UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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1999 ORGANIZATION OF AGREEMENT STATES MEETING

Thursday, September 9, 1999

Renaissance Hotel

Trinity Rooms

Austin, Texas

Thursday, September 9, 1999

The meeting convened, pursuant to notice, at 8:00 a.m.

PANEL MEMBERS PRESENT:

FRANCIS X. CAMERON, Facilitator

DONALD COOL

KATHY ALLEN

SETH COPLAN

DAVID WALTER

PANEL MEMBERS PRESENT: [Continued]

CATHY HANEY

FRITZ STURTZ

PETE MYERS

CINDY CARDWELL

MEL FRY

RAY PARIS

AUBREY GODWIN

ROLAND FLETCHER

TERRY FRAZEE

JAKE JACOBI

RUTH MCBURNEY

DAVID SNELLINGS

STAN MARSHALL

P R O C E E D I N G S

[8:00 a.m.]

MR. CAMERON: Good morning. If you could please take your seats, we're going to get started.

We really have a full agenda, particularly this morning, where we're going to start out with state techniques for a streamlined license renewal, and what's going to happen is Don Cool is going to sort of talk about -- well, sort of, I guess -- he's going to talk about the NRC process. And then we're going to go to Kathy Allen from the Gold Star State of Illinois to set up the discussion for us. And everybody is going to -- I know there's going to be a lot of people who want to contribute to the discussion. And if you look at your agenda, we're supposed to be at Part 35 at 9:15, and we have to do the streamlining discussion and also the performance-based regulation.

So in fairness to people this afternoon, I'd like to try to keep us on schedule. So I may have to arbitrarily cut the discussion off, and anything that we have left over we'll put up here and we'll see if we can circle back and get that.

And what I'll do is turn it over to Don.

MR. COOL: Thank you, Chip. Good morning. Okay. How many people have had a cup of coffee already and are actually awake? Five? Okay. That means I'm probably pretty safe talking up here this morning.

Once upon a time in a land not so far, far away, we started to look at the fact that we were going to be faced with renewals once again. What I want to talk to you about briefly today is the renewal of materials licenses, and many of you, through these meetings and the CRCPD meetings and other interesting and diversified forums have heard us talk now seemingly forever -- it's actually only been about four years -- about business process reengineering and various sorts of things and the whole effort that we had undertaken, back about the time I became division director in '95, to try and recraft ourselves: make ourselves more efficient, make ourselves more effective, try and figure out if there wasn't a better way to go about trying to do this process.

A lot of you were involved in those activities. A lot of discussions back and forth. Several things, if you'll recall, came out of that. One was an extension of the renewal dates by the NRC. There were a variety of reasons. The biggest one, quite frankly, was I was looking for resources. And we looked around for resources and we discovered that I actually had more resources in the budget to do renewals than I had in the budget to do news, and that the case load on renewals was much higher than all of those others. So I said, Here's a target.

We crafted up some criteria. I think maybe it was the first time in the Agency we'd actually drafted up some performance-based criteria upon which to do an action, and we basically extended 90-plus percent of all the renewals for five

years more or less automatically, without any incoming action or otherwise, moved the dates out for five years which gave us a little bit of a lull and an opportunity to go through and work on a variety of things.

Well, we've been working on those things. We've been working through a series of activities. Many of you have had an opportunity to be involved in the guidance consolidation in various activities. And now we are coming back up to the point in time when suddenly there on the horizon is looming this mountain. And as we got a little bit closer to it, we discovered that the mountain was called renewals. They were coming back. They were going to be here once again.

And the senior executives of the Agency up in the EDO's office in what they call the executive council asked what probably was a very logical question, Gee, what are you going to do about all the resources you suddenly have in that budget to do renewals? And can't you, as a result of all of these things that you've done, do any better? And we said we'd go off and think about it. Being good bureaucrats, we didn't give them an answer right away.

And the answer is, Yes, we think we can do something about it. And part of what I have in the next couple of slides is part of what's going to be involved in that process. Some of the other things that are involved is the consolidated guidance. Many of you by now are familiar with the new reg 1556, a series of documents.

It is, if you will, the Ragu sauce -- it's in there, all that good stuff. Ideally, everything that you would need to know for a particular kind of application, in order to apply for it, including: all the reviewer notes, everything the reviewer was going to ask, everything you needed to know, the references to the regulations, and a whole series of things in the back that if you'd wanted to do the cookie cutter approach, there was one acceptable way to do it. One acceptable way. A little bit like a regulatory guide in that sense but a lot more than that.

Also went through and developed and refined a little bit more -- and I'll talk about it in a minute in terms of performance indicators -- again, some measures to try and judge how well a licensee was or wasn't doing in their program and their activities.

And then earlier this year brought together a number of my folks from the regional offices and sat them down and said, Folks, here's your challenge. I want you to come up with a way that we can deal with this mountain of renewals that's coming in and do it for about half of the resources that you've got budgeted right now. And after they all collapsed on the floor and then spent about the next two days arguing as to why the division director could possibly be that crazy, they came up with several other ideas, and that's what we're going to talk about.

First, the performance indicators that, for the moment, we're going to be using as an initial screen on some of the activities; certainly the enforcement history of the licensees.

Have we, during the inspection process, found weaknesses that we've had to take enforcement action, particularly escalated enforcement action? If so, they're automatically going to get a harder look.

Now, some of these others you might say, Well, wouldn't they all show up in enforcement? Well, possibly, but culling out the specific things: losses of material; control in the program; the kinds of things that you worry about in terms of radioactive material running around. You know that the NRC got really sensitive to control of material as a result of a couple of wonderful little incidents with folks who decided they wanted to use the radioactive material, in this case P32, for something other than a pure DNA type of experiment.

Unauthorized disposal or release of material -- are they -- this is the other half of the control if you will -- are they properly handling the material, disposing of it, keeping track of it, dealing with those issues and otherwise? And how are they dealing with exposures, particularly have they had any situations of overexposure otherwise, which would cause us to immediately want to do a more detailed look in the process? If they haven't tripped any of those then what we are looking to try and do is to have what we have nicknamed for the moment a more limited review.

Larry, when he was still a branch chief in my group, had nicknamed it light, but you can add various other names behind that. You sort of get the notion of -- but his would be the light review: less cumbersome, less resource intensive, less detailed, less

prescriptive perhaps, and of course associate with that one some risks. We will talk about that in just a second.

So what are the things that we probably want to look at when someone was submitting a renewal application? They passed the indicators so they were in pretty good shape there. So are there any administrative items? Have they changed anything that they haven't picked up on amendment? That was one of the real concerns -- was our licensees have in the past tended to sort of bundle some of these changes they want to make if they knew a renewal was coming up. That used to be driven very much by fees. Much less now because the amendments and in fact now the renewals are no longer charged separate fees. They're all wrapped under the annual fee now, so there may not be nearly as much of that as we thought there was going to be.

Program management, the pieces of the program that are still in place -- a recheck, make sure that the pieces of the program are still there. Are there any particular changes? If they haven't made any changes, you can go on very quickly.

The equipment and facilities -- have they identified anything different from what we've seen before, what we've looked at before? The environmental -- if there's an environmental assessment that's going to have to be done, they're going to have to kick back out of the light process, because when you get involved in the NEPA and the whole series of things we have to do, that throws you in a whole different space of activity. Thankfully, we don't have very

many of those; and actually, only a couple a year that actually we end up having to do assessments on.

Any previously unreviewed requests or new things that they want to do, if they want to add iodine to what previously had just been unidoses and stuff -- okay. That's going to require a little more look because there's additional pieces of the program. Or if they want to get into seal source therapies, if they want to get into HDRs or other things, or if they're going to add a Gamma Knife, it seems rather intuitive that we're going to want to take a little more look if they're using this opportunity.

Any changes in the control, the management structure -- these days we're finding that more and more people are being bought by more and more people, CBS-Viacom being sort of the latest mega-example, but lots of that going on, and wanting to assure that the right kinds of ownership and control issues, particularly for those who might have the financial assurance. And then if there were any other significant areas that needed a look -- now, a lot of that could be done very, very quickly: click, click, click, check it off, see where the pieces were in the particular process.

We circulated back now several months ago, actually I think back earlier in the summer, a draft policy and guidance directive. I was letting my regions comment on it. I asked Paul to send it out to you folks in the states to look at it. I know that Illinois and Washington at least have sent me some comments, and I very much appreciate that. Perhaps some of the -- others of you

have brought along some comments. If so, we'd very much like to have those because we have not finalized that document yet, although we will need to shortly.

That guidance document was to provide the overall structure for the reviewers to use. We are in hopes that the renewals as well as new actions and things that are coming will follow the 1556 format, and in fact, we're trying to dream up some ways to encourage people to do that. We've already got a little bit of a hint -- and Doug Collins from Region 2 tripped me up to this one -- that there was no real incentive to the consultant's advising a lot of our little licensees to change, because if they did it it would be simpler so they wouldn't get as much money from the licensee to go back through and do the action.

So we're going to have to find a way to change the culture out there, because we want as many of these as possible to come into the new format, take advantage of the new systems.

We have, within the Agency, had a long-standing system of technical assistance where if a unique activity came up, the regional reviewers would get headquarters involved in the decision process. We've now focused that very much in the context of, if you've come up with a new issue, what was it in the 1556 volume that wasn't there and what's the proposal, and the answer coming back in terms of an amendment or an addendum to the 1556 volume, if it applies to other than a very unique circumstance, to try and keep those documents to be living documents.

Another couple of things: all of the seemingly intuitive and not necessarily anything unique -- but to reinforce that if you want to do this quickly and effectively, why don't you walk down the hall and talk to the inspector who went out there? He can probably give you some insights in just a couple of minutes, or she, on what they saw and make it a lot easier to figure out where they are in this process. To try and increase the use of meetings and visits where there are significant activities going on, particularly if we're in a full review process, new activities, can quickly understand what's going on.

A number of different ways to try and simplify communications: e-mail is a wonderful thing. We can take the e-mails, we can docket the e-mails. You can get them into the system very nicely. Wouldn't it be nice to just have electronic submission? It's coming one of these days, but I'm not going to hold my breath. Turning blue isn't really my style.

Trying to limit our request for information to one round, as in reviewer, go through, do the entire review, put it all together in one package, make sure that what you're asking for is really needed, and then go out once and try to make it very clear to the licensee what it is that we're looking for, why it is that we need to have it, so that we only go through this loop once. Another one of the things we discovered was that we were having a wonderful field day with back and forth and back and forth, because -- and what we discovered was in the process we were slowly ratcheting

ourselves along, because we could think of all these wonderful neat questions.

The test now is what about what's in 1556 do we really need to have an order to take this action, as opposed to what other nice thing might you be able to dream up? And then at some point just to cut to the chase and say, All right. Here's a licensed -- this is the way it needs to be and get the agreement and move on, to be able to issue the actions. And you'll say, Well, what's all new in this process? Perhaps nothing is an epiphany of a brand new activity.

But what it is is an attempt to really focus and refocus ourselves on being efficient, moving quicky through the process, communicating clearly with our licensees what we need to have, setting the expectations up front so that what comes in is a lot higher quality, and therefore be able to do this. We're in hopes that instead of having the budget that we had before, which was about .14 FTEs per renewal action, that if we can kick a light review for something on the order of .04 or so, which is just slightly more than what we burn on a typical amendment sort of action -- so it's a little more than that but less than a new action, because conceptually, if you know the licensee is performing well and all you're looking for are changes, why is it that you should spend more resources to do an action than you would to review a brand new application?

How successful am I going to be? I'll tell you in about two years. Questions?

MR. CAMERON: Don, why don't you have a seat, and then we'll have a discussion on this issue?

Kathy, why don't you go ahead?

MS. ALLEN: When we got this draft guidance document, I thought it was pretty interesting. A lot of the stuff that's in here are things that states are doing already without really having written it down. Many states don't go back and forth multiple times with letters. Mostly, we've come about because we wanted to be efficient, so I thought those were some pretty good ideas.

All of us are looking at crunches, financially. We're all looking at better ways to improve service to the customers, which would be the licensees, and better ways to manager our staff and our time. We've got training issues -- it doesn't matter what size state you're from. You don't have unlimited resources. So you want to spend them the best way you can.

Now we're 31 Agreement States. There are 31 different ideas out there. We're all adequate. We're all compatible, but we all have slightly different ways of looking at things. Some of it works great for our states and others -- it may not work well in your state. But what we seem to be missing through some of these meetings was a chance to discuss or come up with ideas, listen to pros and cons of different ways of doing things, and just kind of have a discussion about where you might be headed.

For example, a state may come up with a way of doing a license issue -- sorry -- a renewal or a new amendment or changing expiration dates, and they might have come across some pitfalls that they'd like to share with others that might be considering the same thing. That's what this whole forum is about. It's a great chance to get together and share ideas and share ways of doing things so that we don't all hit the same wall every time we try and reinvent the wheel.

I sent out an e-mail to people to give them a chance to take a look at Don's draft policy and guidance directive -- and I have a few extra copies if anybody needs it -- and asked you to take a look at what you're doing and come forward and have some ideas to share and suggestions. And people have sent me some e-mails and jotted me some ideas down, so if you don't speak I'll poke you. But that's pretty much how we wanted to set this up as more of a discussion type thing.

MR. CAMERON: Okay, great. Thank you, Kathy. And thank you for the thought beforehand in terms of questions that might be relevant to this. And let's go along in the spirit that Kathy laid out for us.

Cheryl, I think you had a question?

MS. ROGERS: Cheryl Rogers, Nebraska.

The old way we used to -- or we still do renewals, if absolutely nothing changes, theoretically, or at least in our procedures, you can do a short form renewal. And the way we do that

is, We want your name and your address and your radiation safety officer, and then the certification. And that's what our standard short form renewal is. The advantage of that, as I see it, is you don't have a bunch of stuff come in that's -- they're still committed to the same procedures.

And so it looks like the change here is you would in fact get a new package of information. And what makes me nervous about that is, being a good little reviewer, I want to see everything that's in it. And so I guess that's my question for Don and Kathy.

MR. COOL: Good question, and it's a mixed answer, quite frankly.

We don't necessarily have exactly the same sort of things in terms of short form. But you can fill it out, you can reference the previous material, and you can -- almost the same way. And if folks choose to do that, we're going to do that very quickly and try to look at that.

What we find ourselves doing is attempting to walk a little bit of a tightrope, because what I would really like to do is do them all very quickly, but I would also like to move them all to the standardized 1556 format. And so I actually find myself trying to encourage the licensee to take the time to look at their program, because they probably haven't looked at it for almost ten years, because most of them have effectively had a ten year license at this

point. Look at what the guidance is. A lot of them have had changes to the regulations.

Part 34 has changed since the time most of them have been reviewed. Part 35, cross some number of fingers, may well be changed before a lot of them have to be done, the new irradiator regs -- and to update and simplify the action simultaneous with that. And so I've got this little balancing act and yes, you're right. Those two are not in exact alignment in terms of their drive on the resources and the need. And one of the big issues is, yes. If they submit me a bunch of new stuff, somebody's going to have to take at least a quick little scan and make sure they didn't sneak something in on us; the old grad student trick of putting the constitution in the middle of the paper to see if the professor reads it.

MR. CAMERON: I wondered how Don got through school. Kathy?

MS. ALLEN: I'm curious. Does any other state to a short form renewal, or do you do -- does every state here look at a complete entire renewal? Does anybody else do an abbreviated renewal?

MR. CAMERON: Yes, sir? And please identify yourself for the transcript, too.

MR. MYERS: Texas right now is in the process of phasing out I think what I interpret is your short form renewal. We used to do a full renewal and then a renewal by letter. If nothing changed

in the program then we'd alternate back and forth. We likewise have extended out the length of our renewal periods, with the intent of eventually eliminating those renewals by letter. So eventually we'll go to all renewals in entirety.

MS. ALLEN: And what time frame is that? Is that five year, or -- it was five years and now you're going to ten, or --

MR. MYERS: No. We went from a five year renewal to a seven year renewal for most licenses. For the real simple ones, pacemakers, things like that, ten year renewals.

MR. CAMERON: Okay. Thank you. Ken?

MR. WANGLER: If by the short form you mean allow them to just incorporate by reference into their renewal application, we do that. They can reference other material they've submitted to us previously.

MS. ALLEN: How many times can they do that? Is it just --

MR. WANGLER: Well, probably indefinitely, as long as it hasn't changed. We do ask that they be specific. If it's part of their operating and emergency procedures, we ask them to give us the section fairly clear so that we understand that what they're referencing is in fact what we're looking at and assuming it to be.

But we allow them to reference previously submitted material.

MR. CAMERON: Okay. Joe?

MR. KLINGER: Cheryl, is there -- do you look at the inspection history on the short form business, because what we're considering is -- we're trying to take a fresh look at this whole process. We've all gone this five year thing -- and resubmit everything in its entirety and all that. And I've always been committed to that, but now I'm trying to be more open-minded.

And I think the licensees get a little frustrated because -- most of them are good, and if they have a good inspection history, it would be nice to reward them in a sense and look at their inspection history. If they've been really good, compliant, et cetera, and nothing has really changed, then we're thinking about going with the short form. And it will save us a lot of hassle. It will same them a lot of problems, and it rewards them for being good operators. And so -- plus it injects more efficiency into our system.

So I'm just curious. Maybe other people ought to take that in mind, because throughout my career I've had so many people say, like after an inspection, Well, tell me something good that we're doing, because you only put down the bad things. And so this would be a way of recognizing good programs and saving them and us some money.

MR. CAMERON: Cheryl, do you want to comment?

MS. ROGERS: Real quick. We do make a decision about whether we're going to send out a short form renewal or the regular renewal. So at that point in time is when we're supposed to look at

it and see if the inspection history is good or bad. And it's very difficult to actually find somebody who doesn't -- who meets that qualification right now, because we have it so tight that virtually nothing can change.

MR. KLINGER: Uh-huh.

MS. ROGERS: But the question, I guess, goes back to Don. It sounds like you guys wait until it comes in to determine whether you're going to do the limited or the comprehensive review? And then it leads me back to that original question of if you have this whole package of information, then you are obligated to look at it.

MR. CAMERON: So is it -- there could be a difference between the short form that you two were talking about and the limited review concept that Don was talking about?

MR. COOL: Yes. There's very much a difference. Yes. We're letting them submit the package. We debated the question of doing a review before and then have it come in.

We concluded that -- because another one of our steps is an administrative review, a quick look by the licensing assistant or one of the reviewers; a quick check off of what's there, what's changed. The very cursory bin it -- that is was more efficient to go ahead and have it come in, have us bin it, because we would need to do that in any case, and be able to toss it in one of the bins than do a review, send it up, come back, and in essence have to warm

back up again because it would have been some period of time, and most of us have memories that don't quite hold that long.

MR. CAMERON: Stan, did you have something you wanted to say?

MR. MARSHALL: No.

MR. CAMERON: Okay, Bill?

MR. MARSHALL: Well, yes, I do. It's a question for Joe. It relates to your thing about waiving the extended review based on a good compliance history.

Let's say a licensee has paid a consultant to come up with a pristine, perfect application that's flawless, but yet there's management disconnect, something that's not even related to the application, not even related to the procedures package, do you draw a line on what -- for instance, if there's management disconnect that has nothing to do with details of an application, why can't you allow a short review with a management disconnect compliance problem, or other things not associated with an application?

MR. KLINGER: Yes. And this is something that we're just considering right now. We're not doing. But I think rather than have them submit an application for renewal, like what Don's talking about, I like what Cheryl's doing. We can make that decision.

We send out notices about four months prior to the expiration date. And at that point, we look at the inspection --

this is something that I think is very easily done -- we look at the inspection history because that's really where the rubber meets the road, is how are they performing out there? Just look at the inspection history. If they're good performers, why hassle them? Just go back to, If you're a good performer, here's an option for you.

And the option would be if not much has changed or essentially nothing has changed, you certify to us that that's the case, and you've got a good inspection history or else we wouldn't be giving you this option, and you certify, sign, and say nothing has essentially changed. You come back to us, we're happy.

Now, if there were management problems then we would be aware of that, so we would be hesitant to offer them a short form like that. It might be some sort of an abridged complete renewal, something focusing on those management problems or something like that. It's still conceptual at this point, but I think it has a lot of potential.

MR. MARSHALL: That's a good answer. That's a loaded question for you. At the time of advising a licensee in Nevada that they're about to come up for renewal, we are looking at things. We are beginning license review at the time we are advising them, at two or four or six months in advance, because if there's a nasty compliance record, we're looking at them six months in advance to even decide if we're going to allow renewal. I mean, we're going to

get serious about it because the shape and form of the renewal advisory is based on several things.

We could get down to two months before renewal with someone with good compliance, allow a short review, and we save a lot of resources.

MR. KLINGER: Sure.

MR. MARSHALL: You can't wait to the very end of the application hitting the desk to decide whether you're going to do short review or not. You have to do it way in advance of that.

MR. CAMERON: Okay. Let's go to Bill, then we'll go down to Jake and across to Aubrey. Bill?

MR. DUNDULIS: Overall I think this has some potential, but I see some back to the future complications.

About 15, 16 years ago, when Rhode Island started doing the first renewals of licenses we'd inherited from NRC, we found many instances of references to documents that had already been renewed several times under NRC that neither the material we received for NRC nor the licensee actually had letter dated 5 March, 1965 any more, and the only people that knew what was in that letter had long since retired. So that's something to be aware of on how many times you can just reference previous submissions.

And then the second thing is even in those cases when somebody did remember what was in that letter, it contained materials or reference to stuff that was either out of date,

supplanted, or was a roster of people, all of whom were dead or retired.

So I think those are the pitfalls that you have to kind of do a reality check, that if documents are included there could be some sort of ability to show that in fact, yes, those documents can be resurrected.

MR. CAMERON: Okay, Don. I see you shaking your head affirmatively. I guess we've tried to -- we've encountered this problem.

MR. KLINGER: Violent agreement.

MR. CAMERON: All right. Okay, Jake?

MR. JACOBI: I had two comments. First is to also agree with what Bill had just said, but that braves the question of if Don finds that people Xerox previous applications and reference people who are dead, why does he think he can go to a short form? Does there seem to be -- if you don't get the right information, if they don't know who's on their staff and they don't look at what they submitted before, they obviously can't know what they're doing.

And that's why we require a complete new application. We got tired of having dead people referenced to safety officers.

The second comment is on Joe's, where he says he looks at compliance history. About ten years ago, we instituted a policy that if people have a great compliance history for the last two inspections, we'd extend their inspection schedule. And we found there are three things that determine a current compliance more than

anything else, and past history is not one of them. The three things that we found were really key was a new radiation safety officer, the existing safety officer having been assigned additional duties, or we have changed our regulations and they didn't know about it. And it had nothing to do with past compliance.

So I would say the only way you're going to have -- can use compliance history for anything is if you know you've got the same RSO, his duties haven't changed, and you haven't had a major regulatory change.

MR. CAMERON: I think those are useful points to consider.

Aubrey?

MR. GODWIN: Just sort of a note to folks -- if you don't come up with an efficient system, there are folks who will help you devise one. There is -- the Legislature, getting tired of some agencies' sitting on license applications for a long period of time, instituted a requirement for all agencies to set time frames to issue their documents. Specifically, you have to set a time frame in which you say you will get the license, permit, whatever it is, out the door. If you don't do it, they take away your money.

We've been in this process a little over a year now. We do a full review -- or full application. We don't do a full review necessarily. And we're able to get them out and meet our time frames. For materials program, most of the time frames are in the 90 to 120 day time frame. Our average out the door time is 27 days.

There are some exceptions. If we had a little redirect of waste site, we have four years unless somebody thinks we've gone crazy. It does vary by the complexity of the license. You are only allowed one round of questions after it's determined to be complete. You can ask all the questions you want to make sure that it's administratively complete, but once it is complete you're only allowed one round of additional questions.

If you do not have adequate answers and you cannot certify its health, then you must deny or issue. Take your choice.

MR. CAMERON: Okay. Kathy, do you want to --

MS. ALLEN: Aubrey, if you get in a poor application, can you deny it outright, or do you go through the review process and do a detailed letter of everything that they're missing?

MR. GODWIN: We first determine if it's administratively complete, and that means did they address all the items on the application. If they did, then we would do a review and send them a series of questions, just like you've probably done all along. We would not go to the extent that we basically become consultants to them.

We'd say, You did not address this issue. You must supply the material to show that you understand, and then they'd have to work it out.

That probably would be an administratively incomplete application if we had to do that, so -- once you raise the question in writing -- and this is something else that's very important --

the questions must be raised in writing to the applicant. Telephone calls do not count. We've had untold staff anguish over the fact that, Well, I called them and told them to send in the information, and they didn't send it in.

Well, we may catch you, so we only had three that didn't make the time frames, and we had to pay $1.20 penalty to the General Fund and $120 back to people who applied. So we've been able to keep it pretty well under control.

But the point is, once you show the question to them in writing, the time stops until you receive their response. Did that answer your question?

MS. ALLEN: Uh-huh.

MR. CAMERON: Okay. Tom?

MR. HILL: We do most all of our renewals, complete applications, complete reviews -- but we do have provisions for, quote, short or light reviews.

And occasionally we do get applications in -- they'll fill in the form, say nothing has changed on all of our procedures. Everything's the same, et cetera. And we can look at that and agree with it.

But we also have a provision in the rules and regulations that if they want to reference any previous submitted documents, to please be specific by date and page and paragraph, if necessary, so that we have some assurance there that they have at

least reviewed what they've submitted to us before and we're not getting any dead RSOs submitted, for example.

MR. CAMERON: Okay. Thanks, Tom.

Kathy, is there some other things that you're looking for?

MS. ALLEN: Well --

MR. CAMERON: Roland. Sorry.

MR. FLETCHER: I just wanted to piggyback on what Aubrey was talking about, because Maryland has instituted -- at least our department, through legislation, has instituted some rather stringent requirements on turnaround times from application to issuance.

But it seems we have a little more leeway in that the clock does not start until we declare that we have received all of the information pertinent to the application. In other words, if there are questions with the initial application, then we must have those questions resolved before the clock stops -- before the clock starts. And we were the ones who determine what would be an adequate amount of time, so we're shooting ourselves in the foot if we cut it too short. And our measure of success is that over a year, we must have at least 90 percent of all the actions that we did within the time frame we predicted.

MR. CAMERON: Okay. Stan?

MR. MARSHALL: Question for anyone. Is your licensing renewal process complicated by a required inspection relative to renewal? Is anyone facing that?

MR. CAMERON: Are you facing that in your state, Stan?

MR. MARSHALL: No. We've pondered it though, relative to certain categories of licensee that have -- if you're on an annual or two or three year cycle with something and you haven't been there in a while, and here you are facing a five year renewal of somebody that's got a questionable recent compliance history, and you're strapped with a situation like Arizona where an application has hit the front door and you've got to get on with it, and in some western states they're a long way from the home office, you can feel like you want to reinspect along with a renewal review --

MR. CAMERON: Any comments on the required reinspection? Terry?

MR. FRAZEE: It's not so much that it's a required inspection, but we do something in our state that probably can only be done because we're a relatively small state, and that is our license reviewers are also inspectors. We also have a compliance staff as well, and so the licensee is being inspected basically every other time by a license -- by the license reviewer, so that when renewal time comes around, the license reviewer has a real good handle on the licensee's facility and compliance history, because they've been really a part of the process. And we feel that's worked out very well.

Going back to something that was said earlier, about ten years ago we did try the one-page, check here if nothing is changed and we renew the license, and we got away from that real fast. And that's primarily because we're real intent into inspection: being there, seeing what's going on. And so it just never sat well with the inspectors to see this one-page certification, which it turns out is just -- I'm not sure we had any dead RSOs listed, but it was that kind of thing, where -- not successful at all.

And we also do a -- most of our license renewals are actually complete applications that we've prepared, and so we're very familiar with what's in the application because it's our application that we're sending out to the licensees. And if they so choose, they review it and sign the bottom line and agree to follow the conditions, and then it makes it much easier for us when it comes back in because it was our application. We already know it's a good application. Much easier than if they submit totally fresh renewal with their own consultant's versions of what they think is right.

MR. CAMERON: Okay. Thanks, Terry.

Richard, and then we'll go to Ed.

MR. RATLIFF: In fact, Terry hit on the question I was going to ask is -- just a show of hands of how many of your people do both licensing and inspections? But because Alice and I were talking a lot.

Our legislature has a unique thing. They've told the state agencies that they want less people in Austin, and we're faced with how we're going to handle a lot of things. And so it's going to be trying times for us.

MR. CAMERON: Is that a historical artifact, that licensing and inspection staffs are separate, or how are decisions reached on combining those two functions? Ed?

MR. BAILEY: We've talked a little bit about the licensee not changing anything, and I'm wondering how many of you are impacted by the license reviewers changing? And over the years that the license has been in existence, there's been a -- maybe not an overt change to the way you interpret and enforce things, but over the seven years or five years or whatever, your standards have oozed over and they're different.

And I don't do licensing, but my perception is there's a lot of that that occurs on our staff, both from staff turnover and simply from just oozing to different requirements over the years.

MR. CAMERON: Thanks, Ed.

Kathy or Don, any comments on that last couple of statements?

MR. COOL: I found the word ooze interesting. I'd like to think that when we changed the regs it was more deliberate than that, but you might actually be right.

I think I would have guessed that the changes in regulations might have had a greater impact than the individual

changes in reviewers. In a lot of cases, we make a more deliberative attempt to not have somebody sort of become too close over a period of time to one set of licensees, so we do some changes. We're more overt about that in some of the bigger programs, some of the fuel facilities where we make sure that different folks are looking at it, just to make sure that the same sort of blind spot doesn't show up multiple times.

MR. CAMERON: Okay. Thank you, Don.

Larry?

MR. CAMPER: I headed up the task group that Don was referring to that went through and prepared the approach that he laid out today, and he mentioned a comment that was subtle but it's very important, and it gets to some of the comments you made in terms of can you ease up what they have to submit and what have you?

Bear in mind that this was part 2 of a process that started with the 1556 series -- the new reg series. And the thing that we did -- just getting at the ooze comment -- we actually went through a deliberate attempt to avoid the ooze in the following sense: we challenged the teams that wrote the 1556 series to make each one of those guidance documents as much risk-informed and performance-oriented as possible.

In other words, putting it differently, we believe that in the past, licensees have submitted information to us for which there wasn't a clear regulatory basis to ask for it. Particular preferences of reviewers, although, well intended, had become very

prescriptive. And so we said, Look. Let's take each guidance document and make it as performance-oriented as possible.

And when we go out this time to the licensees for renewal, we're asking them to look at their program to make sure that it's in fact current, to make sure you're listing an RSO that's alive, for example, and to make sure that you are giving us an application that brings to bear the new guidance, which gives you much more performance flexibility. We wanted to do that and at least get one round on the record that will hopefully be a much more performance-oriented approach.

Now, the team -- we did consider the idea of perhaps going to an abbreviated form, but we felt that so much work had gone into and good effort had gone into the performance-oriented approach, and with the emphasis on risk, that the licensee should take the benefit of that, at least one time around. We can always reassess whether we can go to an abbreviated form at some point in the future.

So it really was part of a two-part approach, and they're very closely married together.

MR. CAMERON: Okay. Thank you, Larry.

Ed, do you have a response to that?

MR. BAILEY: No.

MR. CAMERON: Okay. Joe, did you have something connected, and then we'll come back?

MR. KLINGER: Yes. Just one statement. Instead of ooze, I think it's like the mission creep that they talk about with the military. And that happens to us, because the inspection staff will say, Oh, my God, we're finding all these problems here. So all the license reviewers -- they focus on this area. And then a year later, Oh, my God. We've got problems over here. So we move over here. It's this mission creep.

And so things do change, but still I think this abbreviated concept can still work. I think it has some potential.

MR. CAMERON: Anybody else on mission creep or ooze or whatever we're calling it?

MR. HILL: I was going to second that, because I see it. I see it with staff and with individuals, and as their experiences differ and additional ones -- these changes that occur.

But also, back to Don's comment, we started the first of this year with assigning regions to all of our inspectors, and our inspectors and license reviewers do both. They each have a set of license now that they are responsible for all inspections and all licensing. So our hope is that they will get to know these folks better than they have in the past whenever it was just hit or miss, whoever was the next one in the rotation to the licensing action, and that they will be able to know what the changes are, know how they're coming, and be able to work with them.

And I guess the bottom line is better customer service.

MR. CAMERON: Okay. Thank you, Tom.

Ed, for I think a final comment here?

MR. BAILEY: I want to apologize to this elite group for my lack of vocabulary, but I guess one of the things I'm hearing -- and it's the thing that has come up in our state as we're going through business process reengineering -- is that certain types of licenses -- i.e., the gauges, both mobile and fixed -- the procedures and the requirements are so set in stone that in trying to think out of the box, we also remembered Pearce's admonition to look into the box occasionally.

The suggestion was made, why are we licensing these things at all? At the meeting with Greta Dicus the other night, I brought up would NRC object if we simply took a class of licensees, such as all gauges, and generally licensed them?

Now, you know I don't like general licenses, but take it and simply almost treat it like a registration. Don't change the inspection intervals at all, but cut down on all of this paperwork, which -- we're saying, Hey. Does it do anything?

If you've got a two page set of procedures for mobile gauges, why do we beat ourselves and the applicants up -- and just simply call them all general licenses or come up -- I would prefer to come up with a different name for them, maybe limited licenses or something like that so it doesn't carry the stigma that general license has in my mind.

But I think this is something -- as we simplify all this stuff, we're missing a big opportunity just not to say, Okay. If

you've got one of these, you've got to file these two pages of instructions, and here's your certificate. Go forth and do good.

MR. CAMERON: Okay. Thank you very much, Ed. I think that's a good sort of closing remark for this particular session, and I'd just like to thank Don and Kathy for their help on this. Thank you very much.

And, Seth, could you come up now? We're going to go back to the whole issue of performance-based, which I think circulates around all of these topics that we're talking about. And Seth Coplan from the NRC is going to talk to us about performance-based regulation.

MR. COPLAN: Good morning. I'm Seth Coplan. I'm with the Office of Nuclear Material Safety and Safeguards with NRC. And as you can see, I'm using VuGraphs, which was my backup system here. It turns out that my disk that would have done a nicer job, didn't work, and that's consistent with the way I do a lot of things at this hour of the morning. So I hope you'll bear with me here.

There were -- I'm going to talk about risk-informed and performance-based regulation. There were several interesting talks and discussions on the subject yesterday afternoon, and in fact, they kind of reminded me of a story that I feel compelled to tell. It's an old one. It's stale.

But the story's about a college professor who was lecturing to a physics class, and he'd put an equation up on the blackboard. And he goes to put the next equation up and he says,

Now, of course it's obvious that -- and he stands and he looks at the second equation, looks back at the first equation, and gets this puzzled look on his face, and tells the class, Sit there. Don't go away. Picks up his books, papers, leaves the room. A half hour later he comes back and he's got his jacket off, his tie loose, and collar open, sleeves rolled up. He's covered with sweat and he says, Yes. It is obvious that, and proceeds with the lecture.

I think that there's an element of that that goes with some of the new approaches that people have been talking about for some years now: risk-informed or performance-based regulation. There are aspects of it that seemed very obvious at the time that people started thinking in terms of the shifts, and now we're at a stage generally of looking at, Well, is it as obvious as that after all? And I'm inclined to think that we are eventually going to get to a point where we'll be able to say, Yes. It's obvious. But there's going to be some sweating that goes on in between.

I'm not going to presume to answer all of the questions that were raised yesterday. I hope that I will be able to, during the course of my talk, answer a few of them and give some tools for dealing with the rest of them.

What I'm going to do is take a little bit more of a philosophical perspective than yesterday's talks. I'm going to start with some background on how we got into some of this, and I'm going to talk about risk-informed regulation, what NRC means by that and what we in NMSS have done and are doing in the direction of

moving toward more risk-informed regulatory approaches, and then I'm going to wrap up with a similar but more abbreviated talk about performance-based regulation.

Much of what we're starting to do had its origin with reinventing the government. In fact, quite early during the Clinton Administration, President Clinton issued an executive order -- it was in September of 1993 -- that dealt with regulation and how it was to be reviewed in the Office of Management and Budget when federal agencies issued new regulations. And included in the executive order was a very strong encouragement to do regulation that was focused more on outcomes, less on process, to make sure that new regulations had benefits that were commensurate with the costs, and so on.

Secondly, an aspect of this so-called reinventing was Government Performance and Results Act. And one of the things that that led to was the federal agencies were required to come up with strategic plans for themselves, and these included strategic goals, and the intention was that our budgets and our performance would be judged by how we performed against these goals.

Some of you may recall that several years ago the Nuclear Regulatory Commission went through such a process and one of the issues that the NRC identified as an area that the Commission needed to give some direction on in terms of formulating a plan eventually was something that was called performance-based risk-informed regulation. And the Commission, when it ultimately

formulated the strategic plan, gave some direction to the staff, and this direction included three points that I think are of particular interest.

First, the Commission said that we're not going to be getting more resources in the future. We're going to have to make do with what we've got or less. And in order to do our job right, we need to be sure that we are focusing our resources and licensee resources where the risk really is.

Secondly, the Commission told the materials program and NMSS more generally that we want you to look at your regulations and to look for opportunities where, with minimal additional resources you can make transitions to more performance-based or risk-informed approaches. Thirdly, they told us that -- oh. And in doing this, before you get too far into it, We want you to develop a framework for applying risk assessment in regulation analogous to the one that the reactor part of the Agency had developed in 1995. And I'll explain in a few more slides what was meant by a framework in that context.

