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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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ADVISORY COMMITTEE ON THE MEDICAL USES OF ISOTOPES

(ACMUI)

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MEETING

+ + + + +

MONDAY,

OCTOBER 28, 2002

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ROCKVILLE, MARYLAND

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The Advisory Committee met at the Nuclear Regulatory Commission, Two White Flint North, Room T2B3, 11545 Rockville Pike, at 10:00 a.m., Dr. Manuel Cerqueira, Chairman, presiding.

COMMITTEE MEMBERS:

MANUEL D. CERQUEIRA, M.D., Chairman

JEFFREY A. BRINKER, M.D.

DAVID A. DIAMOND, M.D.

DOUGLAS F. EGGI, M.D.

NEKITA HOBSON

RALPH P. LIETO

LEON S. MALMUD, M.D.

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1 COMMITTEE MEMBERS: (CONT.)

2 RUTH MCBURNEY

3 SUBIR NAG, M.D.

4 SALLY WAGNER SCHWARZ

5 RICHARD J. VETTER, Ph.D.

6 JEFFREY F. WILLIAMSON, Ph.D.

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

(10:03 a.m.)

CHAIRMAN CERQUEIRA: Good morning. My name is Manuel Cerqueira. I'm the Chairman of the ACMUI, and I'd like to welcome everyone here to the open session.

This is actually the first time we've convened under the full implementations of the revised Part 35, so I guess that's quite an accomplishment. We have quite a full schedule today, and we'd like to keep on time so we can complete our business by the end of the day.

Again, I'd like to thank everyone on the committee for their input.

At this point, I'd like to turn it over to Mr. Essig, who is the designated federal official for the ACMUI.

MR. ESSIG: Thank you, Dr. Cerqueira. As the designated federal official for this meeting, I'm pleased to welcome you to Rockville for the public meeting of the ACMUI.

I'm the Branch Chief for the Material Safety and Inspection Branch and have been designated as the federal official for this advisory committee.

This is an announced meeting of the

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1 committee and is being held in accordance with the
2 rules and regulations of the Federal Advisory
3 Committee Act and the Nuclear Regulatory Commission.
4 The meeting was announced in the October 23, 2002
5 edition of the Federal Registry.

6 The function of the committee is to advise
7 the staff on issues and questions that arise on the
8 medical use of byproduct material. The committee
9 provides counsel to the staff, but does not determine
10 or direct the actual decisions of the staff or the
11 Commission. The NRC solicits the views of the
12 committee and values them very much.

13 I request that whenever possible we try to
14 reach consensus on the various issues that we will
15 discuss today, but I also value the minority or
16 descending opinions. If you have such opinions,
17 please allow them to be read into the record.

18 As part of the preparation for this
19 meeting, I have reviewed the agenda for members and
20 employment interests based on the very general nature
21 of the discussion that we're going to have today. I
22 have not identified any items that would pose a
23 conflict. Therefore, I see no need for an individual
24 member of the committee to recuse themselves from the
25 discussion.

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1 However, if during the course of the
2 committee's business, you determine that you have some
3 conflict, please state it for the record and recuse
4 yourself from that particular aspect of the
5 discussion.

6 At this point, I would like to introduce
7 the members that are here today: the Chairman of the
8 committee, Dr. Manuel Cerqueira; Nekita Hobson, who is
9 our patient advocate; Ruth McBurney, who is the state
10 representative; and Dr. Alfredo Sanchez, the FDA
11 representative; and new to the committee, Dr. Douglas
12 Effli?

13 DR. EGGLI: Eggli.

14 MR. ESSIG: Eggli, I'm sorry. I have a
15 typo in my notes. It says Eggli there.

16 And, Dr. Leon Malmud. And reappointed
17 members that were approved by the Commission on the
18 27th of September: Dr. David Diamond, Radiation
19 Oncologist; Dr. Subir Nag, Radiation Oncologist; Sally
20 Schwarz, Nuclear Pharmacist; Dr. Richard Vetter,
21 Radiation Safety Officer; and Dr. Jeffrey Williamson,
22 Therapy Physicist.

23 That concludes my opening remarks.

24 CHAIRMAN CERQUEIRA: Thank you. Any
25 questions for Mr. Essig?

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1 (No response.)

2 CHAIRMAN CERQUEIRA: I guess if not, we
3 can move on to the agenda. And the first --

4 MR. ESSIG: If I could add there, there is
5 one item that is not on the agenda that we would like
6 to insert next --

7 CHAIRMAN CERQUEIRA: Sure.

8 MR. ESSIG: -- which is a presentation by
9 the General Accounting Office. They are currently in
10 the midst of an audit of the uses of sources of
11 radioactive material, and they have a PowerPoint
12 presentation that will take maybe five minutes or so.

13 CHAIRMAN CERQUEIRA: Okay. Sure.

14 MR. ESSIG: So, if we could yield the
15 floor to them and then we'll resume with the normal
16 agenda.

17 MR. COLES: Good morning, Mr. Chairman,
18 and members of the Advisory Committee. I appreciate
19 the opportunity to speak with you today. I appreciate
20 NRC and the Advisory Committee making time to hear our
21 presentation.

22 As Mr. Essig mentioned, the General
23 Accounting Office is in the midst of a review of the
24 domestic uses of nuclear material. If I could have
25 the next slide please, just to give you a brief

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1 outline of what we're going to talk about today.

2 First of all, I want to give you a brief
3 overview of who GAO is and what we do. The second,
4 talk about the reviews we're currently conducting on
5 the uses of nuclear material. Third, how we plan to
6 accomplish our objectives. And then fourth, what are
7 our goals for this survey.

8 Next slide, please. First of all, US
9 General Accounting Office is often called the
10 investigative branch for the Congress. We are an
11 agency in the legislative branch at the government.
12 We conduct unbiased, objective, nonpartisan reviews at
13 the request of committee chairman, the Congress as a
14 whole, minority and majority leadership, and
15 individual members of Congress. In addition, we also
16 conduct reviews at our own instigation that deal with
17 issues that we believe are currently relevant.

18 We're an agency of about 3,500 people in
19 Washington, DC and spread throughout six regional
20 offices. Our current head is Comptroller General of
21 the United States, currently David M. Walker. And our
22 job is to provide information to the Congress on
23 whatever issues they feel are of interest at the time.

24

25 Next slide, please. Our current efforts

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1 on radioactive materials were at the request of
2 Senator Daniel Akaka, who is the Chair of the
3 Subcommittee on International Security, Proliferation,
4 and Federal Services of the Senate Governmental
5 Affairs Committee.

6 He sent us a request back in January of
7 '02 that requested that we take a look at a --

8 CHAIRMAN CERQUEIRA: If I could just
9 interject for just one moment.

10 MR. COLES: Of course.

11 CHAIRMAN CERQUEIRA: It would be useful I
12 think for the committee if maybe we can get copies of
13 these slides done afterwards since we don't have them
14 now.

15 MR. COLES: Absolutely. We've prepared
16 some.

17 Senator Akaka wrote to us in January and
18 asked us to take a look at the problem of radiologic
19 sources worldwide, a rather large task.

20 We have divided our effort into three
21 sections. We are looking at material used
22 domestically, internationally, and then we also have
23 a third job that's an aeroscope review of the
24 Department of Energy's Offsite Source Recovery Program
25 that primarily deals with greater than Class C

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1 materials, storing them at Los Alamos for eventual
2 disposition.

3 We are in the midst of working with a
4 variety of state, federal, and international agencies:
5 the International Atomic Energy Agency to the Nuclear
6 Regulatory Commission, the Commissions, the Office of
7 State and Tribal Program, Nuclear Materials Safeguard
8 and Safety, Nuclear Security Incident Response, the
9 regions.

10 We are working with the Organization of
11 Agreement States, the Conference of Radiation Control
12 Program Directors. We will be meeting with the Food
13 and Drug Administration, the Department of Defense,
14 State Department, Intelligence Community. And we're
15 also going to meet with a selection of licensees,
16 manufacturers, users of material to get their view on
17 this issue.

18 If I could have the next slide, please.
19 The domestic review is divided into three primary
20 questions. First of all, we're asking a very general
21 question: What is the extent of the issue? For this,
22 we're trying to get some idea of the number of
23 licensees there are in the United States, what types
24 of materials are being used, what uses these materials
25 are being used for, and I'll go into how we're doing

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1 that in just a moment.

2 The second question is: How effective is
3 the current regulatory framework? And third: What
4 activities have NRC and/or the states or other
5 entities entered into after the September 11th
6 terrorist attacks to change, improve, modify the
7 regulation of nuclear materials in the United States.

8 Next slide, please. How do we plan to
9 conduct our work? We will be sending surveys out to
10 the agreement states, also the non-agreement states,
11 and the NRC regions. In an attempt to put together a
12 national database of numbers of licensees, combining
13 those databases that currently exist at the NRC and at
14 the Agreement State level to get some idea of the
15 scale of the issue.

16 The second part of the survey is going to
17 be more qualitative efforts to ask the states and the
18 regions about how they go about enforcing regulatory
19 framework that's in place, asking them what changes
20 need to be made, where there are gaps, weaknesses, and
21 really where the strengths are as well.

22 In addition, we plan to go and speak with
23 a sample of licensees from every part of the
24 regulations that are currently subject to license,
25 concentrating primarily on byproduct. We'll also get

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1 into source and special nuclear material as well, but
2 concentrating primarily on Part 30 series.

3 We plan to conduct survey pretests in
4 November, some post-testing in January, and do a lot
5 of our fieldwork just after the first of the year of
6 visiting licensees and speaking with people in the
7 nuclear materials community. Our final reports are
8 expected sometime in the late spring of 2003.

9 We're also going to be participating in
10 several IMPEP reviews, the Integrated Materials
11 Evaluation Program, that NRC conducts of the agreement
12 states and also of the regions, to get some idea of
13 how the NRC evaluates their own efforts, evaluates the
14 Agreement State efforts at inspection enforcement of
15 regulatory framework.

16 Next slide, please.

17 DR. DIAMOND: I'm sorry. What does the
18 acronym IMPEP stand for again?

19 MR. COLES: Integrated Materials
20 Performance Evaluation Program. Thank you.

21 Integrated Materials Performance
22 Evaluation Program. That program is conducted by --
23 for the NRC regions, it's conducted by NMSS. For the
24 agreement states, it's conducted by the Office of
25 State and Tribal Programs. It's a review that goes

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1 through methodically step-by-step of segments of
2 Agreement State regulatory programs and evaluates them
3 based upon some fixed criteria.

