

# Official Transcript of Proceedings

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Radiology Health Branch

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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1997 ALL AGREEMENT STATES MEETING

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RADIOLOGY HEALTH BRANCH

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FRIDAY,

OCTOBER 17, 1997

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LOS ANGELES, CALIFORNIA

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The Annual Meeting was held at the Westin  
Hotel at Los Angeles Airport, Los Angeles, California at  
8:00 a.m. Francis X. Cameron, Facilitator.

PANEL MEMBERS:

DON FLATER, IOWA  
RONNIE WASCOM, LOUISIANA  
MIKE BRODERICK, OKLAHOMA  
STAN MARSHALL, NEVADA  
MIKE MOBLEY, TENNESSEE  
DAVID SNELLINGS, ARKANSAS  
AUBREY GODWIN, ARIZONA  
JOHN ERIKSON, WASHINGTON  
RICHARD RATFLIFFE, TEXAS

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- 1 PANEL MEMBERS (CONT.)
- 2 PAUL EASTVOLD, ILLINOIS
- 3 ROLAND FLETCHER, MARYLAND
- 4 DIANE TAFT, NEW HAMPSHIRE
- 5 AARON PADGETT, NORTH CAROLINA
- 6 JAY HYLAND, MAINE
- 7 BOB HALLOWAY, MASSACHUSETTS
- 8 BOB GOFF, MISSISSIPPI
- 9 BOB QUILLEN, COLORADO
- 10 ED BAILEY, CALIFORNIA
- 11 ROBERT SUPPES, OHIO
- 12 STUART LEVIN, PENNSYLVANIA
- 13 VICK COOPER, KANSAS
- 14 KIRK WHATLEY, ALABAMA
- 15 TOM HILL, GEORGIA
- 16 ALICE ROGERS, TEXAS
- 17 BILL PASSETTI, FLORIDA
- 18 KEN WANGLER, NORTH DAKOTA
- 19 BILL SINCLAIR, VERMONT
- 20 RAY PARIS, OREGON
- 21 VICKIE JEFFS, KENTUCKY
- 22 MAX BATAVIA, SOUTH CAROLINA
- 23 BRIAN HEARTY, VERMONT
- 24
- 25

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

(8:30 a.m.)

1  
2  
3 FACILITATOR CAMERON: Good morning. We'll get  
4 started and want to stay on schedule. One important  
5 factor of that they have agreed to keep the coffee place  
6 open by the piano until after our break which is scheduled  
7 for 10:15 so that we will break at 10:15. I may -- Bill  
8 may still be talking then, but hopefully we'll be beyond  
9 that.

10 AUDIENCE MEMBER: We won't be listening.

11 (Laughter.)

12 FACILITATOR CAMERON: What's new about that,  
13 folks? And we will break tomorrow at 10:15 for coffee.  
14 They're going to try to arrange that also and tomorrow  
15 you'll probably all need a coffee break at 10:15.

16 Anybody who still is having trouble getting a  
17 room rate of \$79 see Cathy from California outside. She's  
18 going to do that today. Anybody who wants a second room  
19 at \$79, she probably can do that.

20 Let's get started with Bill Sinclair from Utah  
21 who is going to update us on Envirocare and then we'll go  
22 to Paul Lohaus.

23 MR. SINCLAIR: Good morning. I'm sure glad we  
24 had the business meeting to start with, to kind of wake

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1 everybody up so I didn't have to. So hopefully this will  
2 be interesting enough to keep your attention.

3 I've entitled this little presentation  
4 "Lessons Learned and Still Being Learned" and it's  
5 relating to what I term the Anderson Sinani Affair. And  
6 if you're not familiar with what that is, I can give you a  
7 thumbnail sketch.

8 On December 28, 1996, I have that ingrained in  
9 my mind, a lawsuit was revealed that indicated that former  
10 Director of the Utah Division of Radiation Control had  
11 received payments from the President of Envirocare of Utah  
12 which is a commercial radioactive waste disposal firm.  
13 And the lawsuit was couched on the terms that the former  
14 Director was suing for consulting services he said he  
15 provided to Envirocare. And with that, certainly that was  
16 a situation that raised a lot of eyebrows and of course, I  
17 guess many of us over the years have dealt with  
18 controversial subjects and controversial things and I just  
19 want to give you my perspective of trying to deal with one  
20 of these situations.

21 Next slide, please. I'm going to talk about  
22 four major areas that I found were kind of areas of  
23 concern that I as a Director had to deal with and so we're  
24 going to start -- the five areas are agency trust, what I  
25 term as media nightmare, generator panic, investigations

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1 and lawsuits, and then finally some suggestions of it.  
2 You run into this kind of situation, some suggestions of  
3 what you can do.

4           Next, please? The first issue deals with  
5 agency trust and, of course, when you have these kind of  
6 allegations, facts, whatever you want to call them come  
7 forth, you find out that the parties that are involved  
8 certainly have some eyebrows raised in their direction  
9 that really the agency also suffers. And we found out  
10 very quickly that the trust issue was a big issue and  
11 trust really goes down, what I term, goes down the toilet  
12 until you prove otherwise. So you have to think about how  
13 you're going to establish trust of your agency in the  
14 midst of something controversial such as this.

15           I'd like to give you some examples of some of  
16 the reactions that we had when this story first broke.  
17 And I've couched it in terms of just several different  
18 reactions and several different sources. The first is  
19 federal agency reactions and of course, federal agencies  
20 are always concerned that in the midst of something like  
21 this that the state isn't doing their job. And so they  
22 feel like Big Brother needs to come in and make sure that  
23 they're competent that the state is doing all they can do  
24 to solve this particular problem.

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1 I'll give you an example of two different  
2 reactions to this situation. The first reaction was the  
3 experience we had with EPA. EPA, of course, has some  
4 regulatory responsibility for the site because of mixed  
5 waste. And so initially they did what I call a knee jerk  
6 reaction and immediately they formed a team. They called  
7 it the Envirocare Team. And that was composed of people  
8 from the CRCLA program, from the Investigation Center,  
9 from the Air and Radiation Program, and they had the  
10 Envirocare Team. So because they formed the Envirocare  
11 Team then, they needed to make sure that they had a  
12 regularly scheduled conference call with the State of  
13 Utah, and so I was informed that every Tuesday, we would  
14 have the Envirocare Team conference call so we could keep  
15 EPA apprised of what was going on. So I reluctantly  
16 agreed, as well as the Director of the Division of Solid  
17 and Hazardous Wastes and we got on the first conference  
18 call and for about three minutes there was nothing but  
19 silence because EPA didn't know what to talk about or what  
20 to do or how to react and after the first conference call,  
21 we decided not to participate in the Envirocare team  
22 anymore with EPA.

23 (Laughter.)

24 On the other hand, NRC really lent us good  
25 support and really provided us with what I would call a

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1 trust factor because they had to respond to several  
2 inquiries from different groups and agencies and I thought  
3 they handled it very well. So I was very pleased that we  
4 got good support from the NRC in regards to our program.

5           Secondly, compact reaction. Of course, the  
6 State of Utah is a member of the Northwest Interstate  
7 Compact and it's an interesting relationship because we  
8 have Envirocare in the compact area. The compact's  
9 reaction was well we have to do something. Well, as I  
10 said and talked to my colleagues on the compact, I said  
11 well, what do you want me to do? Well, we've got to do  
12 something. Okay, what is it? Well, do something.

13           (Laughter.)

14           So over lunch one day we decided that I would  
15 give the Northwest Compact a briefing on how the  
16 relicensing with Envirocare was going because a lot of  
17 that was tied to past licensing actions and so forth. So  
18 that seemed to satisfy the compact members. They did  
19 something. They required me to put in several hours of  
20 work to get a briefing.

21           Next reaction, we have in Utah, we have a  
22 Radiation Control Board and they are rule making and  
23 policy making body comprised of members appointed by the  
24 Governor to represent various interests and one of the  
25 immediate issues we've had here was that Mr. Sinani was a

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1 member of the Radiation Control Board representing the  
2 waste disposal industry. And so there was a lot of  
3 concern that he was in that position at the time the  
4 situation occurred.

5 Well, the first meeting after the news broke  
6 of the Radiation Control Board, it was kind of  
7 interesting. We had really an overt action and a covert  
8 action. The overt action was from our public member who  
9 is from an environmental group and he played it to the  
10 limit to the media. Of course, we had every television  
11 news station there at our board meeting and he voiced his  
12 disgust in several forms and in several terms that were  
13 very interesting and made good news, but it was also  
14 interesting that many of the other board members held an  
15 opinion on the matter. But even though they held an  
16 opinion on the matter, it was interesting that a petition  
17 was being circulated at the time by one of the board  
18 members to the Governor asking for Mr. Sinani to be  
19 removed. That was signed by almost every board member.

20 Well, the legislature, of course, is one that  
21 is always interesting to deal with and I always find  
22 myself in an interesting situation about every January and  
23 February with our state legislature. This year, however,  
24 is much more interesting. One reason was that the Salt  
25 Lake Tribune published a listing of all the contributions

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1 that were made by Envirocare of Utah to various  
2 legislators.

3 (Laughter.)

4 And the Governor, by the way. And I think  
5 once that word got out and got spread among the -- got  
6 spread around the Hill that I had probably one of the  
7 quietest legislative sessions I've ever had. So it was  
8 good in some aspects, at least.

9 Public reaction to this was I talked a lot to  
10 my friends and neighbors who got to see me on television a  
11 lot and most of them couched this in terms of "well, this  
12 is pretty bizarre" and I think kind of summarizes the  
13 public reaction to all of this.

14 As far as our licensees' and registrants'  
15 reactions, it really had an impact on our staff in the  
16 fact that as they would go out and do their routine  
17 inspections of x-ray machine users or radioactive material  
18 users, they get all kinds of nice little remarks made  
19 about gold coins and condos in Park City and things like  
20 that and so they really felt some of the pressure and some  
21 of the heat in regards to some of the action of people in  
22 the past.

23 One thing we realized we needed to do  
24 immediately, we needed to really establish what our agency  
25 position was. And our executive director of the Utah

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1 Department of Environmental Quality was really on the  
2 forefront. She got out immediately among the press and  
3 other forms and was requesting that Mr. Sinani resign from  
4 the Radiation Control Board. She mentioned that if she  
5 had known about the situation she would have barred him or  
6 barred Mr. Anderson, I'm sorry. And so she made it very  
7 clear that this kind of behavior, at least by a state  
8 employee was not acceptable and I felt that was really  
9 good to get that information out quickly.

10 Another thing that we did and I will couch  
11 this as my boss and I did, we really talked about that, we  
12 were kind of disgusted with this and we did this in  
13 several forms. In fact, I remember in front of our  
14 legislature appropriations committee, I don't think I ever  
15 had the attention of the committee as much as this year  
16 and it was kind of interesting because a lot of times  
17 because we're associated with big EPA programs, air, water  
18 and so forth that we really don't get the attention, but  
19 this year I can guarantee that all the eyes were focused  
20 on me when I got up and talked about this situation. And  
21 I did. I voiced disgust with this. And so we're letting  
22 people know that we're not happy with this situation and  
23 this was not behavior that we felt was correct in our  
24 situation.

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1           The other thing we did quickly was to validate  
2 past and present staff activities. This was kind of a  
3 double check. We wanted to make sure that even though  
4 there's been allegations raised that maybe the licensing  
5 of the site was not appropriate, we went back and we  
6 looked at that quickly and we put together a document and  
7 presented it in several forms to kind of validate that  
8 everything had been done right in the past.

9           Well, the next part of this relates to what I  
10 call the media nightmare. As you recall, I mentioned this  
11 happened December 28, 1996. This was the lead news story  
12 on all television channels for 10 days in a row. And this  
13 was the first time I had ever had reporters lined up to  
14 talk to me. They were literally lined up outside in our  
15 waiting area and I just dealt with one right after  
16 another.

17           So my advice is when you get into these kind  
18 of situations, you really almost have to deal with it  
19 initially because there's not a lot you can do to prepare  
20 for it, especially when you don't know it's going to hit  
21 the media at any particular time.

22           We knew the lawsuit was there. We had either  
23 been informed by the Attorney General's office that it was  
24 there. We knew at some point in time a reporter would go

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1 down and find this, and so we just had to kind of wait to  
2 deal with it.

3           The other thing that we worked on was that as  
4 the events unfolded with this that we tried to anticipate  
5 it and we tried to prepare for it and we found it, I found  
6 it very helpful to work with our public relations staff.  
7 One of our press contacts is a person who used to work for  
8 a newspaper and so it was very helpful to get her  
9 perspective on how to deal with the press in this  
10 particular situation. I found it also very helpful in  
11 being proactive in getting information out and we used all  
12 kinds of different ways to do that. I've listed some of  
13 those up there, such as our home page, information  
14 notices, meetings and so forth.

15           And additionally, we found out that once the  
16 initial feeding frenzy, I would call it, died down, that  
17 now there's continued interest and that's now boosted  
18 because of the initial allegations of being brought  
19 forward and so I have contacts all the time now from our  
20 local newspapers, TV media who always call me and say when  
21 is the story breaking, give me a call before it happens.

22           We're one of the few radiation control  
23 programs that have our own watchdog publication, Utah Rad  
24 Watch.

25           (Laughter.)

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1                   We have a lot of interest from trade  
2 publications. McGraw-Hill calls me on a regular basis.  
3 They have several different publications so they're  
4 following the situation closely. I've talked with the  
5 forum, the compact and other interested parties. It's  
6 interesting that since this has occurred we have one  
7 individual, I call the man in black and he just kind of  
8 wanders in and we know what his name is, but he won't tell  
9 us who he represents or anyone, but he always shows up at  
10 what I call appropriate times to get documents that we may  
11 have produced just recently. So it's kind of interesting.

12                   Next. The next area of concern that we found  
13 ourselves dealing with is what I call generator panic,  
14 people who are using the site at the time. Initially, we  
15 got a lot of calls as to just what's going on here. I've  
16 heard this and you know, or I've seen it in the paper.  
17 What's going on? Pretty closely following that, we got a  
18 lot of rumors about well, is the site being closed? Oh,  
19 I've heard the site is closing down. Don't close the  
20 site, please. So we had to deal with that. Of course,  
21 generators' response to dealing with this a lot of times  
22 led them to come in and do audits of the facility which  
23 means they had to come and sit in our offices and do file  
24 searches. It really has stretched the limits of our staff  
25 to try to keep up with just all the people coming in and

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1 looking alt the files and making sure that the files don't  
2 wander off with the people coming in and looking at the  
3 files.

4           Next, Cathy. And then we found ourselves  
5 having to deal with investigations, lawsuits, and  
6 administrative challenges. The first issue we got into  
7 was this was a state investigation to start with by the  
8 Utah Attorney General's Office. And for the first few  
9 months that was the case and I found out that because we  
10 were working with our Utah Attorney General's Office, I  
11 had good communication. I was well aware of how the case  
12 was going. I knew who they were talking to and that was  
13 very valuable.

14           However, at one point or at some point, I  
15 can't remember exactly when, there was a decision to turn  
16 this investigation over to the Department of Justice, to  
17 the FBI, and at that point in time all communication  
18 ceased and it's been very frustrating to try to deal with  
19 that. In fact, the FBI has been pretty covert even coming  
20 into the office. They usually call the staff an hour  
21 before and just show up and then they'll grill them for a  
22 couple of hours and leave again and then show up a couple  
23 of weeks later. Never have come and talked to me yet and  
24 maybe that's okay, but it's very frustrating to not know  
25 where we are in this investigation. So one of the things

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1 I've put up there is prepare to be frustrated because it  
2 is a very frustrating process.

3           As this drags on, you really find yourself in  
4 a situation you really want to get it over with. Please  
5 do something, I don't care what it is, you know, just get  
6 it over with. And as I was sitting in a meeting with our  
7 Attorney General the other day and we were talking about  
8 some issues related to various lawsuits and investigations  
9 and so forth, he mentioned that well, you know, four or  
10 five years from now this will all be over with.

11           (Laughter.)

12           That gave me a lot of hope. Associated with  
13 all these challenges and investigations, of course,  
14 because we have various lawsuits going on, we have  
15 discovery file searches, we have a lot of legal staff  
16 coming in and going through our files, we now are starting  
17 deposition of various staff members related to law suits.  
18 We're going to probably have to prepare at some future  
19 time for trial testimony and so all this takes time and  
20 really wears down on the staff.

21           And then we've had to deal with several  
22 administrative challenges by environmental groups or  
23 competitors to the state or other agencies. NRC has had  
24 to deal with some of this. EPA has had to deal with some  
25 of this. And so all that is very interesting.

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1           Okay, finally what can you do or what I call  
2 advice from one in the frying pan on a daily basis. One  
3 of the things I've tried to do as a manager is I've tried  
4 to practice anticipatory management. I've tried to look  
5 ahead, get up on the balcony, try to see what could be  
6 down the road and try to prepare for it. This has been  
7 very helpful in trying to do that.

8           I've also tried to instill in the staff what I  
9 call the 110-100 rule. And that means if a situation or  
10 problem comes up, it's most cost effective to solve it at  
11 the lowest level, the one level. It costs you one hour of  
12 time or one dollar in resources. As that escalates up to  
13 my level and then up to my boss's level, then it is  
14 exponential. You have a 10 factor, 100 factor and it gets  
15 up to the Governor's level, I call it the million rule.  
16 So it's very important to try to solve those problems as  
17 quickly as you can.

18           The next thing I think is really important is  
19 to support your staff. As soon as this news broke, I  
20 pulled my staff together and we talked about it and we  
21 talked about the situation and I've really tried to be  
22 supportive of them because it's very difficult for them to  
23 try to deal with this with all the distractions, with the  
24 media wandering around the cubicle taking pictures of them  
25 and things like that that go on, people calling them up

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1 and trying to get information. There's a lot of stress  
2 involved in this.

3           In fact, what I've seen is that really the  
4 staff in some cases, especially those who regulate  
5 Envirocare have really probably have become more hard  
6 nosed and hard core because of this, because they really  
7 felt they should have done something more and so there's a  
8 lot of coaching involved of those working with the  
9 facility to try to get past that.

10           Thirdly, my suggestion is to document,  
11 document and document. I think we were practicing  
12 documentation intently before and now I'm practicing  
13 documentation intensely. And every phone call, every  
14 request, everything is documented and put in writing.  
15 That's very important.

16           I found it's smart to try to respond promptly  
17 to the media because it builds your credibility as an  
18 agency and trust, as I mentioned before, is one of the key  
19 factors here. So it's important. If reporters call, to  
20 try to get back to them and try to respond to them as  
21 quickly as possible. You know, they'll ask you questions  
22 you don't like. I can remember that the first of this  
23 situation I got asked, "Bill, did you take a bribe?" I  
24 don't like getting asked those questions, but I do answer

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1 them and I answer them forthrightly. I think that helps to  
2 try to build your trust and credibility with the media.

3           Coordinate internally and externally. That's  
4 something very important because there's a lot of  
5 individuals and agencies involved here. So you try to  
6 coordinate as best you can. And then finally, keep  
7 everybody informed and up to date as much as possible.  
8 This is really an issue that's directed to the staff  
9 because I'm busy, the low level waste manager is busy.  
10 The Envirocare staff is busy. A lot of times the rest of  
11 the staff kind of feel left out as to what is going on.  
12 So we tried very hard to try to keep our staff up to date.

13           So that's kind of it in a nutshell. I'd be  
14 glad to answer any questions.

15           MR. GODWIN: You said it was revealed in  
16 December? How long did you know about it before it was  
17 actually made public?

18           MR. SINCLAIR: I knew about it in October.

19           MR. GODWIN: Okay, thank you.

20           MR. LEVIN: Stuart Levin, Pennsylvania. Does  
21 your department have a press office or any press people  
22 that were able to help you out?

23           MR. SINCLAIR: Yes. We do. We have a public  
24 relations staff and as I mentioned before, our major  
25 public relations person was a former newspaper reporter

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1 and that was very helpful in having her perspective on  
2 dealing with the media.

3 MR. PADGETT: Aaron Padgett, North Carolina.  
4 I have a comment, question and a follow-up. The comment  
5 was I guess I come under generator panic because I just  
6 signed, we just signed a contract to clean up a facility  
7 out in Western North Carolina, a mixed waste facility and  
8 Envirocare was the only place we had to go. So I delayed  
9 that clean up and it's going on now rather than last  
10 spring when it should have because of this, because I  
11 didn't want to be caught with the thing half dug up and  
12 nowhere to do with it. So I come in that category.

13 MR. SINCLAIR: Okay.

14 MR. PADGETT: The question I have is this, the  
15 NRC now is coming out and looking at the state programs.  
16 You have these rules to go shoot people after the fact and  
17 so forth if something like this comes up. The question I  
18 have for you, if you've looked at some of those proposals  
19 is there anything in there that you can see that would  
20 have helped prevent the situation?

21 MR. SINCLAIR: Yo know, that's a good question  
22 and I guess I can comment on that. You know a person who  
23 is going to do something like this, I don't know what  
24 their thought process is. I assume that the person  
25 involved here thought about this, considered maybe the

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1 consequences involved and made the decision to go ahead.  
2 I'm not sure that a conflict of interest requirements, any  
3 potential criminal provisions would have made any  
4 difference in this case. And that's a real good question  
5 about here we have kind of a -- it's an isolated case, but  
6 it's high visibility. It's important that we recognize  
7 that something needs to be done to prevent this again, but  
8 if somebody is really intent on breaking the law, I don't  
9 know if all the laws in the world are going to stop them.

10 FACILITATOR CAMERON: Let's follow that train  
11 a little bit. Does anybody have any other things to say  
12 about that, on preventing that aspect?

13 MR. PADGETT: That's my whole concern. I've  
14 looked at what's been proposed and maybe I'm missing  
15 something, but I don't see anything in there that I think  
16 will help prevent it.

17 I think whether you have the particular rules  
18 of the Commission has in place or not, there are rules  
19 that you can prosecute people and you can take care of  
20 folks who deliberately break the law. So that's my  
21 concern over what the Commission is proposing right now.

22 FACILITATOR CAMERON: Paul, I didn't know you  
23 were go into this media presentation or not. Does NRC  
24 have anything to offer about the nuclear reactor issue?

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1           MR. LOHAUS: I think it's a very good question  
2 and it's one that I'd like to see more dialogue on. I  
3 think what we've tried to do and as I'll talk to, there  
4 really are three programmatic issues that come out of the  
5 Envirocare allegation. And in looking at those, I think  
6 as Bill pointed out, if an individual has intent to  
7 circumvent the law, to go behind the scenes, it can go  
8 undetected, but at the same time I think if we establish  
9 an environment that addresses these issues and set out  
10 some procedures and requirements that are in place it will  
11 help insure that activities and actions of this nature,  
12 hopefully will not occur. But I think as Bill pointed  
13 out, if an individual intends to circumvent the law, it  
14 can be done and it can be done and it may not be detected  
15 immediately, but certainly may at some time in the future.

16           FACILITATOR CAMERON: Roland?

17           MR. FLETCHER: Roland Fletcher, Maryland. I  
18 probably shouldn't even be admitting this, but quite  
19 frankly, what Bill said, if someone has the intent is very  
20 true because some of the safeguards that you put in place  
21 over the last 10 years in Maryland, most of the people who  
22 have violated the law have been put there to enforce the  
23 safeguards. They are the people -- you know, it's like  
24 the wolf watching the chicken coop. The people who have  
25 been placed in certain positions to make sure that money

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1 is received or properly deposited in accounts and things  
2 of that nature, they're the very ones who have broken the  
3 law. So safeguards are good. I mean it's just like all  
4 the laws that are on the books. Most law-abiding citizens  
5 are going to abide by them. But under certain  
6 circumstances, I don't think there's any amount of  
7 prevention you can put in.

8 FACILITATOR CAMERON: Anybody else on  
9 prevention?

10 I think this could be applied to lessons learned, but when  
11 it gets to the situations, you worry about everyone in the  
12 department is responding with the same story because of  
13 the fact that everybody is getting calls. How did you  
14 deal with that aspect of it?

15 MR. SINCLAIR: Yeah, that's a very good point.  
16 In fact, we did sit down as a staff and talk about that  
17 very issue. Our Attorney General's office was very  
18 concerned about who people were talking to and we sat down  
19 and talked about that and talked about ways to make sure  
20 that the story stays the same throughout. That gets very  
21 difficult, especially because this has been a long time  
22 frame since a lot of these events have happened and  
23 depending on how the question is asked, a response might  
24 be different from one time to another. That's a very  
25 important issue.

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1 FACILITATOR CAMERON: Anybody in the audience?  
2 Steve?

3 MR. ENGLAND: I'm Steve England from the State  
4 of Illinois. I concur that it's very difficult to discern  
5 what evil may lurk in the hearts of men. But we've had in  
6 Illinois economic disclosure filing requirements for about  
7 20 years and I was wondering whether Utah had any  
8 requirements like that which if they had been followed  
9 would have disclosed this relationship?

10 MR. SINCLAIR: That's correct. There was a  
11 conflict of interest disclosure form that was required to  
12 be filled out. The person involved here did fill such a  
13 disclosure form. He did not reveal this relationship.

14 MR. MOBLEY: Bill, how much of this could  
15 possibly be related to Sinani's being on the Radiation  
16 Control Board? How did that interface, possibly  
17 participate in this situation?

18 MR. SINCLAIR: It actually didn't have very  
19 much impact. And actually, the Radiation Control Board  
20 didn't come into being until about 1991 when the  
21 Department was formed and before that it was only an  
22 Advisory Board. Mr. Sinani had served on that board and  
23 actually had served on other boards within the Department.  
24 But we really didn't find him very effective in that role  
25 because he was only one of eleven members of the board and

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1 certainly at times he did and I would think  
2 inappropriately, promote his agendas, but there was also  
3 the balance of other members of the board saying wait a  
4 minute here. You're promoting your own agenda, here's  
5 another side to the issue.

6           So I really don't think it had very much of an  
7 effect. In fact, there was a policy that if there were  
8 matters before the board relating to Envirocare, he  
9 couldn't participate or vote on the matter.

10           MR. MOBLEY: Could it have been though beyond  
11 that and I mean you have to watch me because I can ask you  
12 something that maybe you shouldn't answer or whatever.  
13 Beyond that, could the fact that he's on the board,  
14 because see, we don't have a board in Tennessee and I've  
15 always kind of wondered and been concerned about that when  
16 I talk, hear about other states and I see our sister  
17 programs that do have boards and I know that some of those  
18 people on those boards have a lot of clout within the  
19 program. I look at that and think, boy, I don't know how  
20 I would deal with that. And I just wonder how much could  
21 that relationship have possibly caused this situation to  
22 occur. I'll leave it at that.

23           MR. SINCLAIR: Yes, I think the relationship  
24 was more intense just at the Director to Licensee level,

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1 rather than the Board to Board Member level. That's  
2 really where it occurred.

3 MR. PADGETT: Aaron Padgett, North Carolina.  
4 We do have a board and I'm appreciative of them. I think  
5 they give us credibility. I think they add value to the  
6 program. And we'd like to keep the board. Listening to  
7 what I've heard, I seriously doubt that the relationship  
8 entered into this particular problem. Now if there had  
9 been, if Utah had had a hands off approach, and they had  
10 been getting by with a lot of things in their inspections  
11 and so forth, then my thought would be no, that board  
12 membership did affect the relationship.

13 And that leads to the other concern I have  
14 with the board and it's like you. There are certain  
15 people in the state who have a lot of political influence  
16 who are licensees that I would not want on the board and  
17 if they were on the board I would consider that a major  
18 problem. So your concern, I think, is a valid one, but  
19 right now we do not have that situation and as far as I'm  
20 aware, I've not been associated with it that long, but as  
21 far as I'm aware, haven't had it, but it is a situation to  
22 watch.

23 FACILITATOR CAMERON: Could we have one more  
24 comment from Ray and then I think we're going to need to  
25 go Paul Lohaus.

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1 MR. PARIS: Ray Paris. That's my point. I  
2 mean where we're headed with this discussion I'd like to  
3 hear what Paul has to say because I have some comments  
4 about what their proposals are.

5 FACILITATOR CAMERON: Okay. Good. Bill, that  
6 was great. Thank you very much.

7 (Applause.)

8 One generic issue that may be surfacing here  
9 to think about whether you want to explore it further is  
10 the whole issue of advisory boards to state radiation  
11 control programs. I mean I don't know if there's anything  
12 worthwhile exploring there about how you go about forming  
13 them, who should be on it, should you have them, etcetera,  
14 etcetera, but that's one thing you might want to keep in  
15 mind.

16 Paul?

17 MR. LOHAUS: Thank you. Could I have the  
18 first vu-graph, please? We started discussion in this  
19 area and I wanted to maybe start and highlight three  
20 programmatic issues that really come out of the Envirocare  
21 allegation and staff has looked at these, developed some  
22 suggested, what we call preliminary staff proposals which  
23 were submitted to the Commission in a Commission paper.  
24 The Commission has asked that these be provided to the  
25 states in the public for review and comment, so I want to

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1 emphasize that these are preliminary staff proposals. We  
2 seek your comments and feedback on these issues, but in  
3 looking at these three areas, the first one is should  
4 agreement states be required to adopt compatible rules  
5 that are in effect at the federal level that relate to  
6 conflict of interest and really when we talk about  
7 conflict of interest I think it's really the whole  
8 question of ethics and integrity and it carries with it  
9 not only conflict of interest, but also standards of  
10 employee conduct. We talked about financial disclosure  
11 requirements a short while ago, but that's included here  
12 as well.

13           The second issue that comes out is should NRC  
14 adopt explicit guidance to address integrity concerns that  
15 may be identified within an agreement state program or  
16 relating to an individual on the program of an agreement  
17 state staff.

18           The third item relates to licensees and  
19 licensee employees and that is, should agreement states  
20 adopt requirements which are compatible with those in  
21 parts 30, 40 and 70, 30.10, 40.10 and 70.10, which relate  
22 to wrong-doing on the part of licensees and licensee  
23 employees.

24           Next vu-graph, please. As I noted, we  
25 conducted a staff evaluation, prepared preliminary staff

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1 [proposals and these were set out in a SECY Paper 97-156,  
2 which went to the Commission in July. The Commission  
3 provided direction in a September 3rd staff requirements  
4 memo, asking that we transmit the paper to the states,  
5 make it available publicly for review and comment and then  
6 following consideration of comments, provide final  
7 recommendations to the Commission for approval.

8           Next slide, please. We provided copies of the  
9 paper to you all through a September 10th all agreement  
10 states letter. We indicated we would talk about it at the  
11 meeting today and that we would contact you individually  
12 to determine whether you may have existing conflict of  
13 interest regulations in place and ask that you take a look  
14 at the issues in the paper and the preliminary staff  
15 proposals and provide comments to us by the end of  
16 October.

17           We also issued a press release on September  
18 12th which announced availability of the paper inviting  
19 public comment on the issues.

20           Next vu-graph. I'd now like to really turn  
21 and spend some time and talk through each of the issues  
22 and we'll start with should agreement states be required  
23 to adopt compatible conflict of interest requirements? I  
24 wanted to maybe spend a few minutes and talk about current  
25 practice.

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1                   Currently, agreement states are not required  
2 as a matter of compatibility to adopt explicit  
3 requirements dealing with conflict of interest. Our  
4 belief is that nearly all states have existing  
5 requirements, either within the program itself or within  
6 the department where the program is located or state-wide  
7 requirements that deal with this area.

8 Issues are handled on a case by case basis as they arise  
9 in programs through the IMPEP or program review process.

10                   We also looked at the question of does NRC  
11 have authority to require states to adopt conflict of  
12 interest requirements? And really when you look at this  
13 issue it really comes down to is there a clear nexus  
14 between requirements dealing with integrity, conflict of  
15 interest and protection of public health and safety as  
16 it's linked to our authority under the Atomic Energy Act.  
17 And although it may be relatively straight forward to deal  
18 with individual cases in establishing that linkage, in  
19 establishing a linkage generically in terms of setting out  
20 a requirement that all states should adopt compatible  
21 conflict of interest rules, it becomes a much more  
22 difficult area to address and provide a clear basis.

23                   Could I have the next vu-graph, please? The  
24 preliminary staff proposal that was set out in our SECY  
25 paper was that we continue to handle conflict of interest

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1 issues on a case by case basis and that we confirm with  
2 states whether you have exiting rules in place. And in  
3 this regard, Spiro Stragitis has been in touch with a  
4 number of you and he's also done a fair amount of  
5 research. There's quite a bit of information that's  
6 available through state home pages, a number of the ethics  
7 commissions or ethics organizations within the states,  
8 have home pages, and he's been able to access and obtain  
9 copies of executive orders, various rules and laws that  
10 are currently in place. Attached to your handout, on the  
11 last page, is an initial summary that Spiro has prepared  
12 both based on his calls and also based on the research  
13 that he's done. Our plan here is to use that chart or  
14 something similar to that to help summarize in our  
15 response to the Commission whether states do have existing  
16 rules and laws in place that address this area.

17           So one of the things we would like you to look  
18 at and provide feedback to Spiro either through e-mail or  
19 give him a call or include a mark up as a part of your  
20 comments, but please take a look at that and give us any  
21 feedback and comments on that.

22           The last bullet there summarizes additional  
23 direction that the Commission provided to us in their  
24 staff requirements memo. One, they are interested in the  
25 results of this survey and also identification of any

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1 areas of concern that may result from looking at what it  
2 was you have in place.

3           The second area identified is that the staff  
4 consider and recommend whether an agreement state conflict  
5 of interest rules and their enforcement should be  
6 routinely reviewed under IMPEP, rather than dealing with  
7 issues as they arise on a case by case basis through our  
8 review process.

9           I think here, again a key issue is whether  
10 employee conduct and conflict of interest concerns have  
11 safety significance and thus affect the ability of a state  
12 to carry out an adequate and compatible program.

13           Let's move on to the next slide, please.  
14 We'll talk a little bit more about that. Should NRC adopt  
15 guidance to address integrity concerns in agreement  
16 states? Some background information here. Normally,  
17 concerns in this area are usually identified through an  
18 allegation. This may be an allegation that could be filed  
19 by a state employee, a representative of an licensee or a  
20 member of the public. Allegations of wrong doing that are  
21 received that relate to agreement states staff are  
22 considered by a special allegation review board that's  
23 headed by the Director of the Office of State Programs,  
24 Dick Banger heads up this panel and includes management  
25 representatives from our Office of the General Counsel,

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1 our Office of Investigations, the appropriate Regional  
2 Office, and in many cases, depending on the particular  
3 issue, a management representative from the Office of  
4 Nuclear Material Safety and Safeguards.

5           As I noted there, there's a range of actions  
6 that may be recommended by this allegation review board.  
7 In some cases, it's considered and no further action is  
8 taken. In other cases, it may be referred to upper  
9 agreement state management for their consideration and  
10 appropriate action. In other cases, it may be referred to  
11 the State Attorney General or Inspector General within  
12 the state for their appropriate action. And in very  
13 serious matters, it may be provided to the Commission for  
14 their review and approval and could result in referral to  
15 the Governor or possibly an independent investigation by  
16 NRC.

17           I will note that to date, in those instances  
18 where we have addressed areas, the normal course of action  
19 has been to refer to such matters to the State Attorney  
20 General or senior management or the internal state  
21 organization that has responsibility for dealing with  
22 these matters within the state.

23           In all cases, such allegations would be closed  
24 with a letter to the alleged that would describe the

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1 actions taken relative to addressing the concerns that  
2 were raised in the allegation.

3 As identified in the last bullet, and I think  
4 this is an important point for discussion, we currently  
5 have no guidance relative to the handling of integrity or  
6 wrong-doing concerns if they are substantiated.

7 Next slide, please. In the paper, what staff  
8 has set out as a preliminary staff proposal is to develop  
9 guidance and that guidance would really be sort of framed  
10 on a response to two questions. The first would be does  
11 the integrity issue affect the adequacy of the program or  
12 ability to maintain an adequate and compatible program.

13 The second is does the integrity issue create  
14 significant doubt on the person's trustworthiness in  
15 coordinating agreement state matters with the NRC.

16 The normal course of action, as I mentioned  
17 earlier, would be referral to the appropriate state  
18 organization for their consideration and response back to  
19 NRC and I think what we would expect is that would address  
20 any areas of concern or issues. However, if a state's  
21 response in the investigation that was conducted was not  
22 sufficient to address the potential adequacy and  
23 compatibility concerns about the program, or to restore  
24 NRC's confidence in our ability to deal with an agreement  
25 state, the guidance would also identify further actions

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1 that NRC would take and such actions might include further  
2 review of the issue by the Commission and possible, for  
3 example, referral to the Governor or to a high ranking  
4 state official for further consideration.

5           Next vu-graph, please. The final issue  
6 relates to whether states should adopt compatible  
7 requirements relating to licensee wrong doing. As I  
8 mentioned earlier, these are set out in parts 30, 40 and  
9 70 under the new adequacy and compatibility policy, these  
10 would be designated as a compatibility category C. What  
11 this means is that the state would need to adopt a  
12 requirement that would reflect the essential objectives of  
13 NRC's requirement. It would not have to be identical, but  
14 the basic intent and the basic essential objectives would  
15 need to be reflected in the state's rule.

16           I think part of the background or rationale  
17 for this is that there are some transboundary  
18 considerations that are significant here. If there's a  
19 situation where a licensee has experienced wrong doing and  
20 that wrong doing is not addressed through a state's  
21 program or through NRC's program and that individual  
22 operates under reciprocity, there's potential for similar  
23 actions to occur under reciprocity. So I think there's  
24 potential for similar actions to occur under  
25 reciprocities. So I think there is some transboundary

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1 national program aspects that are related here that would  
2 tend to want us to each have a compatible requirement in  
3 this area.

4           As you're aware, under the new policy and the  
5 implementing procedures, states can address compatible  
6 requirements using a legally binding requirement which can  
7 be a rule, generically applicable license condition or  
8 some other form of legally binding requirement. So  
9 there's some flexibility here in terms of how this could  
10 be addressed.

11           That completes my remarks. Again, I'd like to  
12 emphasize open this up for dialogue and really seek your  
13 feedback.

14           FACILITATOR CAMERON: Paul, I would suggest  
15 that what we do is try to go through this systematically  
16 so that we can be efficient about it and perhaps start out  
17 with the, if Cathy could put Slide 4 back on, that's the  
18 compatibility, conflict of interest, then move into the  
19 integrity and then move into the wrong doing and then see  
20 what cats and dogs are left over, including what do you  
21 need to need further, if anything, from the NRC in order  
22 to comment meaningfully on this particular paper.

23           So Aubrey, are we going to start with you on  
24 the compatibility conflict of interest issue?

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1 MR. GODWIN: Actually, I wanted to move back  
2 to the programmatic area.

3 FACILITATOR CAMERON: To the where?

4 MR. GODWIN: Programmatic issues.

5 FACILITATOR CAMERON: Okay, just as an overall  
6 issue?

7 MR. GODWIN: Right. I regretted that I didn't  
8 see anything there about looking at these boards that are  
9 quite frequently used throughout these programs. I think  
10 that's a key. Arizona, some 17 or 18 years ago, had some  
11 interesting things happen to them and I think it's sort of  
12 instructive and we ought to consider it.

13 Number one, I think it's an issue, is the  
14 Board is not an advisory board. I think that's the way  
15 you really need look first. Is an advisory board is  
16 considerably less of an issue. But if it's not an  
17 advisory, has some particular statutory function, you  
18 should look at that as a programmatic issue.

19 The next issue that needs to be looked at is  
20 does that board select the director? Now it gets involved  
21 if that board consists of licensees and registrants as  
22 part of this membership and in selecting the director. I  
23 see that as something that you should be concerned about.

24 The next issue is does it set direction or  
25 policy, if you would, for the agency. If it doesn't

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1 select a director, it gains a certain amount of  
2 independence because the director doesn't have to have his  
3 job obviously beholden to that. But still the various  
4 setting policy and direction approval, that's a pretty  
5 significant part of it.

6           The next level would be review of regulations  
7 and lastly, if they only look at the enforcement as far as  
8 things are concerned. So I think you need to look at some  
9 of those kind of issues as you review the state programs  
10 and I regret you didn't have this as a programmatic issue  
11 to look at. I think it is programmatic and I think you  
12 really need to look at, particularly where it selects a  
13 director and where it consists of licensees and/or  
14 registrants as part of the membership required by statute.

15           FACILITATOR CAMERON: That's a great research  
16 outline for addressing that issue. I guess the question  
17 is that something the NRC should put on their plate to  
18 examine as part of addressing this problem or is it  
19 something that the states would collectively do, somehow,  
20 in order to give  
21 -- share advice with each other in terms of how these  
22 advisory boards are set up.

23           MR. GODWIN: Not advisory boards. Other than  
24 advisory boards.

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1 FACILITATOR CAMERON: Other than advisory  
2 boards.

3 MR. GODWIN: Yes.

4 FACILITATOR CAMERON: Okay. Any comments on  
5 how that issue might be addressed before we go into the  
6 conflict of interest issue?

7 Yes, Bill?

8 MR. SINCLAIR: Bill Sinclair, Utah. I am on  
9 one of the boards Aubrey is talking about and in our 1994  
10 program review that issue was looked at in detail. And we  
11 had discussions with the Executive Director and the Utah  
12 Attorney General's Office concerning the Board. So it's  
13 been looked at, at least from our state.

14 MR. LOHAUS: My comment that earlier under the  
15 30 indicators, this was an area that we did look at to the  
16 program reviews. I think if you look at the criteria  
17 within IMPEP, it's not explicitly identified there, but as  
18 Bill noted, and as I highlighted earlier, we do deal with  
19 this issue on a case by case basis. If it comes up as an  
20 issue that's identified during a program review, we will  
21 address that area. We will make recommendations. But I  
22 think it's a very good comment, Aubrey, and we will take  
23 that under consideration and if there are other thoughts  
24 or views on that, we'd like to hear them also.

25 FACILITATOR CAMERON: Mike Mobley?

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1           MR. MOBLEY: I just want to say one, I think  
2 it should be part of this process right here and I can  
3 only tell you my experience. And when I go in with a  
4 meeting, with my management, regarding certain facilities  
5 which we regulate and there's a guy sitting there and we  
6 don't have a board, but he's on another programs board and  
7 I go into these meetings, it's a very different meeting  
8 than when I go into these meetings with John Doe,  
9 Licensee.

10           John Doe, Licensee, has no clout whatsoever  
11 with the management of the Department and Jim Doe, Board  
12 Member, even though he's not a Board Member, he's a Board  
13 Member of some other Board. I mean I'm thinking the deck  
14 is stacked against me here. Now maybe it's not that bad,  
15 but it's different. It's different. And it makes me  
16 think boy, I'm glad I don't have a Board, because I would  
17 be very uncomfortable if this was some licensee  
18 representative that was on one of these boards. I don't  
19 know. I'm just telling you what my experience is and if  
20 you're going to look into this and you don't look at the  
21 board issue, you're missing, I think, the biggy, my  
22 perspective.

