've got any magic words for me to say to them, I'd be happy to take them.

CHAIRMAN DICUS: If I could follow up on your question, and then I'll come back to you if we can, but you mentioned -- and I understand the problem, because I've been

in the same situation, but you mentioned that you try to elevate these issues to the senior management at the department level that can go, presumably, to the delegation of the state.

To what extent do you have information or data that shows, when that is done, something did happen to it, or do we not know -- do you not know, when you've tried to elevate these issues, that they have, in fact, been carried forward for you?

MR. BAILEY: I would say it is mixed. Sometimes we get some feedback, yes, that there has been a letter sent.

Normally what will happen in our process, at least, is we will prepare a letter for whomever's signature, whether it be the department head, the agency head, the governor's office, or whatever, and quite often, the feedback we will get will simply be a signed copy of that letter or things go into limbo and you have people call up and see where is it, where is it, where is it?

COMMISSIONER McGAFFIGAN: When I was a former staffer -- I spent 14 years on the Hill, and I had wide contacts in New Mexico, and I told anybody in your situation that they should presume that I called them.

[Laughter.]

COMMISSIONER MERRIFIELD: I had the same standing

observation with my home state of New Hampshire.

Perhaps you may want to volunteer that, if asked, you do have an opinion on it, and that may bring some of that forth.

On the first item, I'd just close with a notion. When we testified before the House Science Committee, which is more supportive, I believe, of external regulation, we were there with DOE and with OSHA testifying. There was not a state view there.

I think it would have helped to further flesh out that opinion, and to the extent you can work with individuals in organizations and in other states to perhaps increase that, I think it would be helpful.

MR. BAILEY: Could I just add one thing to that?

We've expressed -- or I've expressed what I believe the states feel about external regulation, that we should be involved in it.

I think, even if we can't be involved in it, we still very strongly support external regulation of DOE and would support that NRC preferably would be the organization to do that.

COMMISSIONER MERRIFIELD: Just briefly, I want to get to the second point, because I know the Chairman wants to move on, and that is that the NRC include in the regulation DOE contractor-operated facilities in the

agreement state program, your disappointment. I guess there's two levels of issue here.

One is, under the Atomic Energy Act, under Section 274, basically we can only give away those authorities for which we have. So, we can't very well give the authority to you which we don't have.

So, the first thing we need to do is get the authority and then consider perhaps the appropriateness of delegating that to the individual agreement states.

The second issue in that is, though, as you well know, the waiver of Federal sovereign immunity as it relates to DOE and DOD facilities is a very sensitive and relatively contentious issue up on Capitol Hill.

I used to be the lead Senate staffer on Superfund issues, where we had to grapple with that in the sense of our committee. There was great disagreement, and it crossed party lines, it crossed a variety of spectra.

This is one, I think, we, too, as an independent agency, have to trudge very carefully given the fact that there is that level of disunity of a common position of Congress.

So, while you have a huge disappointment, I think it would be not in the best interests of this agency to necessarily be in the forefront of waiving Federal sovereign immunity, since there doesn't seem to be a great deal of

agreement among that, or consensus, I should say, in Congress.

So, I sort of leave that.

COMMISSIONER McGAFFIGAN: There is one last thought I have on this subject, again to try to keep us focused on the main thing, if it ever is going to happen, which is to try to get external regulation with the licensee being the person who is the -- you know, the contractor being the licensee, and that's that you mentioned earlier these other models and you mentioned some in the materials space.

We have similar models in reactor space where something is worked out with the state. We regulate the gaseous diffusion plants, but the states obviously can come in under an MOU and do certain things.

With the State of Illinois, at Zion, we just approved an amendment to an MOU that will allow them to be involved in the decommissioning -- not decommissioning -- watching that facility over an extended period of time while it's in safe-store, and so, there are things that -- if we could get the main thing done, as Commissioner Merrifield suggests, there are things short of dealing with sovereign immunity that would give you a role, and I think we could work those things out.

CHAIRMAN DICUS: Mr. Marshall, do you want to

continue?

MR. MARSHALL: I'd like to move next to Rich Ratliff with the topic "Source Material Exemptions."

MR. RATLIFF: Good morning, Commissioners.

This is one of the topics, I think, that impacts many of the states, and I want to go through some of the initiating events of what we're seeing on source material exemptions.

The first slide, please.

You have the bullet where it says "Shipment of waste containing source material to unlicensed facilities," and I want to clarify that.

What we have done for years -- I've been in 28 years now working on these rules, working with the NRC, through the State of Texas -- I'm with the Texas Department of Health Bureau of Radiation Control, and we always looked at 10 CFR 40 and would ask the question of staff, when it's exempt, does that mean it's exempt for disposal, and we always got the answer no.

So, when material from FUSRAP sites went to California, we felt that -- that kind of brought the issue to a head. It went to a landfill, really not a licensed site, and then, as the Commission, you've reviewed the policy and have confirmed that, yes, if it's exempt, concentrations exempt by the 10 CFR 40, it's totally exempt.

COMMISSIONER DIAZ: Madam Chairman?

CHAIRMAN DICUS: Commissioner Diaz?

COMMISSIONER DIAZ: Can you hear me now?

CHAIRMAN DICUS: Yes, I can hear you now.

COMMISSIONER DIAZ: The reason I was so quiet is because you couldn't hear me before. It's not that I did not have questions.

CHAIRMAN DICUS: Okay. Did you have any questions with regard to the DOE oversight?

Commissioner Diaz, we're not being able to hear you very well, you're breaking up. So, we'll have to re-look at what the problem is so that we can you on the bridge, and I think that's the feedback that we're getting, as well.

Why don't you continue?

MR. RATLIFF: The fact that the NRC clarified that especially the source material that's less than .05 percent by weight was exempt really brought a new regulatory area that the states had to look at, because as you know, the formally utilized sites were determined not to be under NRC jurisdiction, and now the material really was exempt from other sites, and so, we've really looked at this a lot, and when we get down to the point of looking at exempt concentrations versus release for unrestricted use and some of the comments I'll have at the end are some of the

suggestions we have, because when we look at the different levels of uranium and other products that really aren't addressed that come in from the exempt concentration or exempt levels, if it's exempt and it goes to a sandbox at a day-care center, I have a lot more concerns than I do if it goes to a hazardous waste or a regular landfill, and so, I think that there's some tweaking that really needs to be done when this rule is reviewed.

The Colorado program then found a company that was not under the exempt part, but they were a general licensee, and under the general license in 10 CFR 40.22(b), the facility was exempt from a lot of things, including the worker protection, contamination control, and so, they ended up with a facility that would not be released under the state's criteria nor the NRC criteria, but yet, because they were exempt, they really were able to do this operation and really cause radiation areas that were much higher, so we get back to the same thing, a rem is a rem is a rem, really didn't work here.

Then, in specific, the next slide, on 10 CFR 13(a), this is one that -- NRC, I think, started to really look at this in 1992, the 57 FR 48.749. You all proposed to totally re-look at the 10 CFR 40. You know, it's been since the Atomic Energy Commission, I think, created in 1946, and this was set up in 1947 but not based on any radiation

safety criteria but based on the strategic use of the materials, and now that you have real specific decommissioning standards, as agreement states we're adopting these standards.

When we look at the radiation concentrations and the ensuing radiation levels that people could be exposed to, they're not consistent from the standards to what the exemptions are in the rule.

When you look at the exemption, it's less .05 percent by weight, and you go to the next slide, for uranium, just natural uranium, you're looking at 330 pico-curies per gram, for thorium, 116, versus what you and what we require as agreement states, cleanup for uranium sites of 30.

There's a wide difference there.

The thing that we really look at in the states is the fact that you do have the daughter products in any of these, and the radium tends to be one of the more hazardous materials.

In fact, work that I did on the Conference of Radiation Control, working on low-level waste, using NRC's models, radium was equal to or greater hazard than plutonium, because it's a long half-life, it's a bone-seeker, it's a alpha-beta-gamma emitter, you have radon gas produced.

So, radium tends to be one of the materials that can really cause multiple real hazards to people.

So, what we're recommending is that 10 CFR 40, I think, is going to be reviewed, but it's been a long time since this started, and it really needs to be reviewed with your current dose methodologies, your current biological data, and to really go through and look at what is safe, because you really, I don't think, want to have exemptions like you have now, with the source material less than .05 percent by weight is exempt, because it's exempt and it could go to sandbox in a day-care center.

I don't think that will happen, but it's possible, whereas controlled disposal really would be what I would suggest when we get into the amendment, because you could have a two-stage exemption, exemptions that really are exempt, totally exempt.

For instance, the smoke detectors with americium sources -- they're exempt, you put them in the landfill, there's no hazard.

Even if they end up somewhere, they're just not a hazard, whereas those concentrations of uranium and thorium really are not appropriate to be released to put in someone's backyard as fill dirt or whatever.

So, I think there's a two-pronged approach that could be used as stuff that's truly exempt and stuff that's

exempt from being disposed of as radioactive waste but that could go to equivalent disposal.

Then that whole part gets to be one of the parts that -- you can see I have pulled a lot of my hair out over the years about it, because after the Juarez incident back in the '80s, most of our scrap-yards and our landfills have radiation detectors, and so, they detect multiple things.

I would say more than half of it is naturally occurring radioactive material, a lot of patient diapers from medical treatments, but aircraft engine parts come in, and it gets real confusing with the way the rule is set now, because if it's a complete engine, it's not been worked on, it doesn't have any milling or grinding, it can go into the landfill as an exemption, but if it's a part that's less radiation, it can't go in there, and so, this whole part confuses the people who have the aircraft engines, it confuses the regulators, and in general, everybody, and I think, when you do the reviews to this section, it really needs to look at something that will be useful, given the circumstances today, that you have a lot of material recycled, either at the steel mills or material disposed of at the scrap-yards or you do have detectors, so that you really look at the radiation safety as the bottom, that if it's safe it can go there, if not it should not be disposed of in that manner.

Then my final slide here is, looking at the whole issue that we deal with, and I think Ed's touched on it and others will, is NORM, the naturally occurring radioactive materials.

We have many of the same isotopes, you have the same problem, and it's really not an NRC problem, it's the Congress' definition of what you have regulatory authority over.

A number of years ago, the states had worked with NRC to really have control over NORM, and there were studies that were done, but I think the final word came down that really, no, it was a states issue and NRC didn't have resources.

But I think to have -- what we've always talked about is a uniform regulatory program across the United States, which we feel the agreement states have, that NRC really has to regulate these other materials, the NORM, the accelerator-produced materials, and I think it's a big leap to get to the machine-produced, the x-rays and accelerators, but the ideal situation would be that, but just regulating radioactive materials would really, really help.

The FUSRAP issue -- just to touch on it, you know, it's something that was forgotten, now it's come up, it's shifted around, but as states, we're dealing with it daily.

We spend a lot of resources on it, but we feel

that, with the exemption, if it's for disposal only, we have disposal sites that we feel comfortable with that can go there.

The ones that we are looking at in Texas are both hazardous waste sites, so even if it did become a RCRA issue in the future, they're already in hazardous waste sites, but I think clarification on that whole rule to make sure that those things can go there without any problem, because we devote a lot of resource to that, and I think, in the future, as you make changes to this rule, we would really be willing to come to the table, devote our resources to develop a rule that's workable for all of us.

CHAIRMAN DICUS: Thank you. I appreciate your comments on that, and I know that the Part 40 rule-making is lagging a bit. In fact, it's probably been put on hold because of competing priorities that we have and the resource issue that you mentioned.