4 We're going to be observing some of those
5 reviews and commenting on the criteria that are used
6 to evaluate NRC and state regulation.

7 What are some of the goals of our review?
8 First of all, we want to provide an education on the
9 regulation of nuclear materials to the Congress by a
10 neutral third party. In this day of concern over
11 "dirty" bombs and other sorts of misuses of
12 radioactive material, there's a lot of information
13 going around out there and we want to provide the most
14 accurate and unbiased source of information we can to
15 our clients up on Capitol Hill.

16 The second goal of our review is to
17 provide the Bush administration with some best
18 practices of what's currently going on in the
19 radioactive material regulation community, cooperation
20 between the states and the federal government, ideas
21 that can be extended to other areas of regulation. We
22 want to provide the administration with some ideas.

23 The third thing, we want to identify some
24 of the successes of the current regulatory framework
25 and also identify some of the gaps and weaknesses and

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1 make any recommendations for change.

2 You folks have been involved recently in
3 major changes of Part 35. We want to discuss that.
4 We want to discuss the process that you folks went
5 through on the Part 35 regulations, your ideas of
6 where gaps still exist or some strengths that could be
7 extended to other areas.

8 And then finally, we want to examine the
9 need for legislative changes. I put as an example up
10 there, possible modification of the Atomic Energy Act
11 to provide for NRC regulation of accelerator-produced
12 materials. That's one idea. We're not advocating it.
13 We're not not advocating it. It's simply an idea that
14 been put forward to us.

15 And we want to go through some of those
16 ideas and talk to the Hill and see: Are there changes
17 needed of the Atomic Energy Act or the other
18 authorizing legislation of the NRC?

19 Next slide, please. Finally, just some
20 contact information. What we want to do is, over the
21 course of the next five or six months, we will likely
22 be in contact with most of you, if not all of you, on
23 the Advisory Committee to sit down and talk with you
24 about your jobs on the Advisory Committee and where
25 you think the current regulatory program stands for

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1 the protection of radioactive materials.

2 It's a very broad scope review, but we're
3 interested in talking with anyone. And if anyone
4 wishes to contact us with ideas, perspectives, things
5 you would want us to communicate with our clients on
6 Capitol Hill, we are more than happy to meet with you
7 at any point in time.

8 I appreciate your time, and I wish you
9 luck in today's meetings. Thank you.

10 CHAIRMAN CERQUEIRA: Do we have any
11 questions?

12 Richard and then David.

13 DR. VETTER: Can you share with us the
14 motivation for this exercise, other than the fact that
15 a member of Congress has requested it?

16 MR. COLES: I don't want to speak for
17 Senator Akaka and his individual motivations for
18 requesting this work. But what I can say is this.
19 Every committee up on the Hill that has an interest in
20 this subject is being bombarded with information from
21 a variety of sources on what radioactive material
22 could be used for in a terrorist situation.

23 Senator Akaka wanted someone objective to
24 come in, who didn't have an iron in the fire, to
25 educate him on how radioactive materials are regulated

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1 in the United States because there are very few people
2 up on the Hill who have a knowledge in the non-
3 weapons, non-power side of NRC's work.

4 This is really one of the first broad
5 scope efforts that has been conducted to try to give
6 the Hill an education in this issue. And so, they
7 called upon us as someone who really doesn't have an
8 axe to grind.

9 DR. VETTER: But it looks like it's much
10 broader than security. The questions will be much
11 broader than security.

12 MR. COLES: That's correct. I would say
13 that security is probably the primary thrust, but
14 we're going to be getting into a lot of different
15 areas as well.

16 I think security will form the focus of
17 our third objective. That is the measures that have
18 been implemented since September 11th. But, the other
19 areas are much broader than that.

20 CHAIRMAN CERQUEIRA: David?

21 DR. DIAMOND: Thank you very much for your
22 presentation.

23 I did want to point out again that a lot
24 of this will have very little bearing on security
25 issues. But my question is this.

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1 In the radiation oncology community and
2 perhaps in the nuclear medicine community as well, we
3 have a concern. And that concern is that with all of
4 this new legislation being promulgated, an amount of
5 regulation that is very difficult for these
6 individuals or even for the societies to fully
7 monitor, that there may be regulations established
8 that may have an adverse impact on our ability to use
9 nuclear materials for medical uses appropriately, and
10 how can we go and monitor these reams and reams and
11 reams of documents and comments and proposed
12 legislation given our limited resources?

13 What advice do you have on this regard?

14 MR. COLES: An excellent question, and I
15 think that's precisely the reason why we've been asked
16 to sort of step into the fray.

17 Right now, there's so much information
18 being thrown at the Congress that everyone is afraid
19 that the Congress will act with new laws and NRC will
20 be forced to act with new regulations that are not
21 adequately informed by the true situation out there.

22 What we want to do is we want to provide
23 at least a balanced perspective on this is where the
24 threat is, these are the things we need to be
25 concerned about, and these are the things we don't

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1 need to be concerned about that will simply be
2 additional burden upon the licensees, and try to
3 convince our clients that a broad-brush approach is
4 not going to work and that you need to be a lot more
5 specific and a lot more focused in your efforts to
6 address where the true threats are.

7 DR. DIAMOND: As a follow-up comment, we
8 too as a committee need to be educated on these
9 issues. And I was very disappointed that we did not
10 have our planned security briefing today.

11 I would just like to direct these comments
12 to Mr. Essig, saying that we need to be educated on
13 these issues and I was disappointed, I am disappointed
14 that that briefing did not occur.

15 CHAIRMAN CERQUEIRA: Those are good
16 comments.

17 When your committee does this work, are
18 they going to go back to look at sort of previous
19 reviews like the Institute of Medicine report that was
20 done in '95?

21 MR. COLES: We are in the midst of a
22 literature search to see where previous reviews have
23 been done, and we'll integrate those into our work as
24 appropriate. There are a lot of reviews out there,
25 and any suggestions that can be given to us as to

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1 things we need to look at, please bring them forward
2 because I have a feeling we will miss some things in
3 the process.

4 CHAIRMAN CERQUEIRA: Well, I think that
5 this committee and the members, who represent various
6 factions of the regulated community, would be very
7 happy and willing to supply input.

8 Now, I apologize. I didn't catch your
9 name. Are you Ryan?

10 MR. COLES: My name is Ryan Coles, yes.

11 CHAIRMAN CERQUEIRA: So are you the person
12 that should be contacted initially?

13 MR. COLES: I'm the lead GAO official on
14 this review, subject to management approval.

15 (Laughter.)

16 MR. COLES: But I'm heading up this
17 review, along with my two colleagues: Peter Ruedel
18 and Heather Von Behren, who are sitting in the second
19 row back there.

20 CHAIRMAN CERQUEIRA: Well, great. Again,
21 I think the committee as a whole, as well as
22 individual members, representing various professional
23 medical societies would be very happy to help you with
24 this effort.

25 Thank you very much.

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1 MR. COLES: I appreciate it. Thank you
2 very much.

3 MR. ESSIG: If we could resume with the
4 agenda, there's just a minor modification. The
5 briefing that we have scheduled on the updated status
6 of the training and experience recommendations from
7 the committee, we're still going to cover that, but
8 maybe a little differently than we had earlier
9 thought.

10 Tony Tse is in the audience. But as with
11 so many things, timing is everything and the timing of
12 this issue is that the recommendations that are
13 currently with the EDO waiting for sign-up, ready to
14 go to the Commission. So, there isn't much that we
15 can discuss in the way of specifics other than I can
16 say that the recommendations from the subcommittee
17 occupy a prominent place in the paper that went forth.

18 We have suggested another option. Well,
19 there are actually three options total in the paper.
20 But for all intensive purposes, the principle options
21 are yours and then a small variation that we made on
22 your recommendation.

23 CHAIRMAN CERQUEIRA: So the designated
24 federal office looked at our recommendations and
25 proposed some modifications?

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1 MR. ESSIG: It was primarily in one area,
2 and that was where the accepted boards would be
3 listed. Your recommendation had said that they would
4 be listed in the regulations themselves, and we've
5 proposed a variation on that.

6 CHAIRMAN CERQUEIRA: Jeff?

7 DR. WILLIAMSON: Could we get a copy of
8 the final report?

9 MR. ESSIG: As soon as the Commission
10 authorizes its release. That's what I meant when I
11 said "timing is everything" because it's currently on
12 its way to the Commission. And if the Commission --
13 when they authorize its release, it's --

14 CHAIRMAN CERQUEIRA: Well, I think it
15 would've been good to send it back to the committee.
16 I mean there was quite a bit of time and work on it.
17 And certainly as an advisory committee, we spent the
18 time and effort and --

19 DR. WILLIAMSON: Yes, and we all have
20 security clearances and are quite capable.

21 DR. DIAMOND: Mr. Essig, once again I'm
22 very disappointed by this lack of feedback and
23 communication.

24 Under Dr. Vetter's leadership, several of
25 us spent a lot of time this summer in a very, very

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1 tight schedule devoting work to these issues. This is
2 the time, this is the venue we're supposed to go and
3 discuss it.

4 Why am I here?

5 (No response.)

6 DR. DIAMOND: I mean I'm just asking a
7 very basic question: What is going on here?

8 CHAIRMAN CERQUEIRA: Well, I think we had
9 a question.

10 MR. ESSIG: Well, you're here to provide
11 advice. You provided your advice. We accepted it,
12 and we made a recommendation to the Commission based
13 on your advice.

14 DR. DIAMOND: But we don't have any
15 feedback? We don't have any --

16 CHAIRMAN CERQUEIRA: Right. Again, we've
17 gone through a whole process of Part 35 revision,
18 which was an interactive sort of process with feedback
19 and, you know, quite a bit of interactive with the
20 staff level and with the support people for the
21 Commissioners. So, this is sort of unprecedented in
22 terms of the work that the committee has done in the
23 past, to not have gotten feedback.

24 It does represent a break in the
25 precedent. And I guess Dr. Diamond's question is: Is

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1 there a reason for that?