The first step for NRC, in going through some of the sweating stage, was, What do we mean by some of the terms that we've been throwing around, like risk-informed, performance-based? And the Commission spent pretty close to a year developing a white paper -- and I think a number of you have copies of it -- that addresses, What do these terms mean? How do we regulate now? What kind of transition are we planning to make, and so on.

For those of you that don't have copies, it's available on the NRC web page.

The first thing that the Commission did in the white paper was it defined risk. Well, people usually think of risk, at least a lot of people usually think of risk, as a hazard times a probability. And in fact, as I think people in this audience are well aware, there's a very broad range of kinds of activities that are regulated in the materials area, and that particular definition is not necessarily applicable for all of them. And those who are risk professionals some time ago realized that risk is more complicated than that, and they've tended to work with something that's called the risk triplet.

Risk triplet basically addresses three questions: what can go wrong; how likely is it; and what are the consequences? The first question is addressed in terms of scenarios, sequences of things that can happen that can lead to something going wrong. The second question, how likely is it, well, that's the probability question. And finally, what are the consequences of the sequence?

Risk assessment is -- oh. And I should mention that the more classic way of looking at risk as probability times consequence is certainly encompassed in that, but so are a lot of other ways of looking at risk. Then the Commission defined risk assessment. Risk assessment is defined simply as being a systematic method for addressing the risk triplet as it relates to the performance of the particular system.

Automatically, I think a lot of people would start thinking in terms of fault trees, event trees, complicated mathematical analyses, and so forth. Yes, that's part of it, but not all of it. And I think very important for the materials area is that actuarial analyses of data are a form of risk assessment, and perhaps a very powerful tool in the materials area.

And insofar as which is a better way to go, risk assessment people think of things like fault tree and event tree analysis as being a sort of predictive way of doing an analysis. That's what you do when you don't have data or when your data are very limited. When you really have data and you can start doing statistical analyses of the data, that's better. It's more solid, so that in fact, we may have quite a bit to work with in the materials area.

But it's important to get the data set up right, make sure that we're getting the right data, which I think was the point of one of the talks yesterday. It's certainly an area that bears more thinking.

A risk insight was defined by the Commission in this paper as results or findings that come from risk assessments. Well, by now you ought to be getting the idea that there's a lot of flexibility that's built into all of these definitions. And so a risk insight could be something like what's the probability of an annual public exposure of 100 millirem from all radiography use in the United States, or in Texas, or any of a whole variety of things?

Just something that comes out of a risk assessment -- an insight into a system and how it performs in a risk sense is a risk insight.

And taking all that together, the Commission said, All right. What's a risk-informed regulatory approach? Well, a risk-informed regulatory approach is simply an approach that uses such insights in making regulatory decisions together with other things. And that's largely because these quantitative analyses, for a variety of reasons, have uncertainties that are associated with them that may leave you with a certain kind of an uncomfortable feeling about drawing firm conclusions.

So the idea is that you use these insights as part of your decision making. Don't rely on them entirely.

In NMSS, it turns out we've been using risk assessment for quite a long period of time. In the waste disposal area, high level waste and low level waste, we've been doing something called performance assessment, which has a pedigree that's almost as old as probabilistic risk assessment. We started doing all that stuff back in the middle 1970s. And in fact, some of the techniques that are used as part of reactor PRA at this point were originally developed as part of high level waste performance assessment. So we've had a fair amount of experience in that one area.

Another area -- about the same time -- I guess it was the late '70s -- we did transportation modal study and generic environmental impact statement on different modes of transportation, and there were probabilistic analyses that went into both of those.

More recently, for the large fuel cycle facilities, we've started to work an approach into regulation that evolved from the chemical process industry as a result of the Bhopal accident.

And more recently than that, we tried to apply PRA to the Gamma Knife, basically to see what would come out of it. And, well, we found a couple of important things. One, that human error was going to be the biggest source of problem and two, that fault tree, event tree methodology is not a very effective tool for dealing with that, and we knew that beforehand.

We've done some things recently. We did establish the framework that the Commission asked us to do. There's a Commission paper that's available on the web that describes this framework, and in essence, what it does is it just provides a logical framework to be sure that when we start thinking about changing a regulation to make it -- or a regulatory approach really, to make it more risk-informed, that we do it in a way where we make sure that we're cognizant of all of the benefits, all of the reasons that we have the current regulation in place; that we look at what's to be gained, if anything -- and there may not be anything -- by going to a more risk-informed approach.

And then taking those two things and doing a synthesis, which may result in very substantial things or it could result in deciding to stay pretty much where we are. But it would be something to look at, area by area, activity by activity.

We also recently published the "Nuclear Byproduct Material Risk Review" for comment; the stack of new regs that's floating around now for comment. And most recently, we established a task force within the Agency that is to -- or within the office that is to be the focal point for the effort of implementing this so-called framework for NMSS work.

What's the task force going to do? We're starting with two things in parallel here: some very early stakeholder interactions of which, in a sense, this is the first one. In other words, we're trying to let the people who are going to be affected, who need to be involved in how this develops, know from the beginning what we're doing, why we're doing it, looking for ways that we can most effectively get input as to problems, how to address such problems, and so on. And clearly, the Agreement States as co-regulators are going to be one of the most important stakeholders involved in this.

In parallel with that, I mentioned that we're going to have to look activity by activity at changes that we might make. Well, the first step then for us is going to be let's identify what's there and try to get some crude idea anyway of, is this something where there's any real promise of making it more risk-informed and getting a benefit?

Getting a little more specific, what we're going to be doing is, having identified such areas, haven taken a coarse screen or put things through a coarse screen, for the things that are left

we're going to want to work with stakeholders through meetings, workshops -- we're going to be setting up a website -- to look at what's the regulatory benefit of a change? What kind of resources are involved: our resources, your resources, licensee resources. What risk metrics should be used? Remember, there's a pretty wide variety of things that can be called a risk metric here. And what are the appropriate ones for a particular area? What kind of goals should be established?

And mention there that when we got comments on the direction setting issue in connection with the Commission's strategic planning initiative, the Agreement States offered some comments. And among them was if you're going to go this way, you ought to develop a safety goal. And the Commission, in giving us direction on implementing this framework, told us, Develop safety goals. So -- and we think it's going to be goals, not a goal, in the materials area.

But that's got to be part of the process and it's got to be done, we think, in a very open, very public way, with lots of involvement from all the stakeholders that would be affected.

And finally, how do we use what risk insights we have in this -- in doing regulation? The range, when you start to think about it, is pretty wide. You can do things like, you can state what the goal is and say, Licensee, you do the analysis and show us how you're going to meet the goal. Or you can go to the other extreme and you can do all of the analyses, do everything connected

with the risk insights, and develop some very, very prescriptive regulations that enable the licensees to comply, but at least they keep the licensee focused on the areas where the risk is.

So part of this process is going to have to be the sorting out which areas are the ones where you give broad licensee flexibility, which areas do you want to continue to be prescriptive, which areas do you want to leave alone?

At this point, I guess I should mention too that we expect this to be a pretty long process. We're figuring that starting now, we will probably be looking at being finished some time on the order of 2003-2004. There's a lot of effort that's going to have to go into that.

Okay. Turning to performance-based approach, when -- just let me digress for a second here -- when the Commission first looked at risk-informed performance-based, they had a comma between them, the implication being that they went together like hand in glove. One of the things that we've come to appreciate is that it's not that way. It's risk-informed and performance-based, or risk-informed or performance-based. They're somewhat different.

By a performance-based approach, the Commission means a regulatory approach that establishes performance and results as the primary basis for making regulatory decisions. That's pretty broad and it's certainly a theme that went through the talks yesterday that were addressed to performance-based inspections. But the Commission went on from there and it has something really a little

bit more specific in mind for performance-based regulation. And to identify what the additional specificity is, they decided it's got to have four attributes.

First of all, you need to have measurable or calculable parameters that can be used to monitor performance. That means that you're doing something quantitative but again, you have a lot of choice about what the quantitative measures are you may be looking at. I was thinking, for example, in the discussion a little bit earlier this morning that you can look at things like simply the number of violations that a licensee has had during inspections as a measure of performance that could then be used in turn to decide whether or not you're going to use a short form for renewals or not.

So what you pick as the measurable or monitorable parameter is pretty flexible. You have to have objective criteria that you can use to assess performance, and here, you have to have some way of picking these criteria. It could be done using risk insights and then you've definitely combined risk-informed and performance-based. On the other hand, you may base the criteria on some of the much older ways of thinking about the problem; a more deterministic approach, whatever.

Finally -- not finally but next -- and in a way it is one of the more essential points of all this -- is licensing flexibility. The point of this is, you're looking at how the licensee performs. The licensee determines how they are going to accomplish that. You don't tell them how. You don't give them

criteria for their process. They determine the process. And when this system works best, there are incentives set up in it so that the licensee is encouraged to improve their performance. In other words, that they will use the flexibility that they've got to tend to do better in the way they perform than they might otherwise do.

Finally, this is an approach where you don't want to have a failure to meet your criteria result in an immediate safety concern; in other words, to take an example from the other side of NRC, where I think it's most obvious, you don't want to do performance-based regulation where you're counting the number of core meltdowns or something like that of reactors. You want to be doing this at a level where you're not getting a threat to safety if criteria aren't met.

We're at a pretty early stage at NRC in thinking through issues on performance-based regulation. So I'm going to stop here, and I'll be happy to try to deal with any questions.

MR. CAMERON: Okay. We're going to go to Ed Bailey first.

MR. BAILEY: Somebody complained to me last night that the meeting so far had been dull and non-controversial. When you put up your definition of risk, you left out one component that a sister federal agency of yours, staffed primarily by political scientists and sociologists, always include in that equation, and that's called public outrage. And it's an additive factor, as I remember the equation. You take your equation plus public outrage.

And my experience, which is limited, has been that most often in things nuclear, that probably has a hell of a lot more to do with the outcome than the probability of something occurring or the consequence of it occurring.

You mentioned two early efforts to look at risk assessment or risk insight, whatever the new buzz words are. You pointed out low level waste and shipping cast. Now, I don't know of anybody that has been terribly successful in opening a new low level waste site. The risk from one is pretty darn small, but the public outrage factor totally overwhelms that other factor in the equation.

Another one you pointed out was shipping cast. Having had my staff drive along beside some spent fuel shipments all the way across the state -- again, public outrage was the real determining factor. People didn't care if they were safe. They didn't care if your mathematical equations said they were safe. You hadn't taken into account the public outrage factor, and I -- all of this sounds good to people who are science based, but it doesn't sell in the community. And how can we get away from that?

We're going to have some meetings in San Francisco, and I suspect that a presentation like this will give you -- about 90 percent of the audience are just going to say, Oh, well. We don't care. So how are you going to address that in regulations, and how are you going to factor that in in all of this risk-informed, and who are you informing of the risk, and how effective are you going to be in communicating that to the general public?

There was a question there, wasn't it, after the sermon?

MR. COPLAN: I wish I'd written them all down. They're good questions. Let me start by taking the broader part of the sermon, as you called it.

I think it's, in some ways, just a matter of how you slice the problem. We're not oblivious to what -- I guess it's EPA that's thinking about that. When you're in this business, I mean the business that you folks are in, there are two sides to this. There's one, assessing the risk, knowing what it is, and secondly, there's how are you going to manage it? How do you regulate around what you know about the risk? And at least at NRC, we think about the first part of it as, Well, the risk assessment is this what can go wrong, how likely, and how bad?

Now, what you do with that information after you've got it is a whole different thing. Then you get into the risk management side of things.

And on the risk management side of things, first thing is -- you couched the question, Ed, in terms of who are you informing? Well, when we use the term risk-informed, we're thinking of informing -- we're thinking of it as a risk-informed process or the approach. The process or approach is what's informed. But getting to what I think was the intent of the question, we have got to find ways of working with the public who have the dread and so on for ways to put some of these concepts in place. And I've got to say to me, there are no obvious ways to do that.

One thing that's clear to me, from having sat in on one of the enhanced participatory meetings -- in fact, it was the one in San Francisco -- is that people are so far apart on these issues. You have licensees and industrial folks on one end that want to just face it from the standpoint of, This is the technical reality of the situation. We've got a business to run and you guys are responsible for looking out for us to be able to do our business and for customers to get products at good prices and so forth. And then at the other end you've got the folks that are so scared of some of this stuff that that logic doesn't apply, and that's where Chip comes in.

MR. CAMERON: Where logic doesn't apply.

MR. COPLAN: Yes. Dealing with trying to create situations in which you can somehow get constructive approaches out of that kind of attention. And not obvious how you do it.

MR. LOHAUS: Ed has raised a very important and key question, and what Seth is talking about is one part of a much larger set of change initiatives -- I'll use that term -- that we're undergoing at NRC. And one of the points that Seth had identified is to define the goals. And we're wrestling with defining what you may want to call top level goals in terms of where you want to see -- what are the major areas of focus of the program in terms of what we want to accomplish?

And when you look at the different areas -- and I'll tell you what these goals are -- but when you look at the different

areas, what you look at is not only defining the goal but also defining what you'd call a vector. And that is where should you be heading with respect to that goal? Should you be doing less in this area or should you be doing more? And when you look at those four top goals -- the first one is protect public health and safety and the environment -- when you hear these, they're basic common sense kinds of things. That's the first one.

The second is reducing unnecessary regulatory burden. It's really the question of trying to optimize what we're doing from a regulatory standpoint to achieve the greatest level of protection and providing a minimum burden on the regulated community. The third is to improve efficiency and effectiveness. And the fourth is public confidence, which comes to the point that Ed raised.

And when you look at a particular area, for example, if we take the waste area, you may find that when you rank the goals, protecting public health and safety and environment certainly comes out as first, but what may come out as second in the waste area is public confidence, because without the public confidence, there's a significant impact and effect that that has, and you really need to improve public confidence in that area. And the vector is, we ought to be heading in the direction of trying to do more to improve understanding: what are the relative risks that are involved in that area, and try to do more to improve public confidence.

But when you look at this whole program planning budgeting process, the Government Performance Results Act, these are

the kinds of things we're going through in trying to define the goals, define the vector -- where should we be heading in that direction -- defining strategies to achieve those goals, and then the various tools that we would use in achieving those top level goals -- and that's where I thought starting to share this information and getting this out -- and a number of you have participated in some of the stakeholder meetings. A number of you have looked at a number of the documents that we provided.

But this is an area of change that we're going through, and although individual states are going through similar types of change, everybody's at sort of a different level in this process. But I think it's important to get this out and talk about it and have some dialog on that.

MR. CAMERON: Unfortunately, we're way over time so we're going to have to limit comments now. But maybe one thing to think about is, is it worthwhile to have a more -- for the NRC to sponsor a more expanded session on this issue with perhaps a more systematic agenda? I don't know.

Jake, do you have a comment?

MR. JACOBI: I just had two questions. One, I was wondering is how effective NMED has been in looking at risks associated with their licenses? And the other one is a new reg that I looked at the other day which talked about perception of risks, both normal condition and off-normal. And I noticed for a number of modes it came out that they felt they were safer when they were

off-normal. And I was facetiously going to say, Well, how do you indicate and regulate this? Do you tell people to start screwing up so it's safer?

But as I thought about it, the real question is, why is it perceived to be safer for these modes in the off-normal conditions than in the typical operating conditions? And that's something I think we need to look at as you go into the risk evaluation.

MR. CAMERON: Okay. Thank you, Jake. And let's go to Ed.

MR. BAILEY: Paul, I guess I had to respond to when you did that ranking of those four things. I would say that we have been so successful on the protecting human health and the environment -- we have been totally, in my opinion, a dismal failure in communicating to the public and building that confidence that in almost all of our operations, if we really looked at it, that protecting human health and the environment can be number four. We're already doing that. And in getting the word out to the public or building that confidence, it would almost be number one in each of those -- any kind of process you look at.

And I'm not particularly liberal or social scientist or anything, but this seems to be the real area where this organization and all are really lacking. And I would encourage NRC, even though I don't generally favor the way EPA does things, to look a little

bit more at that aspect of it and maybe improve it. The safety record's pretty darn good.

MR. CAMERON: Okay. We have a recommendation that the NRC should carry forward from this a risk -- some sort of a forum on risk communication to address some of the outrage factors. And I guess let's get to the Part 35, people.

Larry, do you have one quick thing?

MR. CAMPER: I think there's something -- to pick up on what Ed was saying -- he makes a very good point in terms of the perceptions of risk in the public, and one of the things that troubles us very much today in the Division of Waste Management, the commissioning arena in particular, is the question of finality. We have this ongoing debate of 25 millirem and the licensing termination rule, 15 millirem and 4 millirem for drinking water with EPA. Mr. Chairman has gone on record as saying that the -- in a letter back to the Congressional Oversight Committee that Congress really ought to get involved and resolve that.

And it troubles me immensely in terms of the public perception of risk and concerns about risk where the EPA, for example, gets up in public meetings -- we had a meeting recently in New England which Carl Paperiello participated in. The representative from EPA made the statement that 25 millirem is not protective of public health and safety. Now, the public looks at this and they frankly don't know what to believe.

We had a workshop recently where we were discussing the 25 millirem decommissioning standard and a lady was there representing the environmental concerns. And she basically pointed her finger at me at the end and said, You know, NRC, you should be ashamed of yourself. EPA is at 15 millirem. Some of the states are moving towards 15 millirem. There's even talk of ten millirem. And you really ought to be ashamed of yourself for thinking 25 millirem because obviously 15 millirem is less than 25 millirem.

So getting back to your point, Ed, it seems to me that there is value in talking about within the Organization of Agreement States the pros and cons, the merits, and what have you of this 15 and 25 millirem debate, and helping to put that on the table as another data point for consideration in this debate. Now, I don't know now that's going to ultimately play itself out, but I am for one very concerned about the amount of resources and time and effort that we all put into this debate and how it's going to play out in industry, and I'm extremely concerned about what it means to the public.

And I don't think it does a thing to help their confidence and it's got to be resolved and there's got to be finality on this issue. But of course there's a whole bunch of modeling considerations that go into that as well. But I think the public confidence and taking some of that public outrage out could be served if we could come to some kind of agreement on that debate.

MR. CAMERON: Okay. Thanks for that perspective, Larry.

We're going to jump into Part 35 at this point, and we have David Walter and Cathy Haney with us. And, David, are you going to start out for us?

All right. Let's pass that one down to him.

MR. WALTER: Okay. I can guarantee you I won't get us back on time. But I want to give you a quick overview of what's going on here in Part 35.

It's been over two years since the first meeting of the NRC's Part 35 working group and now the draft final rule is out for us to look at. So what's the same as the old rule, what's different, and how is this going to affect us as Agreement States? How will the suggested state regulations Part G reflect what we see in the new Part 35? I want to talk to you about these topics a little bit, because over the last two years I've been involved in the working group process and have tried to incorporate the parallel rulemaking process into the development of the new Part G.

So what is the same? When you read over the new Part G, you'll note that a great deal of the rules are unchanged but there are some others, like survey requirements, leak testing requirements, aerosols and gasses, that are no longer actually in the Part 35 rule but they're still covered in other parts, like Part 20.

And what do we have that's going to be different in this new rule? The layout of the rule is very much changed. It's been organized in such a manner that each type of use is stand alone.

This should make it more user friendly to the first time user. There have been efforts made to simplify and clarify the wording whenever we've been able to do it. Overall, it should be an easier rule to follow and work with.

There's no longer a specific requirement for all medical institutions to have a radiation safety committee. A licensee will be required to establish a radiation safety committee only when they are authorized to have two or more different types of medical use which require a written directive. But when you look at the new rule you'll notice that all the program requirements that were previously in the rule and assigned to the radiation safety committee are still required of the licensee. It's just that the licensee is given the freedom to accomplish these requirements in whatever manner they feel is best.

Although it's thought that most of the larger licensees will probably continue to maintain a committee, many licensees may incorporate the functions of the radiation safety committee into other committees such as general safety.

The NRC has chosen to not require submission of written safety procedures. Rather, it's their intent to review these written procedures only when a problem is found during an inspection that should have been addressed by one of these required procedures. The words quality management program are gone but of course, there's much of the old QMP still there.

But you've got to understand that the requirements that the licensees submit a written QMP for review and that the licensee perform an annual written review of the QMP are gone. This is a good thing in my mind, because those two requirements were the most burdensome for both the licensee and for us states. And they didn't seem, in my mind, to increase radiation safety.

Rules that covers HDRs, PDRs, LDRs, and Gamma knives have been added, and this should allow us to minimize the number of conditions that we have to place on those types of licenses. There's a new reporting requirement that's been added. It states that a licensee is required to report to the NRC when an embryo, fetus, or a nursing infant receives a dose greater than 5 rem. Now, the NRC is quick to point out that this rule does not give approval for doses to the embryo, fetus, or nursing child of up to 5 rem, only that it's this dose which is a point at which you have to notify the NRC.

So let's take a look now at the SSR Part G. What about it will look the same as Part 35 and what will be different? First, let's look at some similarities.

Formatting will be very much the same. This will help us to maintain a flow between the two rules and it will make cross-referencing between our rules and theirs much easier. And much of the rule text will be the same as well, especially if you have a compatibility category C or higher.

So now, what are the major differences? At last year's OAS meeting there was a discussion about Part 35, and during this discussion a number of you commented that specific duties of the authorized user should be detailed in the rules. Currently, the definition of the authorized user includes reference to their required training and experience and the only time that a specific duty is spelled out for the authorized user is in 35.40, where it says that the authorized user must prepare a written directive. 35.27 also says that the licensee shall require a supervised individual to follow the instructions of the supervising authorized user. But there's no reference in that rule to the duties of the supervising authorized user.

35.27 will refer you to 35.11, and when you look at 35.11, it states that an individual may perform licensed duties under the supervision of an authorized user as provided in rule 35.27. Does anybody else see the catch 22 here?

Now, as we know, there's very little, if any, radiation safety supervision provided to a technologist by most diagnostic nuclear medicine physicians. The fact is, if a written directive is not required, there's no reference as to what the duties of the authorized users actually are. If a written directive is not required, the authorized user doesn't even know that a patient has been dosed until the films show up on their desk. So it's the referring physician that's taking on the medical responsibility of

the study and of the patient's radiation exposure and therefore, much of the patient's radiation safety.

To be an authorized user, you must meet specified training and experience requirements in the rule. Now, how many of those referring physicians do you think meet those requirements? And the simple answer is few to none. Does that mean that we have rules that are being broken or we're not enforcing them? I believe the rules should be more specific in regarding the duties of all authorized users. If we expect the authorized user to make the determination that a nuclear medicine study is appropriate, it should be in the rule.

Do we expect the authorized user to prescribe the dose of radio-pharmaceutical to a patient who's going to receive this dose? Now remember, to prescribe the dose, the doctor at least needs to know that the patient exists. And if we do expect that, we need to put it in the rule. And for those who say it's the practice of medicine and you guys stay out of the practice of medicine, I say, You're darn right it's the practice of medicine. It's also the radiation safety of a patient, and that's my job, and you can't separate those two.

SR6 intends to have Part G require the submission of written procedures for review by the state agencies. As simply stated, I'd rather determine the adequacy of a written procedure before a problem occurs. If you wait until after the problem occurs, you're probably going to find out that no one knew that

there was a written procedure or it was never even done in the first place. That means that each person would have been left to their own in handling any given situation. And I don't believe that this is in the best radiation safety interests of patients or occupational workers.

What's more, the review and discussion of a written procedure opens the lines of communication between the licensee or prospective licensee and the state agency and allows the building of a rapport between these two and can increase the confidence in both parties in the resultant radiation safety program.

As many of you are aware, the patient release rule subject is a very difficult one. On the one hand, you've got a possibly small increase in exposure to the general public with a tradeoff of lower medical costs and better patient morale. On the other hand, you've muddied the radiation safety aspects of unsealed source therapies by placing radiation safety into the hands of and at best minimally trained patient and their family and led to increased costs to state agencies who have no choice but to respond to landfill alarms and deal with the resultant waste.

The heart of this matter is whether or not the training given to the patient and their family is adequate and effective. If it is and the patient truly understands why and follows through on how to maintain exposures to others' ALARA and how to minimize the waste problem, then this rule will work. If not, we end up with unnecessary doses to the public and increased landfill alarms. And

judging from the increases in landfill alarms over the last few years, it seems obvious that at least some licensees are not providing adequate ALARA training or the patients aren't taking this training seriously.

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

We're also trying to come up with some text that gives the regulating agency the ability to hold the licensees responsible for confirmed excessive exposures and releases of radioactivity. In other words, the licensee will have to handle the resultant waste and might even be held fiscally responsible for the agency's costs associated to responding to an incident.

As you probably heard, the NRC has essentially reverted back to the old training and experience requirements for everything except the use of radio-pharmaceuticals in therapy. Here, they've increased the required total number of hours of training from 80 to 700 hours; that is for everything except the oral administration of Iodine 131.

The new Part 35 is supposed to be a risk based rule, and for that reason I applaud the increase in training hours, because I believe that the therapeutic use of unsealed source radioactive material is about as high a risk as you get in these rules. However, I totally disagree with the idea and decision to maintain the training and experience for oral I-131 to 80 total hours and three supervised cases.

Of all the current unsealed source therapies, I-131 poses the greatest radiation risk to ancillary personnel and the general public, and compared to other therapies, those involving I-131 have proven to be the most likely to have a misadministration. And when an I-131 misadministration occurs, it has the potential of having a considerable radiation effect both on the patient and the public.

It only takes about 30 micro curies of iodine to deliver a 50 rad dose to the thyroid, and it exposes many other organs to unnecessary radiation doses compared to the limited exposure of a sealed source. And beyond that, it can cause unnecessary exposures to the public from a variety of routes, both directly from exposure to the patient and indirectly by exposure to contamination caused by the patient.

For these reasons, the new Part G will not recommend having lesser training requirements for those authorized users who wish to use only oral I-131 for therapy. The committee will recommend that they be required to have the same training and

experience as anyone else who wishes to use unsealed source therapy, and that means 700 hours.

Now, let's take a look at the training and experience for technologists. One of the things I wanted to have included in the revised Part 35 was a set of minimum training and experience criteria for technologists. They're the ones who actually handle the isotopes and dose the patients 99 percent of the time, yet there's no minimum training and experience requirements in the rules. Well, unfortunately, the NRC decided not to include any such criteria in the new rule.

During the SR6 committee meeting that we had this past February, we heard from the Society of Nuclear Medicine. They're trying to push a bill through Congress that would essentially require all states to adopt minimum standards for nuclear medicine technologists. These standards, from what I can gather, would essentially mean that the individual must be a certified NMT before they can actually go in and do the work.

To begin with, I don't believe they got a chance to get this through Congress, and if they do get it through Congress, it's not going to stand up in the courts, in my opinion. Therefore, SR6 is going to try and come up with a set of minimum training and experience criteria for nuclear medicine and therapy techs. These requirements will only cover radiation safety topics because that's our only area of purview.

We tabled this subject in February to see what comes of SNM's push for this new law, but if nothing has happened soon, I wanted to have something ready to go into the new rule. We've already gotten minimum training and experience requirement information from many of the states who currently require licensure or registration of their technologists, and we plan to use that information in drafting our rule text.

Now obviously, this text will not be as restrictive as some of the current state requirements. But for those states who don't have any current requirements, it's a good starting point.

Now, let's talk about one of my favorite rules to bash. Anyone who was at the working group meetings -- and you can definitely ask Cathy this -- says that I don't agree with this reporting rule at all. The supposed reason for such a rule was to keep licensees from having to run a pregnancy test on every woman of childbearing age prior to even a diagnostic scan being performed. Well, I've spoken with a few of my authorized users and medical physicists in my state and they've told me that it would be very rare that a diagnostic nuclear medicine study would result in a dose to an embryo-fetus that would exceed 500 millirem.

All of my training has told me that the embryo-fetus is the most radio-sensitive time in an individual's life and that the infant is the second most radio-sensitive. And whatever the NRC says, I see this as a de facto approval to allow embryo-fetuses and nursing children to receive up to 50 times more exposure than the

rest of the general public and ten times more exposure than a person would normally get from an individual who's been released as a patient.

After a discussion among the SR6 committee members, it was decided that the revised Part G will not include such a reporting requirement. We will instead allow Part C exposure limits and reporting requirements to take precedent.

Now, let's turn to the parallel rulemaking process. How is it supposed to work and how has it worked with Part 35? Parallel rulemaking is supposed to give the states early and substantive involvement in the process of writing or rewriting a rule. This involvement should include continuous discussion with an input from the states, so as the rule is forming the states should be able to lend their experience and expertise in trying to make this the best possible rule.

Parallel rulemaking does not mean that the comparable suggested state regulation will be completed at the same time as the NRC's rule. But it should give the SR committee a head start on writing the new SSR because the members should have been kept up to date on the progress of the rule and should have been able to start discussing ideas of what they want to do for a revision of their SSR.

Now, how has the parallel rulemaking process worked during this rewrite of Part 35? If you saw my poster presentation at the Louisville meeting, you know that I think the process has

been pretty helpful. For the process to work its best though, the states should be represented on the rule writing teams. The Part 5 working group included Marcia Howard from Ohio as well as myself, and Tom Hill was representing the Agreement States on the steering group. This seemed to work well, and my being on the SR6 committee also helped a great deal.

Because of that, for any major rule revision or new rule writing, I strongly urge the primary SR committee that's affected by the change to have a member on the NRC working group, and the Agreement States need to have representation on the steering group.

Having these state representatives on the working and steering groups provided for a better line of communication to the Agreement States. The representatives can relate specific areas of concern about the draft rule to the Agreement States and then the Agreement States' comments and concerns and suggestions about the rule can be related in person to the working groups. It also gave me the ability to give regular updates to my SR committee members, and that allowed them to understand the direction the NRC rule was taking and start formulating ideas for the SSR text.

As I mentioned earlier, our committee met in February of this year, and I think we were all pleasantly surprised at the amount of work we got done in the amount of time that we had. I attribute much of this to the members being informed of the NRC drafts so we didn't have to waste time bringing everyone up to date.

In closing, I don't think that the new Part 35 is a perfect rule. Most of us will disagree with some parts of it. I do believe that the revised Part 35 is now a more performance-based rule that sets the minimum standards and lets the licensee decide how they will meet those standards. But to a lesser extent, it's a more risk based rule that lessens the regulations on lower risk uses while maintaining higher radiation safety restrictions for the higher risk uses.

Part G will parallel Part 35 for the most part, but in the areas I've discussed today, it will be divergent. SR6 is in the process of compiling the first draft of the Part G revision right now. I hope that we'll have the draft out soon for peer review, and it's my intention to include all of the state program directors in the peer group. And that means that I expect each and every one of you to give me comments. Okay? I don't care if it's con or pro. Preferably pro, but whichever way, I need comments.

I want to thank you for allowing me to talk to you today.

MR. CAMERON: Okay. Thank you very much, David. And regardless of your position on the issues, that was a very useful analytical breakdown for everybody to try to help understand this.

We're going to take a break until 10:30 because I know that you see people coming in with coffee. And so go and take a break and then we're going to come back and Cathy will talk to us.

[Recess.]

MR. CAMERON: You heard David's analysis of what's going on with Part 35. Cathy Haney from the NRC has been involved in this longer than she probably has wanted to be -- is going to tell us where we are on this.

And, Cathy, I don't know if you're going to spend much time on it, but I think the Agreement States are probably going to be curious about what this means -- the rule might mean for them in terms of adequacy and compatibility too, so you may anticipate some questions on that. But why don't you go ahead?

MS. HANEY: Thanks, Chip. Okay. Good morning. What I'd like to cover today is just an update on the rulemaking. Since we did a presentation at last year's Agreement States meeting, I want to focus on what's changed since last year rather than go into some of the details on the rule, but if you'd like me to go into some of the more detailed issues I can do that.

I'll give you a little information about where we are with the Commission right now as far as where the SECY paper and the draft final rule language is and what we needed to provide to them. I'll also tell you some about the major areas for consideration. Some of this is a little bit redundant with what Dave has already spoken about, so I'll be able to breeze through that a little bit quicker and tell you our projected schedule and then the implementation issues that we see associated with the rule.

As far as an update on the rulemaking activity since we last spoke, in December of '98 the comment period closed on the

rule. As a result of the recommendations from the Organization of Agreement States as well as some of the public comments that we received, we went back to the Commission, said we'd like to extend the comment period for an extra 30 days. Would that be agreeable? They did approve it, so the comment period was extended and it went into December.

In February of 1999, we met with some representatives from the training organizations -- the board, to focus in a little bit -- really to focus on implementation issues associated with what we were proposing in the training and experience areas. We also had some meetings with the ACMUI, which is the Advisory Committee on Medical Uses of Isotopes, and then in the May-July time frame we put a package into Office of Review and Concurrence. Just a couple of weeks ago, in August, the paper did go to the Commission, and the next milestone that we're looking forward to is an October 21 Commission briefing where we'll discuss with the Commission directly some of the specifics of the rule language.

As I said, we did forward the draft final rule language to the Commission under SECY-99-201. It was August 3. You do have a copy. The next view graph will tell you where it's located on the NRC website if you'd like to view the document. It's about 4-1/2 inches thick, so I think we're close to 1,000 pages. So I didn't bring copies to hand out today to everyone because I thought you're not going to take it back with you anyway.

Basically what that does is it gives the Commission the draft final rule language. It's the entire -- and it's presented under a draft Federal Register notice, but we didn't put all the boilerplate into the Federal Register notice. There's a section where we go through the public comments on the rule and what our responses would be to the public comments. There's also a comparison of the current rule to the draft final rule.

This is something that we typically do not need to put into a Federal Register notice, but we were trying to be user friendly, and if I was a physicist out on the field I wouldn't really care what the difference was between the proposed and the final rule. I would really want to know what's different from what I'm doing today as to what I have to do when the rule goes into effect. So that's why that section has been put in there.

We asked the Commission approval to go ahead with finalizing the package and then we also asked the Commission to give us permission to go ahead with beginning the notification process to telling specialty boards that we would start to recognize them. And I'm just going to let that topic sit there for right now, because I'll get into that a little bit more in depth when I get to the discussion on the training and experience.

As I said, you have copies of my view graphs. These are the locations for the website for the rulemaking if you do want to take a more detailed look at it.

The major areas for consideration today are the topics I'd like to discuss with you. This is really where the big changes are -- where changes were made since we last spoke.

The need for a formal risk assessment -- if you remember last year this group discussed whether NRC should go ahead with a formal risk assessment or not. We went back -- we considered whether that was needed or not and we decided that, following the idea that we would do a risk-informed rule, we felt that we had enough information and that we could go forward with the information that we had. That information came from many places.

Someone earlier mentioned NMED. We have used NMED to look at different types of incidents. We used previous reports that have been done in the medical area as well as our experience in inspection and enforcement. So we have not gone forward with a formal risk assessment, but we have -- do believe this rule is definitely a risk-informed rule.

As Dave mentioned earlier, the review of procedures prior to license renewal -- we are not going to require licensees to submit detailed procedures to us in support of a license renewal or a license issuance in the medical arena once 35 goes into effect. For example, in a diagnostic nuclear medicine -- let's say a stand-alone clinic. That's an easy one -- what the potential licensee will tell us: name, address, facility diagram, what equipment they're going to have, the training and experience of their authorized user, and their radiation safety officer. And that

would be all that would come into us in support of the license application.

However, if you were setting up like a remote after loader clinic or one of the therapy modalities, then we would be looking for some procedures. Those procedures are indicated in the regulations, but this is the balance between low risk and high risk. In the high risk area, if we felt that it would be needed we would need to see the procedures.

Use of third party accreditation programs was another issue that came up last year. It was really brought to our attention more by the professional organizations, and this was something like the American College of Radiology, where they do -- they're out accrediting programs right now and they're saying that if we accredit a program would it be possible for NRC just to step off and not do an inspection then?

They came in with that. We discussed it at a lot of the public meetings. The draft federal notice basically says, We heard you. This is an idea maybe worth pursuing but we'll do it separate from this rulemaking. Based on conversations I've had with the American College of Radiology, I suspect this issue is going to resurface in the next couple of months again, so we will probably be discussing that with you next year.

Okay. The next five areas I have specific view graphs on, so I'm just going to go ahead and move to those now. The first one is training and experience. This obviously was probably the

biggest issue that we dealt with over the last two years. These are the motherhood sort of statements that you see here. Our requirements would be risk-informed. We would focus on radiation safety. That was number one going into all of our meetings.

The next thing that we came out with is that individuals should complete classroom and laboratory training, supervised work experience, and in some cases, clinical cases. In the clinical cases, this is where you're seeing your use of unsealed byproduct material like the iodines or your 35.300 uses is where we actually specified some cases very similar to what the current rule does. We did not break down the hour requirements.

In the current rule, we have so many hours of didactic training, then we have so many hours of clinical, then we have so many hours of practical. And that breakdown has worked very fine up to now, but as a result of the last 2-1/2 years, we felt that we really would be okay to just go ahead and specify, for example, 700 hours of training, and specify what we want the individuals to know when they come out of that training. This is very similar to what's being done right now for the nuclear pharmacists. So we're really relying on our experience with nuclear pharmacists to say, If it's worked for pharmacists, why shouldn't it also work for authorized users for the physicians?

This has resulted in a lot of questions coming back to us from the different members of the public that have already seen -- have downloaded the rule and said, Well, you said 700 hours.

Do you still want 200 hours of didactic and 500 in the clinic, or is it 50 and 600? And I said what we're saying is that's up to you. You guys decide what you need. The information of what you need to know is in the rule, and whatever hours it takes, whatever that breakdown is, fine. You go with it. Otherwise, we're not going to tell you.

And at the same time, we've also said there's no hidden agenda. It's not like we have this hidden document back in the office that says if you don't have ten hours of this and 20 hours of that, we're not going to approve or recognize your program. So this is really a major change in thinking for how we will be handling the training and experience areas.