23           FACILITATOR CAMERON: Okay, I think there's a  
24 new issue being flagged here.

25           Don Flater?

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1           MR. FLATER: I concur with Mike -- Don Flater  
2 with Iowa. I concur with Mike because I think where the  
3 problem is is that person, even though he's not part of  
4 your board and we don't have a board, we had an advisory  
5 committee, that person knows the system and how to get to  
6 th system. And they can put political pressure on you  
7 from coming down from the top. And the John Q. Public, as  
8 Mike put it, or licensee, they can't because they don't  
9 know the system. So you have to look awfully strong, I  
10 think, at the Board and the individuals on the boards and  
11 not just the radiation control boards.

12           FACILITATOR CAMERON: Okay, I think the NRC is  
13 going to have to put some thought into how they want to  
14 approach this issue, but I think it's on the plate for  
15 them now. Could we go to slide 4? This is "Should  
16 conflict of interest requirements be a matter of  
17 compatibility?"

18           Who would like to -- Don Flater, you want to  
19 start off on that one?

20           MR. FLATER: I have a couple of points on this  
21 issue. I think this may be one where federal legislation  
22 and state legislation may run head to head. In Iowa,  
23 we've got an exceedingly strong conflict of interest. In  
24 fact, it goes so far as to say that any employee of the  
25 State of Iowa who leaves employment cannot work for a

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1 licensee for a period of two years after employment. And  
2 we have prosecuted on those kinds of things. We have  
3 stopped people from employment. So we've got a strong  
4 one, but I think you're going to run into trouble if you  
5 tell me that I need to put some kind of rules into effect  
6 to make them in direct conflict with state legislation. I  
7 think we're going to run into some problems and so I think  
8 you need to look at that very closely.

9           What I'm concerned about though is something  
10 that happens very early on and I can only relate to a  
11 situation that has happened in Iowa and it has to do with  
12 an employee causing fraud against the feds. And they get  
13 a little nervous about that kind of thing. But we in Iowa  
14 didn't know a thing about that, until we initiated some  
15 question asking. Now this fortunately for us, this person  
16 happened to be on probation and we could get rid of them,  
17 but if that person wouldn't have been on probation, the  
18 feds weren't coming to me and saying anything about this  
19 person doing something wrong.

20           I think you need to look at the process early  
21 on and how you go about and how we talk as partners in  
22 this whole process. You get the legal people into it, you  
23 get personnel rights into it and it really becomes a  
24 confusing mess to go down through the whole process and if  
25 we let that person go prior to any kind of court action,

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1 there's only three things I can give you. If that person  
2 comes to me and wants to go to work for the NRC and you  
3 people haven't seen anything about it, and that's their  
4 salary, how long they've been with us and there's one  
5 other point, I forget exactly what it is, but those are  
6 the only three things I can say. I can't say that they  
7 were let loose for any kind of fraudulent activities.

8 FACILITATOR CAMERON: Okay, Paul, do you have  
9 any clarifications you'd like to ask Don about in terms of  
10 what we're doing here?

11 MR. LOHAUS: Not explicitly, Don. But I think  
12 the kinds of issues that you're raising are the very  
13 issues that we're trying to address here. In many cases,  
14 these are issues that we want to set out maybe a better  
15 process so that it's clear what the steps are and what  
16 actions we will take in addressing and dealing with those  
17 issues. As I noted, there's a range of actions that are  
18 available, but I think that's representative of what we're  
19 trying to deal with and address here.

20 FACILITATOR CAMERON: Let's go to Ray and then  
21 to Aaron and see how many people have the same view as Don  
22 on this.

23 MR. PARIS: I'm not too much different from  
24 Don, but I do think that it would not be needed for the

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1 Commission to have anything to do with a requirement for  
2 compatibility in the rules.

3           In Oregon, we have a commission who is called  
4 the Government Standards and Practices Commission, who  
5 looks at ethic issues for state employees. So for a  
6 commission to come down and say we need to look at a  
7 federal language for compatibility issues, I don't think  
8 that's needed at all. Not only do we have a commission,  
9 we have policies, ethic policies at the department level  
10 and at the division level so I think it is not needed at  
11 all. It may not be needed for states who have that in  
12 place. If a state did not have anything to do with an  
13 ethics issue, which I would be amazed if they didn't, then  
14 that might be applicable for the commission to come in and  
15 look at it, but that could be done on a state by state  
16 basis, so if there are rules in place for a state, I don't  
17 think this would be needed at all at the commission level.

18           FACILITATOR CAMERON: Thank you. Aaron?

19           MR. PADGETT: Aaron Padgett, North Carolina.

20 I looked at the questions that came to us from the  
21 commission and I quickly realized there's no radiation  
22 coming off that paper, no contamination. I was really out  
23 of my league. So I got help from the Attorney General's  
24 Office and turned this over to the Attorney General and

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1 said would you please handle this and deal with the  
2 commission on answering the questions and so forth.

3 My reason for saying that is very simple. If  
4 you're going to make this this issue, you may have to look  
5 at the composition of the IMPEP team. We certainly may  
6 need to look at who we're going to have responding to the  
7 IMPEP team, because the issues involved and that get  
8 raised are out of our league and we need help from  
9 personnel. We need help from the legal side of the house  
10 in dealing with them.

11 And if you're going to make a determination of  
12 compatibility, then you're probably going to need some of  
13 the same help in looking at what does the state have in  
14 place. I doubt that many of your technical people can  
15 really make a judgment call on those issues.

16 FACILITATOR CAMERON: That's a good point.  
17 You need to have the right people to look into this.

18 MR. HAMPTON: Bruce Hampton. I just wanted to  
19 throw in this. Bruce Hampton from NRC. I think we're  
20 very sensitive to the fact that the core of our oversight  
21 functions are related to the Atomic Energy Act and  
22 radiation protection, and as a general matter, we're  
23 uncomfortable looking into the administration procedures  
24 of the state that are generally applicable to all agencies  
25 because we realize and particularly that the radiation

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1 control program doesn't have as much control over that as  
2 it may say over its own regulations, that kind of thing.

3           At the same time in reviewing the program, as  
4 Paul indicated, when he went through his slides, if we  
5 identify concerns about the adequacy of the program and  
6 they somehow are linked to administrative procedures,  
7 conflict of interest rules, then it's incumbent on us to  
8 address that in some fashion. Now how that's addressed  
9 specifically will have to be dealt with on a case by case  
10 basis and that's where you get into these difficult  
11 questions, but I understand the comments that are being  
12 made and I agree with them, that it's a difficult area for  
13 the state and for NRC.

14           FACILITATOR CAMERON: Okay, thank you, Bruce  
15 Hampton. Let's get to Ken and to Dave and then let's jump  
16 to the second issue.

17           Ken?

18           MR. WANGLER: I have, I guess, two concerns.  
19 One is that North Dakota, glaringly, is the only state  
20 that has no ethics or disclosure law and I'm not sure  
21 where that came from, but we probably have some crooks up  
22 there too, so --

23           (Laughter.)

24           I guess one of the things that I'm looking at  
25 here and I wonder where this came from and maybe I didn't

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1 understand the question here, but to me this ethics  
2 disclosure talks about the same kind of situation where  
3 the fellow from Illinois brought up about disclosure from  
4 a licensee. Now at the state level we do have  
5 administrative law that covers all state employees and  
6 conflict of interest issues and disclosure to their  
7 management and things like that. So I think it's not a  
8 bad idea, what he talked about, about having licensees  
9 sign a statement that say that they have disclose some of  
10 their economic issues regarding obtaining a license.

11           And the other thing, I'm a little bit confused  
12 about this board's issue. That seems to have taken an  
13 early on in this discussion taken the prime seat here.  
14 Boards by nature have to be representative of the  
15 regulated community and others, the public, the medical  
16 community, and all other affected parties. If you're  
17 going to have a board, whether it's advisory or has some  
18 legal authority, it should represent the people that are  
19 being regulated.

20           I'm a little bit confused about some states  
21 have to have boards. We don't. But what's the issue  
22 behind the conflict of interest thing here? When an  
23 industry representative comes to a board, he openly is  
24 bringing his issues to the table from his own perspective.  
25 That's why he's there. He's not there, the industry is

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1 not there to represent the regulator. He's there to  
2 represent his own community. And so it's obvious he's  
3 going to have a conflict of interest. He's working for  
4 the people that the laws regulate.

5 I guess I don't understand what looking at  
6 boards is going to do with this conflict of interest thing  
7 and how you would get around some of those problems.

8 Maybe quite frankly, I'm not understanding the  
9 issue because I got very confused here when we started  
10 talking and all of a sudden I was sitting here asking Bill  
11 questions because I didn't know who we were talking about;  
12 if we're talking about state employees or if we're talking  
13 about people on boards or if we're talking about  
14 licensees.

15 MR. LOHAUS: Let me respond to both questions  
16 and maybe Aubrey may want to provide some further  
17 amplification, but in terms of the chart and I want to  
18 emphasize that it's an early draft. It's based on the  
19 information we have to date. We wanted to use this  
20 opportunity to share it with you and as a matter of fact,  
21 I was walking out the door and Spiro was handing me some  
22 additional updates on that which I did note down and I  
23 think with the time I did not plan to talk to those, so I  
24 think take a look at it and give us feedback and we'll  
25 update it as we get newer information.

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1           In terms of the board question, I think part  
2 of that really relates to what the responsibilities and  
3 functions of the board are. I think as Aubrey was  
4 pointing out, there may be different levels that the  
5 boards may address. If they're involved in let's say  
6 appointing or helping appoint individuals that will be  
7 responsible within the radiation control program, are  
8 there some potential conflict of interest issues that  
9 having a particular individual represented on that board  
10 and maybe not having disclosure requirements and things of  
11 that nature that could result in a potential issue. So I  
12 think that's maybe where Aubrey was coming from, but you  
13 may want to comment further, Aubrey.

14           MR. GODWIN: I think the first point I would  
15 make is the boards do not necessarily have to represent  
16 anyone. It depends on the legislation that sets them up  
17 as to how they are set up. Most do, but that's just a  
18 matter of convenience and they're up for different  
19 reasons.

20           Where the board is set up to be a regulatory  
21 program, rather than a professional board you run into a  
22 real conflict if the director is selected by the board and  
23 then he, in turn, has to inspect the board members'  
24 operation because the board say owns the company or is a  
25 major manager of the company. He's going to cite the

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1 board member who selected him. That puts him in a real  
2 definite conflict of interest. So I'm suggesting to NRC  
3 that where those conditions exist, that might be  
4 appropriate to raise some questions and look at as a  
5 programmatic issue where the board is a board that is  
6 selected primarily of licensee personnel, you would have  
7 remote interest in direct operation or say college  
8 professors who are teaching radiation safety, but not on  
9 the radiation safety committee, that kind of arrangement.  
10 You have a lot better arrangement. And if the director is  
11 not selected by the board and if the major policy of the  
12 agency is not set by the board, then there's a lot more  
13 freedom there. So that's why I'm trying to grade this  
14 thing out, but the board and how it's set up statutorily  
15 can determine a lot. The board that preceded what we have  
16 in Arizona now, it selected a director. They got into a  
17 major problem because one of the members, actually I think  
18 two of the members of the board had either -- was the  
19 owner or major ownership of a corporation that was running  
20 tritium. Spent about \$2 million of state monies because  
21 they just billed it up and left the state holding the  
22 whole deal. A major problem there. And I would suggest a  
23 careful look at any state before they get to the NRC as to  
24 what the arrangement is.

25                   Advisory boards are a lot different.

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1 FACILITATOR CAMERON: I think Ken put a  
2 youthful caution in for our approach to that issue and I  
3 know that Ed wants to say one more thing about that. But  
4 let's hear from David first and then close out with Ed and  
5 then go up to slide 6 to look at the integrity issue.

6 MR. SNELLING: Just very simply, I certainly  
7 agree with what Ray said. I think the states should  
8 handle this on a case by case basis if they have the  
9 conflict of interest law on their books and they are  
10 abiding by that. I really don't see at that point in time  
11 why we -- what advantage there would be in tying it to  
12 compatibility. I think it should be handled by the states  
13 on a case by case basis.

14 FACILITATOR CAMERON: Okay. One final comment  
15 on this and then we have to move on.

16 MR. BAILEY: This whole discussion of boards  
17 and whether they're governing boards or not, I've worked  
18 for two states and one state had a board of health that  
19 was appointed by the Governor and they hired the  
20 commissioner of health. And that was a very stable  
21 organization in terms of leadership and direction and so  
22 forth.

23 In California, the Governor appoints the  
24 director of the department and 900 other people under him.  
25 And it's a very unstable situation because every time the

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1 Governor changes or something the whole crew gets shifted  
2 off into positions of somewhat obscurity. We have one  
3 board that's mandated by law, doesn't have anything to do  
4 with radioactive material, but that board does try to use  
5 its influence on decisions. But I don't see that that's  
6 any different going to a meeting as Mike mentioned, going  
7 to a meeting where you have a board member who is any  
8 different from going to a meeting where you have a member  
9 of the legislature or a big contributor. They get  
10 preferential treatment too. I mean it's where their power  
11 is.

12           So I think what you've got to have are checks  
13 in place and you've got to have some people with integrity  
14 running the agency regardless. If you don't, the best  
15 system you can put together is still going to allow abuse.  
16 So I don't know how NRC would come in and look at one  
17 state situation and say this is bad, even though it might  
18 be a perfectly good organization and go to another one  
19 which has the ideal situation and find out that it's  
20 really got a really bad operating constraint. So I mean  
21 if somebody does something wrong, you've got the  
22 provisions to punish them. That's basically my  
23 understanding of what laws do.

24           FACILITATOR CAMERON: Thank you. Thank you,  
25 Ed. How about the integrity concerns that Paul talked

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1 about? The last bullet says there's no current guidance  
2 on NRC handling of integrity, wrong-doing concerns.

3 Should there be --

4 MR. LOHAUS: You may want to --

5 FACILITATOR CAMERON: Any comments? Richard,  
6 do you want to lead off on this?

7 MR. LOHAUS: You may want to put up slide 7,  
8 Cathy. That shows the initial thoughts relative to  
9 guidance which is really focused on those top two  
10 questions.

11 MR. RATLIFF: I think on this whole integrity  
12 issue what comes to mind with me is the thing we discussed  
13 at the last agreement states meeting, the wrong doer role  
14 where you have certain things that are out of people's  
15 control that happened very infrequently and you spend a  
16 lot of effort and a lot of our effort that takes us away  
17 from health and safety issues whereas each state -- our  
18 state even goes overboard. We have state ethics  
19 commission, department rules, department policies and  
20 department policies says that not only do you not do  
21 anything wrong, but you don't even have a perception of  
22 doing wrong. If you're invited to go speak at a dinner,  
23 you put down the money for how much you thought the dinner  
24 was worth. It just gets -- it really is -- I think every  
25 state is dealing with this issue.

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1           But the other issue I think very rarely  
2 occurs. I am not sure whether there are any other  
3 instances we know about or that NRC knows about except  
4 this one that got a lot of press coverage and that  
5 pendulum swings so far as you spend more time on it than  
6 you do on your real job to protect public health and  
7 safety.

8           FACILITATOR CAMERON: Thank you. Mike?

9           MR. MOBLEY: I just wanted to -- I remember  
10 some years ago we went through this thing where the NRC  
11 was going to set up this process of investigating  
12 allegations of state personnel integrity, etcetera,  
13 etcetera, which was referred to in the previous slide  
14 Cathy had up there. I just wondered how many of these  
15 have there been, sort of kind of like Richard is saying  
16 there. I mean how many of these have there been? We had  
17 a very similar kind of thing in Tennessee regarding going  
18 to meetings and I mean it's got to the point in Tennessee  
19 where it's almost -- you just almost can't go to a  
20 meeting. I mean and I'm not saying this jokingly. I'm  
21 concerned about going to facilities and breathing the air  
22 because our legislation which they have rigidly  
23 interpreted says that you cannot accept anything of any  
24 value whatsoever from not just the facilities we regulate

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1 or license, but from anyone who may lobby the legislature,  
2 etcetera, etcetera, etcetera.

3 I mean from my perspective it's gotten to the  
4 point of ridiculous and it's very difficult -- it's very  
5 difficult to carry on business. It's very difficult to  
6 carry on business. You go into facilities and you're very  
7 concerned about if I don't have a pencil with me, I can't  
8 accept a pencil. I've got to stop, go out and get a  
9 pencil. I mean it's just ludicrous and you can spend a  
10 lot of time dealing with those issues. In fact, even on  
11 the integrity issue you can spend a lot of time dealing  
12 with that issue and not be just kind of, maybe, as Bill  
13 said kind of stepping back away and looking do I have  
14 something that's going on in my agency that might be a  
15 problem? I mean we're too worried about whether somebody  
16 has drunk, accepted a cup of coffee or breath the air in  
17 the facility that they were inspecting or visiting and I'm  
18 sure many of us, as program directors, get invited to  
19 speak at any number of different kinds of things. In  
20 fact, I spoke -- I don't know whether -- since I returned  
21 it, I guess it's okay. I spoke at a gathering of  
22 radiologic technologists a couple of weeks ago and they  
23 gave me this envelope as I finished and was going out the  
24 door to go to another meeting and I get home and I  
25 fortunately opened the enveloped and it was a \$25 gift

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1 certificate to a restaurant. Well, I immediately the next  
2 day gave it to my secretary and said write them a nice  
3 letter saying I can't accept this, etcetera, etcetera. I  
4 mean it's tough. The reality is we need to look at it and  
5 say what is it that's effective in dealing with this? How  
6 do you deal with it effectively and not get down into just  
7 really getting it so pervasive and so tough that we can't  
8 really do our business of health and safety issues.

9 FACILITATOR CAMERON: Thank you.

10 MR. FLATER: Paul, I assume that there is  
11 something set up at the federal level to address  
12 everything that's been raised here for all federal  
13 employees. Is that correct?

14 (Laughter.)

15 MR. LOHAUS: I would say the answer is yes.

16 (Laughter.)

17 Let me just amplify. There are laws and  
18 ethics commission that provides standards of conduct which  
19 apply uniformly to all federal employees. I think earlier  
20 NRC had a separate set of requirements relative to conduct  
21 of employees and that's now more subsumed within a federal  
22 envelope of requirements that apply uniformly across the  
23 board. So there are requirements and a process in place  
24 at the federal level.

25 FACILITATOR CAMERON: Okay, Aaron.

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1 MR. PADGETT: Aaron Padgett, North Carolina.  
2 Just one last comment from me on this and that's this, ten  
3 years ago when I was down at INPO for a couple of years,  
4 one of the first things they taught me was to ask the so  
5 what question. If something isn't there, so what?  
6 Where's the problem?

7 So I would just ask the NRC to look at the  
8 things they've proposed and whether something is there or  
9 not, ask the so what question.

10 Is there a problem? And will what we're  
11 proposing address the problem or is it just something to  
12 give us another means to shoot somebody after the fact.

13 FACILITATOR CAMERON: That's a good  
14 suggestion, look at the basic issue of is it a problem and  
15 if there is, can we do anything about it?

16 Steve England has one comment here on the  
17 comparison between federal and state law.

18 MR. ENGLAND: Yes. Since the recent documents  
19 came out I looked at the federal requirements that are  
20 applicable to all government employees of a certain level,  
21 etcetera, and the restrictions in there that I read on  
22 gifts were much less restrictive than we have at the state  
23 level, particularly receipt of meals and visiting,  
24 entertainment things. They're not near as strict as the  
25 states, at least not Illinois.

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1 FACILITATOR CAMERON: Than you.

2 MR. PARIS: Is there some way we can just draw  
3 a closure to this? We've got the representative agreement  
4 states here. Is it possible to just go through these  
5 questions and take a vote yes or no and resolve it without  
6 having all the other -- just go for it and do it.

7 FACILITATOR CAMERON: Paul, how would you  
8 formulate the question for everybody --

9 MR. PARIS: It's right here.

10 MR. LOHAUS: I think if you go back to the  
11 first slide.

12 MR. PARIS: First page.

13 MR. LOHAUS: And the first question is should  
14 agreement states be required to adopt compatible conflict  
15 of interest rules? That, I think, is really the first  
16 issue and on slide 5 the commission has asked that we  
17 explicitly consider and I'd like your feedback here also,  
18 whether this area should be considered during program  
19 reviews, both from the standpoint of our rules in place  
20 and second, how are those rules being implemented and  
21 enforced?

22 FACILITATOR CAMERON: Let's get a sense of the  
23 group by asking a yeah or nay. Do you think that would be  
24 helpful? Do you want to answer the first question, should  
25 agreement states be required? Who thinks that agreement

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1 states should be required to adopt compatible conflict of  
2 interest requirements? Let's go for a show of hands.

3 (Laughter.)

4 Did I ask the wrong question?

5 (Laughter.)

6 MR. LOHAUS: It just brings clarity to this  
7 whole issue. I mean is it an issue?

8 FACILITATOR CAMERON: Okay, I think that you  
9 have a consensus on that one.

10 (Laughter.)

11 Now the second question that we've just  
12 finished discussing, "Should NRC adopt guidance to address  
13 the integrity concerns in agreement concerns?" How many  
14 of the states around the table believe that NRC should  
15 adopt guidance? Interim guidance? Oh, internal guidance.  
16 Well, I don't know -- I'm sorry, I didn't understand that.  
17 Should the NRC adopt internal guidance for the NRC on how  
18 integrity concerns in agreement states should be  
19 addressed? That's a different one.

20 Is there a strong feeling around the table  
21 that the NRC should adopt this type of guidance? Do you  
22 have a clarification point?

23 (All talk at once.)

24 FACILITATOR CAMERON: I think that's the  
25 bottom line, I guess on that one.

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1           MR. GODWIN: I don't care so much what they do  
2 or how they do it, as long as they write it down so we  
3 know what the rules are when we have to deal with it.  
4 That's what I want. I want them to adopt something so we  
5 know how we're playing the game. Yes, they ought to do  
6 that.

7           FACILITATOR CAMERON: So there will be, there  
8 obviously is going to be procedures on how integrity, how  
9 we should address integrity concerns and I guess the  
10 feeling of the crew is that those should be documented so  
11 that the agreement states know how the NRC is going to  
12 address those integrity concerns.

13           Don, one comment.

14           MR. FLATER: May I ask how the NRC intends to  
15 come back to a state who has the jurisdiction over its own  
16 employees to take them to task relative to that?

17           Why don't you just turn it over to the state  
18 and let them take care of it if there's an integrity  
19 problem within the state. That's their business.

20           MR. LOHAUS: As I noted in the list of actions  
21 that I laid out, that's -- a number of the major steps  
22 relate to referral back to the appropriate state  
23 organization. It may be senior management within the  
24 department or it may be a state attorney general or a  
25 state inspector general.

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1           MR. FLATER: I guess what I would say to you I  
2 don't think there's any question to that because how can  
3 you people come and do anything to a state employee? You  
4 don't employ them. That's the responsibility of the State  
5 Attorney General to do.

6           MR. LOHAUS: There's a sort of follow on issue  
7 that comes out of that also and that is, I think our  
8 expectation is that the states, through their normal  
9 process, would address any concerns that come up. But if  
10 they are not -- let's say a concern was substantiated and  
11 it did not appear that the state properly addressed or  
12 handled that, which I think would be a very unusual, very  
13 rare case, may never happen. You would expect the state  
14 would address it, but let's say that were to occur, what  
15 initial actions should NRC take in that case.

16           MR. FLATER: Turn it over to your lawyers  
17 because that's where it's going to go and they're going to  
18 fight it.

19           FACILITATOR CAMERON: Okay.

20           MR. FLATER: Why spend time on it?

21           FACILITATOR CAMERON: That's going to have to  
22 be considered. Let's go to the third question because we  
23 really do need to get to the next topic which we may not  
24 finish during the break, but I want to give Paul and  
25 Roland a chance to get into it.

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1           The third question about should agreement  
2 states be required to adopt compatible licensee wrong  
3 doing requirements? How many around the table feel the  
4 agreement states should be required to do that?

5           There's -- Bill?

6           And we've had no discussion, so let's have a  
7 discussion about why people feel that the states should or  
8 should not be required.

9           MR. SINCLAIR: We don't have a comparable  
10 requirement in our state law and I've been looking at this  
11 for several months and I think it would be another tool I  
12 would like to have in my tool box, but it's politically  
13 more palatable if it's an NRC mandated thing. That's the  
14 only reason I would request NRC to push it.

15           FACILITATOR CAMERON: How many other -- would  
16 people comment on what Bill just said. He made an  
17 important point. Ed, could you add something to that?

18           MR. BAILEY: Yes, I guess it's a simple  
19 statement, but what do you mean by compatible? What level  
20 of compatibility are you talking about? Identical?

21           MR. LOHAUS: No. What we're proposing under  
22 the new policy is that it be -- what would be turned a  
23 Category C and that means that a requirement that would  
24 reflect the essential objectives of NRC's requirement and  
25 I think as Dick had talked to you in his speech, what is

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1 really intended there is that the action that would be  
2 required by a licensee, either under NRC's requirement or  
3 under the state requirement would basically result and  
4 have the same effect. There would be no significant  
5 difference in the action that would be taken.

6           What we're looking for is the same intent, the  
7 basic objectives to be met, but it would not have to be  
8 worded identically.

9           MR. BAILEY: I guess I oppose it because  
10 different states have different requirements or  
11 punishments or whatever. And they go -- we may choose to  
12 do it one way. You may choose to do it another way. I  
13 mean when you get down to -- and I think I said this  
14 before when we talked about the wrong doer thing, we  
15 basically allow states to decide who gets executed and who  
16 doesn't. And if we can allow states the leeway on that  
17 kind of decision, I think the states should be allowed  
18 leeway on issues that in my opinion are much less serious.  
19 I don't think that most states want to go out and have  
20 people doing wrong and so forth. I don't think we need  
21 it.

22           FACILITATOR CAMERON: Okay, we're hearing some  
23 different views on the answer to this question and can  
24 people in the back hear? It doesn't seem like it's as

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1 loud as it was yesterday. We'll try to adjust this during  
2 the break and if you could just speak up around the table.

3 Roland?

4 MR. FLETCHER: Roland Fletcher, Maryland. I  
5 guess the basic question I keep feeling is what exactly is  
6 broke? Can you give me a specific example of something  
7 that the NRC feels that this rule would accomplish that  
8 wouldn't otherwise be accomplished by the state with the  
9 existing rules and license conditions?

10 FACILITATOR CAMERON: Paul?

11 MR. LOHAUS: I think maybe to me the clearest  
12 example would relate to a licensee in one jurisdiction  
13 that may be involved in carrying out an area that would  
14 involve misconduct or wrong doing and if that issue is not  
15 addressed by that program and that licensee were to  
16 operate in another jurisdiction under reciprocity, the  
17 potential for that same type of activity or action  
18 occurring exists.

19 I think the thought here is if you apply the  
20 new policy and their criteria that are cited in that  
21 policy that would indicate that this type of rule and type  
22 of issue should be addressed as a category C matter of  
23 compatibility. So I think that from that standpoint if  
24 you overlay the policy on the requirement, it results in a

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1 conclusion that that requirement falls within that level  
2 of compatibility.

3 FACILITATOR CAMERON: Okay, you heard the  
4 assumption that Paul stated that this would be important  
5 in terms of the reciprocity issue. Do people agree with  
6 that and why no? I think someone's waving their card over  
7 there. Mike, go ahead.

8 MR. MOBLEY: Paul, I hear what you're saying.  
9 I appreciate it. That's why we're doing reciprocity  
10 inspections. And I don't want to cast dispersions on  
11 anybody else in the room, but when somebody comes to  
12 Tennessee from Timbuktu, wherever, I mean there are  
13 certain people you kind of like to look at in addition to  
14 having to meet this mandated reciprocity inspection thing.  
15 There are certain kinds of operations. There are certain  
16 entities that you have concerns about, whatever. You go  
17 out and you inspect them. And if they're not doing -- I  
18 mean that's actually better than all of this stuff,  
19 because you're seeing what they're doing on the ground and  
20 if it's not right, bang, you've identified a problem. Now  
21 maybe the process is that we don't have an adequate deal  
22 or procedure or whatever you want to call it in place to  
23 say that hey, Tennessee found a big problem down here or  
24 let me put it the other way, Mississippi found a big  
25 problem with a Tennessee licensee. What does that mean?

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1 Should we go up there and check out Mike Mobley's bank  
2 account or is it really a technical issue or what's the  
3 deal here?

4 (Laughter.)

5 I'm still working on self-regulating my bank  
6 account. They won't let me do that yet. But you know,  
7 that's how you address this issue. The thing I would  
8 really like to get out of this discussion and I'm hearing  
9 what Bill is saying over there, somebody tell me what  
10 wrong doing means and does that mean if somebody gets a  
11 traffic ticket, I can run out and shut down their  
12 operation? How does this work? What does that mean?  
13 Explain that to me.

14 FACILITATOR CAMERON: Okay, Paul, we have one  
15 more comment from Ray and I know that wasn't a rhetorical  
16 question about what is wrong doing, but you may want,  
17 while Ray is talking, to think about examples along those  
18 lines.

19 Ray?

20 MR. PARIS: That was my point. In context  
21 there, we're talking about integrity. Now are we talking  
22 about the integrity of the licensee or are we talking  
23 about a technical wrong doing, a violation of what -- a  
24 licensee wrong doing for inspection. So if it's ethical  
25 of a licensee, I have some problems with that, but we

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1 certainly have, when we have reciprocity and somebody else  
2 comes in, we're going to be looking at what they're doing.

3           So I guess my question is consistent with  
4 that, what are we talking about, wrong doing? Is it  
5 ethical or is it technical?

6           MR. LOHAUS: It's an intentional violation of  
7 the requirements that is carried out either by the  
8 licensee or an employee of that licensee.

9           MR. PARIS: But ethical, like we're talking  
10 about integrity.

11           MR. LOHAUS: Not necessarily ethical, no. But  
12 a potential act that results in a violation of NRC's  
13 requirements.

14           Let me ask -- Carl, others may want to help me  
15 here.

16           DR. PAPERIELLO: I'll give you a couple of  
17 examples, some from the reactor side. A fuel handling  
18 operator mispositioned a fuel bundle. Well, that's  
19 clearly a recordable event and a serious matter. He cut  
20 the communication from the control room and he basically  
21 put everything back the way it was supposed to be and  
22 never reported the fact that he had missed, put a wrong  
23 fuel bundle. Under our regulations, we basically  
24 suspended, for a period of five years, his operator's  
25 license, so therefore he could not work as a fuel handler.

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1 In fact, I think in that case we actually issued an order  
2 prohibiting from having any involvement in NRC licensed  
3 activities for a period of years. That's a case I happen  
4 to know about. I could make up cases. You have a  
5 radiographer who deliberately doesn't wear his badge. Of  
6 course, we know that never happens.

7 (Laughter.)

8 Under the wrong doer rule, you could, in fact,  
9 issue an order prohibiting him working in any licensed  
10 activity for a number of years. So that's the kind of --  
11 when we talk about a wrong doer, it's not a question of  
12 the traffic ticket or something like that, but the fact  
13 that somebody knowingly and willfully violates a  
14 requirement and you can now take an action against that  
15 person to suspend our activities for a period of time.

16 FACILITATOR CAMERON: We're not going to get  
17 to Roland before the break, so let's take a few minutes  
18 and just close off the questions that we have right.

19 Stan, did you have something you wanted to  
20 say?

21 MR. MARSHALL: I had a current example of this  
22 very thing in the matter right now. As we speak, there is  
23 an investigator from Office of Investigation, Region 4, in  
24 Nevada pursuing a Nevada licensee. We did an inspection  
25 earlier this year and found in their -- within their

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1 portable gauge license temporary job site authority they  
2 had gone to a nonagreement state and hadn't filed Form  
3 241. We clearly looked the RSO in the eye, licensee  
4 management, and believed that there was no willful intent  
5 of anything, but the record shows they didn't file. And  
6 then when they did try to file, they filed to the wrong  
7 people. They did not file to the NRC initially. They  
8 filed to the wrong person within the nonagreement state  
9 who didn't know what to do with this request and I had no  
10 problem with the NRC investigator coming in to sit with  
11 us, review file, and pursue the Nevada licensee. We  
12 clearly have no understanding at all of any willful intent  
13 or wrong doing. NRC has the prerogative to pursue. I  
14 really believe the investigator will come to the same  
15 conclusion we have. It's a perfect example where it's not  
16 only the incoming reciprocity. It's the outgoing  
17 temporary jobsite authority scenario. We had another one  
18 similar in the last six months where one of our licensees  
19 we found went to an agreement state and our violation  
20 letter gave them all kinds of problems. I think Ed  
21 collected a nice little fee from our licensee. They will  
22 remember and know who to contact in California. The fact  
23 that I've got two instances like this, I guess, disgusts  
24 me a little bit, that my own licensees don't know who to  
25 talk to. So they're going to get -- all of them with

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1 temporary jobsite authority are going to get your names  
2 and addresses and the regional NRC offices to know who to  
3 write to to handle the reciprocity scenario. Thereafter,  
4 they will have been advised and we'll deal with them  
5 accordingly.

6 FACILITATOR CAMERON: Okay, two final comments  
7 and we've got to stop at 10:15. We'll go to Aaron first  
8 and then over to Stuart Levin in Pennsylvania.

9 MR. PADGETT: Aaron Padgett, North Carolina.  
10 Currently, we're dealing with three issues along this  
11 line. One is in the area of low level waste and there we  
12 do have clear-cut laws, except for the fact the individual  
13 has to dispose of radioactive material improperly and then  
14 that's a felony.

15 The other area we do not have clear cut rules  
16 to go after a licensee employee, yet we as an agency and  
17 you as an agency have a lot of power to bring about  
18 actions against that employee. For instance, the other  
19 two cases of wrong doing had to do with medical  
20 institutions. The first medical institution, after we had  
21 applied some pressure to them, decided to fire the  
22 employee. And the second institution, same thing. They  
23 did not intend to fire the employee until after we started  
24 negotiations and set up their enforcement conference and

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1 informed them that we didn't think they had taken a very  
2 strong action.

3           So even though we didn't have laws on the book  
4 that would allow us, let's say, to go indict that person  
5 from a felony point of view, we do have -- the weight of  
6 the agency gives you the power to have some action to go  
7 against that employee, just as a throw out and share with  
8 people as you're thinking about do we need to do anything  
9 in this area. And I have mixed feelings on this last  
10 issue, on whether or not something is needed.

11           FACILITATOR CAMERON: Thank you. Last  
12 comment.

13           MR. LEVIN: Just an important dumb question  
14 number 38 for me, but when a state does a reciprocity  
15 inspection, does that state send a copy of report to the  
16 state that issued the license?

17           MR. LOHAUS: Yes, every time. We're going to  
18 be talking about that as a part of the next area of  
19 discussion, but I think the answer is under -- although  
20 there's nothing written down, under current practice, that  
21 type of information is shared among the states and between  
22 NRC and the states back and forth.

23           FACILITATOR CAMERON: This is a good segue  
24 into the next discussion, so why don't we get some coffee  
25 and come back at 10:30.

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1 (Off the record.)

2 FACILITATOR CAMERON: I know this is an  
3 important issue for everybody, but we're going to try to  
4 move it along so that we can get to the folks from the NRC  
5 on the decommissioning issues because we do have a  
6 schedule conflict that might result otherwise, so we want  
7 to get them on so we're going to move right into this  
8 issue.

9 Paul is going to do his bit and then Rowland  
10 is going to come up and do his bit and then we'll have  
11 discussion.

12 MR. LOHAUS: Thank you, Chip. Cathy, if I can  
13 have the first slide?

14 What I'm going to do is only use a few of the  
15 slides I prepared. You can look at the others later, but  
16 I think I'll pull the ones out that really highlight the  
17 key issues. But let me start with some background about  
18 why we're discussing this issue today.

19 Commissioner Sweeney and the New York State  
20 Department of Labor in correspondence with Chairman  
21 Jackson suggested the need for improved communication of  
22 investigation, inspection and enforcement information.  
23 And Chairman Jackson, in her response indicated that we  
24 would review NRC procedures in this area. We would look  
25 to developing guidance, to further improve our exchange of

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1 information in this area and we would coordinate  
2 development of that guidance with the agreement states.

3           Can I have the next slide, please? There  
4 really are three primary issues that I think we're dealing  
5 with here and one of these came up earlier, but the first  
6 deals with prior notification to agreement states of NRC  
7 investigations conducted in agreement states. And if you  
8 look at the correspondence from Commissioner Sweeney, this  
9 was one of the key points that was raised in the  
10 correspondence. That is, that in the case, one of the  
11 cases cited by Commissioner Sweeney, NRC investigators had  
12 entered New York State to conduct an investigation of an  
13 NRC licensee's activities, but they felt it necessary to  
14 interview personnel at a facility located within the State  
15 of New York to collaborate information that had been  
16 provided to them by the NRC licensee and they entered the  
17 state, conducted the investigation without prior  
18 notification to the state.

19 So that sort of frames the first issue.

20           The second which is sort of a broadening of  
21 this is basically the joint sharing of investigative  
22 inspection and enforcement information and I think what  
23 we're talking about here are really two rather narrow  
24 cases or situations and those two are a case where you  
25 have a licensee that's licensed by both NRC and the

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1 agreement state and the second is those cases where you  
2 have licensees that are operating under reciprocity and  
3 that's the case that Stu raised earlier and should we do  
4 more to share that type of information based on our  
5 respective inspection activities.

6           The third is sharing of information having  
7 immediate public health and safety significance.

8           Next slide, please. What we did is took a  
9 look at the procedures and what I tried to show here is  
10 sort of three basic really two basic conclusions and  
11 really a question that came out of the evaluation.

12           But our basic conclusion was with few  
13 exceptions existing procedures and current practice in the  
14 routine exchange of information adequately covered the  
15 exchange of information in this area.

16           I think what we found is that there is written  
17 guidance in NRC inspection and enforcement procedures that  
18 provide guidance to staff to share information with  
19 agreement states that come out of our inspections of  
20 agreement state licensees that are operating under  
21 reciprocity or in those cases where we both may hold  
22 licenses.

23           Although we do not have comparable written  
24 guidance relative to states sharing comparable information  
25 with us, what we find is that there's just the basic

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1 practice, the day to day communication that we have is  
2 affected in sharing of that information with NRC and among  
3 the states.

4           With respect to NRC procedures, we did  
5 identify some modifications that we believe we can make to  
6 our procedures to further strengthen our commitment to  
7 share information and I'll talk a little bit more about  
8 those later, but I think the basic question that we want  
9 to talk about is should we develop further guidance to  
10 better define what type of information we should jointly  
11 share for these types of activities.

12           Next slide, please? I want to quickly talk  
13 through the investigative area because this is one of the  
14 areas where we have made some changes to our procedures.  
15 The first area I'll talk about though which relates to  
16 prior notification of states, when NRC may enter a state  
17 to conduct an investigation of an NRC licensee's  
18 activities when that investigation may involve  
19 interviewing personnel at a facility located within the  
20 agreement state. We reconsidered that and given the  
21 sensitive nature of investigations, the fact that  
22 information from the investigations may go to the  
23 Department of Justice for criminal action, there's a need  
24 for very strict confidentiality here and given that, we do

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1 not plan any change in our procedure relative to  
2 notification on investigation activities.

3           With respect to the sharing of information,  
4 what's shown in the second bullet is that we will provide  
5 a report synopsis of any investigations of NRC licensees  
6 that may involve conduct of that investigation within an  
7 agreement state and I think these are very limited, very  
8 rare, but we have modified -- the Office of Investigations  
9 has modified their procedures to provide a synopsis of  
10 that report to the agreement state.

11

12           Now I want to note here though that that  
13 synopsis would be provided following any action taken by  
14 the Department of Justice relative to criminal sanctions  
15 or any enforcement action that may be taken by NRC.

16           May I have the next slide, quickly? Second  
17 change of procedure is given the very brief nature of the  
18 synopsis report, if requested, we will provide a full copy  
19 of the full investigation report with names and other  
20 sensitive information redacted from the report. But we  
21 would provide a copy of the report. That's also a change  
22 in procedures.

23           The question that's shown there relative to  
24 agreement states, we have no written guidance relative to  
25 sharing of information in this area. As I noted earlier,

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1 is this a scenario where we may want to provide some  
2 further definition relative to sharing of that information  
3 and it really also brings into the question whether you  
4 may be able to share that information, given the sensitive  
5 nature of investigations and some of the internal state  
6 procedures that you may have.

7           Let's move on to the next slide. I think I've  
8 recovered that, on the sharing of information having  
9 immediate public health and safety significance. I think  
10 here, basically, the bottom line is that this is -- there  
11 are existing procedures in effect, both within NRC and at  
12 the state level that are affected, as well as the day to  
13 day contact that we have where there are any immediate  
14 issues that we will insure that information is shared.

15           I might go back and caveat, I think it's an  
16 important point that I did not mention relative to  
17 notification on investigations. If there are immediate  
18 public health and safety issues that are identified we  
19 will notify you and share that information with you. So  
20 there are some exceptions and I think if there are  
21 immediate safety issues that need attention, we're going  
22 to get those to you very quickly and even if there is an  
23 investigation underway, we'll share that information with  
24 you because of the health and safety significance.

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1           May I have the next slide, please?

2   Development of additional guidance, why don't we pass that  
3   one, Cathy, and go on to the next one.

4           Very quickly, I think there is value in  
5   exchanging information of this nature. As I noted, it  
6   seems to be effective through current procedures. We want  
7   your views and we move on to the next slide. Try to maybe  
8   identify some examples to stimulate some discussion of  
9   information that I think we share with the states, but the  
10   question is do you want us to continue to share this type  
11   of information? Should this be better documented? I  
12   think in particular where there are escalated notices of  
13   violation or civil penalties that we take against  
14   agreement state licensees based on inspections that we  
15   conduct for a licensees operating under reciprocities, we  
16   share that information with you.

17           Do you want to receive all nonescalated  
18   notices of violation as well? So maybe we can open this  
19   up for discussion and to quickly close this out, go on to  
20   the next slide.

21           It is sort of looking at the process from the  
22   agreement state side. Is there a need for further  
23   guidance from NRC that would define what type of -- why  
24   don't you move on to slide 11? What type of information  
25   that we'd like to see, for example, agreement state

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1 enforcement actions against NRC licensees that are working  
2 under reciprocity. And on slide 12, another example may  
3 be escalated enforcement actions that states have taken  
4 against licensees that have authorization to operate  
5 temporary job sites and maybe operating within the  
6 agreement state. But an escalated enforcement action  
7 against that licensee may be of interest to others, given  
8 the potential that that licensee has to file for  
9 reciprocity and operate in another agency's jurisdiction.