2 MR. ESSIG: It's well taken. But I had
3 checked with my management prior to coming here to see
4 what I could say today, and basically that's pretty
5 much it -- the fact that it will be soon with the
6 Commission, either today or this week. And as soon as
7 they authorize its release, then you'll see what --

8 DR. WILLIAMSON: Why couldn't we have
9 discussed it in our closed session then?

10 MR. ESSIG: I'm sorry?

11 DR. WILLIAMSON: Why couldn't we have
12 discussed the modifications made in the final report
13 during our closed session? I mean why wasn't this --
14 I really share Dr. Diamond's outrage at the fact that
15 the modifications made to our proposal were not shared
16 with this committee, and we did not have the
17 opportunity to provide any feedback.

18 CHAIRMAN CERQUEIRA: And the Chairman had
19 specifically made the request to the staff to have
20 this material discussed and made available, and it
21 just wasn't done. So that's clearly -- you know, it's
22 disappointing, and I think it does break a precedent
23 that's been established.

24 MR. ESSIG: I apologize for that, and I
25 don't know what I'm able to do about it at this

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1 juncture.

2 CHAIRMAN CERQUEIRA: Ralph?

3 MR. LIETO: Two questions. You said you
4 checked with management. Is that Dr. Kuo?

5 MR. ESSIG: Yes.

6 MR. LIETO: My other question is: When
7 these changes were suggested, alternatives were being
8 finalized and were going to be submitted to the
9 Commission. Why could we not have shared that
10 information?

11 In other words, why could not the changes
12 that the staff was recommending have been sent to the
13 committee? Is there some legal precedent why that
14 could not have been done or some staff policy?

15 MR. ESSIG: Not that I'm aware of.

16 DR. WILLIAMSON: The other issue I think
17 is we could use the time, we still can use the time
18 effectively I think to discuss any remaining fallout
19 from this proposal and determine if there are any
20 weaknesses or concerns regarding our proposal
21 subsequently.

22 CHAIRMAN CERQUEIRA: Right. Are you
23 prepared to do that, to give us --

24 MR. ESSIG: The alternative that we had
25 come up with that differs from the committee is where

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1 the approved certifying bodies would be listed. You
2 had suggested they be listed in the rule. We have
3 suggested that it be on the website. That's the only
4 difference.

5 CHAIRMAN CERQUEIRA: So that's relatively
6 --

7 MR. ESSIG: That's what I'm saying. It's
8 a minor difference.

9 DR. WILLIAMSON: Well, concerns have been
10 raised by the community based I think on the proposal
11 as it was presented at the public meeting. And you
12 know, I think there was something in writing that was
13 circulated to the public.

14 Certainly one area of concern is what
15 types of board certification make one eligible to be
16 a radiation safety officer. And concerns have been
17 raised to me privately by one of the organizations
18 regarding whether the boards in radiation oncology and
19 medical physics can meet even our revised standard.

20 CHAIRMAN CERQUEIRA: All right. Other
21 comments?

22 Dr. Nag?

23 DR. NAG: Yes. I think at the last
24 meeting we had with the Commissioners, the ACMUI
25 expressed our concerns that we are the advisory body.

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1 We give our advice to the NRC, and we don't get
2 adequate feedback back from the NRC staff to us. And,
3 the Commissioners instructed the NRC staff to make
4 sure that this concern is addressed.

5 I would like to reissue that in the public
6 forum that the Commissioners have instructed the staff
7 to provide feedback back to the ACMUI and that is not
8 being done.

9 CHAIRMAN CERQUEIRA: All right. Well, I
10 think it still would be very important to get feedback
11 to certainly the subcommittee that was charged to make
12 these revisions, as well as to the whole committee.
13 Again, it was a fairly long and complicated and
14 involved document.

15 It's still unclear in terms of the website
16 designation verses in the text. There was a whole
17 issue of the process of reviewing boards, which boards
18 were approved. So, we still need to get some
19 clarification on where that stands.

20 MR. ESSIG: Would it be possible to
21 schedule a subsequent conference call? Would the
22 committee be amenable to that?

23 CHAIRMAN CERQUEIRA: Would the committee?
24 (Chorus of yeses.)

25 MR. ESSIG: We're talking in the very near

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1 future, as soon as physically possible to do it.

2 CHAIRMAN CERQUEIRA: Okay. Again, I think
3 the preference of the committee would've been to
4 certainly have discussed it during the closed session
5 if you felt that there was some secret of nature to
6 these things or things that weren't for public review.
7 But, I think a conference call would be appropriate.

8 I guess with conference calls though, for
9 the whole committee, you'd have to go through a
10 process, which takes time and effort. And, I think it
11 does have to be open.

12 MR. LIETO: One question about a
13 conference call verses a closed session. A closed
14 session, we could have the information in front of us
15 to look at and then stays here with the Commission.
16 A conference call, you're not going to be able to send
17 us anything via email or any other means that we can
18 have in front of us when we discuss this.

19 So, I'm kind of wondering what we're going
20 to be able to discuss other than -- without having to
21 see what's actually been presented.

22 CHAIRMAN CERQUEIRA: Jeff?

23 DR. WILLIAMSON: I don't think that's
24 true. I think in a public meeting we can have
25 classified materials before us as long as we don't

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1 share our paper copies with the public. Certainly,
2 we've had pre-decisional materials in our packet
3 before at public meetings.

4 CHAIRMAN CERQUEIRA: Well, I think again
5 -- and I'm still not clear whether this is sort of a
6 lack of planning or just a lack of ability to share
7 the material. It sounds like perhaps it was the
8 initial because we have, as Jeff has said, we have had
9 a lot of interactions in the past with Part 35
10 revisions, both before things went to the
11 Commissioners and after they went to the
12 Commissioners.

13 And so, this does sort of break a
14 precedent with not being able to get feedback in
15 review. I'd suggest that if a conference call is any
16 way to do it, that we go forward with that. But it
17 would be, I think, important for the committee to do
18 its work to have that material ahead of time so we
19 could review it rather than just hear it for the first
20 time during the conference call.

21 MR. ESSIG: That would our intent, to get
22 it to you ahead of time.

23 CHAIRMAN CERQUEIRA: Okay.

24 MR. BROWN: Dr. Cerqueira, could I speak
25 from the side here? This is Fred Brown.

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1 It's unfortunate Tom's covering this item
2 because the paper has not been in the organization
3 that Tom heads up, just for point of clarification in
4 terms of shooting the messenger.

5 Your points were well taken and maybe if
6 I could just recast what was said slightly
7 differently. There were no changes made to the
8 ACMUI's recommendation. And the staff that was
9 involved with that paper very much appreciated the
10 work that was done and has a lot of respect for it.
11 And I think when you see the paper, you will see that
12 that fundamental appreciate and respect for what you
13 did is going straight to the Commission.

14 In the process of putting together an
15 options paper, which is what the staff was directed to
16 do by the Commission, we felt compelled process and
17 regulatory process-wise to have not just the ACMUI's
18 recommendation or a recommendation worked out with the
19 ACMUI, but other options as well. That doesn't change
20 what the preferred option is.

21 But, there was a process perspective that
22 drove us to the point that we're at today, right,
23 wrong, or indifferent. And I understand your
24 feelings about that as a committee. As Tom indicated,
25 we'll take those back and they're well noted and

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1 understood. But hopefully when you see the outcome,
2 you'll feel better about it.

3 CHAIRMAN CERQUEIRA: Well, I think we'd be
4 reassured when we see. But I think you've kind of
5 sensed our general unhappiness with the process. And
6 it does break precedence that we've set in working
7 with the designated federal official and the
8 Commissioners.

9 To keep on schedule, just a few last
10 closing brief comments. Ralph, Subir, and then Jeff.

11 MR. LIETO: Roger, I appreciate your
12 comments in terms of reassurance. I guess the concern
13 is that there are obviously options that went in, and
14 it's not clear where the ACMUI recommendation was
15 ranked in those list of options.

16 If you had five options and it's at the
17 bottom, I think there would be a pretty high level of
18 concern and I think we would've wanted to be prepared
19 to comment at this meeting about that. But not having
20 that information, we don't know whether to feel good
21 or --

22 CHAIRMAN CERQUEIRA: Be reassured or just
23 not know.

24 Subir?

25 DR. NAG: Yes, I think we would definitely

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1 have wanted to know what the other options were. We
2 would've liked to have known that.

3 CHAIRMAN CERQUEIRA: Last word from Jeff.

4 DR. WILLIAMSON: Yes. I would've liked to
5 have had a more technical detailed discussion, where
6 we go over it section by section with the staff
7 members that have previously reviewed the credentials
8 of the various boards to make sure that we've got it
9 right this time.

10 I think we can't afford to get it wrong
11 this time. To use a catch phrase, "The devil is in
12 the details." If one word is wrong, it could
13 potentially continue this dangerous situation where
14 board certification is marginalized. So, I think we
15 could've very productively used the time to go over it
16 section by section to determine if we finally have it
17 right.

18 And in fact, the major reason this
19 subcommittee and the whole parent committee wanted the
20 boards hardwired in the rule language, the intent was
21 to force NRC staff to vet these proposed regulations
22 against the boards as they currently exist to make
23 sure there's not a problem.

24 So, that is major concern. I would've
25 liked to have seen some of the time used to run

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1 through the details one more time with the appropriate
2 staff member who has the most knowledge about the
3 operations of the boards.

4 CHAIRMAN CERQUEIRA: I guess as sort of
5 the closing point on this is there some idea of the
6 timeline for when you'll be able to share this
7 information, when we could set up the conference call,
8 and who on the staff will be setting it up?

9 MR. ESSIG: We can ask for a timely
10 approval by the Commission to release it to the
11 committee for its review. I don't have a good idea at
12 this juncture as to how long that might take. But we
13 might be talking on the order of maybe a couple of
14 weeks or thereabouts, maybe a month, within the month.

15 CHAIRMAN CERQUEIRA: And will Angela be
16 handling the details for the conference call?

17 MR. ESSIG: Yes. Yes. So we would set up
18 a bridge and have folks call in to it.

19 CHAIRMAN CERQUEIRA: Okay. So that takes
20 care of the presentation that we didn't get on the
21 training and experience recommendations from the
22 committee.