We did not go forward with the requirement for an examination in the rule. As a result of all the comments we received during the public comment period, the comments we received from this organization and the comments we received during the February meeting with the specialty boards, we realized that this was probably not where we wanted to be for various reasons. Again, for the sake of time I won't go into the reasons but they are specified in the Federal Register notice.

At one time we were also thinking about approving training programs in lieu of the exam. Again, as a result of significant discussions, we realized we didn't want to be there either. So looking at -- we're not going to have an exam, we're not going to be approving training programs, what assurance does NRC

need to say that someone is properly trained to handle material safely? So it really boiled down to they needed to have a certain number of hours. We needed to specify what those hours were. And also we would revise the precept or statement.

So the preceptor statement is now not just the preceptor saying, Yes, this person got the training. The preceptor statement now is the preceptor saying, The individual received the training and in my opinion the individual is competent to function as an authorized user, as a radiation safety officer, as a medical physicist. So this is a significant increase in burden on the preceptor.

Again, I believe people are starting to realize this based on the number of calls that I'm getting, because they're saying, Cathy, is this what you really mean? And I'm saying, Yes. There will only be one preceptor. It's not like you're going to have a preceptor for the classroom training and a preceptor for the practical training. There's only going to be one person at the end that say, Yes. In my opinion, this person is competent to function as an authorized user or whatever.

Now, I don't have copies -- I mean on Powerpoint presentation of the actual hours, but those of you that do have my handout, if you look at the last two pages there is the actual detailed breakdown of what the training and experience requirements would be. And what you're really looking at is the alternative pathway for the training and experience. This would be if someone

was not board certified by some -- by a board that had been recognized by NRC.

Again, the big difference here, as Dave pointed out, is that we have decreased the hours for 35.290. These would be the people that would be using unsealed material for imaging and localization, where a written directive was not required. Currently NRC requirements are 1,200 hours, so we've gone from 1,200 to 700. For those of you that do remember the proposed rule, we have upped that. The proposed rule went out at 120 hours but based on comments that said that you need to be in a clinical environment to learn how to handle material safely, we felt we should increase those hours.

We increased the hours in 35.390, which is your unsealed material for therapeutic uses. We did leave the use of iodine, the training and experience requirements, pretty much the same as what they are right now in the current rule. There are some little, minor changes, but for the significance here -- the hour amounts are the same. We left them there based on our experience with use of iodines by the endocrinologists. We don't have the record to show that there has been a problem with the uses. Considering that, we felt that we would propose that the requirements stay where they are right now.

And as I said, you can thumb through these: the next page where it goes into the radiation safety officer and some of the therapy modalities. I would point out one thing though, on the view graph where it talks about the training for the radiation safety

officer, it does not list that if the person is an authorized user, they can also be the radiation safety officer. That's one thing that's omitted from this graph.

Let me take a -- not graph, chart. Let me take a second and talk about the board certification process. Under NRC rules, if an individual -- an authorized user or physician presents them self to the hospital and they're certified by one of the boards listed in the rule, all the hospital needs to do is notify NRC that this person is going to be an authorized user. They don't have to do an amendment. We like that philosophy basically and we wanted to continue it, but we also wanted to get away from listing the boards in the rule, because every time a board would change, we would need to revise the rule. And this could become labor-intensive, resource-intensive.

So we have a statement in the rule now that says if an individual is certified by a board, a specialty board that's been recognized by NRC or an Agreement State, then you can kick into that notification process rather than the amendment process. And what that would allow us to do is to recognize boards, put it out on our website, get it out to the public that this is a recognized board, and then the process works real nice after that. But people -- the natural question is, What does it take to get recognized by NRC?

And what we are looking for right now is that the board would send NRC a letter saying that in order to -- basically it's going to say, Dear NRC, in order to sit for our board to become

certified, the individual would need to complete all the training required in the alternative pathway. And that will include that precept or statement. Once they provide that to us, then we would recognize the board, and we would -- process works fine from there.

Because we want the rule to become effective as soon as possible, we would like to start this recognition process early before the rule hits the street, so that on Day one when the rule goes into effect, we already have a list of recognized boards. But in order to do that, we need to go ahead and seek Commission approval to begin that recognition process. So that is one of the items with the implementation issues that I mentioned earlier, and references back to that previous slide.

Medical event reporting -- again, I have a detailed slide in the package that you have that describes exactly where the limits are. I'm not going to go into that level of detail for this presentation. But basically, there are no significant changes. We did try to address two things in the rulemaking. One was patient intervention and the other was wrong treatment site.

To address the wrong treatment site issue, we've put a dose threshold in the rule, so we don't want to hear about anything it hits the 5 rem whole body or the 50 rem organ dose. So if it's something down in the lower levels, you don't need to tell us about it. In order to address patient intervention, we have made the statement that we do not want to hear about any cases that involve

patient intervention unless there is unintended permanent functional damage to an organ or physiological system.

Those words come from our abnormal occurrence policy, and this is really to -- at this point when something would happen, whether or not it was the result of patient intervention, we need to hear about it so that we can make others aware of it and then also to meet our requirement to report to Congress.

And then also there was a minor change in what the licensee needs to do. They no longer need to make the patient aware that they could get a copy of the NRC report. We did -- they still need to tell the patient about it and fill them in on the details, but what we heard from the physician community was that report was scaring the patient; the fact that there was a report filed with NRC. So we have deleted that, but we feel the patient is still going to get the needed information.

Dave touched on this particular topic in his discussion. We have included a reporting requirement in the case of the embryo-fetus or the nursing child. Again, as Dave said and as I've said numerous times, from our standpoint this is a reporting threshold, not a dose limit. And that is stated very clearly in the Federal Register notice on the rule. It helps us -- we have a reporting requirement under the AO criteria that we need to go to Congress with.

We believe that this rule is recognizing that the standard of care, standard of practice, is to test for pregnancy

when needed, so we did not need to put a pregnancy testing requirement into the rule. And as a result of this reporting -- it may result to reevaluation of this particular rule but at this point, we believe only a reporting requirement is needed.

Radiation safety committee -- again, based on -- the comments that we got were really divided. If you are a health physicist, radiation safety officer, the worst thing we could have ever done was to delete the requirement for a radiation safety committee. If you were a hospital administrator or an authorized user, the proposed rule was great. This wasn't one of those things that there were any gray zones on the public comments. It was very black and white.

We went back and considered risk. And really, based on risk, we believed that if the hospital licensee was dealing with the high risk modalities, that they should have a radiation safety committee. If all they had was your diagnostic nuclear medicine department, one room in the basement and that's it, they don't need a committee. But if you're dealing with remote afterloaders, the gamma stereotactic radio-surgery units, you did need a radiation safety committee.

And the rule -- we've dropped a lot of the prescriptive requirements about who has to write the minutes and how frequently they need to be in, but we did maintain the same membership -- specifying the membership.

In the case of a temporary radiation safety officer, I want to go on record as saying the Part 35 group recognizes that RSOs drop dead. And in that case, you can't get a license amendment in quick enough and therefore we made provision for a temporary radiation safety officer. In this case, a licensee can have someone operating as a temporary RSO for up to 60 days a year.

We have had to recognize that there could be more than one temporary radiation safety officer at the facility because for example, if Dave was only qualified for -- was an authorized user for diagnostic nuclear medicine, say 35.200 uses, but yet the facility had 35.600, he could not qualify as the RSO for the 35.600 uses, the therapy uses. So therefore, you would need two temporary RSOs. This isn't the best way to do it, but considering real world what happens, we believe that this is the best way to have gone.

Written directives -- we have deleted the requirement for the quality management program and for NRC to review it. As I said earlier, we are not going to be reviewing procedures in support of the license application. This is one of the procedures we will not be reviewing. 35.40 and 41 contain the regulatory requirements. You still do need a written directive and you still need written procedures for administrations requiring written directives to provide high confidence the patient identity is known and that the administration is in accordance with a written directive.

We believe this gives the licensees a lot more flexibility in how they're setting up their program and their department.

Now, as far as where do we go from here -- as I said in October we have a commission briefing on the draft final rule. We're guessing that it's going to take the Commission about four weeks to get a paper -- the staff requirements memorandum out to us. So that will be about November. I'm also being optimistic that they're going to say, It's a pretty good job. You only need to change maybe these five or ten things as compared to, You need to change these 200 things in the rule. But hopefully they'll say you got the right gist. It's going the right way.

And then from that time, we'll have three months to complete the entire rulemaking package, which puts us into the February 2000 time frame. We will need to go to OMB to get approval for some of the records. OMB has up to 90 days to give us that approval. Now we're into the April time frame. Say give us another month to get it published, which is now May, and it has a six month effective date in it. So realistically, we're looking at December 2000, maybe January 2001 for the rule going into effect. But again, that all assumes that the draft final rule is pretty much where the Commission intended it to be.

As far as implementation issues, I've touched on a couple of these. One is the recognition of the medical specialty boards, which hopefully we'll get started on that as soon as the

Commission gives us the guidance on the draft final rule. We have the guidance document, which is one of the new reg 1556 documents to finish there, and we're working on that right now.

Also, we see that we're going to have to go through some training for our license reviewers and our inspectors, because this is definitely more a performance-based approach toward rulemaking and we want to follow that into the inspection arena also. So we would expect some time next year going out to all our regional offices and doing training sessions with all the staff that would be working in touch by Part 35.

And I think -- and the next two slides are just the backup, so I think I'll turn it back to Chip.

MR. CAMERON: Thank you very much, Cathy.

As all of you know, Cathy and her team were in Los Angeles two years ago when this effort first kicked off, and in New Hampshire last year, and she's described where the rule is today and what the schedule is. And I would go out to all of you to see what remaining concerns are there in the Agreement State community based on what you heard, and obviously we heard about the CRCPD process and there may be questions about what's the relationship between that and where the Commission is going on this.

Ken, are you wanting to start off?

MR. WANGLER: Ken Wangler from North Dakota. I guess my only question is on scheduling.

If you -- let's say that this thing becomes final or implementation goes into effect in December of next year, is there -- then there's a three year allowance for the states to adopt the rule, and how is that double standard going to play out when you have doctors say crossing lines between NRC jurisdiction and into states? What are your thoughts on that?

MS. HANEY: The states do have the three years to implement the rule. The training and experience requirements in the rule have a C designation, and this has been a big discussion with organizations that are doing training, not just for physicians but also for authorized users, such that they're going to have a problem with NRC -- who do you train to NRC requirements or state requirements?

And we've acknowledged that that is an issue but given the fact that we can't dictate to the state -- we can't tell you this is the way it's going to be, nor can you come back to us and say this is the -- I think we have to recognize that there will be a discrepancy there.

MR. WANGLER: What about -- wasn't it on Part 20 where the NRC delayed implementation for the period of time that it took the states to adopt? Which rule was that? Wasn't that Part 20, when all the changes came out for Part 20?

MS. HANEY: Yes. Well, with Part 20 the implementation period was a lot longer and I guess we haven't considered that, to be honest with you. It's something that -- it's worth considering

and maybe doing, but that's the first time I've heard that suggestion.

MR. WANGLER: Okay. Well, that would be one of my thoughts, that the NRC consider a delayed implementation to allow everybody to come on board at the same time. I don't know.

MS. HANEY: Okay.

MR. CAMERON: And, Cathy, I might ask you one question, a process question in terms of comments that the Agreement States are raising at this meeting relative to the Commission briefing. Will there be any documentation of Agreement State concerns for the -- in any way for the Commission to have to consider at that briefing?

MS. HANEY: Yes. I think there are two. One in the Commission paper, the SECY-99-201. There is an attachment there that lists where the SR6 committee differs from the Part 35, and it pretty much -- I think it hits all the topics that Dave said. There might be one or two others. It's very -- it really is where the states differ, so that they'll have that for the Commission briefing.

The other place that they'll hear about it is that in October, we anticipate staff will brief and also the advisory committee will brief the Commission at the same time. And Ruth McBurney is on the advisory committee representing the state interests, so I think if it doesn't come up as -- if these comments don't come up as part of staff's presentation, they definitely can

come up during the ACMUI presentation as part of the state's concerns.

So they will make it to the Commission.

MR. CAMERON: So if the states are expressing concerns today or if they have remaining concerns, they should try to factor that to Ruth --

MS. HANEY: Yes. Or to Dave or to me.

MR. CAMERON: -- and to David in some way?

MS. HANEY: Right.

MR. CAMERON: Okay.

Pearce, do you have a comment?

MR. O'KELLEY: Yes. I think so.

You stated that ACR had approached you about doing away with inspections on facilities that are ACR accredited. I strongly urge you do not consider doing that.

Those of us who have the pleasure of intimately working with ACR in the federal mammography program are very much aware that ACR accreditation does not ensure quality. It does not ensure compliance. And you're looking at an organization that is trying to be able to add an additional marketing tool to their accreditation program, and I think that's their major reason for wanting this. We've seen major problems in facilities that have been accredited by ACR, and the accreditation does not guarantee adequate and safe performance by the facility.

And many times, the accreditation process goes through and that's the end of ACR's involvement, and a lot of that's a paper review. Things in that facility change. The ACR may or may not be aware of those changes. The people that were there originally may or may not be there. I just think it's not sound practice to even consider that.

On another issue, to be overly redundant again, I still don't agree with the 500 MR release criteria. We're seeing a lot of problems under the current release criterias in our state with -- and we're spending a lot of resources agency wide going and dealing with alarms being set off at medical waste incinerators and so forth, and I urge you again to look at the impact on other areas with this ruling.

MR. CAMERON: Okay. Thank you, Pearce.

Don Cool just reminded me relative to Agreement State input to the Commission on the draft final rule that the Organization of Agreement States I guess has a briefing of the Commission the same week that the Part 35 briefing is occurring, and to the extent that there are some uniform state concerns, I suppose that could be incorporated into the OAS briefing.

Bill?

MR. DUNDULIS: Cathy, two parts, both kind of related. On the specialty boards, for lack of a better word, are all of the current roster that's actually coded in the regulations going to be grandfathered or will they have to reapply? And then secondly --

and this is a concern for us primarily in the therapy area -- how are you going to address foreign boards?

It's very common I've found, at least in the east, that a lot of your oncologists and even your therapy physicists will British or Canadian certification. And some of them are included now, but I know there's a couple that we recognize the therapy that are Canadian that are included on your list but that we've done our homework and we know their equivalent. So how are you going to handle the issue of foreign boards, because it's going to be a real issue for therapy?

MS. HANEY: Well, I guess first of all, the boards that are currently listed in our rule will have to reapply. We did not grandfather anyone. Secondly, as far as the foreign boards go, they can go through the same process that the other boards do. All they'll need to do is submit some type of certification to either us or to an Agreement State saying that their requirements would -- in order to sit for their board they need to have the required training.

If we get Commission approval to go ahead and start this process early, we have a letter that we're going to mail out to all the board that are currently recognized, which would catch the Canadian ones. I think they're the only foreign ones that are listed right now.

MR. DUNDULIS: British.

MS. HANEY: Oh, okay. So we would have letters going out to them at least alerting them to the fact that we are changing our regulations and this is the new process if they want to stay recognized. If there are any other boards that anyone here knows about that you want to give us a heads up to, and if you've recognized some that aren't in the rule, if you would like let me know who they are with addresses, we can get the -- also send them this letter to give them early notification.

MR. CAMERON: Okay, Jake?

MR. JACOBI: I think I'm like Pearce and somewhere in here I have a question, and I'll try and frame it. And it relates to the relationships between Part 35 and Part 20.

Now, at one time, if the wrong chemical form of a drug or the wrong isotope or the wrong patients were injected, we at one time required reports, but now we have medical events and we have triggers for all of this. However, in Part 20, all of our licensees are required to document an annual ALARA review. Now, I think we would all agree that if you give the wrong patient an injection of an isotope, it is not as low as reasonably achievable. If you give the wrong drug to the right patient and have to redo an exam, it is not as low as reasonably achievable.

So I guess my question in there is, while they no longer have to report all these diagnostic misadministrations under Part 35, is it possible to have an annual ALARA review if you do not

track how many misadministrations under the old definition that you have given?

MS. HANEY: I guess -- let me try to answer the question. From the standpoint of 35, with the -- 35 is really meant to be the reporting requirements; at what point NRC needs to know about it. So that would be the one point I would like to make.

In the case of the ALARA reviews, the licensees are still required to do the ALARA review. Just because the ALARA requirement has been deleted from Part 20 -- I mean from Part 35, they still have to comply with Part 20. So under 20, I guess what you're getting at is, we've given the licensees flexibility on that ALARA program -- what they look at. What you've said is very true. If they give a radio-pharmaceutical to the wrong person, that is not necessarily ALARA.

And i would say what we need to do is maybe look at some of -- in our guidance documents where we talk about the ALARA program review that they need to do under Part 20, we might want to -- there, we could bullet some things that they might want to consider. At this point, I don't think we want to go into a regulatory forum and say that when they do the ALARA requirement they need to look at these.

MR. CAMERON: Okay, thank you. Ed?

MR. BAILEY: I'm probably going to show my ignorance, but under the embryo-fetus-nursing child limit, your requiring would require a report if it exceeded 5 rem. But wouldn't a minor have to

be -- exposure have to be reported to you at a much lower level if they just happened to be sitting outside a teletherapy room?

MS. HANEY: Yes. So --

MR. BAILEY: So why is there --

MS. HANEY: Why is there a difference?

MR. BAILEY: Yes. We're all having these problems with different limits and trying to remember, and although some of us have excellent memories, they're awfully short at times. And so we -- why can't we harmonize this with just the regular reporting requirement for a minor person?

MS. HANEY: There are a couple of reasons we're not going there right now. One of the reasons is that we do want this to be a reporting level, not a dose limit. And 20 has got your dose limits in it, 35 -- the requirement for embryo-fetus is just the reporting.

We're recognizing that these patients are under medical care. And one thing I did not say earlier was that these are only the unintended. If a physician knowingly doses an embryo-fetus or for some reason tells the mother to continue breast feeding and a child would get a dose in excess of 500, that's not covered under this reporting threshold. That's not good medical -- but we're not going there.

The proposed rule went out at 500. A lot of the comments that we got was that that would significantly affect medical care negatively. The documentation that we have differs

from what Dave indicated, that there are a -- I don't want to say significant, but let me say one step down from significant number of diagnostic procedures that have the potential to trip the 500. If that was the case, we really are instituting a de facto pregnancy rule and at this point, we don't want to go there.

This is almost a first step of trying to gather information on is this a big problem? Is it not a big problem? If you talk to one person, they're going to say there are a lot of people -- children that are getting doses as a result of the medical treatments. But then you look and read articles in the health physics society and they're saying, No, they're not. If you read ones in the physicians' journals, you're seeing not.

So we're trying to take almost a gradual approach. Let's see what the problem is at this level. We do have the statutory requirement to Congress, but at the same time we want to -- it's not just because we have to report to Congress. We want to know because of health and safety issuances. Yes, we recognize there is a difference with Part 20, but at this point we're going to start with the 5 rem limit and call it reporting rather than a dose.

But to go back to what you said, Yes. If you had a minor sitting outside a therapy department and if they got 501, yes, they would have to notify us. But we recognize that difference there.

MR. BAILEY: Okay. One other comment, if I may. I don't know whether I understand the great concern and so forth with

gamma stereotactic units. They're treated like they're some fancy, highly intricate machine type thing, and therefore they have all kind of failure modes and great potential for harm if they fail. They're treated with sort of an awe. And I was looking at the training requirements and so forth. I don't understand this great concern about those units, and maybe someone could enlighten me on that.

And the other issue is over under the authorized users. Most of the ones that I am familiar with have a team approach to it, which includes generally a surgeon, a real life, honest to God, use a knife surgeon who is a primary player in outlining what's going to be zapped, and not the radiologist. So I'm concerned about whether or not you're going to have some different training requirements for them, or are you even going to address it?

In my limited experience with them, the surgeon is the one that said, Go with this. It was not the radiologist. So that -- and you have a committee for those facilities and many of those are being put in stand-alone facilities where the only people that are really there are the surgeon and the oncologist and a tech and a medical physicist who work together every day, so you make them formally have a committee of the same four people.

MR. WALTER: Well, remember, if they're just doing Gamma Knife, they don't have to have a committee. Two or more of them -- and you're right. They do work as a team but essentially what happens is the surgeon outlines, this is the area that I want

affected. It's the oncologist who decides what does needs to go to each of those -- in that area and then takes that to the physicist for them to determine how that's going to be set up to get the right dose.

So, yes. They outline the area they want affected and then the oncologist decides how they're going to affect that area. So you're right but at the same time, it is a team effort. But the surgeon doesn't say, I need 300 rads here. They don't do that. They just say, This is what needs to be obliterated.

MR. BAILEY: All right.

MR. CAMERON: Cathy, do you want to follow up on that?

MS. HANEY: Yes. From the standpoint of the rule, when this rule goes into effect it is different than how we're currently licensing authorized users. NRC is looking at the team approach. This rule would recognize someone with three years' experience as far as the authorized user for use of the Gamma Knife.

We were trying to focus in on radiation safety and the handling of the material, and a surgeon -- if they had that experience could go ahead and -- we would recognize them as the authorized user. But based on what we heard from public comment, what we heard from the different meetings that we had, that we should just still stick with the three years and authorize the one person.

This is also going to step really into if -- I'll sit over there. You come sit here. It's the next step of using the

materials in the cardiology treatment with the therapies that we may be seeing, is what are the training requirements for that type of individual? And that's something that I think will be the -- when we finish this rulemaking we'll start on looking at the training and experience requirements.

Is the individual going to be required to have the same type of training as someone either using material for -- you say you equate it to remote after loaders, or do you want to equate it to manual? Either way, you're up into the three years. Do you still need the quote, radiation oncologist or could just a cardiologist become qualified to use that material?

MR. BAILEY: My personal preference -- if somebody's going to be putting a stint in me, I don't want it being an oncologist. I want the -- and when we talk about those individual stints and balloons and all that other stuff, the individual radiation dose from those is insignificant, and there ought to be -- I would encourage you to look at them in the same way you looked at nuclear pacemakers and treat them in that manner as opposed to having -- even implying that you need all this radiation safety training for the most part, particularly on the solid stints.

MR. CAMERON: Okay. Thank you. We're going to go to one final comment from the table, and then we have a brief statement from a guest in the audience.

Aubrey?

MR. GODWIN: Cathy, I apparently had a moment here when you started talking about these embryo doses and unintentional exposures. The logic of it escaped me because as I understood you to say, the reason you went with the 5 rem was because there's concern about the diagnostic doses. Several of the diagnostic procedures exceeded the 500 millirem. If it's prescribed, I believe that's an intentional, not an unintentional exposure unless there is concern on the part of the medical community that they're not asking the people -- they would have to start asking, I guess, I should phrase it -- the people who are going to get over 500 millirem if they're pregnant or not.

The logic of why you're going to 5 rem for unintentional exposure just doesn't track very well, since the regulation has it at 500 millirem. And if this happened to be anything other than a medical -- a nuclear medicine procedure, they'd have to write all sorts of reports about it on unintentional exposure just because it exceeded the 500 millirem. And now you're going to just suddenly say, Well, if it's unintentional, we're going to skip Part 20 and not do any report writing on it because -- for an embryo.

And I don't really see, are you purposely trying to write an exception to Part 20 with this regulation and is it said that well in the regulation itself, because I think there's a chance for confusion on the part of people that interpret it. And I can harken to the lawyers coming back and asking me, Okay. You didn't

have to report it in this regulation, but this other regulation says you need to report these exposures.

So if you could sort of clarify the logic in there, I would certainly appreciate it.

MS. HANEY: Well, let me try. I'd like to say that the rule is a lot clearer than what I said verbally.

What -- we're seeing this as a more specific requirement than the Part 20 requirement, so in our case, to answer your question, if there was an incident a licensee would look to, does it need to be reported under Part 35? And if it did not, then we wouldn't double dip and go back and say, Ha, ha. You should have reported it under Part 20 and now you're in trouble. So we would say meet the Part 35 requirement in this case.

The 5 rem limit is looking at, how much does this rule impact medical practice? I mentioned the diagnostic, not that we're trying to catch those diagnostic cases unless the threshold is higher, but because of the impact on the practice of medicine if we were to have the limit at 500. And the impact that we see -- again, this is where the information I have differs from what Dave has -- we have been given information that there would be a large number of procedures that would require pregnancy testing now if the limit were at 500 millirem. And that goes down even into the diagnostic level.

And if that's the case, then we're looking at delayed treatments to patients because we have to wait for the results of

the pregnancy test. You're also seeing problems where -- with the preferred providers that they can't -- the hospital that they go to for the nuclear medicine procedure may not be the same hospital that they would go to for blood work, so now you're looking at that impact. Also, we're going to rely on the fact that the professional standards right now are saying that if you're in the diagnostic area, you question everyone about whether their pregnancy status, and the standard is that if you get up into the therapy area, whether it's unsealed or sealed, that you do assess pregnancy.

So we are to a certain extent relying on industry standards right now; the standard of care to regulate rather than us putting a specific regulation in place.

MR. CAMERON: Quick follow-up, Aubrey?

MR. GODWIN: Just a comment. It seems that if they inquired about the pregnancy status, they've met their obligation in what you've described. And I don't see why you would call it unintentional if a doctor prescribed it and inquired. I don't see the need for the blood test and the other things, and your logic just doesn't flow well with me, I must confess.

MR. CAMERON: Okay. Then for NRC's consideration, we're going to go to Dr. Mario Verani, who's on the board of directors of the American Society of Nuclear Cardiology, for just a brief comment on Part 35.

DR. VERANI: Thank you very much first of all, for giving us the opportunity to say just a few words here.

I am a past president of the American Society of Nuclear Cardiology. I want to say just a few words. What kind of society is this? Most of you may not have heard of it. It congregates about 4,000 physicians, physicists, and technologists, and I think has been a very successful society in the employment issuing of many measures in nuclear cardiology that I think have improved the field considerably.

The Society has supported the NRC during the deliberations there, but had a representative, Dr. Sircada [phonetic], from Georgetown University, who participated. And basically we do support the 700 hours as it is stated now. This was not what the American Society of Nuclear Cardiology had lobbied for in the beginning. We all felt that there is perhaps a little bit of an excess of regulation in this area, or was, for the procedure that most people would qualify as a low risk procedure.

What's the interest of the Society in all this? Well, you have to remember that of all nuclear procedures in this country for imaging, cardiology procedures are now number one. And just a little over half of them are now done by cardiologists, not by nuclear physicians or radiologists. So there has to be a process for the cardiologist to get involved in the area, and the process has been a little bit complicated in the past, and I believe this would simplify it to a certain extent provided that there is some degree of uniformity.

So basically we're here today with a message to ask the states -- the Agreement States to try to maintain some degree of consistency here because for the training programs like ours at Baylor in Houston and many others I'm familiar with around the country, it becomes very difficult when you certify that the trainee accomplish the necessary clinical training and have so many hours of radiation training. All this -- that he goes to a state that approves that and then goes to a state next door that doesn't approve that. That creates a tremendous impasse and a lot of confusion. So for the sake of simplicity and fairness, we at this point would support the 700 hours uniformly.

Thank you.

MR. CAMERON: Okay. There's a couple of people flipping cards down here, so I guess that we'll recognize both of them.

MR. BAILEY: Chip, I think NRC, in looking at the nuclear cardiology issue, ought to be sure about every time you mention that you remind yourself that among our physicians, cardiologists probably zap people more anybody else. And I'm not saying that in a negative way. As far as fluoroscopy procedures, most of that work is done under fluoroscope. So radiation isn't totally foreign to cardiologists, and I think, as has been mentioned, some of the cardiologists really look at this additional radioactive stint as being a very minor thing compared to the dose the patient is already receiving just undergoing the procedure.

So those things should be maybe weighed in the balance, when you're looking at the training. I personally wouldn't have any problem with cardiologists having more radiation safety training for the fluoroscope.

MR. CAMERON: Richard?

MR. RATLIFF: Yes. I had a question for Dr. Verani. Do you think the cardiology groups will be submitting an application to NRC to be one of the approved associations?

DR. VERANI: Not approved associations in terms of boards, for example. I believe the nuclear cardiology board is probably going to submit, and that has been discussed before because we do have a test at this point that I think is very fair, includes a huge number of questions, including many on radiation safety and all that. Members of radiology as well as nuclear medicine participate in preparing the test questions and so on.

I don't think that the individual groups will do any of that, but to what extent the individual groups will be able to act as preceptors and certify, that I can't answer.

MR. CAMERON: Okay. Thanks, Dr. Verani.

One quick question that David has about something he said that may have been misconstrued.

MR. WALTER: I don't think it was misconstrued. It was talking about the number of studies -- diagnostic studies that might result in greater than 500 millirem to the embryo-fetus.

You really have only two that have the great likelihood of having something like that, and one of them is a galium scan, which we know is not exactly the common scan used anymore. And the other is if you're going to do a renal scan with doses upwards of 22 to 25 millicuries rather than the standard 15 to 18 millicuries. So the renal scan really would be the one where you have the majority of the people who would have a possibility of having a dose to the embryo-fetus greater than 500 millirem, but you have to have a dose higher than what would be naturally expected outside of the 20 percent range of a normal scan for that to occur.

MR. CAMERON: Okay. Thank you. Final comment from Kathy Allen, State of Illinois.

MS. ALLEN: My comment sort of follows with Dr. Verani as well regarding training.

David, you said that you -- that Part G was going to propose different training requirements for iodine users. Was that correct?

MR. WALTER: The only difference that we see in all the training requirements is to not break out a separate approval of less hours for iodine -- or I should say oral iodine users only. Everybody else that uses strontium-89, P32, or any other unsealed source therapy, will be required to have 700 hours in the NRC rule. But if you were going to do oral iodine, you can come down to 80 hours in three cases, and we're not going to include those two extra ones.

They have two sections, one for 33 millicuries and less and one for greater than 33 millicuries, and we were just not going to put those in there and just let even the oral iodine users have 700 hours.

MS. ALLEN: But under NRC's rule then, they could just use oral iodine with only the 80 hours. Is that right, Cathy?

MS. HANEY: Yes.

MS. ALLEN: So if I were a physician I could get licensed by NRC with 80 hours of training, turn around and submit a license from Missouri -- sorry -- I'm in Missouri so I have an NRC license. I can submit that to an Agreement State because I'm already an authorized user, and then the Agreement State would accept it or you're saying that they're going to go back and recheck all the training and deny them?

MR. WALTER: It would be possible for the Agreement State to deny them. Yes, that's correct. And that is the only part that I see in this training and experience as being different, but it's a major thing for those people who only use oral iodine. Now, I know we have millions of endocrinologists out there who are licensed, and every one of our states has probably got dozens of them. But I've got one finally, after 13 years -- I've got one that applied because they knew that they were looking at a change in hours and he wanted to get in there under the gun.

MR. CAMERON: Kathy, thanks for pointing that potential conflict out, and of course that ties into the compatibility levels that will be set forth for training and experience.

I'd like to thank Cathy and David for their presentations, and as you all know, Cathy and her staff and David and the working group have put in a lot of time on this rule. Thank you.

Okay. Fritz Sturz from the NRC is coming up to first of all, briefly discuss orphan sources. Briefly, right, Fritz? And then he's also going to set us up for a panel discussion on the general license rule. And we have most of the panel up here, but I would ask Cindy or Pete from Texas if they would like to join us up here at the front for that particular discussion, and then we'll have the whole panel at least around the table if not in one place.

MR. STURZ: Good afternoon. By way of a little introduction, since I don't know most of you and probably most of you don't know me, I'm an NMSS orphan myself. I was lost and now found.

But I was primarily -- I've been in NMSS for all my career in NRC, and I've been over in the other building dealing primarily with the reactor in Office of Nuclear Reactor Regulations and the reactor people, dealing with the other orphan source that DOE won't take, spent fuel. I've been in the spent fuel project office dealing with licensing of spent fuel storage and

transportation. I recently came back in NMSS, back where real material licensing takes place.

I'll try to proceed here. Most of you have been following this a whole lot longer than I have and I'll try to skip over a lot of these background slides. Needless to say, the NRC's been concerned about orphan source and the accountability of general license devices for over 15 years. And there was a working group established in 1996 to look at these issues, and one of their recommendations was to have increased regulatory oversight and continued efforts to address orphan sources.

Orphan source issues have been ongoing for a number of years. The Commission directed the staff to take action. In response to that, the NRC prepared a Commission paper dated February 3, 1999 -- staff efforts to address orphan sources. And I guess this slide just kind of lists the subjects that I'll touch on today real briefly.

As part of the Commission's guiding principles in the staff requirements memorandum -- indicate that NRC staff should use as its guiding principle that non-licensees who find themselves to be in possession of radioactive sources they did not seek to possess should not be expected or asked to assume responsibility and cost for exercising control or arranging for the disposal when addressing orphan source issues.

Just briefly, the NRC has been involved in a number of issues to address the problems. They've been participating in

workshops, interagency meetings, seminars with federal and state agencies, CRCPD, et cetera. They've been consulting with federal agencies to discuss jurisdictional issues, regulatory responsibilities, interacting with DOE in creating a memorandum of understanding. And they've been participating with CRCPD E-34 committee on unwanted radioactive material sources. And we've also been considering options for valuating orphan source contracts.

I guess in the Commission paper it also addresses federal and state jurisdictions and regulatory responsibilities. As you know, there are a number of federal agencies with responsibilities or jurisdictions for orphan sources, and everybody's not always been in agreement on the roles and responsibilities to address orphan sources. But I think you know more about that than I do so I won't go into that here today.

Since EPA funded the CRCPD to create a committee to address unwanted radioactive materials and develop a national program, NRC has been providing advisers to the committee, and these advisers have participated in E-34 committees and are providing assistance in the activities. The E-343 committee continues to develop its orphan source program. Currently it is conducting, I believe, two pilot programs this year and next year. One is for the overall orphan source program and one is for roundup of certain Cs-137 sources.

And hopefully, the results of these pilot programs will be used by the Committee to complete its development of a template

program for federal and state agencies to respond to unwanted radioactive materials incidences, and pilot roundup may serve as a basis for conducting further roundups on a national scale.

The Commission recently approved the concept of funding the CRCPD to establish and implement a national program for safely dealing with the orphan sources. The decision to provide funds for the national program may become effective upon completion of the CRCPD E-34 committee's pilot project and finalization of the national program, provided that the national program meets NRC needs, the cost of the national program is reasonable, and funds are available for this purpose.

The memorandum of understanding with DOE is intended -- or formalizes the letters of agreement that the NRC and DOE have been operating on since 1991 to handle requests for DOE assistance with sources that pose potential or actual hazard to members of the public and have no viable options to mitigate hazards. The memorandum of understanding was approved by the Commission and became effective on June 18, 1999.

DOE recently completed a pilot program for recovery of americium/beryllium sources, and they recovered -- in that pilot program they recovered 56 candidate sources, and they've begun a second phase of the pilot program in July.

NRC has worked with DOE to establish the criteria for the second phase of the pilot and identified potential candidates. The NRC is working with the states and regional offices in the

process to identify additional potential sources and NRC continues to work with DOE to establish routine acceptance of greater than Class C material such as americium, beryllium, and plutonium P-38 sources.

On the international front, NRC staff has participated in the December '98 meeting with the Department of State concerning creation of the International Radioactive Source Management Initiative. Department of State is leading the initiative in response to international requests for assistance in the areas of orphan source management and clearance levels for metals. The International Radioactive Source Management Initiative is intended in part to develop a program for the prevention, identification, tracking, response, and remediation of radioactive materials being illegally imported and exported to and from nation states, including the U.S.

The IRSM structure includes a steering committee and four subcommittees. The steering committee and subcommittees include representatives from Department of State, EPA, Department of Energy, Department of Transportation, CRCPD, Customs, and the states, industry and other stakeholders. The four subcommittees include Tracking and Clearance, Stopping Future Losses, Technology Monitoring and Retrieval, and the Education and Training Subcommittees. The steering committee proposed that the NRC should co-chair the Tracking and Clearance subcommittees and chair the Stopping Future Losses subcommittee.

NRC intends to tend to all the steering committee meetings and will provide representatives for the steering committee as well as the subcommittees.

That concludes my presentation and if we get set up, stay tuned for the other half of the picture on how NRC is dealing with accountability for devices.

MR. CAMERON: Do we have any issues or concerns with the orphan source process? Stan?

MR. MARSHALL: Sometimes today's orphan source becomes tomorrow's greater than Class C waste to be disposed in Nevada, at the Nevada test site. And I'm only on the edge of being involved with any of it. Obviously, I have the DOE exemption in the way of my involvement as a regulator, but it seems that EPA and the state equivalent of an EPA agency seems to drive the greater than Class C disposal issue. Is NRC to be involved with orphan sources that become greater than Class C waste for disposal?

MR. STURZ: I thought DOE was responsible for disposing of greater than Class C waste, so I think the second pilot program DOE is taking is greater than Class C waste -- or the other sources and storing them. They've not going to dispose of them. I think the idea is they're going to store them until -- if they get a repository they eventually will go to the repository.

MR. CAMERON: Okay. We have -- Joe?

MR. KLINGER: Yes. There is an update now. I just attended a meeting of the IRSM. They're now six subcommittees.

There's six. And there is the cost free expert that they're looking for. I think everybody -- there was something that went out. They're looking for somebody to go to Vienna for one to three years; a very attractive place to go.

But that's to work with the international community. They're very interested in what we're doing here in this country, and we -- people on the E-34 really appreciate the efforts of NRC and EPA and DOE. In particular, DOE's doing a great job right now.

MR. CAMERON: That's great. Roland?