10           Last two bullets there, again, I think are you  
11 already routinely providing that information? I think the  
12 general answer is yes. Are there significant resource  
13 implications to provide such information? Or to maybe  
14 further enhance this, is something we need to talk about.

15           One issue that's not identified here that  
16 maybe I'll highlight and then I'll turn this over to  
17 Roland, there are differences between NRC and the states  
18 relative to the types of escalated enforcement actions  
19 that are taken and differences among the states. And this  
20 would be an area that we may need to talk about further in  
21 terms of factoring that into any guidance that we might  
22 develop on sharing of the information.

23           Let me stop now and turn this over to Roland  
24 and then we'll open it up for questions.

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1           MR. FLETCHER: Good morning. Although this  
2 subject is basically a continuation, I want to put a  
3 slightly different slant on it because the instances that  
4 I want to refer to I have a feeling virtually everyone in  
5 this room can relate to something similar, so what  
6 essentially I want to talk about is really a bump in the  
7 road, an aberration because the road itself, I believe,  
8 continues to smooth out as this partnership between the  
9 NRC and the agreement states continues. But every now and  
10 then there's a pothole or a bump in the road that kind of  
11 reminds us that there's still some things that we need to  
12 do in order to get to that point where we feel as though  
13 we're close to being equal partners.

14           So what I want to present to you are some  
15 ticklers, if you will, some things that I want you to talk  
16 about and imagine, if you will, someone may be in a remote  
17 regional office or even in headquarters who might be  
18 making some of these comments, perhaps on the other end of  
19 the telephone conversation.

20           Next slide, please. What I believe is that  
21 this partnership, this co-regulator status is better  
22 served if we were absent some of the following things.  
23 Let's take the oh, by the way incidents. You're talking  
24 on the phone with a representative of one of the regional  
25 offices or perhaps even someone in headquarters, perhaps

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1 talking about a licensee and the comment then comes  
2 across, oh by th way. Now this is really reflected by Bob  
3 to me on a situation that he ran into. He was talking to  
4 someone in the NRC and they said oh by the way, we saw  
5 that threat notice of potential activity involving  
6 radioactive materials in Colorado. Well, Bob knew nothing  
7 about it and no one bothered to tell him about it.  
8 Several other federal agencies including DOE knew about  
9 it. It turns out there were three versions of what the  
10 threat really was and bottom line was the only thing they  
11 agreed upon was that the threat was not viable. But you  
12 imagine, you're sitting in your office and there's a  
13 serious terrorist threat in your state and nobody tells  
14 you about it. Other agencies know about it and then in an  
15 oh, by the way conversation, you find out about it. These  
16 are the kinds of bumps in the road that we're trying to  
17 get away from.

18           The other kind of incidents that I would like  
19 to relate, some of the incidents that we've touched upon  
20 primarily due to reciprocity, this is kind of amazing to  
21 me because over the last three years, Maryland has taken  
22 enforcement action against several licensees who have been  
23 operating in the state under reciprocity, however, their  
24 version of reciprocity was a little different from the  
25 state of Maryland, so they thought they could operate

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1 because in these cases there were NRC licensees and  
2 therefore they had jurisdiction to operate any place they  
3 wanted, any time they wanted. Or at least that's what  
4 they told us. Some of them even went so far and I don't  
5 believe it's true, as to say that someone in the NRC  
6 actually told them that. And when we finally got a hold  
7 of them and told them that they were required to let us  
8 know, it was kind of like well tell who what?

9           There is -- I don't know how it got there, but  
10 there is on the part of some licensees the attitude that -  
11 - and unfortunately it seems to and in Maryland come  
12 primarily from those who are licensed by the NRC because  
13 we have nonagreement states all around us, that once they  
14 have an NRC license, notification of the state really  
15 isn't necessary.

16           I can see how that could happen and all I'm  
17 trying to point out is the fact that it's got to be made  
18 clear. It's got to be made very clear what the  
19 requirements are regardless of where you reside.

20           The next one was a little touch and go. I  
21 refer to a specific incident in Maryland where we -- we  
22 got involved in something that made national headlines and  
23 that was an incident at NIH and when Paul said earlier  
24 that we would be notified in the case of health and  
25 safety, I was trying to remember at what point we became

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1 aware of the situation with the Asian couple working at  
2 NIH in the phosphorus 32, but it didn't happen before  
3 there was actually an incident at a Maryland hotel and it  
4 didn't happen before there was an incident at a Maryland  
5 hospital. We kind of found out after the fact. So that's  
6 the kind of incident that once again, we need to work to  
7 clarify to smooth out.

8 I'm sure there are some other situations and  
9 I'm not going to try to give examples of each one, but  
10 what I want you to do now is these are things that I've  
11 heard. I've heard in meetings like this. I've heard over  
12 the time that I've been here and perhaps you can think of  
13 some examples that deal specifically with it. The we'll  
14 never do it again is a great line, but I've gone from  
15 meeting to meeting to meeting where the discussion of  
16 something that was never to happen again kept happening.

17 Next slide, please. Now, this is one that  
18 always seems to come up. Notice, I didn't run the full  
19 acronym, so this could be a state, this could be a  
20 department, this could be a branch. Use your own  
21 imagination.

22 But it seems like there are certain people and  
23 I believe this probably very likely and very true, there  
24 are certain people just like in your state and just like  
25 in mine and in federal agencies, certain people know

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1 certain things about how the agreement state program  
2 operates and certain people don't.

3           And there are some who no matter how hard you  
4 try to teach them how things are supposed to happen, they  
5 just don't seem to get it. The next bullet, in  
6 particular, I was on the phone with someone in one of the  
7 regions who was calling about one of my licensees who had  
8 been found in violation of the regulations under  
9 reciprocity and his comment was well so and so, the  
10 inspector plans to visit the licensee on such and such a  
11 date. Are you available?

12           Now I -- this was not the procedure that I  
13 thought that we had agreed on. I thought perhaps if there  
14 was a requirement to come to the state to look at an  
15 agreement state licensee there would have been some pre-  
16 coordination not come along if you like, but we're coming  
17 anyway. Just a few bumps in the road that we need to  
18 clear up.

19           Basically, I'm just getting to the point where  
20 -- well, you know the person who originated this line  
21 because he's having problems now too, so I'm not sure  
22 whether or not this is something that we should follow.  
23 But all I want to do is get to the point where we have a  
24 clear understanding of each other and we have respect for  
25 each other's rules. Even in this meeting I've heard

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1 several times should we provide guidance to you? Should  
2 we develop other rules for you? Should we develop and  
3 even though I understand what's being said, I still get a  
4 little bit antsy about the way it's being said. It still  
5 seems like we're not quite partners and all we ask if that  
6 we need a little more mutual respect for what we do  
7 because we have very stringent rules too. We're not going  
8 to allow someone to commit a crime or even get away with a  
9 violation of a particular regulation and just let them  
10 walk away. I don't think there's anyone in this room that  
11 would do that. So I'd like to talk about problems like  
12 that on the basis of we both have tight rules, is there  
13 some place we can make them more mutual.

14 Thank you.

15 FACILITATOR CAMERON: Thank you very much,  
16 Roland. Those are some provocative questions. Roland  
17 raised a number of examples about where there could be  
18 better information sharing, mutual respect, courtesy,  
19 items like that and Paul raised a number of issues and  
20 stated that he thought that the NRC procedures in certain  
21 areas were sufficient for sharing information. But how do  
22 we address the types of problems that Roland discussed?  
23 Does the NRC need to do something differently here and who  
24 would like to start off with a comment or a question?

25 Brian?

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1 MR. HEARTY: Brian Hearty, State of Nebraska.  
2 I have a comment on basically the reciprocity issues that  
3 Roland was talking about. Recently, we were asked to add  
4 a condition to our AEA material temporary job site  
5 licenses that said the licensee shall file an NRC Form 241  
6 prior to entering NRC jurisdiction and you know determine  
7 the exclusive federal jurisdiction before going into  
8 another state, an NRC state.

9 And we've been putting that on licenses now so  
10 that if someone doesn't file reciprocity, we can actually  
11 take action against that licensee. Has the NRC put  
12 anything on their license that says if you go into an  
13 agreement state and don't file reciprocity we can take  
14 action?

15 MR. LOHAUS: My understanding is that type of  
16 condition is used in NRC licenses. Let me ask Don, if  
17 he'd like to amplify or agree to comment further, but the  
18 condition that we sent out in our all agreement states  
19 letter was really based on an existing NRC license  
20 condition.

21 DR. COOL: Don Cool with NRC. I don't have  
22 the words here, so I can't quote them to you. I believe  
23 that all of ours include a requirement for notification of  
24 the appropriate authority. Yours is maybe a little bit

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1 simpler because in our standard condition we would have to  
2 have it be a reference to whatever state or locality.

3 MR. BUNN: Don Bunn from California. I just  
4 want to point out a pothole in the road that came up  
5 recently and I'd like clarification on when the guidance  
6 did go into effect because maybe the guidance went into  
7 effect this occurred. But I'll discuss the case briefly  
8 so maybe we can see what needs to be done here.

9 We had a licensee in California who had a very  
10 serious contamination incident that resulted in internal  
11 exposure to one individual. That was very serious. And  
12 we reported this. We participated in NRC conferences  
13 discussing the case and progress that was being made and  
14 that sort of thing went on over a period of time.

15 At the same time the licensee had an NRC  
16 license because they did exports and it turned out that  
17 there was some falsification on their documents or  
18 misleading information on their export documents and NRC  
19 got involved with an investigation. There was a pre-  
20 decisional conference held and our attorney was present.  
21 We participated. We shared all the information we had,  
22 but we have never received anything back from NRC about  
23 their investigation, what the results of the conference  
24 was. That information has never been shared back with us  
25 and we feel somewhat in the -- we are in the dark about

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1 results of that conference. So without bringing up any  
2 more details, I just wanted to point that out as a real  
3 glitz in the two-way communication that we're trying to  
4 work on here.

5 MR. LOHAUS: Let me offer two comments, Don.  
6 One is I don't know the details of the current status. We  
7 can check into that and let you know, but let me also  
8 comment that if the enforcement action that was proposed  
9 is still pending before the Agency relative to that  
10 particular licensee, the synopsis of the investigation  
11 report, as I noted earlier, would not be provided to the  
12 state until that enforcement action is issued in final, if  
13 it, in fact, is issued.

14 If it has been, then there may be an oversight  
15 there in our sharing this report synopsis with you and  
16 we'll certainly follow up and get that to you.

17 MR. BUNN: Okay, thank you.

18 MR. GODWIN: May we assume that we may  
19 withhold from you on the same basis?

20 (Laughter.)

21 MR. LOHAUS: I think that's an issue, that I  
22 raised earlier. The states face similar constraints, that  
23 we're faced with and are you able to and can you share  
24 information at what points in time. I think we would like  
25 some feedback there and I didn't mention this earlier, but

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1 I think what we'll likely do is following the meeting is  
2 maybe summarize some of these issues in an all agreement  
3 states letter and give you the opportunity to think  
4 further about them and provide opportunity for comment,  
5 further comment on this issue, but I think that's a good  
6 question and the issue is really can you or are there  
7 other constraints relative to sharing investigative  
8 information with others. And it's not only -- I think  
9 Roland raised a good point, it's not only within NRC, but  
10 also with other states as well. It's a collective "we"  
11 that we're talking about here.

12 FACILITATOR CAMERON: Ed, did you want to  
13 amplify before we go over?

14 MR. BAILEY: Yes, I guess. When we're talking  
15 about a partnership, and particularly when we're talking  
16 about the same licensee, I think we're in it together and  
17 I can't imagine a police department in L.A. not sharing  
18 with the L.A. County investigational results. You're  
19 enforcing the same sort of laws. You're enforcing the  
20 same area and in many cases the same licensee. I don't  
21 understand really and our lawyer may tell me later why I'm  
22 wrong, but I don't understand why we can't share that back  
23 and forth regardless.

24 FACILITATOR CAMERON: I guess that's the heart  
25 of the issue. Aubrey?

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1 MR. GODWIN: Godwin, Arizona. Civil issues,  
2 that is, civil penalties, normal enforcement letters,  
3 probably not a lot of problem once we get the information  
4 developed on sharing it with NRC and other agreement  
5 states. Criminal matters, a different ballgame all  
6 together. It was criminal. We will not share it unless  
7 it was cleared by the Attorney General and I suspect every  
8 Attorney General will rule the same way in every state. I  
9 don't know that, but I suspect they will, particularly if  
10 it's a matter that goes to a grand jury. If it hits a  
11 grand jury, virtually every state the grand jury  
12 proceedings are secret in what you testified to and what  
13 all is presented there, turns out to be secret. So there  
14 are some things when you hit the criminal side in the  
15 wrong doing area it's going to prevent us from proceeding  
16 to release it until either charges are filed or the case  
17 has been determined no longer to be criminal. Criminal  
18 stuff just puts you in a different ballgame and I hate to  
19 tell you, Ed, but police departments hold out on other  
20 police departments pretty routinely.

21 MR. BAILEY: But they also share pretty  
22 routinely.

23 FACILITATOR CAMERON: Okay, Don?

24 MR. FLATER: Just to share with you and it's  
25 something that's been a long time in the past, our

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1 Attorney General, we went to them and her attitude is if  
2 you share with us, we share with you. If you don't,  
3 you're not going to get a thing out of us.

4 (Laughter.)

5 FACILITATOR CAMERON: Okay, Roland?

6 MR. FLETCHER: This is another instance of  
7 let's deal with the thing that we do most frequently. I  
8 don't know how many people get involved in criminal cases,  
9 but quite frankly that's really the exception, the extreme  
10 exception. So I would rather deal with the incidents that  
11 occur on a more frequent basis. How can we better  
12 coordinate, communicate with one another on  
13 investigations, inspections, etcetera, on the noncriminal  
14 incidents. I mean let's deal with that problem because  
15 that's the one we're going to face more frequently.

16 FACILITATOR CAMERON: Aubrey, do you want to  
17 talk to that point?

18 MR. GODWIN: No, but there's another issue on  
19 the civil matter we have to be rather careful about.  
20 Before we reach some final determinations, would we be  
21 exposing ourselves to any kind of civil liability for  
22 defamation if we notify people of pending actions that may  
23 result in its being dismissed. You lawyer types could  
24 probably answer that, but that's one of the things that  
25 sort of crossed my mind.

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1                   FACILITATOR CAMERON: Okay, thank you. How do  
2 you -- is this a problem going to Roland's point about the  
3 noncriminal aspects and Paul, you might want to reiterate  
4 what our policy is in terms of the investigatory aspect,  
5 but is this a problem that can be solved with more  
6 procedures or does something more fundamental have to  
7 happen here?

8                   MR. LOHAUS: I think in the area of  
9 investigations as I understand our procedures and  
10 limitations that we face, in many cases the results of the  
11 investigation are referred to the Department of Justice  
12 for consideration of further proceedings from a criminal  
13 standpoint or are considered before the Agency for civil  
14 enforcement action. I think in both of those cases, until  
15 those actions are taken in final, the investigatory  
16 information is not shared outside of the Agency and I  
17 think that's fairly standard practice and is documented in  
18 our procedures.

19                   In terms of the -- let's say more routine  
20 civil enforcement actions that are taken, the Agency has  
21 been moving into a more open framework and the issue that  
22 Aubrey raised about -- I think it was Aubrey -- raised  
23 about the fact that you have an action that's proposed,  
24 that may in its final form be different or modified and  
25 you're going into an open conference discussing that

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1 action that the term that's currently used with NRC is a  
2 pre-decisional enforcement conference which clearly  
3 indicates that the action is a proposed action and the  
4 enforcement conference is to sit down and review with the  
5 licensee that proposed action provided an opportunity for  
6 response by the licensee and I think the Agency is moving  
7 in the direction of those predecisional enforcement  
8 conferences being open. You presently receive notices for  
9 those enforcement conferences and I believe in many cases  
10 states have attended those conferences.

11           There's another mechanism that our Office of  
12 Enforcement has used and this, in my mind, is also linked  
13 to some recent correspondence we had relative to your  
14 ability to withhold predecisional information from public  
15 disclosure under state laws, but I think in some cases and  
16 I believe there was a recent case in Utah where there was  
17 a nondisclosure agreement that the state signed with our  
18 Office of Enforcement which provided for the sharing of  
19 the proposed enforcement action. So there was good  
20 coordination that took place, but to protect the  
21 predecisional information there was a nondisclosure  
22 agreement that was prepared and signed by both NRC and the  
23 state. So there are some other mechanisms that we're  
24 looking at and I think this is where we want some further  
25 feedback and discussion. Are these the right processes?

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1 Are similar things workable at the state level? And are  
2 there some other things that we ought to be thinking about  
3 in this area?

4 FACILITATOR CAMERON: You mentioned the all  
5 agreement states letter that you're going to send out.  
6 Will you incorporate some of the problems that Roland  
7 cited in the paper? I think that maybe you need to set a  
8 comprehensive context for this to get some ideas flowing  
9 back on it.

10 MR. LOHAUS: I'd like to do that. We could  
11 work together and draft up a letter. Sure.

12 FACILITATOR CAMERON: Okay, one more comment.  
13 Don?

14 MR. BUNN: Well, if you're going to address  
15 the issue of disclosure, please look at the disclosure of  
16 people making an allegation and you refer to us, but you  
17 won't give us their name. It really constrains us from  
18 doing a credible investigation if we have a blank said so  
19 and so and now go find out if that's true. We are willing  
20 to sign any agreement, nondisclosure, whatever, so you  
21 don't have to be concerned about us running out and saying  
22 that Bob Jones is the one that told us this had happened.  
23 That's something that really needs to be clarified and I  
24 hope you include that.

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1 FACILITATOR CAMERON: Okay, that's a good  
2 point you've raised. We will consider it.

3 Thank you very much, Paul and Roland.

4 We're going to move on to the decommissioning  
5 area and we have two presentations, the first by Cheryl  
6 Trottier on the new site cleanup rule and the second  
7 presentation is going to be by John Hickey who is going to  
8 talk about the formerly licensed sites issue and also the  
9 direction setting issue under the strategic assessment  
10 process.

11 Both Cheryl and John are the key managers in  
12 this particular area. Cheryl is responsible for rule  
13 making and Reg. Guides, not only in site cleanup but in a  
14 lot of different things. And John is in Carl Paperiello's  
15 office as the Branch Chief where the major decommissioning  
16 actions take place.

17 So Cheryl?

18 MS. TROTTIER: Thank you. Good morning. What  
19 I'm hoping to do today is bring you up to speed at least  
20 on where the NRC staff is on the cleanup rule, as soon as  
21 I figure out what I'm doing here.

22 I'm going to walk you through the process that

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1 we have conceptualized, and I have to caveat this. This  
2 is what the research staff believes is the way to go with  
3 the guidance. What that means is that we do not have full  
4 NRC agreement with it, so it may change, but we have had a  
5 lot of internal staff discussions among the other offices,  
6 in particular, the program office that's responsible for  
7 decommissioning and I think this is probably the way we're  
8 going to end up, but you know, just understand that right  
9 now what I'm presenting is where the Office of Research  
10 is.

11 Before -- is this overly loud? No. Before I  
12 get to that though I thought I would let you know where we  
13 are in the process. As many of you may know, the rule was  
14 published in July as a final rule, adopting a dose  
15 criterion of 25 millirem for unrestricted release plus  
16 ALARA. There are restricted release provisions in there  
17 where you may have a dose that would be above 25 as long  
18 as, with the restrictions you'd get down below 25.

19 The way the rule was published, it was  
20 effective within one month which would have been towards  
21 the end of August, I think the 21st, but our licensees are  
22 not required to implement it until next August.

23 The reason for the one year delay in the  
24 required implementation was to allow us time to get the  
25 guidance on the street. When we went forward to the

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1 Commission originally, it was February of 1997, so they  
2 gave us a February of 1998 due date to get the guidance  
3 out. This is a very big project for us. Actually, I have  
4 a lot of people working on it, so we ought to be able to  
5 get it done, but it is a big project and when the rule was  
6 published I think in 1994 as a proposed rule, we did put  
7 out some working drafts of guidance, but it's evolved a  
8 lot as we've gone through this process. Our hope when we  
9 publish this guide in some time in the spring, since the  
10 Commission has asked to see it, what that probably means  
11 is we will not get it -- even if we get it to them at the  
12 end of February, we will probably not actually get it  
13 published until May, but in any case, somewhere I was  
14 going with this line of reasoning -- we do have to get a  
15 lot of pieces put together before that time period and  
16 what we're hoping to do is to put it on the web page as  
17 well as hold public workshops. We actually had our first  
18 public workshop on Wednesday. The first module which  
19 we've decided to do it this way is to break the regulatory  
20 guide itself into modules. And the first module that we  
21 did put out on the web page is the restricted release  
22 option module. Now I don't know whether state programs  
23 specifically sent this to you. My guess is no. But it is  
24 on our NRC web page.

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1           If any of you have had a chance to look at  
2 NRC's new web page, it's not that wonderful, but anyway --

3           (Laughter.)

4           The problem is we used to have rule making  
5 really highlighted and it was very easy to find. Now,  
6 it's on a little thing -- we have a big circle now and  
7 there's this one little wheel up there that says public  
8 participation and school programs. So everyone sees  
9 school programs and -- but anyway, public participation  
10 means commenting. This is a commenting process. So it's  
11 in there. And what you have to do when you go in there is  
12 click on rule making. After you click on rule making, it  
13 will bring up what's currently in that page for rule  
14 making. The approach that we've used with a guide is  
15 similar to what is being used with part 35 and it's a  
16 process called a technical conference. And we've now  
17 reached the limits of my ability to understand these  
18 things, but anyway it's advantages that people can on-line  
19 provide comments. Others can comment on the comment and  
20 you develop these threads and I don't know. It's in  
21 there. And you can pull up the document that way. Now at  
22 the workshop on Wednesday, somebody asked me, I was able  
23 to get into the document. That's fine. And print it.  
24 I've done that myself. I tested this at home. If this  
25 works, I can do it at home. I did print it. But they

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1 were trying to download it and they said they couldn't  
2 download it. So I don't know what the mechanism is to do  
3 that. Maybe it works fine. But if you do try to get into  
4 it and you want to download it to a disk or something like  
5 that and you can't figure it out, we have a contact in our  
6 office and the name and her phone number is in there,  
7 giving her a call and finding out why you can't download  
8 it.

9           We're going to use this for every module. Now  
10 the upcoming modules are going to be one dealing with  
11 surveys, one dealing with dose modeling and the last one  
12 will be dealing with ALARA.

13           We put the restricted release options module  
14 out because that was really the easiest one to do. That  
15 one is simply the staff writing its position on how to  
16 interpret what the Commission has voted for in the final  
17 rule. And as I said we had our public workshop on it on  
18 Wednesday and it was really a very good experience. We  
19 were really pleased that we got a lot of people in the  
20 room. There must have been 60 or 70.

21           Again, because we're under a time constraint,  
22 the ideal situation would be to hold workshops around the  
23 United States. That takes more time, more resources. So  
24 what we did do was video conferencing to our Region 2  
25 office and our Region 3 office. And we had a handful of

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1 people show up in each of those offices and so we were  
2 able to expand the workshop a little more.

3 My reasoning really for just going to the  
4 regional offices is that's free. We didn't have to spend  
5 money and October for the federal government is a touchy  
6 time to plan on spending money. Sometimes we have money  
7 to spend and sometimes we don't.

8 So anyway, we did use that and where we will  
9 have them in the future I'm not sure. We might expand it  
10 out beyond just NRC regional offices.

11 The next round of workshops and in fact,  
12 putting material on the web will probably not occur now  
13 until December. Part of that is is it's just taking  
14 longer. There's a lot more work involved. What we put  
15 out on the web, we want to be nearly a final document or  
16 at least something where people are going to be commenting  
17 on something that really does represent the staff view and  
18 isn't some just rough draft that changes radically in the  
19 process. As we change these modules, we will update them  
20 on the web. We will put newer versions out there and then  
21 finally once we do publish the guide, what I have in  
22 principle gotten as agreement from our Office of the  
23 Executive Director anyway is that we can publish this as  
24 an interim final guide with the concept that after a year  
25 of use we will revisit it, take comments during that one

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1 year time period and then make adjustments. It's a  
2 process that I hope will counteract not actually  
3 publishing it for a comment formally again. The guide  
4 changed, has changed a lot or will when it's finally out,  
5 change a lot from what we published as a working draft,  
6 but I think sometimes there's an actual advantage to being  
7 able to use a document and then provide comments on it  
8 versus just having a 75-day comment period and then not  
9 even know all the issues because you haven't tried to use  
10 it. So we're hoping that by doing it that way we will get  
11 better comments.

12 I would certainly encourage any of the  
13 agreement states who want to take a look at it to do so,  
14 either provide comments via the web, fax them, call us,  
15 whatever. We really do want to make this an interactive  
16 process as we're developing it. And hopefully, over this  
17 time period, we'll be able to keep you up to date on where  
18 we are and as I said, I think using the NRC web page right  
19 now is a very effective way to keep track of where this  
20 project is and we will keep it updated regularly, so  
21 everyone can find out easily what progress we've made.

22 Anyway, now what I thought I would do is run  
23 through a little bit of the methodology and I decided to  
24 use an approach of examples. Cathy, you want to put the  
25 first slide up? I'm just going to pass these around.

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1 Unfortunately, I only made 30 copies, so probably only the  
2 people at the table will get copies. I apologize for that.  
3 We can always make another copy and mail it to you if you  
4 really would like to see it.

5           What we're trying to do is come up with a  
6 methodology that will provide maximum flexibility to  
7 licensees when it comes to making a decision on whether  
8 they can release their site or not.

9           And this first slide is kind of an overview of  
10 what we're calling the decision framework. Actually, I  
11 have to give credit to the Office of NMSS because we  
12 really stole this idea from them. And they were trying to  
13 develop this for an implementation for decommissionings  
14 and it just seemed like such a good idea as a way to have  
15 a process that we hope will be effective and provide  
16 maximum flexibility to licensees.

17           When you walk into a situation of trying to  
18 decide as a licensee, what am I going to do and how am I  
19 going to demonstrate that I can meet this rule, it may  
20 look like a very difficult task, initially. So we tried  
21 to come up with a system where we could find mechanisms to  
22 simplify that and what this system really does is it  
23 provides a very straight pathway, if you have a simple  
24 site. Now if you look at that chart and you look down the  
25 left side, like steps 1 through 7, a licensee who really

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1 has very little contamination can probably walk right  
2 through those seven steps and we're going to do that today  
3 and be done with it. And have not invested a great deal  
4 of money or effort in demonstrating compliance. Where you  
5 move off into steps 8 through 12, those are the licensees  
6 that are going to have a more difficult site. They're  
7 going to be licensees that have significant contamination  
8 on site. And so the idea of this process is to make it  
9 easy for them to figure out how to proceed and what would  
10 be the best steps for them to take in order to do that.

11           So why don't we start walking through this  
12 process and those who have the papers, turn to page 3.  
13 This is the next slide, Cathy. This is the case 1 of the  
14 minimal contamination site. So the first thing a licensee  
15 would do would be to gather what existing information they  
16 had on the site. First of all, there are certain  
17 assumptions built into this. One, that they've already  
18 gotten rid of waste. If they have sources, they've  
19 transferred the source and that again this is a case where  
20 there's only minor contamination.

21           So if they -- the first thing they're going to  
22 do then, if you look at again that overall picture is  
23 under step 2 is scenario definition. And what we're  
24 suggesting is there are screening scenarios in NUREG  
25 CR5512. What I didn't tell you is in addition to the Reg.

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1 Guide there are a number of NUREG documents that also  
2 support this decommissioning rule. Those will be revised,  
3 5512 Volume 3, I think it is, which has the parameters in  
4 it, will be revised and reissued in the spring also.

5           And for this scenario, we're going to use the  
6 building -- for this case, we're going to use the building  
7 occupancy scenario. And so the pathways are predetermined  
8 in that scenario. So let's say this licensee is going to  
9 -- has decided to go that way. Then they move -- the next  
10 slide is on page 4 -- down into selecting the models. We  
11 have a software model. We're not advocating that you  
12 absolutely have to have it. You can certainly with a Reg.  
13 Guide will probably allow people to use other software,  
14 but D & D is NRC's software and for this stage in the  
15 process, we do have a very conservative model. The  
16 parameter uncertainty establishes the conservatism because  
17 what that does is it gives you high assurance that your  
18 decision error is very low. So again, remember this is a  
19 case where there is minimal contamination. So licensee  
20 decides that that's what they're going to use. Then they  
21 go down to the next step which is the actual dose  
22 assessment. They run the case using the maximum value  
23 that they have from an existing survey as their input.  
24 That's their source term into the model. What's the  
25 result? The result in this case that they're way below 25

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1 millirem. Okay? Move down to the next page then. Page  
2 5. Now we're down on to step 5. Can the site be  
3 released? The dose assessment is less than 25. The  
4 assumption here is made that they did a final release  
5 survey that meets the criteria that we will have in the  
6 regulatory guide. Now the other effort that's been on-  
7 going and this has actually been an interagency effort, I  
8 think probably even started by EPA, is the development is  
9 this Morrison Manual. I don't know how many of you looked  
10 at the Morrison Manual that went out for public comment  
11 last December. It's a manual on survey methodology. That  
12 will also be finalized around the same time frame.  
13 Actually, we're expecting that to be finalized in  
14 December. The concept here was that all agencies in the  
15 federal government would use the same methodology for  
16 conducting surveys. We will probably endorse most, if not  
17 all of that manual into the regulatory guide. A lot of it  
18 will depend on if there's a great deal of prescription in  
19 there, we may not -- we don't want to tell our licensees  
20 that you have to go out and do all these steps in the  
21 Morrison document. We'll tell them that these are the  
22 things we expect you to do and you know, if there are  
23 other good ideas in there, it's up to them to decide what  
24 to do. But the Morrison Manual probably will be the

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1 primary vehicle for providing guidance on the survey  
2 methodology.

3           If you haven't looked at the Morrison  
4 document, I would highly recommend it. It adopts a very  
5 unusual approach, for me, anyway, who is used to  
6 parametric statistics. This is a nonparametric approach.  
7 It does simplify in many cases the number of samples that  
8 someone needs to take to demonstrate that they have met  
9 the criterion and we're hoping that by using this  
10 methodology it will make the job a little less onerous  
11 than what we're seeing today with the release surveys that  
12 are conducted for some of our licensees.

13           Okay, now then, they have done their survey.  
14 Since they did use a conservative estimate in that they  
15 used the maximum survey value they have high assurance  
16 that they've met the criterion so they don't need to do  
17 anything else to the source term. Now remember, there's  
18 still another requirement that we have which is the ALARA.  
19 If you go to page 6 and this is step 6 on the ALARA  
20 requirements, licensee has documented that they have in  
21 their operational program applied good health physics  
22 procedures. The survey shows that they have minimal  
23 contamination and from looking at this they can draw  
24 conclusion that no additional actions are necessary. Now,  
25 again the Regulatory Guide is going to spell out for

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1 licensees the minimal kind of expectation we have as far  
2 as demonstrating that they have met the ALARA  
3 requirements, but what we're going to come to as a  
4 conclusion here is yes, they have demonstrated that  
5 they're ALARA. Therefore, they can release the site. Now  
6 again, that's the very easy case.

7 Let's move to page 7 --

8 MR. MOBLEY: Cheryl, can I ask you a question?

9 MS. TROTTIER: Sure.

10 MR. MOBLEY: Your number 6 there, the licensee  
11 applied the best practice procedures as part of its  
12 operational program. This is while they were in  
13 operation, not while they were in the D & D process, so  
14 the ALARA requirement only pertains to their operational?

15 MS. TROTTIER: No, I'm just saying that  
16 because they have documentation that while they were  
17 operating, they maintained doses at ALARA then. That  
18 eases up their burden that demonstrate at the time. If  
19 they don't have good documentation during all their years  
20 of operation, they're going to have to go a lot further to  
21 demonstrate that they're ALARA now. But what I'm saying  
22 is that you know this is part of the assumptions built  
23 into this simple case, that this was a licensee who had a  
24 good program that was well documented so that there's --  
25 in other words, less work for them to do when it comes

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1 time to release that site, if they have a good paper trail  
2 that yes, in fact, while we were operating we did do good  
3 practices.

4 MR. MOBLEY: I'm not sure that I can make the  
5 connection between the operational ALARA program and ALARA  
6 in terms of how it applies to D & D because I assume it's  
7 two different things. They may have a great ALARA  
8 program, but when I think ALARA relative to D & D, that's  
9 what you're doing above and beyond the D & D requirements  
10 to assure that whatever does or potential remains at this  
11 site is below the standard.

12 MS. TROTTIER: Well, I think --

13 MR. MOBLEY: I don't know how it relates to  
14 the operational ALARA.

15 MS. TROTTIER: When we get to case 2, I think  
16 it might -- first of all, remember, this was someone who  
17 had minimal contamination to begin with. So they already  
18 are -- what we're trying to do is say if you have minimal  
19 contamination, we're not expecting you to spend a fortune  
20 proving to us that you had minimal contamination. And  
21 again, how well you documented that ahead of time will  
22 make a difference. For those people who had that well  
23 documented during their operations, we're not going to make  
24 you go back and start from scratch as if you never  
25 documented anything. We're saying you then have

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1 demonstrated that you, in fact, have minimal  
2 contamination.

3           Let's move to case 2. I think maybe that one  
4 might be better when you see the difference between  
5 someone who does have minimal contaminations and someone  
6 who has significant contamination.

7           In this scenario, again, these are just  
8 hypothetical things. We pick something that would be  
9 somewhat extreme levels, you know, extreme ends of the  
10 spectrum so you could get an idea of what our expectation  
11 is for the majority of our licensees and what our  
12 expectation is for those problem site licensees.

13           So in case 2 then this is a licensee that  
14 there's an assumption that they had a leaking waste tank.  
15 And so when they're getting ready to start their  
16 decommissioning process, they've already done certain  
17 things. They have gotten rid of the waste tank and some  
18 of the soil. At this point they're unsure of whether  
19 they're going to want to go to unrestricted or go to  
20 restricted. So during the first iteration, the licensee  
21 will follow the same process as this last licensee did.  
22 They'll run through the steps and do you want to go to  
23 page 8?

24           They're going to gather the information that  
25 they have about the activities that went on at the site.

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1 They're going to define their scenarios, again using 5512.  
2 Now in this case we're starting with the residential  
3 scenario. Again, if they decide later on they want to go  
4 restricted, one restriction is to prohibit residential  
5 use, but in this case they're going to take the  
6 conservative approach. They're going to say okay, well,  
7 let's just see what happens if we run the scenario  
8 assuming an unrestrictive release and a residential  
9 scenario.

10 We go to page 9, again, they're going to run  
11 the model that is in the D & D code and again, this is  
12 going to produce a conservative result, again, because  
13 that's going to guarantee right up front that you have  
14 high assurance that you have a low error. In this case,  
15 they're going to base their assumption on the maximum  
16 contents of the waste tank. That's a very conservative  
17 assumption. You know they've done an analysis of their  
18 site. They know that this is really the only major  
19 contamination problem they had with this and so they're  
20 going to use that as the basis for their dose assessment.  
21 And of course, in this case, the result is it exceeds the  
22 25 millirem. So then they're going to ask themselves a  
23 question, you know, can it be released? And of course, it  
24 doesn't pass the test for the dose criteria. So now then  
25 that's what throws them over into that other piece of this

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1 framework which is step 8 which is they're going to have  
2 to consider options.

3 All right, on page 10 then, there are many  
4 options that a licensee can consider that will get them  
5 down below 25. Of course, the simplest one is they can do  
6 more cleanup. That's one way. They can have land use  
7 restrictions. They can collect more data. Sometimes  
8 there are site specific factors that can be put into the  
9 model that will lower the dose. So an important point  
10 here is that they don't have to do one or another of these  
11 options, they can do a combination of these options and so  
12 you know between doing a combination they can actually  
13 usually get the dose down much lower.

14 Let's go to page 11 and we have a table which  
15 shows this options approach. Okay, the first one is where  
16 they would collect field data to better characterize the  
17 source. Under the second one, they looked at what we have  
18 in D & D and they decided our soil type is different,  
19 movement is going to be different, so they can go collect  
20 data and come up with a more realistic input for that  
21 parameter in the model. That will give them probably, it  
22 may give them a lower dose.

23 Then another one of those options, of course,  
24 is that they can remediate and of course the last one is  
25 they can restrict the use of the land.

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1           Okay, now then let's go into the next slide  
2 which is on page 12. This is where we start now to  
3 consider the ALARA aspects of this approach. They have to  
4 kind of look at this in comparison to the costs and  
5 benefits of selecting these different options. Under this  
6 scenario that we had devised, they could go out and do a  
7 more realistic site characterization so this table gives  
8 you an idea of how the costs compare with the probability  
9 of success. Same thing for the soil type. I mean that's  
10 something that doesn't cost very much money at all to go  
11 out and do some research on what would be the right KD for  
12 that soil, so you know that's a really inexpensive  
13 approach. Remediation, just looking at the dollar signs  
14 is pretty high costly decision.

15           So in this case, and you'll notice the last  
16 one, setting the land use restrictions. At this point in  
17 the process, where they're doing this comparison,  
18 licensees should not be automatically jumping to  
19 restricted release. Our goal and we say that in the rule  
20 is that we prefer unrestricted release. That's really the  
21 goal, to get unrestricted release. If it turns out to be  
22 not ALARA, to be unrestricted, we'll accept restricted  
23 release, but really the goal is to be unrestricted.

24           So during the first pass through this system,  
25 we don't want them to just automatically say ha, let's not

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1 do anything, let's just restrict it. We want them to go  
2 through the analysis to see if there is a cost effective  
3 way they can get down below 25. Okay, so let's go to page  
4 13 then --

5 MR. PARIS: Excuse me, Cheryl, what is  
6 determined cost effective? Who determines that?

7 MS. TROTTIER: Well, actually the licensee  
8 will determine that and again, this is going to be  
9 addressed in the Regulatory Guide. If I were to just give  
10 you our answer now it's \$2,000 per person rem. The fact  
11 is we know licensees spend way more than \$2,000 per person  
12 rem, but in general, that's what the Agency's guidelines  
13 are on determining cost benefit.

14 Okay, then go to page 13. They're going to  
15 run D & D with the revised parameters. They've gone out,  
16 in this case, the licensee decided to go out and take  
17 additional field samples and they decided -- I think I may  
18 have skipped a slide, but anyway. We're on 13. It  
19 doesn't matter. They revise the KD for the soil type. If  
20 you want to go down to page 14, I did jump ahead. It  
21 doesn't matter. It's okay. We're all right. They made a  
22 decision to do those two things because the combination of  
23 the two would give them a high likelihood of success by  
24 having those two options together. That's why they  
25 decided to do that.

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1           So they went out, they performed the survey,  
2 they got regional soil maps. Do you think if we can get  
3 to page 15 now -- this is the second time now they're  
4 doing dose assessment, but it doesn't take any effort to  
5 run D &D. You just plug in numbers. This time they're  
6 going to plug in numbers that are more specific to their  
7 site and this time they're going to get a number that's  
8 equal to 25. So by running through this process they  
9 actually had to run the code twice, but they were able to  
10 make modifications to the input parameter and by making  
11 those modifications to the input parameters they were able  
12 to get -- to demonstrate that they could get down to 25.

13           Okay, now let's move to page 16. Again the  
14 same question has to be asked. Can they release the site?  
15 They do meet the dose criterion. They have to go back and  
16 see if they've met the ALARA requirements. Again, it's  
17 the same thing as I said before, if they can demonstrate  
18 that they have a well-documented ALARA program during  
19 their operation that information is a valuable piece of  
20 information. In addition, they have done this analysis  
21 that they just did in that earlier step. They looked at  
22 the cost to do further remediation. It was very high. It  
23 didn't necessarily give them the benefit. What they did  
24 though was they chose other things. They spent money, you  
25 know, that money that they spent to collect extra field

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1 data and to modify the soil type input, allows them to  
2 demonstrate that this was part of being ALARA. We're not  
3 just saying that cleanup is the only way you can  
4 demonstrate that you're ALARA. You can spend money on a  
5 number of features and it will help you demonstrate that  
6 you're ALARA.

7           One of the things, if you have looked at the  
8 language that went into the rule that the Commission I  
9 think specifically wanted in there as part of this ALARA  
10 analysis is when you're considering costs for soil  
11 removal, you have to evaluate the deaths that are caused  
12 from transportation accidents of transporting millions of  
13 cubic tons of soil offsite. These are part of the  
14 considerations. So the ALARA piece, I think, will not be  
15 as onerous as it seems to be. I think once we get the  
16 regulatory guidance put together, and while I seem kind of  
17 cryptic now it's partly because we haven't gotten any  
18 guidance put together. I think we'll be able to provide  
19 licensees with sufficient information on what kind of  
20 steps they have to go through to demonstrate the  
21 difference between the cost and the benefit of further  
22 remediation so that it will help them to make a decision  
23 on what steps needed to be undertaken in order to  
24 demonstrate that not only did they meet the dose  
25 criterion, but that they were also ALARA. Again, in this

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1 case then the final point is that the site would be  
2 released.

3           As I said, this is a developing process. This  
4 is where the staff thinks we're going to go with this. As  
5 you can see, there's a lot of bugs yet to be worked out of  
6 it. We have five months, six months. We're hoping that  
7 by the end of February, it will be a lot clearer how we'll  
8 be able to meet all these -- licensees will be able to  
9 meet all these steps. But the one thing I wanted to do  
10 today was one, make you aware of where we were going and  
11 also to request you to put in whatever time you can put in  
12 on this. I mean I realize that you all have a lot to do  
13 and so it's not like this is something which you're just  
14 sitting around waiting to review, but if you can take the  
15 time to look through these modules as they become  
16 available, I think it would help us because we're trying  
17 to get as much feedback as we can by the end of February.  
18 That's what's going to make our product a worthwhile  
19 product. If you see serious glitches in the ideas that  
20 we're coming up with, I think it would really help to hear  
21 about them as early as possible. I recognize that it's  
22 not always something you can do when we need it, but  
23 remember even if it turns out that you've identified  
24 something, we are going to revisit this thing a year after

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1 we publish it, so hopefully by that point we will have  
2 taken care of any of the other issues.

3           If anyone has any questions.

4           MR. RATLIFF: Richard Ratliff of Texas. In  
5 the initial guidance you had the uranium sites at the 5  
6 and 15 and I noticed that was pulled out. Do you have any  
7 words of wisdom on how that's going to come out since  
8 we're faced with about ten licensees trying to get out of  
9 business?