23 I guess the next item is the Agreement
24 State compliance with Part 35. And Part 35, I guess
25 Lloyd Bolling will be doing that. Mr. Bolling?

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1 And I had requested this be on the agenda
2 because with the current Part 35 and then the work of
3 Dr. Vetter's committee, starting with the training and
4 experience, there was still a lot of concern as to
5 whether we would have a unified process or whether we
6 would still continue to have a lot of fragmentation.
7 We've had some concerns by people who run training
8 programs and what they're going to tell their trainees
9 or how they should instruct their trainees.

10 So Lloyd, you're going to tell us how it's
11 going?

12 MR. BOLLING: Yes. Good morning, and
13 thank you for inviting me.

14 CHAIRMAN CERQUEIRA: We've killed one
15 messenger so we're --

16 MR. BOLLING: Ready for the next.

17 (Laughter.)

18 MR. BOLLING: What I'd like to do is just
19 give you a brief overview of what the Agreement State
20 Program is about and then I'll jump right into Part
21 35, the training and experience, and compatibility of
22 regulations.

23 First, it was interesting when I got the
24 invitation to come and speak, the title was "Agreement
25 State Compliance with Part 35". That's an interesting

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1 choice of words because generally we don't use the
2 work compliance when we speak about states.
3 "Compliance" is usually something that we use in the
4 realm of licensees. But "agreement" is what we use
5 with agreement states.

6 The Atomic Energy Act was amended to add
7 Section 274. And that section of the Atomic Energy
8 Act allows the NRC to relinquish, and at the same time
9 the states pick up or assume regulatory authority over
10 certain materials and certain activities. The
11 materials are byproduct materials, source material,
12 and special nuclear material in quantities
13 insufficient to form a critical mass.

14 CHAIRMAN CERQUEIRA: These slides are in
15 the agenda booklet. For those of you who want to
16 follow them, you can.

17 MR. BOLLING: Next slide, please.

18 In order for a non-agreement state to
19 transition to Agreement State status, there has to be
20 an initial finding of adequacy and compatibility. And
21 then once the state has signed, that is the Governor
22 signs and the Chairman of the AEC/NRC signs, there is
23 a continuing program to make sure that the agreement
24 states maintain adequate and compatible programs. And
25 I'll get into that a little bit further in one of my

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1 other slides. That basically is the IMPEP program.

2 One way that we make sure that the
3 agreement states are maintaining compatible programs
4 is we review the proposed and final rules that are
5 promulgated by the states by both the technical staff
6 and the legal staff. So, that is for states that are
7 entering the program.

8 Non-agreement states that would like to
9 become an Agreement State, they submit their statutes
10 and regulations to us, we review them, make sure their
11 compatible, and then we hand them over to the legal
12 staff. The legal staff passes judgment on them, and
13 then the information is funneled back to the states on
14 any issues that need to be resolved or fixed. And
15 then when the final rules are adopted and in effect,
16 a copy of those is sent to us and we review those as
17 well.

18 Next slide, please. The compatibility
19 determination process, it looks a little laborious but
20 it isn't quite. The proposed rule or program element
21 is reviewed according to this like a flowchart. And
22 what we do is we take the rule or the program element
23 and we ask ourselves whether or not the requirement is
24 exclusive to NRC.

25 An example of that would be if there's an

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1 import component or is this a reactor or a fuel
2 fabrication plan, which the agreement states are
3 specifically prohibited from regulating. If the
4 answer to that question is "yes", then that rule or
5 that program element is reserved to the NRC, and the
6 Agreement State may not by law regulate that portion
7 of the activity.

8 If the answer to that question is "no"
9 it's not applicable, we jump down to the next criteria
10 and we ask ourselves whether this is a basic radiation
11 protection standard, an essential definition, a term,
12 a sign, or a label. If the answer to that is "yes",
13 then we assign a Category A to that rule or
14 requirement. And, it must be essentially identical in
15 the Agreement State regulations.

16 Now, "essential identical" does not mean
17 verbatim. It means can the licensee read the
18 Agreement State regulation and NRC regulation and come
19 to the same conclusion as to what is required of them?
20 And if it varies beyond some acceptable level, then we
21 must insist that they change their rule to make it
22 compatible.

23 If the regulation or element does not meet
24 this standard, we jump down to the next one and we
25 ourselves: Is there a direct transboundary

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1 implication? I believe the term in our guidance on
2 this is "direct and significant transboundary
3 implication". If the answer is "yes", then it also
4 must be essentially identical in the Agreement State
5 regulation as it would be in the NRC.

6 There is basically no difference in the
7 way the regulation must appear if it's an "A" or a
8 "B". It's just that the reason is different.

9 If the answer to this is "no", we jump
10 down to the next criteria. And in this one, we ask
11 ourselves: Is there a conflict, gap, or a duplication
12 of effort created if the state does not adopt this
13 particular regulation? If it is, then they must adopt
14 it and have a new term, essential objectives. The
15 state must have the essential objective in their
16 regulation. However, they may choose to be more
17 restrictive.

18 If the answer to the next question is
19 "no", we jump down to health and safety. If the
20 regulation or program element has a health and safety
21 component, then we insist that the agreement states
22 have maintained the essential objectives in the
23 regulation as the NRC rule has.

24 And if the answer to that is "no", that is
25 if the new regulation or program element does not

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1 contain any of the above criteria, then we assign it
2 a Category D, and we do not insist that the agreement
3 states adopt that particular regulation.

4 Yes?

5 DR. WILLIAMSON: What is the difference in
6 implications of "H&S" verses "C"?

7 MR. BOLLING: The H&S is if the regulation
8 does not have a compatibility component to it, but
9 there is a health and safety requirement that we feel
10 should be covered, then we'll assign that H&S. It
11 will have to have the essential objective, although it
12 does not have to be identical.

13 DR. WILLIAMSON: But they could be more
14 restrictive?

15 MR. BOLLING: They could be more
16 restrictive, yes. In that respect, the "C" and the
17 "H&S" are similar.

18 Next slide, please. We come to the
19 training and experience regulations.

20 When we were promulgating the regulations
21 in Part 25 and we came across the T&E question, we
22 realized that there were some disconnects. And that's
23 the reason for the two-year transition period.

24 The T&E for authorized users is a
25 compatibility Category B. And the reason for that is

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1 that the Commission felt that we had to have some set
2 of uniform standards throughout the country so that
3 physicians trained in DC could go to Oregon and take
4 their qualifications with them and be licensed just as
5 they would in any other NRC territory. So across the
6 United States, physicians would be able to be licensed
7 in agreement states and NRC territory with the same
8 criteria.

9 The Category B requirements have directed
10 significant effects in multiple jurisdictions. That's
11 what that means. Agreement states should adopt
12 regulations essentially identical to NRC, and this
13 applies to radiation safety officers, physicians,
14 nuclear pharmacists, and medical physicists.

15 Next slide. The term "legally binding
16 requirements" is something that you may not have heard
17 before. When an Agreement State regulation is
18 determined to be a matter of compatibility, the
19 agreement states have three years generally to adopt
20 a similar and compatible rule. Because of the way
21 regulations are promulgated in agreement states, this
22 may not be possible.

23 So, we have something called a legally
24 binding requirement and that may take the form of an
25 order or licensed conditions, which can be used as an

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1 interim measure until agreement states have the
2 opportunity to promulgate a rule.

3 These legally binding requirements by the
4 way are generally applicable to entire categories of
5 licensees. For instance, if a locking mechanism on a
6 teletherapy machine was found to be defective, we
7 could issue an issue, the Agreements States can issue
8 an order which is legally binding on all licensees of
9 that category until such time as the time is fixed or
10 a rule is promulgated which will cover that problem.

11 Next slide, please. The IMPEP process is
12 one of the ways we use to determine if the agreement
13 states are maintaining the compatible and adequate
14 programs that they said they would when they signed
15 the agreement with the Commission.

16 In the area of non-common performance
17 indicators, regulations and program elements are
18 contained within that indicator. So, this indicator
19 has three ratings that are applied to states and/or
20 the NRC: -- the NRC actually does not get reviewed
21 against this criteria -- satisfactory, satisfactory
22 with recommendations for improvement, and
23 unsatisfactory.

24 So when we do an IMPEP review of an
25 Agreement State, we look at their regulations and we

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1 determine how many regulations they have that meet the
2 three-year requirement, how many have not met the
3 requirement and by how long. And then if there are
4 substantial numbers that have not met the three-year
5 requirement, they fall into the unsatisfactory
6 category.

7 Next slide. This slide is a timetable for
8 the different Part 35 requirements.

9 As you know, in April the rule was
10 published. Just last Thursday, it became effective
11 and so did the two-year transition period begin for
12 subpart J, and the three-year compatibility period
13 began for the agreement states.

14 Two years from now on October 24, 2004,
15 the subpart J two-year transition period ends. And a
16 year later, the Part 35 compatibility period ends for
17 agreement states. So, the agreement states have until
18 October of 2005 to adopt a compatible rule and/or as
19 an interim measure institute legally binding
20 requirements.

21 Now, at the last ACMUI meeting, I guess it
22 was in February, I indicated that I would poll the
23 states to find out what progress they're making
24 towards instituting their rule. Of course, at that
25 time the rule had just been published and was not yet

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1 effective.

2 But, all states responded to the survey.
3 Eight states said that they would have a compatible
4 rule by the end of 2003. In addition, two states said
5 that they'd have a compatible rule by 2004. And the
6 remaining 22 states said that they would have one by
7 the end of the three-year compatibility period,
8 October 24th of 2005.

9 CHAIRMAN CERQUEIRA: Now, was that for all
10 elements or just the training? You asked specifically
11 for the training and experience?

12 MR. BOLLING: No, no. This was for the
13 entire rule, all right?

14 CHAIRMAN CERQUEIRA: Yes.

15 MR. BOLLING: That concludes my
16 presentation. If you have any questions --

17 CHAIRMAN CERQUEIRA: That's really very
18 good, Lloyd. I appreciate your coming here and
19 sharing this with us.

20 I had hoped to get somebody from the OAS
21 to come because I had heard that there was some
22 rumbling that it may be difficult for training and
23 experience to get full implementation, and there may
24 still be. But because of funding issues, we weren't
25 able to get anyone.