MR. FLETCHER: I guess my question goes to the commission guiding principle. Essentially, it says that if a -- let's say a landfill comes in possession of a source that of course they didn't want, they don't have any responsibility for -- I understand perhaps for having it, but for arranging for its disposal. It don't understand how then -- they have to be a part of arranging for its disposal, it would appear to me, if only in communicating with agencies that can actually do the disposing.

The wording is a little troubling.

MR. CAMERON: Okay. Thanks, Roland.

Don?

MR. BUNN: There was a time when NRC worked along with U.S. Customs to monitor -- or to make sure monitoring devices were at our borders so we could possibly detect things that were coming in. And in fact, they did pick up some pretty significant incidents as a result of that. Maybe ten years ago or so, NRC decided to pull

out of that support for Customs, and since then there's no monitoring that I know of at the border. This, I think, needs to be considered for reenactment if we're going to look for these orphan sources, or at least see them coming across the border.

MR. CAMERON: Okay. Thank you very much for that comment, Don.

And I think that we're ready to move into the GL discussion, and what I would suggest, as we've done the other panels, let's have Fritz do his presentation and then let's go to the four states -- representatives of the four states that we have to say whatever they have, and then let's open it up for discussion. And I would note that Mel Fry is listed as being from Oregon. So -- he isn't. And we have Cindy Cardwell and Pete Myers up here from the State of Texas.

So let's go to Fritz and then maybe go to Cindy and Pete, and then Mel, Ray, and finish up with Aubrey. Go ahead, Fritz.

MR. STURZ: I'll try to be brief on this, but I think this may take a little longer. But we'll breeze through some of the slides and they are in the handout, and I guess extra handouts are in the back. The handouts have been passed out to the table, but for the audience there's others in the back there.

As I said previously, NRC's been concerned about the accountability of general license devices for 15 years now, and on November 13, the NRC -- of '96, the NRC staff and stakeholders were

provided evaluations of NRC and Agreement State working group recommendations to the Commission. And out of that, as a result, the Commission directed the NRC staff to consider the feasibility and costs of an annual registration program to reexamine accountability of risk-informed performance-based regulations of material licensees.

And in response to NRC, in April of '98 the Commission directed in part the staff development to implement the registration program for general licenses possessing devices identified by the working group as needing increased regulatory oversight. The SRM also directed the staff to establish a registration program through two rulemaking efforts and follow up with general licensees who either did not respond to registration program or had discrepancies in their responses.

In response, the staff prepared the February 3, 1999, Commission paper, which addressed the staff efforts to address orphan sources, and also is working on two rulemakings to establish and define a general license registration program. And it's working with the contractor to develop a general licensing tracking system.

Just to touch on some of the things that have occurred since the last Agreement States meeting -- in March, 1999, the Commission established an interim enforcement policy for violations during the initial cycle of the registration program. The purpose of this policy is to remove the potential for the threat of

enforcement action to be a disincentive for the licensees to identify deficiencies.

Under the interim policy, enforcement actions will not be taken for violations that are identified by the general licensees and reported to the NRC if reporting is required, provided the general licensee takes appropriate corrective action to address the specific violations and prevents reoccurrence of similar problems and the general licensee has undertaken a good faith effort to respond to NRC notices and provide the requested information.

On July 27, the NRC held and Agreement State workshop. This workshop was originally planned as an opportunity to create a forum for discussing the second rule, and while gathering comments during the comment period and to gain insight from Agreement States experience with similar programs and the issues that will affect implementation of the registration program. However, the Federal Register notice of the proposed rule was delayed and finally published just the day before the meeting, but we went ahead with the meeting anyway and still took it as an opportunity to gain Agreement State insights and to create a forum to discuss and identify and clarify the proposed rule, as the information would feed into later formalized comments which we hope to get from the Agreement States.

And as you can see up there, these were the main topics that were discussed at the meeting. I won't go into any more detail about that.

The NRC also has planned another public meeting to discuss the proposed rule too, about the registration program on October 1. The details of the meeting can be found in the September 3 Federal Register. The purpose of this meeting is to gather information on implementation issues, and this meeting will be facilitated by Chip and will address -- I guess issues will initially be addressed by a panel of various vendors and then will be open to the audience for discussion.

To get into the general license and registration program, the registration program is going to be established through two rulemakings. The first rulemaking provided the regulatory basis for subjecting general licensees to a registration by amending the Part 31 to add a requirement to 31.5, that they must respond to written requests for NRC information. The final rule was published on August 4, and now becomes effective October 4, 1999.

The second rulemaking contains specific requirements for the registration program. It establishes fees for registration and addresses Agreement State compatibility requirements and addresses enforcement issues. Specific provisions of the rulemaking include clarifying which sections of Part 30 apply to all Part 31 general licensees. It adds clarifying requirements about 31 general licensees. It adds specific provisions for general licensees subject to registration and clarifies the requirements for manufacturers and distributors of devices.

The proposed rule requires that general licensees appoint a responsible individual, while the person who holds the license is usually a corporation or institution rather than an individual. For the general licensee to comply with existing regulations, an individual must be aware of the requirements and be authorized to take the required actions. It also adds a requirement to report changes of address, and not only includes the change -- this also includes the change of the name of the company. If the general licensees move their operations without notifying the NRC or appropriate Agreement State, they may be difficult to locate, contact, or inspect.

The proposed rule for general licensees adds a requirement to require that if a site is taken over by a new entity or new general licensee -- includes that the new entity must provide a new responsible individual information and identify the device serial numbers. It also expands the reporting requirements for a transfer of advice to a specific licensee to include the recipient's license number, the device serial number, and the date of transfer. And it also restricts the length of time allowed for a device to be in a storage only state, and it defers leak and shutter testing during storage.

The general licensee intends to use the device after a period of more than two years of non-use, the device could be sent back to the supplier to be held under the distributor's specific license until later use. If the period of storage exceeds the

normal interval for testing, testing will not have to be done until the device is put back in service.

Okay. It also -- the proposed rule adds specific provisions in 31.5 for general licensees subject to registration. It adds the criteria for devices to be registered. And you can see the criteria up here, and these are based on the NRC Agreement State working group recommendations study. It provides information required for the registration and the fee for registration, which apparently right now is at $420.

The proposed rule also has provisions for vendors. It adds -- revises the required contents of the quarterly material transfer reports to include information on devices returned for replacement, the name and phone numbers of the responsible individuals, and the mailing address of the location of use, not the corporate headquarters, and also includes additional labeling requirements for the devices. It also revises record keeping requirements of the vendors and revises the content and timing of certain information provided by vendors to their customers before the devices are shipped.

Specifically in the Federal Register notice, there's about five questions that the Commission is looking for specific answers -- or is looking for specific comments on. They're in the handout. I'll just run through them briefly. They deal with registration requirements. Should they include provisions that

require general licensees to complete registration by a certain time, whether or not the NRC requests a registration?

The second question deals with new devices obtained by registrants to be registered when the annual registration is carried out, without NRC having earlier contact, after additional devices are received. The third question deals with whether a general licensee should be required to assign a backup responsible individual. The Commission is looking on comment to how to best achieve and enforce the intent of full disclosure of information required to be provided by the general licensee customers by distributors. Should it be made early enough to be considered in the decision to purchase?

And they also -- the Commission is seeking comment on the advantages or disadvantages of a national data base of general licensees and their devices.

As an integral part of this registration program, the NRC is developing a new automated system, a general licensing tracking system. It's intended to facilitate implementation of the user device registration and NRC contract follow-up, and it also is going to maintain the general license information. It will include information about the general licensees, the devices each licensee possesses under the general license, and the vendors of generally licensed devices.

The GLTS will replace the existing general licensing data base, and is being designed to house information currently in

that data base, as well as the additional information that's going to be requested in the second rulemaking. It will also generate ad hoc reports and disseminate information on lost or unaccounted for devices.

The general licensing tracking system will accommodate growth of the data base to at least 150,000 licensees. The growth of the data base may occur because of increases in the general licensee population or additional licensees being subject to registration. The NRC is currently conducting a materials risk assessment and will evaluate the results of the study to determine if additional licensees should be included into the registration program. Several future enhancements of the GLTS are planned, including on-line registration, two-way communications with other programs, such as NMED or the National Sealed Source and Device Registration Program.

I've included a number of slides in the handout which highlight a number of changes since you last heard about the rule, last October. Hopefully this will assist you in directing you to any specific issues that you want to look at in the proposed rule.

In summary, initiation of the registration program is based on the first rulemaking, and when we implement it in mid-year next year, with the mailing of initial registration scheduled for March, 2000. The registrations will be sent to all general licensees subject to registration, but will be simplified in that

the registrations will not include any key additional provisions contained in the second rulemaking.

The registration program will include a short amnesty period for general licensees who identify a lost or unaccounted for device during the initial registration cycle and who make a good faith effort to find the device. Following initial implementation, the registration program will continue on an annual basis in accordance with the provisions of the second rulemaking. When the second rulemaking becomes effective some time in calendar year 2001, licensees and vendors will be required to provide additional information addressing the second rulemaking.

Fees will be charged for registration and general licensees providing incorrect or inaccurate information or who improperly dispose of devices will be subject to enforcement actions and civil penalties up to three times the cost of authorized disposal. The registration program is expected to provide a number of benefits in that the GLTS will increase the accountability of devices. Hopefully, it will provide a more efficient system for maintaining general licensee device and vendor data, searching data, creating reports, and disseminating the data.

Hopefully, we'll have a greater accuracy in licensing data and means for data validation, will provide efficient means for contacting and mailing between NRC and the general licensees. We're expecting, I guess, it's going to provide registration of approximately 5,000 to 6,000 NRC general licensees. And also

hopefully, it will provide access to certain general licensee data by the public, especially concerning lost or unaccounted devices.

Thank you.

MR. CAMERON: Okay. Thanks, Fritz.

Before we go to the state panel, I would just like to repeat the notice that Fritz talked about for the October 1 meeting in Washington on this issue. And we would invite participation by any Agreement States and would welcome that. And also if anybody has a particular vendor that they think might be well represented in the vendor roundtable that we're going to use to focus discussion, I'd appreciate getting any leads on that.

So, Cindy, do you want to start off?

MS. CARDWELL: Pete's going to start.

MR. CAMERON: Pete's going to start? All right.

MR. MYERS: The organization of our presentation this morning is I'm going to talk a little bit about how we run our program and how we got to where we are now, and then Cindy's going to talk a little bit about the comments on the proposed rule.

We started our program in 1993, and the way it ran was, of course as most of you already do, we get quarterly distributor reports. Once we get those reports, we know to whom we need to send letters soliciting their applications for a general licensee acknowledgment. In that application, in 1993, was name, address, device, model number, device serial number, source serial number, and point of contact. And then we would issue an acknowledgment to

them, including conditions of use from the sealed source and device safety evaluations.

The concept there was to provide information that we thought was necessary for the users of these generally licensed devices to use them in a safe manner, understanding that the general licensees don't have any -- are not required to have any training, experience, or indicate to us what their facilities are like or how they're going to be using these devices. We thought we would go through the sealed source device safety evaluations and as a user friendly kind of an approach, to include some of that important information on the acknowledgment.

So the GLAs included device and source specific limitations of use, leak test intervals, on and off testing intervals, record keeping requirements, and such.

In 1995, we changed some of our procedures, and those changes continue to the present. Now we've reduced the number of devices for which we issue acknowledgments, and we no longer record the serial numbers of the devices and the sources. And the reason for that was it just -- we didn't have the resources in order to do what we wanted to do in as timely a manner as we thought was necessary to serve our customers. It was taking a lot of time to create the device-specific data base that included conditions of use.

For instance, we would need to comb through the safety evaluations and create a data base for specific model numbers so

that when somebody applied for an acknowledgment for a specific model, we could call in these conditions of use and then to correspond to get correct model numbers and serial numbers.

I'm going to make a suggestion here in a little bit -- in maybe another slide to try to solve one of these problems, anyway.

Once the licensees get their acknowledgment and they have their device, our program requires a self evaluation or inspection once a year. There's a 30 item administrative checklist that includes a lot of the things that are required for them to really be using these devices in a safe manner. And also that self evaluation includes an inventory that they are supposed to perform but keep on file for our inspectors to come and take a look at. That inventory does include device model number, device serial number, and sealed source serial number, and then our staff is programmed to come around once every five years to evaluate their program.

Now, a couple of recommendations -- one of the things that really slows the process down is this bit of having to get the reports from the distributors quarterly and then to send letters out to the people who receive these devices, asking them to submit an application to us. It would really, really be much more efficient if we could come up with an OAS standard application that would be included within -- or would accompany the device, that the receiver of the device would have this form. On it would be preprinted

serial numbers so that there wouldn't be any problem in transcribing serial numbers from one form to another, and it really, I think, would create a much more efficient method for processing these applications.

It would be sort of similar to a warranty card, if you will. If we could just come up with a standard form that we could all use instead of having separate forms that the manufacturers would have to think, Gee, which form do I put with this guy's? So I think that would be a great thing, if we could come up with that.

The other thing that is a recommendation that perhaps Cindy's going to talk about also is that we ought to have the distributors continue sending these quarterly reports to us, even if they are negative reports, and without us having to request them to send them.

Okay. Cindy, here's your part.

MS. CARDWELL: Thanks, Pete.

We took a look a few weeks ago at the proposed NRC rule that's just come out; Phase 2 I think Fritz called it. And I have some comments on that rulemaking. And actually, we found that -- I don't want to say surprisingly, but we kind of were -- that we were in general agreement with the proposed rulemaking, most parts of it. We actually found several good things that we probably will look into changing our rule to be compatible with, be equivalent to.

We like the idea of the responsible individual. When you have to put your name on the dotted line and sign and certify

that you're responsible, that seems to automatically create an awareness that there is something out there that you're responsible for: radioactive material. So we like that concept.

We also like the concept that NRC's put in the proposed rule on the storage restriction. They've got a two year restriction in there, and the thinking being that if it's in storage longer than two years, the out of sight, out of mind philosophy comes into play, and that just lends itself even more so to these lost, quote, sources that we end up with -- a lot of these GL devices.

We really like the idea of distributors being required to provide additional info to the GLs like, for instance, the rules of the Agreement States that do have these programs in place and those that are anticipating putting them in place. The cost of what it's going to take -- the regulatory cost of what it's going to take in order to possess one of these GL devices -- we really think that's important for them to include in what they have to distribute to the general licensee along with the devices.

And we really like the idea of having in rules specified what information is supposed to go on those quarterly reports. Now, the NRC proposed rule has an actual form, but whether they fill out the form -- at least as long as they have the equivalent information, we're really moving towards consistency, and I think that has a lot of implications in several of these other requirements. So -- and it goes back to what Pete's talking about

in getting with that consistency in what we're asking them to submit to us.

In terms of the specific questions that NRC asked for comment on, the first one that Fritz went over -- we really think that the rule ought to require that general licensees register their devices, regardless of whether or not they've had an NRC request to do so. In the proposed rulemaking, what NRC pointed out was that if they, for some reason, fail to notify the general licensee that they had gotten their quarterly report and the quarterly report indicated that they had x number of devices and they needed to register them, that the general licensing would basically fall outside of the rule. And that just didn't seem right. If it's good for one, it's good for everybody, so we think the rule ought to require that.

And again, if you think back to the -- one of the major reasons for the implementation of this rule is tracking of these devices. You're not going to have consistent tracking if you're only going to get to those that you actually go out and solicit the information for. We think it should be required for everyone.

Specific comment number two -- we believe that the registrations, as NRC calls them -- we call them acknowledgments so as not to confuse them with our x-ray side of the program -- the registrations we believe should be updated with the addition and deletion -- and that means permanent deletion. We're not talking about transfer here -- of devices. Again, if you go back to the

objective, one of the primary objectives of the rule was for tracking. And if you only -- NRC's proposal, if we understood it correctly, was that at their annual renewal they would have them update any deletions or additions they had of devices.

You go back to tracking and you happen to lose one in that half a year, you don't have any information as to where it went. You have to go back further than just what's on their registration. So we think that ought to be reported with each addition or deletion.

Specific comment number three -- we don't see any need for a backup responsible individual, even though that was a recommendation of the working group. One of our staff said, That's akin to requiring an assistant RSO, and we don't to that. And besides that, that would be a BRI. That's another acronym we have to learn. Let's just not do that.

Specific comment number four -- we really like the words, prior to purchase in the requirement for the distributors to provide the information, especially on the cost of this thing, prior to a general licensee making that commitment, or that purchase, if you will. If we put in there the fact that you're going to be subject to inspection --whether or not that has a cost associated with it, I guess depends on their compliance -- the fact that the NRC's going to charge them $420 to have a registration, that they are going to be required to register. We think that basically is

essential in determining whether they want to take on the responsibility of possessing one of these devices or not.

And really, you can turn it around and say, If it were you, wouldn't you want to know? If someone comes out and says, It's only going to cost you $3,000 for this nice device we have. We have such a deal for you. But oh, by the way, here's another couple hundred here, maybe another couple hundred here, and you're responsible for this and this -- we think that's, in terms of up front government, that the distributors ought to provide that same information to them.

In terms of asking for comments on a tracking system or a national data base, we started talking -- this national data base sounded good. There's one place we can all go and look for this information. And then we started looking at what NRC was putting in -- listed as some of the advantages and disadvantages in the proposed rulemaking.

One of the things that stood out to us, besides the things that -- how are we going to maintain security, et cetera, was the cost. Who's going to implement and maintain this thing? And they listed -- could it be somebody like NRC, CRCPD, or an independent third party? When we saw independent third party, the dollar signs started rolling up. Somebody's going to have to pay for it, and while if Texas were a republic again we'd be the eleventh most wealth country, that wealth is not concentrated in our

bureau. And we're not going to pay for anybody to maintain that thing.

So we started looking at what's already out there, and as Fritz already mentioned, NMED's out there. When you lose a source -- and think back again to the objective. We're going to try to track ones that are lost, maybe damaged, if we can -- NMED already asked you -- or requires you to put that information in the system: model number, device number, serial number, everything that you can get off of a lost source.

At that point in time, we think it becomes critical -- and I'll quote Greta from yesterday. She said, Communication is paramount, that the agencies know -- and I mean state controlled programs here, radiation control programs -- which ones of us have implemented already such a program and may already have such a data base, which ones of us plan to, and to develop the data base. This gets back again to what we mentioned earlier. We think it's very important, in fact, critical, that the quarterly reports all be consistent, because then we'll all got consistent information to put in our data bases.

So therefore, if we have the information in NMED, we say, We've lost a source, you can see all the information we need about that lost source in NMED. We know who has what data base. If there are any tracking problems, they ought to surface at that time. We ought to be able to put out some kind of blanket e-mail, if you will, to each other, and say, We've lost a source. We've reported

it to NMED. Do you have this in your data base? And talk with each other about it before we go jumping into some national thing. If indeed there is a problem in the tracking and it surfaces at that time, then we can examine options for some kind of national system.

And our thinking in that was, Let's not jump to what we consider the far extreme that's going to cost a lot of money, be time intensive, resource intensive, if we've already got the seeds, if you will, of being able to do so in our own states and we just need to talk with each other about it.

And that's what we have on our comments.

MR. CAMERON: Okay. Thank you very much, Cindy and Pete. And let's go to Mel.

MR. FRY: I talk better than I write, so I don't have any Powerpoint for you to look at.

North Carolina comes into this tracking of GL devices from a long history of registering Gls, probably for well over 20 years. The problem lies at the very root of the concept of the general license and the information that the recipients have at the point we try to make some contact with them. And you've all had the same problems we have if you've tried to follow up with the contact people. Many of the GLs go through two or three people to get where they are. The general contractor buys it and then the electrical contractor gets it, and the hotel that has it possesses it until they sell it to the next chain the next month, and on it goes.

The idea that you have a responsible party that's knowledgeable about what they've got and what to do with what they've got is flawed all the way to the bottom of the GL concept. You don't have a knowledgeable party. they don't know what they've got. And they have no idea about what their responsibilities are. And to build a new program, to expand the existing program, to put additional requirements in there for this untrained individual who doesn't know what he's got just seems to be basically flawed.

The issue of generally licensed device, especially portable ideas -- and we don't generally license anything in North Carolina that's portable. If it's got wheels on it, look out. And we just simply don't recognize, and our rules don't allow for the recognition of a portable device. The issue seems to constantly come into play relative to what should be generally licensed, that it's a dose consequence. And all of the discussion we've been having today has had to do with accountability, and most of the generally licensed devices are not large does producers. That's been the thing we've been evaluating before we generally license something to start with.

But the issue for us has become accountability and the tracking of those when they're stolen, when they're lost, when they're surplused, when it's recycled. And letting them know ahead of time, getting some minimal training in their hands would certainly be a start. I think the crux of this is in underlying issues. We've talked earlier on other subjects about ALARA and the

like, and is the issue of, are you just going to let the small stuff go? When the alarms go off, tell them to call Washington or call the vendors.

You've got two major programs with the scrap and recycling people wanting to make certain that there's not a single becquerel in anything. And then you have another major initiative -- you don't have to turn to two separate agencies -- two major initiatives within the NRC to see how much material we can recycle is how much radioactivity can we make sure it's got in order to have clearance rules. The loss of control over the generally licensed devices is the same issue as you look for more and more things that you can have less control over, then how are you saying then we just won't let the small stuff go.

And it doesn't really matter that you got radioactive diapers in the landfill. Just put them there. Or that you've got radioactivity in the scrap -- that's probably a wonderful place for most of it. It just doesn't make sense for a lot of it.

MR. CAMERON: Okay. And we're going to go to Ray and then over to Aubrey. And I think it would bear some discussion to go back and focus on what Mel's point was there.

Ray?

MR. PARIS: I'll make mine brief. We've been registering GLs for about ten years. It's worked. And accountability, as you mentioned, Mel, is a great asset when people know what they got. We send out a renewal by letter and people --

annually, and they find out and they are becoming aware they do have the stuff. And so it's worked.

And so what I've done is just simply give you -- if anybody wants, it's our web page and it has our rules, the fee structure, the whole thing. We charge $100 per year per device. NRC I think is going to go 420 or something like that. But ours is -- so it works. If you're interested in what we've got, take a look.

MR. CAMERON: Okay. Thank you very much, Ray.

Aubrey?

MR. GODWIN: Fortunately a lot of the material's already been addressed, but there are a couple of points I would call to your attention and I think you'll need to look at.

The proposed Rule 2, which is still proposed, has in it some sizes of devices that would require registration and below that would not. It was agreed to by the general license committee that was working with NRC on it to these levels. I personally feel that one of them's a little high. The cesium one at 10 millicuries just seems a little bit high to me, to not require registration until you get to 10 millicuries of cesium.

But that's something I think that they would like to hear from the states on, and certainly I hope that each of you will take the time to write in and express an opinion relative to that and other issues.

The next step is the one on the national data base. They are specifically asking questions about the national data base, and I think you need to look at that a little bit. I have a question for you first. Would the states around the table raise your hands if you have a data base of your general licensees?

Oh, that's a good show. A lot better than I thought it would -- including serial numbers? We've dropped a few out there.

What the intent would be -- with the national data base would be a tracking system to keep up with the devices, not like we have a specific license where it's a licensee responsibility but where the government, whoever we are, would keep up with it. There are advantages to that. Whenever there's a problem, with a model number you can quickly identify who has them and how to get to them. If you have a source missing, you can track where it turns up and comes back. If a significant number of states do not have a tracking system, it becomes a problem being able to track anything.

Ten states at least -- or nine now, would have to depend on NRC for a tracking system. At the discussion we had in July, the proposal would be that NRC would consider at least developing and funding the running of such a national tracking system. As they lose their state that they have control over, I'm not sure they'd continue to make that commitment because this is probably a couple of million dollar project per year, and that would be an appreciable financial burden if they have to support it by their fees from their

general licensees. Your comments should be made relative to this system also.

If it's adopted, it would -- there are a couple of things you need to know in the concept of where it could operate. If adopted, there may be only one report submitted, and that's given to the NRC who in turn would combine them all together and then send you your copy. I don't have any problem with that if NRC does that in a timely manner, but I'm not sure that when they talk to their lawyers they want buy that responsibility. So you need to be aware that would be concept.

Another concept might be that we at the states would have to enter the data into their national data base through one of our terminals, which you need to think about your work load considerations in that case.

Another point that really was just sort of bounced over that came up in the meeting I think you need to also look at -- there's a proposal that when this gets fully implemented, the civil penalty would be two to three times the disposal cost for a device to encourage companies to not, quote, lose a source, but to actually pay for disposal because it's cheaper that way. We don't have the same policy the Commission does about not charging the third party who ends up with a source disposal costs.

If you're unfortunate enough to be a landfill and get a source and it's got to be dug up -- somewhat like Texas, Arizona might not be the eleventh largest in the world but I can tell you

the wealth of Arizona is not in their radiation program. And we won't pay a whole bunch of money to somebody to dig it up. They're going to sue whoever they can find out shipped it to them and suits tend to get very expensive, so that does tend to discourage people from doing this.

And the Commission might want to think about their policy a little bit relative to that. The third party can't contribute to the disposal of these sources illegally by just agreeing to accept things without any kind of review. And I would suggest that you need some incentive to these disposing companies and melting companies to survey and make sure they're not getting unwanted trash. So you might want to look at at least some liability for those folks.

And that's my comments on the GL provision as it currently stands.

MR. CAMERON: Okay. Thank you very much, Aubrey.

We've heard a number of specific comments on the GL rule and registration generally, and I think they've been generally positive. I guess I would, before we open it up to all of you, give anybody on the panel an opportunity if they care to speak to the point that Mel raised.

Cindy?

MS. CARDWELL: Well, I'm not speaking to Mel's point. I'm just apologizing to Mel for putting you from Oregon. You don't sound anything like Ray. I'm sorry about that.

MR. CAMERON: Yes. How can two people from Oregon have such opposite views?

Okay. Larry, did you -- you had something you wanted to say? It's Larry Camper from the Nuclear Regulatory Commission.

MR. CAMPER: Thank you, Chip. I want to make a couple of comments about the national data base, the General License Tracking System.

I follow your comments with a great deal of interest, having been very much involved and working closely with Don Cool as the division director as we work to develop the GLTS. And what I want to really do is plant a seed in your mind to encourage you to look closely at what's going on in the development of GLTS and encourage you to think very seriously about using it. I'll take a couple of minutes to share with you some background about that system that I think will be of value to you to know.

In the federal sector, we now have a piece of legislation called the Klinger-Cohen Act, and it required all federal agencies that were developing an information technology project of certain dollar amounts to go through a fairly rigorous process; a rigorous process where you had to look at and examine all of the various alternatives that were available to you for a particular IT system, where you had to clearly define the requirements of the system and put it through a fairly rigorous feasibility study.

Now, in developing the GLTS, we identified about 222 requirements for the system. We looked at several alternative systems in other federal agencies and in state agencies. In fact, some of the ones that have been mentioned here today we took a long, hard look at. And we have developed what we think -- or propose what we think would be a very sophisticated system.

We then had to go defend the system before what's called the Information Technology Business Council, who puts us through a very scrutinous and rigorous examination of the system that you want to proceed to develop. This particular system exceeded the trigger of $500,000 and therefore we had to justify in fairly clear and certain terms why we should proceed with the system. What it also does is bring to bear a certain amount of responsibility for managers not to change the system once you decide what it is you're going to proceed with.

One of the primary reasons why IT systems fail of any dollar amount is that managers cannot come to rest on what they want the system to do. You have to define the box: the shape, the size, the color. You can go back at a later time and augment the box to make changes, but you cannot decide to change course in the middle of development.

So it's been put to a very, very rigorous process. And one of the things that concerns us greatly about the GLTS is that in our jurisdiction -- we're talking about on the order of 5,000 licensees, 20,000 or so devices -- 24-25,000 devices, in that

order -- well clearly, you have far more devices that you control than we do. And one of our biggest concerns throughout this entire process -- we have gone to a great deal of trouble to follow Commission direction. We have gone to a great deal of trouble to develop a very sophisticated tracking system, and yet it's going to house only a very limited number of devices. We would like very much to see a national tracking system.

And what I want to do is encourage you to take a good hard look at the system. Feel free to call us up and ask us questions about the system. The software that's being used is relatively inexpensive for you to secure. Several hundred dollars will do it. There are some security firewall issues with the system that have to be addressed, but they're not insurmountable. Cindy raised a very valid point about ongoing maintenance. And Don can correct me if the budget numbers have changed since I left at the end of June, but we had programmed into the system something on the order of a couple of FTE per year and about $300,000 or so for ongoing maintenance of the system.

We know that the success of the system and the success of the registration program is going to be that we maintain in an up to date manner. Therefore, it would be cost-effective to add additional GL devices to the system because the base line cost for ongoing maintenance has been considered in the developmental issues.

So I just want to plant the seed in your minds at this juncture, take a good hard look at the question that's being asked

now about the GLTS, and individually, take a good, hard look at the system. Call us up. Don will be happy to answer questions, I'm sure. I will, from what I can recall of the system. Fritz, who is the section leader now -- and it would be wonderful if we could really get to a point where there was in fact a national tracking system where all the GL devices were accounted for in that system.

And for those of you in states where you have very limited systems for tracking at this point in time -- in some cases they're even manual systems -- I encourage you to take a good, hard look at it, because the level of sophistication and the level of scrutiny that has gone into it is really state of the art.

Thank you.

MR. MYERS: Larry, I was wondering, the GLTS, even if the NRC puts it together for the NRC states only, is it going to include non-GL sources too?

MR. CAMPER: No. It is a very set group. It's the group that Fritz -- the working group identified a particular set of GL devices that should be tracked: cobalt-60, strontium-90, transuranics, and cesium-137. It is that group initially that the system is being developed for, but as was mentioned, the system has incredible capacity for expansion and could accommodate all the GL devices that are out there.

MR. CAMERON: Okay. I think Don is going to add something to that.

MR. COOL: yes. I think maybe one clarification is probably in order. We're going to be using the system to run our registration devices that Larry was just talking about. We're actually going to house all of the information that previously was in the General License Data Base, so all of the things even that are not subject to registration are going to be resident. We just won't be pulling up those files.

And we've tried to construct it in such a way that we can add considerable additional numbers of licensees and number of devices. We've actually tried to size it based on our understanding of the national level that's out there, if we wanted to go there, so we wouldn't have to go back and modify the system. Theoretically, there's very little you'd have to do in terms of fields and things to include other sorts of activities if the state wished to pick it up and then have additional things in it. That's part of what we would need to talk about.

But conceptually we'd want the exact same kind of pieces, and it would be a matter of how the pieces were segregated within the data bases. And data bases are deliberately designed to be able to parse them out -- separate out different things, cull out sets that you want to have. So I think that can be something that could be fairly easily -- put that in quotes from somebody who doesn't know.

MR. CAMERON: Okay. Let's take the gentleman in the audience here, and then we'll go back to -- Richard. Go ahead.

MR. RATLIFF: I think one of the problems we have in my staff is that it's another national system that this group didn't get involved in what would go into it. I think it's fine if NRC uses it, but if it's good for GL, it's good for specifically licensed gauges. We've had just as many of them show up at scrap yards. And I think the bottom line that maybe we haven't got across yet to NRC is that the states have real diminishing resources.

As Pete put in his discussion, we had to cut out certain of the data in our GLA program just because of staff. We're going to be cutting more and more. We have to do our basic radiation programs. And so this is a luxury type thing, and if we can track them in our state, that's really our bottom line.

MR. CAMERON: Okay. Thanks, Richard.

Yes, sir?

MR. DUNN: Wes Dunn, International Isotopes.

Luckily for you, Richard hit some of my major points. It seems for the last several years this has been a solution in search of a problem. The only base line coming from this was we're starting to get problems with the scrap metal and steel mills, which were just the large curie gauges. And unlike Aubrey, I looked at the numbers and said -- we both came to the conclusion they seemed a little bit strange, but I thought you had the units wrong. I thought you meant curies, not millicuries. Then you're dealing with health hazard.

When you're dealing with these small sources, where's the health hazard? If there is a health hazard, then to reiterate what Mel said, we've got a flawed system in GLs that maybe the whole system needs to be thrown out. To quote my old patriot, Floyd Hameter, should we maybe just exempt sources and specifically license sources? We shouldn't be putting more work into GLs than we're putting in specific license.

MR. CAMERON: Okay. Thanks for putting a little bit of finer point on what Mel was saying.

Any response to that comment from anybody? Yes, Pete?

MR. MYERS: In the working group that Aubrey and I sat on in July up at Rockville, that was an issue that surfaced. It sounds like it's a repetitive issue that comes up from time to time. And we were told that the NRC apparently in the process of developing what they're doing now offered that to the Commission as an option, to just do away with the GL program, and the Commission said, No. We don't want to do that.

Is that right or wrong?

MR. CAMERON: Fritz or Don?

MR. COOL: I think the answer is yes and sort of. We're actually trying to pursue maybe a little bit of a deliberative process. Rather than jumping all the way into the hundred foot depth, the Commission wanted to pursue this in more or less a risk confronted approach: peel the first layer off, see how that worked, get the systems in place. The understanding, I believe, has been

that additional things could and would be looked at when we saw how this system was working, how the resources were playing out. And that applies not only moving on down through the GLs, because there are a number of us who sort of wonder about, Well, if it's good for this set, what's the conceptual difference? If we can run it cheap enough, why not run it this way because the whole issue of accountability remains.

But also looking up, as the point was made earlier, what about some of the stuff that's currently specifically licensed now, because some of that doesn't make any different sense and the issues with regard to accountability being the principal concerns are similar. One of the things I think we do intend to look at, I just can't give you a date and time certain, is to potentially rerack some of those down so that we have an appropriate set of controls. But first I have to figure out if I can run it for the price I think will actually be effective.

MR. CAMERON: Okay. Thank you, Don.

I don't see any comments now and I guess I would like to thank our panel and thank Fritz for his double duty. Thank you for taking the time.

There is going to be sign up sheets for people who need shuttles to the airport this afternoon. They'll be out there, so if you have a particular time you need tomorrow -- and I'm going to ask our leaders -- two o'clock or an hour an -- what do you think, two o'clock?

Okay. We'll start back at two o'clock, and we have about seven or eight, I think, unrelated presentations to move through.

[Whereupon, at 12:40 p.m., the meeting was recessed, to reconvene at 2:00 p.m., this same day, Thursday, September 9, 1999.]

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

[2:00 p.m.]

MR. CAMERON: Welcome back from lunch, everybody. And we're going to be starting to address a number of disparate and hopefully interesting issues. And when we get to the 3:15 break time, we're going to sort of caucus and see if we should move one of the presentations from later on this afternoon to tomorrow morning to give you more time and to try to make up some time. But we'll see where we are when we get to the break. Some of these issues may have broad interest; some of them may have narrow interest.

But our first presentation is going to be by Roland Fletcher from Maryland: Real World Difficulties in Decommissioning to Unrestricted Levels. And then we'll go out to you for questions and comments.

Roland?

MR. FLETCHER: Thanks, Chip.

One thing that maybe we have overlooked or ignored or haven't paid much attention to is with all of the fanfare about Y2K, today happens to be September 9, 1999, where we're supposed to get a preview of the difficulties of 01/01/00. And so far, I don't think anything's happened, so maybe that is the preview.

What I want to talk about is, as many of you who have heard these presentations before, it's kind of a continuous adventure, if you will, and like all great adventures, there has to be a certain amount of adversarial relationship. I mean, what would

Ian Fleming's James Bond, the original, have done without Ernst Stavrou Blaufeldt? Of course, nowadays they've come up with other people. But what would Luke Skywalker have done without Darth Vader, who not only has gone to his maker, but he's been reborn and will start all over again.

And of course the NRC has the EPA, that relationship. And so in Maryland we have Neutron Products, Incorporated, NPI. And it has been something that I've been a part of for the last 13 years. But just to give you a brief overview -- so let's see. I want to give you a brief history in case you haven't been keeping up.

Now, you know this organization. It existed a long time ago. However, when I brought this up to the NRC recently, they took the option of disavowing any knowledge of anything done by any organization that predated them, kind of the way they've done the licensing of previously -- the clean up of previously licensed sites.

Now, while the ink was still wet on the application, this facility started to make changes. Now, that should have been a clue. But this was done before we became an Agreement State, and a lot of things that weren't in the original license suddenly got added as amendments. Included in this was the hot cell construction. That's going to be important as we progress, because that's one of the areas that's going to need to be cleaned up.

Then there were worker overexposures, and the RSO resigned. Now, all of these things happened within a two year period of their initial application, but see, Maryland was busy trying to become an Agreement State. And I know you know something about that. When you've got your head down focused on the paper to make sure you've got everything right, maybe you're not looking around to see all that's going on at this facility.

So what happens? We became an Agreement State in 1970. We actually started in '71. Then this facility had a pool leak. It went into Chapter -- I jumped a few -- if I put everything up here, that would be all of my presentation. So I jumped ahead a few years.

In '86 there was a Chapter 11, which kind of kept the creditors off and some of the regulatory actions off. We had shut downs in '88 and '89 because of loss of control of contamination. We were one of those states we talked about getting licenses out quick. Well, this is one of those licenses where every correspondence included about 50 to 100 questions and took as long to be responded to as it did to review. So each year there was an annual update in the status of the license application. This was the renewal from Hell, but we were given a directive that we would issue a license and in 1996 it was issued. However, it was challenged, of course.

And last week, before coming to this meeting, after the challenge was overturned by a judge, we finally issued that license.

So in three years we finally issued it. But in the meantime, the actual issuance is almost meaningless, because of the next action.

We are in the process of pursuing an injunction to have the facility, at least one of the licenses there, totally shut down.