10           MS. TROTTIER: That's a good question. That,  
11 interestingly enough, came out of the rule after the staff  
12 sent it to the Commission. There was some concern amongst  
13 the Commissioners that the staff's recommendation was --  
14 which I believe the staff's recommendation was to  
15 basically use the standard that's in Part 40 today for  
16 radium and apply it to the thorium and uranium. That  
17 piece of the rule was never finalized and when the rule  
18 was published as a final document, a separate Federal  
19 Register notice was issued soliciting additional comment  
20 on that piece.

21           I believe that comment period is over now.  
22 Who the heck is going to do this rule, I don't know. We  
23 don't have time, but somebody is going to have to do this  
24 rule making.

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1           So what I think it is is it will simply go  
2 back to the Commission with some kind of paper, making a  
3 staff recommendation, probably the same recommendation we  
4 made before to use the -- the analogy we used was it made  
5 no sense to have a site which this huge portion was  
6 cleaned up to some higher value and this little postage  
7 stamp which didn't contain the tailings was cleaned up to  
8 25. I mean that really was what the staff was saying.

9           Whether the Commission will agree or do  
10 something else, it's hard to tell at this point, but that  
11 piece of the rule is yet to be finalized. Probably will  
12 not get finalized until maybe the -- if I were just  
13 guessing, maybe the January or February time frame and  
14 maybe that's even an optimistic estimate at this point.

15           MR. PARIS: Do you feel that if an NRC  
16 licensee would clean up the 25 millirem that EPA would  
17 come in and say that didn't quite meet the 15 that we are  
18 saying, therefore, we're going to put that under CRCLA?

19           MS. TROTTIER: I'll say this, EPA has made the  
20 statement that that's what they will do, but what EPA has  
21 to do is rank sites on the national priorities list. And  
22 my guess is it's highly unlikely that a site that was  
23 cleaned up to 25 would ever be considered a candidate for  
24 the national priorities list.

25           That's my opinion only.

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1           MR. ERICKSON: You mentioned you're not going  
2 to require the code D & D to be used. Have you given any  
3 thought how, what criteria we're going to use to accept  
4 alternative methods of calculation?

5           MS. TROTTIER: In general, yes. In specifics,  
6 no. We are holding a workshop. I didn't mention this  
7 because it's not directly related to the Regulatory Guide,  
8 although it's very associated with the Regulatory Guide.  
9 Our Waste Management Branch in Research was particularly  
10 interested in the issue of the type of codes that are out  
11 there today to do dose assessment. There are a number of  
12 codes already out, one of which is the code that DOE is --  
13 it's actually an EPA code and now my brain -- that's on  
14 the 13th and 14th of this month, I mean November, in  
15 Washington.

16           It will be interesting to see what comes out  
17 of that. We're hoping the authors are going to come and  
18 present papers. We're hoping we'll get some interesting  
19 information, but we will have to decide what criteria  
20 we're going to look for in other codes. You know,  
21 certainly there are a lot of other codes out there and as  
22 long as it's a validated code, I would think we would  
23 probably be willing to accept it.

24           MR. GODWIN: I don't know whether you  
25 discussed this while I was out of the room, but it looks

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1 to me like the weakest part of the whole program is a lack  
2 of any laboratory requirement in the quality control in  
3 the laboratories from what you talked about so far. If  
4 they blow their analysis, everything is down the tube,  
5 whether it's the radio chemical analysis or whether it's  
6 the soil KD test. Whatever it is, you've got to look at  
7 that laboratory and I hope in your guides you have  
8 extensive discussion on what to look for in the way of a  
9 quality laboratory work because we see some lousy  
10 laboratories that are selling things commercially that  
11 just don't make it.

12 MS. TROTTIER: Well, that was a great idea,  
13 because there actually is -- the federal government  
14 occasionally does some good things and the follow on to  
15 the Morrison effort is an effort called MARLAP. Multi-  
16 Agency Radiological Laboratory Accreditation Process.  
17 Does that sound right, Carl? Okay.

18 It's not going to be ready in six months, but  
19 it's well under way and it is going to come up with  
20 standard accreditation procedures and I think, this again  
21 is an EPA, DOE, NRC multiple federal agency process. I  
22 think that may go a long way to insuring laboratory  
23 quality.

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1 MR. GODWIN: Well, I think -- did you go to a  
2 meeting down in Carlsbad on that? Was that the same one  
3 in Carlsbad?

4 MS. TROTTIER: I did not go, but I know we  
5 have staff who --

6 MR. GODWIN: Anyway, we have some people there  
7 and one of the main things was under the comparison  
8 system, EPA apparently is pulling out of the water  
9 accreditation program and so we're going to have to go to  
10 a private system, apparently.

11 MS. TROTTIER: Uh-huh.

12 MR. GODWIN: But it's so important that you  
13 get a good accredited lab that really has a traceable  
14 curie. Without it, you're in big trouble.

15 MS. TROTTIER: Yes. We understand that that's  
16 a critical issue, but I really think this effort will go a  
17 long way to solving it.

18 MR. PADGETT: Aaron Padgett, North Carolina.  
19 You mentioned the fact that if you cleaned up the 25  
20 millirem you didn't think the site would ever go on a  
21 national listing of sites. However, in the state many  
22 times that doesn't matter. I'll give you an example.  
23 Right now, as we sit here, I'm digging clay and  
24 occasionally scintillation valves out of Western North  
25 Carolina and they are being shipped to a processor and for

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1 disposal. The state legislature dictated that this site  
2 would be cleaned up and made funds available. So just the  
3 fact that there is a difference there between EPA and NRC  
4 will create difficulties and problems down the road. How  
5 great, I don't know.

6 MS. TROTTIER: We understand that.

7 FACILITATOR CAMERON: How about going to Don  
8 Flater and then Steve Collins and then we'll wrap up.

9 MR. FLATER: Cheryl, do you know where 5849  
10 will stand relative to this whole process? 5849 is the  
11 decommissioning document by -- is it Berger?

12 MS. TROTTIER: I'm not sure where 5849 is  
13 going to end up. Maybe John Hickey can answer that. What  
14 I should mention to you is the other NUREGs that will be  
15 published. There's one called 1549 which will provide the  
16 default parameters that are used in D & D and then there  
17 are two NUREGs for sampling. One is 1505 and the other is  
18 1507. Both of them were published before and they'll be  
19 revised. Those are documents that really support the  
20 Morrison Manual. And so as the Morrison Manual was  
21 revised, those documents are also being revised and they  
22 deal only with surveying, but they do provide a lot of  
23 real useful information on survey techniques.

24 MR. COLLINS: Steve Collins, Illinois. One  
25 comment, one question. I have a copy of a letter from

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1 three key Senators that basically tells EPA you better not  
2 put them on Superfund or any other part of your system if  
3 NRC or an agreement state has cleared them. If anybody  
4 here wants a copy of that letter, give me a business card  
5 or something with a name on it and I'll give you a copy of  
6 that letter.

7 But I think Congress is speaking very clearly to this  
8 issue and letting EPA know that if it's NRC or agreement  
9 states, decommission site for 25 millirem, it's going to  
10 be okay. Superfund will not be an issue.

11 The second item is has there been any legal  
12 challenge as of yet to the NRC decommissioning rule?

13 MS. TROTTIER: Not that I'm aware of.

14 FACILITATOR CAMERON: No, time has passed for  
15 challenges. So it's set.

16 MS. TROTTIER: I should mention that NRC has  
17 sent some correspondence to Congress suggesting that the  
18 CRCLA issue be addressed.

19 FACILITATOR CAMERON: Sharon mentioned that,  
20 in fact.

21 MS. TROTTIER: Did she? Okay. But getting  
22 Congress to act on this thing is no small task. So I  
23 wouldn't count on that in the near future.

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1 FACILITATOR CAMERON: Okay, that was great.  
2 Bob, do you want to say something before we go to lunch?  
3 Thanks, Cheryl, that was terrific.

4 (Applause.)

5 MR. QUILLEN: Just a quick comment in response  
6 to Aubrey's question about laboratories. Since I'm in the  
7 laboratory business now and I'm more familiar than I  
8 wanted to be with this issue and that is that there is an  
9 initiative going on now called the National Environmental  
10 Laboratory Accreditation and there's a C at the end and I  
11 can't remember what that stands for, to accredit private  
12 laboratories that do environmental work. This is an  
13 offshoot of the fact that the EPA is backing out of this  
14 issue, but it's also an offset of the fact that the ISO  
15 14000 and so forth criteria are coming into play into the  
16 environmental arena and many of the environmental labs now  
17 want to get qualified to operate in the international  
18 market as well as just the United States market. So there  
19 is this push now to try to develop some unified system in  
20 the United States that are accrediting environmental  
21 laboratories.

22 We're going to try to start again at 12:45 on  
23 time, so please -- Ed has one quick announcement.

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1                   MR. BAILEY: I passed out a survey sheet on  
2 mobile nuclear medicine and I'd appreciate if all the  
3 states would fill it out and John Hickman, where are you?

4                   Stand up so they can see you. John is the one  
5 that needs the forms back. It's his survey and I'd  
6 appreciate getting something from each of the states and  
7 I'll give one to NRC too.

8                   (Whereupon, at 12:00 p.m., the meeting was  
9 recessed, to reconvene at 12:45 p.m., Friday, October 17,  
10 1997.)

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1 A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

2 (12:55 p.m.)

3 FACILITATOR CAMERON: We're going to be  
4 talking about actual decommissioning problems and we do  
5 have John Hickey from the NRC here with us who is going to  
6 lead up and then Bob Quillen is -- I think that we'll take  
7 some questions for John after his presentation. And then  
8 we're going to go to Bob Quillen and we're fortunate to  
9 have Milt Lammering, Dr. Lammering with us from the EPA  
10 and I think that Bob is probably going to say a few words  
11 of introduction after Bob's talk for Dr. Lammering.

12 Okay. Well, let me turn it over to John.  
13 We'll get started.

14 MR. HICKEY: Thank you, Chip. If the people  
15 at the table rummage around, I've provided a handout  
16 before lunch that has my name on it and it's entitled "Low  
17 Level Waste and Decommissioning." I'm going to be talking  
18 about several topics this afternoon, so keep that handout  
19 handy. I'm going to be starting with page 3 of that  
20 handout.

21 As Chip says, I'm Chief of the Low Level Waste  
22 and Decommissioning Branch. I've been in that position  
23 for about a year. I've been in the Materials Program for  
24 a long time. Some of you go back farther than me, but I  
25 don't think too many.

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1           First thing I wanted to talk about today is  
2 formerly licensed sites which I think is a topic that's of  
3 interest to a lot of you.

4           Over the years, we have had a nagging problem  
5 with some of the sites that were -- the licenses were  
6 terminated many years ago and some of them popped up and  
7 were identified as still contaminated. In many cases, it  
8 was bulk contamination of uranium and thorium piles or  
9 soil or buildings and in a few cases it was even by-  
10 product materials in buildings that hadn't properly been  
11 cleaned up.

12           This was due to many factors. One is the  
13 state of the attitude and the state of the instrumentation  
14 at the time the licenses were terminated. In some cases,  
15 they were cleaned up to what was thought to be  
16 nondetectable levels. In some cases, natural uranium and  
17 thorium was just sort of considered to be a no-never mind  
18 and a license might have expired or the licensee may have  
19 reported to AEC that there was no longer any radioactive  
20 material at the site or at least licensable material and  
21 there was never any follow up. So we at various times  
22 over the last 10 or so years, we've conducted reviews in  
23 pieces and we pulled it together over time and we've --  
24 with the help of a contractor, Oak Ridge National Lab,  
25 we've gone back and looked at over 37,000 files to see

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1 what the record showed and out of that we identified  
2 several hundred where there really wasn't a record of how  
3 the case was disposed. It didn't really, the licensee may  
4 have just made a statement that there was no contamination  
5 there, but there was no documentation either from the  
6 licensee or from AEC and in a few cases, maybe NRC after  
7 1974, that the case had properly been closed out.

8           So with the help of the lab a screening device  
9 was used to flag the files that weren't properly closed  
10 out and to characterize what the licensee was authorized  
11 to possess and how hazardous that might have been and how  
12 much of it was unsealed versus sealed material and you  
13 kind of get some sort of a ranking of how hazardous that  
14 site was liable to be and then we systematically went  
15 after about several hundred of those sites. Well, of  
16 course, a lot of the sites weren't agreement states. Most  
17 of the terminations precede the time that the state became  
18 an agreement state and so we notified the agreement states  
19 in the cases where the site was an agreement state and it  
20 wasn't a federal facility or there wasn't some reason that  
21 it would still be under federal jurisdiction. And in some  
22 cases, we got -- I'm sure you'll want to discuss this, we  
23 got some reactions ranging from concern to alarm about why  
24 are you telling us about this, this is a federal problem.  
25 The federal government terminated these and can't you take

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1 care of it? So if the state didn't feel they had the  
2 resources to go out and review the case or actually  
3 inspect the site and in some cases we felt the site needed  
4 to be inspected, we went out and did some of the  
5 inspection. And in -- go on to the next slide, please.

6           In the 34 sites, we actually confirmed some  
7 contamination at a terminated license and 11 of those were  
8 agreement states. I think about 9 of them under, were not  
9 a federal facility. So if you consider that we started  
10 out with 37,000, we did pretty good. We got down to .1  
11 percent of the total actually confirmed decontaminated.  
12 However, there are some where the jury is still out. The  
13 files are not in good order and an inspection still hasn't  
14 been done at the facility, so those also will have to be  
15 looked at.

16           We also looked at sealed sources, but we  
17 haven't put as big a priority on those because we  
18 generally found when we go out to the sites the sealed  
19 sources aren't there. There may not be good documentation  
20 where they ended up, but we think most of those ended up  
21 properly disposed of so we haven't put as high a priority  
22 on trying to track down the sealed sources.

23           So where we stand is we still have quite a few  
24 files to go through over the next six months, but they are  
25 the newer cases and we don't think that we're going to

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1 find very many more contaminated sites because we think we  
2 did a better job over the last ten years than we did 30  
3 years ago and I think most of you would agree with that.  
4 And we still are working on closing out the sites and  
5 you're probably not surprised to hear that a large number  
6 of the ones that were reviewed still needs to be done to  
7 complete the cases are in California because that's one of  
8 the largest programs, but for some reason it seems even  
9 more out of proportion than jut the size of the program  
10 would indicate.

11           So we will finish up the review and we'll  
12 probably be making another batch of referrals in early  
13 1998 and to the agreement states that are affected and  
14 maybe a final batch a few months later and so I am kind of  
15 alerting you or confirming to you that there will be some  
16 follow up indicated.

17           Now the nature of the follow up is what I want  
18 to talk about today. As I said, there have been some  
19 questions raised about what's NRC's responsibility versus  
20 what are the agreement states responsibility. And you  
21 probably thought if you were here last year, you probably  
22 would have thought this would have probably progressed by  
23 now to a point where we wouldn't have to be discussing  
24 this today. It would have been all signed, sealed and  
25 delivered and it wouldn't be a topic on the agenda for

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1 today, but as is the case for many things, in  
2 decommissioning, things take longer to resolve than we  
3 would wish and would anticipate. So we've been taking a  
4 look at the issue of if the agreement state has a problem,  
5 the question about jurisdiction or the question with  
6 resources or a problem with resources go out and follow up  
7 on these sites. We had taken the position because we had  
8 a shortage of resources that we were going to stop  
9 actually doing the inspections in agreement states. We  
10 were going to refer those cases to the agreement states.  
11 We consulted with the Commission on that to explain what  
12 the situation is in terms of jurisdiction. We see this as  
13 an agreement state jurisdiction matter and that we have  
14 the resource shortage and we still haven't gotten final  
15 direction from the Commission on that so we hope to have  
16 that soon. I wish I had it today to give to you, but I  
17 don't have it yet. But when we get final direction on  
18 that we'll pass it on to you and that will give us a  
19 vehicle to be on a path to bring these cases to closure,  
20 but the position the staff has taken is that we will  
21 identify the cases and do some review of the cases to make  
22 sure some follow up is warranted, but if a site inspection  
23 appears necessary, we're going to refer that to the  
24 agreement state and the agreement state is going to have  
25 to do any on-site review that's necessary. And that is

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1 confirmed both by our view that this from a point of view  
2 of legal jurisdiction, the agreement state has  
3 jurisdiction, but there's also a resource issue. Every  
4 inspection, we do an agreement state is one less  
5 inspection we do of one of our own licenses and our  
6 resources are getting tighter and tighter all the time.

7 I have some additional slides that I've  
8 provided in the package. I'm not going to show those  
9 slides, but if you're interested, you can kind of get an  
10 overall picture of how the review breaks down in terms of  
11 cases that were identified for follow-up and how many have  
12 been closed out in each of the agreement states. And if  
13 you have any more questions about that, you can get back  
14 to me about the specific cases or get back to the State  
15 Programs Office and we'll follow up.

16 I'll stop there. I have another topic to go  
17 on to, but I think we ought to have some discussion or  
18 questions about this particular topic.

19 MR. COLLINS: Steve Collins, Illinois. I  
20 would like to make the agreement states aware that you  
21 should take this with caution because when the NRC says  
22 they will turn it over to agreement states, they're going  
23 to turnover the inspection work, but it's still their file  
24 is not properly closed out and they're going to tell you  
25 what information they want and how they want you to do

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1 certain stuff and we expect you to report back to them the  
2 results in a way that they can close out their files. So  
3 it's not really all being turned over to you. It's here,  
4 go out and do the field work and report back to us so we  
5 can properly terminate the file that we didn't turnover to  
6 you when you became an agreement state, but we want you to  
7 do all that work. So be aware of those things, those  
8 little things.

9 Iowa and Illinois are the two states, I think  
10 in the United States that from the very beginning said no,  
11 you're not going to do it. We're going to take it and I  
12 think we're the only two states that currently have all of  
13 those sites properly closed out.

14 FACILITATOR CAMERON: Let me just ask a  
15 clarification on that. I mean that might have been the  
16 experience that happened before, but in terms of what's  
17 going on now, John, when you say turn it over, it's turned  
18 over lock, stock and barrel or?

19 MR. HICKEY: Well, we do want feedback because  
20 we're accountable for the fact that these cases were not  
21 closed out. And that, I think that will be part of what  
22 sense we get from the Commission as to how much we want  
23 NRC to stay involved in this. But there is congressional  
24 interest in this situation and I don't know that it's  
25 going to be adequate to report that we just referred the

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1 case to the agreement state and we never heard about it  
2 again.

3 FACILITATOR CAMERON: Is that -- is there  
4 something more involved than just having the NRC know what  
5 happened to the site so there would be an ultimate sign  
6 off than in the situation you're talking about?

7 MR. COLLINS: The only thing, the normal  
8 documentation that we go through when we document what we  
9 did and what we found was more than sufficient to satisfy  
10 what NRC did. It was just that we had 55 sites and we  
11 weren't going to give them the results until we finished  
12 all of it because as soon as you give it to them, it gets  
13 out in public domain and you've got people asking all  
14 kinds of questions. So the only problem was they kept  
15 wanting information soon and we said we're not through  
16 yet. You'll get it when we're through.

17 So the amount of information NRC required in  
18 the format was fairly simple and easy, a less than one  
19 page memo to the file was sufficient to close out each one  
20 of them that give a bottom line summary of the results,  
21 not the 15 pages of data that we might have gathered and  
22 documented for our own purposes, but it was make sure  
23 you're careful of when you do go out and survey these  
24 things and start giving them back results, particularly if  
25 some of your interested parties out there have this list

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1 of 50 places and you start reporting them back one at a  
2 time. It's how come you did them first and all these  
3 things that just decide how you're going to control your  
4 data to minimize the other adverse impacts on your  
5 program.

6 FACILITATOR CAMERON: I know Ed Baily from  
7 California, do you still have a comment?

8 MR. BAILEY: Remember, you're the host now.

9 (Laughter.)

10 MR. BAILEY: We have respectfully declined to  
11 accept the responsibility for sites for which AEC, NRC  
12 receive fees and regulate since we're 100 percent fee  
13 base, it's not fair to take it from our licensees, but I  
14 think more importantly we've had a letter in now for some  
15 time on two particular sites, well, actually three sites,  
16 two licensees or maybe three licensees. It depends on how  
17 you count them.

18 And the real problem is that it's not simply  
19 going out and surveying because in many cases they're  
20 going to have to be cleaned up and to figure out who is  
21 going to pay for the clean up we feel is a burden we  
22 should have to bear 30 years, 35 years after the site was  
23 closed by AEC.

24 One of them includes a uranium mill that we  
25 don't understand why it wasn't identified to be cleaned up

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1 and why we're doing it now. And we just -- we will  
2 cooperate as we've told NRC. We will work side by side  
3 with you on surveying and all this other stuff, but when  
4 it comes down to ferreting out the responsible party who  
5 is going to pay to get that place decontaminated and  
6 dispose of that waste, we really think it should be the  
7 agency that didn't do its job in the first place and that  
8 they should bear the cost out of their licensees' money.

9 FACILITATOR CAMERON: So is that -- would a  
10 solution I guess the solution is the cost -- the concern  
11 is the cost element.

12 MR. BAILEY: Cost and time, yes. And quite  
13 frankly, we'd rather let your lawyers chase down the  
14 remnants of this company and who is responsible and what  
15 was sold when and what liabilities have accrued to the  
16 owner of the bakery where the contamination exists now,  
17 those kind of things.

18 FACILITATOR CAMERON: Any other comments on  
19 this particular issue? I know some of you don't have an  
20 issue because you've either assumed the sites or don't  
21 have any sites.

22 Stuart?

23 MR. LEVIN: For the three of us here who will  
24 be negotiating agreements, what is the NRC's position on

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1 those sites versus those agreements? Can we not include  
2 them in our agreements or do you have a position or what?

3 FACILITATOR CAMERON: That's a fairly  
4 complicated question.

5 (Laughter.)

6 There's no answer. It's just a complicated  
7 question. I don't know, Hampton, do you want to say  
8 anything?

9 (Laughter.)

10 No, okay. This matches the subject matter.  
11 But no, actually, there may be possibilities that that can  
12 be negotiated, but there's some requirements based on  
13 Section 274 that have to be worked out there, but it's  
14 definitely a consideration and I know that Mike Broderick  
15 knows all about this in spades, but it's possible too that  
16 we might be able to address it somehow, but Ed?

17 MR. BAILEY: Are you intending to do the same  
18 thing on decommissioning of reactors, training reactors  
19 and so forth like the one at UCLA that was shut down?

20 FACILITATOR CAMERON: John, you might add the  
21 jurisdiction over reactors once the spent fuel is gone is  
22 going to be with your branch, isn't it?

23 MR. HICKEY: That's correct. I should have  
24 mentioned that we did not look at reactors. Those are the  
25 only ones we didn't look at. That's a good question.

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1 FACILITATOR CAMERON: Any other comments  
2 around the table? Aubrey?

3 Does anybody have a solution for how  
4 California and NRC can work this out?

5 MR. GODWIN: Correct me if I'm wrong, once the  
6 fuel has left a reactor, doesn't it fall under the  
7 agreement then? Okay. I don't want it, but I thought  
8 once it had less than a formal quantity on site --

9 FACILITATOR CAMERON: That's a novel solution  
10 proposed by Aubrey Godwin.

11 (Laughter.)

12 They're all going to go to the agreement  
13 states. I think what they -- and John correct me if I'm  
14 wrong, if there was -- the Commission is debating this  
15 issue right now, as you mentioned --

16 MR. HICKEY: I don't know if debate is the  
17 right word, but they have not responded yet to our --

18 FACILITATOR CAMERON: I don't know if there's  
19 -- in other words, like we could say hey, they're yours,  
20 okay. And you can say no, they're not. And if there's  
21 any sort of middle ground that can address the underlying  
22 concerns I think everybody might be well served to at  
23 least consider that.

24 MR. BAILEY: Well, I'm thinking now about how  
25 you can get a partial agreement for this and a partial

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1 agreement for that. You can get one to do seal, source  
2 and device reviews or only device reviews and I guess we  
3 would write and give you back that part of our agreement.  
4 If the ultimate legal decision was that you'd given it to  
5 us, then we can give it back to you. Give you that part  
6 of the agreement back. You carve out mill tailings, you  
7 carve out seal source and device and everything else. We  
8 can give you -- and you can take back a problem licensee.  
9 Remember? If we don't react in a responsible manner and  
10 there's a threat to public health and safety, you can take  
11 over a licensee of ours.

12 MR. HAMPTON: On an emergency basis.

13 MR. BAILEY: Yes, and this would be with all  
14 this stuff out there in the bakery.

15 MR. HAMPTON: This is Hampton from NRC. I  
16 think the issues you're raising are definitely something  
17 that should be on the table for some future discussion  
18 with the staff on it. That's something that we talked  
19 about internally in OGC and we don't have a firm position  
20 on whether that's a viable alternative, but it's something  
21 we definitely want to explore.

22 FACILITATOR CAMERON: Does Roland have a  
23 question?

24 MR. FLETCHER: I thought it was interesting  
25 that part of the rationale that you used was the fact that

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1 your resources were getting more and more limited, so you  
2 were turning this problem over to the states. Of course,  
3 we have unlimited resources.

4 (Laughter.)

5 I was only going to offer the possibility that  
6 somewhere in the NRC budget there's training money that  
7 was at one time divided out to agreement states and I  
8 recommend you see whether or not your resource  
9 requirements might be solved by using those funds.

10 FACILITATOR CAMERON: Thanks for that subtle  
11 suggestion.

12 (Laughter.)

13 Anybody else on this issue before -- John, did  
14 you want to continue?

15 MR. HICKEY: I have another topic starting  
16 with

17 --

18 FACILITATOR CAMERON: Let's hope it's more  
19 successful.

20 MR. HICKEY: Starting with page 11. This is a  
21 more philosophical topic, you might say, related to our  
22 strategic assessment in the area of decommissioning. I  
23 believe Chairman Jackson mentioned the overall strategic -  
24 - I was not here yesterday morning, but I believe she told  
25 you about the strategic assessment efforts, so I'm not

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1 going to give you a lot of background on the overall  
2 assessment which is an effort by the Agency to redirect  
3 itself in accordance with the best priorities to protect  
4 the public health and safety and use its resources in the  
5 most efficient manner.

6           But one of the many topics that had to be  
7 dealt with was decommissioning and if you go on to slide  
8 12 to make a long story short, the way the strategic  
9 assessment worked was you identified a lot of alternatives  
10 of how you could improve, in this case, the  
11 decommissioning area and the decommissioning program. And  
12 then we went out, we discussed those topics and published  
13 the document for public comment which you all had the  
14 opportunity to comment on and it considered a lot of  
15 different alternatives and without reading through the  
16 alternatives, some of these alternatives, I think, you  
17 might call more radical, going more to the roots of our  
18 approach, changing the law, going more the way EPA  
19 regulates, decommissioning and some of the alternatives  
20 were more -- continue on the same general path that we're  
21 on in terms of our legal and regulatory framework, but do  
22 a better job of the way that we're doing it under our  
23 existing program.

24           The way the Commission came down, if you go to  
25 the next slide, is they chose more to keep the existing

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1 framework, not try to radically change the legal  
2 underpinnings and they chose a combination of options and  
3 I mainly want to talk about option 2 that we should look  
4 for better ways to expedite decommissioning. In  
5 connection with that, they asked us to conduct a pilot  
6 program with licensees who are kind of hung up on  
7 decommissioning, but it appears that the decommissioning  
8 could be done in a straight forward manner, if NRC and the  
9 licensees both focused on it and also to conduct a  
10 workshop in that context.

11           What we found is when our licensees come in  
12 with decommissioning plans they include some things that  
13 they could do without even coming to NRC for approval.  
14 They could go ahead and do a lot of decontamination work  
15 under their existing license and that they're sort of  
16 overcommitting in these decommissioning plans, so it takes  
17 them time to prepare the plan, takes us time to review the  
18 plan and that delays the decommissioning process. So that  
19 was an example of something where we saw some room for  
20 improvement. So we are going to identify some licensees  
21 for this pilot program and we'll keep you informed of the  
22 progress and we're going to conduct a workshop. Right  
23 now, my target is to do that in March of 1998 and keep in  
24 mind when Cheryl Trottier was talking that we're  
25 conducting a series of workshops to implement our new

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1 decommissioning rule and we want to time -- the workshop I  
2 want to hold I want to time reasonably with those work  
3 shops so people aren't being told that NRC is conducting  
4 two different workshops on the same day on decommissioning  
5 for different reasons.

6           We will also keep you informed of that  
7 workshop and what we will do is anybody can be invited to  
8 the workshop and the first part of the workshop will kind  
9 of bring people up to speed on decommissioning in general  
10 on the new rule, generally where NRC is going on  
11 decommissioning and the second part of the workshop will  
12 be for a group of licensees that we feel we can expedite  
13 decommissioning and apply some innovative thinking and  
14 focus and resources to getting those facilities  
15 decommissioned. And again, anybody will be invited to the  
16 entire workshop, the second part of the workshop, and I  
17 think this will probably be a one day meeting or maybe two  
18 day meeting. The second part of the workshop will be  
19 focused on meeting with those particular licensees to get  
20 their decommissioning off the ground.

21           Does anybody have any comments or questions on  
22 that?

23           Mr. Flater?

24           MR. FLATER: Flater from Iowa. It was real  
25 interesting on the workshops that you've got, John, but I

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1 just called my office today and they said the notification  
2 of those workshops came in today. That workshop is  
3 already done.

4 MR. HICKEY: I'm sorry, that was in connection  
5 with the new decommissioning rule. Ms. Trottier mentioned  
6 we did hold a workshop this week on that topic and there  
7 will be three more. The workshop that I'm going to hold  
8 on decommissioning pilot program has not been scheduled  
9 yet.

10 MR. FLATER: Okay.

11 MR. HICKEY: Hold on to that handout because I  
12 have three more topics.

13 FACILITATOR CAMERON: After Bob and Dr.  
14 Lammering speak, I think we may -- we'll definitely get  
15 back to John, but there may be more questions raised about  
16 the decommissioning option 2, perhaps. But I'll turn it  
17 over to Bob.

18 MR. QUILLEN: Some years ago when we met in  
19 Portland, Maine, as I remember I made a presentation on  
20 Ramp Industries. It's a famous facility in Denver,  
21 Colorado that has its roots in Maryland, just to make sure  
22 we spread it around a little bit.

23 Subsequent events have unfolded and I think  
24 it's good to understand what really happens when EPA gets  
25 involved with their contractors in trying to decontaminate

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1 a site and Milt Lammering and Richard Graham are here from  
2 EPA Region 8 to educate us on this. Milt, Richard, why  
3 don't you come on up? They need to put the thing down.

4 I'd just like to say a couple of things.  
5 Despite what goes on within the beltway, we in Colorado  
6 get along well with EPA and Region 8 and I should have  
7 known what was coming because before I got reorganized,  
8 Milt got reorganized and he's now also an expert in  
9 pesticides. So if you have any pesticides questions, you  
10 can ask him those too.

11 MR. LAMMERING: Thanks, Bob. As Bob said,  
12 what we'll try to do, we'll give you an update on what  
13 happens when CRCLA takes over a Superfund -- takes over a  
14 site for cleanup, a licensed site. This was a state-  
15 licensed site. Just so you know who is talking here or  
16 how we fit into the regional structure, Richard and  
17 myself, EPA has a lot of resources as you all know, so  
18 Richard and myself, we are the regional radiation staff in  
19 Region 8. We've got a lot of people. So right now we're  
20 both here to talk to you about this. Why I mentioned that  
21 is we are really advisors to Superfund. We are not the  
22 decision makers on the site and I'm not backing off from  
23 that. I can be here and say whatever I want to say and  
24 that's -- I made none of these decisions.

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1           We're involved in decisions, but in CRCLA, the  
2 way it works is you'll have and this was done under  
3 removal, different from the remedial program for those of  
4 you that have been involved with the EPA programs, the on  
5 scene commander, the OSC for the removal program, that is  
6 the decision maker and Richard and myself provide support  
7 to him. So that's the way this functions.

8           We have, as Bob mentioned, we work very  
9 closely with the State of Colorado. It's very nice these  
10 days to talk about partnerships, but I think we have a  
11 partnership. Whatever you want to call it. This has been  
12 together, we've talked about release standards. We've  
13 talked about how we want the site cleaned up. Where we  
14 want to clean up to, what we want to walk away from. So I  
15 think we've been together on this all the way.

16           So let's -- going from that, put up the first  
17 slide, Bob. Just to tell you where we are. Again, it's -  
18 - I'm Milt Lammering and Richard Graham. We are from  
19 Region -- let's try the second one right away, Bob.

20           I know this is not readable so while you're  
21 looking at this --

22           (Laughter.)

23           I'll go over some of the highlights here, but  
24 what I've tried to do is just put a chronology of the site  
25 down, but I was hoping you could read this and then while

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1 you were reading this I wanted to give you a little more  
2 history on the site and what Ramp is, but I'll just go  
3 ahead and do that.

4           Ramp is a small company in Denver. It was a  
5 Rad Waste broker. The concept being small generators and  
6 not so small generators, Ramp would go to the site, get  
7 those wastes, bring them back on site, store, package,  
8 treat and then combine for off-site disposal. It was also  
9 a RCRA site in that it handled radioactive and hazardous  
10 wastes, in other words, mixed wastes. So it had that  
11 duality of a function. It started operation in 1982.  
12 That was the rad portion of it and I believe -- at a  
13 location -- and this is essentially from the following  
14 map, it's location in downtown Denver essentially, 1031  
15 West 46th Street which means nothing to you but to Bob and  
16 myself and Richard, it's an address we know very well.  
17 Expanded in 1984 to another property, 1027 West 46th.  
18 Overall, it's about an acre. So when you see some of the  
19 slides of the site, remember it's not a very big site and  
20 when we walked on site in 1994, there were about 6,000  
21 drums on site in about an acre and you'll see some  
22 pictures of what really meant.

23           The number of generators involved, when we  
24 first came on site were we thought looking at the manifest  
25 were about 900. We had 900 in Superfund language

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1 responsible parties or potential -- Richard, what's the  
2 right word? The -- PRPs, principal responsible parties in  
3 Superfund legal, not HRP as you would hear it on Law and  
4 Order. PRPs. That's my only chance for humor here.

5 (Laughter.)

6 Otherwise, it's going to be very straight.  
7 That has been honed down now to where we're looking at  
8 about 550 PRPs that could be responsible for the cleanup  
9 cost. I think if you take nothing away elsewhere from this  
10 as we go through this, Superfund cleanups are time  
11 consuming. They will take time. They won't be fast.  
12 Superfund cleanups are very expensive. This site over a  
13 three year period has obligated \$7.5 million to date and  
14 there will be cost recovery and those 550 PRPs are looking  
15 at some fraction of that cost recovery. In some respects  
16 that's going to mean double billing to them. They paid to  
17 have their waste picked up and many of them will pay again  
18 to have it disposed of by EPA. This is not a fast process  
19 nor is it by any manner a means, a free process for the  
20 generators involved.

21 The enforcement program of EPA does have  
22 discretion in looking at the overall site costs and having  
23 some of the trust fund itself pick up the site costs and  
24 wouldn't be subdivided out to the principally responsible  
25 parties. How that will work at this site is a decision

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1 still to be made. That's in enforcement and that's almost  
2 another story. Perhaps in a year or so when this is all  
3 finished, we can have one of our Superfund people from the  
4 enforcement side of the house and come and give you the  
5 full financial history of the site and how all the final  
6 decisions were made.

7           A number of regions are primarily responsible  
8 parties. I am one. I'm like 453. I put that number out  
9 there because Bob has topped me. He's about 370. I have  
10 7/10ths of accumulated foot on site. Bob, how much do you  
11 have, roughly? He claims 55. We're in that area. So  
12 that's the universe we're looking at here.

13           Again, running through the chronology side,  
14 the site started operating in 1982. In 1984 it expanded  
15 to two properties. Then looking on down and this is to  
16 the accredited state, in 1993, this is when the site was  
17 really identified as a problem. This is through state  
18 inspections. It was determined that wastes were coming in  
19 and nothing was going out.

20           At that time, Bob's program, Colorado Public  
21 Health and Environment, a preliminary injunction was  
22 issued against the site basically to take in no more waste  
23 until you correct the problems and until the problems were  
24 corrected then and only at that time could more waste be  
25 brought on site to stop the build up.

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1 EPA took over the site, again about three  
2 years ago, August 31, 1994. And Bob has a very funny  
3 story about how that all happened and what led up to it.  
4 Basically, on that date the last remaining party on site  
5 and again this is as Bob referenced, the owner of this  
6 property still has a viable company in Maryland, RSO. His  
7 last Denver employee essentially turned the keys over the  
8 Colorado and said the site is yours, have fun. They  
9 contacted, they the state contacted Superfund removal  
10 program and Superfund removal took over the site on that  
11 day. And what we did on that day is essentially  
12 immediately bring on 24 hour security to secure the site  
13 so - and at the same time within about a week have some  
14 preliminary health physics work done looking at an  
15 external gamma levels around the perimeter of the site and  
16 within about -- we had put up a second fence, a secondary  
17 boundary fence.

18 As far as when we're going to be cleaned up,  
19 we're estimating perhaps hopefully 1998, but there's  
20 nothing cast in stone on that.

21 Okay, next slide. This locates -- this gives  
22 you an idea of where the site is located in Denver. This,  
23 for those who are familiar, this is the intersection of I-  
24 25 and I-70, downtown the site is right here. And  
25 downtown Denver is essentially, I don't want to move the

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1 pointer in anybody's eyes is just about two or three miles  
2 to the right. So it's very, very close to downtown  
3 Denver.

4           This gives you -- blowing it up a little more.  
5 This is the ramp site right here. The two properties I  
6 mentioned, refer to the smaller one as the 1031 property.  
7 This was the first building they occupied. As the Ramp  
8 site goes, this property is being cleaned up by the owner.  
9 EPA's cleanup is on the property to the left here and this  
10 is where the 6,000 barrels, roughly 5,000 to 6,000 barrels  
11 were located. This area right here is the residential  
12 area adjacent to the site. It's what we're calling --  
13 we're calling this whole project an environmental justice  
14 project because this is largely a Spanish speaking  
15 community. There's about 1600 low income housing units in  
16 this area right here. We have two schools within about  
17 two blocks of the site. There's a food processing company  
18 right across the street right here. Within about a four  
19 mile radius there's about 96,000 people. So -- but I  
20 would say surprisingly and maybe it's through the good  
21 work of the PR staff, the public relations staff of the  
22 State of Colorado and NEPA, we've kept the community  
23 informed. We hold regular meetings with them, but there  
24 has not been a large public outcry which giving all these  
25 factors, I thought there would be some -- much as Bill has

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1 experienced with them are up there, a considerable  
2 backlash, etcetera, etcetera, why, how and those things,  
3 but it really hasn't happened.

4           There's no way and I've got a much better --  
5 this is the 1027 property which EPA is cleaning up. This  
6 is essentially -- and this gives you a good idea. Again,  
7 from a magnitude-wise, this is less than an acre. This is  
8 where all the barrels, you can see basically all the  
9 barrels. One of the big problems we had on the site  
10 initially was just being able to move, get to barrels,  
11 just turn around. In some of these areas you really  
12 couldn't turn a forklift around in. It was just  
13 practically all usable space that had been devoted to  
14 waste storage.

15           To give you the physical -- this is a -- this  
16 was more or less, it's a cinder block warehouse which we  
17 probably -- not probably, will leave when we leave the  
18 site. This is their office building. This is a wooden  
19 structure, small residence it was at one time. Initially,  
20 we planned to leave the house on site. As we look at it  
21 in terms of our clean up goals it will probably be  
22 demolished and probably remove it. It's a wooden shed  
23 right back in this area. This has been used for our seal  
24 source storage up until those were moved off site in the  
25 past month. We had a small shed right here which was used

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1 to store iridium seeds and this was producing some  
2 external exposure, so one of the first things EPA did when  
3 I mentioned that second fence was we constructed a second  
4 fence line and sandbagged this area just to cut down  
5 exposure as one walked by the site.

6 This was probably the only point where there  
7 was any significant increase above background of external  
8 gamma radioactivity around the site, an alley in the back  
9 way here.

10 Now some of the more impressive pictures, this  
11 is an aerial view of the site. This was in August of  
12 1994. I think it really illustrates as we walked on site  
13 the real difficulty one had in just moving around here or  
14 even getting to barrels. You can see there are probably  
15 four or five rows out this way. From this point here,  
16 there was no way to get back in through here.

17 This gave -- and quite frankly, being in those  
18 days, this for the Superfund removal program, was somewhat  
19 a problem because these individuals contrary to the  
20 remedial program liked to move in and do things quickly.  
21 They want to be moving barrels out and that was really the  
22 mentality that we had as we started. Let's get in there  
23 and let's get rid of these things. There was a problem,  
24 you couldn't do it right away because you couldn't even

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1 get to things and we weren't sure what was in, so we  
2 really were holding removal program back.

3           This van was one of the two vehicles on site.  
4 It was a lease vehicle. It was very quickly determined to  
5 be noncontaminated. He used it, he the general manager of  
6 Ramp, used it to pick up waste in town. It was leased.  
7 We surveyed it and it was returned to the lessor. He also  
8 had  
9 -- he and I'm talking owner now, Ramp Industries, there  
10 was a -- was it a flatbed, Bob or a pickup? It was a  
11 flatbed truck. We surveyed that truck and we determined  
12 it was contaminated and we disassembled it and it's now --  
13 pieces are in various roll outs. Unfortunately, Bob and  
14 myself had hoped to reclaim the door. We thought it was  
15 going to be a nice memento. They had Ramp Industries.  
16 But that is now in a roll off, so maybe we still have a  
17 chance of getting it. That again, and when we finish this  
18 off, you'll see another slide of that when Richard is up  
19 here, see another slide of the site and the progress that  
20 has been made.

21           Waste-wise, this area here, about 3,000  
22 barrels is the RCRA waste, largely liquid scintillation of  
23 cocktails, right in through here. This was the vial  
24 crusher, the rad wastes are largely in this area. Iridium  
25 seeds were right out here. In this area here there were a

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1 number of drums that contained uranium-bearing wastes that  
2 been concreted in, had made a trip to Beatty, but didn't  
3 get there on time and were returned.

4           That was 1127. This is the 1031 property.  
5 This property was the first building occupied by Ramp and  
6 it's being cleaned up by the owner. One of the initial  
7 activities that was done on site was the cutting up of  
8 fuel racks from the Trojan Nuclear Power Plant. That was  
9 conducted here. And that's being cleaned up.

10           The state did find in this building which was  
11 largely surface contamination, although the state did find  
12 organic components and radionuclides in the waste sump  
13 from the building indicating that although they shouldn't  
14 have, things may well have gone down the drain and out.