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1 And Ruth, can you give us some insight?

2 MS. MCBURNEY: Yes. I think the main
3 concern there was that most of the states don't want
4 to do a two-step process. They don't want to do all
5 the stuff except the training and experience. They're
6 waiting to hear what's going to come out of any
7 changes that may be made to the training and
8 experience requirements before they adopt the whole
9 rule, instead of taking what's "compatibility" now and
10 putting that in place and then having to go back and
11 change the training and experience requirements once
12 this other rule is developed.

13 So, I think that's the delay on a lot of
14 them. They don't want to have to do two rulemakings.
15 They just want to do one.

16 CHAIRMAN CERQUEIRA: So they heard that
17 Dr. Vetter's committee was working on something to fix
18 some of the issues related to the medical physicists,
19 the authorized medical physicists?

20 MS. MCBURNEY: Right, and the authorized
21 users.

22 CHAIRMAN CERQUEIRA: And that's part of
23 the reason why it was very important for us to get
24 some idea from the designated federal official as to
25 where that stood because we had hoped to get that

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1 implemented so when the two-year extension of the old
2 as well as the new standards were basically no longer
3 effective, that this new rule would kick in. And
4 that's why I think Dr. Vetter and his committee did
5 such great rapid work.

6 Okay. So we're still uncertain is what
7 the bottom line is.

8 Jeff?

9 DR. WILLIAMSON: What is the status of the
10 suggested state regulations with regard to
11 compatibility with Part 35, and what role does this
12 play in the general acceptance of the Part 35 changes
13 among the agreement states?

14 MR. BOLLING: Well, a number of NRC staff
15 are advisors to the CRCPD Committee that is revising
16 their equivalent to Part 35. It's my understanding
17 that a peer review document has been forwarded to the
18 Executive Board of the conference. And, they will
19 review it along with comments from others advisors and
20 then move it forward.

21 The second part of your question, how does
22 that influence the agreement states in adopting a
23 rule, in some states they copy the suggested state
24 regulations almost verbatim. In other states, they
25 prefer to use the NRC rule.

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1 We've had some extensive discussions with
2 the states over certain portions of the suggested
3 state regulations. It appears as though, based on our
4 review of the last document that we were presented
5 with, that those questions and concerns have been
6 resolved and the rule is essentially compatible.

7 CHAIRMAN CERQUEIRA: I guess I just have
8 sort of a procedural question. Now, under 274 of the
9 AEA, we've got the NRC published Federal Register
10 Notice, and let's say Washington State because I lived
11 there for 11 years. They don't always like to tow the
12 party line.

13 Now, under the 274 AEA, if Washington
14 State decides that in three year they're not going to
15 change anything, they're going to go their own way and
16 continue to use existing regulations or to have more
17 restrictive requirements for position, does the law
18 allow the NRC to impose compliance or "agreement" as
19 you like within say Washington State?

20 MR. BOLLING: My boss is heading toward
21 the microphone right now --

22 (Laughter.)

23 MR. BOLLING: -- to bail me out.

24 MR. LOHAUS: Thank you. Paul Lohaus.

25 Very good question, and it's a tough

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1 question that we wrestle with particularly in the area
2 of regulations. And the answer is it really is -- the
3 answer is given through the IMPEP program and the
4 IMPEP process. There are several different aspects.

5 One is there's a set of objective criteria
6 that are identified in our management directive that
7 provides a basis to address compatibility. And a part
8 of that process includes a review of conclusions of
9 that review team by a Management Review Board.

10 And the question that the board sometimes
11 wrestles with is if you have a particular section of
12 a regulation that may not meet the compatibility
13 criteria, does that place the state in a not
14 compatible regime? Generally, the answer is "no".
15 It's different. It may not meet the criteria, but
16 it's not of sufficient significance that it places
17 that program in a not compatible status.

18 You could then carry that logic to an
19 entire rule. And I'm not aware from my experience of
20 a case where a state has not adopted a regulation.
21 They may not in all cases have done that within the
22 three-year timeframe. But I'm not aware of a state
23 that has never adopted a regulation. There may be
24 differences in that rule and the MRB is going to have
25 to make some judgments on the significance of those

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1 differences.

2 If you were to be faced with that
3 situation, Dr. Cerqueira, the MRB would need to make
4 a determination --

5 CHAIRMAN CERQUEIRA: I'm sorry. MRB
6 stands for?

7 MR. LOHAUS: I'm sorry. It's a Management
8 Review Board. It's part of the integrated materials,
9 performance evaluation program.

10 And very quickly, what you have is a team
11 that conducts the review against an objective set of
12 criteria. Then, my boss heads up a Management Review
13 Board. Karen Cyr, our General Counsel is on that
14 board. I am, Mary Virgilio from NMSS, and we also
15 have an Agreement State program manager that serves as
16 a liaison to the board.

17 They hear the team's report, they listen
18 to the program, and then they take a look at all the
19 different aspects and they make the final
20 determination relative to the adequacy and
21 compatibility of the state's program.

22 CHAIRMAN CERQUEIRA: But has that ever
23 been tested? I mean has the NRC ever taken action
24 against any states?

25 MR. LOHAUS: We have found programs not

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1 compatible on the basis of not having put in place in
2 a timely matter, regulations. I'm not aware of any
3 tests relative to a single rule that was not adopted.

4 From my experience, that rule may be
5 adopted in a longer timeframe. But I'm not aware of
6 any states saying, "We're not going to adopt that
7 regulation." Now, there may be portions within that
8 single rule. And so far, I think the test has been to
9 look at the effect that that has on other programs.

10 In other words, when you're looking at the
11 compatibility part, what's the effect of that state's
12 action on NRC or other programs? And if it's
13 significant enough, then the MRB would make a finding
14 of not compatible and expect the state to make a
15 change. If it's not, then --

16 CHAIRMAN CERQUEIRA: But whether they
17 could do that -- again, just to sort of boil it down
18 to the nuts and bolts. Representing the cardiologists
19 who have not traditionally come in via boards in the
20 past, there's some question how you're going to set up
21 your training programs. And you hate to train people
22 who may meet criteria in some states, but not others.

23 Some that may be resolved in some of these
24 board issues, but it's still sort of a practical
25 concern. Some of my constituents are still expressing

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1 concerns and apprehension about it.

2 MR. LOHAUS: Yes.

3 DR. DIAMOND: Mr. Lohaus, if I recall
4 correctly of Category B, compatibility category, it's
5 not necessarily essentially identical. Isn't it of
6 minimum standard that, again, the states have the
7 purview to make the regulations more stringent above
8 that?

9 MR. LOHAUS: No. For Category B, the
10 state would have to have a rule that is essentially
11 identical. There may be some subtle differences in
12 the word, but the actions that are required and the
13 actions taken by a licensee to comply with that rule
14 have to be essentially identical.

15 CHAIRMAN CERQUEIRA: For Category C, they
16 can be more restrictive according to what Lloyd said.
17 But Category B means that because it does cross state
18 boundaries --

19 MR. LOHAUS: Right.

20 CHAIRMAN CERQUEIRA: Dick?

21 DR. VETTER: Just to follow up on Dr.
22 Cerqueira's question, and this perhaps more of an
23 expression of frustration than it is a question, and
24 it relates to compatible regulations verses compatible
25 programs.

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1 We live in a global economy, and more and
2 more healthcare systems are operating in multiple
3 states. And yet, we are seeing, as more and more
4 states become agreement states, we're seeing
5 significant differences among implementations of the
6 programs.

7 Just to focus in on one, for example in
8 Part 35, adoption into Part 35, I'm aware of one state
9 that is incorporating into their new regulations all
10 of the guidance relative to Part 35. They're
11 incorporating guidance into regulatory space. That
12 becomes very frustrating for licensees that operate in
13 more than one state.

14 And I can give you other examples where
15 there are significant differences, not in the
16 regulations per se, but in how the program is
17 implemented. So I guess my question is: What can you
18 do about that? Perhaps there isn't much. It's more
19 of a frustration I'm venting.

20 MR. LOHAUS: Yes. The guidance is not
21 mandatory.

22 DR. VETTER: It is if they incorporate it
23 into their regulatory space.

24 MR. LOHAUS: That's correct. And our
25 recommendation would always be that guidance be what

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1 it is, and guidance not be adopted into a set of
2 regulations.

3 However, I am aware that in some states
4 there may be statutory provisions that the
5 completeness, if you will, of the set of requirements
6 that a licensee would be subject to should be
7 reflected in a statutory regulation, if you will, or
8 other legally binding requirement. And it does create
9 difficulties because it removes flexibility in terms
10 of the guidance being one approach, one acceptable
11 approach to meet the rules.

12 But, I think that's only in a few cases.
13 Maybe Ruth, you may have some insights here too from
14 your experience. But I think there are some states
15 that do have some statutory requirements across the
16 board for all states agencies that the guidance also
17 needs to be reflected in their rules. And, it does
18 create a more difficult situation. No question.

19 CHAIRMAN CERQUEIRA: Other questions for
20 Paul or for Lloyd?

21 (No response.)

22 CHAIRMAN CERQUEIRA: If not, I'd like to
23 thank you. Lloyd, you've done a great job on this and
24 you've kind of been the one constant behind the
25 program. Thank you very much.

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1 We're ahead of schedule. That's great.
2 Next item is discussion of the National Materials
3 Program Working Group Report. And Paul, you're
4 already seated there.

5 MR. LOHAUS: Okay. Let me first of all,
6 thank you and express my appreciation for the
7 opportunity to be here.

8 What I'd like to do is I have six slides
9 that I put together. I'd like to use this to maybe
10 pick from where we were at the last meeting. We
11 talked about briefing you periodically to give you
12 information in terms of where we are on the National
13 Materials Program, and that's what I'm going to try
14 and do today. And then, answer any questions that you
15 have.

16 Can I have the first slide, please? I
17 think you all have a copy in your handout as well.

18 I wanted to start out and really highlight
19 that we have a National Materials Program today. It
20 basically reflects the NRC and the collective
21 Agreement State programs. This program has evolved
22 and will continue to evolve. But today, we do have a
23 National Materials Program. And basically what the
24 program is is the collective NRC Agreement State
25 programs.