We recognize, for several of these issues, there are a lot of concerns with both technical issues as well as jurisdictional issues, and we have the staff working on some ideas on how we're going to deal with some of these, and I think we expect a paper to us next month on some of those issues.

FUSRAP is clearly our most frustrating issue, to me, I think to all of us, and we look at it just from the

legal point of view that we have to deal with and then looking at it from a scientific point of view, the two don't -- they pass in the night and they don't quite meet, but that's just part of the fun that we have in our various programs and dealing with some of the issues that we must deal with.

Commissioner Merrifield, did you have any comments you wanted to make?

COMMISSIONER MERRIFIELD: The first one is sort of a clarifying question. You mentioned the notion of these materials -- it was determined they need to disposed of, could go to equivalent disposal facilities. Did you mean RCRA sub-title C facilities?

MR. RATLIFF: If it has hazardous materials, then I think it could go to a hazardous waste site. If it was just contaminated dirt with no hazardous constituent, it could go to just a regular permitted landfill.

So, I think, you know, it really depends on the other constituent, whether it has a hazardous constituent, but I think, at that exempt level, I have no problem, from the health and safety risk, that it goes to those sites.

I think it's better -- that way, at least, it's put into a facility that's monitored, secured, and you don't have it appear in different places in the environment.

COMMISSIONER MERRIFIELD: Okay. So, you're

comfortable with subtitle D facilities.

MR. RATLIFF: Correct.

COMMISSIONER MERRIFIELD: For materials that have hazardous components, subtitle C, and for that which is not exempt, it would go to Enviro-Care or one of the other facilities permitted to take low-level waste.

MR. RATLIFF: Yes.

COMMISSIONER MERRIFIELD: All right.

You talked a lot about the need for consistency in a regulatory approach. Although it wasn't part of your presentation, I do want to explore one issue.

Currently underway at the agency is an effort we have to seek stakeholder input on how or if we should move forward on a clearance rule, and I was wondering, given the issue of consistency, is there a position among your group on that issue that you'd like to share with us, and is that consistent among you all?

MR. RATLIFF: I think the answer is we've discussed it, and the majority, I think, agree. We need a floor that, below this level, it can be handled not as radioactive material.

Without that, you're continually having to go into different modeling, different approaches from state to state.

I think it also helps the people that we both

regulate if they know that this is -- anything above this is going to be disposed of as radioactive waste or radioactive material.

It gives them the up-front foresight to know how they have to conduct their operations and help them conduct them in a better way. The exemptions like this -- I think you run into so much opposition.

What we had, though, in Texas was successful. We were petitioned for rule-making to take radioactive materials with a half-life less than 300 days to go to a landfill, and we had certain concentrations.

It was not only supported by our board of health and our boards and the regulated community, but the Sierra Club supported this rule-making, because it really saved money for the universities, for materials that could go to a landfill under controlled situations and not have to go as low-level waste and therefore leave them money they needed for doing other educational issues.

So, I think there's a lot of different things out there that we can work on to make this issue work, and I really think that the whole clearance regulatory issue is an important one to all of us.

COMMISSIONER MERRIFIELD: Just by of clarifying, you mentioned that a majority of members were supportive of this. I wouldn't want to have you point out which states

weren't, but is there some attempt to come to a consensus view that could be represented as a view of OAS?

MR. RATLIFF: Well, we haven't voted on it, is the thing. We've discussed it a lot, and I think that's what we need to do.

I think that's an issue that's definitely one that we'll have to address and that Ed, as Chairman next year -- it will be a challenge to really get everybody on-board, but there are a few people that still don't think that you need to have a level like that, but most of us who have worked with us and seen the realities agree, you really do need a clearance rule, a below regulatory concern, whatever you want to call it, something that really establishes the lower limit that really causes no health concerns to the public.

MR. MARSHALL: I would suggest there's probably not a significant opposing opinion, that many states without resources or the circumstances to need to address it will probably be in favor, but as Richard says, we've not voted with a formal -- for a formal record on it.

MR. BAILEY: I was at the San Francisco public meeting, and I think there are a couple of things that struck me at that meeting.

One is that somehow we got it over into recycle, and that raised concerns among environmentalists, consumer groups, and so forth.

In listening to representatives from the individual power plants, from the steel industry, and so forth, they were hoping the rule wasn't going to be used as a recycling rule; rather, that it was going to be sold as a disposal rule, and I think if it were repackaged and presented in that fashion, rather than, as it got turned around to, a recycling issue, that it would be a much easier sell.

I didn't see any of those groups, other than some of their organizations, saying, hey, we want this, we want this rule so we can recycle more of that stuff. The steel people didn't want it. The power plants said I don't want me steel going and being recycled.

So those were sort of my takes on that particular meeting, and I did have to add at that meeting, since I was there in California, that both members of the legislative and executive branches of California government really have expressed concern about this rule and whether or not it would be an item of compatibility, strict compatibility, and if it weren't, then would we have shopping around? Could I take my stuff to Nevada or Texas and get it recycled if I couldn't in California?

So, there are all these kinds of issues.

COMMISSIONER MERRIFIELD: This reminds me, whenever I used to have discussions with the state, I would

always refer to the state of Aurora, so you never had to refer to any particular state.

So, let me just get your last point, so it's clear to me, at least.

What you're saying is you think the idea of our having a baseline standard so that there isn't shopping by some of these folks is a positive thing. That was the impression.

MR. BAILEY: Yes, I do, and we did -- I think, during that meeting, did suggest that you have a table similar to what you do for water and air, rather than having all this dose modeling, which anybody that's worth their salt as a dose-modeler can change it by at least one order of magnitude in the process. So, give us a table, you measure it, if it's below it you throw it away or dispose of it however it should be.

CHAIRMAN DICUS: Okay.

Do we have Commissioner Diaz on-line?

COMMISSIONER DIAZ: I am on-line.

CHAIRMAN DICUS: Can we turn up the volume, because we can barely hear you.

COMMISSIONER DIAZ: Can you hear me now?

CHAIRMAN DICUS: Barely.

COMMISSIONER DIAZ: I guess this is not working. So, I'll just listen and be quiet.

CHAIRMAN DICUS: I apologize, Commissioner Diaz. I think our technology is a little behind the times right here, so we need to keep working on that, but at least you can hear us, so that part is good, and I'm sure, if you have any particular questions, if you'd like to submit them in writing, I think we can probably get them address.

Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: I will get off the clearance for the moment and get back to the Part 40 issues that you have raised with us.

The first comment I would make is that the Staff has not been consistent over the years with regard to exempt materials and whether they could be disposed of. We went and looked at the history of that last year.

The second point I would make is that in the case of the Metcoa material that ended up at WCS, the state regulator in Texas for RCRA had previously allowed some FUSRAP material from another state which they had declared exempt NORM, almost identical stuff, to go to WCS. That was a factor and it was not going to a school sandlot. It was going to a hazardous waste facility. It was all those sorts of things that weighed in our mind in making that decision.

I agree that we need to look at Part 40. I think one of the issues -- I hope it is not forever on hold. We have three papers before us at the moment that need to be

voted on once we get some additional information and additional things need to be looked at.

One of the problems we face in all honesty in this area is we have got a very small number of licensees and under the fee legislation they get weighed down with everything. At the moment they get weighed down with a lot of adjudicatory matters which hopefully rules would help straighten out so that there would be less adjudication, but this may be an area where some day somebody in the Congress who really wants us to legislate in this area is going to have to give us some money off the fee base to revitalize Part 40 and get it done and get the resources for it, because we will bankrupt the few remaining people who are trying be prepared to mine uranium if we make this too large a process, and yet it needs to be done.

The issue I would like to explore is NORM, because you guys have been saying, both of you, a rem is a rem is a rem, and one of the perplexing things for me still learning this business is the way that NORM gets handled -- you know, the CRCPD had some draft rules on NORM and you got the usual letter from EPA saying it was inconsistent with Superfund principles, blah-blah-blah -- that we get, that DOE gets that anybody who tries to make rational regulations gets, but what you were trying to do there was consistent with your current practices, as I understand it, with regard to

NORM.

Could you tell me a little bit -- Mr. Bailey should feel free to talk -- you know, one of the perplexing things is the famous Buttonwillow case. That facility for better or worse is regulated and presumed safe by I guess a different state of California regulator to receive NORM materials from the nearby oil fields, the slag and whatever, up to 2,000 picocuries per gram, as I understood it, and that is what the Corps has been saying and yet stuff that is far less contaminated coming in from New York the state has a problem with and how often are these RCRA facilities allowed to take fairly significantly contaminated materials from oil fields or whatever?

MR. RATLIFF: In Texas, where we have a lot of oil drilling and reworking of wells, we have real specific rules, and the 2,000 picocurie per gram is a Department of Transportation rule for their purposes. If it is below that it wasn't regulated for transportation purposes.

I think somehow EPA got this transferred to some of the states' hazardous waste groups and they put this in permits and that is not an appropriate number. In Texas we set up our numbers based on two things for a oil and gas related scale that has NORM, but we went with the limit for uranium mill tailings for radium, which is 5 picocuries per gram unless they could show that the radon emanation was

less than the 20 picocuries per square meter per second, which is the real controlling factor EPA had on looking at the dose, and if it is less than that they can go to 30, so radium ends up being the controlling factor, then other isotopes you have in NORM the uraniums, the thoriums, other daughter products. We have gone to the .05 percent by weight exemption and extracted that and just came across the board for 150 picocuries per gram.

It has worked well for oil and gas, but the unique thing with oil and gas though in Texas is that it is regulated by us and our Railroad Commission of Texas and they are allowed to take -- there is a license that we have with two companies and they permit these companies where they put it back where it came from.

The have deep injection wells and so you don't end up with a disposal problem for oil and gas NORM. Other NORM is a different situation. There really is no disposal site to handle that NORM. I think it has to be based on risk and that is what we have done in our rules, and we have looked at what equivalent rules do we have for uranium industry and for other areas.

CHAIRMAN DICUS: Yes.

COMMISSIONER MERRIFIELD: Can I just interrupt because this is a very good piece I want to ask a question to clarify. You said the EPA adopted the DOT rules relative

to the 2,000 picocuries per gram --

MR. RATLIFF: I don't know if they adopted it. I think they presented it that it was a number out there, and I am not sure how the states got it but it seems that there are multiple state hazardous waste regulatory agencies in states that have come up with that magic number and really they are using it inappropriately.

COMMISSIONER MERRIFIELD: But that number apparently went through EPA, do you believe? I am just guessing because they are EPA delegated programs.

COMMISSIONER McGAFFIGAN: And I think this is a discussion that I think some day we need to have in much greater depth, but the other place --

CHAIRMAN DICUS: So are you suggesting we have a NORM briefing?

COMMISSIONER McGAFFIGAN: Well, some day we need to have it, although that is not our area.

CHAIRMAN DICUS: It might be some day though.

COMMISSIONER McGAFFIGAN: A rem is a rem is a rem.

COMMISSIONER MERRIFIELD: I was going to also suggest that there is some possibility at least, although I wouldn't want to unfairly characterize our brethren at the EPA that we may be suggesting levels that are more protective of health and safety than they are.

[Laughter.]

COMMISSIONER McGAFFIGAN: Well, certainly our Agreement State colleagues are.

MR. BAILEY: I think they would disavow any knowledge of that number.

COMMISSIONER MERRIFIELD: That is why we don't want to make an unfair characterization.

COMMISSIONER McGAFFIGAN: But just to stay on this subject, I mean again something that was motivating us when we were thinking about what the right thing to do is here, and Mr. Paperiello is sitting there behind you, but coal ash, which is probably the single largest amount of technologically enhanced NORM we have out there, as I understand it EPA encourages the recycler of coal ash in concrete for building materials, et cetera.