15           Going back to the property EPA is cleaning up,  
16 this is -- you saw coming down. We were looking this way.  
17 Now if you stand looking on one corner of the site and  
18 you're now looking to the South, you can see the situation  
19 when we took over the site, how barrels are stacked up and  
20 really the inability to move around. This is the office  
21 building. This is the small house I talked about that  
22 initially we had planned to decontaminate it, did  
23 decontaminate it and leave on site. Looking now like it's  
24 going go down for a number of reasons. We may have some  
25 radionuclide contamination. Obviously, it's an old

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1 building. We've got a lead and paint problem. We  
2 probably have got an asbestos problem. There's a lot of  
3 reasons and actually this building, this house looks a lot  
4 better in this picture than it really does when you get to  
5 see it in person.

6           Just looking from the building now towards the  
7 1031 property, again, you can see how barrels were stacked  
8 up back in this area. There are three or four high, two  
9 or three high here. This was a shed, the iridium, the  
10 barrels carrying the iridium seeds were stored in this  
11 area here and again we sandbagged out here and you can see  
12 the secondary fence we've put up.

13           One more shot. This is the liquid  
14 scintillation waste. Again the stacking. And this went  
15 back, we're probably four or five rows like this. From  
16 here, you really couldn't -- there was no way to access  
17 what was in the bag.

18           Okay, I apologize for this. Let me go over,  
19 Richard is going to go into the specifics of the waste  
20 streams and the analysis and the sampling and the disposal  
21 options. I just want to highlight some of the issues we  
22 faced. Some of these issues have been resolved. Some  
23 have not been resolved, but they all have contributed to a  
24 three year plus cleanup and a very expensive cleanup.

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1           The first one, really the question is and it's  
2 not is a matter of who is the lead federal agency. Really  
3 it was more was more what is the lead federal agency going  
4 to do. This was an emergency response action so we in EPA  
5 felt the NRC was the lead federal agency. However, we had  
6 the resources to do the site cleanup. So it was more a  
7 discussion of what was the roll of the NRC in the cleanup  
8 and what type of assistance and support could they provide  
9 the EPA, so that was handled.

10           The other issue I had from a radiation  
11 standpoint in dealing with the NRC was the fact that we  
12 took possession of the site and we didn't have a license.  
13 I had somewhat of a quandary with that of how we really  
14 could do this since we came in possession of quite a bit  
15 of radioactivity, but that was resolved. The NRC made the  
16 decision that we were competent to handle the cleanup of  
17 the site without a written license. So we've proceeded  
18 that way.

19           Another major issue that we've been confronted  
20 is really the use of the EPA Superfund contractors. The  
21 Superfund program, the removal program has a number of  
22 contractors available to them on an immediate need. These  
23 are very expensive, obviously because they have to be able  
24 to go at any time and they have to have th equipment to do  
25 so, so when you get involved with these contractors, they

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1 are very expensive. We also found on Ramp that at least  
2 for this type of site which was handling low level wastes  
3 and rad mixed waste was the primary contractors didn't  
4 have rad expertise. They were very experienced with  
5 chemical, inorganic and organic type cleanup, but not with  
6 radiation type, so it was trying to get the resources we  
7 needed on site. So we used those primary contractors and  
8 the Superfund folks refer them as their TAT contractors.  
9 That's the Technical Assistance Team. They have START  
10 contractors which are and let me read this off to make  
11 sure I've got it right, backing up. The TAT contractors,  
12 those are normally the contractors which help in the  
13 science and assessing the radioactivity levels. They have  
14 the emergency response cleanup services contractors, the  
15 ERCS which they're contracted to the person, the  
16 contractors who come in and move barrels around with  
17 supervision. And over a three year period, as you can  
18 imagine, contracts expire. There's rebidding, new  
19 companies win bidding, but the net result of that has been  
20 over a three year period we have been dealing with seven  
21 private contractors on site. In addition to that, in  
22 addition to that, we have been working through IG with the  
23 Army Corps of Engineers, using their contractor, as  
24 necessary for transportation of waste of Envirocare. We  
25 also have been working with the -- I apologize for the

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1 delay -- the Army Industrial Operations. They have a new  
2 world technology which we've been able to use for sealed  
3 source, so we've had those on site too. We have a spider  
4 work as existing responsible Superfund person, a spider  
5 work of contracts that we have to deal with and you can  
6 imagine this has not been seamless. When contractors  
7 change, work slows down.

8           We've also had on site until the past month  
9 the U.S. Coast Guard. Superfund removal uses the Coast  
10 Guard as their on-site eyes. They oversee what's going  
11 on. The Coast Guard is also there in many cases to do  
12 health and safety from a chemical standpoint.

13           So in summary, we've operated about seven  
14 private contractors and about five federal agencies. All  
15 of this has strung this out a little bit.

16           MR. MOBLEY: You can forget ALARA.

17           MR. LAMMERING: I can forget ALARA?

18           MR. MOBLEY: I mean there's got to have been a  
19 lot of exposures that were unnecessary.

20           MR. LAMMERING: We, EPA, on site, Richard has  
21 been responsible for employee exposure and I can let him -  
22 - but they have nothing significant, except -- well, there  
23 have been measurable exposures on the prime contractors  
24 doing the waste characterizations.

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1 Another issue has been personnel changes.  
2 Again, this was a Superfund removal action, not Superfund  
3 remedial. Superfund remedial are the on-scene commanders,  
4 the OSCs. These individuals respond to emergencies. So  
5 they are normally working several sites at one time.  
6 Their primary goal isn't one. And so due to that we have  
7 gone through three OCS and obviously that hasn't been  
8 seamless. They all operate in a little different way.

9 We have now shifted, the program has now  
10 shifted from removal to remedial and we are now dealing no  
11 longer with the removal of OSC, but a remedial program RPM  
12 and that changes things a little bit. So we have had  
13 changes and again none of these have delayed the action to  
14 some extent.

15 The community involvement, Superfund cleanups,  
16 as all Superfund programs, are - there is very, very  
17 active involvement with the community. Any major activity  
18 that goes on on site is discussed with the community and  
19 we receive the input from them as to how they see the  
20 world. So that certainly tends to make the project longer  
21 before you complete it.

22 A major problem was site records. When we  
23 took over, we had hoped that the inventories, the  
24 manifests were going to be in good order and it was really  
25 going to be a removal action and it was going to be a

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1 matter of simply going in and taking drums and moving them  
2 off site. We found out very quickly, we really couldn't  
3 do that. Going from the manifest we could not go to  
4 barrels on site and really do a tracing of a debt. When  
5 we went to Barrel A, what the manifest said was in Barrel  
6 A or in Barrel 1 was really there. They didn't match.  
7 There were many barrels on site that you couldn't even  
8 track back to the manifest and this was due to basically  
9 the way Ramp operated. I almost slipped and said  
10 Envirocare. It has absolutely nothing to do with  
11 Envirocare.

12 (laughter.)

13 Through the basically brokering small  
14 quantities and putting them together, it was very, very  
15 hard to do any tracking at all. So what we initially  
16 thought of would be largely a barrel disposal situation,  
17 really came into almost a barrel by barrel situation, with  
18 the exception of the liquid scintillation waste,  
19 approximately 3,000 barrels. Those were pretty uniform  
20 and could be handled rather quickly. The rad waste was  
21 almost a barrel by barrel situation.

22 I'm going to pass over this one. Richard will  
23 get into the extent of waste characterization, but here  
24 really the issue was to what analytical levels did we have  
25 to go to to characterize the waste so that we could get

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1 disposal? And many, many hours of discussion spent on  
2 that.

3 Mixed waste disposal, obviously, the mixed  
4 waste disposal, I said options limited. We had one. That  
5 was Envirocare, but even in the first few years that was  
6 not an option either, due to Chlorine 36 contamination and  
7 at least up until the present renewal process for their  
8 license, Envirocare could not accept mixed wastes with the  
9 Chlorine 36 concentrations that we had. So we are still  
10 looking at the resolution of the mixed waste.

11 The site is clean or how clean is clean? What  
12 is background? All those issues -- we were very fortunate  
13 in this site. As we had been planning it, we were  
14 fortunately able to be right in the middle of discussions  
15 and activities of the NRC and the EPA in assigning clean  
16 up standards. So while we were trying to project what we  
17 were going to do in the end, we had all these discussions  
18 going on, but it's been our decision, what our decision is  
19 we are going to 15 millirems. That's what we'll walk away  
20 from on site.

21 Background. As you can imagine in Colorado,  
22 specifically Colorado, but maybe not in other states, was  
23 a real issue in that how does one approach it? If you  
24 look at Colorado on an average you have a wide range for  
25 radionuclide so what background levels could be. It's

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1 uranium country. So do you go on a state-wide average or  
2 do you go on very site specific? But even on site  
3 specific and the type of area we're in which was  
4 residential industrial, it was hard to find native  
5 background sites.

6 Also, this was an area in the flood plain and  
7 it's also an area of fill so very, very difficult the  
8 process. Again, many hours and we finally have resolved  
9 that.

10 I can't read the last one.

11 MR. PARIS: What is background?

12 MR. LAMMERING: What is background? What are  
13 we working on?

14 MR. PARIS: Right.

15 MR. LAMMERING: I think we ended up, Richard,  
16 correct me if I'm wrong, but we're looking at about two  
17 pico periods per gram of radium, two micrograms per gram  
18 of radium, right in there. Let's say if we had taken  
19 Colorado to general on a broader scope, we could have  
20 probably said well, we got a range of 2 to 5 to 10 pico  
21 periods per gram of radium, 2 to 20. So we're trying to  
22 address that. What are we going to call background on the  
23 site.

24 Unresolved issue, media contamination, nature  
25 and extent. This is still to be done. Ground water issue

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1 has not been resolved. We have done sampling. We're only  
2 now in the process of looking at the data. This has  
3 really been delayed at this point in time due to the fact  
4 that we had to move barrels out before we could even get  
5 to the point where we could even start looking at what  
6 type of soil contamination or ground water contamination  
7 we had. So much as for ground water is there or is there  
8 not soil contamination. We still have to look at the  
9 data. The sampling has been completed, just completed,  
10 but that's still to be determined.

11           One last point on generators reclaiming waste.  
12 I mentioned there initially were 900 potential generators  
13 that were liable. That's been honed down to 5, 550. We  
14 have about 50 generators that were able to come back on  
15 site and take their wastes back off and they will be  
16 credited for doing that, but essentially they pay double.  
17 They pay once to have it taken there. They pay to have  
18 somebody move it off-site and they are paying again to  
19 have it put into the ground. And they have not -- that  
20 still doesn't resolve them from all liability, that there  
21 is any clean up of soil, ground water, there could still  
22 be some liabilities there. But we did have about 50.  
23 More would have liked to have done that, but through the  
24 process, the way the wastes were handled and merged  
25 together in many cases we couldn't take many, many barrels

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1 and say this belonged to generator A and this belonged to  
2 generator B. It was just not possible to do. So many who  
3 had hoped to be able to do this were not able to do this.

4 I could just add a little thing. As you look  
5 at some generators about 10, 10 to 12 that have one  
6 percent or greater of the on-site waste, so there's 10 to  
7 12 very large generators. The largest was the National  
8 Institutes of Health. They have about 17 percent of the  
9 waste on site.

10 One last and we can finish this off. Bob  
11 asked a little bit and I'm not going to be able to do  
12 justice, what is the difference between Superfund removal  
13 and Superfund remedial. They're both costly. They both  
14 take time. Removal, the removal program is typically your  
15 emergency responders. An example -- where there is either  
16 a known or a potential imminent health threat. That will  
17 key the removal program in. When they come in they're  
18 looking to, within a very short period of time resolve the  
19 situation from the health standpoint, not necessarily do a  
20 cleanup to the point that you could walk away restricted,  
21 but get the site stabilized. That's the removal. For  
22 example, a spill of radioactivity on a highway, removal  
23 program would come in and do that. Long term clean up of  
24 that might be done by the remedial side of the house. So  
25 that's kind of -- they talk about a six month time frame

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1 of planning. If they could more or less see the end in  
2 six months, that would be removal. If it's going to be  
3 longer than that, that's going to be remedial. But that's  
4 an EPA call and it's not a fixed point. It -- we  
5 obviously on this site had gone removal for several years.

6           If you're in the -- if you have a removal,  
7 Superfund removal, you'll have a change of personnel.  
8 Just the nature of the responsive parties you're dealing  
9 with, the on scene commanders, the OSCs who normally  
10 handle many, many spills or situations at one time. When  
11 you're in the remedial program you're normally dealing  
12 with one person who has one main site and maybe one or two  
13 sites.

14           Cost-wise, it should be about the same, but  
15 remedial does tend to be a little more costly because it's  
16 a little more comprehensive in terms of characterization,  
17 etcetera, etcetera. So that's the kind of comparison of  
18 the two.

19           This site and any site that takes a number of  
20 years to clean up, where it starts removal, does do a  
21 phase into remedial where the removal moves off and  
22 remedial takes over and in this case it happened on  
23 October 1st. So with that, Richard will finish this off  
24 in terms of waste characterization sampling and some  
25 disposal issues.

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1           MR. GRAHAM: We're doing a little bit of tag  
2 team wrestling here on purpose. I came on board to EPA in  
3 1995. One of the first sites I took over was Ramp.  
4 Leonard, good to see you here. Now we can show you what  
5 we've got coming.

6           This is originally part of what we started  
7 characterizing. As Milt indicated, we didn't have a good  
8 knowledge of what was in the barrels. So we started going  
9 through here and again, as indicated before, EPA is  
10 excellent as far as response to heavy metals and organics.  
11 As far as the rad portion, we had a lot to learn, as far  
12 as the EPA side of the house. My background has been DOE,  
13 DOE and thanks to Bill Wright over here, you taught me a  
14 lot about operational health physics.

15           So what we found is that we have a lot of  
16 biologicals, that is the university as well as research,  
17 short-lived, half lives as well as as you can see a wide  
18 range from norm all the way up to fission products. So  
19 with this knowledge, but unknowing which barrels fit which  
20 category, we started off. So let me show you what we  
21 faced. Initially, as Milt indicated, we had iridium  
22 seeds. This is from primarily one generator back East in  
23 the favorite state of Maryland again, who proceeded to  
24 give us some seeds and the generator, proceeded to pack  
25 them instead of in concrete with soil and sand as shoaling

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1 material. So when we first got to the drums we started  
2 looking at the readings on the side of the drums. We  
3 actually got some readings, around 600 MR up to about 1.2  
4 R.

5 So we knew we had a little problem for the  
6 first time since I worked in power plants.

7 Again, similar, what we had was some  
8 generators, the same one, excuse me, proceeded to pack  
9 some of the seeds without shoaling and with others you can  
10 see very crudely within lead and iron, shielding with the  
11 dirt as a background. The lead just for your information  
12 we did try to recycle, decon and recycle the material and  
13 we were able to do so, somewhat successfully and your tax  
14 dollars at work. We were able to put some small amount, a  
15 couple of thousand dollars back into the Superfund as a  
16 recyclable metal constituency here.

17 Biological waste. As was indicated, NIH was a  
18 big contributor. We had a lot of conferences and let me  
19 tell you, after sitting in the Colorado sun for quite a  
20 few years, it was not a pleasant site. We had rats,  
21 carcasses, rabbits, dogs, etcetera. I won't go into  
22 detail, but again, some of the radionuclides were still  
23 present. We also had a lot of chemicals that were of  
24 concern as well.

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1           We also had a lot of material from USGS as  
2 well as from other states, mill sites that contributed to  
3 the site and that was the easiest thing to look at to  
4 determine and we're still working on disposal.

5           Then we had some unknowns. We had renew as an  
6 oxidation. We had a lot of manganese. We had a lot of  
7 iron in here. But also it was contributing a couple  
8 hundred micro R per hour. What was it? So it gets back  
9 to some of the questions we get over here, who asked, but  
10 yes, it was critical.

11           Between Bob's department and EPA, we were able  
12 to satisfy to work with the concerns, both with hand held  
13 and field instrumentation. We had coax, jellies on the  
14 field, did field analysis and then we also took samples  
15 into the laboratories to confirm what we initially had  
16 thought we had saw out in the field.

17           We also, as Milt said, had a lot of liquids  
18 and option fluids, V-tex, benzene, ethyl benzene, and  
19 xylenes. We shipped out approximately 2700 drums, 55  
20 gallon drums, all liquids of detox material to various two  
21 sites, NSSI and Permafix in Florida and Texas and  
22 proceeded to incinerate those materials.

23           They loved to have that as source material.  
24 We just recently shipped off 47 curies of sealed sources  
25 and we still have quite a bit left. We had, as I said,

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1 over 2700 drums of liquid. We still have about 200  
2 gallons of liquid and sludges left. We are projecting to  
3 close to 30 cubic yards of low level waste and 350 cubic  
4 yards of mixed waste which we're going to try to rid of.

5           Again, what we had was a variety from squashed  
6 sealed drums, by the squashed drums we had diesel fluids,  
7 we had everything from laboratory equipment to analytical  
8 chemicals, everything was all put together when we got on  
9 site. Initially, we had an agreement with ROSC with  
10 Envirocare, verbal agreement, unfortunately, where  
11 Envirocare was going to accept the waste. So what we did  
12 initially was to take the drums and start sorting them.  
13 That is, what we wanted to do is exclude characteristic  
14 waste, read that as being lead and iron, out of the  
15 material, put everything and take out the sealed sources  
16 obviously and then put it into a roll off and send it to  
17 Envirocare. Unfortunately, the organic vapors, as you all  
18 are aware with RCRA and characteristic waste, they were  
19 too high for Envirocare to take which gets us also into  
20 the problem we had. We didn't have a good  
21 characterization of the biological materials. However,  
22 part of my background has been in medical research, so  
23 when we started looking, we knew we had tritium, we knew  
24 we had C-14. We started looking and unfortunately after  
25 intensive soul searching, we found Chlorine 36.

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1           We found Chlorine 36. Now that was only after  
2 intensive searching and looking. That was a question that  
3 the State of Colorado and ourself started questioning  
4 whether or not we should have looked so intensively.

5           (Laughter.)

6           Unfortunately, as Milt indicated, Envirocare  
7 did not have a license for Chlorine 36. The only facility  
8 that did so was Benton County, Washington. They would not  
9 take mixed waste. Hence, our quandary.

10           This is a good depiction of the sludge. You  
11 can see it's basically organics, as well as heavy metals,  
12 as well as radionuclides.

13           What I'd like to basically show here, I wish I  
14 could make it a little bit larger, but let me go over them  
15 quickly, these are the various waste streams we currently  
16 have. Look at scintillation waste, sealed sources. Some  
17 of them were in solid cement. Now when we took over the  
18 site which as some of you know that go into disposal, you  
19 make the two arc containers, but when we took over the  
20 site, how can I verify that Mike Mobley made the two arc  
21 container correctly. I can't. So what are we going to  
22 have to do to justify to Benton County that the two arc  
23 containers are properly constructed? We either have to  
24 slice them and dice them, take the sources out and remake  
25 them or we ask for a waiver or we go through tomography

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1 and we start analyzing that way and you can show Benton  
2 County that yes, indeed these two arc containers were  
3 correctly sealed and properly disposed of, the two arch  
4 containers were properly made. That's what we're --  
5 problems and going through quandaries or going through the  
6 processes right now. Biological waste. As I said again,  
7 from a standpoint of short-lived radionuclides, it wasn't  
8 a problem. Long live C-14 tritium and of course, Chlorine  
9 36, yes, we did have debris. We had a lot of concrete,  
10 soil. We had PPG, paper, plastic and glass. A lot of  
11 scrap metal, a lot of crushed drums and palettes, wooden  
12 palettes. How do you dispose of wooden palettes? That  
13 was a very interesting discussion which we finally were  
14 able to start doing on a pallet by pallet basis.  
15 Fortunately, the contamination, drums did leak. They were  
16 in, as you would imagine, a nice little ring around the  
17 palette, scraped off or shaved off, the top couple of  
18 millimeters of the wood and the rest of the palette then  
19 we then shredded. So that was intensive man labor for  
20 about three weeks.

21           We also had recycled metals, as I indicated.  
22 We also had sand. We had iridium and cobalt and cesium.  
23 We had moisture density gauges. We had a lot of the  
24 normal high level, you might say, sealed sources, which  
25 you all are used to, which the generator, or the owner of

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1 a site proceeded to shield with sand. Unfortunately, the  
2 sand was what he bought from a firing range. So not only  
3 did we have --

4 (Laughter.)

5 He was resourceful. Not only did we have  
6 lead. We had iron and then we started finding DU as well.  
7 So when we started looking at the sand we thought we could  
8 easily dispose of it. We found out that we did have  
9 radiological constituents in the sand, background, and  
10 that goes back to the question asked how high is  
11 background. When you start having sand which we have no  
12 idea where he got it from, it could have been in Colorado.  
13 He could have gotten it from Utah, could have gotten it  
14 back east, what do we use? So that was a major concern  
15 and consideration and then DU. Which value do we use in  
16 our cease branch position for clean up or DU? Or do we  
17 use 40 CFR 192 for radium? Which values do we use. So  
18 that's been in cooperation with Bob's staff and how we're  
19 looking at it.

20 Similarly, we finally have liquids and sludges  
21 as you saw. How do we dispose of those? Once again, when  
22 we first came on site, sampling was intensive. First of  
23 all, we had to get rid of liquid scintillation drums so we  
24 could get room to actually do the sampling. As you can  
25 see, we're in full level 3 or level A.

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1           Here's our wonderful sludge again, taking  
2 subsamples. The question also we got into, just for  
3 rhetorical comments is the solution or is the material in  
4 a drum, homogenous or heterogenous and if it's  
5 heterogenous how do we sample? So obviously, little  
6 questions like that kept popping up on a daily basis.

7           Just to show you that we did use -- if you  
8 turn your head -- sorry about that. We did use various  
9 types of instrumentation as you can well see from just the  
10 typical lead lem micro R all the way to the fiddler type  
11 of probe and scaler logger and which I don't show you is  
12 also we had to coax the jelly array in a warehouse which  
13 we're able to look at drums which were placed on a  
14 platform or turntable and rotated so we were able to look  
15 at the concentration in those directly without opening  
16 them up.

17           This shows you our sorting process. Once  
18 again, this is only for dry activated waste. Primarily  
19 sorting out the metals, as well as the sealed sources.  
20 Anything we call sealed sources above approximately 2 MR  
21 an hour we got out of there. Unfortunately, now that we  
22 have a lot of vermiculite which absorbed a lot of the  
23 organics, we're facing the problem of going back and  
24 probably resorting these same roll offs.

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1           Again, showing the sortium as well as looking  
2 for different types of contamination. And again, the dry  
3 activated waste.

4           What I'd like to briefly discuss here before  
5 we open it up for discussion is looking at what type of  
6 clean up options that we're going with. As Milt said in  
7 spite of headquarters of EPA and NRC having differences of  
8 15 to 25 MR, when you get down to it and I put a D-9 blade  
9 on the ground and started scraping, I can't tell a  
10 difference. So we have agreed and the state has been good  
11 with us and we're going to use a 15 MR to begin with. We  
12 actually see using res red RD & D code, what the actual  
13 level is going to be. When you're 2,000 miles away from  
14 the beltway, we don't seem to have a problem with using  
15 NRC regulations. We use 5849, we use 5512. We use the  
16 branch technical positions. We're using things that are  
17 operationally useful. If it's been done, we're going to  
18 use it. We're going to try to get it done. That's one  
19 position from Region 8 only. So when you go to another  
20 region, it's not going to be the same. So don't be  
21 frustrated. That's just the way life is. But I think the  
22 key for all of us is partnership, working together.  
23 Because the big key was there was -- there appeared that  
24 there was an emergency response incident, that is, that  
25 there were sealed sources that was an area that was highly

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1 contaminated as far as the drums that contained material.  
2 Let's get it out of there and worry about politics later.  
3 That was our position for Region 8 and with Bob. So  
4 that's the step we took in our region.

5           Some of the issues that we currently have deal  
6 with what technologies are going to be able to handle the  
7 mixed waste. As you know, Envirocare is the only facility  
8 currently that's able to handle mixed waste with disposal  
9 involved. So we're looking at some type of innovative  
10 technologies, ATG up at -- near Hanford, on the outside of  
11 Hanford, is using the vitrification process. We're  
12 looking at them as well as low temperature thermal  
13 disorption. We've already talked about consideration of  
14 liquid scintillation waste. We're going to solidify some  
15 of the sludges, as much as we can. The sludges, when you  
16 solidify them have to pass TCLP before it goes on the  
17 ground and so that's a toxic leach 8 test. So again,  
18 we're looking at what we can do to remedy as quickly as  
19 possible, sorting the roll offs and getting the drums out  
20 of there as fast as we can and then we're going to be  
21 going into the two hour containers, are they or aren't  
22 they? That is the question.

23           So once again, to refresh your memory or to  
24 let you know what we have now, this was taken just last

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1 December. This is where we're at. That's where we were.

2 (Laughter.)

3 Yes, federal agencies are slow. There's no  
4 doubt about it, but I think what it shows is a corporation  
5 between you all, the agreement states and the federal  
6 agency, can work, and it's to the benefit of our citizens  
7 and we need to keep that in mind.

8 That includes our portion of Ramp. We'll open  
9 it up to discussion.

10 FACILITATOR CAMERON: Do we have some  
11 discussions? Can we have some lights?

12 MR. GRAHAM: The question was how much was the  
13 cost so far? Funds have been allocated to the tune so far  
14 and allocated means we've either spent or we put into  
15 separate files or separate pockets of money going to  
16 either Envirocare, to Hanford, to the Army Corps,  
17 etcetera. So far, it's come out to about \$6.5, \$7.5  
18 million. Out of that, as we've already described, some of  
19 the principal parties will be chartered, unfortunately,  
20 can't do any thing about it. They're going to be charged  
21 double, but that's part of the Superfund policy and act,  
22 that they will be charged and some of that money, we will  
23 recover.

24 MR. FLETCHER: Since Maryland seems to have  
25 figured so prominently in this, probably it will be

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1 because of the salesmanship of the owner. I do have one  
2 question though. We spent a lot of time talking this  
3 morning about the whole issue of wrong doing. What kind  
4 of investigation, if any, is being made into how this  
5 facility got to where it is and what's being done about  
6 that?

7 MR. QUILLEN: The state has taken action  
8 against the owner primarily under our hazardous waste  
9 regulations because they're much more severe than the rad,  
10 but also under the rad regulations and we have issued an  
11 order against them which he did not meet and we had to go  
12 back and amend that whole process because the first order  
13 we placed against him was he was responsible for removing  
14 waste and cleaning it up and so forth and so on. When he  
15 abandoned the property, we had to change that legal  
16 tactic, but it all came down to he was -- he has been  
17 fined \$6 something million, I forget what it is, under the  
18 state legal system. Now there are so many ins and outs of  
19 this project, one of which was the State Attorney General  
20 goes out and hires a private attorney to do cost recovery  
21 on these kinds of things and the meantime the private  
22 attorney has lost his license to practice law.

23 (Laughter.)

24 Just when he was getting close to starting to  
25 collect some money. The other ins and outs of this is

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1 under the state law it turns out all this money goes back  
2 in the general fund, so that doesn't make EPA legal people  
3 very happy that we may collect money, but it goes back to  
4 the State of Colorado and not to EPA. He has been fined.  
5 He finally, he basically ignored this whole legal process  
6 until the very end and then he appealed the decision after  
7 it was made. That's where we are right now.

8 MR. LAMMERING: Similarly, EPA -- Milt  
9 Lammering, EPA -- EPA attorneys have been looking and they  
10 really don't divulge many things to us as to where they're  
11 going. It's kind of another story.

12 MR. QUILLEN: I just wanted to mention one  
13 other thing. The first week I think the security guards  
14 were out there, the security guard was approached by a  
15 local resident who wanted to know if the security guard  
16 was moving in on his drug territory.

17 (Laughter.)

18 MR. LAMMERING: And to add to that, one was  
19 sent to a hospital one time. He went out to the car and  
20 he didn't make it.

21 FACILITATOR CAMERON: Can we do the rest of  
22 this quickly and we may get on with it.

23 Mike, do you want to go and then Aubrey?

24 MR. MOBLEY: I have great interest in this,  
25 Bob, as you can imagine. I don't see many sites that have

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1 that many barrels, but they're B-25s. They're not 6,000  
2 barrels. They're 6,000 B-25s sitting on the site. Have  
3 you got a nice lessons learned document that I could take  
4 home with me and hand to some people and have them run out  
5 and look at some of our sites? I'm very serious here. I  
6 saw some things there that are not the kinds of things  
7 that we would allow at our processing facilities, but at  
8 the same time, I see some very similar kinds of things and  
9 have some serious concerns. Do you have anything or is  
10 there anything in the works that would be useful to any of  
11 us that may license or do have such facilities licensed  
12 today? Or do you have any help?

13 MR. QUILLEN: Let me put this in a larger  
14 context having served on both the Midwest compact and the  
15 Rocky Mountain compact. I am not impressed by the waste  
16 brokerage industry in the United States.

17 (Laughter.)

18 We have seen too many mistakes made, not only  
19 with Ramp Industries and other waste brokerage companies  
20 and I think they just need closer oversight and closer  
21 oversight should have started very soon after they got a  
22 license, but it did not. And you can't always accept the  
23 licensee's word on some of these things. Some of these  
24 issues really need to be dug into much deeper than we  
25 normally do. The tendency is to accept what the licensee

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1 tells you, what the licensee records show and in this  
2 particular case, there really was a disconnect. Records  
3 really didn't reflect what this person had.

4 FACILITATOR CAMERON: Let's go to the audience  
5 here.

6 MS. COTRIN: Cass Cotrin from California. I  
7 have two questions, actually for EPA. We're currently  
8 involved in a rather large project with EPA and I have two  
9 questions about it. One is that they told us that they  
10 cannot actually do clean up under Superfund unless the  
11 owner abandons the site. It's no longer a viable  
12 business. That was the only circumstance under which they  
13 could come in under Superfund. Is that correct?

14 MR. LAMMERING: Again, we're the radiation --  
15 I can't answer that.

16 MS. COTRIN: Okay.

17 MR. LAMMERING: I'd be speaking for Superfund  
18 and -- well, if I would tell you something, it could be  
19 right or it could be wrong.

20 MS. COTRIN: Okay.

21 FACILITATOR CAMERON: That sounds about right.

22 (Laughter.)

23 MR. LAMMERING: I didn't mean to flippant.  
24 That's Western philosophers.

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1 MS. COTRIN: I think that kind of blows my  
2 second question.

3 (Laughter.)

4 FACILITATOR CAMERON: Aubrey?

5 MR. GODWIN: I don't understand why EPA in  
6 light of this experience doesn't go out and get a license  
7 from NRC to do what they need to do in this case. And  
8 also use licensed contractors. I cannot understand how  
9 NRC would give a letter or whatever they said. I had no  
10 problems with it being qualified, but I think it would  
11 just close that last little legal loop and save us a lot  
12 of heartburn in trying to deal with it if they would do  
13 that. I just can't believe they don't do that.

14 MR. LAMMERING: You mean why we didn't get a  
15 licensed for store and dispose?

16 MR. GODWIN: I don't understand why you don't  
17 get one now to do clean up or to supervise or whatever, to  
18 handle it until you can get your contract --

19 MR. LAMMERING: That was the issue we  
20 addressed up first and basically through the meetings,  
21 essentially it was that it was NRC discretion and NRC is  
22 out there. They can answer.

23 But the conversation went like we make that  
24 decision as to whether we will issue you a piece of paper  
25 or not and we have decided that we don't need to do that.

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1 MR. GODWIN: I'd have a real legal liability  
2 problem unless they gave me something firm in writing  
3 about that because it really leaves some people hanging  
4 out, potentially.

5 MR. LAMMERING: We've probably got meeting  
6 notes. I don't know if we ever got anything written on  
7 it.

8 FACILITATOR CAMERON: Okay, let's have one  
9 last comment and let's go on.

10 MR. PADGETT: Aaron Padgett, North Carolina.  
11 I'd like to ask Bob this question. Did you have any  
12 problems from a legal point of view dealing with this  
13 and/or collecting the money that you've assessed this  
14 fellow because his primary location is out of state?

15 I know with us, when the person is out of  
16 state it just terribly complicates doing anything legally  
17 to the individual and collecting any funds that you may  
18 want. So have you faced that yet and if so, what have you  
19 learned there?

20 MR. QUILLEN: It is difficult to collect money  
21 out of state. There's no question about that. But the  
22 attorney they hired who no longer is a practicing attorney  
23 was very resourceful in identifying assets that they -- he  
24 saw that they could go after. Everything just came to a  
25 dead halt right now while they try to figure out what

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1 they're going to do, hire another attorney or go some  
2 other route on this issue.

3 MR. MOBLEY: Bob, was there any financial  
4 insurance on this facility?

5 MR. LAMMERING: Yes, there was. And part of  
6 that I'm going to discuss in my next topic.

7 FACILITATOR CAMERON: Let's give our  
8 colleagues from UVA a hand.

9 (Applause.)

10 MR. QUILLEN: If I can continue, this  
11 particular case brought to light a problem that we had and  
12 that is although we had financial assurance agreements  
13 with over 25 licensees, we discovered we had no legal  
14 mechanisms to access the money or number two to spend the  
15 money if we accessed it. In other words, we had all these  
16 nice financial assurance agreements, but the financial  
17 people said sorry about that, you can't put that money  
18 into any fund that we have in the State of Colorado and  
19 even if you could put it into a fund you couldn't spend  
20 it. So we have financial assurance agreements to the tune  
21 of between \$45 and \$50 million at the present time.

22 So next slide, please. The only way we could  
23 address this was to obtain statutory authority to clearly  
24 fire financial assurance warranties for our licensees, to  
25 give us the authority to forfeit these financial assurance

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1 warranties and to spend financial assurance warranty funds  
2 outside of the normal budgeting system and then to  
3 accomplish all the processes that are involved in this  
4 activity.

5           In the spending money outside normal budgeting  
6 issue was an interesting one because in Colorado the  
7 legislature tries to micromanage things and if you don't  
8 have a line item appropriation, you don't spend the money  
9 and we discovered in this particular situation that the  
10 lottery people have what's called continuous spending  
11 authority.

12           (Laughter.)

13           Believe it or not and so we got continuous  
14 spending authority put into our statute. So we now have  
15 this authority. We got a bill through the legislature and  
16 we got the bill through because our licensees recognize  
17 the need for this authority, because they've got the money  
18 hanging out there and they wanted to be protected too.  
19 One of the things we came up against, we weren't even sure  
20 we could give the money back to them. I mean this was  
21 really a murky thing when you get into the financial  
22 people and how they look at the world versus how we look  
23 at the world. But shortly we will exercise our authority,  
24 our new authority to forfeit the Ramp financial assurance  
25 and the money in that account is nowhere near adequate to

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1 handle this cost of roughly \$7.5 million. We have about  
2 \$140,000 in the financial assurance fund which was better  
3 than the hazardous waste fund at the time because they  
4 only had about \$12,000 to \$14,000 in their financial  
5 assurance for this company and they recognized their  
6 problems and they've changed their regulatory authority  
7 because they can do theirs through a regulatory process.  
8 We had to go through a statutory process. A side light to  
9 this is that the legislation really got pushed through  
10 because a potential licensee saw this statute as a way  
11 that carried a special provision that they wanted and  
12 we'll mention that later on when Ken Weaver gives his  
13 talk. But the message I want to give is if you have  
14 financial assurances on licensees, you really need to go  
15 through your financial people, your fiscal people and find  
16 out whether you can -- they control those funds and even  
17 if you take control of those funds can you spend them. We  
18 have authority to spend the funds because not until this  
19 case when we really got push to shove did we actually  
20 recognize the shortcomings we had in our financial  
21 assurance system.

22 Any questions? Roland?

23 MR. WANGLER: And this may be something that  
24 other states are encountering. We're having difficulty of  
25 exactly mechanically how to deal with instruments of

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1 credit, for example, from banks that we receive from our  
2 licensees. I mean we don't have a safe. We right now  
3 don't have a mechanism through our fiscal system to deal  
4 with it and a lot of our licensees are very reluctant to  
5 give us this instrument and I was wondering if there were  
6 some ideas out there on how exactly you deal with the  
7 instruments that establish your financial assurance.

8 MR. QUILLEN: The state treasurer in Colorado  
9 is the holder of all these instruments. We get the  
10 instrument. We turn it over to the state treasurer. The  
11 state treasurer keeps it in their big safe.

12 MR. MOBLEY: That's similar to what we have in  
13 Tennessee although for a number of years before we learned  
14 that we kept them in a safe that we had. Your concept  
15 about the forfeiture is really kind of interesting because  
16 the way ours is set up in Tennessee, the minute I get that  
17 in my hand I can go down to the bank. This is what  
18 lawyers on both sides have told me. I could run down to  
19 the bank and cash that on face value, if I go in and say  
20 we determined that -- I forget what the words are, but  
21 we've determined this facility is in default, hand me the  
22 money. They are legally required to hand me the money.  
23 But your comment there about spending it, unless I took  
24 off to the Bahamas, your comments about spending it, I  
25 don't know what I would do if they gave it to me. If I

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1 gave it to the state, I'm sure I'd be like you. I  
2 wouldn't have spending authority. I wouldn't be able to  
3 do anything with it. I'm glad you brought that up because  
4 that's where we would fall apart. We can get the money.  
5 There we would be. I have a bank full of money and  
6 nothing to do with it. So I appreciate that insight.

7 MR. PATTERSON: Tom Patterson from Louisiana.  
8 As a follow up to Roland's comment about how do you secure  
9 these instruments, all of your hazardous waste agencies,  
10 all of the RCRA delegated agencies in all of the states  
11 have been dealing with this since the early 1980s as of a  
12 condition of hazardous waste site licenses. You might use  
13 them as a resource because they've been dealing with this.  
14 They've had to as part of their delegation of authority  
15 from EPA.

16 MR. WANGLER: That was part of the problem  
17 because what they were doing is not something that I  
18 wanted to follow. So I was trying to get some ideas from  
19 other places.

20 MR. QUILLEN: One of the problems with the  
21 Ramp financial assurance was that part of it was being  
22 held by a bank and our lawyers were concerned if they  
23 claimed bankruptcy before the site went belly up so to  
24 speak, where the Superfund would come in, the other  
25 creditors would come in and try to take that money and so

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1 one of the things that we did in the money that they were  
2 keeping in the bank so to speak is we transferred it over  
3 to the state treasury's account and made sure that we got  
4 first call on it in case anything happened. That was just  
5 a protective measure we peremptorily did.

6 Yes?

7 MR. PADGETT: Just to follow with a question.  
8 Aaron Padgett, North Carolina. Not question, I'm sorry,  
9 but comment. One of the things I learned is that we had  
10 to get the Attorney General's Office involved because the  
11 instruments, you and I do not have the competency to  
12 determine whether or not they're valid and so we had to  
13 have help from the Attorney General's Office and all like  
14 that. As far as following one more and I'll follow up, as  
15 far as following what the solid waste people are doing, I  
16 probably would have to have a staff equal to the size of  
17 my current staff just doing financial assurance if I did  
18 what the solid waste people are doing in our state. So  
19 that's not an option.

20 Right quick, to evolve on Mike's issue, I'm in  
21 the same boat you are, Mike, but we also have our  
22 emergency board meets every three months when the session,  
23 legislature is not in sessions so within three months we  
24 could have the authority, and I know that if we needed to

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1 spend \$8 million or \$10 million, that would not be an  
2 issue.

3 MR. MOBLEY: I think probably the same would  
4 be true for some of our major facilities, but it would be  
5 a complicating factor and one that hopefully given some  
6 insight, I can address.

7 Aaron, the way we've dealt with this in  
8 Tennessee, is we've had some very specifically worded -- I  
9 mean one is we require the financial instrument to be  
10 worded exactly like it is in our regulations which again,  
11 given what the attorneys tell me, looks to be pretty iron  
12 clad. We can walk down to the bank and say give us our  
13 money. We've made this determination. We have to make a  
14 determination of default or whatever -- I can't remember  
15 the exact words, but in essence, that's what it is. And  
16 once we do that, they've got to give us the money. And we  
17 do not issue a license and/or amendment, whatever it is,  
18 until we have that document in hand, worded, explicitly as  
19 directed in the regulations. Now we have a lot of  
20 problems with that because insurance companies, banks,  
21 they don't like the wording that says when we show up and  
22 say it's in default you got to give us the money. They  
23 don't like that. They would rather have more protection  
24 there, but obviously our attorneys like it that way

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1 because all we have to do is make that determination and  
2 we got the money. And so far, people put it up.

3 MR. PADGETT: Yes, and we have the same thing.  
4 We can go in and get the money at any time we make that  
5 designation. The only -- the point I was making though is  
6 that the instrument itself, we really do not have the  
7 competency in our staff and I doubt most of us here do, to  
8 determine whether or not that's a valid instrument and for  
9 instance, particularly when you get into the guarantees,  
10 and that's one of the reasons why this new relaxation that  
11 the Commission has just -- the NRC has just done on  
12 aligning the parent company guarantee, we're not going to  
13 do because it's just too complex to get into it and  
14 determine whether or not the guarantee is worth crap.

15 It takes a lot of time and a lot of technical  
16 expertise in the financial area to do that.

17 FACILITATOR CAMERON: We have Alice.

18 MS. ROGERS: As you all are tired of hearing,  
19 at our agency we do lots of different -- I'm Alice Rogers  
20 from Texas -- lots of different EPA and NRC programs.  
21 We're in the process of developing one set of instruments  
22 that would be effective for all those different programs  
23 and those forms are approved by our Attorney General and  
24 then put into our rule in our licensees and permittees and  
25 registrants and all of their things, have no ability to

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1 change the wording in those except for the amount at all.  
2 So and we do have a staff of about five accountants that  
3 all they do is deal with those instruments and they're  
4 very tough, our accountants are in making sure that what  
5 comes in the door, it does meet our regulations and we  
6 require that those be in force and effect 60 days prior to  
7 receipt of waste to the commercial facility.

8 FACILITATOR CAMERON: Another approach. John,  
9 you want to finish a thought? We're almost past that.  
10 Then we'll take a break.

11 MR. HICKEY: Related topic, bankruptcies. I'm  
12 on page 15 of my handout. For some time we've had a  
13 requirement that a licensee notify us if they go bankrupt.  
14 We haven't always had that requirement, but at least it's  
15 been on the books for some time. Prior to that time we  
16 heard about bankruptcies by rumor, if we heard about them  
17 at all or it's just luck if we heard about them.

18 But what we found was we needed to develop the  
19 capability to react quickly when we find out about a  
20 bankruptcy. And in general, if we establish our claims,  
21 we can get ahead of the creditors. That's not always the  
22 case, you never know how a judge is going to rule in a  
23 specific case, but at least if we can get our claim and  
24 get into the process, we can try to get our interest,

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1 immediate protection to the public health ahead of the  
2 creditors.