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1 I wanted to highlight four background or
2 reference documents and we can talk through each one.
3 The first is an earlier Commission paper, which we
4 talked about at the last meeting. But that provided
5 to the Commission, the working group report for the
6 National Materials Program Working Group, which
7 contained a series of recommendations for Commission
8 consideration.

9 The recommendations ranged from NRC
10 basically taking back responsibility for all licensees
11 to assigning responsibility to each of the states, and
12 a number of options in between.

13 And we talked about the alliance option,
14 which was the working group's recommended option,
15 which to me really reflects a continuation of the
16 evolution of the program of where it is today. It's
17 a program where they would be greater shared resources
18 and greater shared activities with the states.

19 Move on to the next. The second paper,
20 SECY-02-0074, provided for Commission consideration
21 five pilot projects. The purpose and intent of the
22 pilot projects is to provide a further base of
23 information on how the states and NRC can work
24 together focused on the alliance process, sharing
25 resources, maybe looking to centers of expertise if

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1 the states have a particular area of expertise, and
2 that area of expertise be relied up to help address a
3 rule or guidance area for the nation.

4 The next paper was an addendum to the
5 pilot projects paper. What that paper did is provided
6 a recommendation. And this in a sense to me was sort
7 of a National Materials Program recommendation. It
8 was a collective recommendation from the Conference of
9 Radiation Control Program Directors, from the OAS
10 Board, the Conference Board, and OAS Board, and the
11 NRC staff.

12 The thought here was that in moving
13 forward and proceeding, what we should do is use a
14 blending of two of the options that were in the
15 National Materials Program Report. One was the
16 current program option, and the other the alliance
17 option.

18 And really what's reflected here to me is
19 really the blending in continued evolution of the
20 program where we're looking to see whether working
21 groups, a higher level of state participation in those
22 working groups could help provide the support and
23 infrastructure that's necessary for the Materials
24 Program.

25 Let's go on to the next one, please. The

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1 Commission considered those three papers, and in
2 August issued guidance to the staff. As you're aware,
3 this is done through what's called a staff
4 requirements memo.

5 The Commission approved the recommended
6 option of the blending of the current program and the
7 alliance options as we proceeded forward with the
8 pilots. They indicated clearly that future direction
9 on the National Materials Program and any option would
10 be dependent and be guided by the results of the pilot
11 project effort.

12 They also explicitly identified that we
13 should seek and request comment from a broad spectrum
14 of stakeholders, including licensees and non-agreement
15 states.

16 Let's move on to the next one, please.
17 What I tried to show here is sort of termed as
18 "Interrelationship of the National Materials Program."
19 But if you look on the left-hand side, what's really
20 reflected when you look at this is that each of our
21 programs, whether it be an Agreement State program or
22 an NRC program, has certain responsibilities that we
23 need to carry out: the basic day-to-day licensing,
24 the inspection, response to incidents, we've got to
25 make we provide adequate staffing, training for that

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1 staff, enforcement investigations.

2 But, they're really sort of separate
3 activities that we each carry out to cover our areas
4 of responsibility. And they're basically key to the
5 number of licensees that we each have.

6 On the right-hand side is reflected what
7 I could call "Shared Program Activities." And to me,
8 this is sort of the key to the National Materials
9 Program. Things like rule development, policy
10 development, guidance development, program evaluation,
11 and areas of that nature, there is a shared aspect to
12 that.

13 And if you look at the box underneath,
14 rather than having two separate boxes, there's one
15 box, and you'll see a dotted line there. I think part
16 of the thinking and part of the evolution of the
17 program is that that dotted line needs to begin to
18 move further to the left.

19 In other words, given the larger
20 proportion of Agreement State licensees there is need
21 for a greater sharing, if you will, of the regulatory
22 infrastructure work with the agreement states. And
23 that's what reflected here.

24 And I think today NRC still carries the
25 LIONS' share of that. In the future, we may see the

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1 states start doing more. It may stay as it is, but we
2 may see the states doing more. And that's part of
3 what is being tested as a part of the future work in
4 the program.

5 DR. VETTER: Excuse me. What do you mean
6 by "program evaluation"?

7 MR. LOHAUS: Our IMPEP program, what we do
8 is we involve Agreement State representatives both on
9 review teams and on the Management Review Board.

10 I want to make it very clear though that
11 this is a responsibility that is solely NRC's. They
12 may work with this and help conduct the review, but
13 the final bottom-line determination is made by the
14 Management Review Board. But, it's an NRC
15 determination. It cannot be delegated, if you will,
16 to the states.

17 Any questions on this? But I think --
18 what I've tried to do is sort of capture on one slide
19 sort of the spirit of the program. And regardless of
20 how the program infrastructure activities are shared,
21 each of us are going to have to carry out the basic
22 LIONS' responsibilities of the regulatory program:
23 the licensing, inspection, etcetera.

24 Let's move on to the next slide.

25 CHAIRMAN CERQUEIRA: Now is some of this

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1 related to budget? I mean just kind of shift it out
2 of the federal budget since the NRC is supposed to
3 generate enough revenues to pay for it. And so, you
4 share it with the agreement states.

5 Are they going to buy into this?

6 MR. LOHAUS: This is -- you put your
7 finger on one of the keys here that was sort of the
8 genesis for thinking about this further. And that is,
9 as the number of state licensees increase -- we're
10 talking about 17,00 or so now, with NRC about 4,000 --
11 NRC was continuing to cover the LIONS' share of the
12 regulatory infrastructure work, the research, the rule
13 development, the guidance development.

14 And the costs for that were covered
15 through licensee fees. The thought was we ought to
16 look for a more equitable sharing, if you will,
17 proportional to the number of licensees.

18 There are a number of other factors.
19 There's off fee-based funding that was specifically
20 requested to address international and Agreement State
21 activities that NRC carries out to try and help reduce
22 the fee pressure that's there.

23 But I think the concept is still there,
24 that there may be some cost sharing. There may be
25 some efficiencies that can be gained. But, there's

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1 also a technical expertise issue. As NRC loses
2 licensees, the states may have the majority of
3 licensees in a particular category.

4 Well-logging may be a good example. And
5 the expertise in that area may very well reside within
6 a state or few states as opposed to with NRC. And,
7 why shouldn't we use that expertise to address the
8 national picture as opposed to NRC trying to do that.

9 So, there are a number of different
10 factors in here that we're going to be dealing with
11 and working as we go forward.

12 CHAIRMAN CERQUEIRA: Jeffrey? I think
13 Jeff's got a question.

14 MR. LOHAUS: Yes. I'm sorry.

15 DR. WILLIAMSON: Maybe you're coming to
16 it, but it seemed in some of the notes that we were
17 sent prior to this meeting there was talk about
18 amending the Atomic Energy Act to facilitate this
19 program.

20 Are you going to comment on what the
21 proposed statutory changes are that you have in mind?

22 MR. LOHAUS: I had not planned to
23 directly, but if you go back and look at the working
24 group report, there are two areas that they identified
25 for possible consideration.

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1 One was whether the Act should be amended
2 to provide authority to states for licensing,
3 inspecting the regulatory oversight of federal
4 facilities. Regardless of how many agreement states
5 we have today, NRC would still have a residual, if you
6 will, cadre of federal licensees as well as
7 import/export exempt distribution that we would have
8 responsibility for.

9 I think the working group felt that's an
10 area that could be explored. And if so, it would
11 require a legislative change.

12 The other area was the fact that NRC has
13 regulatory jurisdiction over byproduct sources and
14 special nuclear materials. The states have a broader
15 focus, including naturally occurring and accelerated-
16 produced materials. And the question was whether NRC
17 should also assert jurisdiction, request legislative
18 change to assume responsibility over that suite of
19 licensees so you have a more comprehensive program, if
20 you will.

21 DR. WILLIAMSON: I don't see how that
22 would improve your financial standing because what
23 you'd be doing is taking on a larger burden of
24 regulatory infrastructure, but still most of the
25 licensees would be in the agreement states.

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1 MR. LOHAUS: There are a lot of balances
2 that are involved in these types of decisions. And as
3 I said, these were two areas that were identified by
4 the working group in their report. But, there are
5 certainly considerations that would need to be
6 addressed at some time in the future.

7 CHAIRMAN CERQUEIRA: Dr. Nag?

8 DR. NAG: Okay. What are the five pilot
9 projects? I mean I think that's helpful to know so we
10 can see where we will be going in the future.

11 MR. LOHAUS: Sure. The first pilot
12 project is one that's directed at determining whether
13 and how NRC can share with the agreement states the
14 process of setting priorities for work that's done in
15 the materials area.

16 And here, I think the states believe that
17 with their larger share, with the expertise that they
18 represent, they also should have a greater say in
19 determining what are the priorities, which rulemaking
20 actions are we going to be working on, which guidance
21 areas should we be working on, where are the key
22 technical issues. And that's the focus of the first
23 pilot.

24 It's to examine whether there's ways
25 within our existing processes to further engage states

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1 and bring them into that process or whether we need to
2 have some additional processes to share with the
3 states the development of those priorities.

4 The second pilot is directed at an
5 existing program in the states and really relies and
6 utilizes expertise that the states have already
7 demonstrated. And this is to use the Conference of
8 Radiation Control Program Directors Working Group to
9 see if the states can take on the job and administer
10 a national radiography certification program.

11 There's already been a lot of work that
12 that group's done. And the thought is that could be
13 an area where NRC could shed some work and the states
14 could pick up and carry that responsibility forward.

15 The third is to examine how and what
16 processes we could use to further engage the states in
17 reviewing events, incidents that occur for generic
18 implications and sort of share and take on some of the
19 responsibility today. Most of that work is done by
20 NRC staff. We review all the events nationally that
21 are in our nuclear materials events database.

22 The thought here is to examine whether the
23 states can play a greater role here in identifying
24 generic implications and the kind of regulatory action
25 that may be taken or should be taken to address those.

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The fourth was directed at seeing whether the states, or a state or a group of states, could take on and develop a set of guidance, the licensing, inspection procedures, etcetera, that would be necessary for a new use of material or a new modality that had not been previously reviewed or approved.

And the last pilot was one that was directed at utilizing an existing working group. In this case, it's the working group that's addressing changes to the Inspection Manual Chapter 2800.

In the basic Materials Inspection Program Manual, there's an existing working group. And the thought was we piggyback and have the benefit and experience of an existing working group to reflect into the pilot programs.