You mentioned your state legislators are concerned about things. Well, some of that coal ash can be 500 parts per million uranium and thorium, right? -- or higher. It can be fairly hot and if it were controlled by us it would be in this mix. I don't know what the effect of recycling the coal ash in building materials and concrete is but if it is fairly hot coal ash it is trivial compared to all the granite on Capitol Hill probably but there's some dose that probably would be higher than any dose you would get from any recycled nickel coming out of Mike Mobley's contractor in Tennessee by many orders of magnitude.

MR. RATLIFF: I think the reason sometimes it gets blessed is because it is natural. It has been here. It is extracted and what we see with the coal ash is that it can be high. Typically it is lower but it is still being put into building materials and if I remember right, there is still a requirement that federal new buildings use this for recycling purposes.

The studies we have done have looked at the radon emanation, which is because radon would be the greatest problem --

COMMISSIONER McGAFFIGAN: Right.

MR. RATLIFF: -- and there is just not a radon problem, but yet it is still material going there for inappropriate use and we concur with that.

COMMISSIONER McGAFFIGAN: I don't know whether it is inappropriate or appropriate. It is just the practices, the actual practices that we have going on across the nation, and your viewgraphs were to the point that the practices don't add up to a coherent whole, the practices don't add up to a coherent whole and it is not just our fault and it is not your fault.

CHAIRMAN DICUS: It is a combination.

COMMISSIONER McGAFFIGAN: It is EPA has to take some responsibility as well. Why don't I leave it at that.

CHAIRMAN DICUS: All right. Mr. Marshall is

ready. We can proceed to the next topic, and I am kind of looking at the watch. We still have a lot of material to cover, so try to move us along.

MR. MARSHALL: I am watching it as well and I will just ask David and Roland to bear that in mind as we still --

CHAIRMAN DICUS: Thank you.

MR. MARSHALL: -- have Bob -- David Walter from Alabama on comparisons of Part 35 and Part G.

MR. WALTER: And you might say I am here as Agreement State but I am also here as the CRCPD since virtually everything that I am going to talk about has to do with the Conference's SR-6 committee.

I would like to take a few minutes to inform you about areas of the revised Part 35 for the Agreement States and the Conference's use of radioactive materials or the SR-6 committee have some differences of opinion, but I also want to give you my opinion on how the parallel rulemaking processes work for Part 35.

Let me start with the second slide with the duties of the authorized user. At the public hearing conducted at the '98 Organization of Agreement States Meeting a number of states commented that the specific duties of the authorized users should be detailed in the rules. Well, currently the definition of an authorized user includes reference to their

required training and experience. The only time that a specific duty is spelled out for an authorized user is in 35.40 where it says that the authorized user must prepare a written directive.

If you look at 35.27 it says the licensee shall require a supervised individual to follow the instructions of a supervising authorized user, but there is no reference to the duties of that supervising authorized user and 35.27 further refers you to Rule 35.11, but when you look at 35.11 it states that an individual may perform license duties under the supervision of an authorized user as provided in 35.27, and that appears to be a Catch-22.

Our committee believes the rules should be a little bit more specific regarding the duties of all the authorized users. It is our intent to offer rule text that specifies the radiation safety related duties of the authorized user based on the radiation risk of the study.

These will be broken into three specific requirements that may sound very familiar to many of you -- selecting the patient, prescribing the dose or dosage, and interpreting the results of the study. The reason it may sound familiar is because this text is similar to that that was used in the mid-1980s Reg Guide 10.8.

Now there will be those out there who say it is the practice of medicine and we have to stay out of it, and

I say to them that that is true. It is the practice of medicine. But it is also dealing with radiation safety of the patient and that is our job, and you simply just can't separate those two. Next slide.

Next I want to discuss the submission of written procedures. Throughout the new Part 35 there are requirements to develop and implement written procedures. However, there is no requirement that the licensee submit these procedures for review by the Commission Staff. Rather the intent is to review these written procedures only when a problem is found during an inspection that should have been addressed by one of these required procedures.

Well, the SR-6 committee intends to have Part G recommend the submission of these written procedures for review by the state agency. The reason is, simply stated, we would rather determine the adequacy of a written procedure before a problem occurs. If you want until after a problem occurs you may find that the written procedures were totally inadequate, were never even written or that nobody even knew they existed and if that is the case, that means each person is left on their own in handling any given situation and quite likely they are going to handle it in a different way, and I don't believe that this is in the best radiation safety interest of the patients or occupational workers.

Additionally, we also believe that the review and

discussion of a written procedure opens a line of communication between the agency and the licensee and can build a rapport or at least start building a rapport between them and it can increase the confidence of both parties in the resultant radiation safety program. Next slide.

Now let me discuss patient release criteria. Rule 35.75, or the patient release rule subject, is a very difficult one for us states. On the one hand you have a possible small increase in exposure to the general public with a tradeoff of lower medical costs and better patient morale, but on the other hand you have muddied the radiation safety aspects of unsealed source therapies by placing radiation safety into the hands of a minimally trained patient and their family and you may have led to increased costs to state agencies who have no choice but to respond to landfill alarms and deal with resultant waste.

There are some points I would like to discuss here.

First, if a member of the public can receive 5 millirems of exposure from a released patient, what is the limiting factor for this exposure? Can this same member of the public -- for instance, an LPN working at a nursing home -- be exposed to numerous released patients resulting in exposures much greater than 500 millirems in a year? If so, then what is the point of having a 100 millirem per year

limit for the general public?

On this point, why not offer the same types of exemptions to all other different types of licensees, not just medical? Well, once it is decided that such exposures are acceptable, then your heart of the matter is the training that is given to these patients and their families. Is it adequate and effective? If it is and the patient really understands why and follows through on how to maintain these exposures to others' ALARA and how to minimize the waste problem, then this rule should work. If not, we end up with unnecessary doses to the public and increase landfill alarms.

Judging by the increases in landfill alarms over the last few years, it appears that at least some of the licensees are not providing adequate ALARA training as required. Next slide.

The revised Part G will offer as an option to the states verbiage that will allow the release of patients but will try to assure that the ultimate responsibility for radiation safety remains with the licensee. Additional text will be included that requires the authorized user to personally approve the release of the patient based on their professional opinion that the individuals are adequately trained and fully understand how to maintain exposures ALARA and minimize the release of radioactivity. Next slide,

please.

Now let's turn to authorized user training and experience. In the revised Part 35, there has been an increase in the required total number of hours of training from 800 to 700 hours for uses covered under 35.390. SR-6 applauds this increase in training hours because the new Part 35 is supposed to be a more risk-based rule and we believe that the therapeutic use of unsealed radioactive material is about as high a risk as you are going to get in these rules.

However, we disagree with the decision to maintain the training and experience for oral I-131 as specified in 35.392 and .394 to only 80 didactic hours and three supervised cases.

When you compare to other therapies those involving I-131 have proven to be the most likely to have misadministrations, and of all the current unsealed source therapies, oral I-131 poses the greatest radiation risk to ancillary personnel and to the general public. For these reasons the new Part G will recommend not have lesser training requirements for those authorized users who wish to use only oral I-131 for therapy. The committee will recommend that they be required to have the same 700 hours of training and experience as anyone else who wishes to use unsealed therapeutic radiopharaceuticals. Next slide.

One of the things that SR-6 wanted included in the revised Part 35 was a set of minimum training and experience criteria for technologists. I mean they are the ones who actually handle the isotopes and dose the patients 99 percent of the time but there are no minimum training and experience requirements in the rules. Unfortunately we were unable to get such criteria included in the new rule, so our committee is going to try to come up with a set of recommended minimum radiation safety -- and I stress radiation safety -- training and experience criteria for nuclear medicine and therapy technologists.

The committee has already gathered minimum training and experience requirement information from many of the states that already require licensure or registration for technologists and will use that information in drafting our rule text and although this text that we draft will not be as restrictive as many of these current state requirements, there are a number of states out there that have no current requirements, so this could be a good starting point for them. Next slide.

Now I want to discuss probably the most contentious rule in this draft Part 35, to me at least, and that is 35.3047. As anyone on your staff who was at the working group meetings can tell you, I don't agree with this reporting rule at all. Regardless of its intent, I view

this rule as a de facto approval to allow embryo fetuses and nursing children to receive 50 times more exposure than the rest of the general public and 10 times more exposure than the allowable limits from a released patient.

Because of the obvious contrary health physics implications the SR-6 committee has decided that the revised Part G will not recommend the inclusion of such a reporting requirement. We will instead allow our Part 20 equivalent exposure limits and reporting requirements to take precedence. Next slide.

Now a few statements about the parallel rulemaking process during this Part 35 rewrite. I believe the process has worked very well and has been quite helpful to the states, but for the process to work its best the states should be represented on the rule writing teams. Now the Part 35 working group included Marsha Howard from Ohio as well as myself, and Tom Hill from the state of Georgia represented the Agreement States on the steering group. This seemed to work quite well, and my being on the SR-6 committee helped a great deal.

For any major rule revisions or new rule writing I strongly urge that a member of the Conference SR committee that is affected by the change be included on the NRC working group. In addition, the Agreement States should have a representative on the steering group, because having

these state representatives on these working and steering groups has provided for a better line of communication to the Agreement States. The representatives can relate specific areas of concern to the states and let them comment and give suggestions about the rule, and give those back to those individuals who can relate them to the working groups in person.

I was also able to give regular updates to my SR committee members and this allowed them to understand the direction the NRC rule was taking and tried to start formulating ideas for suggested state regulations text.

Our committee met in February of this year and I think we were all very pleasantly surprised at the amount of work that we got down in the amount of time that we had, and I attribute much of this to the members being informed of what the NRC drafts were so that we didn't have to bring them all back up to date before or during the meeting.

In closing, I believe the Agreement States actually do agree with the majority of the new Part 35, however I urge the Commission to consider the statements I have made about the small number of problem areas and consider appropriate actions. Thank you.

CHAIRMAN DICUS: Thank you very much. And let me -- I did mention that since we are having trouble with being able to hear, Commissioner Diaz suggested that if he

had written questions to submit that you would be responsive to answering them. And he has indicated that he will have some written questions to submit. He'll have those to us in a couple of days, and I'll channel them either to Mr. Hallisey or Mr. Marshall, depending on what topic they happen to be on. So we will take care of that in due time.

I've got a couple of questions I'd like to pose to you on the Part 35, and I think you're aware tomorrow we will have a briefing on Part 35 from the staff and ACMUI involved as well.

It's my understanding that there is general agreement with the NRC's medical policy statement with regard to the fact that NRC should not delve into the practice of medicine. Is that a fair statement?

MR. WALTER: As much as possible; that's correct.

CHAIRMAN DICUS: Okay. And I think then we have some concerns from the NRC because you're wanting to require such prescriptive requirements of authorized users, their duties require selection of the patient, prescription of the dose, et cetera and so forth. Do you see that as delving into the practice of medicine? Because I think the NRC's position maybe is that we're getting into that arena.

MR. WALTER: There is no specific cutoff point that you can say that everything to the right of this is going to be medical, and everything to the left of this is

strictly radiation safety. The fact of the matter is that we require anyone who uses radioactive material or oversees the use of radioactive material to have a good understanding of radiation safety and the use of these materials. And for that reason I don't believe that to the point that -- the extent that we've gone we're not telling them what they have to do as far as medical is concerned unless it has to do specifically with radiation-safety-related matters. To that extent no, I do not believe that we're having a problem with that.