Now, the difficulty in dealing with all of the ramifications of a potential shut down is, first of all, there are four licenses there, three of which fell under the criteria for financial surety and a decommissioning plan. Two of those, the Department and our AG's have decided, meet the criteria for meeting the regulations. These are both irradiators and their financial obligation was only 75,000 each. Believe it or not, there's still some glitches there, but we're not pursuing that license.

The one we're pursuing is the manufacturer's license. That's where the hot cell is, the limited access area. This is the source of radioactive contamination that we feel is occurring. Also, when you saw where the main pool was leaking, all of these things go togther. So we envision a substantial cleanup.

Now, please don't let me give you the impression that the owners of this facility aren't clever, extremely clever, and so are their attorneys. So they got a hold of Part 20 and read this criteria for license termination under restricted release, and they decided that that would work, in their minds, for them meeting state requirements. Well, as most of you know, we are not yet -- we have not yet hit the three year deadline for incorporation, so we haven't -- that's not a part of Maryland regulations.

But the other difficulty here for this particular facility is that as you read down the criteria, they meet none of them, and therefore, even if we had these laws on the books, they wouldn't meet any of them. But it does bring -- see, part of the difficulty -- one of the first real world difficulties is what you and I understand, judges, lawyers, and citizens don't. And when a plausible argument is presented to a legal person -- sorry, Chip -- regardless of the science involved, it is still a plausible argument.

And we are right now at something of a crossroad because we're being encouraged to fast track incorporation of these regulations just so we can have the criteria in Maryland to turn him down.

Meanwhile, the facility did not meet, as I said, the requirements for financial surety. They passed the deadline. We requested and received a -- well, we asked for a court order and we had a hearing for a temporary injunction to terminate the license or at least put it on possession and storage only. And believe it or not, the judge decided it would have been unfair to shut down the facility under temporary conditions because it looked very much like the state has a strong enough case to win in a permanent injunction. But the facility argued that during the interim, it would be unfair to deprive them of the opportunity to try to satisfy the financial surety requirements. And the judge bought it.

So they are operating outside of the regulations but inside of the court order to try to gain some additional financial worth. That's the way things go.

Now, here are some of the realities we're having to deal with. When a large organization like this has functioned for so many years, they develop a reputation. This facility has gone out of its way to develop quite a reputation, not much of it very flattering, particularly in the community in which they reside, which happens to be a residential community. And what they have essentially done has gotten the citizens up in arms about anything they do. Unfortunately, different groups of citizens think differently and oftentimes they don't think through the consequences.

For a long time, we had proposed that covering this facility with a cover on its courtyard would prevent some of the particles of Cobalt 60 from getting out. And from 1994 until I guess the last couple of years, that was the solution we were going for. But this -- as I said, this facility has quite a reputation and it got to the point where the citizens just wanted it gone, which is easy to understand but difficult to do in the real world, because in the real world, you have to look at options and consequences.

For example, if all court decisions go against the facility and they walk away, you have to be prepared for that alternative. Part of that alternative is talk about someone --

about cleanup as a Superfund site. But the likelihood of this becoming a complete Superfund site is very low because don't forget, only one license has been affected by this decision. There are two operating, functioning irradiators that are still there, so only a portion of the facility can be cleaned up.

Well, the citizens would like to see the whole facility done, and that can't be accomplished. But they also don't want this facility turned into a Superfund site. So if you're starting to see a tightrope that we're walking, that's the exact situation. And the third thing is, we don't want to prejudge or predict what a court might decide to do.

There is also the possibility the facility may once again declare bankruptcy. They've done it before and come out of it. They could go back into it. While all of this is going on, one thing I can guarantee you will continue to go up, and that is the cost of the final solution.

These are some of the things I've already talked about, but some of the letters we received from various members of the community are quite interesting. One I want to highlight in particular. We were more or less told that we should exercise more muscular enforcement. And this is with the court. They want us to more or less go in and tell the legal system what they should be doing in response to this facility. I don't think that that's the option that we're going to select, but it's one of the

recommendations that we've received. And we don't have a date set for the permanent injunction hearing.

So, what are we going to do? Well, first of all, I'd like to find a cure to attorney roulette, because while all of this has been going on, we've been through eight attorneys. And each time you have to reeducate -- the amount of documentation with regard to this one licensee would fill about half of this room, just the legal documentation. So each time a new attorney comes on board, you've got to reeducate them on what has gone on before.

I would like to be able to convince my department that hire -- additional staff to compensate for those who are spending their time in court so that we won't be so far behind in licensing and things like that -- hire is not a bad word. It is something that you can do on occasion to deal with a problem. Thankfully, I think they finally listened to us after -- and I must appreciate some comments from my last IMPEP. I think that did the job.

Prescriptive license approval -- that's something that we have initiated with this licensee, and based on some of the comments I've heard about the back forth of amendment, that's another option. I heard someone else talk about -- there comes a time when you know what needs to be done and whether or not the facility wants to put that in their application, we may still just have to put it in as a license condition. Just make the decision and give it to them as, This is your license. This is something

that we need to have in it. We've had to do it with this licensee. We see a couple of others that we may have to do that on.

These are some of the lessons learned. Nothing happens smoothly -- as smoothly as you'd like. You are not always right when you think you are. And whenever you deal with outside entities, be prepared for 360 degrees of response, because they will change their mind about what you're doing if it doesn't conform to what they think it should be.

That's our current status, and I'll probably be doing this again next year. Thank you.

MR. CAMERON: Thanks, Roland. That's a classic case of what we might term a difficult licensee. I wonder if anybody else has run into this problem, has any advice for Roland, or would seek any advice from him on trying to deal with this particular type of problem.

Anybody?

(No response.)

MR. CAMERON: Okay. I don't see anybody who has any questions or comment on this, and you'll have a chance next year because you'll be back with the same sad story. Right, Roland?

Okay. We're going to go to another unique situation, and this is license transfer process for Sherwood Uranium Mill. Terry Frazee from the State of Washington is going to do that for us.

MR. FRAZEE: First of all, I need to extend my apologies for Gary and John Erickson, who were not able to attend this meeting. Our other uranium mill is issuing a press release today. It should have been released about an hour ago. And they were required to stay back at home to take care of that. Gary also sent me with an extra set of slides, recognizing that this is sort of a narrow focus and not too many people are going to be interested in the uranium mill issue. I have some slides of the Trojan Reactor being carted up the river and buried.

I'm going to sit down because since it's not my presentation, I have lots of notes to read on it.

Okay. Western Nuclear was our second uranium mill in Washington. It was licensed in 1978 and operated continuously until 1982, and was then in a standby mode until 1991. The buildings themselves were demolished. The mill buildings were demolished in 1993 and the closure plan was submitted to us in basically late 1994 and approved by the Department about a year later. The final reclamation, which is what you're seeing here, was completed in the fall of 1996. And currently, they're in the monitoring and stabilization of the cover phase.

Now, because this mill -- the mine and the adjacent mill were located on Indian reservation, the responsibility for this site is going to revert to DOE with NRC having a role in being responsible for reviewing and approving the long-term stabilization

plan. And that will take affect once the license is terminated, which hasn't occurred yet.

Now, because of NRC's role, they were invited early on to participate in the review and development process for the closure, and that was about 1994 or 1995. The NRC declined to actively participate and obviously didn't conduct a detailed review of the plant at that point. They did, however, comment on the conceptual design and they told us basically, It's okay as long as it meets the performance specifications in the regulations. So therefore, we were on our own.

The Department of Health followed NRC guidance as far as radon attenuation, groundwater protection, report preparation, erosion protection, conducting rad surveys, and we used Title 1 as guidance for writing a technical evaluation report for the uranium mill. And this was all in 1996, '97, '98, going through years and years of getting this place ready to go.

When 1999 comes around and it's like the light goes off and NRC decides to send out a surface-water hydrologist to conduct its first post-reclamation audit of the site, we -- he reviewed the rock placement, gradation, and durability and also the executive summary of the technical evaluation report that we had written, but apparently had not reviewed any of the supporting documentation. And, of course, that was the closure plan itself: design specs, as-built reports, the monitoring stabilization plan, and so forth.

There are a number of things that are unique about this closure. We decided to go with a thick homogenous cover rather than compacted clay, to use vegetation rather than riprap to hold down the cover and to rely on native plants for evapo-transpiration purposes. And we also did not dewater the tailings.

You've been looking at this aerial view for a long time, and it's like -- Gary thinks you can see this from the moon. It's kind of a blight on the surface of the earth, here.

Interesting story to relate to you, Gary and his staff were out showing the members of the tribe around the site and walking over the surface of this thing and showing them -- from Gary's perspective it's, Hey, this is a really great job we've done here and so forth, with nice, clean, smooth, clear, nothing out there to confound anything. And the medicine man was also with Gary and his staff, and he's taking it all in, he's looking around, looking down, looking up. And Gary is just sure he's about to give him his blessing on, This is a really great job.

Instead, he looks at Gary and he says, This is not right. This is sterile. There are no ants. There are no flowers. There's no bees, no deer, no trees. It's just -- he's going through this litany of things that just are not there. And there's no debris; the things that would be needed really to establish some living things back into the area. And so Gary's going to end up having them bring some more junk in just to sort of provide that micro-environment for critters.

Now, this is what the Indians want. They don't want the sterile environment. They want biodiversity.

We're going back to the technical part of it. There are several things that were unique about this and the fact is a thick, homogenous layer -- is because in this area the climax for us is Ponderosa Pine. And the roots will penetrate quite a ways, and they would penetrate a clay barrier, is what the belief is. And that would -- is this had been the traditional compacted clay type narrow, small barrier, the roots would have penetrated. It would have allowed for excess radon emanation and so forth.

In addition, if you've ever seen a wind-blown evergreen, the root system is wide, not really deep, but it is wide and when they fall over, they sort of -- and up comes a big chunk of turf and you have a nice little hole. And that, even though it's relatively shallow, that probably would compromise any clay barrier, had we used that approach. And the other factor with the homogenous thick layer -- 13-1/2 feet as opposed to six feet of compacted clay -- that's also basically a self healing sort of barrier. Any wound like that would be basically filled in after some point in time, just because of surface movement.

The vegetation is going to come anyway. If you look at some of the other DOE sites and mill sites, you give it long enough, the vegetation's going to come. So we pre-plan for vegetation and that's going to help with the long-term maintenance. If you plant the vegetation it's going to be there. You really don't want to

tear it out, as you do have to in other places. And it also provides the desired biodiversity that the Indians were concerned about. Also, along with the low lying vegetation, the trees are also going to add to the evapo-transpiration and help prevent rain water from penetrating the cover.

And of course, the cover and the fact that we're not dewatering the tailings was based on a geochemistry issue and basically it was not practical to pump the tailings dry; too many slimes in it. It just wouldn't pump fast enough to make it dry. And there was also a concern that potentially you're introducing oxygen and oxidizing the uranium that's still a little bit there. And if water then were to be reintroduced, you'd have resuspension and mobilization of the uranium, and we didn't want that.

A little more about the NRC's reclamation audit -- the inspector was critical of the rock durability placement and gradation, and the major contentious issue was the diversion channel that runs around the site. And starting from the upper -- well, the most left portion is the head waters of the diversion channel, and it runs around to the top of the picture and then around the side. You can see it most clearly on the right side. And that's about a 9,000 foot channel, and there is 700,000 square feet of rock surface in there. It's mostly three to six inch rock, but where there are confluences, where there's channels that are draining from the surrounding land, there's about 15 inch rock that's in place.

NRC's inspection -- they noted that there's about 700 square feet where the rock didn't meet what were considered the placement and gradation criteria. That's less than one-tenth of 1 percent of the entire area. And we did not believe that to be a failure per se, although that's the way NRC is wording it.

Larger picture of the diversion channel -- obviously, there's your perspective. This is in the three to six inch rock lane. Farther in the background is the final picture. This is the largest -- of the 700 square feet, there was a ten by 15 foot patch -- and that's it right there -- that was not right. And of course, this will be filled in. Everything else is in the two to five foot square foot, really small holes. Other than this one -- this was the biggest -- there was just these few sites, and that's the biggest.

Another thing that he wanted me to point out was that this particular area had to be blasted out in order to put the diversion channel there anyway, so we're talking bedrock below this, so erosion is really not a concern at this point. In fact, 80 percent of the whole diversion channel is -- the underlying strata is monzonite, rock -- bedrock.

Anyway, all this stuff will be repaired before we turn loose of the site. And we've also conducted a number of inspections this summer, and we also have lots of questions about erosion issues. But we don't agree with NRC's assessment of the channel as having failed.

Okay. So there were three recommendations that I'll wrap up with here. If NRC intends to be involved in a reclamation project, it needs to begin its involvement early on and should remain involved throughout the project, rather than waiting until after the project is completed. And secondly, if the NRC is going to be involved, then it needs to review all the technical information which has been provided in support of the project and should also be involved in the approvals and should be an equally responsible party. And finally, it should assign qualified staff to each aspect of the review process.

We have engaged this list of experts in reviewing the site and we believe it covers all the bases, and what we're saying is that we need to make sure that if you're going to -- if NRC comes out and reviews, they need to have pretty much the same kind of line up in order to review it. Anyway -- so, that's it for that part and hopefully, you won't have any questions because we're running out of time, if nothing else.

There's a few more pictures here, but they're very brief. As I'm sure you probably all know, the Trojan reactor was taken out of commission, and the reactor -- actually the reactor vessel was removed intact, without fuel, of course -- was removed intact and shipped off to -- barged off to Hanford [phonetic] to its disposal.

A couple of tugs had to accompany the barge; not that it required two tugs but just for safety purposes. It was barged about

270 miles up the Columbia River, and this is at Port of Pasco, where it's being -- or north of the Port of Pasco, where it's being run into a slip. And then the barge was actually flooded in order to get it down on the river bottom, and then a couple of big trucks -- there are two of these: one in front and one in the aft. This one's The Beast. The other one, of course, is Beauty. So Beauty and The Beast were the two huge tractor-trailer things to haul this cross-country to the waste site.

And so here it is in it's nice little carrier. It looks like a big dumb bell, but it's -- a little more than necessary. Those two big donut things on either end are impact limiters, designed to cushion it if it rolls off, I guess. And here's -- I think this is the final shot. This is now down into the trench, and the impact limiters have been taken off and it's just sort of sitting there ready to be filled up. And it sits all by itself in this huge trench.

And that was it. Okay.

MR. CAMERON: I think we do have one question, at least on the Sherwood issue.

And, Ed, do you want to --

MR. BAILEY: Yes.

MR. CAMERON: All right.

MR. BAILEY: Since that was on Indian land, why wasn't it NRC's responsibility totally?

MR. FRAZEE: The State of Washington was asked by either the tribe or BIA at the time -- I don't remember the details -- but we ended up with the responsibility, even though it's --both the mine and the mill were on Indian land. I don't know. If anyone -- Paul, do you know the history there?

MR. LOHAUS: Paul Lohaus, NRC. I believe that at the time that decision was reached, the -- I guess the legal interpretation relative to jurisdiction was that if it was a private concern that was establishing a facility on Indian land, that that facility would be subject to Agreement State jurisdiction. At the same time, if it was an Indian nation that was the applicant, then the license would be issued by NRC as opposed to the Agreement State.

Recently, the question of jurisdiction relative to activities that take place on Indian nations has been raised I think in a number of cases regarding reciprocity, and it is an issue that is being further examined primarily from a legal jurisdictional standpoint. And based on that review, there may be additional guidance and possibly some changes relative to how reviewing and dealing with Indian -- I guess the question of whether it's Agreement State or NRC jurisdiction on Indian lands -- but until that's completed, the Commission has an opportunity to look at that. I'm not certain exactly where that's going to come out, but it is under reconsideration.

But I think in the earlier guidance, it was very clearly stated that if it was a private concern similar to Western Nuclear and the activity was taking place on an Indian reservation, the Agreement State very clearly had jurisdiction under that interpretation.

While I have the mike, I did want to respond to a couple of points that Terry and Gary raised, and I think there are some very good points that are going to require some further consideration and discussion. And as Terry noted, this particular area is relatively narrow. There's only a few states that have the uranium mill authority. And also with UMTRCA, the Uranium Mill Trailings Radiation Control Act, there are some rather unique aspects that are not shared relative to the other parts of the Agreement State program and authority. And in particular, under UMTRCA, Congress made it very clear that in addition to the state determination relative to a site being closed in accordance with appropriate standards and requirements, that NRC is also to make that determination. That's one aspect.

The second aspect is that there's an option that the state has relative to long-term custodial ownership of the property. The state has the option of retaining ownership or transferring ownership to the federal government, and I think in most cases the expectation is the state will transfer ownership to the federal government. And that's the case with respect to the Sherwood mill.

So a second part of this thing, in addition to the independent determination that NRC would make that site's been closed in accordance with appropriate requirements, there's also the second aspect relating to land transfer and at the time that transfer takes place, what's necessary is that an acceptable long-term surveillance plan has to be prepared and submitted by the custodial agency, in this case either the state or the federal government. And NRC would issue a general license to that custodial agency based on an acceptable long-term surveillance plan to cover the long-term control and monitoring. Basically, it's going to be carried on in perpetuity.

The issues that Terry raises appear to be, in terms of referring to the visit that our hydrologist made, as activities that were related to our concurrence determination that all standards and requirements have been met. In point of fact, that visit was done in connection with our activities to address the long-term surveillance plan.

In other words, for a site that's under NRC jurisdiction, we have good background and understanding of the closure, the plan, et cetera. In the case of an Agreement State site, we're not necessarily going to have that background and understanding. And that's where I think -- the point that's raised here is how does NRC maintain or have that understanding when we don't really have the direct jurisdiction until you're to the point

of license termination? So there is an issue relative to, how do we work and coordinate during that time frame?

But in this case, the visit that was made was really in connection with the long-term surveillance plan part of our responsibility, not with respect to the concurrence determination. And I think as you're all aware, we do not have -- these are decisions that were reached a long time ago. We're not going to do de novo reviews or independent reviews of state licensing actions, including uranium mill actions.

And recently, in response to this area, we did develop a procedure -- it's a procedure within my office which addresses how we will handle the site closure determination that we're required to make. And basically, it's got two parts to it.

One is we would like some information from the state in the form of a -- we may want to call it a closure report which would document the state's review process that this site has been closed in accordance with state requirements which are equivalent or compatible with NRC requirements. And the second is, we have confidence in that determination on the basis of our IMPEP program reviews.

In other words, we're not going to do an independent review of the closure plan, the implementation of that plan, the design reviews, et cetera. We're going to have confidence, based on the program reviews, that what the state does in its determinations that state requirements are met, that we have confidence that's

comparable to what NRC would do. So we're not going to do a detailed review through that process. But the issue, how do we maintain a sufficient base of information such that when the long-term surveillance plan is submitted we're in a position to understand that plan will in fact work for that site and is compatible with the closure decisions that were reached by the state.

So I think this is the first one, conventional mill, that we're faced with, and I wanted to spend a few minutes to talk further about this because those of you that have mill programs -- this is an area that, given the experience here, there's some lessons learned and some areas that we can have some further dialog on, and I think have a better process that will serve all of us better in the future.

I'd also like to note, though, that we have been I think successful in addressing in situ facilities. There are seven facilities in Texas where we have applied our procedure for the NRC determination that the facilities were closed in accordance with appropriate requirements, and those facilities are in the process of final completion. And we provided Richard with the NRC determination. There's one more that we have that will hopefully be closed out shortly. So I think we also have some base of experience in applying the procedure and being able to make the determination that the actions that were taken by the state were in fact done, and we can make -- NRC can in fact make its concurrence determination.

So I think we have some base of experience there as well.

I'd like to sere if there's any additional thoughts you may have, Terry or any others that may have mill programs. But I think this is a unique area to the mill states and does have some, as I said, some rather unique aspects because of the UMTRCA legislation.

MR. BAILEY: Can I follow on to that? You mentioned that the state now has ownership of it, and therefore it's not Indian lands anymore, is it?

MR. LOHAUS: Well --

MR. BAILEY: You don't have ownership of it.

MR. LOHAUS: In this case, you're correct, I misspoke when I said state or federal. In this case, given that it's an Indian reservation, there's only one option and that is federal. I don't think the state would have the option in this case.

Thank you. That's correct.

MR. CAMERON: And I think you clarified the major question that people might have had, which is not the tribal jurisdiction question but why the NRC got involved in it again. And it's peculiar to the uranium mill situations: either the concurrence or the long-term care situation. That's what I think people were wondering about.

MR. BAILEY: I guess now that we're talking about 11(e)(2) material, in some of those conventional mills, that

11(e)(2) material was generated before 1978 and I'm hearing that you're going to regulate it. Is not this policy inconsistent with your other determination on 11(e)(2) material that you don't have authority to regulate it?

MR. CAMERON: Is that a subject that's on the agenda for tomorrow morning?

VOICE: This afternoon.

MR. CAMERON: Oh, for this afternoon? Okay. Well, it's later at any rate. Do you want to -- why don't we address that when we do get to FUSRAP?

MR. BAILEY: Okay.

MR. CAMERON: I think that's the best place to do it.

MR. BAILEY: Okay.

MR. CAMERON: Okay. Any other -- Steve, you have a comment?

MR. COLLINS: Paul, have you or will you make available that internal written procedure that you have on your process for closure?

MR. LOHAUS: Yes. It's available on our website.

MR. COLLINS: Okay.

MR. LOHAUS: If I remember correctly -- maybe Dennis can make sure I have the right number -- but I believe it's --

MR. COLLINS: I know the last time I talked to you about it, you spouted off what your procedure was but you didn't mention

it being in writing at the time I talked to you about it, months and months ago.

MR. LOHAUS: I believe it is on our website.

MR. COLLINS: We're interested in having a copy.

MR. LOHAUS: Okay. Will do. It's SA 900.

MR. STURZ: Fritz Sturz, NRC. Finally, something I'm a little familiar with. I'd like to just make a comment about the shipment of the reactor vessel up the Columbia River.

This morning, Seth Coplan had a presentation about risk-informed performance-based regulation. Look into this, but the approval of that reactor as a transportation package was a significant piece of risk-informed licensing that the NRC did, and there was no way -- I think it would have been cost prohibitive to have that Trojan reactor vessel meet the Part 71 requirements for a transportation package. And there was a lot of work done on risk assessment and what the alternatives would be to cutting up that reactor and what the exposures would be to workers to cut that up to fit it into a qualified package. And they did an evaluation of the package under specific transportation route conditions: looked at what could happen and what the consequences were.

So just to point out -- if you want to look into it, that's a significant piece of risk-informed [indiscernible].

MR. CAMERON: Okay, thanks.

Kathy Allen is with us now to talk about streamlining license termination, and I'm going to turn it over to her. And if

you want me to keep track of anything, I'll be glad to do it on the flip chart for you.

MS. ALLEN: Okay. I'm going to stand so I can talk fast. We can catch up on time. If I talk too fast, raise your hand. I'm not looking up.

How many people perform verification closeout surveys -- states? I was hoping for 100 percent. See, we all agree. Isn't that nice?

When you look at the closeout surveys, do you exempt -- how many people survey everybody, every licensee? Anybody do that -- do confirmatory closeout? Didn't think so. Do most people exempt small quantities of material of short half-life material from closeout surveys? Hands up. Very nice. I'm going through this so you can see what other people do, because I think we might find some differences, or if we find out that we're all the same, then 31 flavors. We all agree.

How many people perform closeout surveys for people who possessed only sealed sources? Okay. Well, pull all those people that leaked or any incidents off the table. Very good point, though. How many performed closeout surveys of people who possess loose material only? Is that pretty much your -- how many people actually use a criteria for loose material -- those are the ones you go out and do surveys of? Is it typically longer half-life materials and only certain types of uses? So you do have a graded

approach to what you're going to do closeout surveys on? That's pretty much what we suspected.

Now, when somebody says that they're terminating, do they have to tell you what they did with their sealed source? Get rid of it, who they sent it to? Do you typically -- I'm assuming everybody gets that information. How many people accept just that information and then close it out versus how many people then follow up with the recipient to verify that they received it? So how many people just accept what the licensee says where they shipped their sealed sources to? Now, the show of hands for those that actually call the recipient to verify that they received it? Now, we all find our programs are still adequate though. Right? Just checking.

I want to look at financial assurance. How many licensees -- when a licensee establishes financial assurance, do you draw -- I believe in NRC land a licensee can draw down on the surety or the assurance that's been posted, to use that money to clean up, versus some states that actually say, No. Your financial surety stays locked in, and once you demonstrate to me that you've cleaned it up, then we'll allow you to draw down.

So I'd like to see a show of hands that allow licensees to access their surety -- or financial assurance arrangements prior to cleaning up.

VOICE: Prior to cleaning up?

MS. ALLEN: Prior to cleaning up.

VOICE: With an approved decommissioning --

MS. ALLEN: Sure. With an approved decommissioning plan prior to cleaning up. How many people just allow a decrease in financial assurance only after they've demonstrated they've cleaned up that portion?

(Pause.)

MS. ALLEN: And I have a lot of confused looks on faces. For those of you that saw other hands go up, if you have questions about how other people run their programs -- we don't have time to get into the discussion sections, but some of the issues that I wanted to raise were how detailed do you get in terminations? How much information do you ask from these people? Do we find ourselves spending almost as much time terminating licenses as we do issuing licenses in the first place, or are they pretty much straightforward: have they got rid of this stuff? For most terminations it's pretty straightforward. Right, pretty much?

(Pause.)

MS. ALLEN: Okay. Well, we wanted to get -- I wanted to get into more stuff, but actually for the sake of brevity, I think I'm just going to let you guys rest. And I think I'll bring a couple of other issues that stem from this up at the business meeting.

Thanks.

MR. CAMERON: Okay. Thanks, Kathy.

Jake is going to talk to us about the Colorado petition at this time -- the Colorado GL petition.

MR. JACOBI: Just briefly as an introduction, what I'm going to talk about is that as we've all accepted, Part 20 has been based upon national and international guidance and it's used to set limits for exposures and release and the mechanism for the safe use of radioactive materials. And Part 19 has been established to provide a right for workers to know what they're working with, and we put the two together and we say that an informed, knowledgeable workforce is necessary to protect radiation exposures and to keep everybody healthy and safe.

So we have set this mechanism up that wants to apply to almost all of our licenses. And unfortunately, possibly because at one time the NRC or Atomic Energy Commission in their great wisdom decided that source material general licensees couldn't be a problem. They have eliminated the Part 20 and Part 19 requirements. And to try and demonstrate some of the problems with this, I thought I'd walk you through some of Colorado's experiences.

Now, our experience -- the light bulb went on last January when our great working public-private partnership that we all have -- the gate monitors at landfills and the state radiation control program got together again. And we set off an alarm. And it happened to have been about 4.9 mR per hour at the surface of a dumpster.

We originally thought that it was a sealed source because of the other material that was in this dumpster. It looked like it was a pretty narrow beam coming out, so we found the sealed

source. We're okay. And the owner of that dumpster hired somebody to go through it and as they found contaminated material, they put it in one dumpster. When they found clean material they put it in a second dumpster. And finally we started finding everything contaminated, and we found some garbage bags.

Inside those garbage bags were some vacuum cleaner bags. And these vacuum cleaner bags were measuring 11 mR per hour. And this was after about a third of them had spilled and spread out through the rest of the dumpster. So needless to say, we had quite a large system of contamination.

Well, being smart regulators that we were, we decided, Well, if it got in the dumpster, it's got to have come from somewhere. So we went back and found out where this dumpster came from, and it was the result of a remodeling project. Now, unfortunately, by the time the people who filled the dumpster started remodeling, the building had already been gutted. The previous tenant was required to clean up everything they had put into it, and this included walls, included ceiling tiles, and just about anything else that wasn't fastened down.

The only thing that was left was the roof, the floor tiles, and a couple of toilets. And that's what had been taken apart that went to the dumpster and set off the alarm. Because not all facilities in Colorado have portable monitors, we're really not quite sure what else went where.

But anyway, we went back to this facility to see if there was a problem and we found contamination clearly around the inside and the outside of the building. We ran NRC's D and D code and we found out that the peak annual exposure projected was some 28 times what the NRC had for unrestricted release. And as I go through, remember all of this is by a source material general licensee that is exempt from Part 20 regulations.

Exposure levels around parts of the building generally ran about 100 mR per hour. A 30 gallon drum of waste -- this is only critical because we took the philosophy, while you can have 15 pounds of source material under a general licensee, if you put one ounce of dirt on top of that 15 pounds, you now have more than 15 pounds in your specific license, so we could specifically license their facility. And we had a mop bucket that read 500 counts per minute in it, and this gave us a clue of why the building was so contaminated.

After this company, who had -- I'll get into what they did in a moment -- every once in a while they would mop down the floor and the contamination went in between the floor tiles and hence, when they dug up the floor tiles we had contaminated under the underlying flooring. A lot of the material looked like it was a powder and so we tried to vacuum it up, but we still were left with about 500 DPM after we tried to vacuum it, and that didn't work. And when you have mop buckets that are contaminated -- you know you empty mop buckets, so we got into the process -- or rather the

consultant got in the process of digging up sewer lines. And so they moved a bunch of sewer lines that had been on the property.

I put a question mark down here on cost. Last I heard about a month ago, the consultant had charged -- I think it was a little over $110,000, and the bid for disposal of this material, EnviroCare, was $250,000. And again, general licensees, they're exempt from any requirements and they don't need financial assurance arrangements. And of course, they always hit the local newspaper -- all very nice about keeping the public involved about radioactive contamination.

Well, we figured we had this company that created us a problem and we said, Let's go see where they are now. What the company was in our particular case that caused this was a company that coated optical lenses, and they used thorium because it's used for infrared imaging: your night goggles and a lot of military equipment.

Briefly, in a nutshell, the way you coat optical lenses is you have a vacuum chamber. You have what's called the boat, and what they call the boat is about four inches long, two inches high and one inch wide. And you fill it with thorium fluoride and you put that boat full of thorium fluoride and lenses in the vacuum chamber. You seal it up. You evacuate it. You vaporize the thorium, and you let it condense back down on top of the lenses. It works very efficiently, but it also condenses down anything and everything else. Well, that's what this company did.

We found work stations that were over 1 mR per hour when we got there, and based on our knowledge of what we had from vacuum cleaner bags before we figured it's going to reach 5 mR per hour -- the process was when they opened up the chamber there would be this little powder left around in the vacuum chamber, and so they got a vacuum cleaner and they vacuumed it out. And the way the facility is set up is in one small area, on one side of the worker there's a work station. On the other side of the worker was the vacuum chamber and in between was the vacuum cleaner bag.

So it was constantly being exposed to what's going on, and this 2-1/2 rem per year -- not millirem per year -- was basically said, we'll have an average of between one and five. The average will be 2-1/2. And we say 1,000 hours per year for working, and so it could be higher than this.

We found a storage cabinet where the materials were held reading 1 mR per hour. We had a thorium handling area reading 3 mR per hour. Contaminated sheet metal -- this is another fun story -- they lined the inside perimeter of the vacuum chambers with thin aluminum sheet metal to try, I guess, to keep contamination down. When we went to the facility there was all this sheet metal folded up, and it was reading about 1.4 mR per hour lining along the wall.

I guess they realized they were in trouble and it would be an expensive cost to get rid of it, so about a month later we get a call from an aluminum recycler that a shipment from Tennessee came back. And so our optical lens company wound up buying another

$16,000 worth of scrap aluminum. And of course, we had vacuum cleaner bags, and these were only going up to 5 mR per hour.

Who cares? No posting. No worker training. We talked to a lot of the workers who said, It's radiation, but we're told it's not harmful. In fact the president of the company sat down with us and bragged before he admitted that he was responsible for all this. He said, I've been to the Oakridge training course and it's generally licensed and it's not a problem. So I'm not sure if that's what they told them in the Oakridge course or that's what he interpreted from it.

Well, I don't want to go much into this, but we used general provisions orders and we asked for a specific license. I'm not sure if NRC could have done any of this under its regulations, but we did. And as I've said, we got a little creative because we said, You've got more than 15 pounds of stuff and there's thorium in it, therefore, you've got more than 15 pounds. I'm glad they didn't challenge us on that one.

Now, if it was just this one facility, I would say fine. I wouldn't be up here. I wouldn't have suggested that there be a petition to the NRC because I'd say we've got one problem. You don't need to change regulations if you have one problem. But I spent an afternoon -- I found several others. I talked to Rita Aldridge [phonetic], and she mentioned she had a facility in Glen Cove that had a similar problem.

And you might say, Well, why did you call Rita? Well, I found an internet hit from the -- an EPA annual report that talked about a facility in Islip, New York which had not only released thorium down the sewer lines but they also put hazardous material down the line. And I called EPA and I called the county health department. I could never find out how much thorium went down, but EPA reported significant quantities were down the sewer line.

There's a second lens coating operation that we found in Colorado. Fortunately, it had just started business and it was doing research and development, so it had only done a couple of hundred lenses. And we were able to get them started on the right track before they got a major problem. The zirconium refacotry powders are kind of interesting. They're used for repairing kilns -- and don't ask me the physics or the mechanics of it -- but it is used, and it contains thorium.

I found a note posted on Radsafe from somebody saying, We have -- my client has cement kilns and I thought I'd check the thorium concentrations outside and around these kilns, and it seems that it exceeds the NRC's cleanup criteria. And he asked, Are we exempt from having to clean this up because it was generally licensed? And my response to him, as I read the NRC regulations, Yes, you are exempt. Leave it contaminated and just go about your own way.

The other thing I did to see if maybe we have other problems -- and this really also ties into what Greta mentioned

about evaluating what we exempt for source material -- I did a search. I used two words on EPA's website. I did thorium and I did removal. And there were hundreds of hits. I did not have time to see how many hit in generally licensed verus how many were exempt, but clearly, it indicates that we do have a number of problems. Colorado wasn't alone. And so we thought maybe it's time to do something generically.

Now, this is the source of our problem and as you see, 40.22(b) says, We exempt general licensees that use source material. And as I said before, perhaps at one time when the Atomic Energy Commission had decided they were going to exempt this, they said, Nobody can possibly get exposed and there can be possibly no problems relating from generally licensed materials that are uranium, thorium. It just can't happen. Well unfortunately, we've learned the hard way.

And so you start looking at what do we exempt that we require every other class of licensee to do? We'd ask them to have ALARA programs to limit occupational exposure, embryo exposures, fetal exposures, minor exposures, limit public dose, limit release limits. We'd ask them to survey. We'd ask them to store. Incidentally, these containers, the way our company got them, came in kilogram -- one kilogram containers, DOT labeled two with a 0.2 transportation index on them.

Again, we exempt them from all posting, procedures for receiving, opening, waste disposal requirements, waste manifests,

worker training, and postings. We've got a lot of issues that they should be required to do, but we don't. We just have basically ignored it.

There's a few other issues, and a lot of what I'm saying relates to the resolution that we'll talk about. But there's other issues besides the resolution an the specific exemption that are related, and I'd like to talk about those. But let me just say that when the petition was written, it was done so that the NRC would be in a hard position to deny that some workers need to limit their dose and some don't. That some licensees are required to post a radiation area and some licensees are not required to post a radiation area. So remember, there was a very narrow focus for the petition, but there are several other issues that we really need to consider.

One of the first things we started saying is, What limits do we set for these people who are working there? We thought, Well, occupational exposures make sense because they are radiation workers and therefore, it's 5 rem.

Then we said, Wait a minute. They're exempt from all of Part 20, so maybe it's the same limit you would do for the public, and maybe we should limit it to 100 millirem. And then somebody said, Well, NRC has this great idea that general licensees are okay if you expose people to 500 millirem. So we had those three options. The question is what do you really want to do? How do you protect the public?

Part of this is you've got to know where the material is going, and if you don't know, because there's no notification requirements -- oh. I might say that -- I tried to find out who in Colorado had a problem and I did an internet search. I located three companies that distribute thorium, and we wrote to all three of them, saying, Tell us who your Colorado customers are. But only one of them answered me. So there's two other companies out there that are distributing to I don't know where, and they won't tell me.

Waste disposal has two areas that you might want to consider. One is what level do we need to control the disposal of radioactive materials? Clearly, somebody that puts out garbage bags reading 11 mR per hour have to be controlled, but by the same token, you don't want a level where your laboratories are using reagent-grade uranyl nitrates. They shouldn't have to worry about doing anything different; it's not a problem. So where do you draw that level and what do you control?

The side issue under the compact involvement is that our compacts have been set up to regulate the import, export, and disposal of radioactive waste, but we now have a waste stream going on and it is totally uncontrolled and even unknown to our compacts.

Notification of sales -- somehow, again, if we are going to control these facilities that have high exposures, we've got to know who they are. You would expect that this would have happened -- when I looked through the NRC Part 40 requirements, they list optical lenses under the section of unimportant quantities.

But the paragraph right under saying, optical lenses with thorium are unimportant, they say, this does not apply to the manufacture, grinding, or shaping of these things. But then you went and looked and said, Where's the requirement for them to have a license, and it's not.

And we all know how you need a NRC license for distribution of exempt items, but that's byproduct material, and you look in Part 40 and there's no requirement for a license to distribute exempt items source material. So we have a whole lot of disconnects and we have two, again, who have two classes of license. And again, like the waste issue, the notification of sales says, at what level do you want to do?

If it were my recommendation, I think what I'd do is say let's do a study and everybody who received more than 15 pounds of thorium -- that's 10 percent of what they're allowed for a year -- and see if it's a problem. If it is, then we'll start looking at those who had five pounds. If it's not, we'll look at those we get 100 pounds. You can pick any number you want, but I think somewhere along the line we need to start scoping the issue.

I already mentioned the problem about manufacture for exempt distribution. It just doesn't appear in Part 40 and so it doesn't apply. And release for unrestricted use -- that is another issue. There's two sub-issues that probably we need to think about there.