Those are the five pilots. We're in the process of getting charters completed, identifying representatives for the groups. We talked at the agreement states' meeting, I gave everybody similar talk at the agreement states' meeting and we have interest in identifying representatives, getting the groups established, and starting on with the next steps.

DR. NAG: The other question is if funding

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1 for NRC was the major consideration, why National
2 Materials Program was instituted? Did you examine the
3 possibility of taxing the agreement states so that if
4 they are -- you know, if NRC is still providing a lot
5 of fundamental basic input, but not getting reimbursed
6 for that, why not tax the state depending on the
7 number of licensees they have to help fund partially
8 the NRC?

9 Was that examined?

10 MR. LOHAUS: The working group certainly
11 talked about that. I think their bottom line was that
12 the level of effort that would be provided by the
13 states in terms of their providing personnel, paying
14 their salaries for participating, that that basically
15 would offset, if you will, the costs. But, that's
16 certainly an issue.

17 Again, I want to maybe emphasize that cost
18 is not the only consideration. It's one
19 consideration, but there's a lot of other
20 consideration. It's really, you know, how are NRC and
21 the agreements states going to continue to function
22 and operate in the future as NRC's number of licensees
23 continues to decrease.

24 And certainly, budgeting costs is one.
25 Expertise is another, how we continue to operate.

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1 There are a lot of different factors in there that
2 we're working with. So I don't to just leave the
3 impression solely that it was a cost factor, but that
4 certainly was a major aspect in looking at the fee
5 question.

6 DR. NAG: The other thing is
7 fundamentally, I think the ACMUI would've been
8 interested in knowing how historically NRC got
9 involved in byproduct material, but not the NARM
10 materials.

11 And if the risks are the same, if the
12 radionuclides that are produced have the same activity
13 and same half-life and so forth, the risks are going
14 to be similar.

15 MR. LOHAUS: Yes.

16 DR. NAG: So why this dichotomy -- how did
17 it come about? And that will help us answer why we
18 are now regulating the two differently and why we
19 should bring it back.

20 MR. LOHAUS: Very good question, and the
21 states have argued the relative risk part of this for
22 years.

23 The answer is historical. It really comes
24 out of the genesis for the Atomic Energy Act and the
25 focus of the federal programs at that time. They were

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1 focused on the source materials, the special nuclear
2 materials that were derived from the source materials,
3 and the byproduct materials that were created incident
4 to the use of the special nuclear materials.

5 The naturally occurring and accelerated-
6 produced materials were not a hard consideration at
7 that time. And it's been a continuing issue within
8 the program that the states have brought up, that NRC
9 does not have as comprehensive a program as the states
10 have when they cover the full suite of materials.

11 But, it's really a historical reason and
12 it's the genesis of the Atomic Energy Act program.
13 It's where that comes from.

14 DR. NAG: Yes, but regulation -- we always
15 see that we are trying to go for regulation that is
16 risk-based. The risk is no different than when you're
17 using the same criteria.

18 MR. LOHAUS: Yes. And again, it's a
19 consideration, where when we do seek state comment, I
20 think they look at this from a risk-based prospective
21 given the totality of their programs. I think those
22 aspects are reflected in their interactions.

23 CHAIRMAN CERQUEIRA: Neki, you had a
24 question?

25 MS. HOBSON: Yes. I just wondered how did

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1 you come about deciding that now is the right time to
2 bring everything all under one tent? Have there been
3 incidents for instance?

4 The states have been regulating these non-
5 NRC materials. Have there been accidents or incidents
6 that would warrant federal intervention? Why are we
7 at this juncture today instead of yesterday or two
8 years from now?

9 MR. LOHAUS: You mean in terms of
10 asserting jurisdiction over a broader base of
11 materials?

12 MS. HOBSON: Yes. Right.

13 MR. LOHAUS: That's a consideration. I
14 don't think there's any hard decision that's been
15 reached at this point in time. But, it is certainly
16 a consideration that the Commission is interested in
17 looking at.

18 At the same time, the National Materials
19 Program identified this from the standpoint of
20 reducing potential duplication, assigning
21 responsibility in a single organization for materials
22 that have similar risks. Why have --

23 MS. HOBSON: But you haven't had a rash of
24 incidents that you say, "Oh my goodness. We've got to
25 do something?"

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1 MR. LOHAUS: No, we have not. No. Thank
2 you. I should've focused on that initially.

3 But, that's correct. We have not. It's
4 more from the totality and universality standpoint.

5 MS. MCBURNEY: Just to add to what Paul is
6 saying, from the state perspective, part of it is due
7 to looking at occupational exposure and public
8 exposure from a total exposure standpoint rather than
9 splitting off just the byproduct material.

10 A lot of times in the NRC states when they
11 go in and inspect, they're only looking at that part
12 of it even though they're looking at total
13 occupational exposure; whereas in the states, they
14 look at the total program, the Materials Program, or
15 adding in the x-ray part of it as well.

16 And in a lot of cases, you're going to
17 have a lot of combined features in medical
18 applications and in industrial applications.

19 MS. HOBSON: Well, if the states -- and I
20 agree with you. I think the states are really doing
21 an excellent job out there. So if the states are
22 already doing this, looking at the total picture --

23 MS. MCBURNEY: That's only in the
24 agreement states.

25 MS. HOBSON: Well, but you have most of

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1 the licensees --

2 CHAIRMAN CERQUEIRA: There are 32.

3 MS. HOBSON: -- and it's growing.

4 MS. MCBURNEY: But I think they were
5 looking at it in the big picture that there needs to
6 be some consistency throughout the regulatory
7 framework on how we regulate all radioactive
8 materials.

9 CHAIRMAN CERQUEIRA: Jeffrey?

10 DR. WILLIAMSON: Are you considering also
11 widening the AEA domain to include electronically-
12 produced x-rays that aren't derived from any
13 radioactive materials such as diagnostic radiology,
14 linear accelerators in diagnostic oncology?

15 MR. LOHAUS: No. The answer is "no".

16 And again, I want to emphasize that the
17 aspects in terms of jurisdiction were areas that were
18 identified by the working group and are areas of
19 consideration. There's been no decisions reached to
20 move forward along these lines other than to explore
21 potential -- one case is to explore potential
22 legislation dealing with naturally occurring -- excuse
23 me, dealing with accelerator-produced materials where
24 we've developed some proposed legislation.

25 But some of these other aspects, they're

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1 considerations and there have not been hard decisions
2 reached there.

3 DR. WILLIAMSON: But a hard decision has
4 been reached to go forward with increasingly, scope to
5 include NARM?

6 MS. MCBURNEY: Not NARM, ARM.

7 MR. LOHAUS: ARM. Accelerator-produced
8 material. Yes, yes. The Commission did ask --

9 DR. WILLIAMSON: Okay. You excluded
10 Radium-226.

11 MR. LOHAUS: The Commission did ask the
12 Office of the General Counsel to examine some
13 legislation, yes.

14 CHAIRMAN CERQUEIRA: Dr. Nag?

15 DR. NAG: Had the working group had any
16 discussion about the role of ACMUI in the National
17 Materials Program?

18 MR. LOHAUS: The working group requested
19 stakeholder feedback. There was one meeting. But in
20 terms of looking at advisory committees and other
21 aspects, you can see in their consideration and
22 reflection that the use of advisory committees such as
23 ACMUI would continue as a part of the program.

24 In other words, you need to have the
25 independence, the independent review, the peer review,

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1 and the feedback into the process. That would
2 continue to be a part of the process.

3 So, I don't think there's really change
4 that was contemplated in that area. It would be a
5 continuation of existing processes and utilization of
6 existing committees and mechanisms. That's not to say
7 that there may be additional mechanisms that might
8 come out of this process in the future as well.

9 But, I think their thought was primarily
10 focused on how NRC and the states would interact in
11 the existing structures. A lot of that would continue
12 to function such as ACMUI, or ACMW, other advisory
13 committees.

14 DR. NAG: Would it require any expense,
15 you know, any change in the structure of the ACMUI or
16 would it remain exactly the same?

17 MR. LOHAUS: I really can't comment on
18 that at this time. I think that's something that as
19 the program goes forward you could look at that item
20 and consider that as an item for consideration,
21 certainly.

22 I wanted to maybe spend a few minutes and
23 talk about this slide because this has some important
24 aspects on it that really may sort of affect our
25 ability to move forward.

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1 The first item, "Evolving National
2 Materials Program Environment", what I wanted to
3 reflect here were maybe two things. One is the
4 response to 9-11, the response to terrorist
5 activities. There are activities underway here within
6 both NRC and the states, and looking at what kinds of
7 additional security measures do we need to put in
8 place.

9 That process and those activities need to
10 be taken into consideration, and may very well help
11 shape or affect any National Materials Program
12 structure in the future. So, it's an area of
13 consideration that I sort of wanted to lay out.

14 Another area that today is really
15 critical, if you looked at the initial work and if you
16 looked at where the states were from a budgetary
17 standpoint at the time the working group engaged, they
18 all had very strong fiscal bases.

19 And if you look today -- and I have to
20 recognize Texas. Texas did a recent survey. They got
21 very good responses from 23 states I believe. And all
22 those states, with the exception of five, indicated
23 severe fiscal conditions, severe budgetary constraints
24 that they're each dealing with.

25 That obviously will also have a big impact

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1 relative to the program in moving forward. Because
2 without that base, it's going to limit the ability of
3 states to engage in the process. And that's an
4 uncertainty, so I wanted to sort of highlight those
5 two aspects in terms of an evolving aspect that will
6 have an effect here.

7 The other is, I've labeled this "Success
8 Measures". If you look at the first pilot project
9 paper, there is about eight or nine success measures
10 that we've identified that would be used to judge and
11 help assess the pilot projects.

12 I've highlighted a couple of these here,
13 and one is, and we've talked about this, is the
14 ability of NRC to share with the states the
15 establishment of priorities. The second, and we've
16 talked about this also, is the ability of states to
17 assume and carry out greater responsibility for the
18 development of products needed in a National Materials
19 Program, the ability of the states to commitment
20 resources to program.

21 And the final item is looking to the
22 future. What will the respective roles of the
23 Conference, the OAS, the Organization of Agreement
24 States, and the NRC be in the program? And you can
25 look at a number of different options.