CHAIRMAN DICUS: Okay. I think we may have a slight difference of opinion there, but we understand where you're coming from, we understand that concern.

Let me bring up one more thing, then I'd like to have the other Commissioners -- and this has to do with the training and experience requirements on your slide on that, on 35.392 and 35.394.

The NMED data base, which Agreement States do provide information on with regard to misadministration data, et cetera, frankly in our opinion does not appear to support the SR-6 concerns that, and I'm quoting what you said, iodine misadministrations pose the greatest biological radiation risk to the patient, I think is a quote taken from some comments that have been made.

Where is the SR-6 Committee -- what are you basing

that comment on, what sort of scientific data, since the NMED data does not appear to support that?

MR. WALTER: Let me get a little clarification exactly what you mean. Are you speaking specifically about the effects on the patient or the effects on ancillary personnel and the public?

CHAIRMAN DICUS: I was talking about the questions related to the effects on the patient, but I would expand it to the ancillary personnel as well as the public.

MR. WALTER: Okay. It only takes 30 microcuries of iodine to deliver a 50-rad dose to the thyroid. We're dealing with millicurie quantities that if you're only a millicurie off, you're looking at a substantial difference in dose.

Now from a patient's standpoint, that is not the most important thing. The fact of the matter is using oral iodine you're flooding the body so that the entire body -- it's a whole-body exposure rather than a specific area of the body that would be exposed if you were using beam therapy or a sealed-source device -- the vast majority of the dose is going to go to any thyroidal activity or tissue that is still active with then a great deal of it going to the kidneys and bladder.

But in looking at this, we looked at the misadministration data, and looking at that specifically

there is no doubt that the misadministration -- the number of misadministrations that occur, and we're not 100 percent certain on this last part that I'm about to say, but we do know that the number of misadministrations that occur in therapy are much higher in iodine than they are with virtually any other kind of radioactive material, whether it be sealed or unsealed-source medical use.

The question was whether or not the percentage of iodine therapies that became misadministration was actually higher. There are a huge number of iodine therapies that are given in comparison to every other type of therapy. It's one of the highest, if not the highest, at this point in time. It's more than -- I would say probably twice as high than any of the next ones after that.

But we're basing that on the biological aspects of the radioactive material. You have a much larger area of the body receiving a large dose for the patient. But when you get out to the -- as I said in here, it's the ancillary personnel and the general public. The general public, yes, the general public can be exposed to the individual as a point source, but to a greater extent they're exposed to an individual's contamination that they didn't even know that there was a patient around there.

CHAIRMAN DICUS: I don't want to take up too much more time, so I just wanted to pursue it a little bit, and

it had to do really, because you're working around to the patient-release criterion in some ways, and a little bit concerned about that, because, you know, a variety of things to into the decision on patient-release criteria, including the well-being of the patient, psychologically, et cetera, there are a lot of other things that have to come into that.

Granted, it is something of a problem, but I think also you were working around in your comments the fact that then State radiation control programs, for that matter the NRC, may find itself responding to alarms that are set off at waste facilities, et cetera, and therefore they need some ability to recoup from these kinds of expenses. And point out that nothing in any of the proposed rules prevents that.

Now, I think what you're trying to go to, well if you have a tighter grip on the release criteria and maybe don't allow these patients to be released, then you won't have as many of these alarms going off. But --

MR. WALTER: No, what I actually --

CHAIRMAN DICUS: I'm not sure where you're going.

MR. WALTER: When I was saying that, what I actually mean is that when a patient is released, the licensee is generally not held accountable for their exposure to other individuals because the data that was -- the equations that were worked on show that it's unlikely that that individual will expose any other person to more

than 500 millirem. That's all they have to do. If that patient then goes to a restaurant within the next two hours or less and becomes sick to their stomach, if they don't notify the licensee that something has happened, the licensee will not know anything about it and will not take any responsibility for it, even if they were going to.

CHAIRMAN DICUS: Well, I've actually been under the impression that they are given some instructions before they leave the hospital on certain things they should be doing. Are you saying that's not the case?

MR. WALTER: They are -- the only part that requires written instructions is if it's greater than 100 millirem. Okay? If there is a possibility of an exposure greater than 100 millirem, yes, there is something that is in there that states that.

But having worked with a number of these patients, if you have your choice of being cooped in a room for the next two to three days, in a hospital room with no ability to get outside or having the ability to say I'm going to go home and I'm not going to go anywhere, and being able to be released, there is a no-brainer. They are going to say whatever they think is necessary to get -- to go home.

The written instructions notwithstanding, that doesn't necessarily mean, knowing the patients, they may -- there are going to be some of them that are going to be very

conscientious and are going to definitely call immediately and say something about it. But I'd also believe that there are a number of them out there who -- their training is not -- when I say adequate, I mean it's not actually clear in their mind that this is an important thing that they need to make sure that they're doing.

CHAIRMAN DICUS: I think I understand what you're saying, but I'm not sure there's a rule that really fixes that. But --

MR. WALTER: There isn't right now in the current draft --

CHAIRMAN DICUS: Well, I'm not sure that --

MR. WALTER: And there may not be a possibility of that.

CHAIRMAN DICUS: Right.

MR. WALTER: We're not -- at this point in time I'm not really attacking 35-75 on its release -- allowing the release of an individual who can receive 500 millirems, but -- because personally I didn't see a problem with the 500-millirem public dose from pre-1993. But if a person -- and most of these patients will come in, if it's thyroid, if they've had a thyroidectomy, they very often will come in two to three times a year, which allows their family members and anyone else to receive up to 1,500 millirems in a year. Is that your intent? Is that the intent of this rule, to

allow much larger doses per year than the 500 millirem? That's just the point I'm making for that.

The other is that you have to consider nursing home facilities and other places where a lot of these -- a lot of these patients and their families are in support groups. So they may be exposed to not just the one person in their family, but to numerous other patients. So now we're looking at occupational exposure rates, possibilities of occupational exposure rates.

CHAIRMAN DICUS: All right. We need to move on.

Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: Well, you've talked through the patient release. I just come back to the T&E for endocrinologists. Our data, as Chairman Dicus indicates, is that endocrinologists in the practice of the use of sodium iodide have not had problems. There have been -- there's two data points in the data base, and neither were serious for the patient.

And so the question -- if you go to 700 hours, the endocrinologists have also testified to us that you will disrupt the practice of medicine, because they will not be able to build that into their educational programs, and you basically will be denying an option for patients. We could not, based on the data we have, deny that option to patients. That's the choice we made. I hope you guys have

a vigorous debate, and I think you will, because the endocrinologists will bring it to you when the SR-6 findings go to the broader community of the CRCPD.

The technologist T&E will -- that's not an issue I was up to. On the embryo-fetus, when you say you're going to propose to your colleagues that you use the Part 20 reporting, is that 100 millirems per year?

MR. WALTER: For an embryo-fetus, it would be 500 millirems in the full term. For a nursing infant, it would be 100 millirems or a released patient criteria of 500 millirems. Yes. So I could see where 500 millirems would be applicable to either of those.

COMMISSIONER McGAFFIGAN: As you know, the doctors tend to think of the mother and child as a unit that they're treating, and so again you're going to -- I mean, this is going to be one of these issues that come up against practice-of-medicine considerations, and we're going to have to -- we're going to have to hear tomorrow's testimony from ACMUI and the staff and make a judgment. But the staff paper justifies the 5,000-millirem reporting requirement on the grounds that -- I guess ACMUI has told the staff that there are no deterministic effects and stochastic effects are less than 1 percent. I mean, that's the line in the paper.

So it's a judgment. It's a judgment as to how

much we treat medicine as a different -- because there is a clear benefit being provided by medicine -- as a different thing from dealing with reactors or fuel-cycle facilities. It's -- I appreciate your raising the issue, but I know the doctors will have a very different view.

MR. WALTER: I think originally that this was brought forth because of the belief that there was no doubt that you would have to have a pregnancy test done before every study. But if you go and you look at the actual information about the dose that would be expected under normal dosing procedures for diagnostic uses of radiopharmaceuticals, you're not going to find a huge number of those tests that are going to expose that embryo-fetus to greater than 500 millirem unless you are saying I don't want a bone scan of 20 millicuries, I want one of 60.

COMMISSIONER McGAFFIGAN: Um-hum.

MR. WALTER: And that determination is something that needs to be made by the physician anyway. And I am not saying to any physician that they cannot dose this patient if their medical decision, and I'm saying that this is their practice of medicine, they can make that decision to give higher doses based on the fact that this is what is going to best for my patient. There's no doubt that that's what they can do. They can give a 500-millicurie dose of technetium to do an ingrown toenail for all I care, as long as they say

it's the best thing for their patient.

CHAIRMAN DICUS: Commissioner Merrifield. Moving on from the ingrown toenail.

COMMISSIONER MERRIFIELD: I would weigh in, along with Commissioner McGaffigan, in terms of the concerns relative to iodine-131, but I don't want to belabor that any more.

Just a short word on misadministration and doctor notification of the NRC. This is probably the single most third-wire issue for doctors, and the number of vehement letters that we get from members of the medical community relative to the fact they don't believe the NRC should be in the business of worrying about this is certainly noteworthy.

Similarly noteworthy in terms of the review that I have done since I've been here is the lack -- surprising to a certain degree to me -- the lack of patient involvement in the concerns about those notifications. I mean, we've been talking about relaxing our standards for notification for misadministration, and there has been no -- I would have expected more comment from the stakeholder community outside of you all about that kind of change, and to my knowledge we just haven't gotten a lot of that. So I sort of throw that out there. I'd be interested to see what comments you get when you release your report. I'd second Commissioner McGaffigan on that one. Thank you.

MR. WALTER: I do want to point out that regardless of what we put in SR-6, the rationale will specify that there is a less restrictive option to maintain compatibility for the State. And so that will be included as a possibility, and if the State so chooses, they can go that route, but that does not mean that that will be the recommendations of our committee.

CHAIRMAN DICUS: Okay. Stan.

MR. MARSHALL: I am glad to introduce, a bit late but not lost, Roland Fletcher. Roland is from the state of Maryland and is Past Chairman for OAS. He is here to talk about allegation investigation protocols.

MR. FLETCHER: Chairman Dicus, Commissioners, good morning.

As you may see from my topic, this is something of a follow up of an area that I have been looking at for the past couple of years. In fact, at the Commission briefing last year I talked about information-sharing and at that time Chairman Jackson recommended that I go and talk with some of the specific offices including the Office of Investigations, which I did, so I am approaching this topic today from a more generic perspective. I am not focusing in on specific things although they fit into my information, but what I want to talk about is what we see as areas of concern and some of the recommendations that I think might

help to ease those areas.

One of particular concern is Management Directive 8-8, which is going to be highlighted on a few instances as perhaps the source of a problem and the location of a possible solution.

What we are talking about are instances where investigations may be conducted in Agreement States and on several occasions that I am aware of throughout the country the Agreement State program management, the state senior management themselves are essentially either not informed, not made aware, and for various reasons of course but ofttimes we found that there are other options.

As I look through Management Directive 8-8 in reference to the first area, the failure to recognize or acknowledge Agreement State authority, in the glossary there is no definition of an Agreement State. In the procedures there is no information that could be given to an investigator as to how an investigation should be conducted in an Agreement State.

As a result, what we are finding is that in some instances investigators are not taking the Agreement States seriously, either because they are unaware of the jurisdiction of the Agreement State over licensees within that state or for other reasons that I don't want to touch upon, but we find that their relationship in conducting the

investigation is often inappropriate to successful results.