3           Going on to slide 16, so what we have done is  
4 we've developed the capability of developing, of  
5 establishing a bankruptcy team within 24 hours of  
6 notification of bankruptcy. There's three reasons we want  
7 to do this. One is we want to assess the hazard at the  
8 site, if necessary, to go out to the site immediately.  
9 Now we always had that capability. We didn't have to have  
10 a bankruptcy team to do that. But that's our first  
11 priority. The second priority is to get involved, the  
12 second reason is we want to get involved in the legal  
13 process as quickly as we can to establish our claims and  
14 there's a side benefit to this. The mortgage holders, the  
15 landlord, other receivers might think twice about taking  
16 possession of the radioactive material and kicking the  
17 licensee off the site if they're put on notice immediately  
18 that they are the ones that are going to be liable for  
19 compliance with NRC regulations. And sometimes it helps  
20 if the licensee maintains possession of the material  
21 because they have the expertise to assist in making sure  
22 the material is secure.

23           But we have had some cases where creditors  
24 took possession of the radioactive material and then found  
25 out to their dismay that they were then, had obtained some

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1 liabilities that far exceeded anything they could have  
2 gotten out of the bankrupt licensee.

3           So the first thing we do is decide what we  
4 need to do to secure the material and if necessary go out  
5 to the site. And I think that parallels the EPA process  
6 that they're years ahead of us in that respect. They have  
7 an impressive mechanism for taking quick action.

8           And then we get involved in the legal process.  
9 We tell them, tell the people that are involved in the  
10 bankruptcy that the licensee is still liable for  
11 compliance with NRC requirements and we inform the court  
12 that any trustee or receiver is also liable and we try to  
13 establish our claim, moving on to the last slide, 17 on  
14 this item. And we have to get the Department of Justice -  
15 - NRC cannot just do this autonomously. We have to get  
16 the Department of Justice involved in filing proof of  
17 claims with the court and somebody mentioned the  
18 mechanisms for implementing the financial instruments.  
19 It's nice to have them there in a safe. You might not  
20 even know whose safe they're supposed to be in, but it's  
21 another matter to actually, if the licensee defaults to  
22 actually put that financial instrument to good use and we  
23 do have procedures set up to do that.

24           So I guess the way I would conclude is to say  
25 that if you don't have a mechanism, you know bankruptcies

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1 and abandonments are a headache. You've all had a lot of  
2 experience with that. I would say if you don't have a  
3 mechanism set up to react quickly to this type of  
4 situation, that you should consider establishing that and  
5 we can provide you with some counsel on our experiences  
6 and how we go about doing it.

7 FACILITATOR CAMERON: Questions, comments?  
8 Aaron and then Ed.

9 MR. PADGETT: Sorry to keep butting in and  
10 giving opinions, but on this one the only thing I say is  
11 get down to the bankruptcy court quick and get your claim  
12 in. It's the only chance you've got that any of those  
13 assets -- that's hard experience speaking, folks.

14 MR. BAILEY: We get probably more bankruptcy  
15 notices through another means rather than the licensee or  
16 the registrants and our Department has somebody that goes  
17 and looks at bankruptcy records and gives us a list of  
18 them. The problem we have had, I just got a report from  
19 our financial person, is that in the last FY we had gotten  
20 zero dollars out of all of the ones that we have filed a  
21 claim against. So --

22 MR. HICKEY: Not a good batting average.

23 MR. BAILEY: It's almost like is it worth the  
24 time and effort we're spending on it to get the fees or  
25 whatever that are owed.

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1 MR. HICKEY: Have you had any sites go  
2 unsecured as a result of bankruptcies?

3 MR. BAILEY: Yes.

4 FACILITATOR CAMERON: Questions from the  
5 audience? Cass Kaufman.

6 MS. KAUFMAN: Cass Kaufman, California. I'm  
7 not sure you'll know the answer to this or not, but we've  
8 been told last week that there was a recently enacted law  
9 that either just was in the Federal Register or is just  
10 about to be in the Federal Register that said that if the  
11 person assuming control over that property is merely  
12 acting as a banker, in other words, this is just a  
13 financial situation where they are taking a mortgage back,  
14 for example, that they cannot be held liable for problems  
15 with that property. Do you know anything about that?

16 MR. HAMPTON: I think it's a Superfund thing.

17 MR. COLLINS: Steve Collins from Illinois.

18 And this is a question for NRC, I guess. Now that you're  
19 looking at external regulation of DOE, in the future will  
20 you treat all other federal agencies the same way you  
21 intend to treat DOE with regard to the licensing their use  
22 of radioactive material?

23 MR. HICKEY: Well, I don't know. That's a  
24 pretty broad question to answer broadly, but we generally  
25 license federal agencies.

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1 MR. COLLINS: Yes, but in this case do you  
2 give EPA a piece of paper saying here's Ramp, one piece of  
3 paper.

4 MR. HICKEY: EPA is not bankrupt.

5 (Laughter.)

6 We'll have to talk about that another time. I  
7 wasn't involved in that particular decision, but I'm aware  
8 of NRC exercises considerable discretion in various cases  
9 where there's a quote emergency unquote.

10 MR. MOBLEY: I'd like to ask a question maybe  
11 of the entire body here. Something we've been considering  
12 because these bankruptcies, Ed captured the extent of our  
13 experience with bankruptcies. I mean the horse is out of  
14 the barn. It's too late. You're filing paper and you're  
15 keeping your attorneys busy. The reality is and something  
16 we're considering is just requiring every licensee to put  
17 up a financial assurance, not just doing it for our major  
18 facilities that we are seriously concerned about, but for  
19 everybody and in particular one that I'm looking at maybe  
20 hitting first are these guys with these moisture density  
21 gauges because I'm expending a lot of time chasing down  
22 moisture density gauges and I want some reason for them to  
23 be kind of interested in holding on to them. I figure if  
24 I put a high enough financial assurance on them, they'll  
25 be --

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1 MR. COLLINS: Have them post bond in effect.

2 MR. HICKEY: In essence, that's it. You want  
3 this license? Yes. Here it is, here's the bond or  
4 financial assurance you have to put up and we're looking  
5 at it across the board. Every radioactive material  
6 licensee, you put up an appropriate financial assurance  
7 for your operation.

8 Has anybody else thought about that?

9 MR. QUILLEN: We have thought about that same  
10 issue and we discussed it. We haven't gone down that path  
11 yet, but we have certainly seriously discussed that same  
12 option.

13 FACILITATOR CAMERON: Now Bailey from  
14 California and then we'll recognize the two from Illinois.

15 MR. BAILEY: I would agree with you and we  
16 have talked. The ones that have cost us I think the most  
17 money have not been the ones that would necessarily fall  
18 into the category of triggering the financial security,  
19 but they tend to be the small operations where the guy  
20 dies and his widow is bankrupt and we get the radium, you  
21 know. And the same thing with gauges, as you mentioned.

22 We adopted our financial security regulation  
23 rather hurriedly to try to avoid missing one more  
24 deadline, but we over the years maybe we'll get to looking  
25 at it and trying to figure out how to word that because

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1 right now to get rid of a gauge you're talking quite a bit  
2 of money. If they've got any waste at all, you can spend  
3 a bunch of money getting -- if anybody is further down the  
4 road than just considering it, I'd really appreciate  
5 knowing.

6 MR. ENGLAND: Steve England and Cathy, the tag  
7 team from Illinois. We have been looking at that. We  
8 also are looking at requiring surety or some fund  
9 mechanism, not only for specific licenses but also for  
10 some general licenses. And Cathy is starting public  
11 hearings on it on Tuesday.

12 MS. ALLEN: Check out our website,  
13 [www.il.state.us/idns](http://www.il.state.us/idns). Under notices, there's a working  
14 draft of our proposed rule, right there.

15 FACILITATOR CAMERON: You may want to write to  
16 just write that out and put it on the table out there.

17 (Laughter.)

18 Let's go to Roland, and we were going to take  
19 a break. I lied to you about that. Because we really do  
20 need to get someone on an airplane and that's Leonard  
21 Slosky who is going to talk to us about emerging issues in  
22 the low level waste compacting process.

23 Roland and Aubrey if you're real short.

24 MR. WANGLER: Just a couple of quick comments.  
25 One, while you're looking at these gauge users as far as

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1 increasing their fees, make sure that when they do lose a  
2 gauge or misplace it or run over it that your enforcement  
3 action reminds them that they should have held on to them  
4 a lot tighter. That's one of the ways we're going.

5           The second comment I wanted to make was the  
6 fact that when you're dealing with facilities in  
7 bankruptcy, it's not just knowing when they go in. You  
8 have to expend a lot of effort finding out what their  
9 status is along the way and believe me, I've been engaged  
10 with a facility for 10 years in Chapter 11 bankruptcy and  
11 to get a specific status at any point in time as to  
12 whether or not they're coming out or going deeper in,  
13 etcetera, is extremely difficult, particularly since  
14 they're incorporated in another state. So that's  
15 something that has to be looked at.

16           FACILITATOR CAMERON: Aubrey.

17           MR. GODWIN: In theory, any health and safety  
18 requirements should take precedent over other things. I  
19 had experience in Alabama where it did. Other parts of  
20 the health department had experiences where they had a  
21 health and safety requirement and it did not take  
22 precedence. You're totally dependent on the Judge and how  
23 he looks at the situation.

24           Secondly, these and things where you get a lot  
25 of bankruptcies, they don't look at it as health and

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1 safety, so you're not going to get much back on fees. The  
2 only way you can get money is when you're requiring them  
3 to meet some specific health and safety requirement.

4 FACILITATOR CAMERON: One of the things that  
5 emergencies from these meetings are issues that maybe  
6 should be explored further and singly. It may be that --  
7 a good idea would be to have a joint NRC agreement state  
8 workshop on bankruptcy issues and take some time to  
9 explore all of these different types of things.

10 I thank all the decommissioning people. I  
11 won't thank John yet because he's going to be here again  
12 and it's my pleasure to introduce Leonard Slosky from the  
13 Rocky Mountain Compact to talk to us about low level  
14 waste. Thanks for your patience.

15 MR. SLOSKY: Thank you. It's nice to be with  
16 you today. I see a number of familiar faces around the  
17 room. First, I need to give you a couple of disclaimers.  
18 First, what I am going to say today represents my own  
19 views and not that of the Rocky Mountain Compact Board.  
20 Bob is sitting pretty close. I have to give that  
21 disclaimer.

22 Secondly, everyone at this table probably  
23 knows more about their compact or state than what I do and  
24 so I bear your indulgence as I try to summarize some

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1 things that I see going on and try to talk about a few  
2 emerging issues.

3 I think when you step back and try to assess  
4 low level waste disposal, it's important to keep in mind  
5 what the objective is. Those of us that were involved in  
6 this a decade and a half ago envisioned this as a  
7 different type of program and the statute recognizes that.

8 This was not intended to be a top down federal  
9 mandate. This is how it should be done. The federal act  
10 gives some general guidelines, but it was up to each state  
11 and compact to develop a solution that's appropriate for  
12 their area.

13 And the act recognizes this in holding the  
14 states responsible for providing for disposal. It doesn't  
15 say each state or compact shall have a site. I think it's  
16 important to keep that in mind as we see the system  
17 continue to evolve, although I'd be the first to admit  
18 that we're now at a very different point than I thought we  
19 would be seven years ago, 17 years ago.

20 Right now there are 10 compacts. I'm counting  
21 Texas in that group and hopefully they will get  
22 congressional ratification very soon. All but eight  
23 states are now in compacts. The eight that are not  
24 includes the District of Columbia and Puerto Rico.

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1 I think it's also important to look at what's  
2 happened since the act was enacted. Some things have  
3 changed very dramatically. Some things have perhaps not  
4 changed very so dramatically. There's a lot of focus  
5 today about volumes and you hear a lot of people saying  
6 the volumes go down, the volumes go down. The sites are  
7 not going to be economically viable. We need a much  
8 smaller number of sites. Let me review the data with you  
9 a little. Around 1980 and again I'm speaking of  
10 commercial waste as defined in the Low Level Waste Policy  
11 Act. The commercial waste appeared to peak around 1980 at  
12 about 3.7 million cubic feet. By 1987 this had dropped  
13 down to about 1.9 million cubic feet and according to the  
14 recent DOE report in 1996, it was around 450,000 cubic  
15 feet. So there's been a very dramatic change in volume.  
16 It's also instructive to look at activity. Activity, this  
17 is the total disposed in the -- was then three sites and  
18 now the two commercial sites. In 1980 was about 350,000  
19 curies. 1987, 275,000 curies; in 1996, 456,000 curies.  
20 The curies as the volume tends to jump around from year to  
21 year, but if you look at the data over the last ten years,  
22 the curie level has really not declined. There are some  
23 years that are down. There are some years that are up.  
24 But the typical curie level now is the same or higher than  
25 it was 17 years ago when the original act was put into

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1 place. The reason I spend the time going through this is  
2 I'd like you to, as all of you are radiation professionals  
3 have probably already thought about this, but in terms of  
4 the public dialogue, what we're about in this system is  
5 not disposing of contaminated paper, tools, resins,  
6 etcetera, etcetera. The disposal sites and the compact  
7 system and the states are designed to isolate  
8 radioactivity from the biosphere. They're designed to  
9 protect health and safety from radioactivity and I think  
10 you'll see an increasing focus on the activity versus the  
11 volume in the years ahead and it presents a different  
12 prospect as to how you view the world, if you look at  
13 curies as opposed to volume.

14           Obviously, during that same period the amount  
15 of processing and compaction and more sophisticated  
16 techniques have grown by leaps and bounds. That's one of  
17 the reasons that we see the trend that we do. The other  
18 major change that has happened has been the change in the  
19 Barnwell facility. For a very long time, South Carolina,  
20 the Southeast Compact was going down a certain road. In  
21 fact, they were one of the principal leaders in the 1980  
22 and the 1985 acts. And suddenly a decade later in July of  
23 1995, South Carolina left the Southeast Compact and now  
24 anyone who is willing to pay the freight, except for North  
25 Carolina, can dispose of their waste at Barnwell. And

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1 that has again been a very dramatic change. Frankly, the  
2 reason people were developing sites is not to comply with  
3 the act, not to be good citizens, but they thought that  
4 they wouldn't have disposal capacity. So they were  
5 developing sites to meet the needs of their generators.  
6 With Barnwell reopening, that picture has changed  
7 dramatically. Adding to that has been the Envirocare  
8 situation where Envirocare, at least until recently has  
9 been taking bigger spectrum of waste and again much is in  
10 the perception which may be different from the reality,  
11 but at least the perception was that Envirocare was going  
12 to be able to take a significant part of the low level  
13 waste stream. Those two features, the South Carolina  
14 situation and Envirocare, sent a message out to that were  
15 developing sites that maybe that's not such a high  
16 priority or maybe it's going to be postponed for 10 years.

17           Again, I think it's important to recognize  
18 particularly in terms of Barnwell is that Barnwell could  
19 close or be restricted from being a national disposal site  
20 almost as quickly as it reopened. All it takes is state  
21 legislation to reverse that decision.

22           The other problem that I'm sure a lot of you  
23 are aware of in South Carolina is that the surcharge is  
24 not generating as much revenue as the state had expected  
25 and efforts are now underway to try to increase those

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1 revenues and there have been recent meetings with Chem  
2 Nuclear and Generators, trying to come up with a fairly  
3 fancy financial arrangement to give the state the money  
4 that they want to try to keep the site open.

5           In terms of what's left of the Southeast  
6 Compact, North Carolina is proceeding, but seems to have  
7 fallen a little bit farther behind at each milestone and  
8 seems to have their money turned off and on by the  
9 Compact, depending on how much progress they're making or  
10 not making. Again, there are some discussions underway  
11 with generators to try to come up with the funds to  
12 complete the siting and licensing process that being well  
13 over the original budget.

14           In the Appalachian Compact, Pennsylvania's the  
15 host state. They've gone through a preliminary site  
16 screening process, have eliminated about 75 percent of the  
17 states' land area from consideration and they're pursuing  
18 a volunteer community. As I'm sure you know, the long  
19 time director of that program has recently been  
20 discharged.

21           In the Northwest Company, I saw that Bill was  
22 talking this morning about Envirocare, so I won't step  
23 into that.

24                           (Laughter.)

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1           In terms of the other facility in the  
2 Northwest Company, Richland, the only real thing I think  
3 we can note at this point is that the rates will be  
4 increasing significantly over the next couple of years and  
5 they put into place about a year and a half ago a new rate  
6 structure that is more dependent on activity and less  
7 dependent on volume.

8           In the Central Compact, Nebraska is the  
9 designated host state, at least that's what the Compact  
10 believes.

11           (Laughter.)

12           A license has been under review since July of  
13 1990. The Governor is doing his best to prevent that site  
14 from getting licensed or going into operation.

15           In the Central Midwest Compact, Illinois and  
16 the Compact spent about \$80 million trying to site a  
17 facility. A blue ribbon panel was appointed which  
18 rejected the site. This last year I believe they passed  
19 legislation to set up a new siting process and begin  
20 again, at least on paper.

21           In June of this year, the Midwest Compact made  
22 a dramatic move, citing the need for much higher  
23 expenditures, declining waste volumes, site development,  
24 cost estimate of over \$100 million and access to existing  
25 facilities they put on hold their siting process.

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1           The Northeast Compact is a compact of two  
2 states which are working independent to site and develop  
3 their own facilities. They're a number of years off from  
4 having this facility designated. Again, both of those  
5 states are seeking volunteer communities.

6           Massachusetts, Michigan, New York, the major  
7 go it alone states at this point are all not proceeding  
8 quickly, if at all.

9           I'm saving some of the better news for the end  
10 of this recitation. The Texas Compact which includes  
11 Maine and Vermont, passed the House of Representatives  
12 last week by a vote of 309 to 107. It's hoping that the  
13 Senate will take action on that, perhaps as early as next  
14 week. There was an amendment added on the floor that is  
15 giving some of the compact people heartburn and that is  
16 that there's a prohibition from the compact receiving  
17 waste from states other than Maine and Vermont.

18           There are negotiations going on right now to  
19 see whether they're going to accept that or it's going to  
20 go to conference committee, assuming it passes the Senate.

21           A draft license of the Texas site, I believe  
22 was issued, in early 1996. The pre-hearing process is in  
23 full swing and actual hearings are scheduled to begin in  
24 January of 1998.

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1           The Southwestern Compact, I'll spend a few  
2 more minutes on because of the Ward Valley site and the  
3 national significance that I think the California and  
4 Southwest compact has.

5           The Ward Valley site was licensed by the state  
6 in 1993. The license was subsequently upheld by the  
7 California Supreme Court. The main impediment to site  
8 development is the transfer of the land which is owned by  
9 the Bureau of Land Management. On the last day, I  
10 believe, of the Bush Administration, the Secretary of the  
11 Interior signed a record of decision transferring the  
12 land. The next day, when the Clinton Administration came  
13 into office that was reversed. There's been land transfer  
14 legislation introduced into Congress in recent years.  
15 There are not enough votes to pass it, so it's not  
16 expected to go anywhere.

17           In February of 1996, Interior, as the current  
18 land owner announced that they were going to prepare a  
19 second supplemental environmental impact statement that  
20 was expected to take six months. We're still waiting.

21           There's a GAO study released about a month ago  
22 that concluded that most of the issues that Interior plans  
23 on addressing in the SEIS have already been resolved. The  
24 site was reviewed by the National Academy of Sciences.  
25 They generally gave it a passing grade, recommended some

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1 additional testing during site development and since then  
2 Interior and California have been in a tug of war about  
3 the testing program. Negotiations recently broke down  
4 again for about the twelfth time. California insists on  
5 transferring the land before the testing begins. Interior  
6 insists on doing the testing before the land transfer is  
7 made. They're both arguing about who is going to do the  
8 testing and at this point that is unresolved.

9           Both California and U.S. Ecology, the  
10 designated site operator, have filed lawsuits in federal  
11 court, one, trying to compel the transfer of the land and  
12 two, to try to recover U.S. Ecology's cost to date which  
13 are about \$80 million.

14           I think when one steps back and asks the  
15 question is the act working? Have we made progress in the  
16 last 17 years? I would suggest it's a classic case of is  
17 the glass half empty or is it half full? I'll let you  
18 judge for yourself.

19           A lot of people say the act has failed. It's  
20 been 17 years. There's not a new site. What has really  
21 happened?

22           Those people don't seem to have much of an  
23 alternative that I hear of. Every once in a while there's  
24 rumbling of let's nationalize the existing sites. I would  
25 suggest that that will not work very long. What got us

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1 into this situation is the need for equity among the  
2 states, among the regions and to go back to a smaller  
3 number of sites than caused this problem in 1980 is  
4 unlikely to succeed very long.

5           In terms of looking at a half full glass, one  
6 site is licensed. That's a very major accomplishment.  
7 Two others are pretty far along, Texas and Nebraska.  
8 Obviously, there's some impediments in all of those and  
9 they're far from being a done deal. In addition to that,  
10 the goal of the act was to provide for disposal capacity.  
11 Right now, everyone except for North Carolina has disposal  
12 capacity. And in a sense, that's an achievement, that's  
13 success.

14           The other thing I would just come back to is  
15 you ought not to try to view this program as the agreement  
16 state program as a framework delegation implementation,  
17 but a program that was designed to have flexibility. It  
18 was always intended that compacts might consolidate. It  
19 was always intended that like the Rocky Mountain compact,  
20 compacts might contract with another compact for disposal  
21 capacity and I would suggest the existing framework  
22 provides adequate flexibility to forge whatever solution  
23 is appropriate, keeping in mind that the problem  
24 originally was not economic. It was not technical. It

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1 was an equity problem. Whatever solution emerges needs to  
2 meet that same goal of providing equity.

3           The other thing is that Congress has no  
4 appetite at all for revisiting this issue and they haven't  
5 and they've made such wonderful progress in the high level  
6 waste program. We have a great model to look to if that  
7 ever happens.

8           (Laughter.)

9           But I would suggest if California and/or Texas  
10 fail, I think it's very likely that the existing system  
11 will collapse. What will re-emerge is very hard to say.

12           There are just two other points I leave you  
13 with that I see in terms of emerging issues and right now  
14 this may not be happening across the country. It may be  
15 in isolated pockets, but there are things that I see  
16 growing in numbers and growing in importance.

17           One of these is the development of what I'm  
18 calling noncompact facilities, facilities that are not the  
19 normal, low level waste site that went through the compact  
20 or state development process. The two that are most  
21 evident right now are Envirocare and the WCS facility in  
22 Texas. I really see that as a growing trend. I think  
23 it's driven by money. That's not a bad thing, but there's  
24 a lot of money to be made in this industry, particularly  
25 looking at the decommissioning waste, the DOE waste, the

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1 Superfund cleanup waste. When there's big money out  
2 there, the private sector is going to be innovative and  
3 that's one of the great things about this country is a lot  
4 of times that produces something that's very good.

5           On the other hand, those types of sites  
6 present some issues. One is a regulatory issue. How are  
7 they regulated? Who has jurisdiction? They may be within  
8 a compact physically, but are they within the compact's  
9 jurisdiction?

10           The other thing is that if we see more of  
11 these sites, in particular, but even the ones that now  
12 exist, they may tend to draw waste away from the compact  
13 facilities, thus undermining the economic feasibility of  
14 newly developed sites. So I think there are several  
15 challenges that those types of sites present.

16           Another unrelated issue is the DOE  
17 privatization issue. We had a scheme in this nation for a  
18 long time, almost 50 years, where there was a pretty hard  
19 line between the DOE waste and non-DOE waste. I know that  
20 that line wasn't always perfect, but for the most part  
21 that was a pretty bright line.

22           With privatization that becomes grayer and  
23 grayer. And again, I think it presents licensing issues,  
24 regulatory issues, DOE sends their waste off-site for  
25 treatment and the treatment facility then contends that

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1 the residual waste is no longer DOE waste. Who has  
2 jurisdiction over that? What compact facility or state  
3 facility can or can it not go to?

4 So again, I think that's an issue that we all  
5 need to keep in mind and we'll present challenges in the  
6 future.

7 I appreciate this opportunity and I do have  
8 time to answer some questions if the schedule allows.

9 MR. QUILLEN: Richard?

10 MR. RATLIFF: Richard Ratliff, Texas.

11 Leonard, what would be a good estimate on the cost per  
12 curie for disposal now versus what it was before 1980 when  
13 the Low Level Waste Act was passed?

14 MR. SLOSKY: It's obviously gone up. I can't  
15 give you a number, but that would be an interesting  
16 analysis.

17 MR. RATLIFF: High orders of magnitude, I  
18 would guess, wouldn't you?

19 MR. SLOSKY: Yes.

20 MR. RATLIFF: Okay.

21 MR. SLOSKY: Yes, I can remember when I first  
22 started in this business, the major generator in Colorado,  
23 I think, was paying less than \$10 a drum. It was not  
24 going to a radioactive license facility, but over the last

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1 decade and a half, you're right. Costs have gone up.  
2 Orders of magnitude at least.

3 MR. BAILEY: Bailey from California. I'm glad  
4 you saved those wonderful last good stories because it's  
5 hard for us to sometimes realize that the California has  
6 any good news in it. The last figures that I saw showed  
7 the cost of disposal being more than it is to take it to  
8 Barnwell including the transportation at present. And  
9 that site comes up for its license renewal.

10 (Laughter.)

11 And I don't -- I guess COV's already got that  
12 figured out how it's going to work, but that would seem  
13 that we may be back into another whole round of  
14 application and review and court battles again.

15 MR. SLOSKY: I know it's hard to be  
16 optimistic, but it's one of the bright spots.

17 (Laughter.)

18 MR. HYLAND: Jay Hyland, State of Maine.  
19 Given your comments regarding the private waste sites and  
20 how that may ultimately kill the compacts, how is the --  
21 how should I word it, shall we say the \$5 million cubic  
22 foot offering from Chem Nuclear, how is that going to  
23 affect waste sites and how is that being received by the  
24 compacts and Governor Beardsley?

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1           MR. SLOSKY: I guess I would never speak for a  
2 Governor, even if he was my own. But you know I think  
3 that as long as Barnwell is perceived to be an option and  
4 it certainly seems in the short run, it is a disposal  
5 option, but really no one except for Texas and California,  
6 I think, are going to try to move ahead with any  
7 conviction. I think those states are so far along and  
8 have spent so much political capital that they're going to  
9 continue, but I will be shocked if anyone else does.

10           MR. HYLAND: I guess sort of the pointed thing  
11 is that with Doggett's amendment to the Texas compact,  
12 that may kill that compact as it is. It may not be in  
13 comparison to the market what Barnwell is offering. It  
14 may not be economically viable now.

15           MR. SLOSKY: My understanding is that in the  
16 short run Texas didn't intend on taking anyone else's  
17 waste outside of the compact, but in terms of the long  
18 term national solution, consolidation, other arrangements,  
19 it is certainly a blow and those negotiations are going on  
20 now as to whether they want to risk the compact at all,  
21 but try to get rid of that amendment. You know how things  
22 are in the end of Congress and something very minor like  
23 that can cause the bill to be lost entirely.

24           FACILITATOR CAMERON: Aaron?

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1           MR. PADGETT:  Aaron Padgett, North Carolina.  
2  I would like to maybe take some slight exception to what  
3  you're saying.  I think North Carolina is trying to move  
4  ahead, however, there are some major problems.  Number  
5  one, the site that was selected is in the Triassic Basin  
6  in North Carolina, it's a fractured rock site, a very  
7  difficult site.  The application that was filed by the  
8  prime contractor, I guess maybe I just need to say if  
9  anyone wants to look at the quality of the data in that  
10 application, open it up to the meteorology section and  
11 take a look at the wind rose and then compare it to wind  
12 roses in that -- from that area.  Obviously, meteorology  
13 is going to have nothing to do with the licensing of the  
14 site.  It just gives you some indication of the quality of  
15 the data throughout that application, the thing that we've  
16 been dealing with.

17           I personally would very much like for a site  
18 to be developed in North Carolina.  The particular site  
19 that we have is a very difficult site.  The contractor --  
20 they do have a contractor in now that is doing good work  
21 technically, but they are going to have a difficult time  
22 showing that that site will meet the part 61 requirements.  
23 There are a number of issues that could be fatal.  We  
24 think it's probably likely that at least one of them will  
25 turn out to be fatal.  Hopefully, that won't be the case

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1 and they can move the site along, but they still haven't  
2 characterized the site after a number of years and  
3 spending close to \$100 million.

4 So the problems in North Carolina have not  
5 been political. They've been technical and that's where  
6 the site is at this point in time.

7 MR. SLOSKY: I accept that as a friendly  
8 amendment.

9 FACILITATOR CAMERON: Thank you very much.  
10 Leonard. That's a thoughtful presentation.

11 (Applause.)

12 FACILITATOR CAMERON: We're going to take a  
13 break until 25 to 2 and then we're going to have training  
14 and go back to low level waste, some of the issues that  
15 Leonard raised. And the wind rose comparison will be at 8  
16 o'clock in the lounge.

17 (Laughter.)

18 (Off the record.)

19 FACILITATOR CAMERON: Let's go back on the  
20 record.

21 MR. SOLLENBERGER: I guess Attachment D has  
22 comparisons for the criteria that goes through the 1246  
23 inspection manual chapter and compares that. And we have  
24 gone through and selected those things which we thought  
25 were basic training, enhanced training, advanced training

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1 and they're presented there. And the working group  
2 recommendation was that states use that in selecting  
3 courses for attendance to their staff.

4 We've also provided a policy statement and  
5 form for qualification of an individual. You can tailor  
6 the program depending on their responsibilities in the  
7 state.

8 The second task we had was to evaluate NRC's  
9 policy and passing and failing courses. Last year we  
10 presented that policy. We essentially got no comment on  
11 it and therefore it was issued as a null agreement state  
12 letter and we've been following it and we've been giving  
13 you notices of successful completion of courses presented  
14 by NRC that your staff have attended and also occasionally  
15 when there's a failure and we send those out and your  
16 staff is going to take a follow up exam to complete that.

17 So that's when on-going now for approximately  
18 a year.

19 The last thing was to identify acceptable  
20 alternatives to training options, including evaluation of  
21 technology and training methods that could lower the cost  
22 of training. This was the focus of a meeting this past  
23 August and the last attachment in the report goes through  
24 what the group looked at and what their conclusions are.  
25 So that's a quick overview.

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1           The second slide goes through the members.  
2 Cathy Allen and I were elected as co-chairs by the group.  
3 John Richie from the Technical Training Division and Cathy  
4 Haney from Nuclear Materials Program participated from  
5 NRC. Marilyn Kelso and Bill Sinclair participated from  
6 the agreement states.

7           The first appendix in the report is the  
8 charter with detailed information about the individuals  
9 and what the charge was to the group.

10           I've kind of walked through -- next slide,  
11 please. I think I've walked through this slide as I did  
12 the introduction. If you have any questions, we'll go on  
13 in detail. I'll try to make this quick, just so that we  
14 can get on with the meeting.

15           The task 2 results have been accomplished. By  
16 the way the working group, Cathy and I signed a letter  
17 yesterday transmitting the final report to Mr. Bankhert  
18 and Mr. Quillen, so one of the things that we feel we have  
19 done is completed the work of this group. Task 3, we went  
20 and met, like I said in August. We've gone through and  
21 reviewed various technologies including video  
22 conferencing, computer based training, satellite  
23 broadcasting. There are various enhancements. And  
24 there's advantages/disadvantages discussion in appendix F  
25 to the report that went through those and we had various

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1 working group members look at some of the various  
2 technologies and experience that they had from people in  
3 their programs. John Ritchie came up with a lot of  
4 information that Mr. Anderson in the Technical Training  
5 Division had collected at a meeting and so the group had  
6 quite a discussion. We met for three days and we kind of  
7 walked through and developed the advantages and  
8 disadvantages that we saw based on our insights.

9           One thing I'd like to do on part of our  
10 conclusions is thank the organization of agreement states  
11 and NRC for the support and the individual states who had  
12 the people come to this working group and the various  
13 offices for giving us the time and availability to do that  
14 and I know there's an acknowledgment on the inside cover  
15 of the report and I think they're signed by myself and  
16 Cathy, but I think the whole working group all feel the  
17 same way as that acknowledgment. I think it's going to  
18 take some time for you to look over the report, see what  
19 you can use out of that. I know I've gotten some comments  
20 from a couple of states that have used what we sent out in  
21 June who sent a portion of the report out for comment to  
22 the states and I know Nebraska said they took that to  
23 heart and used it in helping to get their training program  
24 in order. And so I'm glad to know that it has been useful  
25 in draft form. And hopefully, now that we've cleaned up a

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1 few things in the report and presented it to everybody it  
2 will be useful for more states.

3 I'll address any comments at this point in  
4 time. At this point the working group feels their work is  
5 complete. Mr. Bankhert has informed me when the  
6 Commission gets done looking at all their options, we may  
7 get tasked by NRC to do some additional work. We felt  
8 that we completed everything the charter had been  
9 originally set out for us. OAS may have additional work  
10 and whether it's this working group or another one, I feel  
11 that this was a successful working group and I know all  
12 the members worked hard, contributed varying expertises to  
13 the working group which I think helped make it a good  
14 report.

15 FACILITATOR CAMERON: I don't know why all  
16 your colleagues were laughing over here. Some private  
17 joke, I guess. Are there any questions for Dennis?

18 Richard?

19 MR. RATLIFF: Richard Ratliff, Texas. I'm  
20 just wondering if everybody is like me, if this is a  
21 special one where it has these two for one coupons in the  
22 back and get into class free?

23 (Laughter.)

24 FACILITATOR CAMERON: Thanks, Richard. Brian?

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1           MR. HEARTY: Brian Hearty, Nebraska. Yes, the  
2 draft was very helpful with me with setting up a  
3 qualifications manual. Another question I do have though  
4 and maybe someone else can answer this, if not you, was  
5 that the distribution of course manuals to help us come up  
6 with the equivalent courses on our own, I was wondering  
7 the status of that?

8           MR. SOLLENBERGER: That work is in progress.  
9 There's a whole row of boxes down the hallway in our  
10 office with the various state names on them. We do have  
11 some manuals in that have been reproduced. I called back  
12 to the office today to find out the status of this. My  
13 understanding is that Technical Training Division is  
14 assembling another group to go off to reproduction and we  
15 are -- our office is pushing them to get those manuals in  
16 so that we can get that completed and sent out. So that's  
17 work in progress right now.

18           FACILITATOR CAMERON: Thanks, Dennis. I think  
19 that's -- do you have other things?

20           MR. SOLLENBERGER: Yes, I had another little  
21 bit. That was the working group and I wanted to kind of  
22 close that out.

23           FACILITATOR CAMERON: Okay.

24           MR. SOLLENBERGER: In addition, one of the  
25 things that is a fall out of this, I wanted to address

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1 just briefly is that in the IMPEP report, guidance 5.6,  
2 manual chapter, it says that qualifications and training  
3 of staff when we review that criterion we use 1246 or  
4 guidance that comes out in that area.

5           We hope that this working group report in  
6 policy statement, training forms, what courses are basic  
7 training will be eventually worked into helping in that  
8 evaluation so that we can look, have the states got a  
9 written policy? Have they got a training qualification  
10 for each individual on their staff and what they expect  
11 that person to be trained to do so that that would make it  
12 much simpler for the IMPEP teams when they come out to say  
13 okay, here's a book with our training qualification in it.  
14 You can look up what the individuals are assigned, their  
15 training program match that, that's only part of the  
16 review to see that they've attempted to go through the  
17 formal course work area, the on the job training.

18           In addition, the qualifications are evaluated  
19 when we do the file reviews on individual license  
20 reviewers. If there's a problem in how those licenses are  
21 put together, we check in to see is it a training problem  
22 or is it that they're just not following what they've been  
23 told to do. The root cause of that could be training.

24           In addition, when the inspector accompaniments  
25 are done, that's a place where the inspector is not

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1 evaluated on how well he can perform in the classroom and  
2 passing exams, but how well he can perform in the field.  
3 And if he's not performing well, it may be an indication  
4 that that individual needs additional training in order to  
5 be truly, do a quality job for the state, or whether  
6 that's a root cause in the state program and it has to be  
7 evaluated. So this will also help evolve in the IMPEP  
8 program and it may be crisped up better now that we have  
9 the report out, we can take it and look at it and that may  
10 be something the states will want to comment when 5.6  
11 comes out in further recommendations for change. And then  
12 make a recommendation on what out of the working group  
13 reports should be incorporated in there as a reference for  
14 that activity.

15 I just wanted to add that and again as further  
16 evolution of the program.

17 FACILITATOR CAMERON: Any questions on the  
18 IMPEP implications that Dennis just mentioned?

19 There may be questions after Cathy Allen.  
20 Cathy?

21 MS. ALLEN: Okay. A couple of orders of  
22 business, if I talk too fast, somebody wave their hands.  
23 Probably only Cass Kaufman and I talk this fast so we'll  
24 try and -- for those of you who didn't understand me  
25 earlier, this is the web site address for IBNS and if

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1 you're looking for financial assurity rules, don't look  
2 under regulations, you have to look under meetings and  
3 notices because this is a public meeting to discuss the  
4 proposed rules.

5           Now we're switching gears again. If I talk  
6 too fast, we'll actually gain time.

7           (Laughter.)

8           Let's begin with some exercises. If you  
9 believe that training is an important part of a radiation  
10 control program, raise your right hand. This includes  
11 peanut gallery people, everybody. Those of you who don't  
12 know your right from your left -- okay.

13           If you believe that a review of training  
14 should be part of the IMPEP review, raise your left? Left  
15 hand. Okay.

16           Now this is the tricky one. If you believe  
17 that in order to insure uniform training of radiation  
18 control program staff, the NRC should go back to funding  
19 training -- clap your hands or stamp your feet or make  
20 some noise.

21           (Applause.)

22           Great, great. Well, for all of you dreamers,  
23 I have to tell you --

24           (Laughter.)

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1           It's not going to happen. Okay, now back to  
2 the reality check here. Although NRC is working on a  
3 policy and we've all had a chance to look at it, I think  
4 you know which one I'm talking about, the policy where you  
5 submit affidavits and videotapes and testimonials  
6 accounting to the fact that you crawled on your hands and  
7 knees before Congress, your general assembly is begging  
8 for money and you actually lost blood in the process, then  
9 NRC may be able to find some money equivalent to the  
10 amount of blood lost to support your training program.

11           (Laughter.)

12           Something like that. I have forgotten.  
13 Sometimes I tend to exaggerate. I have heard that some  
14 states did go ahead and ask their general assemblies for  
15 money to fund training. Now this is a serious question.  
16 And I don't care which hand you raise. I'm interested in  
17 which states have gone to their legislatures or currently  
18 have funds for travel and per diem for training? There  
19 are certain ones I have to check, hold on. Good, good.

20           How many of those include tuition costs? Very  
21 good. Very good. My job here is done.

22           How many of those were successful then? How  
23 many actually have funds now? Okay.

24           MR. MOBLEY: Now how many of us can spend  
25 that?

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1 (Laughter.)

2 MS. ALLEN: The hands of those that tried and  
3 currently did not get what they wanted. That's what I'm  
4 looking at.

5 Okay. And then there are some states that did  
6 other things. You can raise your hands if you want.  
7 Illinois didn't do very much different than we normally  
8 do. We've got some funds for travel and training and per  
9 diem and things like that. We have a really stable work  
10 force, not much turnover, not much -- the staff is very  
11 well qualified, everybody take notes on this. They're  
12 very good workers. And they're really well qualified. We  
13 don't have a big problem. I think there's a lot of states  
14 that are probably today in that situation. So we're all  
15 going down this road and I'm going to try to use Mr.  
16 Bankhert's road for him. Down the road, you can use the  
17 guidance from this delightful working group report, which  
18 of course is not signed, but Dennis and I will do it out  
19 there for \$1 apiece, sign the cover page.

20 It's going towards a special training fund.

21 (Laughter.)

22 You can use NRC's existing courses and I say  
23 that and we will get back to this. You do have to kind of  
24 keep some things in mind. Or you can establish your own.  
25 The working group tried really hard to come up with some

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1 guidance, something that you can hang on to or use or  
2 maybe develop yourselves. Let's take a look at what will  
3 probably happen. Ed, you have money for training and  
4 travel. Cool. Bill, you have money for travel and  
5 training.

6 MR. BAILEY: Some for each.

7 MS. ALLEN: Some for each, good. Who else was  
8 I going to pick on? John Erickson. Yes, good. Aubrey?  
9 Just yes or no?

10 (Laughter.)

11 That's kind of neat. That's great. All you  
12 people, a lot of you on the west coast, right? Some. A  
13 lot of the west coast people that have funding which is  
14 great because all of the training courses are on the east  
15 coast. So I have this great thought. You guys could  
16 probably save yourselves a lot of money. Here's my plan.  
17 California, you're diagnostic medical. Nevada, you do  
18 therapy. Utah, transportation. Aubrey, industrial  
19 radiography. Oregon, basic health physics. If each of  
20 you developed one of those courses, you take the  
21 guidelines in the book, you ban together and say fine, I'm  
22 doing -- he's doing diagnostic medical. He's doing  
23 transportation. You put together the program. You figure  
24 out a way to say okay, this is the time line. This little  
25 group of people gets together and says this is what I

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1 need, this is how many people I need in training and this  
2 is the schedule. You save a lot of money traveling people  
3 back and forth across the country, at least for this  
4 group. Now, I know, you're not as close knit as the east  
5 coast people that can spit at each other, but it will save  
6 you some money.

7           Now the tough part about all this is that  
8 you're actually going to have to do some work. You can't  
9 just ship somebody on a plane over to the other side of  
10 the country and tell them go to the class, pass the test,  
11 heaven forbid you don't pass because then I'll have to  
12 figure out some way to like retrain you or document that  
13 you really do know what you said you didn't know and --  
14 have you thought about that by the way?

15           Okay. Retraining in the event somebody  
16 doesn't pass the class?

17           It requires everybody to commit to putting  
18 these courses together. So I'm thinking this could  
19 actually work. Except Ray says no -- sorry, I don't have  
20 Ray saying anything bad. Please stand, Marshall.

21           Stan says wait a minute, wait a minute. I'm  
22 not going to do a course on therapy, medical therapy. My  
23 people know this. This isn't a problem for me. Why  
24 should I spend my time doing this just because I have one  
25 inspector that might need to go to the transportation

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1 course that Mr. Utah is going to do. No, no, no. It's  
2 not worth my time.

3 Or, Stan does do it and he does a bang up job  
4 and it's a great class and everybody loves going to his  
5 class and then they go over to California and they get  
6 here you go, it's medical, the physicians know what  
7 they're doing so just leave them alone, have a nice day.

8 (Laughter.)