The first is we have a lot of facilities that at one time have used thorium and we don't know where they are. So do we have more orphan sites floating around? Do we have those orphan sites? The second issue that relates to that is where do we want to start thinking about looking at these? Again, what level should they have had before we go out there and look at it?

And of course, financial assurance and record keeping -- all are byproduct materials if they have a certain amount of material that can theoretically cause a larger contamination. If we want them to have financial assurance -- but the NRC was very consistent in what they did. If you look in Part 40 and look at the curie amount of needing financial assurance, that somebody decided a general licensee does not need financial assurance so the curie amount is above what is required for a general licensee, and hence, they aren't required. But like I say, we're looking -- and it's not disposed yet, but we're looking at 350 to $400,000 remediation program, not counting lawsuits involved, and yet there was no requirement for financial assurance.

Fortunately, the SSRs -- and Colorado regs are a little more general than what the NRC is under Part 4 and you can interpret the SSRs in our regs to say, Yes, you need a financial assurance. But the NRC couldn't -- if this had happened to an NRC facility, you'd think it's going to happen over and over again because they've got no mechanism whatsoever.

This didn't come out too well. This is just the side of the petition that we sent. And I said yesterday, it's not the OAS in Colorado. It was the offices of the Organization of Agreement States -- it was posted in the Federal Register the 7th of July, then we have the 20th for comments. And incidentally, I've noticed that as
of -- I guess it was last Tuesday, nobody had commented on it, so if any of you have comments, I'd sure encourage you to submit some comments in there.

Recommendations -- we need reporting requirements. I don't know what those levels of reporting requirements are, but we sure need to have some information when people are getting enough material to put up dumpsters reading 11 mR per hour. You've got to visit your licensees, but again, you have to know where your licensees are. We have to reevaluate the financial assurance requirements. And just listening to Greta, I think I'd like to modify one of my recommendations.

As I had said -- been going to say, that we really need to see what we're doing and maybe get together with the NRC and look at this issue. But I heard Greta say that she's going to start reevaluating the .05 percent limit for exemptions for source material. And to me, it would be a real nice thing if this organization, the NRC, could get a working group together, because to me, the two issues go hand in hand -- is what level are you going to control the stuff and start working on them together.

And that's all.

MR. CAMERON: Are there any questions for Jake or any status reports from the NRC on a petition? And I think we'll note Jake's recommendation that -- about the working group on this, and there may be more to say during the Part 40 presentations that the NRC is going to do today.

(No response.)

MR. CAMERON: Okay. Well, let's move on to our next topic and then see -- maybe take a break at that point. And I think we have two topics left in this session, and one is the use of laboratory data.

Aubrey, this is yours. Do you want to come up here?

MR. GODWIN: I'll give you a couple of scenarios. You're sitting quietly in your office, if that ever happens -- you're trying it -- and someone appears and says, I've got this small pile of stuff and it has no real hazardous material characteristics in it, and we'd like to ship it over to one of your waste sites here in the state. And we had an analysis run on it to see what it had, and we got some results back, and I want you to let me know if I can do this without getting a radioactive material license.

Well, you can't answer at this time, but the answer is no, because nobody comes and asks you that question if they don't have radioactive material. You just don't get it.

Now, there's a couple of things you have to worry about when they do this. There's two or three critical elements you need to worry about. Number one, what kind of sampling plan did they follow to collect their laboratory samples? We promptly refer them to MARSEM [phonetic], and then we start looking at how they went about choosing things such as background.

Background's real tricky when you're talking about [indiscernible] materials, and in some case it's tricky when you're talking about byproduct material, if you've got some fallout remaining in your areas.

Secondly -- well, when you talk of -- you also have to recognize that it's not a real easy thing. For example, we had one gentleman who came in and had some estimated 700 truck loads of material, and he had 13 samples, and he's ready to say that this has been approved. He would agree to take 17 more before it was over with, so we had 30 samples, finally, out of 700 truck loads.

Ed Bailey recently had a problem with about 84 car loads and 26 samples, something like that.

MR. BAILEY: Eighty-three.

MR. GODWIN: Eighty-three carloads. Excuse me.

MR. BAILEY: Train car loads.

MR. GODWIN: Train car loads, not small cars, but -- and what they do is they come in and they plop some results on your desk that probably looks vaguely like this, and unfortunately, I can't --

I blew it up but you can't blow it up very well and still have it look like a lab report. That's the problem.

And quickly, you're asked to make a decision about whether this is going to fly and a few things. Well, I'm going to talk about the laboratory end of it today. We won't go into sample selection and sample sizing and things like that. That's a good one for somebody else.

But looking at this lab report, can anybody see anything that raises your eyebrows about anything here? Not from there? Well, the curious thing you notice on it is the first isotope listed is what? Can anybody read it? Actininium. What's the half-life of actininium?

(No audible response.)

MR. GODWIN: In that particular chain, it's six hours -- goes to thorium 228, if you look real close. Guess what you don't see in that chain?

(Pause.)

MR. GODWIN: You don't see any thorium 228. Now, this is in soil that's supposed to have been there for about 12 years. Do you reckon it made equilibrium yet? And we haven't gotten to talking about the laboratory, have we?

So you see results like this and you wonder how they did some of the testing and finally you figure out they must have done it by gamma because that's really all you're looking at, is gamma peaks and whatever else is in there you wouldn't see. You don't see

natural uranium up here either, even though the 235 gamma is showing in there, so you wonder where that would be. The point of the slide is to look critically at the data they lay on you because it probably has more stories on it than they really realize or they wouldn't have brought it to you.

Now, we had another case -- this is another sample of the same site -- in this case, guess what? They're reporting 238, both of them. So after you see the two, you begin to wonder, Is this the same samples, or what's going on? And then, for you who think that a certified lab is all that great -- and by the way, these were all certified labs -- you need to understand something. The quote, certified lab is for water, not soils, not leak tests, not air, and it's only for certain isotopes. Most of the things that you're looking for -- guess what -- they're not certified all.

But the first thing they lay on you when they bring in these reports is, This is a certified laboratory. And this is just a little certification sheet for the boy who brought this one in. We had to do an investigation on this particular one. It gets real entertaining when you really start checking up on them. And you've got to remember now, you're going to be making a determination whether they can bring this in, which puts your use as a regulatory individual very much in question.

This was the result they showed us, or one of the results. Does anybody see anything strange on this one? Can you read this one a little better?

(No response.)

MR. GODWIN: Well, it says it's gross alpha result is 22, plus or minus 17, with a detectable level of 2 in picocuries per liter. Does that raise any question in anybody's mind? The error is a little bit larger than the detection limit. It ought to raise a few eyebrows.

They had been passing out results like this for several years, and this lab has been used by several cities for their drinking water. It had been used by consultants. It had been used by DOE. It had some interesting history to it, and they were a quote, certified lab. We went down and took a look because we were curious about this and we discovered another thing or two about it. This is the data they had recorded.

Now, you might can read it a little better now. If you notice on this particular sample, they had 11 plus or minus 17. Wait a minute. I thought the detectable limit was two. But you also notice a little number circled out there by it? You'll see on the next sheet that what they actually put on the sheet wasn't eleven plus or minus 17. It was 17 plus or minus ten. And you'll see it was transferred to our Arizona forms and sure enough, it showed up -- if I got the form -- well, they showed it to us as 17 plus or minus ten. I guess I passed it by.

Anyway, the point is that you really need to look closely at what they're doing in these laboratories, because the laboratory is what you're going to make your decision on and that's

where the result really -- making a regulatory decision for you. And it's bad to discover in court that they have reversed the numbers, as they did on this particular report.

Now, typical type problems that we see is that commercial laboratories, because they're trying to get as much money as they can and charge as little as they can, because it's competitive out there, they minimize the counting time. What happens to your detection limit when you're minimizing the counting time? It goes up. And when we start telling folks that you're putting out this detection limit. You've got to have the time to count it and show that it gets it there. They say, Well, that's going to cost us money because as quick as they figure out they cannot count it for 20 minutes and get a result out -- they start talking about hours, and that slows things down pretty drastically.

Now, when you start talking about counting alpha -- we don't have a sheet on this one, but it turns out the alpha count was very highly suspect. They didn't do any kind of correction for weight of sample. They also didn't do any weight of sample correction for beta, so all of those results became very suspect because as you build up your sample thickness, guess what you do to your counting efficiency? Yes. It goes down. You almost have -- once you start getting into this thing, you almost have to go look at the laboratory that you're going to be accepting results from.

Now, am I all that good? No. I'm not all that good, but I got a laboratory guy who is good, and I hope each of you have

a laboratory guy that's good at it because that's what you need when you get into this kind of business. Don't just take one look at it and say, Okay. I'm going to buy it or not buy it. Let your laboratory people take a good critical look at it.

Secondly, go with your laboratory people and see how they're doing things at the laboratory that you're fixing to accept the results from. It may mean out of state travel because a lot of these laboratories will not be located where you are. And don't let the fact that it's a DOE laboratory that's being used by DOE slow you down. Go look.

Thank you.

MR. CAMERON: Thank you, Aubrey.

Any other states have similar problems with lab data? Does anyone not? So Aubrey's recommendation about having a good laboratory [inaudible]. Do we want to take up with the last item since Aubrey's up here before we take a break?

VOICES: Sure.

MR. GODWIN: For those who haven't heard, Seaman's Nuclear has an application pending with the Nuclear Regulatory Commission for a distribution license for a moisture density gauge to be distributed to general licensees. Now, in order to understand the significance of all this, we might need to talk about general licenses just a minute.

First of all, one of the basic concepts to general licenses is that they are, quote, inherently safe, unquote. And

then, depending on which one you're dealing with, you have some criteria that describes what is inherently safe and what they Commission believes will meet that criteria. This particularly device will be distributed under 31.5.

There are several general licenses which we have that go state to state and nobody has any problems with them: your aircraft exit lights, your counter weights in aircraft, are just a few, some static eliminators. They are, for the most part, distributed under a different general license. This particular general license, in its current form, calls for notification quarterly of the addresses to which the device was shipped to as the end user. And as a result, you have some record of where these devices are. Now, these devices can consist of almost anything from, again, static eliminators to four and five curie cesium devices.

If you look at the preamble or statements of consideration to this 31.5 general license, over the years there have been statements about acceptance of portable devices being okay under it, and at least one of them indicated that moisture density gauges would be an example of an acceptable device that could be placed under

there -- be distributed under it.

The staff is currently reviewing the application from Seaman's Nuclear, and I had an opportunity in July to take a look at the device and the application. And I'm doing a lot of this by memory because I don't have the application in front of me. But as

I recall, the maximum radiation exposure level is around 30 mR at contact. And unlike most moisture density gauges, the sources do not come out of the device. The detector tube is placed down the hole as opposed to the source being down hole, so it's a little different from the conventional arrangement.

The handle is arranged so that when you pick it up it shuts it off. There is a way to lay it on its side and turn the handle and turn it on, but that's another issue. And it's really quite a cleverly designed device. I must give them credit for it.

However, the question becomes, is it inherently safe sufficiently enough that it can be distributed as a general license device to any and everyone who commits to reading the manual and following the manual? And the only address location under the current version you will have will be where it was initially distributed to. There's also some concern under the proposed rule whether you can even get successive addresses and how they would have to give these addresses then should it get moved?

I think it's important to know that we do have some portable devices out now that are being distributed under this 31.5, and they have caused, at least in one case, a problem in that they were shipped into one state and used in another state and ended up scrapped into another state. So we have some experience with these being floated around.

As you can see from the letter I sent to Carl, I don't believe it's inherently safe, primarily because of the inability to

assure proper storage of the device just based upon reading a storage manual. I mean reading the manual about storage. It's really difficult for me to believe that a person who is told he's going to have to go out and do a lot of work and whose primary interest is getting the production out on the part of testing the roads and what have you is going to be concerned enough to read in detail what the storage requirements are and the transportation requirements for transporting the device.

And if it's not properly stored -- we already know that devices that are stored are being ripped off. I suspect if they're not being stored properly, they'll go faster. And after it's gone, there's not a whole lot of assurance that they're going to let us know about it. And so there's an even greater probability for misuse.

Now, the accident conditions that are described in the regulations will not give you sufficient radiation dose to reject it based upon those described conditions. You would need to look at some other basis that I think the storage and adequate security -- is the way I approach it, anyway.

I also pointed out to them there's no real recognition under our reciprocity regulations to recognize a general license coming from another jurisdiction, and so basically, once you get it, if you get it in Arizona, you'd be stuck to Arizona. If you got it in NRC jurisdiction, you've got nine states you can use it in. That

is one of the issues that will be raise on this new Rule 2, but they want some discussion about it.

Anyway, this is my letter and my comments on it. I leave it to you to read. And if you've got any thoughts on it, you might want to write Carl. But I do think it's important that you know that these devices are being considered and you give it some thought.

MR. CAMERON: Thank you very much, Aubrey.

Does anybody have any questions for Aubrey on that, relative to contacting the NRC? Jake?

MR. JACOBI: Colorado sent a few page letter to the NRC about why they shouldn't put these out as general license. But I was just curious, how many states here think that these devices should be generally licensed? Maybe what we need is a resolution this afternoon.

MR. CAMERON: Okay. That's so noted for Stan and Richard.

MR. GODWIN: If we're going to send them anything, we need to have a basis for telling them why they should reject it, because our regs, at least as far as the staff is concerned, would indicate that they can issue and probably could be forced to issue such a license.

MR. RATLIFF: Well, one thing we see, especially in the summer time, the moisture density gauges are most often stolen and

most often run over and damaged. So you're dealing with ones that are not in a situation where they're in a safe, remote location.

MR. GODWIN: Just for a matter of interest, they passed out the states that had the most stolen gauges in it. It was Florida, Texas, Arizona, and New Mexico. I don't know how Ed missed it, but he did. Maybe you're number five.

But anyway, three of the four close to what --

MR. CAMERON: Well, great. Michael?

MR. BRODERICK: It's not a major issue but you mentioned specifically to write to Carl. I think he's about to change jobs. They're going to get someone else in that slot, so his office is who you'll need to write to.

MR. CAMERON: Okay. Thanks.

All right. Let's take a break and come back at four o'clock and we'll take up from there.

[Recess.]

MR. CAMERON: Okay. If everyone could come in and take their seats? We're running right on time. Okay. We have two interesting and useful presentations now, and Don is going to be the NRC lead on both of them. One is 40.13, and when Jake was talking before, we brought that -- that issue has come up.

Ruth McBurney is going to be with us for the state side on that one. And then we'll have Don talk and we'll have Ruth talk, and then we'll have a discussion. And we are going to go into the clearance rule, and for that one, Don is going to take the lead, as

I said. And we're going to have David Snellings from Arkansas talk on that one.

So let's get started with Don. Do you want to go ahead?

MR. COOL: The first rule of meetings is take the talking stick away from Chip.

All right. Good afternoon. We're going to spend a little bit of time talking about a subject which has been discussed, or is disgusting, or you might say some other things, for a very, very long period of time.

I was trying to think of some cute way to introduce this, and the best I could come up with was to simply tell you, Dorothy, Toto, you're not in Oz anymore. However, this is a very interesting land which we have entered upon.

Back a few months ago, as we were trying to look at the Commission's direction to go off and look once again, for the umpteenth number of times, on the source material issue, we spent one day -- we went away from [indiscernible] to try and get out of the ivory tower a little bit and try and brainstorm some ideas of what were some possibilities; what could be done to resolve the seemingly endless debates with regards to source material and exemptions and the whole issue.

And we spent the first little while trying to figure out what the domain -- what the map of this territory was. Some of you may have heard, you map the territory -- figuring out what things are. And we came up with this little graphic. And I think what you

will discover over the next moment or two is that whether your source material -- NORM, TENORM, or any combination of the above, you are somewhere on this chart.

Originally, before all of this got started, you had material. It happily sat in the ground. Nobody had done anything with it yet. And then along came the Atomic Energy Act. In the Atomic Energy Act, for reasons totally unrelated to health and safety -- the reasons specifically were a dividing line based on what they thought was a reasonable amount of material from which they could extract stuff for bombs -- drew a dividing line -- call it 500 parts per million, one twentieth of 1 percent -- and they defined source material: uranium, thorium, any combination, any physical chemical forms, or ores which contain blah blah or any combination thereof. And they divided the world into two halves.

So you had things that were less than that, which was not source material. Let's just leave it at that for the moment. But you can apply the word norm down there. It exists in nature. It's out there. It's in the ground. Nobody has done anything to it. It's just there. Is it above it? Even if it's in the ground, you consider it to be source material.

Now, what happens when you do something to the material? You mine it out of the ground. You drill for oil and you pull it up. You make fertilizer out of phosphate materials, or anything else that you might do. Well, we've nicknamed that technologically enhancing it. Well, if you were down in this category, you

technologically enhance it, and you go up to another line. Now, what kind of regulation applies to that? Well, for the moment, under the current regulations, it's considered an unimportant quantity.

Okay. That's 40.13(a). Never got over the criterion by which it was in the definition of source material, but it has been enhanced and that's sort of how you get to the TENORM category. Now, if you were over here on this side and you refined it and processed it -- most likely you were a uranium mill or something like that -- you started out with source material. Voila. You're still source material. You have regulated material. And up here lives all of the uranium fuel fabricators and conversion facilities, enrichment facilities, and the reactors, and everybody else who may be using various materials in unregulated land.

Now, wouldn't it be all nice and simple if that's the only possibilities of roots was to go up there, or it could go up there? Unfortunately, thus is not quite the case, because you can start out down here less than 500 PPM, and as a result of things you do which have really nothing to do with the radiological material, you can go over here because you can pull up other factors that are associated with it, and the net concentration of the uranium or thorium could be greater than 500 parts per million. Well, now what do I do?

Or you could be up here and for various and sundry other reasons like mixing it with other materials or other ores and slags.

You can have material which ends up being less than 500 parts per million. Will that make it TENORM? Not exactly. And of course, you have the people who really very much enjoy it, because they've had it under regulation. They've been using it all along, and they've figured out a way to toss it over the fence that way.

And it's this latest category that creates a number of the more interesting, recent examples where people have been up here. They've had materials in these categories. They've been under some type of regulation. And they want to deal with it now under some one of the exemptions.

Okay. You're totally confused? Good. In that case, we'll move on.

All right. The exemption for source material covers all types of materials other than ores established for practicality, and AEA has been excluded from some of the statutes that regulates NORM and TENORM, like TSCA and RCRA. It gets more complicated, because you see, we're not in Oz, but we do have good witches, perhaps bad witches, and various sundry other forms who all think they have a piece of the regulatory pie at some point in time, depending on the kinds of materials.

What kinds of materials are we talking about? This is just the short list. We've talked about zircon sands. We've talked about various kinds of minerals, phosphate slags. The list can go on and on and on. We won't need to take additional time on that.

Now, what I mentioned a minute ago was over the last few months, there have been several cases that have arisen which the staff has brought to the Commission's attention, where people have wanted to do various and sundry things like transfer it to a different entity, say in the great State of Texas, without having to manifest it as waste or consider it for analysis under the waste disposal provisions for Part 20. In that case, the Commission concluded that they were transferring it to another appropriate entity and they didn't have to do it.

Or our friend Shieldalloy. Roger now has one of those. He's shaking his head quietly. I've wanted to do various and sundry things to their slag pile because, depending on the way they do the analysis, they think some of the slag pile, or maybe all of the slag pile is less than 500 parts per million, so why can't they simply transfer it? After all, it's an unimportant quantity. We've concluded that yes, that's probably true, but we'd really like to know about it before you go sending off rail cars and rail cars and stuff.

You have some situations where we've been trying to decommission some facilities, and lo and behold, they generate materials and they think it's less than 500 parts per million, and they want to do the same thing. In that case, the Commission ended up concluded, Yes. They're sort of in the same boat so you can go ahead and approve it, but once again, keep in mind that staff, if your analysis says that the dose possibly could be over 25 millirem,

please let the Commission know about it, which raised in fact then a very interesting sort of question, how are we going to know about it, because of course, if it's exempt, they don't have to tell us about it.

Well, okay. We'll mush on just a little bit here. The picture doesn't necessarily get any prettier.

The Commission has asked us, the staff, to give them an options paper for some alternatives, possibility legislative. Go down and see if our friends on Capitol Hill can help us sort out some of this tangled web that we've woven, potentially some rulemaking, maybe an MOU between EPA and NRC -- don't hold your breath -- to try and address this 40.13 issue. Consider the possibility of some rulemaking to at least close the, on a stopgap basis, the fact that someone under 40.13 at the moment doesn't have to really -- there's no obligation to tell me when they're going to do this, so that we can at least take a look and do some sort of evaluation to make sure they aren't going to get themselves into too much trouble associated with it.

That paper is due from us into our executive director's office and then to the Commission towards the end of this month or early next month.

What I'm going to do now rather than going on, because I think I've painted you an outline of the very complicated picture, is just toss out a couple of questions then stand back and watch the fireworks. To what extent will some of the things that have been

going on -- EPA's been looking at some of the TENORM, a number of you folks have been doing things -- to what extent does that help or complicate or otherwise -- the picture associated with the exemptions of uranium and thorium? You have these on the slide sets and hopefully, there are copies that are floating around so that when I flip to the next one, you can still remember what the questions were.

Would someone besides the Commission be willing to take responsibilities if the Commission decided to say, Okay. It really isn't any of our jurisdiction. The Atomic Energy Act didn't put me into that role. Or if I went to Capitol Hill and said, This is really no place for the Commission to be, and there are other appropriate statutes that EPA has, keeping in mind of course that most of that then gets worked directly through you folks to pick up some of the responsibilities, because the alternative, which would be to move that 500 part per million some direction like down, because 500 parts per million translates to some rather significant doses, as Jake very correctly pointed out.

Would it mean that the Commission would start picking up regulating a whole bunch of other people in the phosphate mines and otherwise? And quite frankly, I know I don't want to go there. So the question of who might pick it up and the regulatory structure under which they would -- and then -- one which is sort of inside the Commission, as this probably doesn't need to be debated in this forum -- but it's one of the ones that really drives us nuts right

now. This would be a significant activity to try to develop an approach, and none of the people who are involved with this problem pay me any money to think about it.

And with that, I'm going to turn it over to -- thank you, Dorothy.

MS. McBURNEY: Welcome to the real world. The states have to deal with this all the time. And I promise you, at the time I first called Don to find out what he was going to talk about, he wasn't sure, so this was just winging it. But I think it'll fit in nicely with what he's brought up and some of the questions he's raised.

I've called the title of my presentation, "Source material exemption: a matter of regulatory equity," due to some of the recent applications and interpretations of this rule, the rule exemption in 10 CFR Part 40, and a similar in the Agreement State regulations. This particular rule which exempts source material that is in concentrations less than .05 percent by weight in any medium is an anomaly when compared to other exemptions, and I will discuss, therefore creating an inequity in the risk basis for exemptions.

Some of the events that have brought about this particular rule -- have brought this rule to light and to the need for further discussion include several things. Suddenly, there are large shipments of waste containing source material that are being allowed to go to unlicensed sites, including FUSRAP waste and

cleanup waste from other sites. Of course, FUSRAP waste was not under AEC so that exemption's another story.

The Nuclear Regulatory Commission recently issued a policy in which the exemption in 10 CFR Part 40 and 40.13(a) for source material includes any waste containing source material at less than .05 percent by weight, if it is within the bounding radiological consequence analysis, whatever that means. This issue was raised to the Commission level as a result of the METCOA [phonetic] waste containing source material being proposed to be disposed of at a RCRA hazardous waste landfill in Texas. The Commission concluded that the exemption for source material did include disposal.

However, in response to concerns raised about the issue by staff of the Texas Natural Resource Conservation Commission, Chairman Shirley Jackson explained that state and EPA regulations would also need to be met concerning the disposal of this waste. I don't know which regulations, our NORM regulations or the RCRA regulations or just what. But she also stated that the Commission has directed the staff to provide recommendations to the Commission for developing a more risk-informed and coherent set of requirements for licensing of source material, including possible revisions to 10 CFR 40.13(a), as Dr. Cool alluded to.

This brings us to the next initiating event, the reevaluation of 10 CFR Part 40. In 1992, NRC announced an advance notice of propose rulemaking concerning Part 40 in which the

licensing and exemption criteria for source material were to receive a fresh look and potentially changes were to be made as a result. The Source Material Concentration Exemption was one of the issues to be addressed in future rulemaking. That was 1992. The future is now, and we have exempt concentrations versus release for unrestricted use.

Prior to the latest interpretation of 40.13 by the Commission, if source material that was waste created by a licensee -- a licensed facility in which the resulting waste was a result of that activity, then the waste would have been radioactive waste at any concentration down to the cleanup standards, and only if it was always at the exempt concentration was it considered to be an exempt concentration of source material. That was the way we were interpreting it earlier.

Normally, exempt concentrations cannot be used as release criteria for unrestricted use, but in this case, one could have a licensed facility that is contaminated at less than .05 percent by weight and would not meet the release criteria, but they could clean up that site and take the resulting waste and send it to an unlicensed facility for disposal. The same material, same concentration, just a different site. One analyzed for dose contribution and one not.

Just as a matter of comparison with exempt product and byproduct exempt concentration, exempt products are evaluated carefully for individual dose contributions to avoid any unnecessary

or any inadvertent dose to the public. As recently shown by NRC policy and brought to light by the Agreement States, it is not legal to combine exempt sources in a single device. Also, disposal usually takes place at one or two or three units at a time, not giant ship loads of it.

Product containing radium, which is an alpha-emitter, which is not regulated by NRC, is not included as exempt sources in the suggested state regulations -- in most state regulations except for those that were originally distributed prior to a certain date.

The exempt concentrations of byproduct material found in 10 CFR Part 30 are based on a particular risk. They cannot be concentrated. They cannot be incorporated into commercial items. And they cannot be used as a volumetric release criteria from licensed sites, therefore can't be incorporated into the waste.

We recently received an e-mail from Mike Mobley from the Tennessee Radiation Control Program in which their allowance of some nickel containing very low concentrations of technicium 99 for which analysis showed that the dose to the most exposed individual would be conservatively about .14 millirem per year was highly criticized by the media and Congress. The release of exempt source material could result in doses, although also low, around 100 millirem per year -- far exceed that level that was cited for the free release of the technicium 99.

Likewise, we in Texas have received a letter from a legislator who is concerned about a lot of radioactive waste being

allowed to come into Texas and go to an unlicensed facility in high volumes. So we see a few inconsistencies in the issues when it comes to the source material exemption in 10 CFR 40.

This exemption, as far as I could discern in looking at it, has been in the rules since 1947. As Dr. Cool said, it was based on a low-impact assumption at that time and protection of common defense and security, not on a risk basis. At that time it was thought that source material below that amount was not worth trying to extract for its source material content, and that was prior to in situ uranium mining, I think.

As stated in the advance notice of proposed rulemaking in 10 CFR Part 40 in 1992, there has been no review for consistency and conformance of these rules with other rules since that time. There's also inconsistency with decommissioning standards. In the February 1999 issue of Nuclear Licensing Reports, one article stated that, quote, the regulations in 10 CFR 40.51(b)(3) and 40.13(a) allow licensees to transfer source material to any person exempt from the licensing requirements of the Atomic Energy Act and 10 CFR Part 40 as long as the source material content is less than .05 percent by weight of the material as a whole.

However, under some circumstances, transfer of material in accordance with these regulations could result in doses that exceed the 100 millirem per year public dose limit contained in 10 CFR 20.1301. In addition, because the regulations do not explicitly provide a regulatory basis for denying such transfers and because

the licensee making the transfers would be complying with the regulations in Part 40 as they're currently written, the NRC may issue an order to stop a licensee from making such a transfer only when the transfer may result in a potentially hazardous condition that could affect public health and safety. And I think this was done prior to the latest NRC Commission policy.

So if you take a look at the concentrations that .05 percent by weight would consist of, for natural uranium it comes up to be about 339 picocuries per gram, and for natural thorium, 116 picocuries per gram. This compared to the uranium mill cleanup criteria -- we are using 30 picocuries per gram uranium and 15 picocuries per gram radium. For the cleanup of other NRC sites, they have used ten picocuries per gram for uranium and ten picocuries per gram natural thorium. And depending on the scenario assumed in the methodology to calculate the dose, these concentrations could result in doses much greater than the 25 millirem per year dose limit for unrestricted release contained in the final rules for radiological criteria for license termination.

In addition, if radium is in equilibrium with uranium or thorium present in the chain, the radium activities would significantly exceed the 5-15 soil standard. Since radium is in the chain, as Don mentioned, it's all in the source material TENORM, this whole world of these isotopes. This leads us to compare this to NORM in that similar isotopes are involved.

The CRCPD suggested state regulations for NORM allows the release of sites and disposals up to 100 millirem per year as a range. When his rule was sent to the federal agencies for concurrence, EPA did not concur with those sections of the regulations that dealt with release and disposal standards. In their letter of non-concurrence to CRCPD, EPA stated, "Should such a regulation be adopted, the latitude given in choosing appropriate radiation standards up to 100 millirem exposure annually from a single source of TENORM could result in an unacceptable risk to the public, result in inconsistent standards among the states, and potentially result in the creation of new Superfund sites."

As we recently heard though, AEA material is exempt from TSCA and RCRA, so -- but if they don't regulate it and the states do, then maybe it will -- I don't know.

So what are the implications? Of course the FUSRAP waste again -- but that's another story. The cleanup of other sites -- it becomes a de facto cleanup standard, potentially. And then we have the issue of people wanting to average higher concentrations of this material, mixing it with -- if they're cleaning up, maybe throw some clean soil in and get it down below the exempt level and then ship it, to achieve that exempt concentration.

I haven't indicated whether these regulations should go up or down or whatever, but it's clear that there are some inconsistencies and that it should not be used as a cleanup standard

or transfer for disposal in large volumes. So the rule needs further review, as both of us have stated, and I was glad to hear that NRC is going to proceed on this. And this in conjunction with the source material issues that Jake brought up concerning the general license source material shows the need for further rulemaking in this area.

Thanks.

MR. CAMERON: Before we go on to all of you, I would just ask Don if he has any comment on Ruth's presentation. I don't think there was anything in there [inaudible].

Okay. Let's go to Steve Collins for a first comment.

MR. COLLINS: And I've got two comments, the first one for the group, basically.

For matter that has source material in it, which is just the uranium and the thorium atoms, the states can regulate that matter based on other TENORM radionuclides present -- the radium and whatever. I have gotten concurrence from a couple of different NRC staff members of that interpretation. So if you have Part N and it's above five picocuries per gram, it's potentially not exempt, and if you've got those rules you can regulate it.

My other one is, I can't believe you said that and how dare you? We have identified a problem with adequacy to protect the public health and safety. It's a result of actions and inactions on the part of NRC and the Agreement States, and how dare we seek some other agency to help solve our problem? We need to clean up our own

dirty laundry, and do not look to some other federal agency to do this. We've got a problem that exists with source material. We're now proving that it's a problem. We need to fix it, and it's going to be lot of hard work and it's not going to come quick and easy.

But let's not look to another agency. Let's get some working groups started on solving the problem.

MR. CAMERON: All right. Ruth, Don, anything to say on that one? You don't need to say anything.

MS. McBURNEY: I agree.

MR. CAMERON: All right.

VOICE: Amen to the first one.

MR. CAMERON: Amen. All right, Aubrey?

MR. GODWIN: I can only echo what Steve said. It seems to me that there's been identified a health and safety issue -- these levels of source material being released and I think the Commission would be derelict if they didn't proceed to try to solve the health and safety issue. That's a prime concern of the Commission.

I'd also point out to the group that there is another couple of exemptions floating around. I'm not sure of the number of it, but there's one for 4 percent thorium and stuff in the aircraft engines and metallurgical equipment. I think if you check those you'll find the doses from that can be pretty high. These exemptions always have been real interesting because they're the only exemptions the Commission has that has conditions with them.

And I don't understand an exemption with conditions. They just never computed very well with me.

And now for the question -- Ruth, you had ten picocuries of uranium as one of your cleanup standards, or --

MS. McBURNEY: That was quoted as an NRC --

MR. GODWIN: Okay. Does that --

MS. McBURNEY: -- something that they had used on one of their --

MR. GODWIN: You had above background or --

MS. McBURNEY: Yes.

MR. GODWIN: -- or including background?

MS. McBURNEY: Above background.

MR. GODWIN: Above background? Does anybody know about how you establish background? It's a little trickier when you get -- we recommend you use the ICRP 50, I guess it is. Otherwise you find that a lot of areas in this country where the background varies somewhat above what you really think it does.

Do you have an answer to that, Don?

MR. COOL: Only esoteric: very carefully.

MR. CAMERON: Okay. Thanks, Aubrey. We have Paul Merges, State of New York.

MR. MERGES: Paul Merges from New York.

One of the things that's missed from the discussion so far is this BRC-ing of a million cubic yards of unimportant quantities of source material that we're seeing, and shifting it to

the RCRA C facilities -- these RCRA C facilities, the way they're licensed, they're only licensed for a 30 year look-see. And if there's no problems associated with the facility after 30 years, the site developer can walk from that site.

It's not a site that's designed to be turned back over to the DOE like your UMTRCA mill tailing sites are. It's not a site that's designed to be in state or federal government jurisdiction like your Part 61 sites are. And all this has been done without any NEPA documentation, any support by the Commission of any consideration of NEPA or ALARA, as far as I'm aware of.

And I only -- I used a million cubic yards just because of the FUSRAP material. DOE is sitting out there with another 100 million cubic yards, that if you set the precedent here it's going to be good for phenol and it's going to be good for Oakridge and all the unimportant quantities down there, and you're going to -- and there's another two orders of magnitude of material sitting on those sites.

MR. CAMERON: Okay. Thanks, Paul. And I -- is that going to be an issue that we're going to take up in our FUSRAP discussion tomorrow, or is that sort of stand alone? I mean, does anybody have a follow-up to what Paul said? Let me ask it that way.

MR. BAILEY: Yes. But I don't think we have time to -- I've got a date tonight with my son -- but there's going to be some follow-up tomorrow on it.

I would like to put a little bit of the FUSRAP thing in the disposal. If we accept the average concentration that the core or its contractor claims was in the 83 train carloads of FUSRAP waste that went to Button Willow and we put it into a program to model doses at a low-level waste site -- and I will tell you we did not put in the three plastic liners, and I'll tell you why later -- we show that site exceeds the low-level waste criteria in the 3- to 400 year time period. And that's assuming everything stays the same.

Now, people always say, Well, you've got to include the plastic liners, and I say, Every container of radioactive waste is thicker than those three sheets of plastic. And in our site, there was not going to be any uncontainerized waste going in, and I think that was a pretty common type thing at all low-level sites. It's all going to be containerized. So if you get that argument, just tell them, A steel drum is a lot thicker in retarding something than is three sheets of plastic.

MR. CAMERON: Okay. Yes, sir?

MR. McNEES: Jim McNees from Alabama.

And I wanted to follow up on what Aubrey said about the 4 percent exemption. We're looking at Part 40. We're going to look at 13(a) at the one-twentieth of 1 percent. The 4 percent exemption on devices is real interesting also, but as you said, it's the one that has conditions on it.

If I acquire one of these parts -- one of these manufactured parts, I'm exempt but I have a restriction that I can't perform metallurgical tasks on it. I can't saw it, reform it. But one thing I'm not exempt from doing and that's transferring it. So I got it -- it's 4 percent thorium -- and I can give it to anybody I want to, including an aluminum plant in Baldwin County, Alabama, when they get it and can melt it.

So if we're looking at revising Part 40, let's take a look at that 4 percent exemption and whether or not it should have restrictions on it and whether or not transfer should be a restriction on it.

MR. BAILEY: Another exemption you should look at is the .25 percent by weight for rare earth products. That one -- you can get some screamers there.

MR. CAMERON: Don, is this -- are these going to fit under this rulemaking, or possibly could they fit under it -- and I guess I might as well ask you at the same time. Jake made a suggestion about a state-federal working group on this rule, and I wondered if you and possibly Paul wanted to comment on that suggestion?

MR. COOL: Okay. Will you permit me to work backwards, because the last one's easy. I think it's probably a good idea.

MR. LOHAUS: Paul Lohaus, NRC.

I would agree, Don. I think this particular subject area and the kind of issues here lend themselves very well to an nrc-Agreement State working group.

MR. CAMERON: And perhaps one of the issues could be scope of the rule, too.

MR. COOL: Yes. Now to move back to the previous question or group of questions which is whether some of these other exemptions are not under the rulemaking, and that's in fact got two pieces of answer to it.

One piece of answer is that in theory, all of Part 40 might be open. I think what the staff will probably recommend to the Commission is something slightly more bite-sized, as in try to deal with some of this, we don't even know what's happening issues, the 40.13(a), and at least getting notification of it on a shorter term and then dealing through a working group or something on some of the longer issues.

There's also a second piece to this puzzle, which is for some fairly lengthy period of time -- unfortunately, it's had a really long gestation period -- there has been underway an analysis to try and reevaluate the doses and implications from the various exemptions in the regulations, both by product material and source material. And I believe the compilation report will be published before this year is over; I'm in hopes within actually the next month or two.

But it's been just long enough since I've touched the time line on that action that I'm not sure exactly what their due date for getting that out for comment and analysis will be, but I would urge you to keep one antenna up and we will -- we're working with Paul Lohaus to try and make sure that the states get notification when that does come up for comment, because that report -- and it's going to be a rather massive piece of material -- is an attempt by Oakridge to go through and run a series various kinds of dose models and scenarios on all of the different exemptions; the two we've talked about and lots of the other ones in there to try and evaluate what it is.