We also find that there have been instances where there is an extreme reluctance to share information. I am well aware that there are instances where information, integrity of information must be preserved but ofttimes the Agreement State once again deals with many of the licensees on a regular basis and can perhaps provide information that the investigator is not even aware of.

There have been instances where information has been shared with either the Headquarters or the region and the investigator from one or the other is not aware of that information. I find that a little difficult to understand. So what happens is there is a reinvestigation of investigations that have already been conducted and that leads to some problems with the Agreement States.

There is ofttimes staffs who in many instances, as I said before, are very familiar with certain licensees and they have information from cradle-to-grave about certain licensees. It may be an instance dealing with reciprocity, it may be an instance just dealing with some concern, but some contact or at least -- well, some contact or communication with a member of the Agreement State staff might be beneficial for those conducting the Agreement State.

The last is I guess a perception, a feeling that

is shared once again by many Agreement State individuals, and that is that ofttimes personnel are made to feel as though they do not have the expertise, they do not have the competence, they do not have the relevant information that an investigator should bother to seek. This is very far from the truth and I think it does not aid in continuing to build and strengthen our partnership as far as handling these types of investigations.

I have some recommendations that hopefully we can jointly pursue and that is perhaps when information that requires an investigation is revealed either through an allegation or other information an analysis is done as to whether or not this information should be precluded from an Agreement State. I am not sure that this should be done by an investigator. I think there has to be some contact with the Agreement State personnel at that headquarters, either at the region or at the headquarters level to make a rational determination as to whether or not this investigation might be aided by contact with the Agreement State.

There needs to be, I believe, more information, perhaps even a paragraph or procedure, outlined in the Management Directive giving guidelines on appropriate contacts and appropriate procedures to be followed when pursuing an Agreement State licensee within an Agreement

State. I haven't seen anything in here. I have been over it a couple of times. There is a reference to referring allegations to Agreement States but there is nothing that I have been able to uncover that says this is how you coordinate with an Agreement State.

Whenever there's instances such as reciprocities some states have indicated that they find out the day after that an investigation has taken place in their state. There needs to be some precoordination and I think in the best interest of partnership perhaps there needs to be some joint communication with the licensee. Unless there is some real reason to preclude it, I think this would be very helpful.

I believe that once an allegation has been referred to Agreement State and that it is completed, if there is no follow-up on such a thing there needs to be a real good reason why and there needs to be communication between the region and the headquarters when such a thing happens and there have been instances throughout the country where that has not occurred.

When final reports of Agreement States for allegations are prepared once again, and I am not making light of the need for confidentiality, but I do find and states have indicated that there have been instances where they have been blindsided on information within their own state and this does not bode well with the states and their

state government oversight.

I believe I have already mentioned about the reciprocal investigative information exchange process. What we in Agreement States normally do is whenever we have a violation that occurs under reciprocity we will communicate with that licensee but any follow-up will normally take place within our state under the reciprocity agreement. We will not normally pursue that licensee into an NRC state and if that should be necessary, we should feel it's necessary, then we communicate with the NRC. We only ask that the same process be afforded to states if such is deemed appropriate.

As in other instances, and I know that we in Agreement States are always pressed to find the time and the energy and the individuals to do so, but I believe this is another instance where we get to know each other better when we demonstrate that we are doing the same thing, we have the same mission, we have the same intent and we want the same results, so some type of a joint system I believe would be preferred.

These are the things that I wanted to present as far as concerns and recommendations and I will entertain questions.

CHAIRMAN DICUS: Thank you for your comments. This is a somewhat complicated issue. It may not lend itself easily to resolution, but whatever appropriate

methods are available for us to discuss these issues, we certainly I think would have an open mind to doing it.

I think one of the things we have to keep in mind is whenever there is a situation where there is sensitive material or the need to protect sensitive information, an alleger, whatever, some states do not have that ability to protect that information. That is one of the complications that we must deal with when we deal with this sort of issue.

Commissioner Merrifield?

COMMISSIONER MERRIFIELD: There are a couple of things that got raised that I would like to comment on.

I think one of the things that bothered me in your presentation was the area of concern, your statement that there's a tendency to treat Agreement State personnel as co-conspirators in wrongdoing investigations.

I would say two things relative to that. First, I think we have a Office of Investigations we feel pretty confident in. We think they do a pretty darn good job around here. Now that is not to say that there may not be an individual investigator who may not have the appropriate attitude relative to state personnel.

We as an agency obviously have provided for -- have given the responsibilities to the Agreement State to run these programs. With that comes a respect of this agency for this program and that should run up and down

throughout our agency, and so it does bother me that at least your impression is that we have investigators that are treating you, our colleagues, in some disrespectful manner, and that is certainly something I think we can go ahead and take that as a lesson learned and look at.

We are professionals. We should treat it as a professional relationship and it would be unfortunate for you to feel that you were treated in a disrespectful manner.

That having been said, the issue of our sharing this information, as Chairman Dicus has mentioned, is very sensitive. I am aware since I have been a Commissioner of one investigation that was underway in which I wasn't even able to share with my staff activities relative to an investigation, so that the need for tight control over this is very important.

The preferences in the federal whistleblower statutes are to protect alleger confidentiality -- when in doubt protect that alleger, and so we have to act with great care in terms of making sure that we meet those goals of federal law.

Now that is not to say that there may not be some way in which we can explore a manner in which we can provide some greater information. I don't know. We certainly haven't tasked the Staff to do that. That may be something worth a discussion between yourselves and members of our

Staff to see if there is a way of having better communication and better interaction so that we are treating you in a fair and professional manner.

MR. FLETCHER: And I am very, very sensitive and I think I mentioned to the need for confidentiality and the sensitivity of information. States also, many states -- I am sure it is not all -- but many states also, I mean we conduct investigations and we have the same kind of protocol and all I am saying is that in those instances where those things don't apply there needs to be more sharing of information.

COMMISSIONER MERRIFIELD: Well, maybe what we are doing here is applying a one-size-fits-all method of dealing with these issues here at our agency, and maybe we need to explore some way of being more flexible on more of a case by case basis. That is something to at least consider.

CHAIRMAN DICUS: I think that is one of the things we mentioned, that whatever way is appropriate and proper that we can address some of these issues I think we would be willing to do so. Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: I don't really have a question, but I do see, as Commissioners do, the monthly OI report, and I can't recall very many cases -- I mean the vast majority of the cases are reactor sites, et cetera, that are open OI. There aren't too many, on an annual

basis, that I can recall off the top of my head -- investigations in an Agreement State or something that is in your jurisdiction. I think it is a sensitive matter when it comes up but I don't think the numbers are very large.

CHAIRMAN DICUS: No. Mr. Bailey?

MR. BAILEY: Alphabetically I'm first.

CHAIRMAN DICUS: Well, I saw two hands.

MR. BAILEY: We had a problem some time ago in regard to what I am sure was just a formatted letter that came out and said we have got this complaint -- this allegation about the use of an x-ray machine, it is not in our jurisdiction, but oh, by the way, give us a report back in 30 days how you handled it.

So we went to Region IV and we said, hey, just look at your letter, and I am happy to report that they did. They looked at it and said, okay, this is in your jurisdiction, it is not in ours and so we are referring the allegation to you.

But I understand the frustration on several of these that have been referred to us to investigate. We don't get a name so we don't know who the guy is and what we do, what we have done, is gone to the licensee and then they tell us who the alleger is and then we can investigate them, so when we do get these letters down that do involve Agreement State materials and we don't know who the alleger

was it is very difficult in many cases to follow up, to see if there is in fact any truth, but when you go to the company they are very seldom saying okay, you caught me, I'm guilty. You have got to go to someone else.

MR. MARSHALL: That's real similar to what we've had. One that I had in the last year was that we have a report allegation that one of your licensees -- and they gave us the licensee name -- has radiation safety problems. That's it.

Where do we start, since we can't talk to the alleger? It really made it hard for -- you know, we've done inspections, we look at this, and I think that's where you run into the problem is we can't really do our job --

COMMISSIONER McGAFFIGAN: It isn't us investigating you, it's --

MR. MARSHALL: Right.

COMMISSIONER McGAFFIGAN: Turning it over --

MR. MARSHALL: Turning it over so that we can -- where do we start?

COMMISSIONER McGAFFIGAN: Have enough information. Okay.

CHAIRMAN DICUS: All right. I think we can effect some improvements there.

Okay, Mr. Marshall, is there anything else?

MR. MARSHALL: I truly appreciate Bob's patience.

I'm going to try to take one breath and get through a couple slides very quickly.

The last item is the OAS resolution to support NRC-proposed budget. I truly appreciate, on behalf of the States and the executive committee, appreciate the attendance and participation of Chairman Dicus at the recent Agreement State meeting in Austin, Texas. At that meeting we discussed what we understood was the NRC-proposed budget to include some additional funding to address NRC initiatives involving Agreement States. At a business session of the attending States a resolution was proposed, discussed, and passed by those participating in the business meeting.

The next slide indicates that the 29 States participating in the discussion voted unanimously to support the resolution, which we sent to Chairman Dicus, as well as to the Senate and the House Finance Committees. In the resolution States were also encouraged wherever possible within constraints of communicating to legislatures to also support such budget. Many States have struggled, and I believe most, I'm proud to say, have been successful to get our own dollars to come to our own OAS meeting. I was pleased that we had as many States, including Ohio and even four other -- I don't mean it derogatorily, but Agreement State wannabes. There were the four additional States

looking at the option, and we look forward to continuing the relationship in this national program with maybe your help to --

CHAIRMAN DICUS: Okay.

MR. MARSHALL: That's all I'm going to say, and defer the balance of time to the Chairman and Bob Hallisy.

CHAIRMAN DICUS: Thank you.

Go ahead, Bob.

MR. HALLISEY: Good morning, Chairman Dicus and Commissioners McGaffigan, Merrifield, and Diaz. My name is Bob Hallisey, and I am the Director of the Radiation Control Program, but I'm here this morning as the current Chairman of the Conference of Radiation Control Program Directors, commonly referred to as CRCPD.

I am also the Director of the Massachusetts Radiation Control Program, which on March 21 of 1997 became the 30th Agreement State.

In this respect, I want to relate to the Commissioners how proud and pleased we are to have entered into this agreement with the Nuclear Regulatory Commission, and what a tremendous effect this has had on the identity of our program within the State government, our relationship with the medical community, academia, and industry in the Commonwealth of Massachusetts, and the professionalism and great sense of accomplishment of our expanded staff.

Becoming an Agreement State to us was the final step towards a comprehensive radiation control program, and Massachusetts would like to take this opportunity to thank the Commissioners and all of the staff of the NRC, and especially Paul Lohaus and the staff in the Office of State Programs, for all this work in making this happen, and for the continuing excellent relationship we have with all the staff that we have experienced as a new Agreement State, no longer the baby, though, now that Ohio is.

Back to CRCPD, which is the primary purpose of my being here. I thank you for this kind invitation, and I would like to tell you a bit about CRCPD and to briefly relay to you some related issues that our organization wishes to call to your attention.

Many of our issues have already been addressed by the Organization of Agreement States, because obviously all of the Agreement States are part of the conference.

The conference is a nonprofit organization incorporated in the State of Kentucky, with our principal offices there in Frankfort, and incidentally our 31st annual meeting was held last May in Louisville, Kentucky, and the Chairman was present at that meeting.

The overall purpose of the conference is to provide a common forum for the exchange of information among State and local radiation programs, and also to provide a

mechanism for States to communicate with the Federal Government on radiation issues.

Our mission is to promote consistency in addressing and resolving radiation protection issues, to encourage high standards of quality in radiation protection programs, and to provide leadership in radiation safety in education.