9 So how do you make sure that states will be  
10 equitable in doing this work? Do you think that this is  
11 something that you guys might actually consider? You  
12 don't really have to answer, but I do want you to actually  
13 think about it. Then you have industrial radiography. Oh  
14 my gosh, you might have to talk to somebody. Well, you  
15 could, actually, maybe, think about for the time being  
16 allowing Texas to put on that class in exchange like for a  
17 few other things.

18 (Laughter.)

19 See what I'm getting at? If you want to do  
20 this, you're going to have to be really creative and  
21 you're going to have to spend some time doing it. Now you  
22 can just say I'll continue to go to NRC courses which is  
23 great. And NRC would actually probably like you guys to  
24 go to their classes because right now they're training up  
25 all their people and they're going to all these classes

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1 and have you noticed how many courses get canceled because  
2 there aren't enough people going? If states, not IDNS, of  
3 course, if states are not paying tuition and we're all  
4 hanging back to say well, gee, do I tell them that I'm  
5 coming and pay tuition or do I hold back, save the tuition  
6 money and just pay travel and per diem. Hm. Which is  
7 more cost effective? Well, maybe I'll hold back. If they  
8 have slots, great. If not, I'll sit the guy down and tell  
9 him to watch a video, talk to him a little bit and sign  
10 off and say he's trained, as long as I cover every one  
11 of the points on the list. Do you think that would ever  
12 happen? Oh no.

13 (Laughter.)

14 I'll tell you a dirty secret, as Jim Lynch  
15 leaves the room, oh he did, good.

16 (Laughter.)

17 We've been in a situation like that and I will  
18 admit that I am rather embarrassed as co-chair of this  
19 working group to admit that I have not converted our  
20 training data base over to the system that I tout as new  
21 and improved. I mean I believe in this stuff, but I still  
22 haven't found the time to do it. I'm messing with fees  
23 and assuery today. Tomorrow it will be something else.  
24 Every single person in this room has exactly the same  
25 problem. So again, go back to the first questions I asked

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1 you. Do you really believe in the commitment to training?  
2 Maybe it's not a crisis today. Maybe not a crisis  
3 tomorrow.

4 I don't want every state to reinvent the  
5 wheel. There's no need for David to do every single class  
6 on the list and have it ready to go in the event you need  
7 to hire somebody. But can you lose somebody? Let's say  
8 you lose one of your inspectors. How many people does  
9 that leave you with? One. What's that person going to be  
10 doing? Training the replacement. So now you're down to  
11 zero.

12 If you don't have funding now, you might have  
13 to consider really getting funding or be brutally honest  
14 with me when I start asking some of the questions.

15 For those of you who don't know, I also kind  
16 of volunteered to head up the training commission for  
17 COCPD, so although my work, I thought, was done with this  
18 training working group, I will be talking to you again  
19 about training and some other concrete things to do with  
20 training. Wayne Kerr used to call me the training czarina  
21 because I'm not a czar.

22 (Laughter.)

23 But when I ask you the question about are you  
24 willing, Bob Hallacy, if I set up a course, are you  
25 willing to send your people to it? Will you have the

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1 funds available? You're telling me now that you need a  
2 training course on industrial radiography. Bad example.  
3 Let's try someone on the west -- because there is a  
4 course.

5           You've identified a need and you need the  
6 training. And somebody agrees to do the training course.  
7 Are you really going to send the people? I think there's  
8 experiences in the room for other courses that states have  
9 asked for that have been put on and people just didn't  
10 come and then those courses disappeared. Let's write some  
11 things down.

12           (Laughter.)

13           Oh, how did that get there? Someone brought  
14 up the suggestion that we take training and you trade off  
15 some time, a little tit for tat. If I send somebody on  
16 the pink team, oh, Mr. Klinger has been on the pink team.  
17 Great. How many credits is that worth? I'd say five,  
18 five credits. Somebody writing a report? We have to come  
19 up with some sort of a scale, but come up with -- find out  
20 how many credits it's worth to spend two or three weeks  
21 writing a licensing guide. IMPEP, participation on IMPEP,  
22 maybe the IMPEP team itself is worth 50 points and MRB is  
23 worth 15. Hm. How much would it cost to actually follow  
24 up on AEC contaminated sites? That might be the solution

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1 to your problem. California might actually go take care  
2 of these sites then.

3 (Laughter.)

4 Now, in order to set up this program, every  
5 state needs maybe half an FTE to start tracking what it is  
6 you're doing for NRC. Now NRC, of course, OSP, you're  
7 going to have to start hiring maybe two or three people to  
8 start tracking and evaluating the benefits associated with  
9 all the work done by the individual states. I'm sure  
10 you've got plenty of staff time and you can just assign  
11 that to somebody else.

12 The point I'm getting at is it will be great  
13 to do this, but we missed the boat. We should have made  
14 these arguments firmer. We should have done it a long  
15 time ago, but that's water under the bridge. If an  
16 opportunity exists again, you can just take a hard look at  
17 it and really try and change things, but in the meantime,  
18 I think the only way something is going to change is when  
19 an incident occurs and you're dragged before a hearing,  
20 you're dragged before the public, held out to dry by the  
21 media and someone says why in the world does that  
22 individual do that? How come your inspection didn't  
23 discover that problem? How come your license reviewer  
24 allowed that licensee to do something? Didn't they know  
25 better? And you can say yeah. And they'll say where is

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1 the evidence that they were trained? You could pull out  
2 all the little scraps of paper you want and you can argue  
3 all you want, but if you don't have a documented training  
4 program, you're dead in the water. And personally, I  
5 don't want that state to be Illinois and I don't think  
6 anybody else here wants that state to be them.

7           So, you're going to have to bite the bullet.  
8 You're going to have to do the training program. I'll  
9 help if I can. I don't know exactly what you guys want,  
10 so when I start asking you more pointed questions, not  
11 today, but further down the road, give me honest answers.  
12 Don't tell me what you think you want me to hear. Tell me  
13 what you're going to do and what you won't do because one  
14 problem somewhere is going to have an avalanche effect for  
15 all the other states.

16           I guess I don't have anything more to say. I  
17 was going to pick on people more and ask you guys exactly  
18 what you wanted to do, but in the interest of time I  
19 decided just to tell you what I think you should do.

20           (Laughter.)

21           Does anybody have any questions?

22           MR. MOBLEY: Cathy, can I make an observation  
23 real quick because --

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1 MS. ALLEN: Well, you're in Tennessee. You  
2 have no complaints because all the technical training  
3 centers are there.

4 (Laughter.)

5 Next?

6 I'm sorry, Mike.

7 MR. MOBLEY: Yes, this is a confession because  
8 when she was talking some of the -- you tell people -- in  
9 Kentucky put on a program some years ago in x-ray training  
10 and they asked us how many people can you send and I said  
11 four. Had a great need, four people. And at the point in  
12 time the request was made, I could send four people, but  
13 when it came time to go, I could not send four people. I  
14 had the money. I had the plant. I had everything except  
15 -- I also had an edict that there will be no out of state  
16 travel and there was no way that I could not do it. So I  
17 mean we're always going to have that problem, particularly  
18 when we're funding the travel. And you know, that's just  
19 a constraint that we're going to have to recognize.

20 MS. ALLEN: I would just ask that when I put  
21 my other hat on and I provide some ideas on alternative  
22 training and you can look in the back of the book for some  
23 of these ideas, that you keep an open mind. You'[re going  
24 to have to look at training more than just everybody sits  
25 down and the teacher is up at the front of the classroom

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1 because you're going to have one on one training needs,  
2 like Ken will. Or you're going to have somebody that  
3 needs just -- they have most of it, my goodness, there are  
4 medical physicists, but gee, they could really use some  
5 help in this area. You're going to have to tailor things  
6 and I just want you to keep an open mind.

7 MS. KAUFMANN: Cath Kaufmann, California. And  
8 Cathy, incidentally, it isn't the two of us that talk at  
9 warped speed, it's that everyone else is going so slowly.  
10 That's the problem.

11 Actually, I think one of the problems is I  
12 think we all, there certainly is probably unanimity on how  
13 we feel about training, but it obviously is often a  
14 problem to get those kinds of funds approved from higher  
15 level people. This may already exist and I just don't  
16 know about it, but if it doesn't it may be something like  
17 for a training czarina to come up with and that would be  
18 if we could agree on what minimum courses this person  
19 ought to do, ought to have had in order to do this job  
20 because then we could go to our upper management and say  
21 look, this is what, for example, CRCPD says that they  
22 ought to have and if they don't have that, we could run  
23 into trouble down the road in terms of their capabilities  
24 and experience and expertise and that kind of thing. So  
25 that's one thought that might help us all in terms of

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1 getting approval to go to these courses and to prepare  
2 them.

3 MS. ALLEN: The working group itself since it  
4 was looking at mostly radioactive material, did just that.  
5 It came up with a core group of courses for radioactive  
6 material and the training commission through CRCPD will  
7 continue that work and expand it's x-ray.

8 MR. FLETCHER: Roland Fletcher, Maryland. One  
9 of the difficulties in giving the kind of commitment that  
10 would make a lot of these things work is that things  
11 change state to state very quickly. Before this year, I  
12 had training funds that I could control and determine how  
13 to use. This year I don't have them, at least that I can  
14 control. They're controlled by somebody else. I don't  
15 know how many other people run into that.

16 As many of you know, there was a time I wasn't  
17 even sure I would be here because these funds were out of  
18 my control. So unfortunately, although the commitment, I  
19 believe is there for virtually every program, the  
20 mechanisms and the situations state to state change  
21 uncontrollably and you can say this year I'm going to  
22 support this training or if you hold it, I'll be there and  
23 next year you're going to wind up as Mike said, you can't  
24 do this because of some rule that's come up in your state.  
25 That's the kind of situation I feel a lot of us are in.

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1 MS. ALLEN: Thank you. Richard?

2 MR. RATLIFF: Cathy, I think the follow up  
3 here is good because one of the things that Dr. Jackson  
4 said yesterday was that we need to make sure the national  
5 program goes forward and one of the comments that we came  
6 up with at the direction setting issue papers on the  
7 agreement states was that there really will not be a  
8 national program unless our inspectors are integrated with  
9 NRC inspectors so they all hear the same message.

10 I think as we dilute it, we're going to see a  
11 real difference in what one side of the country does  
12 versus another, north, south, east, west. I think if you  
13 don't follow through with training like this, it will even  
14 get worse, but I think you will never have a national  
15 program if everybody receives different training.

16 MS. ALLEN: I think that's a good point and I  
17 think you're going to find these fights fought, if you can  
18 follow that, on the IMPEP playing field. They're going to  
19 come in and they're going to say Aubrey, your people  
20 didn't go to the same training courses that David did.  
21 And you're going to -- Aubrey is going to argue that his  
22 courses were fine, his people were trained and David is  
23 going to argue exactly the same thing. They're going to  
24 follow the outline, but the courses are going to be

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1 difference and the NRC courses are going to be completely  
2 different.

3           It would be great if we all followed the  
4 guidelines. At least they're sort of similar now,  
5 possibly, but you're right, things will drift and time  
6 will change all that. We just have to be really diligent,  
7 not just now, but later on.

8           (Applause.)

9           MR. BAILEY: Listening to Richard reminds me  
10 that some of us have been involved in courses and sharing  
11 those courses with other states. We're going to be in a  
12 situation where we're hiring a bunch of new people so  
13 we're going to have to set up training courses for those  
14 people. We -- I guess since last year or year before  
15 last, we arranged to have for x-ray inspectors the actual  
16 MQSA-1 course brought to our site. We pay for travel and  
17 per diem and let FDA pay for the fee for the instructors.  
18 FDA got to send some of their people to the course in  
19 California and several of the states around, sent people  
20 and met that MQSA-1 certification course requirement and I  
21 can see some of these courses here. You mentioned  
22 medical. I probably could find somebody to teach it.

23           (Laughter.)

24           FACILITATOR CAMERON: That was a very  
25 provocative presentation, Cathy. I think it is

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1 appropriate that it comes on the time when Che Guevara's  
2 ashes are being re-interred down there and we did have a  
3 revolutionary flavor to it, but we're going to jump into  
4 low level waste here and John Hickey is going to finish up  
5 a couple of things for us and then we're going to go to  
6 Ruth McBurney and Ken Weaver and figure out the solution  
7 to the low level waste problem is we'll just put Cathy in  
8 charge of it and she'll figure it out.

9 MR. HICKEY: Slide 18, please.

10 (Laughter.)

11 I think we have five speakers in a one hour  
12 time slot, so I'll keep my remarks brief rather than try  
13 to defy the laws of physics.

14 We've mentioned a couple of times our  
15 strategic assessment. One of the topics was low level  
16 waste and in each case again the Commission had several  
17 options that it considered and to make a long story short,  
18 should the Commission have a much larger role or stay  
19 about the same or have a smaller role and its preliminary  
20 view was that it was option 2, that it should assume a  
21 strong regulatory role.

22 Generally, if you ask the heads of a federal  
23 agency should they exercise a strong role or not they'll  
24 say yes, I want to exercise a strong role. But in this  
25 case when we went out for comment, we heard back from the

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1 OAS as an organization and we also heard back from most of  
2 the agreement states. I think we got about 50 to 60  
3 comments on this and also a lot of oral comments at public  
4 meetings.

5           Go on to slide 19. There's one point that I  
6 want to make here is that the Commission changed its view.  
7 It heard the agreement states that the low level waste is  
8 mostly in the agreement states and it's a state issue and  
9 that the NRC role should continue to be a limited role.  
10 So the Commission heard that and in many cases, many of  
11 the other issues they did not change their preliminary  
12 view, but in this case they did and they said that NRC  
13 would continue a limited role and so that's the way it's  
14 going to be and if you look at the final bullet there,  
15 you'll also notice that we have some concrete issues that  
16 -- in the low level waste area that were expending  
17 resources on such as Ward Valley and Biocare which you  
18 heard about this morning.

19           So we will have a limited role. For what that  
20 implies it means that we're not going to be as involved in  
21 what the agreement states are doing in the low level waste  
22 area, but it also means when you request our participation  
23 in certain things, we're going to say no, we're not going  
24 to be participating because we don't have the resources to

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1 do it, so that was I wanted to say briefly about that  
2 issue.

3           Let me talk about the second topic before we  
4 open it up for discussion and questions on either topic.  
5 Going on to slide 20, this concerns the International  
6 Waste Convention. Now if you don't know anything about  
7 the International Waste Convention, don't worry because  
8 I'm going to tell you a little bit about it. If you do  
9 know something about it and you're worried, don't worry  
10 because I'm going to tell you why you don't have to worry  
11 and if you're not worried about it, that's good because  
12 you don't have to worry.

13           (Laughter.)

14           The International Waste Convention is like a  
15 treaty and it's under the auspices of the International  
16 Atomic Energy Agency. It has what are called member  
17 states, but let's say nations when the International  
18 Committee refers to nations as states, but we'll say  
19 nations to keep it clear. And it was recently ratified --  
20 I shouldn't say ratified. It was recently signed by a  
21 large number of member states including the U.S. and it  
22 still needs to be ratified by the Senate in this country  
23 for us to be a full participant and it would have the  
24 force of law. Cathy, if you could slip to slide 24 to  
25 save some time. It has a lot of general provisions that

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1 support the general concept of safe regulation of  
2 radioactive waste. But one of the key provisions is that  
3 waste, storage and disposal will be monitored, you know,  
4 about how we're worried about proliferation of nuclear  
5 weapons, well, you might think of this as sort of  
6 analogous that we also, there's an international  
7 recognition that we should be keeping track of nuclear  
8 waste to make sure it's safely stored and disposed of.

9           And there is a concern that this could have  
10 implications of an unfunded mandate on the states and let  
11 me come back to that, but before I talk about that, I do  
12 want to say that there was involvement of the agreement  
13 states through the conference of radiation control program  
14 directors committee, E-5, Paul Mergis in New York was the  
15 lead and the conference did provide comments on the  
16 convention as it was being developed. And there was a  
17 concern about if waste was going to be tracked, that this  
18 would impose a burden on the states. Now let me tell you  
19 a little bit about that. DOE is going to put up, right  
20 now they're planning and they're still talking to the  
21 states and other organizations about this, they're  
22 planning on putting up the money that's involved with  
23 this. Now for the Barnwell and Hanford facility they  
24 already have an existing contract where they're getting  
25 the information they need about the waste of those states.

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1 They're also prepared to work on cases like Envirocare,  
2 work with Utah or the Envirocare itself, if necessary, to  
3 pay for that. Now the broader issue is storage,  
4 commercial waste storage and broker facilities. You  
5 realize that has far, much more far reaching implications  
6 because there's a large number of facilities and it  
7 depends on how you define the facility and what  
8 information you want.

9           So DOE is going to continue and NRC is going  
10 to be involved too, but DOE is really the lead agency.  
11 They're going to continue talking to the states about how  
12 that can be arranged and they're planning on putting up  
13 the money for any arrangements that are made for  
14 collecting information on wastes that's in storage. So  
15 the main message that I wanted to deliver is that there is  
16 implication for impact on the states, but DOE and NRC want  
17 to work with the states on this and put up the money for  
18 any financial burden that this would place.

19           So questions or comment on either side?

20           MR. MOBLEY: We're not going to solve this and  
21 it talks about the international and I know that  
22 internationally they generally talk of radioactive wastes  
23 as radioactive wastes without regard to whether it's  
24 Atomic Energy Act waste or norm or norm, whatever. They

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1 don't necessarily recognize all the differences of the  
2 little boxes we put things in.

3           And given that I have some concern about the  
4 fact that we say that we can't ship AEA waste out of the  
5 country to third world countries because it has potential  
6 negative impacts, but we're shipping a lot of radium waste  
7 out of the country to other countries, does this address  
8 that?

9           MR. HICKEY: Yes, in a way it says that norm  
10 and military waste are voluntary so in that sense it does  
11 recognize that the focus is atomic energy waste and we  
12 haven't committed to what we're going to do on norm or I  
13 don't think we're going to participate as far as military  
14 waste is concerned. We haven't committed to what we can  
15 do on norm, but that's something I could check into and  
16 get back to you. I could call you and talk to you about  
17 that.

18           MR. MOBLEY: Very interesting.

19           MR. BAILEY: Baily from California. What is  
20 the perceived need for this?

21           MR. HICKEY: A general concern for the  
22 tracking and safe disposal of waste.

23           MR. COLLINS: Steve Collins from Illinois. As  
24 I follow up to Mike's lead in, would this in effect result  
25 in a possible change in the waste classification scheme?

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1 MR. HICKEY: No, not in itself.

2 MR. KLINGER: Bill Klinger, Illinois. I'm  
3 referring to slide 19 on DSA-5. It's the second bullet.  
4 It says the Commission has to be informed of how staff  
5 plans to resolve public comments on performance assessment  
6 VTP before decision to finalize it. I think that DSA-5  
7 actually said that the Commission asks staff or directed  
8 the staff to work with the states to resolve some problems  
9 before VTP was finalized and we're kind of waiting for  
10 something and then suddenly we get this final VTP out of  
11 them on performance assessment.

12 So I don't know if that was something just  
13 fell through the gap there or what?

14 MR. HICKEY: That's a good question. First of  
15 all, the document that's being referred to is a branch, an  
16 NRC branch technical position on performance assessment  
17 for low level waste disposal facilities.

18 The document has been issued in draft for  
19 comment. It has not been issued in final. What the  
20 Commission directs us to do is before it's finalized which  
21 will be at least 12 months for now that we would work with  
22 the states and we are still going to do that and we  
23 already have some comments from the states.

24 MR. GODWIN: I'd like to go back to the  
25 California question. David, this is Godwin, Arizona. Is

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1 this information going to be made public in such a manner  
2 that someone could track down where all of the storage  
3 facilities are and have addresses and all? I mean if I  
4 was a terrorist I'd just love to have that kind of  
5 information. And if we have to provide this, it's not  
6 going to be a small burden to the states. I suspect  
7 California has got a bunch. We have several, but the  
8 difference in size makes up -- it could be a significant  
9 burden depending on how the questions are asked.

10 I'm trusting the D-5 will discuss some of  
11 this, but we do have some concerns, but it's going to be  
12 identifying addresses and names of facilities and things  
13 like that because that could be a security issue.

14 MR. HICKEY: That's the first time somebody  
15 has asked me that question. I think it's a valid point,  
16 but I think the answer is yes, the information is already  
17 public in this and I don't think there will be any effort  
18 to keep this in any way confidential. The material, the  
19 addresses are individually public, but this would be a way  
20 to -- I agree, it would be a way to centralize the  
21 information to make it easy for people to refer to.

22 As far as the burden, we're still evaluating  
23 that, but I think you're correct to be concerned about  
24 that.

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1 FACILITATOR CAMERON: Are we finally done with  
2 John Hickey?

3 (Applause.)

4 And next we have Ruth McBurney and then Ken  
5 Weaver to talk about a couple of those specialized  
6 situations, I think, that have been referred to of low  
7 level waste issues outside of the compact.

8 MS. McBURNEY: All that time that Cathy saved  
9 in talking fast. I'm going to take it up.

10 (Laughter.)

11 When you like to talk in Arkansas and you work  
12 in Texas, you just can't talk that fast.

13 (laughter.)

14 What I am going to be talking about is how  
15 history and bringing you up to date on the status of waste  
16 processing in Texas.

17 AS you know, we have two agencies in Texas.  
18 The Department of Health and the Texas Natural Resource  
19 Conservation Commission. We regulate everything except  
20 disposal of radioactive waste and norm waste except for  
21 oil and gas norm waste which is regulated by the Railroad  
22 Commission.

23 In order to talk about how waste processing --  
24 I've got to figure out how to do this, how waste  
25 processing is regulated in Texas, we must go back a few

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1 years on how it was and why it has -- why we have specific  
2 laws and regulations that deal with waste processing.

3 I will be going into what went into -- what  
4 led to legislation that was developed and then bring you  
5 up to date on where we are now.

6 In the late 1970s, there were several  
7 facilities in Texas that processed waste and stored it.  
8 One of these was Todd Shipyards in Galveston Bay. The  
9 facility had a drum inventory of over 1,000 primarily  
10 waste from several federal laboratories across the  
11 country. About that time, Barnwell was having problems  
12 with liquid scintillation media being buried and allowed  
13 the nuclides to migrate, thus a prohibition on liquid  
14 scintillation media was placed on Barnwell, so Todd was  
15 then left receiving a lot of liquid scintillation waste  
16 for processing. They had an incinerator. They crushed  
17 the vials and incinerated the waste. So they got a lot of  
18 NIH waste and other liquid scintillation waste from around  
19 the country.

20 Another incident that happened there, in one  
21 of those barrels of liquid scintillation waste, they got  
22 some Strontium 90 in powder and there was a big  
23 contamination then of their vial crusher and other parts  
24 of the facility, so they had to do a cleanup and repaint

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1 it. Then the paint fumes caught the vial crusher on fire  
2 and they had a fire at the facility.

3           Also, Todd began accepting large drums of  
4 discharge reactor water from a facility in California, a  
5 reactor in California. We had a Republican governor at  
6 the time and he said something to the effect that he  
7 wasn't going to accept Jerry Brown's stuff or something to  
8 that effect.

9           (Laughter.)

10           Anyway, at Todd, they were filtering the water  
11 and discharging it after removing the nuclides. So this  
12 is just more scenes from Todd. A lot of drums. Because  
13 of all the concerns and some of the technical problems  
14 they were having there, several government officials went  
15 down and visited the site. Dr. Bernstein, who is our  
16 Commissioner of Health at this time and went and toured  
17 the site. As a result, he came back and said it's ugly,  
18 but there's no real health and safety problem.

19           The Governor ordered the Commissioner to shut  
20 down Todd Shipyard and so this matter was referred to the  
21 Attorney General's Office. The facility eventually did  
22 shut down, but it was not because of the edict from the  
23 Governor.

24           Meanwhile, another company, NSSI, Nuclear  
25 Sources and Services, Inc. was attempting to establish new

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1 facilities, one at Gulf Gate which is down south of  
2 Houston and the other was at a remote area in Leon County,  
3 Texas. There was a lot of public opposition to both.  
4 First of all, there was public opposition to them  
5 expanding their facility at Gulf Gate and really heated  
6 public opposition. One of the bulldozers they had down  
7 there was set on fire. And then there was a lot of heated  
8 opposition to the site in Leon County. So this quickly  
9 turned political. Thus, because of both public and safety  
10 concerns, there was an emergency legislation was proposed  
11 and enacted in 1981 to address these issues.

12           Also, in 1981, disposal site development in  
13 Texas was also an issue for legislative action. Along  
14 with legislation to create a state disposal site,  
15 development agency, legislation was needed to address the  
16 regulation of such a facility.

17           As the legislation proceeded, many of the  
18 requirements for waste disposal facility were also applied  
19 to waste processing facility, but in some cases we're not  
20 quite as restrictive. For both, disposal and processing,  
21 siting criteria and facility design were major issues. No  
22 flood hazard areas or wetlands. Engineered systems for an  
23 err in liquid emission control and suppression, fire  
24 control and stability were important. An environmental  
25 assessment was required by the enacted legislation for

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1 both processors and disposal facilities. And financial  
2 security was also a major part of this, as well as  
3 financial capability.

4           Public involvement through notifications of  
5 surrounding land owners, public officials, and other  
6 members of the public proposed licensing actions took up a  
7 big section of the legislation.

8           One of the good things that came out of the  
9 legislation was an expansion of the Texas Radiation  
10 Control Program staff up to what was needed at the time.  
11 So this is about the time that I moved to Texas. If any  
12 of these things had happened before are not correct, maybe  
13 Ed Bailey or Richard can correct me on that.

14           So when I first got down there from Arkansas  
15 two of the -- as head of Standards Branch, two of the  
16 first tasks I had to do was to finish up the uranium rules  
17 which I had not had any experience and to develop rules  
18 for waste processors.

19           The rule making went through many iterations.  
20 We started working on it in early 1982. It was based on  
21 the legislation. And this is for storage and waste of  
22 waste and processing waste from other persons. It would  
23 not apply to folks that store their own.

24           So in order to apply the law to any type of  
25 person who received waste from others, we had to set up a

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1 tiered system and set up some exemptions. So we put in an  
2 exemption for limited receipt of waste and also we  
3 exempted sealed sources. There were several manufacturers  
4 and service companies that were taking sealed sources from  
5 other persons and we didn't think that all the street  
6 criterion needed to apply to them.

7           Also, there were facilities like the nuclear  
8 pharmacies who took back the waste from the hospitals as  
9 part of their service and we didn't think they would need  
10 to have to deal with all these restrictive regulations as  
11 well.

12           We also set up a tiered classification of the  
13 types of facilities and set fees based on -- and  
14 limitations based on their -- the total activity in the  
15 various hazard groupings. We used the transport groups as  
16 the basis for that, and called them Class A, B and C  
17 facilities. As we went, have gone through this several  
18 years, it's just gotten confused with Class A, B and C  
19 waste and so now we're proposing to change these  
20 classifications to 1, 2 and 3, not to be confused -- so  
21 that they wouldn't be confused with Class A, B and C  
22 waste.

23           The rules also establish licensing and siting  
24 criteria. The types of financial security that would be  
25 applied to these. We set up a system to address the

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1 financial security. It was later changed to the  
2 compatibility rules as NRC has.

3           The law required that we do an environmental  
4 assessment of the sites at which waste processing took  
5 place, but to evaluate if there was any effect on the  
6 environment. In doing the rule making, we also did a  
7 generic environmental assessment up through Class B,  
8 because we felt like for limited handling of waste and  
9 storage of waste that there probably wouldn't, if they met  
10 the other strict siting criteria, for example, not putting  
11 it in a wetlands, not putting it in a flood plain, that  
12 there would be no effect on the environment, that the  
13 engineering of the site would take care of any of that in  
14 operations.

15           We also established public notice and hearing  
16 requirements. The licensing criteria looked at applicant  
17 qualifications, statement of need, the time schedule that  
18 they proposed to have, some sort of flow diagram of the  
19 processing operations, radiation safety procedures, site  
20 monitoring program, once again, financial security, how  
21 they're going to dispose of the waste. They can't just  
22 bring it in and say we're just going to store it for a  
23 long time. We're not going to tell you how we're going to  
24 dispose of it; and then the establishment of an emergency  
25 plan.

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1           One of the unique features of the -- or some  
2 of the issues we've dealt with in the financial security  
3 is how to handle sealed sources and whether the \$75,000  
4 listed in the financial security will be enough to dispose  
5 of sealed sources and then the issue of mixed waste. For  
6 mixed waste facilities, they probably already have to have  
7 financial security for the hazardous waste and one of the  
8 companies that has applied for a license for wanting to  
9 use that financial security for their hazardous waste to  
10 cover the mixed waste and we said no, that we have to  
11 cover the disposal of the radioactive material and they  
12 would not pay for that, but we did work out a way that if  
13 the financial security with us covered the disposal of the  
14 mixed waste, then they could go back to the hazardous  
15 waste permitting agency and ask them to give them a  
16 dispensation on their financial security with that agency  
17 for the hazardous waste disposal.

18           For a siting criteria, for waste processors,  
19 we said that it could not be in 100 year flood plain.  
20 There was much discussion in the development of this  
21 particular rule. We didn't want them to have to do a  
22 flood plain analysis, so the rule is written that if it's  
23 designated 100 year flood plain by -- and at the time it  
24 was the Texas Water Commission. Now it would the Texas  
25 Natural Resource Conservation Commission, that if it had

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1 been designated flood plain, it could not be located  
2 there. Could not be located in a wetland and also soils  
3 that will minimize waste migration are also a site  
4 characteristic that we'd be looking for.

5           The facility design, fire resistant  
6 construction and fire protection capabilities, ventilation  
7 systems, field confinement, a buffer zone. There's actual  
8 amounts listed in the rule. I think one of them is 30  
9 meters from the nearest resident. Something like that.  
10 And then emission control equipment.

11           We had to develop along with our regulations,  
12 we developed a memorandum of understanding on the  
13 regulation of mixed waste with the agency that regulates  
14 the hazardous waste. At that time it was, as I mentioned  
15 was the Water Commission, now TNRCC.

16           From the 1980s to the 1990s we had several  
17 what we call Class A licenses. Those that were exempt  
18 from the particular part of the rule that deals with waste  
19 processing and the nuclear pharmacies, the sealed source  
20 recipients and so forth.

21           We had two to three class B facilities,  
22 Nuclear Sources and Services, Isotech which is no longer  
23 accepting waste, but is getting rid of all that they have  
24 on hand. We had no class C facilities. For class C,  
25 you'd actually have to go into more detail on looking at

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1 environmental aspects and so forth. But Nuclear Sources  
2 and Services was limited to the class B amounts.

3           Also, at the time that Barnwell was closed and  
4 we were looking at interim storage, long term storage, we  
5 put forth an interim storage policy for generators that  
6 weren't shipping to waste processors for disposal for a  
7 period of time. We put that into play. That has nothing  
8 to do with the waste processing rules, but we used some of  
9 the factors and similar criteria for the storage facility  
10 in doing that interim storage policy.

11           At the present, we still have several Class A  
12 exempt authorizations for the nuclear pharmacies and so  
13 forth. We have one active class B facility that's Nuclear  
14 Sources and Services. And we were just down there  
15 recently and they have limited amounts of dry waste on  
16 hand. Still doing some liquid scintillation processing  
17 and so forth.

18           We have, as I mentioned, Isotechs, which is  
19 shipping all of its waste on hand for disposal and has not  
20 -- is not authorized to take any more. I put up there, we  
21 have one university system that has a waste storage  
22 facility. They were not licensed since they are not  
23 taking waste from others, we did not license them under  
24 this waste processing, part of the rules, but we did apply

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1 quite a few of the criteria in the rules to the licensing  
2 of that facility.

3           We have two application spending. You've  
4 probably been reading a lot about what's going on with  
5 both of these. The one class C facility application is  
6 Waste Control Specialist. The status of that particular  
7 facility is that we did propose to issue the license. WE  
8 got an outside hearing examiner because there was a  
9 request for hearing on that during a proposed time. WE  
10 had a preliminary hearing to determine party status and we  
11 got an outside hearing examiner from the state office,  
12 state office of administrative hearing, and her  
13 determination was that no parties have party status.

14           Now we're waiting for -- there's a time period  
15 after she made her determination for the parties  
16 requesting the hearing to rebut, and then the applicant  
17 and the state to send back any comments on that and then  
18 it will be up to the Commissioner of Health to make that  
19 determination then.

20           If it is determined that there are no parties  
21 and the license can be issued, we will be issuing that  
22 some time in the near future.

23           The other applicant, oh, by the way, that  
24 facility is located right on the Texas-New Mexico border,  
25 just a little ways northwest of Midland-Odessa, but at

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1 Andrews, Texas. The applicant, Envirocare of Texas, has  
2 applied for a class B processing and storage license and  
3 they're located about five miles down the road, still in  
4 Andrews County, Texas as well.

5 We have sent them one deficiency letter and  
6 have been told that they will be responding to us with  
7 more submissions, probably around the end of this year,  
8 some time or early 1998.

9 We're not advocating that every state have  
10 specific regulations for waste processing, that's why we  
11 haven't put a compatibility number on it.

12 (Laughter.)

13 As we did on our radiography rule. At a  
14 recent meeting at the Nuclear Regulatory Commission, I  
15 learned another new term. I heard several new terms this  
16 week. And one is called rule space, so we're not  
17 advocating that anybody use rule space to write rules for  
18 waste processors, but some of the criteria that we have  
19 used, have seemed to be beneficial.

20 In the licensing of waste processing  
21 facilities, we have come across several things to mull  
22 over and several items for discussion and since you all  
23 probably don't have any questions for me, I've got some  
24 for you all.

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1           This is one of the issues that has come up.  
2 Can waste processors receive material as radioactive  
3 waste, usually liquid scintillation material, and then  
4 release it under the provisions similar to 10 CFR 20.2005,  
5 the liquid scintillation median animal carcasses rule. If  
6 when they receive it, they receive it as radioactive  
7 waste.

8           The second one is having to do with financial  
9 security and this latest licensing action we took, we had  
10 to do some unique things. Instead of requiring the full  
11 financial security for everything that the licensee was  
12 authorized, we used -- we split it into sealed sources and  
13 unsealed sources, using the 75,000 for the sealed sources  
14 and for the material that would be received from the  
15 Department of Energy, if they received material from the  
16 Department of Energy for storage, getting a signed letter  
17 from the Department of Energy stating that DOE would take  
18 back any waste that was stored there, should the facility  
19 go defunct in lieu of having full financial security to  
20 cover the disposal of that waste. And putting in a tiered  
21 system for the financial security thing, you can process  
22 up to this amount for this amount of security. If you go  
23 above that, you will have financial security in place for  
24 the higher amount.

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1           Does the \$75,000 financial security for sealed  
2 sources really apply to sealed sources received as waste  
3 and is that adequate to pay for disposal costs?

4           Some other issues, what do we do with orphan  
5 waste? Do we assume that the Department of Energy will  
6 take it since there's -- how do you put a dollar amount on  
7 the financial security for orphan waste? Do you just put  
8 the amount on it it would take to package it and transport  
9 it to DOE's door or to somebody's door, rather than  
10 actually having to pay for something where there's no  
11 place to put it?

12           The third question is how will changes in the  
13 number or lack of disposal sites impact storage and  
14 processing facilities. I think we heard from the last  
15 speaker that they're going to be looking at sort of  
16 tracking volumes and activities at processing and storage  
17 facilities as well. So just some food for thought there.  
18 And that's all I have and I'll turn up the lights and have  
19 some discussion, I guess.

20           FACILITATOR CAMERON: Any questions for Ruth?

21           MS. McBURNEY: Yes, Mike?

22           MR. MOBLEY: Ruth, the orphan waste question  
23 has been the biggy in Tennessee that none of the people  
24 that have proposed to store waste interimly have been able  
25 to leap over that hurdle. And I mean we've proposed it.

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1 If somebody wants to store waste and we've had a number of  
2 proposals and our final question of the meeting always is,  
3 okay, you tell us how you're going to deal with this issue  
4 and maybe we'll think about your proposal, but nobody has  
5 been able to get over it because there is no way, there is  
6 no way to deal with it when you consider that you may have  
7 people send waste to be stored and they may go out of  
8 business the day after they send it and that can't go back  
9 and that means it's going to set there, forever and ever  
10 and ever until you come up with some sort of solution,  
11 because the site you're licensing or the entity you're  
12 licensing may not always be there. And your deal about  
13 the DOE waste, that's interesting. You better build some  
14 big facilities because they'll write you any guarantee you  
15 want, but when you go to send it back, it's going to be  
16 tough.

17 MS. McBURNEY: We tried to write that pretty  
18 tightly.

19 MR. MOBLEY: I'd make it a dollar hurdle and  
20 it would be a high one.

21 MR. BAILEY: On the WCS facility, I assume you  
22 had to do a full-blown environmental assessment?

23 MS. McBURNEY: We did an environmental  
24 analysis, but we made the determination -- what the law  
25 says is if we determine that it will not -- will have an

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1 impact on the environment, we have to do an environmental  
2 assessment. We determined that it did not have an impact  
3 on the environment and therefore did not do a full-blown  
4 environmental assessment.

5 MR. BAILEY: That would be interesting to see  
6 how building a facility would not have an impact on the  
7 environment. I'd like to see the logic.

8 MS. McBURNEY: Human environment.

9 MR. BAILEY: The surface of the earth is  
10 pretty much human environment and putting up a building  
11 has an impact, I would think.

12 MS. McBURNEY: It did not have any further  
13 impact beyond the class B generic assessment that we had  
14 already done.

15 MR. RATLIFF: It's an adverse impact, not just  
16 an impact. It's adverse impact.

17 MS. McBURNEY: Right.

18 FACILITATOR CAMERON: Any more questions for  
19 Ruth?

20 MS. McBURNEY: Or any answers.

21 FACILITATOR CAMERON: Or any answers.

22 MR. BAILEY: The question you had about  
23 receiving waste and then performing a survey and being  
24 able to dispose of it --

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1 MS. McBURNEY: It wasn't just a survey.

2 Blending it and adding additional --

3 MR. BAILEY: Okay.

4 MS. McBURNEY: Hazardous waste and then poof,  
5 it becomes -- or aggregating it with other nonradioactive  
6 material, I guess.

7 MR. BAILEY: Okay.

8 MS. McBURNEY: And then saying it meets the  
9 release criteria for liquids sent.

10 MR. BAILEY: But certainly someone could take  
11 waste, store it for X period of time, survey it and  
12 release it as nonradioactive?

13 MS. McBURNEY: Yes.

14 MR. BAILEY: Decay and storage.

15 MS. McBURNEY: Decay and storage is when this  
16 is liquid scintillation material coming in, sampling.  
17 Right.

18 Okay, thanks.

19 (Applause.)

20 FACILITATOR CAMERON: Thanks, Ruth.

21 MR. QUILLEN: Next talk is going to be Ken  
22 Weaver and I would just like to give you a little bit of  
23 background on that. Late last year we were approached by  
24 hazardous waste site operator who was interested in

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1 receiving DOE mixed waste. This is a permitted hazardous  
2 waste facility in Colorado.

3           So the initial issue we had was what is the  
4 authority of the State of Colorado to regulate DOE waste?  
5 And we spent probably three months in meetings with our  
6 attorneys and attorneys for the potential applicant,  
7 mulling over this issue. So the first thing that happened  
8 in this whole process was an issue who has authority and  
9 what authority is that based upon. This was a long,  
10 laborious process.

11           Another issue that came out of this was the  
12 fact that we were not a host state and all of a sudden  
13 we're being asked to potentially develop a license for a  
14 mixed waste facility and I brought this up at one of the  
15 MRV meetings, I think about the fact that currently the  
16 NRC when they do IMPEPs only look at radioactive waste  
17 programs for designated host states. And even when we did  
18 our IMPEP they didn't really look at the radioactive waste  
19 program.

20           Finally, one of the issues that came out of  
21 this and I alluded to it earlier is the fact that we as  
22 many other states have in our statute the fact that a low  
23 level waste site is supposed to end up as either state or  
24 federal property and in this particular case, the  
25 potential applicants said under no circumstances did they

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1 want this site to become state or federal property. They  
2 wanted to retain ownership of the property and so they  
3 tagged on to our financial assurance legislation provision  
4 that where a disposal site was going to receive DOE waste,  
5 it didn't have to be owned by the state or federal  
6 government. And so this site has had some particularly  
7 interesting background issues and policy and legal issues  
8 and Ken is going to try to address some of the technical  
9 issues that he's had to wrestle with.

10 MR. WEAVER: I've lived in Indiana, Michigan,  
11 Illinois, New Hampshire, but 35 years in Colorado, so you  
12 can judge what pace my speech is, whichever of that still  
13 lingers.

14 The site in eastern Colorado is 50 miles east  
15 of Denver. It is a site that's had a hazardous waste  
16 management facility, TSD, treatment, storage and disposal  
17 permit for 10 years and is up actually today is close of  
18 public comment on a 5-year renewal. It began receiving  
19 inorganic hazardous waste in July 1991. And basically,  
20 about a year ago the integrating management contractor,  
21 Kaiser Hill at the Rocky Flats plant started sounding to  
22 see if there was a place in Colorado, less of a transport  
23 that could receive low level rad waste and low level mixed  
24 waste from the Rocky Flats plant. February 14th, the  
25 Commerce Business Daily notice of procurement invitation

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1 for offerors and what was then Rollins, but is now Laidlaw  
2 Environmental Services Deer Trail, unlike Laidlaw  
3 Environmental Services Rocky Mountain in Utah. The Deer  
4 Trail facility then responded and is or was close to  
5 working out an arrangement whereby we would receive an  
6 application some time late this year. In February-March  
7 time period, they did agree with our department's,  
8 Department of Public Health and Environment leadership  
9 that they would apply, they would live up to the  
10 requirements of the radiation regulations that were  
11 thought to be applicable and that they would apply to the  
12 Department for radioactive materials license. It's  
13 important to understand that this would be an overlay on  
14 or side by side with the existing TSD permit. In other  
15 words, there's a waste analysis plan. There are health  
16 and safety procedures which are fine procedures. I've  
17 looked through. So there's already a body of reference  
18 documents that would need to be modified then to handle  
19 the dimension of the Rocky Flats radioactivity. And  
20 that's kind of key to understand.

21 I guess if there's any group that's likely to  
22 appreciate kind of the complex technical policy and legal  
23 issues surrounding licensing of RCRA subtitle C engineered  
24 site for U.S. Department of Energy low level radioactive  
25 and hazardous mixed waste containing the transuranium

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1 elements, it's the Directors and Managers assembled here.  
2 And what I want to do is just mention and in the little  
3 handout and there's just a couple more, but there were  
4 enough for the table here, three tools, kind of early in  
5 the pre-application process, three tools that illustrate  
6 three points probably worth raising up, three problem  
7 solving aspects of the potential Colorado application.