And the whole purpose of that will then be to talk that analysis and take the comments and propose potential regulatory changes. So there is another mechanism coming for looking at some of these other issues: transfers and some of the other things, which is coming on, because we needed to have something which resembled a logical and systematic underpinning of the technical bases in order to be able to move forward and make some changes. So stay tuned.

MR. CAMERON: Richard, do you want to comment?

MR. RATLIFF: Yes. I think this is an important rule because one thing we've talked about, these people don't know they're exempt until they go to a scrap yard or to a landfill, and then they realize they have radioactive material. And when you get something like that that really is up in the air as to whether they

can dispose of it properly, it really takes the confidence the public has in the whole regulatory structure.

So I think it's a real important area to address. And I know Ed and I both said we're willing to have people on the task force to really work towards the resolution of this issue.

MR. CAMERON: Great. All right. Let's give Don and Ruth a hand and move on to --

(Applause.)

MR. CAMERON: We're going to go next to the infamous clearance rule, I guess. And Don is going to let us know what's happening here, and then we'll have some comments from David and then get comments from you.

MR. COOL: Now, the first thing that you may notice is that the word clearance does not appear on the title slide. Our efforts to establish appropriate regular controls on the control of solid material -- okay. That gives you just a wee bit of a hint of what's going on. If we thought we were in Oz before or someplace else, we are now in the twilight zone.

Why are we here? Licensees have material. Licensees have to do something with the material and their facilities and the equipment, and anything else that walks across the threshold of their facility. Not all of that material is going to be a liquid or a gas. A lot of it happens to be a solid. What happens today is sort of hit and miss in various -- depending on the kind of circumstances that you have, because in fact Part 20 does not have

any criteria for controlling the release of solid material. There is no table in the back of Part 20 which gives you values for solids like they do for liquids and gasses.

Licensees make various requests for case by case analysis, most of those being in the context of waste disposal for certain kinds of materials, soils, or other sorts of things. But the fact of the matter is that every single day people release material.

Now, they do that by one of generally a couple of ways: the old reg guide 1.86, which has various surface contamination levels. Those were not based on dose. Those were based on basic delectability way back when -- I'm not quite sure how far back that goes. Or, if you're on the reactor side of the house, you wave your white hat around for just a moment and you say, We're non-detectible, except of course when you get under the surface of that, you discover that the next line in the reactor tech specs tells them how hard they have to look and how hard they have to look for surface contamination just happens to be numbers which are exactly equivalent to reg guide 1.86.

What it means is that there's a whole variety of things that are going on. There's disagreement over levels. People are installing new kinds of detectors, and what you now have is a whole system that is driven by the Eberlines [phonetic] and other instrument manufacturers of the world whose basic reason for being in business is to move over the decimal place. And every time they

do that a whole bunch of things which was perfectly appropriate one day, to walk out the door because you couldn't find it, the next day is inappropriate because now you can find it.

So in June, 1998, responding to a staff paper on the status of activities for potential waste to proceed, the Commission directed us to start the process which might result in rulemaking. They gave us some relatively clear initial guidelines that it ought to be dose based, not delectability, that we ought to pursue an enhanced public participation process very similar to what was done with the license termination rulemaking in the Part 35 rulemaking, that we ought to be realistic in terms of the health effects and the analysis, and that theoretically at least, we should be looking at something which could be applied to all materials. They gave the staff a little bit of an out to narrow the scope to only certain types of materials if in fact it was impossible to generate the kind of technical bases that would be needed for a more broad based rule.

So staff went off and started to develop the process, sent to the Commission a paper which outlined the kind of process that we would intend to pursue, separately sent to the Commission a draft issues paper that we proposed that we would use as part of the public participation in the early parts of the process. The Commission approved the issues paper for use at the end of June, and that set us off on a schedule which has us in San Francisco next week and down to Atlanta, and back to Rockville.

Now, some of you may recall that once upon a time there was Chicago. We'll probably get back there. It has not actually been officially rescheduled. We pulled the plug on that session because by the time the issues paper was approved by the Commission, there really was only about four or five weeks for people to start looking at it, and that was deemed by all concerned to really not be a sufficient time for people to be able to engage in any kind of constructive dialog.

In the meantime, we also have a variety of other things going on because you can't just go write a rule on the basis of some public discussion. Actually, you can, but you don't have any basis to support it, which is not a very good place in terms of the Administrative Procedures Act, NEPA, or any other thing. So out for comment is NUREG 1640. That is a technical basis document which analyzes individual doses you could get from releases of various materials, particularly metals -- from the various metals. That's out for comment and serves as a technical basis.

We have also contractors now on board to help us put together environmental impacts, extend the 1640 methodology and results to start looking at collective doses so that you can get into the cost benefit analysis, the regulatory analysis, the things that you have to have in place in order to be able to do an environmental impact statement, and this will be a full-blown generic environmental impact statement. Other folks on board to help us work through the whole process of what you can detect and

what you can survey and how that does or doesn't factor into costs and practicality issues.

The issues paper, which I mentioned, lays out the broad range of issues. And you see right up front here that while this lays out a broad range of issues, at the meetings that will be held other options and alternatives that participants may wish to bring forward can also be entertained. This is not constricting. This is just the starting point for the discussions.

One approach -- we could stay the way we are or you could do some regulatory guidance. You could just update reg guide 1.86 if you wanted to. Or you could move to dose based criteria for unrestricted releases. Or perhaps maybe you only want to have restricted releases, or you want to have a combination of the two, depending on the kinds of levels that you have present. You can move the other direction and simply say, I'm not going to allow the release of materials. Or maybe I'm only going to allow the release of materials that haven't been inside the restricted area, or maybe I would only allow the release of materials -- and you can start adding any different sets of conditions which from various practicality standpoints might allow you to define classes of materials.

A number of decision making factors, both in terms of the regulatory analysis that we might eventually need to put together: environmental impact statements and otherwise, human health impacts, a cost benefit analysis, the ability to measure it,

and other things that happen to be out there which set precedents for us -- one of those happen to be international standards, things which the states may have in place, other things which may be happening nationally -- the international actually plays a much larger role than a lot of folks may realize because there are similar activities going on.

The International Atomic Energy Agency sets standards basically applied throughout the rest of the world, and within the European Community, the EC, where standards like this are already in the directive and the EC countries are mandated by treaty to adopt those by May of next year. So quite frankly, there are standards which are already getting pretty well firmed and locked down outside of the United States. And this is one of the things that has to be kept in mind, because it would be a very interesting situation if there was one form of doing business inside of the United States and a whole different thing happening to come across the border, which makes life very interesting for the State Department and Customs and EPA, whose job responsibility is to do be the lead federal agency in responding to some of these sorts of activities.

So where do we stand today? In this tumultuous land, as you might expect, there has been a slight, small, negative reaction to the issues paper and the whole concept of public meetings to possibly establish rule. I've just had enough caveats in there. More bluntly, there's a boycott going on by the environmental community. They've said, No way. We're not going to come. We've

told you what we want to do before, read zero, no release. We don't want anything to ever come out of a reactor or a defense establishment, so we're not going to participate.

This of course brings up the very interesting question, Well, that's all well and good. What are you going to do about the nuclear pharmacy down the street, and what are you going to do about all these other uses, and how does this related to NORM activities and other activities, and where's the consistency? I don't care. I just don't want anything to come out of a reactor. You get some very interesting sorts of viewpoints. And don't take this as a total characterization. That's just one or two sorts of views, but they have some very strongly held positions in this matter. And at this point, we don't expect them to come participate in the meetings, although we do have a pretty clear idea of the kinds of views they would have.

The Commission, in just the last week or so, has reaffirmed that it wants us to move forward with the process as it was laid out; to move forward with the issues paper, to go ahead and hold the meetings. Fundamentally, you were posed the question, if you don't have a series of stakeholders with which to participate, do you move forward with the process or not? The Commission believes that it is critical to go ahead and move forward. This is a national issue. If anything, the press -- the issues that Mike and the folks in Tennessee have had with the nickel and the DOE complex and otherwise, simply bring into a sharper focus the

fundamental fact that there is no national standard to deal with volumetric or solid material contamination.

Thus, the Commission feels it's important to go ahead and move forward and try to start this process and engage the discussion which may lead to some standard. Will it be rulemaking? I don't know. But of course, rulemaking would be needed to do anything other than to just maintain the status quo. So while it's interesting what the environmental groups might want me to do, which is to say, No release, would require a rulemaking. It would require a generic environmental impact analysis and the whole other set of things that go along with it, just as setting a dose based standard, without even talking about the number, would require a rulemaking.

So we're going to proceed to move forward with those activities, address them in open forums. Ye all come, if you want to. It ought to be a very interesting time. Chip is really looking forward to it.

And so just to wrap up this quick little status summary for you, what are the opportunities for some of you to get involved? There are a number of them, and there are a number of places where you may be able to exert leverage that I simply can't from my position. One of them, and sort of the obvious one, is come and participate in the meetings and make your views clearly known during those discussions.

Then there are other places where you have opportunities to interact with people and express viewpoints. Your legislators at

both the state and federal level -- yes, it's got big time visibility in Washington down on Capitol Hill, and there are some rather interesting views with regard to that and it probably would be very useful for your folks to understand where you're coming from. Interactions with other folks that you have within the state organization -- this is an issue that transcends the Bureau of RadHealth, or whatever your particular organization may be, because you're going to have to involve your solid waste folks and other folks who may be in other sectors of your state organization to get a consistent state view and approach to the issues. And that may involve a considerable dialog to bring those together.

Discussions with the folks that you have, because there are a lot of other people out there -- this is an issue which goes well beyond. You have the various solid waste handlers. You've got steel and scrap recyclers and other people. This is not simply a matter of, it walks out the door and gets buried in a landfill or something. Now, that's one possibility but there are a lot of other possibilities out there. And discussions in addition to the discussions that the NRC would have with various public groups, because you have a lot of folks that you can, or perhaps need to see and interact with.

There is some measure of -- I hate the word -- education, but coming to a better mutual understanding of what's involved, what the implications are, and how it fits into the pattern, how it fits in with the total scheme of activities -- it

should be a very interesting process. We are due to take the results of the series of interactions back to the Commission spring of next year and then lay out for them those results, and whether a recommendation is then proceeding forward with a specific rulemaking and the time frames that would be associated with that. What exactly are the next steps in the process?

Thank you very much, and I'd love questions.

MR. CAMERON: Thanks, Don. And I think these opportunities for a state involvement are really well measured up there. And we should point out at this time that this rulemaking does have a -- not only a state-federal working group but a steering committee. And Steve Collins from Illinois has been with us from the start on that.

I think David has some probably practical examples here that are relevant.

MR. SNELLINGS: Yes, I do.

MR. CAMERON: Go ahead.

MR. SNELLINGS: Okay. First of all, Arkansas is not one of those ones on your next to the last slide that has opposed this. I think that this is an excellent process, that we need to do this. However it turns out, we need to go through this process.

We have gotten a little early look at some of this. Back when Stan asked for an agenda item, we were really involved with one of our NRC licensees in our state and some negotiations relating to the clearance rule. And so I asked Stan to please

include clearance rule on the agenda, and I thought at the time that I would get up and say a little bit because the things that we were addressing -- it was related right down the line.

The licensee in our state is actively pursuing the clearance rule -- and I'm using that. Even though you didn't, I'm using that terminology -- the clearance rule methodology to initiate a tech spec change to do this now. And they have been told that, Yes, that's the right way to proceed on this thing. And not discussing the merits of the issue, whether this is the right thing to do, the dose related merits and all that -- not discussing that. What we are concerned about is that we have a law in Arkansas that prohibits disposal of low level radioactive waste in anything but above ground facilities. And some of the materials that are being talked about to be disposed of is secondary system mine exchange resin, slightly contaminated, a few hundred counts above background, want to put it in a landfill.

Well, you can't do that. You can't do that in Arkansas and still live by the existing law. And this law was passed back in 1987. And so how does the issue of a tech spec approval by the NRC -- how does a process like this, if it comes out with rules, et cetera that allows this, does all of this preempt Arkansas law? At the time that we put this on the agenda -- that I asked for it to be put on the agenda, the answer really wasn't that clear.

And I've worked with Paul and several other people in state programs, and they have identified for me a change -- and let

me make sure I get it right -- the Energy Policy Act of '92, which basically says that states still have the authority -- this is the old BRC stuff that when I was away from Arkansas, this was done. But anyway, the old BRC stuff, but it still applies, as I understand it, and it says that states can regulate on the basis of radiological hazard and the disposal of low level radioactive waste in their state.

And so how does all of this and the Arkansas law -- and I understand a lot of other states have the same type of law -- how does all of this interact? And it really presents us some opportunities for state involvement in the enhanced process. That's great. That's well and good for a year down the line. If the licensee in Arkansas decides to pursue this, how does that tech spec approval, if it's approved by the NRC, how does it interact with Arkansas law? Does it preempt Arkansas law? No, I don't think it does, and we will let the attorneys hassle that one out.

But that's where we are on this thing, and I see some other topics that were talked about in the previous talk; the same thing applies. If a state has this kind of a law on its books, you're not going to get -- at least I don't think you're going to get state legislatures to change it, because in Arkansas now there is concern building again for host state, and that's where all this came in.

And then I think an also equally important thing -- and Ed, I thought, said it real well earlier -- public outrage factor.

I don't see much of that in any of these nice, formal presentations. How do you assess that? What do you do with that? How do you communicate this, add to that public -- add legislator outrage factor? When you have to live with it every day and you pick up the phone and all of a sudden it's Senator So and So from southern Arkansas, Why in the world are you doing this? It's a no-win situation for you.

So whatever this working group is, they've really got their work cut out for them to work on this public outrage factor.

MR. CAMERON: Okay. Thank you, David.

I would point out that there is a discussion in the issues paper that Don mentions on the provision in the Energy Policy Act that David mentioned. And it's not just an issue for states that might have some provision enacted like David, but what the states could do prospectively in that regard, vis a vis whatever the NRC does. And I guess I would just ask Don perhaps to address this issue apart from the legal issue. And I think we're going to have Hampton say something about that in a minute.

But how we will approach the everyday, so to speak, decisions that are being made within the Agency on clearance or release of materials while this generic standard is being worked on -- and then we'll go to Hampton for some National Energy Policy Act elucidation.

Don?

MR. COOL: Very quickly, the staff is really wrestling with the what-do-we-do-in-the-meantime syndrome, not just from the standpoint that Dave has pointed out. The practical necessity is that every day licensees have the need for and will continue to have the need to take actions.

I expect that we will be taking -- and it may not necessarily take the form of a formal paper -- some proposals of how we would proceed to the Commission in terms of the policy question. The leading candidate, of course, is to try and pursue more or less the status quo in terms of looking at individual actions as they come in. And circumstances which portend a policy implication, a large action or a higher visibility action or a unique modeling action which doesn't readily fall under the criteria -- a tech spec change certainly falling into that category -- I would expect -- and this is just Don Cool, a division director in NRC, views, so don't take this as the NRC party line at the moment -- that that would get taken probably all the way to the Commission before such an action would take place, in order to assure that the policy implications had been thought through at the senior management process.

MR. CAMERON: Okay. Hampton Newsome is with the NRC's Office of General Counsel. Hampton?

MR. NEWSOME: As Chip mentioned, this provision in the Energy Policy Act has raised in the issues paper -- and we're expecting to get some feedback from it.

It was encoded in Section 276(a) of the Atomic Energy Act. It's a very interesting provision. It has not been interpreted, as far as I know, by the courts. It hasn't received much attention at all, and so you can -- if you do a search on it you won't find much beyond the actual language there. But it promises to play a role in the development of this -- in this area, and we look forward to hearing -- we expect to hear different views on what kinds of impacts that provision will have, and we'll see how it goes as the process moves along.

MR. CAMERON: Thank you, Hampton.

Larry, do you want to offer something?

MR. CAMPER: I do. Let me pick up on Don's comment, our concerns about what we do in the interim. And I'll share with you again -- this is informal as well. I'm speaking from my discussions along with John Greeves, my division director with NEI on the tech spec issue.

NEI is looking at, and had an informal discussion with us about some type of generic approach for modification of tech specs and release of materials under the umbrella of -- we currently have effluent releases for liquids. We have air effluent releases. And therefore, it would seem to be appropriate that there were some solid materials effluent releases as well.

Now, we raised a couple of concerns in that discussion. One was this concept of viewing it as an effluent release, and we discussed some of the differences between solid material and the

effluent release that we have today in Part 20. But we also cautioned Paul that we have a great deal of concern at this point in time, and sensitized any eye to the fact that any movement away from what we have been doing, the status quo in Don's slide, causes us a great deal of concern in terms of putting any change through the appropriate due process, public awareness and what have you, at a time when the Commission is looking at this idea of clearance. So any dramatic change from what we have been doing causes the staff a great deal of concern and would have to be factored into the overall process.

So Paul and NEI were going to chew on that and think about it and we'll probably be having more discussions with them informally, but we did run the flag of concern up on the tech spec issue.

MR. CAMERON: Okay. Thank you.

States around the table? Steve?

MR. COLLINS: When our director asked me, What's all this process about, I knew I could get his attention quickly by saying BRC, which Dave mentioned.

A very brief history on this -- NRC and a lot of the Agreement States that have been faced with some of these issues, even before BRC came up, were basically saying if you model a situation and make a case by case proposal to me and it turns out that it's less than 1 millirem or certainly in the 1 to 10 millirem range, you can probably get a case by case approval for release of

this material. NRC tried to adopt a policy to that effect called BRC. Needless to say, they weren't successful in that policy.

So if you back off and say, Well, we still get the case by case things. We're still basically using the same back of the pocket unofficial criteria. Everybody thinks that 1 millirem, by ICRP definition anyway, is a negligible individual dose, and so that's a pretty safe level that we can all go by to release something. So if you were going to do a rulemaking, you'd need to model a lot of the common situations that you would expect to have from NORM materials that exist in large volumes already, particularly some that have a high economic value, if they can be released, to model those, which has been done as part of a technical basis for rulemaking if you decided to have a rulemaking.

And then if you decided that you were going to use that criteria, certainly you would want to establish that criteria by using every step of the Administrative Procedure Act appropriately, and even open it up for wide stakeholder input. And that is how I explained to my bosses, where are we at today?

We're in a wide stakeholder input into something that is to discuss the options, one option of which is to have a rulemaking, if that's the way we decide to go. To actually put in the rules the criteria that's kind of being used now on a case by case basis by most any of us that get these questions.

MR. CAMERON: Thank you, Steve.

Anybody else around the table or in the audience want to comment on this before we go to the business meeting? Paul Merges, and then we're going to go to New Mexico.

Go ahead, Paul.

MR. MERGES: All right. I'm Paul Merges from New York again. Just because you adopt a dose-based criteria doesn't mean there's going to be consistency among federal agencies.

We had a site in New York state, same site, same radiological conditions. Two different federal agencies modeled the site. One comes up with a cleanup standard to meet a 25 millirem per year maximum exposed number to the general public and comes up with 600 picocuries per gram. The other federal agency a few years before that did exactly the same thing, only they marked it up to come up with 100 millirem per year. But they used conservative scenarios and they were 60 picocuries per gram was the cleanup standard for total uranium.

What I'm getting at is just because you apply a dose criteria doesn't mean you're going to get consistency in the system. You need consistency among your federal agencies but also you need consistency among your decisions of the path. You've got a very sophisticated public out there and they're aware that you cleaned up this site here and you did it at 60 picocuries per gram but on the other side of the state you want to clean up to 600 picocuries per gram. Now, why am I and my children going to be exposed at 600, but

the kid next door, exact same type of site to the other site, only gets 60?

You've got to start looking at what you've done in the past and keep that moral outrage down of the public, besides looking at a generic criteria. And don't expect it to be a simple thing where you're going to adopt relatively loose scenarios, because the public is a lot more sophisticated than we realize they are, I think.

MR. CAMERON: Good point, Paul.

Stan?

MR. FITCH: Well, this is an idea that's long overdue, and needless to say, I'm looking at it from a perspective of the bottom up, because I was part of the regulated community at one time and it's like they just simply gave us guidances instead of regulations.

Now that I'm a regulator, I go to some of our licensees and say, Well, you're setting criteria for us that you can't force because it's not a regulation. Well, we need a regulation. We need clearance rules that are tenable, something that when we go to them we can cite them on. Reasonable programs for release of materials is certainly overdue, and I think using a base criteria of 1 millirem is probably ludicrous because that seems like an awfully low number.

MR. CAMERON: Okay. Thank you, Stan.

And as Don mentioned, we are starting with public meetings and we welcome Agreement State participation and views in those meetings. And I have a feeling this is going to be a long process and hopefully, there will be a lot of opportunities for input.

And with that, I guess that would close the formal part of the meeting? We have -- Ken?

MR. WANGLER: I don't want the last word.

MR. CAMERON: You don't want the last word? I'm sure someone would. Go ahead.

MR. RATLIFF: Just for those of you who are not staying for the business meeting that are coming back tomorrow, we're not in this room. We're up in the Atrium level in the Wedgewood Room. It's just right opposite of the registration area. And then we do have this list. Anyone that wants to sign up for transportation, we'll try to get it to the bellman in the morning first thing. And like they told me when Cindy Cardwell checked, is if three or four of you go together, the taxi is cheaper. It's like $32 for a taxi.

But I'll leave this here through the business meeting and then try to get everybody to determine do you want the shuttle or do you want to try to pair up with each other?

MR. WASCOM: Does that list include Saturday?

MR. RATLIFF: No. Tommy will have to do that for you.

MR. WASCOM: Okay.

MR. CAMERON: Okay. Eight o'clock tomorrow, Wedgewood Room, and --

MR. RATLIFF: It's real close for checkout and the elevators and everything.

MR. CAMERON: And we have a catchy title for the first presentation, What's happening with FUSRAP? And then something that seems -- I don't know why it seems appropriate to talk about weapons of mass destruction after that, but it does.

We're going to reconvene in just a few minutes. If you'll come back at the bottom of the hour, in about five minutes, we'll reconvene to the business meeting. Thank you.

[Recess.]

MR. MARSHALL: All right. Let's get this started. With time passing, the agenda gets more and more complicated, so let's get it going here.

If you'll go to the printed meeting agenda in your package, I think we need to add a couple of things that have come up. I've had some suggestions. I was just handed another resolution; a ballot form that reminds me of yesterday's discussion. We need to put some things in order here on the agenda.

If you go to the bottom half of that meeting agenda that starts around four o'clock, it's got about five or six bullets. We need to add -- I have a resolution from OAS to support the NRC budget. If you'll add that. I also have -- I see Floyd Hameter. I

haven't seen Floyd in 15 years. Good to see you -- and Steve Collins, to comment about IMPEP review of the NRCSSD.

I think generally -- I'll say it now, and you can think about it and give ideas by the end of this session -- Richard, Roland, Ed and I, and possibly others are going to brief the Commission on October 20. We've had a skeleton draft agenda since about January, and we thought we would be there for an April briefing. Some things have evolved and regressed and gotten worse, so we'll take any items for consideration for a briefing.

And that, I think, is the agenda, besides yesterday's resolutions and the issue of consideration for secretary-elect.

Aubrey?

MR. GODWIN: I would like to suggest and make a motion at the appropriate time relative to a sense of the group -- not a resolution, but a sense of the group to support the not issuing a license to Seaman as -- for a portable moisture density gauge. At the appropriate time I'd like to make that motion, whenever you decide -- I presume you have other business somewhere down there?

MR. MARSHALL: We can sure add that to the list too.

Okay. I appreciate -- Floyd will like this. I'd like Steve and Floyd to talk first so Floyd can go home. Come on up here. You can stand or come up here and sit if you like, Floyd. Either one.

MR. HAMETER: Howdy. I just wanted to give you all a Texas greeting.

Back in November, I guess you could say a team was formed of several Agreement State members technical staff and one individual from the Office of State Programs to do an evaluation of the sealed source and device program of the NRC, and using the same IMPEP criteria that are used on the state programs and the regional offices of the NRC. When I first got there -- well actually, when I first started reviewing for this thing, I sort of felt like Don Quixote, and I was assured that these windmills were actually dragons. So we had to go out and look for the dragons. So I started learning real quick what the IMPEP process was all about.

And just as an aside, for all of you that haven't done it, we've done our own internal IMPEP, and it's an extremely important learning process for your senior staff so that they understand what's being required of you in the IMPEP process. We went up in the last week of March and did all of our reviews of the device sheets and the reviews of the program and the staff, and I don't know, in some ways I still feel like Don Quixote.

I started looking at the rules of the way an IMPEP is supposed to be done and it was totally entirely different from what I envisioned it. Instead of going up there and saying, You don't have this information so we can't tell if you've got a good program or not, it's, You don't have this information so we can't prove that you're not doing the things that you're supposed to be doing. So it caught a couple of us by surprise. I'll just say it that way.

Basically, what we looked at -- it was just an abbreviated IMPEP that the states get, except for the fact that it was just the sealed source and device indicators. So all we did was look at the technical quality of the sealed source and device reviews, the training of the staff, and -- I can't remember the exact terminology of the last one -- evaluation of defects and incidents regarding the SS&Ds. This was covered by Jim Myers, the NRC representative.

Apparently, there had to be a representative from the NRC on board because they wouldn't let us state staff look at their secrets, I guess you would call it. Eric Jameson from Georgia and Gibb Vinson from Illinois were the other team members.

And one of the things that I noticed was the fact that I guess mainly it was an indictment of the IMPEP process for SS&Ds was the big thing that I saw, and the fact that for sealed source and device programs, the criteria demand perfection. Instead of -- and like inspections are license reviews, instead of them saying most, the criteria is all. So everything has to be perfect. And if you've ever tried to come up to a perfect standard, you'll know that there's no way anybody can do that.

And that's basically what we found, was that there were several things that they weren't doing, although they -- I don't know exactly the right term -- they argued the point that, because they were doing things by NUREG 1556 Volume 3, and since it wasn't out until the middle of July of '98, those were the only ones that

mattered. Everything before that was not couldn't be evaluated against that standard.

I still believe that document is just a written version of what we've been doing for the last ten years anyway. And in fact, it's probably -- I can probably ask any one of you to stand up and you'll probably tell me that every time you had an IMPEP or whatever the process was called before that, when the SS&D folks would come down and talk to you they'd say, Well, you've got to do it this way. And so we were taught to do it that way.

And in many cases -- well, I'll try to make this short. We looked at -- I could probably talk about this for several hours. When you live this for a week, you -- well, actually it was several months. But basically we found their program, quote, unquote, acceptable. Well, I think -- I can't remember the exact terminology. I've already forgotten it. I guess it was such a traumatic experience I forgot everything. Satisfactory, that's the term. Everything was satisfactory.

We had some -- had one item satisfactory with recommendations for improvement. We would like to have made the whole thing satisfactory with recommendations for improvement but the way the rules go, you can't do it that way. You have to give them satisfactory.

Generally on the whole, my observations were we had -- this is from my point of view. This is not the team's viewpoint. I saw some changes of attitude from the beginning of the week to the

end of the week. I saw some -- I won't say arrogance, but -- and I won't say superiority, but they were -- the staff -- well actually, the new staff -- that was the other thing too, is their program was almost entirely brand new. They did what I call a rush job on trying to qualify all these people, and I guess you'd have to say they accomplished their goals.

But because we were supposed to be looking at the last four years of information, and we only got to see probably a little less than a year's worth of information that they were willing to say, We're going by these procedures, we didn't really have a good handle on what was going on except for the fact that just from our personal experience and contacting with these people, we knew what their internal procedures were, and that they were doing this for the last ten years and yet, some of the things they were telling us to do, they weren't doing.

For example, how many of you in here got dinged because you didn't have your review check sheets for the device evaluations? Almost every one -- in fact out of the 26 or 28 device evaluations that we looked at, I think we saw one in these files. And I know every time I was involved with one of these things, the first thing they asked for was, Where is your check sheet? It's in the file, and show it to them. It's got everything in there. It checks everything off. So they know exactly what we looked at and what we didn't look at.

That's one of the big complaints I had was the fact you couldn't tell what they'd looked at or hadn't looked at. They said, Trust me. We know what we're going. We checked everything that was supposed to be checked and we ignored everything that wasn't supposed to be checked, so we did it right. And that's one of the problems that I had with the IMPEP process in the fact that you're innocent, even if there's no evidence that can support either innocence or guilt, so you have to take their word for it.

And I guess that's good, but if it's done properly there shouldn't be these little nit-picky things that happen. That's again, my personal opinion.

There were three things that we discovered that needed to be changed with the whole system, and that was -- the handbook 5.6 part 3, as I said, appears to be an absolute standard where all aspects of the sealed source and device program must meet the standard to be satisfactory. We proposed, and I think the MRB accepted, the premise that maybe this should be rewritten to come in more in line with licensing actions and inspections.

We had a problem with the term concurrent review. One of the things we discovered during the week was that there probably is as many ways to do a sealed source and device evaluation as there are Agreement States. We heard about some states doing it by committees. Some states do it by having two complete, independent reviews. Some people -- some states do it by having one knowledgeable individual do it and then a supervisory person check

to make sure that all the points were covered. We had a little problem with that, so we turned it over and requested that somebody come up with a specific definition of what that is, and if it's even needed.

We indicated a recommendation that the NUREG 1556 Volume 3 needs to be reviewed and determined if any revisions to it need to be made. There were several philosophies and whatever that were proposed during the week we were up there -- or excuse me -- the week and a half that we were up there, counting the half a week that we were up there for the MRB. Several proposals were made as to how these were changed. I think the NRC came up with a committee to provide some kind of criteria and guidance. I personally think the committee should have been larger than what they had because -- personally because I'd like to have been on the committee.

Well, basically, I guess I can say that the people in NMSS discovered that -- I guess, to be nice, they discovered that there are other knowledgeable people out there in the Agreement States that know just as much how to do device evaluations as they do. And again, like I said, it goes along with that feeling that I had that the attitude had changed, because there was, I felt, a better feeling after the thing was over, that they had -- and I think the statement was made during the MRB meeting that we need to start working more closely together and interacting as equals, rather than as NRC state. And I think that they did change their attitude a whole bunch in that respect.

I think Steve Collins has some comments that he'd like to make. I think he's drawing on some comments from Gibb Vinson, one of our other members, and -- well, I'll let him tell you what Gibb says.

MR. COLLINS: The way I initially got involved in this was I volunteered for the OAS to -- since we were trying to meet kind of a short time deadline to try to put together a team real quick that would meet the needs to get this review done and the process started in a short order so people could be trained in a regularly scheduled training time to do this.

I called Richard Ratliff and asked him if Texas was willing, and he basically said that Floyd would do it, without checking with Floyd, so we greatly appreciate your efforts, Floyd. And then I went to Joe Klinger, and basically what I had done was I had already asked around, What's the two or three most experienced people in the country at doing SS&D evaluations? And Floyd Hameter had about 18 years plus. I think Gibb Vinson had 14 or 15 years plus. And so we had a good core of a team.

And then I went out asking very quickly for some volunteers. Roland had a staff member that would have been available at a different time slot. Eric Jameson from Georgia, Bill from Arizona -- Bill Wright and one other name, I think -- so we had several backups in case one of these team members got ill or something like that. And we got the team put together really quickly so the training could go on.

And then I got asked to basically bless what had been proposed. That went forward to the Commission and that started -- and then I volunteered myself to be the voting member on the MRB when it came up, and didn't get any objection to that from the OAS. So my participation was originally putting a team together and then backing off and saying -- when Floyd called me and asked for help, I said, Well, I'll help, but, Floyd, it's really your job to work with Cathy Snider [phonetic] and the others to learn this and get it all going. I'm not anything other than a general adviser until MRB time comes.

I did talk with Gibb Vinson and get his input and reactions as a member of the review team on this, and so I'm going to paraphrase some of the remarks he made. In general, some of the NRC staff had the same reaction that the Agreement States have towards IMPEP review. That is, there was some special agenda and that the adverse findings were unjustified. This certainly was not the case. From the Illinois perspective, the review team members went to pick up pointers on how to improve the Illinois program but was disappointed to find that Illinois is much more conscientious about adhering to the current guidance and previous IMPEP findings.

Another striking point is NRC's statement that the new reg guidance was new, they shouldn't be held accountable for statements made therein. Ninety-five percent of the items in the guide have been around since the early 1990s and were found in

previous reg guides and brought to light by NMSS under the old Agreement State audit program.

Now, you need to be listening, Larry. We're being recorded, aren't we? I don't want any of this to be missed by Larry. You can stay, Larry.

NRC never addressed in the report how it would document and apprise the states of items in the guide it thought were no longer important. The states should certainly be made aware of such items so that they do not waste valuable man hours on these items, such as recommended working life not being specified in the registry sheet, updating old sheets, and bringing the total file up to current standards when amending a registry sheet, and that they will have documentation of the decision. This last item generated feelings of regulatory bias from the manufacturers in the states that are implementing this guidance in its entirety.

Now, the rest of this is pretty much my own, not much of Gibb's. But I had some statements that I kind of made into questions. But certainly in Illinois -- and I checked with Texas and some others -- these are true.

My state has been told by NRC representatives to use a checklist such as the ones shown at the NRC SS&D workshops as a guide for reviews. Yes or no? And everybody so far I checked with said, Yes, I've heard that from IMPEP reviewers and even before that, in the old days, from Rich or Tom or somebody that had come by to review our program.

The checklist is to serve as a guide to ensure no important items are missed. I think we've all been told that. The reviewer -- and this is prior to July of '98 -- the reviewer checklist should be maintained in the SS&D file. I think we've all been told that. So perceptions, opinions, and feelings regarding this NRC SS&D program -- the IMPEP review is, Do as I say, not as I do.

And one specific example there is following NUREG 1556 Volume 3. The answer shown to several of the reviewer's -- comments was that didn't start until July of 1998, even though what we've all been told is all of this guidance existed before. That was just putting it all in one place. And that matches the training of the workshops and stuff from previous years to that date.

That's what I said, but that's not what I meant. Example: all items done to be satisfactory -- are to be satisfactory -- that's the criteria -- versus it's performance-based. And another example of that would be the interpretation of the applicability of a concurrent review and what is a concurrent review? Another perception is, That's new guidance and we have not fully implemented it yet. An example is not maintaining the reviewer checklist in the file.

And another one is, We have decided that item of guidance in NUREG 1556 Volume 3 is not really necessary, so we don't do it. Making sure the recommended working life was in a specific section of the sheet was an example of that. There are other

examples of each one of these. And then the general feeling, once again, that someone has a personal agenda to make us look bad.

Now, the bottom line to me is basically NRC went through what a whole lot of us have. They went through a period and had massive turnover in the SS&D program with maybe one of the old timers left, and that was it. They had to bring a whole bunch of new staff up to speed and they did an excellent job of doing it. The team actually did not find anything that they could identify that was a real public health and safety hazard or a potential threat. There were some that there was some doubt on, because there wasn't really enough of a paper trail to document that everything had been reviewed, but they didn't find any real evidence of any potential threat.

So for the technical quality of the evaluations, they were found satisfactory but needs improvement. For the training and qualifications, they were found satisfactory. And for the incidence and whatever the rest of that subcategory is -- sub-indicator is, they were found adequate. So the overall recommendation for the program was it was satisfactory.

That's it.

MR. MARSHALL: Thanks. Let's go on to something on the agenda I think is straightforward and I think good for where we're headed, maybe next year. Let's deal with funding and logistics for the local meeting --

MR. COLLINS: Oh. There was one other item I need to bring up to make sure NRC doesn't -- it doesn't get interpreted in a bad light.

There was a recommendation, which you may find in the transcript if you look at it, that the next review of the NRC SS&D program be two years rather than four. Most NRC regions get reviewed on a two year cycle, plus the working group is making a bunch of recommendations and NRC is proposing a bunch of changes to the SS&D program. So the recommendation for a two year follow-up for the SS&D program had absolutely nothing to do with any recommendations or negative findings. Had nothing to do with that.

It's just because of all the changes that are about to occur, we thought a two year cycle of going back was appropriate.

MR. MARSHALL: Ed?

MR. BAILEY: Floyd touched on an issue that Cindy had mentioned earlier, a year or so ago when she was on a review team, and that is that the NRC does not allow state people to review the incident files. And I would think that what's good for the goose is good for the gander, that we insist that only a state person review our files.

MS. SCHNEIDER: Kathy Schneider.

I just want the record to show it's the allegations, not the incidents. It's only the allegations files, Ed, and that's because of the protection of the alleger.

MR. BAILEY: That wasn't what I heard. The incident --

MS. SCHNEIDER: No. It's only the allegation files. It's always, always been the allegation files. It's not the incidents. So that's the only thing that the state people cannot look at is the allegation files for the NRC regions.

MR. BAILEY: Okay.

MR. SNELLINGS: I have a question. So what do we do about this? I mean, we're all just sitting here looking at each other. What happens now? Are these new ground rules? We busted butt on IMPEP. Everybody else does. We follow the rules. So what happens?

MR. GODWIN: I think the NRC is following what's now the rules. They just didn't follow them as far as the prior stuff. But they are complying, and I gather from the report that they got a report that's basically satisfactory. So they're just waiting for the next two years after -- and they're going to make some changes in the meantime. They know that's coming.

That's the same thing that would happen to you if yours was satisfactory. I presume somebody on the management wrote them a letter saying, Thank you.

MR. COLLINS: It is my understanding from the conclusion of the MRB meeting that NRC agreed to bring themselves in line with what's currently written in NUREG 1556 Volume 3 until they actually get the results of the working group and disseminate information so that if there's backing off on any of the criteria, that everybody can back off at the same time, in the same manner.

Does that answer -- isn't that accurate?

MR. LOHAUS: Yes. Paul Lohaus, NRC.