Our overall goal is to keep the radiation exposure to the patient, the worker, and the general public to the lowest practical level, while not restricting the beneficial uses.

Our members are State and local radiation program directors and their staff, staff of radiation-related Federal and international agencies, individuals from the medical profession, academic institutions, and the radiation industry, and some retired radiation protection professionals. We have about 1,000 members.

The activities at our organization are divided into five separate councils, depending upon the matter -- subject matter of the committee and task force.

The five councils are the Healing Arts Council, which deals primarily with X-ray matters; the Environmental Nuclear Council, which deals with radiation environmental matters; the Suggested State Regulation Council, which oversees the various working groups.

[Increase in amplification.]

I'm not going to start again, though, I hope.

CHAIRMAN DICUS: Your voice carries so well.

MR. HALLISEY: I apologize for that.

The Suggested State Regulations Council, which oversees the various working groups that develop the SSRCR's, a General Council which oversees all of our liaison activities with various Federal and other organizations, and now a Special Council which oversees the task forces that report directly to the Executive Board, such as our Trading Commission and our Strategic Planning Group.

CRCPD, through cooperative agreements, works very closely with numerous Federal agencies, in addition to the known activities that we have with the Nuclear Regulatory Commission.

We work very closely with the Food and Drug Administration in the diagnostic X ray area and in the mammography area; with the Environmental Protection Agency in the Office of Radiation and Indoor Air in our decontamination and decommissioning issues; MOSSUM, orphan source, low-level radioactive waste, radon, NORM; with the Department of Energy with our low-level radioactive waste, hazardous waste sites, orphan sources, and norms in transportation of radioactive materials; with FEMA, the Federal Emergency Management Agency, on our offsite reactor

emergency planning and response, our potassium iodide protection issue, emergency guides in pathway analysis.

Some other Federal agencies that we deal with are Department of Transportation, CDC, Department of Agriculture, the National Institutes of Occupational Safety and Health, and some State -- Department of State on Import and Export Issues.

Professional organizations that we work with are numerous and many, and I won't name them all, but they include the Health Physics Society, the American College of Radiology, American College of Medical Physicists, our Association of Safe Drinking Water Administrators, the Joint Commission on Accreditation of Hospitals, the National Governors Association, and the National Council on Radiation Protection and Measurements.

I did want to call to your attention some special services of CRCPD that we are especially proud of. One is our accreditation of regional calibration laboratories, traceable back to standards for survey instruments for State use.

The second is our program of recognition of licensing States, those that license NORM uses.

The third is our issuance of special transportation authorization for shipping of radium.

The fourth is we coordinate and broker the Texas

Industrial Radiography Examination to States. And we also coordinate and conduct an annual national conference on radiation protection, which is now involving many other associated agencies and organizations with us.

We also conduct comprehensive reviews of State radiation control programs using a team of experts. These reviews are similar to the IMPAIR process, and they're done by request to the State to review the entire State radiation control program, and 12 States so far have been through this process, and we've used in additional to NRC EPA and FDA representatives for their respective program areas.

We are especially proud of our numerous publications, which are disseminated widely in the radiation protection community, such as our bimonthly news brief, the directory of personnel responsible for radiological health. This directory lists addresses and telephone numbers for many of the key individuals in the radiation arena. This is a directory of professional personnel and State and local government agencies who administer radiation control activities. And in selected Federal agencies, certain U.S. territories, Canada, and Mexico who have radiation protection responsibilities.

I have brought with me copies of the 1999 directory for each of you, and I have instructed the CRCPD executive office to see that each of you are sent a copy of

next year's directory when it comes out in January. Hopefully you'll use it to contact any of us for any issue.

We also have the publications of our proceedings, our annual national conference in which all of our presentations and papers are presented. We also have a list of State contacts that can be used during radiological emergencies. Our radon bulletin is widely disseminated throughout the country. We also do profiles of State radiation control programs which are available for the numerous programs that have participated that list program staff, budget, salary ranges, job descriptions, et cetera. And we also do various technical reports relating to radiation protection.

Lastly I wanted to mention our Web site, which is CRCPD.org. And on the Web site, which we hope you will visit, we have all of our SSRCR's, we have some technical papers and publications, and a method to communicate and ask questions at any time of the conference.

Over the years CRCPD has taken positions on many radiation-related issues. The conference has three different forms of positions. First is the position of a task force or a committee. As a matter of fact Dave had mentioned as a committee chair certain positions that his particular committee had on Part 35.

The next step up would be an executive board

position where an item is brought to the board and the board votes on it unanimously for that position.

And the third step up would be a conference position for all of the members, which is done primarily through resolutions.

With these three types of positions in mind, I would like to briefly like to call to your attention two resolutions of the conference relating to current issues.

First is a resolution which was first in 1993 in which CRCPD resolved to formally request Congress to amend the Atomic Energy Act to provide for the regulation of the Department of Energy by the NRC. The conference is aware of the continuing discussions on this issue and offers our assistance to the NRC in this area.

The second resolution, which was passed in 1998, related to the regulation of 11(e)(2) material and the transfer of FUSRAP to the Army Corps of Engineers.

The remainder of my comments are from the executive board and the committees and task forces. We want to convey to the Commissioners our sincere appreciation for NRC's role in the CRCPD orphan source initiative and the importance of NRC's continuing its support to locate, track, provide for the disposition of, and overall management of these orphan sources. This is a very intense interest to the States, CRCPD, as well as internationally. We must not

let this initiative be weakened, but rather strengthened.

Secondly, with more and more States signing agreements with the NRC, the conference has been thinking about a potential role in providing guidance and rules to States in the future. At some time in the future, probably 95 percent or greater of radioactive material licenses will be issued by Agreement States. At such time it may not be economically feasible, as you know, for the NRC to continue its current regulatory program for such a small number of licensees. However, there will still be need for national guidance and regulatory development to assure consistent regulatory control. With our experience in CRCPD conducting comprehensive program reviews, in developing the SSR's, and our licensing State process, we are looking to put together a blue-ribbon panel committee to investigate CRCPD's potential role in this area.

Next we support and sympathize with the NRC as you deal with the concept of establishing in regulations release levels for solid materials.

We also support the NRC's effort to establish an expanded NMED data base to cover all incidents.

We also applaud your efforts to get accountability of GL sources and devices.

Lastly, the conference supports the NRC budget request to receive general revenue funds to support the

State and international programs of the Nuclear Regulatory Commission.

Again, we thank you for the opportunity to speak before you this morning, and I'd be happy to entertain any comments or questions at this time.

CHAIRMAN DICUS: Thank you very much. We do thank you for the support OAS and CRCPD did give us in our budget quest. We weren't quite successful this year but we will keep trying to get where we want to be with regard to getting some things off the fee base so we can continue to support programs that we think are very vital to radiation safety.

I only have one question. You mentioned that 12 states had undergone a comprehensive review of their programs by CRCPD, by your panel. What was the general findings, the outcomes of that?

MR. HALLISEY: Most of the states have a positive outcome from that. They were looking for a review of their program to determine if it was comprehensive enough and also to go back to their hierarchy for support to expand the program in areas in which it was lacking.

In the majority of the instances, the process worked. The states were able to get better support from their organizations, increase their budget.

CHAIRMAN DICUS: All right. Commissioner

McGaffigan.

COMMISSIONER McGAFFIGAN: I was just going to ask who is the current CRCPD representative to ISCORS, the Interagency Steering Committee on Radiation Standards? Do you happen to know?

MR. HALLISEY: Yes, I believe it is the second Past Chair, Jill Lapodi.

COMMISSIONER McGAFFIGAN: Jill Lapodi? Do you personally have any view as to how ISCORS is working? Maybe it would be second-hand from Jill or one of the things we have tried to push is to open more of the meetings. We have had a couple open meetings when they happened to be here, but do you have any views on how the ISCORS process is working?

MR. HALLISEY: Well, Commissioner McGaffigan, I am sure that if you know Jill Lapodi, her response would always be on a very positive vein, and I know she is very intense with the ISCORS issue, and she has reported back to the Board that she feels that the process is working and looks forward to continue working with us.

COMMISSIONER McGAFFIGAN: Okay. She may be more positive than is appropriate --

MR. HALLISEY: That may be --

COMMISSIONER McGAFFIGAN: -- in that instance.

You mentioned the possibility of some day, if we

have very few Agreement States left, ISCORS potentially becoming a body that would develop rules and regulations for the nation.

That is something that I know the Chairman mentioned once in a speech. It will require legislation and it may -- that is some years off, but it is a fairly profound change that we are going to need to do some thinking about because it will require legislation almost surely.

There will be a lot of people thinking about it and I am not sure. You know, if we can get things off the fee base, then we may be able to maintain that core rulemaking capability here, working with you all in the way that currently we do. If resources are really, really tight and Congress wants this outlet -- but you aren't going to do it for free either, right?

[Laughter.]

COMMISSIONER McGAFFIGAN: So I suspect, you know, maybe your choice is whether they give us the resources off the fee base or they give CRCPD the resources off the fee base in order to have this rulemaking capability.

MR. HALLISEY: Much of our rulemaking activities have been done by the Conference based upon contributions to the operation of the Conference from various federal agencies.

COMMISSIONER McGAFFIGAN: Right.

CHAIRMAN DICUS: Commissioner Merrifield.

COMMISSIONER MERRIFIELD: Just a couple of things, because I do want to follow up Commissioner McGaffigan on that.

Appreciate the kind words in a number of the areas you spoke about in terms of our budget, in terms of DOE external regulations, support for our trying to get some money for general revenues for state programs -- appreciate all those very kind comments.

One of the things you did mention was the issue of orphan sources. I think most people know but it is certainly worth repeating that Chairman Dicus has been a real leader in making this element of the program happen, and I think it should be noted -- her active support based in part on her prior experience with your group, which has led this agency into that effort, and she is to be congratulated for that.

On the issue of our lasting materials program, I am as fervent a member on this Commission in terms of being a federalist, in being supportive of Agreement States coming into this program and taking more responsibility for the material areas. That having been said, I think there is a logic in having a national program through the NRC to set the standards. The question is how big should that program

be as we move out into an area where we have an increasingly larger and larger number of Agreement States.

I believe that our Materials staff is excellent. I think they do a very good job and I think it would be unfortunate to lose the capability that we have as a national agency to conduct those programs.

An effort to have you take some of that, obviously there's some difficult funding issues. There's also the issues of economies of scale, the fact that we have got all those folks here in one agency in one place clearly makes it easier than trying to have 50 states plus the territories try to replicate the same thing and so as you go forward with your blue ribbon panel, I certainly would leave that with you from my personal standpoint.

We have a problem right now, and our problem right now is that there are more Agreement States. We have fewer material licensees. We are continuing to place an unfortunate burden on that group for an increasingly larger portion of the Materials program.

We need to do those Materials program efforts. I believe our efforts to try to get those efforts off the fee base and into general revenues because they benefit all American people whether they are Agreement States or not is important. As I did before, I would urge you to the extent you can to rachet up even further your efforts to be in

touch with members of your delegation to let them know the importance of those programs.

CHAIRMAN DICUS: And assume they did call you --

[Laughter.]

COMMISSIONER McGAFFIGAN: Like McGaffigan and Merrifield.

CHAIRMAN DICUS: Anything else?

COMMISSIONER McGAFFIGAN: No.

CHAIRMAN DICUS: Did you have anything you wanted to add? Comments?

COMMISSIONER McGAFFIGAN: I think Mr. Marshall had a closing statement.

CHAIRMAN DICUS: Okay.