8           The first really relates to what I just call  
9 the application design phase. How you work with such a  
10 potential applicant in a unique situation. And we chose a  
11 work system approach. The top page of the handout is a  
12 simple one-page of five steps and I apologize that I  
13 didn't bring 50 or 60 instead of 40, but it basically has  
14 the last two steps being that which would be treatment,  
15 storage at facility, licensed activity and the first three  
16 steps are really at the point of generation, how well  
17 characterized is the material on-site before it leaves to  
18 meet some facility waste acceptance criteria. The  
19 characterization are at origin inspection under another  
20 authority under the Colorado radiation regulations, much  
21 like State of Washington does in its at origin inspection  
22 program, again to see that nothing comes out the gate that  
23 would have to be sent back. And then, of course, the  
24 transportation piece. Finally, then acceptance and  
25 treatment, much like the requirements in the Texas sort of

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1 outline that Ruth provided. And finally then disposal in  
2 a RCRA double lined, leachate collection and leak  
3 detection type system with about three or four feet of  
4 clay in the liner and a thick cap on basically thousands  
5 of feet of shale in eastern Colorado.

6           The whole works system involves both the  
7 license and what's upstream of the license, obviously, and  
8 we would have to use our federal facilities compliance act  
9 type relationships with the Rocky Flats plant to see that  
10 the system worked together.

11           And the reason that became so apparent to  
12 think in that way is if you make a triangle of Kaiser  
13 Hill, the willing sender and Laidlaw, the willing receiver  
14 and the state as the independent check and balance, Kaiser  
15 Hill or Laidlaw basically feels that the radiological  
16 expertise is with the U.S. Department of Energy at the  
17 origin point and would not want to establish a whole  
18 radio-analytical laboratory, develop a whole complex set  
19 of procedures at its destination facility. Who is left  
20 then to be the public's independent check. It's clearly  
21 the Department of Public Health, the Radiation Laboratory  
22 and Radiation Services in our Hazardous Materials and  
23 Waste Management Divisions.

24           Again, something you have to think about both  
25 in and outside the context of the specific license that

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1 you might issue to the facility itself. The waste  
2 acceptance criteria are the level and in the hazardous  
3 materials world, it is the generator's responsibility as  
4 with radioactive material, radioactive waste disposal to  
5 do the characterization.

6           Then secondly, we decided on a team approach,  
7 two reasons, good team makes superior decisions and the  
8 principled approach related to issues of trust and  
9 respect, credibility for the Department. You'll see on  
10 the second page, the back page of the first sheet, again a  
11 tool that was just for the team, some principles that we  
12 thought ought to be kind of articulated early. I wrote  
13 high principles. And in July we had a two-day team  
14 building workshop before we ever got into joining a  
15 technical issue as Bob can describe better than I. If you  
16 read the Denver newspapers, if you go to the meetings  
17 surrounding the Rocky Flats environmental technology site,  
18 you do see skepticism about Kaiser Hill, maybe even more  
19 than U.S. Department of Energy and also the Department is  
20 viewed with question marks so to try to articulate the  
21 legitimate role, to legitimate the role of the regulator,  
22 we want to set in the record at the outset, the principles  
23 there. I think one of which is like Bill, you articulated  
24 and something I read for Utah, that the equivalent  
25 protection principle, the primary objective is that you

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1 make no perceptual distinction between commercial and  
2 government produced radioactive waste, that it will be  
3 treated by the same requirements in this case, our part  
4 14, which is 10 CFR part 61 analogous.

5           The third set of tools actually and what you  
6 have is an illustration is an approach and I have a full-  
7 time facilitator available to the team. Management by  
8 decision approach. The attempt to boil down to a few key  
9 decisions what findings of fact, conclusions of law, we  
10 would have to make in the adjudicatory style hearing that  
11 we would be heading to much as Texas faces in January. We  
12 just know that that's the end that will be there and so  
13 making the administrative record very sound early is  
14 important. We have some experience from some past complex  
15 licensing actions that have gone this path and it's really  
16 a very excruciating process to get defined the key  
17 decisions that have to be made for a license to issue as  
18 this group knows well. And then order the pieces and  
19 parts from regulatory guidance and branch technical  
20 positions that feed those key decisions you have to make.

21           And in your hand out you have what are really  
22 -- it's a review by a technical writer with a logical,  
23 kind of a logic training of the recently released draft of  
24 branch technical position on performance assessment. We  
25 knew that was in the literature. It would be held up to

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1 us as something to look at. We basically concluded we  
2 would have to put together something for Colorado, state  
3 specific, that we would then portray as the platform we  
4 would stand on and took a close look at that and while  
5 several very weighty issues are dealt with in the  
6 document, it's not a manual. It's very difficult to  
7 extract what -- how you would lay out the continuum along  
8 which you would make your decision. And so you see the  
9 result of that, again, trying to point up the key  
10 decisions that we would have to make to do issuance or  
11 denial to make our adequacy decision criterion in advance.

12           It hasn't been easy to work with some of the  
13 guidances we're used to working with and like the  
14 memorandum of understanding in Texas it hasn't been easy  
15 even within the same department to get the -- to meld the  
16 RCRA and the Atomic Energy Act paradigms for treatment and  
17 disposal. It's so much of an understatement to say it  
18 hasn't been easy. You're under so many wary, watchful  
19 eyes in what you do. To tie it together then, we've been  
20 willing to help this potential TSD applicant, have the  
21 best opportunity for success through the kind of work  
22 systems approach to the design of the application. We've  
23 tried to build as flexible, but trustworthy, I guess I'd  
24 say, a platform to stand on as possible with the idea that  
25 maybe that less is more. This is what we sent August 19th

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1 to the potential applicant which kind of pulls together  
2 some tools including a checklist for an environmental  
3 report that we developed based on the regulatory guide for  
4 an environmental report, a checklist approach that we've  
5 used in the past, I think, with some success, if you're  
6 careful how you use it.

7           And that went to the applicant and I have a  
8 couple of copies and would be happy to provide an extra  
9 copy to anyone, to provide to anyone that just wants to  
10 see what we were able to put together in a very pre-  
11 application early discussions with this parting ways, some  
12 awkwardness to try to know what you want most to  
13 communicate. And then by trying to bring out these key  
14 decisions for the RCRA and radioactive materials licensing  
15 team that must be made in order for the license to issue  
16 or be denied, I guess I wanted to say we've tried to keep  
17 from losing ourselves in the trees which can happen. We  
18 know that we will have to do some sort of risk or dose or  
19 performance analysis or assessment. We don't know what  
20 that will be, where on a continuum from next to none to  
21 quite a lot, to how we'll use the knowledge they have for  
22 many monitoring wells of the inorganic metals, how that  
23 can relate to what we need to be attentive to for the  
24 radionuclides. That's still yet to be sorted out, but

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1 we've tried to give ourselves some room to really approach  
2 that, based on what the applicant then turns to give us.

3 Any questions?

4 MR. RATLIFF: Who's the lead regulator? The  
5 Colorado Department of Public Health and Environment. Are  
6 there two divisions?

7 MR. WEAVER: When Bob got bigger and went to  
8 Laboratory and Radiation Services, 100 souls, did what we  
9 all say our radiation program should do, have a real good  
10 firm laboratory underpinning. Ten of us, now ten of us,  
11 then six, moved into the Hazardous Materials and Waste  
12 Management Division which has the RCRA authorities. And  
13 so we're a sister division within the Department and I --  
14 Bob can address this, but I think not only is Bob in his  
15 role here, but the Director of Hazardous Materials  
16 Division is the president-elect of ASWAMO, so I think they  
17 work together and are pretty aware of the issues that  
18 we'll face.

19 FACILITATOR CAMERON: Ken, thank you very  
20 much.

21 (Applause.)

22 We're down to the final two presentations and  
23 as you remember in yesterday's episode, Sally, Applicant,  
24 got a truckload of documents. Well, in today's episode  
25 Sally, General Licensee, has called Don Cool up to ask

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1 about general licenses and Don is sending a truck to  
2 Sally's house and I guess you're going to tell us what is  
3 in the truck now, right?

4 DR. COOL: By my watch we have negative two  
5 minutes for Aaron and I to discuss a couple of issues that  
6 we have today.

7 Let's see if we can get that to a starting  
8 point. I was going to use a slightly different variation  
9 of an introduction. Don't make it too dark on us, please.  
10 We'll all go to sleep and that would be very bad.

11 As I was going to start off this by saying in  
12 today's episode of As the Pendulum Swings, we're going to  
13 discuss that many talked about issue associated with  
14 control and accountability of devices in various and  
15 sundry times and places. For those of you who have not  
16 been following the score sheet, there was a working group  
17 with both NRC and agreement state folks whose report came  
18 out in July of last year. We went to the Commission  
19 towards the end of the year. The Commission in one of its  
20 final acts of 1996 directed the staff to go ahead and  
21 develop an action plan to implement a number of the  
22 recommendations. They have since then given us a couple  
23 of other pieces of guidance in various places associated  
24 with issues that weren't at all actually associated with  
25 general license devices, one of those being to go ahead

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1 and look at the possible effectiveness of a registration  
2 program more generally and then as part of these strategic  
3 assessment exercise, to go and to fundamentally look at  
4 how to move the entire material programs to a more risk-  
5 informed performance based approach.

6           So that as a background, what I want to touch  
7 on very, very briefly this afternoon are three particular  
8 arenas which I think you might have some interest in.  
9 First, we've already touched on a minute ago, actually it  
10 was a very nice set up there in terms of what happens to  
11 orphan devices. I'll give you a heads up. It's not  
12 necessarily great, but it isn't horrible. The second  
13 party which is a fundamental reexamination which we have  
14 underway right now to look at all of the materials  
15 programs, at least the by-product arena associated with  
16 risk and then the where do we stand today in terms of  
17 moving forward on some of the recommendations for  
18 registration.

19           So that's where we're going so you can sort of  
20 keep track of how far we're moving along and how many  
21 microseconds it's going to take to finish this particular  
22 project.

23           In terms of working with orphaned devices, we  
24 continue to work with the Department of Energy in terms of  
25 disposal devices that present a threat or a hazard to

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1 public health and safety. This is an informal process.  
2 We had bene working for quite a while to try and get a  
3 memorandum of understanding signed. The lawyers are  
4 batting it back and forth a little bit like a tennis ball.  
5 It continues to be batted back and forth. My  
6 understanding which has been the same understanding for  
7 last month and the month before and the month before that,  
8 just sort of keep that rolling for a little while while I  
9 go on is that it's with the Department of Energy Lawyers.  
10 They've undergone two sets of personnel changes in that  
11 period of time so I'm not looking for a final MOU any time  
12 soon.

13                   Nevertheless, we in fact through the informal  
14 mechanisms continue to have a fairly effective system  
15 whereby when we really find something that really needs to  
16 be dealt with and in fact gets handled and in fact it gets  
17 handled rather expeditiously as we tested once again, not  
18 so long ago when we discovered we had a shred of amoresium  
19 source and a bunch of nonferrous autofluff. I'll explain  
20 that to you later outside. Where we were in fact, were  
21 able to turn on the Department of Energy and get a source  
22 pickup within a matter of a few hours and had the source  
23 sitting down at Los Alamos and a hot cell being analyzed  
24 within the space of a week.

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1           That one actually may long-term have a fairly  
2 nice end of the story because our friends in Los Alamos  
3 succeeded in finding a registration number on that  
4 particular source, but we are now pursuing people and have  
5 what in mathematical terms might eventually be construed  
6 as QED, perfectly circular proof coming all the way back  
7 to the end.

8 So sometimes things actually work well.

9           The CRCPD and the EPA have been working on  
10 some issues to try and enhance the process. EPA  
11 discovered it had about a half million dollars worth of  
12 money which it wanted some CRCPD help on. There was a  
13 meeting in May. There continues to be some discussions in  
14 particular on how to deal with some of those issues, how  
15 we can identify some places for some people who want  
16 sources because that, in fact, continues to be a problem.  
17 You get people who say I've got the source and I'm not  
18 quite sure what to do with it and particularly if its  
19 amoresium or some of the other ones, it really doesn't  
20 have any particular place to go.

21           Related to that and not on this slide is the  
22 fact that the DOE has talked about for some time the  
23 possibility of a retrieval or round up for some of the  
24 amoresium sources. There was, in fact, a request made to  
25 both the NRC and the states through CRCPD, I believe, to

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1 try and identify the number of sources that might be out  
2 there for that round up. We've supplied the information  
3 back from them, haven't heard lately as to where they  
4 stand with that particular process.

5           Let's jump on to the what formerly is called  
6 the nuclear byproduct material risk review group. I call  
7 the rerack group because the ultimate outcome hopefully  
8 will be a reassessment and perhaps reracking of the entire  
9 system of how we do business. These are the folks who are  
10 up there. A wide variety of disciplines including Nancy  
11 Doherty from Colorado who is giving us some valuable  
12 input. Their purpose and goal is to try and identify and  
13 document a logical basis to the extent that logic ever  
14 truly plays into this exercise for how to develop a risk-  
15 informed matrix of regulations for by-product material and  
16 to try and develop from that set of information a graded  
17 approach to the regulation of those various kinds of  
18 materials.

19           Right now we have limited it to by-product  
20 material although we recognize that you've got source  
21 material. You've got special nuclear material and you've  
22 got a whole bunch of other stokes which within the  
23 official jurisdictional elements are not NRC's but which  
24 longer term obviously has to fit into an overall pattern  
25 in some way.

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1           The approach being used is to try and through  
2 quantitative, to the extent that we can, mechanisms,  
3 identify the various kinds of risks which are associated  
4 with what they're referring to as the by-product material  
5 systems like radiography would be a system, aging devices  
6 would be a system and you can start to add up the various  
7 kinds of systems. They've got in the vicinity of 40  
8 systems that they have identified.

9           And then having laid out a matrix which  
10 conceptually might be something along the lines of what is  
11 the public dose associated with these? What are the  
12 occupational doses? What are some of the accidental  
13 doses? What are some of the various and sundry risk  
14 factors? What's the probability of these particular  
15 events happening?

16           And then on the end I have asked them to look  
17 at trying to consider all right, all of that's wonderful  
18 well and good, what about the outrage factor? IN  
19 Washington, D.C. we refer to that as what happens when the  
20 Washington Post prints an article on the subject and  
21 everyone goes sort of elliptical in terms of their  
22 response. Or what happens when you actually find a source  
23 in the environment or you find contamination in an  
24 environment? Witness what happened up in New Jersey when  
25 a tritium exit sign had one of its vials broken as a

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1 result of a 16-year old finding it on a site, carrying it  
2 back to his house, down to his room in the basement and as  
3 all good 16-year olds would do, takes it apart and breaks  
4 it. Spent something on the order of \$70,000 there working  
5 on some remediation and cleanup of those materials and if  
6 you do a dollars per person, given that this young man got  
7 something on the order of 60 millirem, you can do the  
8 mathematics associated with what we actually do when faced  
9 with these situations and how does that play into the  
10 factor?

11           We want to look to the extent we can, even  
12 though we are looking at byproduct materials right now, to  
13 look at some of the issues where the agreement states  
14 certainly have a very strong interest and where states in  
15 general would have an interest because a lot of these  
16 might replicate over to some of the other areas.

17           A schedule. They are already started.  
18 They're meeting on about a once a month basis. This is a  
19 fairly tight time line in that we hope to get to them in  
20 September of 1998. I see that we manage to say that we  
21 started in August of 1998 and finished in September of  
22 1998, a very, very impressive accomplishment.

23           (Laughter.)

24           I'm not quite sure how we managed to do that.  
25 We can still do that.

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1           But basically within the period of a year or  
2 so to put together a report and then to take that to the  
3 Commission with some recommendations associated with  
4 actions. The bottom of that slide, we can put that up  
5 later. I can give it to you. Dennis Serig, who is my  
6 human factors expert, is leading that group and any input  
7 that you have you can get to Dennis you can get to Nancy  
8 Doherty as the team starts to meet and puts together their  
9 particular activities.

10           Okay, if I'm using the pathway analogy that we  
11 seem to be pursuing throughout this meeting, we're on to  
12 the third stepping stone which is where do we stand in  
13 terms of actually doing anything about implementing the  
14 recommendations that came out of that working group. And  
15 the answer is unfortunately we haven't gotten very far.  
16 And that's, in large measure, because the same old  
17 bugaboos and issues keep coming up to play in terms of its  
18 cost beneficiality and in terms of where are the resources  
19 coming from to actually start up the process and so in the  
20 current version and this is why I was sort of thinking as  
21 the pendulum swings, in today's episode we find that the  
22 Commission paper still has not gone up to the Commission  
23 and the staff is presently considering an approach whereby  
24 we might try to start a rule making process to look only  
25 at cesium devices with 10 millicuries or greater and just

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1 try and start developing through some rule making a  
2 possible registration process through a rule making  
3 process of a couple of years time frame, where as part of  
4 the effort, early effort, we would specifically try to get  
5 information associated with costs and benefits and  
6 analysis. You'll recall perhaps the working group  
7 document which had some measures of analysis of cost based  
8 almost totally on the average cost per smelting to a steel  
9 facility. Now if you look at it in terms of dollars per  
10 person rem and you look at it in terms of dose, you  
11 discover that there's essentially no dose associated with  
12 that, at least in the typical scenario that we've seen.

13           But if you're one of these folks who likes to  
14 live on the highly deterministic edge of the world and say  
15 what if, you immediately conjure up images of guyana where  
16 cesium source got out of control and killed several people  
17 or as we have possibly running right now, issues  
18 associated with some cesium sources over in the former  
19 Soviet Union state of Georgia where last week people were  
20 starting to run around frantically because apparently some  
21 of them may have gotten out of control and by early  
22 reports perhaps a dozen or more people had significant  
23 skin burns and lesions that they were starting to look for  
24 plastic surgery.

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1           So you -- the reality is that you have some of  
2 these. How do you factor any of that into an analysis and  
3 use that to justify in any way the costs of imposing  
4 burden on a group of individuals who are currently using  
5 material with essentially no costs at all from a  
6 regulatory perspective, even though that cost as we have  
7 figured it out for registration program, even run by the  
8 NRC, might only be on the order of \$100 to \$200,  
9 collective gasp is in order now.

10           So we're trying to sort our way through that  
11 process and get a proposal to the Commission so the  
12 Commission can at least consider whether they want us to  
13 proceed down this road or not.

14           Presuming that the Commission agreed that such  
15 an approach should be pursued and we should at least move  
16 through the early stages of rule making to develop a  
17 registration process, whereby we can impose such  
18 requirements, that would have a couple year time frames,  
19 so we would be beginning to look at implementation in  
20 perhaps 2000, perhaps 2001, before people would actually  
21 begin to register their devices. We'd have to look in  
22 terms of how you'd verify accountability. Right now,  
23 presumably you would do that by going and trying to do a  
24 cross comparison between what the vendors had sent out and  
25 what the registrants sent you in terms of some kind of

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1 matching up to determine you had the right things. You've  
2 have to determine how much follow up you wanted to do and  
3 here's where that great resource question comes into play.  
4 And those of you who have already gone down this road know  
5 that there's a substantial resource if you really want to  
6 chase those who come back with either missing information  
7 or missing sources or don't bother responding to you at  
8 all. Quite frankly, in the budget that I have at the  
9 moment, I don't have those resources. And so the question  
10 will be whether we extract those resources from what is  
11 the zero base system overall and where you pull them from,  
12 or whether or not we sort of just a priori say from this  
13 moment forward we will capture what we can and we will  
14 gradually improve the system over time because we can  
15 track those who are coming into the system, because the  
16 fact of the matter is we know that there is some number of  
17 sources, maybe hundreds, maybe a thousand or more, who  
18 knows, that are out there. They are already out of  
19 control. They are in some scrap stream or something  
20 someplace. They have probably been there for a number of  
21 years and no amount of follow up is ever going to find  
22 every single one of those particular sources, so it's a  
23 whole series of trade off issues and resources.

24                   If we proceed with the rulemaking, as I said,  
25 there would be a number of specific questions that we

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1 would be trying to look at to answer in terms of how to do  
2 the cost benefit analysis, how to try and do the  
3 implementation of the process, how to follow it up or not  
4 follow it up or to what extent you chase them down in a  
5 variety of those. The bottom line from this is continue  
6 to not hold your breath, as things have not been moving  
7 particular rapidly. There are, in fact, a number of legal  
8 issues associated with this and imposing burden. Our  
9 Office of Management and Budget and the Government as a  
10 whole generally look kind of unfavorably on imposing new  
11 burdens on a whole set of people who haven't previously  
12 had burdens associated with regulation, so it sort of  
13 bucks the trend in the current administration and so this  
14 will continue to be a process which will best move along  
15 at probably a relatively slow fashion.

16                   With that, I'll answer any questions.

17                   MR. RATLIFF: You know, Don, you said the word  
18 yesterday and you weren't going to, business process  
19 reengineering, but it appears that this may be one that  
20 follows so well into that plan where you're registering  
21 the sources as they come out. You can do it all  
22 electronically, a minimal fee and I know we've developed,  
23 based on what Ray Harrison had in Oregon, an inspection  
24 form that goes wit the fee so the people at least have  
25 contact once a year, they have to go look at the site. It

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1 gives you a good chance I think to see why should we defer  
2 the cost to the sealed mills and scrapyards because there  
3 are costs out there and I think it gives you a good chance  
4 to try that. That's the route I would take.

5 DR. COOL: That's in fact exactly what we  
6 would like to try and do. It's a one time touch. The  
7 bill comes with it. You send me back your list of four or  
8 five questions. Yes, I have these devices. I've got these  
9 new ones or I deleted those. I've gone out and visually  
10 checked each one. Sure enough, I've still got them. I  
11 know where they are. They got the right label and here's  
12 my check for \$100. Thank you very much. See you next  
13 year.

14 MR. GODWIN: I really don't understand why you  
15 don't go the fee route in the interim way, getting these  
16 regulations adopted. It's such an excellent system for  
17 doing the touch. You can send out an inspection, forward  
18 it to half of them each year and every other year in  
19 effect you can get them to really inventory the things.

20 And you also can pay for additional staff  
21 which is a nice thing about it. You can probably get a  
22 couple extra. I realize you've got to go through the  
23 budget process to get those actual people there, but you  
24 know, in this next round of fee rule making you could  
25 start the process or at least get it submitted for one of

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1 the things to be considered. You already have the  
2 obligations for these people to have the things. All  
3 you're doing is charging a fee for the administrative  
4 effort, are you keeping up with it?

5 DR. COOL: And that in fact is part of the  
6 difficulty that we have because in order to start that  
7 process, I have to have something in the rule which allows  
8 me to charge that fee because in fact, if you looked in  
9 the antiquated history of the world, Volume 2, you'll  
10 discover that one of the things that was said was that we  
11 will not charge general licensees so I have, in fact, to  
12 make changes in the regulatory structure before legally I  
13 can --

14 MR. GODWIN: What part?

15 DR. COOL: This is history of the world, part  
16 2.

17 MR. GODWIN: Okay.

18 DR. COOL: Way, way, way back.

19 (Laughter.)

20 So in fact, one of the things from a legal  
21 perspective and in our discussions with our General  
22 Counsel's office is in fact how can we try to move more  
23 quickly and the only other answer is to conduct a survey  
24 and get my friends down in OMB to clear a survey of  
25 information which would have no regulatory implication and

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1 no significant possibility of any enforcement action  
2 behind it other than sort of following it up.

3 We should do this outside in the area on the  
4 other side of the hallway after the meeting is over  
5 because it's a long discussion.

6 Mike?

7 MR. MOBLEY: Let me put you on the fast track.  
8 There are some guys out there that are just biting at the  
9 bit to deal with this issue of these sources coming into  
10 their facilities. And I'm talking about the scarp  
11 dealings association. I can't remember their exact names  
12 and the foundries.

13 I mean I know you can't go out to them and say  
14 hey, here's this nice piece of legislation that if you  
15 would put it in and get some people to push it and  
16 everything, but if they could just get wind of this  
17 through some method, I would think that you wouldn't have  
18 much problem. You don't even have to worry about your  
19 lawyers other than telling them to be quiet.

20 (Laughter.)

21 You know? You could just get the legislation.

22 DR. COOL: It must be late in the day.

23 (Laughter.)

24 MR. MOBLEY: They'll take care of the  
25 legislation for you because they're -- from the meetings I

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1 go to and hear the discussions, they want something done  
2 and I mean what they'd like to have done is just legislate  
3 away all sealed sources so you don't have to worry. This  
4 would be a way that you could, they could be offered  
5 here's a mechanism that can help you because I seriously -  
6 - one is I really appreciate that you're going this route  
7 or you're attempting this route because it's one I believe  
8 takes care of a lot of the problem, whether you survey  
9 them or not annually, if they pay that \$100 a year at  
10 least their accountants are looking out there to see do we  
11 still have that thing on board here?

12 DR. COOL: That's exactly the point, yes.  
13 Carl?

14 DR. PAPERIELLO: Not to put too much gloom on  
15 this light, if you look at the paper and you take a look  
16 at what we would achieve by what we're proposing, it's  
17 only the prevention of one melding every eight years. The  
18 fact of the matter is that a significant number of devices  
19 are already registered. They're specifically licensed.  
20 Not only that, even with registration, you're going to  
21 lose them. You start looking at the regulatory analysis,  
22 the cost benefit of what we're proposing to do is rather  
23 iffy and so it's not -- it's more of the people, it is the  
24 people who bear the cost aren't necessarily the people who  
25 will benefit and it's -- as I say, when you look at the

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1 risk calculation, it's all economic. It has almost no  
2 risk to individuals because of the exposures, from all the  
3 events that have occurred have been very low. You could  
4 turn around and say but what could? When we are in PRA  
5 space, and you do a probablistic analysis of these things,  
6 what you find out is there's an economic risk, you know,  
7 because you contaminate the steel mill and because of the  
8 people's reaction to radiation, you spend a lot of money  
9 cleaning it up. The fact of the matter is there's --  
10 that's it and you really in our analysis, at least for NRC  
11 jurisdiction, we're only going to save one event in eight  
12 years.

13 DR. COOL: Let me note one other thing and  
14 then Mike, I think you want to go up again? No.

15 The one other thing wanted to note is there is  
16 an interrelationship between the second item which is my  
17 risk review group analysis and the potential long term for  
18 a more viable registration program which is that depending  
19 on the outcome of that analysis, what we may discover,  
20 what I think personally is likely to be a case is there's  
21 going to be a bunch of things which may now be in the  
22 specific license category and for which there are a whole  
23 bunch of associated fees and other implications, where, in  
24 fact, a more efficient regulatory touch might be something  
25 which was a registration. Now if I was in New York State

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1 what I'd be saying is this is a specific license, a one  
2 year renewal upon sending me the \$100 and filling out the  
3 questionnaire.

4           But the equivalent touch, where the primary  
5 issues are associated with accountability and things, deal  
6 with things which are both generally licensed and things  
7 which are specifically licensed and part of what I am  
8 actually in hopes is that as we move through that analysis  
9 process, we may be able to gain some momentum from the  
10 fact that we could move a set of licensees from a higher  
11 cost and probably higher workload grinding FTE whatever  
12 kind of term you want to have, all our hand wringing that  
13 we do over specific licensees, into this new middle  
14 category, where I don't expend so much effort, but I get  
15 as much or more actual security because most of these  
16 specific licensees have got this wonderful specific  
17 license. They applied. And the inspection frequency is  
18 what, five years? They haven't seen us again in five  
19 years? If accountability is the issue, we've lost them.

20           Any other questions?

21           MR. BAILEY: I listen to this explanation of  
22 the cost benefit and I would extend that then to soil  
23 moisture gauges. You don't to license them. You don't  
24 need to review them.

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1 DR. COOL: They're one of the ones on my hit  
2 list.

3 MR. BAILEY: Well, I mean and we spend  
4 thousands of dollars reviewing them, doing sealed source  
5 and divide sheets on them. We're going to have a talk on  
6 them. I think if you look at a lot of areas and say how  
7 much exposure has been caused by these devices, you  
8 couldn't justify the cost of regulating them. But I don't  
9 know what would have happened if they hadn't been  
10 regulated.

11 The other question, the one I really wanted to  
12 ask was what impact will this convention on waste  
13 management have on generally licensed gauges that are in  
14 storage for disposal and so forth. Will they have to be  
15 accounted for too under this convention?

16 DR. COOL: That's a good question. John? Do  
17 you have the answer for that? I don't have the answer off  
18 the top of my head as to where those pieces would fit into  
19 the convention.

20 MR. HICKEY: Well, you're talking about if  
21 they're in a commercial storage facility or where?

22 MR. BAILEY: I'm talking about I'm a company  
23 and I take ten of them off line and cost me too much to  
24 dispose of them so I set them in a room.

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1 MR. HICKEY: Right now I think what's  
2 contemplated is only people who are in commercial storage.  
3 They're storing stuff for other people. Not storing their  
4 own stuff.

5 MR. BAILEY: Okay.

6 FACILITATOR CAMERON: Thanks, Don.

7 DR. COOL: Thank you.

8 (Applause.)

9 FACILITATOR CAMERON: Now we're going to look  
10 at the specific device so to speak. Aaron Padgett from  
11 North Carolina is going to talk about a Troxler gauge  
12 problem.

13 MR. PADGETT: I think I was just pre-empted.  
14 That's no problem. Let's go home.

15 I can tell you this. It's late. I'll be  
16 brief. If we go back on this particular problem -- we of  
17 course -- are licensed Troxler Electronics who makes  
18 moisture density type gauges. And prior to 1993 there had  
19 been no disconnects of the source from the source rod and  
20 no loss of sources to the environment.

21 However, starting in 1993, as you can see from  
22 the slide, there were three that year. One of those  
23 belonged to the Ohio Department of Transportation. That  
24 not being a nonagreement state, the NRC came into that and  
25 five gauges that -- including the one that had the source

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1 drop off, that appeared to be damaged were shipped down to  
2 Southwest Research for metallurgical analysis. Southwest  
3 Research reached several conclusions. They included  
4 things like this. The failure resulted in the region of  
5 the weld where the cup slipped on to the rod and was  
6 welded. The initial crack came about as a result of a  
7 severe bending load, probably an impact and I think that  
8 most of you know that these are very ruggedly designed and  
9 manufactured devices. However, they're not designed for  
10 the guy to take a sledgehammer and drive the device into  
11 the ground. And I have examined some of these and found  
12 that that is the way some people, not nearly all, not even  
13 a high percentage, but that is the way some people use  
14 them.

15           So that was one. The other thing is that the  
16 crack continued to propagate from normal use and in some  
17 cases that's continuing to beat on the handle to free the  
18 thing and pull it out. Other cases, as you push the  
19 handle down, it pushes the sliding block out of the way  
20 and that also introduces a torque to that weld, so once  
21 the crack gets started, quite possibly that normal use  
22 causes the crack to continue to propagate.

23           Well, in the old design that Troxler had prior  
24 to serial number about 13,300, the source cup just slipped  
25 up on the rod and was welded in place, so if the weld

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1 cracked all the way around, the cup was dropping free, and  
2 the source would be lost. Troxler back in the 1980s  
3 changed that design so that the cup was now threaded and  
4 screwed on to the source rod before being welded and they  
5 were convinced that that would solve the problem and there  
6 would no more lost sources. In fact, at that point in  
7 time there had been no lost sources. They were looking  
8 ahead at that and some other things. They thought that  
9 precluded the possibility of a lost source from one of  
10 those.

11 Other things that they concluded was that  
12 visual examination of the weld would not identify cracks.  
13 It just is not a reliable means of identifying cracks  
14 without magnification.

15 And I think events since then has proven that  
16 one to be true.

17 Troxler through the years has made a number of  
18 modifications to these including the material used for  
19 weld, the rod material, the cup material, looking for the  
20 right combination of hardness to push that sliding block  
21 out of the way without wearing through, but also having  
22 the characteristics for a good weld and they made a number  
23 of changes there.

24 The most recent change and one of the more  
25 significant ones was the fact that the old cup, including

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1 the threaded cup was one and three quarter inches long.  
2 That provided a long length for a tremendous force on that  
3 weld as it pushed the block out of the way or as that user  
4 beated on the side to free it. I have examined handles  
5 that had marks on the side where it was very obvious that  
6 a hammer had been used to free it up before they pulled it  
7 out.

8           So they shortened the cup to about .62 inches,  
9 dramatically reducing the forces that would be exerted  
10 even when it's misused and certainly as it's used daily  
11 pushing that sliding block out of the way.

12           One of the questions we had to face is there  
13 were three then in 1993. Do we really have a problem  
14 here? Troxler had several thousand gauges out there even  
15 at that time and having three disconnects, how big is  
16 that? That's a good question to answer. I'm not sure  
17 we've ever done it satisfactorily. You go back to the  
18 what's the criteria you use. Obviously, you can't use the  
19 \$2,000 per rem. That just isn't applicable. Not when you  
20 have a source dropping free out in the environment and  
21 some kid may pick it up and put it in his pocket. \$2,000  
22 per rem just has no place there.  
23 So that was one of the questions.

24           Troxler started examining gauges coming back  
25 in to look for cracking and they did this first at their

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1 facility there in Research Triangle Park in North Carolina  
2 and then they expanded that to all the service facilities  
3 nationwide. They have examined several thousand so far,  
4 looking for cracks.

5           Less than one percent that they have examined  
6 have had cracking and they do replace these free of charge  
7 for their customers and to date, we have seen a total of  
8 seven disconnects as you see on the board up there. And  
9 notice that 1993 was a bad year and 1997 has been a bad  
10 year so far.

11           Prior to 1997, we had not seen any -- I'm  
12 sorry, prior to 1996, we had not seen any cracking in the  
13 serial numbers above 13,300, the threaded rods. However,  
14 about a year ago in Oregon there were three gauges that  
15 Braun Intertech, a company in Oregon, did die penetrant  
16 testing on and one of those that was a threaded cup was  
17 cracked circumferentially all the way around and had it  
18 not been threaded, would have dropped free. So we then  
19 had evidence that cracking existed above the 13,300.

20           To date, we've still not seen any cracking in  
21 the serial numbers above 25,264 which is the short cup  
22 that was introduced a couple to three years ago.

23           Now as I said Troxler made a number of design  
24 changes. They're now inspecting all gauges being returned  
25 to them at 10 times magnification and picking pu and

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1 removing gauges from service that have cracks. They've  
2 done a lot of other things too. We talked about the weld  
3 material changes. One of the thoughts that we have is  
4 that quite possibly these defects may be introduced during  
5 the manufacturing process and the purchase and use of an  
6 automatic welder, we think, has reduced that possibility  
7 considerably.

8           Now additional actions that we're taking  
9 include these. Last December, Troxler submitted to us an  
10 action plan. I guess I should back up to November because  
11 they submitted the first one in November and we looked at  
12 it and gave it back to them and said we really asked for  
13 an action plan, please take this back and give us an  
14 action plan and so they took that back and then they came  
15 in December with a reasonable action plan.

16           Well, a number of these gauges arrived in NRC  
17 space and we know that we're not going to work on this  
18 alone and looking to go down the partnership road we  
19 submitted this action plan up to the Commission after we  
20 had reviewed it and said we'd like your comments on it.  
21 Unfortunately, I was kind of naive about some of the  
22 dealings there and this was labeled as confidential and  
23 proprietary. And I soon learned that the Commission  
24 cannot recognize our determination of confidential and  
25 proprietary so the action plan came back to me. And then

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1 we worked with the Commission for several months, waiting  
2 and hoping that that issue would be resolved and they  
3 could treat an item as confidential and proprietary that  
4 we had determined to be such, but we were not successful  
5 in that.

6           Then after some of the disconnects that we had  
7 this year, we gave up on that basically and the Commission  
8 sent an individual down to our space, reviewed the plan  
9 and had some contact with Troxler, some discussions and we  
10 went forward from there.

11           Since that point in time the working together  
12 has gone extremely well and we have an action plan that is  
13 essentially final that we all are going to agree upon.  
14 Basically, what that means is Troxler is going to get a  
15 great deal more aggressive in going after the gauges that  
16 are out there. The only ones they've been inspecting so  
17 far are those that the company owners are sending back to  
18 them for either leak testing or some other type of repair  
19 and we're going to have them go after all the gauges. We  
20 don't know how successful they will be in getting the  
21 owners to return the gauges to them for review and for  
22 analysis to see if there's a cracking problem, but if they  
23 are not successful in getting them all returned, then  
24 certainly there may be additional regulatory action that  
25 we take in conjunction with the NRC and some of the other

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1 states may be involved in that too, where there may be an  
2 order to licensees or some other regulatory action to get  
3 the rest of the gauges inspected.

4           Also, there will be additional metallurgical  
5 examination looking for the cause of this. We're also  
6 requiring Troxler to be more aggressive in getting the  
7 word out via the user training manual. It's going to be  
8 revised and address this issue and the training that they  
9 give to gauge users.

10           One of the questions we have is should we take  
11 this on to other gauges or other manufacturers?

12 Certainly, the problem may exist. One of the things, we  
13 see no evidence of cracking outside of the 3400 series  
14 gauge so we're limiting it to that, the extended rod  
15 gauge. We've not seen evidence of cracking from the other  
16 manufacturer in North Carolina. That may just be simply  
17 because they have so few gauges out there. The same  
18 problem may exist. And we will continue to watch that.

19           One other thing that came in this that we  
20 identified is the little sliding block sometimes sticks in  
21 the open position and of course when that happens you  
22 violate the transportation regulations and so forth if yo  
23 ship it. It's not much of a hazard, because three feet  
24 away you're down to two to three millirem per hour dose  
25 rate, but still you're above the transportation

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1 requirements for the packaging and so forth that they  
2 have.

3           We looked also at our other manufacturer and  
4 sure enough that same problem exists with the other  
5 manufacturer so my guess is if you have a gauge  
6 manufacturer in your state, they have that problem too and  
7 you may want to take a look at it and see how serious it  
8 is and whether or not there is something they need to do  
9 to address that.

10           We're having Troxler address that in their  
11 user manual and we'll be moving on to our other  
12 manufacturer to get them to address that in their user  
13 manual also when we implement this program.

14           So that's in a nutshell, that's the problem.  
15 It's -- so far there have been seven out of tens of  
16 thousands that have disconnected. There have been no  
17 exposure of significance as a result of any of the  
18 disconnects. But the potential exists. And dropping a  
19 source out in the public, very little Johnny may end up  
20 with it in his pocket just is not an acceptable risk to  
21 take if there's a way to avoid it. Troxler is going to  
22 spend a bunch of money on this. They're estimating right  
23 now that the total cost of the program that's outlined  
24 will be over \$2 million for them. They're a \$20 million

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1 company, so it's a substantial investment that they're  
2 going to make in this.

3 That's basically all I have. If you have  
4 questions, I'll answer them.

5 MR. HEARTY: I have one. Brian Hearty,  
6 Nebraska. I have a question. You talked about you're  
7 having Troxler address a lot of things in their user  
8 guides and internally. Have you done anything with their  
9 device registry, changing any -- reflecting any of the  
10 changes they're making to the device or any considerations  
11 on use or anything like that?

12 MR. PADGETT: We're in the process right now  
13 of writing the 3400 series SS&D, rewriting that. So the  
14 answer is yes, but we are still depending on the majority  
15 of this not to be addressed in the SS&D. We'll address  
16 those issues that appear appropriate for the SS&D, but  
17 we're expecting them to address it in much, much greater  
18 detail in their user manual and in the training that they  
19 did.

20 MR. MOBLEY: Mike Mobley from Tennessee. In  
21 our inspection process, has there been any notices going  
22 out that maybe we ought to be looking at the handles on  
23 these devices to see whether they're being hammered in or  
24 hammered out or whatever?

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1 MR. PADGETT: Troxler put out a notice back in  
2 the summer of 1996. I really would not refer to that  
3 notice as being one that you should copy because it was at  
4 that point in time they still did not believe they had a  
5 problem and the notice reflects that.

6 The Nuclear Regulatory Commission put out a  
7 notice though that I think is much, much better and to  
8 some degree at least addresses that.

9 FACILITATOR CAMERON: Don, do you want to make  
10 a statement?

11 DR. COOL: The information note, this is Don  
12 Cool with NRC. The information notice that we put out was  
13 as a result of the first couple of disconnects, suggested  
14 to licensees that they needed to pay particular attention  
15 to this, was limited on the serial number because at that  
16 time we hadn't seen any disconnects in the serial numbers  
17 where they had started to go to the threaded cup. It  
18 wasn't more than a month or two after we put that  
19 information notice out earlier this year that we had the  
20 ambric disconnect where the disconnect was actually with a  
21 device that had the threaded cup.

22 We have not at this point putout any  
23 inspection temporary instruction or anything to go looking  
24 for abnormal conditions of use as part of our inspection  
25 protocol yet. Part of what we've been doing with Aaron is

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1 to try and get as much of this rock riding on Troxler's  
2 back for the moment to look and see what they've got and  
3 then on the basis of what we get or don't get over the  
4 next few months as they go through their action plan and  
5 the consent decree or whatever, the actual mechanism will  
6 be that North Carolina uses to then look at additional  
7 actions that we would have to take from an inspection  
8 standpoint to try and follow up on the ones that get  
9 missed or other activities and see what we actually come  
10 by that. But we've actually been trying to pursue an  
11 approach where we don't burn too much of our regulatory  
12 resource until we have burned to the extent we can the  
13 licensee's resource to fix the problem which is within  
14 their device. So that's where we are at the moment.

15 MR. PADGETT: And we plan to enter into a  
16 consent agreement with Troxler on this issue on what they  
17 will do.

18 FACILITATOR CAMERON: Okay, Aaron, that was  
19 good to hear about that real life regulatory problem to  
20 end the day and all of you have a lot of endurance. It's  
21 been a long day and tomorrow we're going to get started at  
22 8:30 and we should have an interesting session on the  
23 medical program and we do want to get Don, Don does want  
24 to get and Cathy Haney, who is with Don's staff, they do  
25 want to get some viewpoints out of you on the various

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1 alternatives, so we're going to be looking to you for  
2 that. We're also as I mentioned before, going to have a  
3 number of doctors and medical personnel in the audience.  
4 It sounds if it gets too rugged up there they'll be able  
5 to help us out, but they are going to want to say some  
6 things and please sign in tomorrow. Bob Thunderbird has  
7 reminded us to do that out there and he says he'll sign  
8 people in for a fee, subject to conflict of interest, but  
9 -- DR. COOL: Before the state people run out, I  
10 need to talk to them. We still have a number of business  
11 items we have to accomplish and the time is growing  
12 shorter and our options are growing shorter and so what  
13 I'd like to hear is whether you want to extend this  
14 discussion for a few more minutes or get up very early  
15 tomorrow.

16 (Whereupon, the meeting was concluded.)  
17

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