There's really two actions. The one is exactly as Steve characterized. I think, given a number of the issues that were identified in the SS&D reviews of the state programs, given the need to look at the guidance and process -- there was an interest within NRC to basically reengineer the process that NRC was using for its SS&D review, and given the need to look at the criteria in the IMPEP management directive 5.6, all this sort of came together.

And part of this was that we wanted to have the benefit of the OAS review of our SS&D program. And the thought was to take all of that information, including the results of the review, the experience with the state reviews, and the reengineering, and basically take a look at the criteria across the board. And out of that working group should come recommendations relative to changes to the criteria in the management directive, and I think one of those is it's very clear that there's a need to make the criteria more performance-based. One of the issues was the criteria were too prescriptive. So that's one of the areas.

So I think out of that working group process should come not only some areas for change in how we would do the SS&D reviews -- and that can be reflected in the guidance -- but also changes to our criteria in the management directive for the criteria that we apply in doing the IMPEP reviews. And that would then be applied uniformly across the board. But the second part of it --

that's sort of the first part of it -- the second part of it is, similar to how a state would deal with an IMPEP review report, we're going to handle that in the same manner.

The team did a very good job in conducting the review. The report is issued in final. NRC has that. We are going to address the comments and recommendations that are reflected in the report and proceed forward to implement those within the program. So those are really the two actions that I would see coming out of this.

MR. MARSHALL: Thank you. Richard?

MR. RATLIFF: On the funding issue, as you know, we pay our way now, and what worked well last year with New Hampshire, we -- Diane had like $395 left over. So we started out with 395 seed money. We based the registration fee on what it was going to cost us with that. We had to pay for the conference room, pay for the breaks.

What happened just at the last week, there's a Texas Health Foundation that I applied for a grant for, and so they have awarded a grant of $1,200, which will pay our rooms. So we should have about 6- to 800 more for seed money that we can send to the next group. I think it will be helpful, because some of the things that you really will have to look for is how are we going to keep this money? I know my credit union with the Health Department was real good. They let us set up a separate account -- sub-account that's OAS and that do separate statements, so at least for this

year, until we transfer the money to the next host state, we have good accountability.

I think it's going to really boil down in the long term -- is what Kathy Allen said yesterday. And I think we really need to hopefully assign a subgroup at this meeting to look at some of the other issues and see is OAS a group that can get a tax number, can get exemption status, and all those other areas? I talked to Paul Lohaus earlier and NRC is still willing to provide the microphones and the transcription. So the state will have to provide the meeting rooms and the video: the slide projectors, overheads, et cetera.

But I think we're doing well. Our registration fee is pretty small, and we've got a good carry forward. What several states had problems with is not having a tax number, and I think one of the things is to look -- can you get a tax number without being a 501(c)(3) exempt status? But that would help a lot of the people, and some of the states would have to go through and get checks issued.

But I think the system -- since we're 31 individual states that don't have a charter, don't have people with an office that routinely do business, it will be more difficult to go through the other route. But I think the meeting logistics works pretty easily from a smaller state like Diane to a larger state. It's just a matter of taking some time, and it's just dealing with the hotel. The executive committee pretty much has worked with the agenda, and

so any state -- I know North Dakota, Ken, has suggested that they might put in the bid. I think there's plenty of experience. I know Diane and I have talked, and we're willing to work with Ken or whatever state decides they want to host it next time to really go forward.

I can keep the account for a year and so right before next year's meeting I can transfer the money or I can transfer it whenever they want to have it transferred to that state.

MR. MARSHALL: Diane?

MS. TEFFT: I think my concern last year was simply accountability. I didn't have the option that Richard had in putting it in a separate account. It was in my account, and I was very nervous about that. I did get a secretary to go along and keep track of this as well.

But I think over time, this just doesn't look good for this organization, and I think we really need to pursue having some sort of account that we can put our money into and then as we go through the years, we can attach the costs of a meeting wherever it is. So I really think -- recommend we do something about this.

MR. DUNDULIS: Richard, that brings up the point that you raised yesterday about whether the secretary should become secretary/treasurer and actually, in addition to the account, maybe get one that we can draw checks should we have to. And it doesn't have to be something that would withstand a CPA audit, but basically like you do your own checkbook, and maybe as part of the business

meeting in future years, just a financial -- almost like an annual financial report.

And even if we don't incorporate, Well, this is what we had. This is what we took in. This is what we spent. And I've worked with a lot of other organizations that have done it. And I think all of the people that are involved are honest, but I think that's the reason you feel so uncomfortable about the situation, because you do have integrity but you're saying -- but what if somebody says, I think there should be 33 cents more in the account than there was? Then you'd probably be the one worrying about, Gee, did I lose 33 cents?

MR. MARSHALL: Ruth?

MS. McBURNEY: One of the things that could be done is if you did not want to go the 501(c)(3) route, which is the tax-exempt organization, you could become a 501(c)(4), which is scientific and professional, and at least get a number that people could do their requests to.

MR. MARSHALL: Does that require the by-laws and the incorporation paperwork and all that stuff too, or is it just simply to get a number to be --

MS. McBURNEY: I think it does require by-laws.

MR. MARSHALL: It does? Okay. The point of this item on the agenda was just to discuss and smooth out some of the highs and lows of the last couple of years, since we're now paying our own way. It's not -- we're not intending to take a vote or a motion.

We can if you choose to, but there's no real intent to spend all night on this.

Aubrey?

MR. GODWIN: Just one quick comment. Didn't we assign a committee to look into incorporation yesterday?

MR. MARSHALL: No. We mentioned it. We went as far as mentioning it.

MR. GODWIN: I thought we asked that the board look into it.

MR. MARSHALL: We can --

MR. GODWIN: And this could just be a part of that look-see.

MR. MARSHALL: Sure.

MR. GODWIN: Just -- not spend any more time on it, just look-see.

MR. MARSHALL: I can handle it.

MR. O'KELLEY: Stan, we came up with a great idea that instead of incorporation we go for corporate sponsorship. If that's the rule, we could have the Nike/OAS Agreement State meeting. We were talking ooze earlier today. The swoosh might be a great trademark. And Steve Collins' remark earlier, the logo, "Just Do It" may fit this group real well. We've also had some discussion with the Budweiser folks here, and they are interested in becoming the official tritium-chelating agent for --

(General laughter.)

MR. O'KELLEY: So we see a lot of potential in this, and it would ease all our money woes.

MR. MARSHALL: Thank you.

Right behind that topic is the next one, administrative transition between chairman and chair-elect. This is kind of an informational note. Roland, I think Bob Quillen for sure -- Roland and I at least agree that being chair of this organization is very different than it was even two-three years ago. Very different. Very interesting, I will say from the experience so far. And I want to make this a positive statement that being chair is a good thing. It's been good for me. It's been a real interesting learning experience, and I bring Ed along into the next year and the new chair-elect that we will elect here yet this evening.

But I think we need to have a more sound and complete orientation from past chairs. We need to involve OSP differently than we have in the past. Roland indicates that he was blind-sided a couple of ways becoming chair and then chair past, I guess, and the same thing has happened to me. And I'd like to help next chair persons to have a smoother time rather than be blind-sided, because this cannot become a second career for somebody. There were times I wondered. But I say this, I think if we hang together using past experiences with host states, past chairman experiences, and connect a little tighter with OSP on what NRC wants from this group, I think this person can help all of you around the table to connect better when they need working group support, when they need IMPEP and MRB

replacements. And it can make it -- I think keep it a very strong relationship.

That's really all I wanted to say on that item.

I think before we do -- let's see. We've got three resolutions. We've got two that we discussed and there's a third one that has been worked up concerning support for the NRC budget. While Roger passes that one out, I think I'd like to go back to the first one we moved today. I think we distributed -- let me try to recollect here -- we presented the Colorado GL exemption -- the GL petition. Did we take action to move it to today?

MR. JACOBI: We tabled it until today. Right.

MR. MARSHALL: Okay. Let's address that one again.

MR. JACOBI: Let me just reiterate, in my mind, it's an issue of equity between different licenses or some licensee is required to meet our radiation safety standards and some exempt -- and it's also a question of needing to protect the public health and safety. A rem is a rem is a rem, as Mike Mobley always used to like to say. And therefore, if one licensee has to do a -- post a radiation area and train its workers, then another licensee who has exactly the same risks and same hazards should.

And I think it covered most of the things in my talk there, and so maybe, Stan, you might like to say something, or else if people have questions we can talk a little bit about it.

MR. MARSHALL: I don't know what happens or what causes a mistake in posting in the Federal Register to reflect, in this

case, the organization instead of the officers for the organization. I don't know who slurred that, but I reiterate that in May, I sign on behalf of the officers only in support of the Colorado petition. And generally, the resolution today is to bring all of you into the loop if you so vote in support of the issue.

VOICE: Is that a motion to accept your resolution then?

MR. JACOBI: Yes.

MR. MARSHALL: Aubrey?

MR. GODWIN: I'd like to move that we accept the resolution as presented by Jake.

VOICE: Second.

MR. MARSHALL: There's been a motion and a second to accept the resolution as presented. All those in favor?

(A chorus of ayes.)

MR. MARSHALL: Let's discuss it more if you'd like. Is there discussion?

(No response.)

MR. MARSHALL: I hear no discussion. All those in favor?

(A chorus of ayes.)

MR. MARSHALL: Opposed?

(No response.)

MR. MARSHALL: It so passes. We'll work it up to put a signature on it and date it today.

Okay. The other one was a -- there's a rework by David Walter on the resolution to standardize something. I'm not going to name it, because we beat that up a little bit.

Go ahead, David.

MR. WALTER: Okay. Have you passed them out yet?

MR. MARSHALL: One second.

MR. DUNDULIS: Since we officially tabled it, before we start discussion -- I'll introduce a motion to remove it from the table for further discussion.

VOICE: Second.

MR. MARSHALL: It's been moved and seconded to take it off the table. What --

VOICE: It's automatic at the next meeting, it has to come back up to be retabled or taken up.

MR. WALTER: Okay. Hopefully you have it in your hand by now. If you don't, let me just -- okay. He's got them. I'm going to go over the old one and tell you where the changes were made, and that will probably help make it a little easier for you to understand.

The title of it was changed to, Relating to standardization of radiation limits to members of the public as established by U.S. federal agencies. The next change is typographical. On the last "whereas" on the first page on DOE order 435, that was just a matter of getting "except radon and its progeny released to the air" and then close the paren.

On the back, the only other change that was made was in the, Now therefore, be it resolved, which now has, "The Organization of Agreement States urges the U.S. Nuclear Regulatory Commission, the U.S. Environmental Protection Agency, the U.S. Department of Energy and any other involved federal agencies to enter into discussions which result in a consistent of radiation exposure limits for all federal agencies. It is further recommended that this limit be set at .1 rem, 1 millisievert per year total effective dose equivalent."

MR. MARSHALL: What do you think?

VOICE: So moved.

VOICE: Second.

MR. MARSHALL: There's been a motion and second to accept the resolution. Any discussion?

(No response.)

MR. MARSHALL: Arizona?

MR. GODWIN: Again, I would suggest the deletion of the National Council on Radiation Protection publication 116 and the International Commission on Radiation Protection publication 60. I think you'll find that the National Council on Radiation Protection is actually -- the correct name of the organization is the National Council on Radiation Protection and Measurements. I've previously stated why I think these should not be included, and I move to so strike those from the first Whereas.

MR. MARSHALL: NCRP and ICRP -- those two. Has there been a second to that motion?

MR. GODWIN: It appears, Mr. Chairman, I stand alone.

MR. MARSHALL: Illinois, comment?

MR. KLINGER: A question, actually. Is it a correct understanding that the, Now be it resolved would counter the third, Whereas about the patient release criteria of 500 millirem as opposed to an exposure limit of 100 millirem? Is that a correct understanding, because states that have already passed an equivalent to 10 CFR 75 would basically be voting for a motion against their own rules.

MR. WALTER: If you look at various situations that are involved in all of these -- in some of these Whereas, the -- as a for instance, the DOE and NRC both have a recommended limit of 25 millirem per year based solely on the fact that they are expecting there to be multiple areas of exposure, and that they're actual limit is 100 millirem.

And if you look at that on the third Whereas, it wasn't necessarily my intention to do that because of the fact -- I don't know what's going to happen on this as far as from the NRC's standpoint, and I don't know that they would feel they would be required to make a change because they already have specified a 100 millirem limit on virtually all of these things, with the exception of the 500 millirem. It wouldn't keep them from giving specific exemptions, but -- in my eyes it wouldn't.

But again, I have to say, like yesterday, and the same thing that was said by Mike Mobley, a rem is a rem is a rem, and if it's okay for someone to get a hundred millirem here, why is it okay -- but only a hundred millirem, why is it okay for 500 here? Why is it only okay for 25 here, and so forth? I'm trying to get them to standardize it so that it's easier to understand, rather than having -- if they standardize it and have 17 exemptions, that kind of defeats the purpose.

MR. KLINGER: Right. The last paragraph says, a consistent set of exposure limits.

MR. WALTER: Right.

MR. KLINGER: So I'm asking, is the understanding correct that you would like it to be 100 millirem, and basically, that would do away -- our recommendation would be to do away with all of those others that are not that same --

MR. WALTER: For members of the general public. This is -- the whole thing here is for limits to the members of the public. Now, those are exceptional situations with patients. Okay? They're members of the public but they're exceptional situations.

So in my mind, they could still go with that and be within the context of this.

MR. KLINGER: Thank you. I thought that was what it was.

MR. MARSHALL: Mel?

MR. FRY: I'm somewhat confused also with the last sentence. You referenced whereas. In the different whereas is various subsets, and yet you make recommendation back to the 100 millirem a year, which if you go back to the first whereas, is was collective for everything, and it appears, as I read, that all the limits, each and every one of them individually should not be set in any lower than 100, but collectively they shouldn't be higher than 100. That don't make any sense.

MR. WALTER: The first whereas is talking about various recommendations from groups throughout, whether they be federal, including EPA, or international or national. That sets a precedent. Or at least I'm looking at it as setting a precedent.

We set another precedent in our position paper that specified that 100 millirem was what we recommended. I'm following through on that position paper and recommending 100 millirem.

MR. FRY: Then I think we need to clarify what we mean, that the limits be set at 100. The implication there to me is that you shouldn't ever parcel it out, and I don't agree with that. I think there are good reasons for parceling it out. I certainly concur in the national-international recommendation of the total being 100.

MR. WALTER: That's why the total --

MR. FRY: But the issue is how to parcel is out, and that -- and you don't have agreement on. I happen to think that the government promising me clean water is a much higher standard than

letting my wife come home with some seeds inside of her. I wouldn't consider those to be anything equivalent with each other. I don't disagree with the whole overall idea that the total general public shouldn't be exposed to any more than 100 millirem a year, but I sure don't want my government supplied water to do that to me.

MR. MARSHALL: Pearce and then Jake.

MR. O'KELLEY: Maybe I'm lost too. I thought I knew what this meant.

But I do -- I'm of the opinion that I think that it ought to be at 100, even for this new Part 35 release criteria. I don't see why that should be taken any -- or receive any consideration other than any other source. And I think the bottom line is what we're trying to do here is just set a tone for what we people think is going to -- or what we want to do, because I don't think it's going to really matter. They're not going to adhere to it and they're not going to automatically go out and say, Okay. They said do it so we're going to do it.

But I think what we're just trying to do is set the tone of what the feel of this group is. If we get bogged down in semantics all we want --

MR. MARSHALL: Jack?

MR. JACOBI: I think I agree and wanted to say what Mel had said, that I don't have a problem with that collective limit for all sources of exposures to a member of the public should not exceed a millisievert. But I'm not sure that we really want to say

eliminate all fractionization so that your low level waste, your uranium mills, and your D&D from your licensees are each set at 100 millirem rather than fraction it out. Or maybe you did and I'm misunderstanding it, but I assumed that you didn't.

But the way it reads is you say, Well, you have a 25 millirem limit here, and therefore we think it should be 100. So I think if it's not the intent that you eliminate the fractionization, it has to clearly state that.

MR. WALTER: That's the reason I put in total effective dose equivalent rather than a fractionated dose or anything like that. I expected that to be the overall maximum that they were looking at as the standard they would set.

And so a change in the wording there for collective, if that makes it more clear -- anything that would make that much more clear to you, then absolutely.

MR. DUNN: I move to amend the resolution to add to the very end of it the words, to members of the public. I know it's in the title, but that's just for clarification. I think it would help some.

MR. DUNDULIS: Second.

MR. MARSHALL: It's been moved and seconded to add the words, to members of the general public.

MR. DUNN: I don't think the word general.

MR. MARSHALL: Well --

MR. DUNN: Just to members of the public is the wording consistent with current regulations.

MR. MARSHALL: All right. To the last line of the, now, there it be resolved, paragraph. Any discussion? Stan?

MR. DUNN: That's fine with me. So you wouldn't even have to vote on it if I say it's okay.

MR. FITCH: I'm not real comfortable with this idea of including Part 35-75 in here because of the fact that if we start popping it down to 100, that's going to be a little too restrictive. That's not really taking into account people -- patients and their families, and show more compassion there of allowing a little bit higher dose.

I'm really not comfortable with having it in there. I'm not going to move that we strike it out. Somebody else can do that, but I just don't like the idea.

MR. MARSHALL: Other discussion?

MR. O'KELLEY: Do you want to handle these individual word changes as they are or you want us to keep making suggestions and vote on them all together, because I like the idea of putting the word collective in there somewhere, probably like this collective limit. Maybe that's the place to stick it.

MR. MARSHALL: To which place?

MR. O'KELLEY: I'm on the next to the last line, "Further recommend that this collective limit be set."

MR. WALTER: I'll add that and I'll say that and then I'll speak against the whole concept, because what you have just said is we want it all, and I think we all agree that it ought to collectively be 100. But I started to 500. I support that -- comment the 4 millirem for drinking water, I support that. I'm sorry, girls. I don't like everything from everywhere being all one number. I think it's a rotten idea.

MR. FRY: Point of order. There's a motion on the floor still.

MR. MARSHALL: Arizona?

MR. GODWIN: Since apparently we're discussing all the issues at one time instead of just the last little amendment, I'd like to point out that if you make this collective change or if you view it as David as indicated, you really hadn't changed anything because they'll look at it and say, Hey, we're all within a hundred. We're okey-dokey. You haven't changed anything. We're passing this resolution. Then we come to, Why are we doing it then? What we really ought to be talking about, is there a limit we want to have for each one of these and see what our parceling out would be? And I don't think we're really prepared to do that in 30 minutes this afternoon.

It's a good idea to say we want the same limits for water and the same limits for this and the same limits for that, and whatever number we choose for each of those media, but when you really get down to it, just setting the overall collective limit of

100 millirem is not going to do anything to change one federal agency action, because if everyone kept it within 100 millirem and they're saying, This is what we think the parcel ought to be.

And if you look at it collectively, which is what I believe we've been discussing, that this 100 millirem is a total collective dose, then I would suggest to you it's worthless to pass this because they're all going to beat it. And they're going to say, Oh boy. We've got all support from the states.

I'm sorry. I just don't believe we're going to gain anything if we go that direction.

MR. SNELLINGS: I'm absolutely confused. The last sentence, does that mean that to me, as a member of the public, I should not receive greater than 100 millirem from all of these various sources that we have whereas-ed up here? Is that how we're interpreting that? We haven't really done much of anything.

MR. GODWIN: That's my understanding.

MR. SNELLINGS: I agree totally with Aubrey. We haven't done anything.

MR. MARSHALL: Pearce?

MR. O'KELLEY: I was going to make originally the same point Aubrey did. We're still advocating these various dose limits depending on whether you're millirem comes from water or whatever, and if somebody in this room can tell me where a water millirem is more dangerous than any other millirem, then I'll be happy to support four millirem a year. And if somebody can also tell me that

the extra 400 millirem that these family members are going to get from these medical releases are not harmful, then I'll support that too. But I don't think there's anybody in this room that can justify the differences.

MR. MARSHALL: New York?

MR. BAKER: I think we should move to table this whole idea. All these limits have been set based on some numbers that were based on some risk, and while they may not all be consistent, they shouldn't be based on 100 millirem. And maybe ultimately that's a number to consider, but they should be based on some risk, some recommendation the EPA comes up with, whatever. But I move to table this discussion.

MR. JACOBI: Second.

MR. MARSHALL: Discussion? Am I wrong? Don't we have a motion and second with discussion to pass? Somebody tell me. This relates to the chair, chair-elect transition. I need a parliamentarian or an education in rules of order, because you're frustrating the heck out of me.

MR. BAILEY: Point of order. I think -- didn't we go through this before that if we table it at this meeting, it dies at the end of this meeting because we only have annual meetings? So if you want to table it now and you don't bring it up before we leave here, it's dead for this year but can be reintroduced next year?

VOICE: Correct.

MR. BAILEY: So I call the question.

MR. O'KELLEY: Which one? There's four on the --

VOICE: The motion to table takes precedent --

MR. BAILEY: That's right. And I'm calling the question on the motion to table.

MR. MARSHALL: All those in favor?

(A chorus of ayes.)

MR. MARSHALL: Opposed?

VOICE: No.

MR. MARSHALL: It passes to table it. Okay. Did we get through this one, Roger?

MR. BAILEY: Mr. Chairman, do we have any guidance that came out of that discussion on whether or not there should be an attempt to carefully craft such a motion for next year's consideration?

MR. DUNN: Is that a motion?

MR. BAILEY: No, it's a question?

MR. O'KELLEY: Well, can we discussion that or has discussion been shut off on that too?

MR. MARSHALL: I would say the leadership that we elect can lead and direct the organization any way -- I don't think this group has any direction on this matter to provide.

MR. BAILEY: And this organization already has a position paper on this.

MR. GODWIN: I would point out to the chair, you could wait until everybody leaves and then find out if somebody will make

a motion to take it off the table, take it up, and vote it down if you want to.

MR. MARSHALL: All right. Do you want to do this, Roger?

MR. SUPPES: Yesterday we discussed providing support for the NRC budget that -- I think Greta Dicus had had dinner with the executive committee and had requested the assistance of our organization in providing support to NRC for non-license fee based fund from Congress to support activities of the Agreement State program. And at yesterday's meeting, I volunteered to take a stab at putting together a draft resolution.

The resolution that you have before you attempts to deal with that. Another aspect of the resolution is also urging each of our states to provide support to -- and information to members of Congress along this line, because the feeling that was expressed at the meeting yesterday was that it's not only support of organizations like ourselves but individual support from our respective states that is also heard, and may be even more effectively heard by members of Congress.

So the -- one thing I wanted to point out -- and this is a -- it remains a question -- it was my understanding that some portion of the NRC budget is general revenue fund based, or whatever the appropriate term is, for their international programs. And the third whereas says that's the reason it says almost exclusively. I haven't -- that was information I had. I've talked with a couple of

folks from NRC, and they were not certain of the source of funding for the international programs or whether or not -- another aspect of that was that funds had been transferred from the State Department to NRC for support of international programs.

So I think that's the reason why I used the word almost exclusively. I don't know whether that is a cause -- how much of a cause for concern that is, yet I also did not provide any amount because I thought that this resolution would provide NRC with the maximum flexibility. They know what they need. This is an indication of support for them. It does say that this resolution supports activities associated with the Agreement State program. It's not directed, nor would it be an appropriate use of the resolution to say for other things like their international program efforts. The resolution doesn't speak to that.

So that's what the attempt was, was to draft a resolution that encourages Congress to provide NRC with additional funds to deal with the issue that, as more and more Agreement States come into the fore, there's less and less of a fee base for NRC to ship -- or provide a base for their costs. So that's what the resolution's trying to do, is to get Congress to recognize that there are other activities out there. There are things that should be supported by general revenue funds and not limit the budget of NRC to that they derive from their licensees.

MR. O'KELLEY: I move the motion be passed.

MR. FRY: I second.

MR. MARSHALL: There's been a motion and second to pass this. Discussion? Arizona?

MR. GODWIN: I think it's a very good resolution and support its passage. However, I think there's a couple of little improvements that might can be made in the, I guess fifth whereas. If you'll follow the changes. Whereas, the Commission has requested that Congress provide additional non-licensee -- add the word fee based funds to support -- change the word the to these -- initiatives of the Commission and Agreement States.

It would then read, "Whereas the Commission has requested that Congress provide additional non-licensee fee based funds to support these initiatives of the Commission and Agreement States." I move that change as an amendment.

MR. DUNDULIS: I second that.

MR. MARSHALL: Moved and seconded to make those changes.

MR. FRY: Again, do you want to approve the changes one at a time, or do you want to look at more than one? There are some budget initiatives of the U.S. Nuclear Regulatory Commission I haven't even seen. I would guess, knowing who I am, that on the last line I don't support all of their budget initiatives. This budget initiative, singular, maybe?

MR. GODWIN: I think that -- I said these initiatives, speaking specifically by the ones in the preceding whereas, which is infrastructure, training, and coordination.

MR. FRY: I agree with what you changed. I'm now on the last line of the whole resolution where it says, I'm in favor of all the NRC's budget initiatives -- and I doubt that I am.

MR. GODWIN: Could we add the word these budget initiatives --

MR. FRY: I put this budget initiative. This one we're talking about.

MR. MARSHALL: Does everybody understand that? The last resolved, change the word in the first line, the, to these?

MR. COLLINS: To this. And take off the s on initiatives.

MR. MARSHALL: Initiative, singular.

MR. COLLINS: Am I the only one that thinks provide additional non-licensee fee based could carry the connotation that you're suggesting that they have some more fee based, as opposed to GRF? That could be misinterpreted.

MR. GODWIN: I think the first resolved takes care of that, because we talked about non-fee based general funds that are used to support -- suggest they receive non-fee based general funds. I think that addresses the issue you're trying to raise.

MR. COLLINS: Yes. I guess what I'm really suggesting is in the whereas where Aubrey suggested most of the changes, that you might ought to put the word general in front of funds.

MR. MARSHALL: Stan?

MR. FITCH: How would it read?

MR. DUNN: The last whereas would be, "Whereas the Commission has requested that Congress provide additional non-licensee fee based general revenue funds to support these initiatives of the Commission and Agreement States."

MR. FLETCHER: I thought we said that we were changing it to this initiative.

MR. FRY: Well, we did in the resolved but we didn't in the whereas.

MR. FLETCHER: Okay. But the second -- if we want to save some time, if the originator would accept the changes, we don't have to go through voting.

MR. FRY: What I propose -- if I understand up in what Aubrey was changing, that we're talking about a number of different initiatives that might be evolved, and therefore it should be plural under the last whereas. But on the last line, my proposal was to read, "The Organization of Agreement States urges its individual member states to support this budget initiative." "This budget initiative" covers all of those initiatives that would involve general funds.

MR. MARSHALL: Is that understood and is that agreed? Let's vote.

MR. DUNDULIS: Would we want to say, the above-mentioned initiatives?

VOICE: Call the question.

MR. MARSHALL: All those in favor?

(A chorus of ayes.)

MR. MARSHALL: Opposed?

(No response.)

MR. MARSHALL: This passes too.

MR. FRY: Mr. Chairman, I would remind the states that what they did, they've told themselves to go write some letters to Congress, and I would urge you to do as much as you can along those lines.

MR. MARSHALL: Yesterday we brought up -- I brought up the concept of secretary-elect, and we talked about bringing that person in a year before the expiration of the current secretary and also changing the term, including that year as secretary-elect so there's only three, not four, years involved for the secretary: one year as secretary-elect, two years as secretary. Is there any interest to do this?

MR. FRY: That was the very issue I made, Stan, when I said let's go ahead and vote and do it, and then send you home to try to find somebody to nominate. We can do it again. I think somebody just made a motion to do it again.

VOICE: It's been motioned and seconded.

VOICE: It's already been voted.

MR. MARSHALL: All those in favor?

(A chorus of ayes.)

MR. MARSHALL: Anybody opposed?

(No response.)

MR. MARSHALL: All right.

MR. DUNN: Mr. Chairman, I nominate Alice Rogers for this position.

MR. MARSHALL: Does Alice accept the nomination?

MS. ROGERS: Yes.

MR. O'KELLEY: Second.

MR. MARSHALL: I think you're it. Let's pass around this form then. Do you want to do this?

VOICES: Yes.

MR. MARSHALL: All those in favor?

(A chorus of ayes.)

MR. MARSHALL: Anybody opposed?

(No response.)

MR. MARSHALL: Okay.

VOICE: Can we go ahead and vote?

MR. MARSHALL: We just did.

VOICE: Point of order, Mr. Chairman. Is the board awake up there?

(General laughter.)

MR. BAILEY: The motion was to close nominations. That's what we voted on.

VOICE: Right. But only one candidate.

MR. BAILEY: It doesn't matter. You still have to vote on that one candidate. I call the question.

VOICE: I make a motion that the secretary cast one vote for the secretary-elect.

VOICE: Second.

MR. MARSHALL: Those in favor?

(A chorus of ayes.)

MR. MARSHALL: Those opposed?

(No response.)

MR. MARSHALL: I'm trying to send around a form that has your two nominations for chair-elect, and the one -- and you can add Alice Hamilton Rogers --

VOICE: No. That's not necessary.

MR. MARSHALL: Okay. I want to explain something. There were 31 ballots prepared. I believe -- is Kansas here?

VOICE: No.

MR. MARSHALL: Is Iowa in the room?

VOICE: No.

MR. MARSHALL: Okay. There should be two ballots then not used. I'd like two volunteers to count the votes, not on the board. Marsha.

(Pause.)

MR. MARSHALL: Somebody else to help Marsha count these ballots? Ken Weaver? We'll let everybody up here rest.

(Pause.)

MR. MARSHALL: While they count that, I'd like to move to the next item that is, I think, except for Aubrey's question -- do you still want to address your question, Aubrey?

MR. GODWIN: Yes, sir. I would. Whenever you're ready.

MR. MARSHALL: Let's wait a minute, because I have no idea what your question is. I'm trying to regain a little bit of control here, whatever that means.

Year 2000 OAS meeting location -- Ken from North Dakota had previously offered to host our meeting.

MR. GODWIN: I move we accept that offer.

MR. JACOBI: Second.

MR. MARSHALL: Does Ken have any discussion?

MR. WANGLER: I don't know that I'm really one way or the other on this. When I threw it out, I was just checking the water. I didn't know that I was going to get nominated so quickly, so I can sympathize with you, Alice. I know how this feels.

But my only thoughts are, just so you understand the logistics, when I first went to get a plane ticket down here, it was $900 plus, and that was without a Saturday night stay over. And I know we voted before our talked before, at least about the Saturday night stay over requirement. It's not very favorable with most people. But let me give you the good side of the story.

When they added the TENORM discussion on, it forced me to stay over Saturday night because the connections are not good enough for me to get home Saturday night anyway, so I have to go

home on Sunday. It will take me all day to get there. We leave at 6:30 and get in at 3:30. But the plane fare dropped $500 to 400 and whatever it was, and then they had a special going on, so 385 was my plane fare down here. But I don't know how many of you can expect to get that kind of discount from $900.

So understand that we've got -- we're served by two airlines. It's a town of 50,000. I'm sure we can handle a meeting this size. I don't have any problem with that. But it's probably going to be a little bit tight getting in. I don't know how many flights a day come in, half a dozen? Northwest and United Express -- so the one out of Denver is a prop. There is a jet. There's a 727 that flies once in a while, but a lot of times it's one of those flying cigar tubes, those prop planes coming up from Denver. Northwest is out of Minneapolis.

MR. O'KELLEY: Can you give Honolulu your proxy?

MR. GODWIN: Nothing says they have to be hosted in that state. You might want to host it somewhere else.

MR. WANGLER: No. I'm not going to host it anywhere else. I've got reservations about doing it in Bismarck. But that's fine.

I keep getting these, I want to go to North Dakota just because I've never been there, kind of thing, so whatever. So if you want to have it in North Dakota, that's fine. I'm more than willing to give it up to somebody else, if -- all you've got to do is get your hand higher than mine.

MR. MARSHALL: Seeing no one do that, I think we're all inclined to go to North Dakota. Do we need to vote on this?

MR. WANGLER: The only other thing -- do it in September. I know Stan and I have already talked about this. Don't push it back to October. Do it one of the three weeks in September, not including Labor Day weekend. And so between right now and up to the last week of September would be a good time to get it done.

MR. COLLINS: Did I hear a motion that it close for that? I was told that Illinois is willing to host again in the Chicago area, so I'm throwing that out?

MR. MARSHALL: Next year or 2001?

MR. COLLINS: Yes. Now, I am not pushing ahead of North Dakota. I'm just -- I said very carefully, I was told Illinois was willing to host.

MR. O'KELLEY: Are you taking requests for two years down the road, because we may be willing two years down the road. I don't want to take North Dakota's turn.

MR. WANGLER: Let me tell you what my biggest reservation is. My biggest reservation is the amount of effort that I'll have to put into putting this thing on. There's myself and two others, and I also manager four other programs, so basically it's about 2.3 people to put this one. So that's really where my reservation comes from.

And in fact, Dana Mount [phonetic] -- a lot of you already know him -- cautioned me on this. He said, Do you really

think that you can pull this off? And the answer to that is yes, but I don't do it with my eyes closed. That's why if somebody else wants to take it -- I'm sure Illinois can do -- well, Illinois doesn't have to expend the percentage of personnel effort to put this on that we do.

But whatever -- and I don't care how you go about deciding and you're not going to hurt my feelings. I'm not a person that goes out looking for work. I've been in the military. I know what it's like to volunteer. I'm sorry that I -- I question why I ever said, Gee, maybe. So I should have known better than that. I must have had a slip that day.

MR. FITCH: Tell us about North Dakota accommodations.

MR. WANGLER: Outhouses and no running water. Wagon train in. Your accommodations will be fine. There's a couple of places that could host a meeting this size. I don't know what you mean by accommodations. You'll have a room with bed in it, running water and -- I told you about the airlines in and out. Out is probably easier than in because I suspect there will be some tag ons at the end of that meeting also, so not everybody will want to leave at one time.

MR. MARSHALL: At this time, all those in favor of North Dakota, say aye.

(A chorus of ayes.)

MR. MARSHALL: Opposed?

VOICE: No.

MR. MARSHALL: I think it passes. At this time, let's plan for North Dakota September of next year.

MR. RATLIFF: Ken, if you'd like, we can keep the account I have open until then and transfer it right beforehand.

MR. O'KELLEY: Question, Stan.

MR. MARSHALL: Okay.

MR. O'KELLEY: When do you formally volunteer for the following year? Is there a time --

MR. MARSHALL: You can do it now.

MR. O'KELLEY: Well, I'll put Charleston up against Chicago.

MR. MARSHALL: We'll put those two on the list for Ed. We'll put those two on the nomination.

Aubrey, do you have a question?

MR. GODWIN: I have a suggestion. I believe you are having a meeting with the Commission or the chairman or the Commission coming up in October?

MR. MARSHALL: Yes.

MR. GODWIN: And I would like to suggest that Part 35 versus Part G be part of your discussion, and I would suggest and offer a motion that we ask the board of directors to write a letter stating that there is an inherent -- there's not inherent safety in the Seaman's proposed general license distribution, their portable device, and that also be a part of their -- and refer them to the letters that have already been sent by the states. And let's just

be a sense of the organization that we recommend that it's not inherently safe. And not a resolution, just a sense that the organization -- that it's not inherently safe, and refer them to the letters that have already been sent by the states relative to this matter.

MR. MARSHALL: The board will take that into consideration and make that contact for such --

MR. GODWIN: And of course put that [indiscernible].

MR. MARSHALL: Yes. Thank you.

Is there anything else? I have an election result. Kathy Allen is your new chair-elect.

(Applause.)

MR. MARSHALL: Roland?

MR. FLETCHER: Just a reminder, and perhaps we can do this by e-mail. I do have one additional person for IMPEP. But we still need two -- at least two additional IMPEP representatives with experience in SS&D and we need to begin rotating some of the people off of the MRB, because most of the people there have done five or more MRBs. So we need to -- Shawn Seeley has volunteered for the IMPEP team, and we're still looking for others. Bob, you have someone who -- good.

Give me the name and I'll pass it on. Thank you.

MR. MARSHALL: Is there any other business? Ken?

MR. WANGLER: This is probably counter to what my concern is here, but we're now going on after seven o'clock. These

meetings traditionally get like this because they're not run well somewhere in the beginning, and we can look back to today and see that the -- we fell off schedule on the very first session this morning. We were set back at least 45 minutes by the end of the first session.

Now, I guess -- at the CRCPD meeting, one of the things I appreciated, even though it's a little bit disruptive to the speakers, is they knew the time they were supposed to have finished and then they were told to finish at that time, and not having finished, they were cut off. But it kept things on schedule. One of the complaints we've had out of this group in the past is we are the OAS and our meeting is always put back on the back burner. I mean, we started this meeting when we were supposed to be finished with it.

And so I don't know exactly how to handle this, but my question would be when we started this morning, did the people know at eight o'clock that -- we had three of them to go through -- how long they were going to speak, and did Chip know how long they expected their topics to last so that we could be done and start the next session by 9:15?

MR. MARSHALL: They may not have individually known as well as they could have, and that is a detail that we're going to pursue a whole lot better next year.

MR. WANGLER: Good. That's all I ask, that we don't -- yesterday we did real well. Today we didn't do very well. So we

should try better to stay on schedule, whatever that takes. And my suggestion would be that each speaker knows how long they have, so that they prioritize their discussion to fit it within that time.

MR. MARSHALL: Can I adjourn this meeting? All those in favor?

[A chorus of ayes.]

MR. MARSHALL: Thank you.

[Whereupon, at 7:07 p.m., the meeting was recessed, to reconvene at 8:00 a.m., Friday, September 10, 1999.]