MR. MARSHALL: We are pleased for this opportunity again. This has been a very interesting, challenging and enjoyable time as Chairman. I will relinquish gavel on January 1 to Ed Bailey as the new Chair and we look forward to the next Commission briefing.

CHAIRMAN DICUS: Thank you -- and I remind you again that you will get some questions in writing from Commissioner Diaz, and as I said before, I will channel those to the proper place to try to get the answers.

COMMISSIONER MERRIFIELD: Chairman? Just before you make your closing comments, I would just like to put a plug in, as they did for their website --

[Laughter.]

COMMISSIONER MERRIFIELD: NRC.Gov -- in addition, hopefully if we are successful and things work out, perhaps next year when you have your meeting we will do it videostreaming so that your colleagues will also be able to see it on the Internet.

CHAIRMAN DICUS: Yes.

COMMISSIONER MERRIFIELD: And if --

CHAIRMAN DICUS: That is something we are working on.

COMMISSIONER MERRIFIELD: In place hopefully in place by the end of the year.

CHAIRMAN DICUS: Yes. Yes, that is -- okay. Thank you for bringing that up. I had forgotten about that. We are looking forward to being able to do that.

Well, again, on behalf of my fellow Commissioners I want to thank both the Organization of Agreement States and the Conference of Radiation Control Program Directors for another very informative briefing. It is clear from our discussions today that I think we have made a lot of progress in pooling our resources to work together and achieving consensus on many topics of concern to both of all of our regulatory programs.

As I noted at the OAS Annual Meeting in Texas in September, states have steadily increased their

opportunities for early involvement in regulations, guidance and other regulatory development activities and now play a much more significant role in helping direct and shape the NRC program. Part of that ongoing involvement includes a new direction, an exchange of ideas for including more performance-based, risk-informed decision-making processes in our routine interactions with all of our stakeholders as well as inclusion of these ideas into revised regulations.

Since the public's health and safety is paramount in all of our endeavors we must take it upon ourselves to reach beyond our comfort level with the old way of developing regulatory strategies and instead use our technical competence and insights drawn from past operating history to better focus licensee and regulatory attention on design or operational issues commensurate with their importance to health and safety.

A solid materials regulatory program in the United States helps provide reassurance to our stakeholders that we are and we will continue to work together to resolve regulatory issues that are of mutual concern.

Again I thank you very much and unless my fellow Commissioners have any further questions or closing comments, this meeting is now adjourned.

[Whereupon, at 11:44 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: MEETING WITH ORGANIZATION OF AGREEMENT STATES AND CONFERENCE OF RADIATION CONTROL PROGRAM DIRECTORS PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Wednesday, October 20, 1999

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: Rose Gershon

Reporter: Mike Paulus

76

Organization of Agreement States

Rev 10/12/99

ORGANIZATION OF AGREEMENT STATES NRC COMMISSION BRIEFING

REINVENTING NRC ALLEGATION INVESTIGATIONS IN AGREEMENT STATES

Presented by
Roland G. Fletcher – Program Manager
Maryland Radiological Health Program

PAST-CHAIRMAN, ORGANIZATION OF THE AGREEMENT STATES

October 20, 1999

Rev-10/12/99

AREAS OF CONCERN:

- FAILURE TO RECOGNIZE OR ACKNOWLEDGE AGREEMENT STATE AUTHORITY.
- RELUCTANCE TO EXCHANGE INFORMATION PERTINENT TO AN AGREEMENT STATE LICENSEE.
- LACK OF COMMUNICATION BETWEEN NRC HEADQUARTERS AND THE REGIONS.
- INEFFECTIVE UTILIZATION OF THE EXPERTISE ON AGREEMENT STATE STAFFS.
- TENDENCY TO TREAT AGREEMENT STATE PERSONNEL AS CO-CONSPIRATORS IN WRONGDOING INVESTIGATIONS.

POSSIBLE NEW APPROACHES:

- IMMEDIATE NOTIFICATION AND DISCUSSION WITH AGREEMENT STATE STAFFS ON ALL INVESTIGATIONS INVOLVING STATE LICENSEES, UNLESS SPECIFIC FACTS PRECLUDE.
- ACKNOWLEDGEMENT OF AGREEMENT STATE JURISDICTION.
- REQUEST FOR THE OPPORTUNITY TO MEET WITH LICENSEE.
- ACCEPTANCE OF COMPLETED AGREEMENT STATE ALLEGATION INVESTIGATION REPORTS UNLESS SPECIFIC NEW INFORMATION PRECLUDES.
- SHARING OF FINAL REPORTS OF NRC INVESTIGATIONS OF AGREEMENT STATE LICENSEES.
- A RECIPROCAL INVESTIGATIVE INFORMATION EXCHANGE PROCESS IS NEEDED.
- INITIATE MORE JOINT INVESTIGATIONS OF ALLEGATIONS "ALA" IMPEP.

14

Nuclear Regulatory Commission Briefing

Part 35/Part G

Presented by:

David Walter, Chairman

SR-6 Committee

Authorized User Duties

- No duties for the Authorized User are specified in Part 35 unless a written directive is required
- 35.11 and 35.27 refer to each other - Catch 22?
- Select the patient, prescribe the dose and interpret the results

Written Procedures

- Assures written procedures have been prepared and can be followed consistently
- Opens communication with the Agency
- Increases licensee and Agency confidence in the radiation safety program

Patient Release Criteria

- Can an individual be exposed to numerous released patients
- Other types of licensees should be allowed to have the same dose limits
- ALARA training is critical

Patient Release Criteria

- Radiation Safety should remain the licensee's responsibility
- Authorized User must approve the release

Authorized User T&E

- The new Part 35 is to be more risk-based
- Therapeutic use of unsealed sources is a high risk use
- Oral I-131 therapy misadministrations are the most common
- Sodium iodide poses the greatest radiation risk to ancillary personal and the public

Technologist T&E

- SR-6 will include technologist training and experience requirements
- Requirements will be based solely on radiation safety

Embryo/Fetus - Nursing Infant Dose Reporting

- 35.3047 appears to give approval for an embryo/fetus or nursing infant to receive up to 5000 millirem

- Part G will not recommend a parallel rule to 35.3047

Parallel Rule Making

- Has worked well for Part 35
- SR committee representation on the working group
- Agreement State representation on the steering group
- Provides better communication to the states

Organization of Agreement States Briefing to the U.S. Nuclear Regulatory Commission

---

Stanley R. Marshall, NV - Chairman

Roland G. Fletcher, MD - Past Chairman

Edgar D. Bailey, CA - Chairman Elect

Richard A. Ratliff, TX - Secretary

K. David Walter, AL

Introduction

- The purpose of this briefing is to provide an update to the Commission about OAS concerns and issues in support of the State/Federal partnership in the long-standing national radioactive material program.

Briefing Topics

- DOE Regulation/External Regulation Pilot Program Status - Ed Bailey, CA
- Source Material Exemptions - Richard Ratliff, TX

Briefing Topics (continued)

- Comparisons of Part 35 and Part G - David Walter, AL

- Reinventing NRC Allegation Investigations in Agreement States - Roland Fletcher, MD

- OAS Resolution to Support NRC Proposed Budget - Stan Marshall, NV

OAS Resolution to Support NRC Proposed Budget

- Discussed during recent OAS executive committee meeting in Austin, Texas
- Understood that proposed budget intended to secure additional funding for NRC initiatives
- Resolution proposed, discussed, and passed by attending Ag. States during OAS business meeting

State Support for the Resolution

- 29 states participated in the discussion.
- Unanimous attending state support for the resolution
- Resolution copy sent to Chairman Dicus

OAS Correspondence to Congressional Committees

- OAS Letters and Resolution to U.S. Senate and House Finance Committees

- Encouraged states to submit additional letters in support of the budget

Source Material Exemptions

Initiating Events

- Shipment of wastes containing source material to unlicensed sites
- NRC Policy that exemptions includes disposal
- Reevaluation of 10 CFR Part 40 Started in 1992
- Exempt concentrations vs. release for unrestricted use
- Contaminated facilities found by Colorado

Colorado/OAS Petition for Rulemaking

- Worker protection not required
- Facility contamination control
- Need to restrict the exemption in 10 CFR 40.22(b)

10 CFR 40.13(a) Exemptions

- Needs to be reevaluated to conform to the current standards for protection against radiation
- Exemption in rule since 1947 based on low impact assumption and protection of common defense and security
- Inconsistency with decommissioning standards
- Currently 10 CFR 40.13(a) exempts source material that is less than 0.05% by weight

10 CFR 40.13(a) Exemptions (Continued)

- For uranium this is 339 pCi/g for thorium this is 116 pCi/g
- Uranium mill cleanup criteria = 30 pCi/g uranium, 5/15 pCi/g Ra
- 10 CFR Part 20 revisions in 1991 decreased the values for permissible concentrations in air and water for uranium and thorium
- Reevaluation needs to use latest biological data and dose calculation methodology

Disposal Issues for all Unimportant Quantities of Source Material

- 40.13 (a), (b), (c) need to resolve disposal issues
- Aircraft engine parts containing nickel-thoria alloys 10 CFR 40.13(c)(8)
- Thorium alloys containing tungsten or magnesium under 10 CFR 40.13(c)(d)
- Need consistent rule that can be understood by the general user, dealers, and scrap processors

Is it NORM?

- NRC and EPA need to be consistent in regulatory requirements
- Radiation risk should be the basis for regulation
- FUSRAP - The missed but not forgotten atomic legacy
- States forced to deal with the problem

EXTERNAL REGULATION OF THE DEPARTMENT OF ENERGY FACILITIES

Edgar D. Bailey, PE, CHP
California Radiologic Health Branch

External Regulation Pilot Projects

- Lawrence Berkeley National Laboratory
- Oak Ridge National Laboratory (LBNL) Radiochemical Engineering Development Center (ORNL/REDC)
- Savannah River Site Receiving Basin for Offsite Fuels (SRS/RBOF)

EDB 1

18 OCT 99

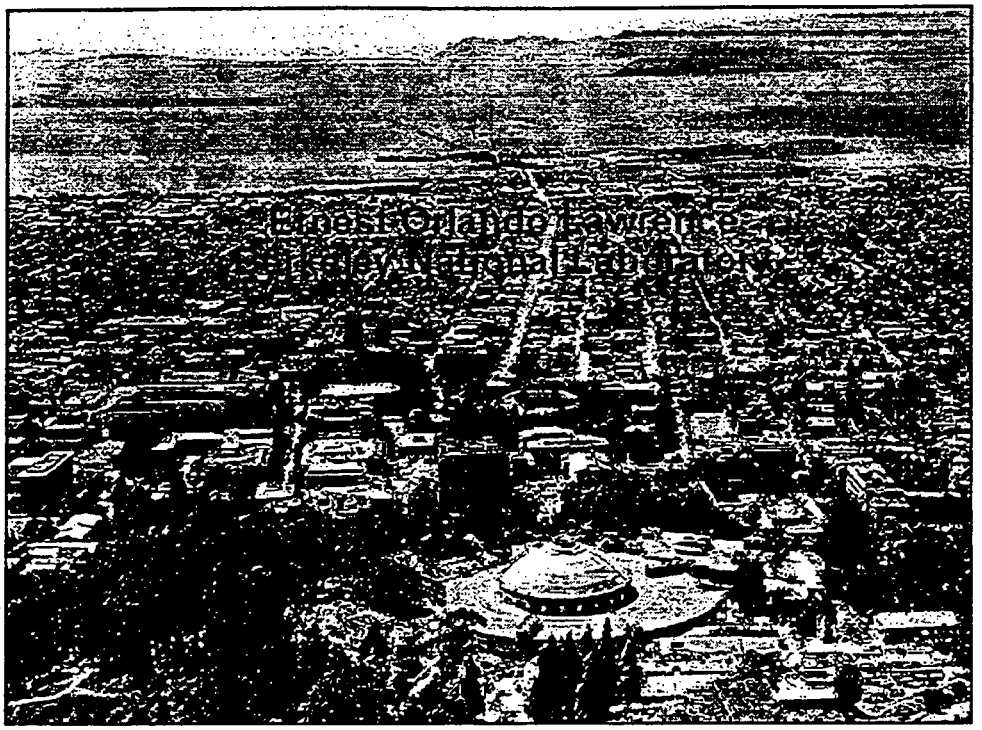
CALIFORNIA DOE SITES

- Lawrence Berkeley National Laboratory
- Lawrence Livermore National Laboratory
- Sandia National Laboratories/California
- Stanford Linear Accelerator
- Laboratory for Energy-Related Health Research
- Energy Technology Engineering Center
- Fusion Research Center

With apologies to Gertrude Stein:

- ***"A rem is a rem is a rem."***

- ***Attributed to Mike Mobley and others.***



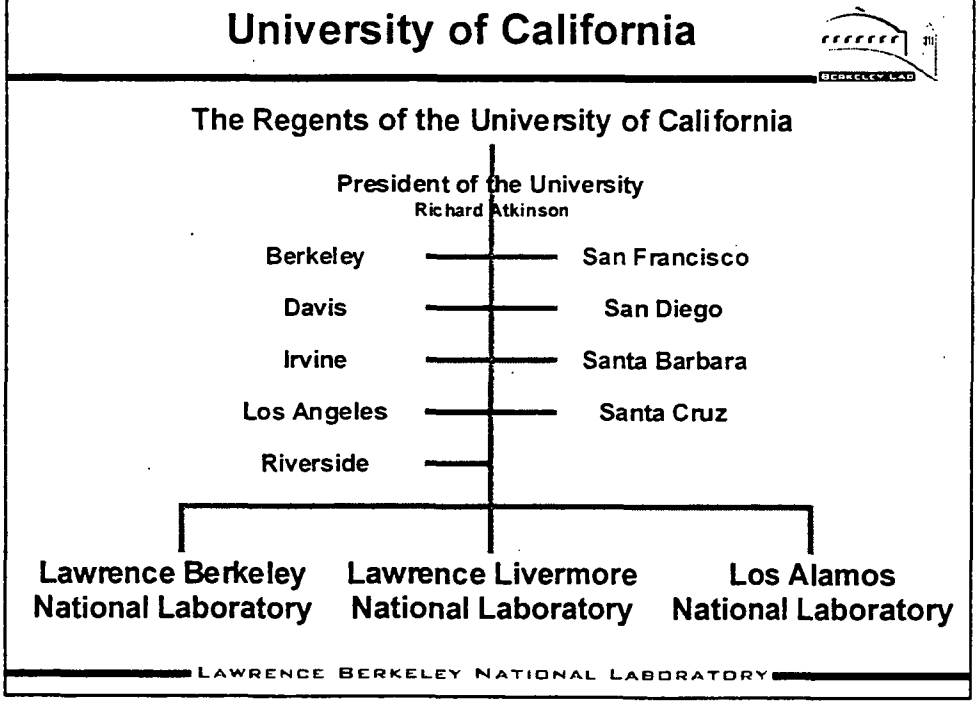
Berkeley Lab

- Founded in 1931 - oldest national laboratory
- Named after Earnest Orlando Lawrence, inventor of the cyclotron
- Nine Nobel prizes
- Unclassified research in basic energy, earth, nuclear, life , & computing sciences
- Managed and operated by the University of California for the U.S. Department of Energy

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY

- Presently Employs Over 3, 200 People
- Occupies 134 Acres in Berkeley Hills Surrounded by UC Berkeley
- Elevation 500 to 1,000 Feet
- Little or No Weapons Related Work

University of California



LAWRENCE BERKELEY NATIONAL LABORATORY

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY

- Advance Light Source (Synchrotron)
- Bevalac/Bevatron (Not Operating)
- Research Medicine (PET Accelerator)
- Heavy Ion Accelerator (Not Operating)
- National Tritium Labeling Facility
- Hazardous Waste Handling Facility
- 88-inch Cyclotron

U.S. Department of Energy
A self-regulated safety program

1946 **Atomic Energy Act established the AEC**

1954 **AEA amended to give AEC broad powers for peaceful purposes**

1962 **Kentucky was the first AEC Agreement State**

1974 **Energy Reorganization Act of 1974 split AEC into ERDA and created US NRC on January 1, 1975**

1977 **DOE created as cabinet level agency replacing ERDA**

External Regulation of DOE

1990 **Clean Act Act Amendments extended NESHAPS (air emission stds.) to DOE sites**

1992 **Federal Facilities Compliance Act placed DOE sites under RCRA (hazardous waste disposal)**

Existing NRC/Agreement State oversight:

Gasseous Diffusion Plants - Paducah KY, Portsmouth OH
Spent Fuel Storage - Ft. St. Vrain CO
Offsite lab, Battelle PNNL - Richland WA

1994-9 **Legislation introduced in the House to place DOE national labs under US NRC and OSHA**

Drivers for External Regulation

Safety	Uniform standards consistent with industry
Credibility	Remove conflict of interest of self regulation; open to external scrutiny
Stability	Predictable, resistant to political change

Ahearne Committee, 1995
Report of Advisory Committee on External Regulation of DOE Nuclear Safety

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY

- Work Smart Standards Program
- Copper Release Study/Concurrence
- DOE AIP Program
- Tritium Issues Work Group
- External Regulation Pilot (Phase I)
- Eucalyptus Release Study/Concurrence
- External Regulation Pilot (Phase II)

EXTERNAL REGULATION

- 1995 Legislation Introduced in Congress
- Secretary O'Leary Convenes Advisory Committee on External Regulation
- 12/95 ACER Recommendations Published
- Secretary O'Leary Appoints Working Group on External Regulation
- 12/96 WGER Report Published

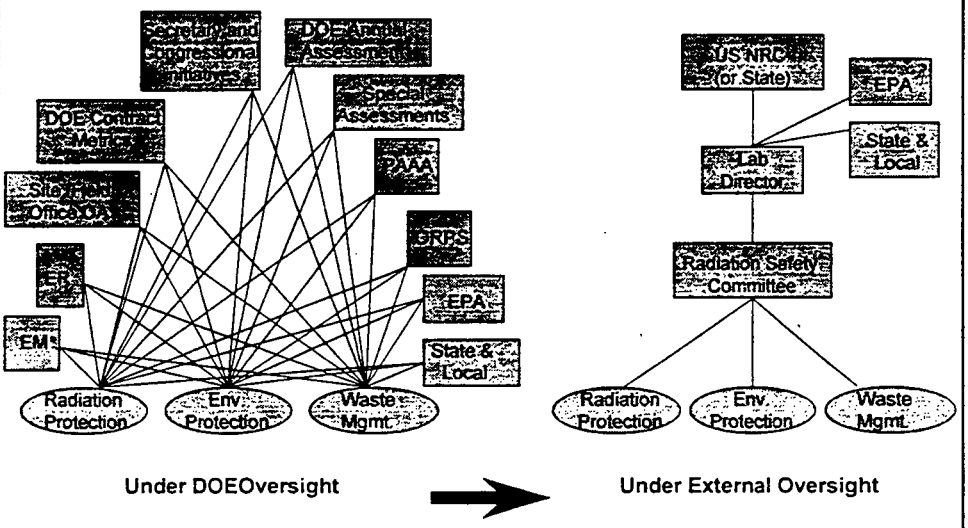
External Regulation cont.

- 9/97 DOE/NRC/RHB Begin Work on Pilot Study
- LBNL Volunteered and Was Selected as First Pilot Project
- 11/97 DOE/NRC Sign MOU for Pilot Project
- Draft Report on Pilot Study Issued

External Regulation cont.

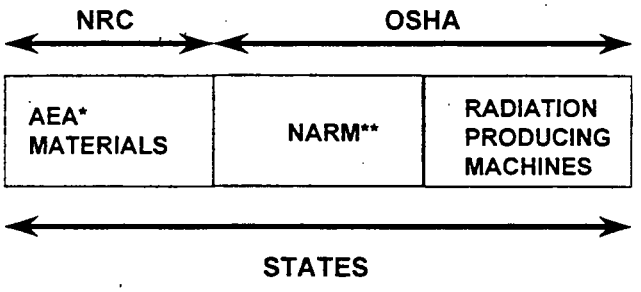
- Congress Instructs Increased Involvement
- Phase II of Pilot Study

More Effective Radiation Safety Management



Jurisdictional issues

Federal Facilities



Non-Federal Facilities

* AEA: Atomic Energy Act
**NARM: Naturally occurring and Accelerator-produced Radioactive Material

External Regulation of DOE

In the news ...

•**"Essentially all aspects of safety at DOE's nuclear facilities and sites should be externally regulated."** Advisory Committee on External Regulation of Department of Energy Nuclear Safety, Dr. John F. Ahearne, 12-95

•**"The Department of Energy (DOE) will submit legislation to transfer oversight of nuclear safety to the Nuclear Regulatory Commission, Secretary of Energy Hazel R. O'Leary announced today."** DOE press release, 12-20-96

External Regulation of DOE

In the news ...

- "Mr. Chairman, the Department is ready to move forward now to work with you and others to develop a path forward to externally regulate single purpose Energy Research laboratories." **Acting Secretary Betsy Moler before the House Science Committee, 5/21/98**

- "many of the potential benefits that we expected to see from external regulation have not been demonstrated, and appear to be outweighed by associated costs and difficulties raised in the pilot projects." **Energy Secretary Bill Richardson, letter to Rep. Ron Packard, 2/19/99**

"LBNL VIEWS..."

- "LBNL agrees with the DOE Team preference that LBNL should be regulated by the same regulators as private industry and academia. LBNL believes that there would be a smooth and seamless transition to external regulation if the regulator was the State of California."

"LBNL VIEWS..."

- "LBNL considers that the benefits of external regulation are strongly dependent on the licensing model. LBNL believes that the only license model that represents a clean break from DOE's self-regulation is the model in which UC-LBNL is licensed directly by the NRC or the State."

ISSUES

- REGULATOR(S):
  - NUCLEAR REGULATORY COMMISSION
  - OCCUPATIONAL HEALTH & SAFETY ADMIN.
  - CAL RADIOLOGIC HEALTH BRANCH
  - CAL OHSA

ISSUES cont.

- WHO WOULD BE THE LICENSEE?
  - U. S. Department of Energy
  - The University of California
  - Lawrence Berkeley National Laboratory

NUREG-1708

ONE HUGE DISAPPOINTMENT!

"WITH RESPECT TO STATE REGULATION OF DOE FACILITIES, SOVEREIGN IMMUNITY SHOULD NOT BE WAIVED AND THE STATES SHOULD NOT REGULATE DOE FACILITIES."

CONTRADICTIONS

- This was not the conclusion of the LBNL site team from NRC.
- This was not the conclusion of the DOE Oakland Operations.
- This was not the conclusion of LBNL.
- This was not the conclusion of the State of California.

Whose conclusion was it?

"I DON'T WANT TO REPLACE ONE REGULATOR IN WASHINGTON WITH ANOTHER REGULATOR IN WASHINGTON."

OAS RECOMMENDS:

- That the NRC aggressively seek regulatory authority over DOE and its contractor facilities.
- That the NRC include the regulation of DOE contractor-operated facilities in the Agreement State program.