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1 I think there's always going to be a very
2 strong NRC component. But at the same time, the
3 states have demonstrated, are continuing to
4 demonstrate greater ownership, taking on a greater
5 responsibility. And we're going to see that as well
6 in the program.

7 As I mentioned, the budgetary, the fiscal
8 issue may have some effects here. But as an example,
9 if you look at the agreement states' meeting, today
10 that meeting is truly a meeting of the agreement
11 states. It's planned by the Organization of Agreement
12 States. It's their meeting. NRC is really an invited
13 member to that. They've basically taken on the
14 ownership and responsibility for that meeting.

15 So, that's one example. It may not appear
16 to be a big example, but in the past the agreement
17 states' meeting was basically set up and run by NRC.
18 And today, it's basically set up and run by the
19 states.

20 There's very close coordination and
21 integration in terms of the items we cover and the
22 participation in the meeting. There's a high level of
23 senior management participation in the meetings,
24 etcetera. But, it's a change that's occurred that's
25 reflected in the National Materials Program structure.

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I'm going to stop at this point, and open this up for discussion. I don't know Ruth, if there's any comments or observations, additional thoughts that you might like to offer as well. Please, I welcome the opportunity.

(No response.)

MR. LOHAUS: Any feedback as well. I'd very much appreciate that. And, I appreciate the comments earlier. They were all very good comments and very good questions.

CHAIRMAN CERQUEIRA: Neki had a question or comment.

MS. HOBSON: Yes. I just kind of -- it's kind of hard for me to grasp how this alliance thing would work.

Would NRC like be the first among equals, or would NRC be the Chairman and the boss of the group, or would it be a pure democracy? Who's going to call the shots on what are the problems we need to solve, where are we going to find the solutions, when is the solution adequate, that kind of thing?

Who's calling the shots?

MR. LOHAUS: Let me answer this in several ways. One, in terms of program performance and

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1 program evaluation, NRC will always have the lead and
2 will always have prime responsibility there. It's a
3 legislative responsibility we have in terms of the
4 oversight and cannot be delegated. So, we will
5 continue to have a strong role there in that program.

6 In terms of determining priorities, as I
7 mentioned, the states would like to share and
8 participate to a greater extent in that process. And
9 that's one of the pilot areas that we're going to
10 explore.

11 But as a part of that process, my sense is
12 that the Commission and what we lay out as a part of
13 our strategic plan and of our operating plans and as
14 our budget to support that is really going to reflect
15 the priorities from NRC's standpoint.

16 At the same time, as I mentioned, if
17 there's states that may have a particular area of
18 expertise, and we identify that there's need for work
19 in a particular area -- and I'll use well-logging
20 because Texas probably has the majority of the well-
21 loggers and has a high degree of expertise there.

22 And if we need additional guidance in that
23 area, what we may do is we may not identify that as an
24 item that NRC would address, but we may look to Texas.
25 And Texas would pick this up, and either individually

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1 or working with states, identify that.

2 We're not at that point yet, but that's
3 part of what you can see in the National Materials
4 Program. We still have a ways to go or maybe even a
5 long ways to go on certain parts of this, but this is
6 part of the thinking and part of the evolution that
7 you can see in the program as you look forward.

8 CHAIRMAN CERQUEIRA: Leon?

9 MR. MALMUD: Are you requesting our
10 opinion or are we just being informed of the process
11 that's ongoing? I mean that in a constructive way.

12 MR. LOHAUS: In the spirit of staff
13 requirements memo, we are seeking stakeholder
14 comments. Personally, I would very much appreciate
15 the views of the committee in terms of not only the
16 pilots -- I mean we're just beginning to get the
17 charters formulated -- but in terms of issues or areas
18 that should be considered or things that you see that
19 should be reflected.

20 I think that individually and collectively
21 as an organization, we'd certainly welcome your
22 feedback.

23 MR. MALMUD: As a nuclear physician in my
24 training and as a realist in terms of believing part
25 of what I read in the newspaper, number one, the

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1 states are going to be under increasing budgetary
2 constraints as is the federal government.

3 I'm from a state that's in the Rust Belt,
4 with an aging population and an emigration of its
5 college graduates. It's a state which can ill afford
6 I believe to take on an addition economic burden.

7 As a provider of services, it means
8 another level of oversight, or a greater intensity on
9 the part of the state in the oversight. And I can't
10 imagine the federal oversight disappearing. It
11 shouldn't disappear.

12 We're talking about radioactive material.
13 It moves from state to state. It's kind of like
14 shifting the FDA responsibilities for food and drugs
15 into the states. It would make a quagmire of 50
16 different regulations based upon each state's own
17 myopic view of the world. There are some areas in
18 which the federal government can function much more
19 efficiently. And this, in my opinion, is one of them.

20 In practicing in the city of Philadelphia,
21 we have city inspections, state inspections, federal
22 inspections. They all contribute to an atmosphere of
23 oversight and concern to the patient, as the primary
24 recipient of their oversight. However, I'm not sure
25 that we need three. The expense of three, though

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1 divided among the three has to exceed the expense of
2 one well run program at the federal level.

3 So while I am not generally a proponent of
4 central control of everything, I think that with
5 radioactive material given its nature and the fact
6 that it moves across state borders and that we now
7 have a national security issue arising of a magnitude
8 that we didn't have before, I would suspect and I
9 would hope that the states would not have more
10 responsibility in managing this, but that it would
11 rest as it has in the past with the federal
12 government, which is going to make the rules anyway.

13 That's a personal opinion I have.

14 CHAIRMAN CERQUEIRA: I think Ralph was
15 going to make a comment, and David.

16 MR. LIETO: I was going to kind of hold
17 off here a little bit. But, a couple weeks ago I was
18 asked to collect comments from the committee and the
19 intent was to try to create a consensus response to
20 this. But I think because of the timeframe and so
21 forth, that wasn't really too practical to achieve
22 what I think is a full consensus of the committee.

23 So maybe what I can just do is summarize
24 some of the things that were feed back to me in terms
25 of the documents that were distributed to the

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1 committee previously, which I think probably was your
2 SECY-01-0112, which was the Materials Working Group
3 Report on the National Materials Program.

4 As I understand it, that this report was
5 basically, was a directive that came out in 1999 I
6 think thereabouts and the report was completed last
7 year. Is that correct?

8 (No response.)

9 MR. LIETO: The bottom line was that the
10 National Materials Program, with the stated goals and
11 mission statement and the objectives that were
12 presented in the working group report, has merit and
13 a benefit to medical users.

14 I think there was support for the four
15 components that were proposed in the working group
16 report. I think you call those options or whatever.
17 But just for the committee's review, these four
18 options were: establish centers of expertise, seek
19 authority to regulate NARM, maintain an information
20 infrastructure, and fourth to create a standing
21 Compatibility Committee.

22 There was support for that, but there was
23 also a concern that was shared with the agreement
24 states about NRC regulating NARM. And I think the
25 concern from the medical users' perspective involved

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1 the potential for increased regulatory burden, which
2 I think Dr. Malmud expressed just a few moments ago,
3 in an area that the NRC has not been previously
4 involved with.

5 I think this intrusion is really focused
6 at the use of PET, which is area of greatest potential
7 and growth in nuclear medicine. I think that's where
8 the main comments lie.

9 There were four major concerns I think
10 that were expressed. One had to do with the
11 regulation of NARM and the increased burden and costs
12 to agreement states, especially those that might not
13 have any significant improvement in safety. This
14 adverse effect would be of greatest concern in the use
15 of positron emitters and diagnostic nuclear medicine.

16 A second concern that was expressed was
17 that states with strong programs of health and safety
18 might be tied or forced to seek a lower level to
19 create a common denominator throughout the country.
20 I think you've addressed a little bit of that already
21 in your comments and provided some reassurance there
22 that states would still in many areas be allowed to
23 continue their unique functions.

24 Another concern has to do with the funding
25 of this program from the NRC's perspective. This was

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1 not addressed in the working group report. It was in
2 the information that was supplied.

3 The funding of NRC activities, especially
4 in the non-reactor area, cannot continue to be funded
5 by the current mechanism of fees supporting NRC
6 activity. I think that if you're going to seek
7 regulatory authority to change areas that need to be
8 addressed by the Atomic Energy Act, I think that the
9 current funding mechanism needs to be changed also.

10 It's unclear how there would be any cost
11 savings to programs that would have to expand based on
12 a fee-supported program. What we're talking about are
13 those programs, which really don't have much
14 regulatory now in the area of NARM, having to assume
15 those responsibilities.

16 And then one of the areas of concern was
17 that one of the assumptions for the success of the
18 alliance options was "states develop and maintain a
19 level of technical and regulatory expertise equal to
20 or greater than the NRC."

21 I think there's some concern that this may
22 not be realized in a third of the states that are non-
23 agreement states, mainly because they do not or cannot
24 achieve this level of expertise. What incentive would
25 there be for them to change to achieve this assumption

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1 for success?

2 So, those are the comments that I had
3 gotten from the committee as a whole.

4 MR. LOHAUS: Thank you very much. I very
5 much appreciate those.

6 CHAIRMAN CERQUEIRA: Would it be helpful
7 -- I mean you got these verbally --

8 MR. LIETO: I'd be glad to write them out.

9 MR. LOHAUS: Please. I'd very much
10 appreciate that. Thank you.

11 Yes?

12 CHAIRMAN CERQUEIRA: A few other people
13 wanted to make comments then we have one outside
14 person who requested an opportunity.

15 Ruth?

16 MS. MCBURNEY: To expand on what Paul said
17 about the changing in the resources on the federal
18 level and the state level, it makes it even more
19 important for us to combine those resources and work
20 together.

21 For example, on a lot of cases where some
22 of the newer technologies and the sources that are to
23 be evaluated for particularly new technologies,
24 they're probably going to happen in one of the larger
25 agreement states first before NRC sees them.

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1 So rather than having each state have to
2 reinvent the wheel and the NRC have to come up with
3 licensing guidance or review guidance for that source
4 and so forth, right off the bat if we can establish a
5 working group to review that that includes both
6 federal and state people, that will combine the
7 resources a lot better in our shrinking economies.

8 MR. LOHAUS: Yes?

9 DR. DIAMOND: Just out of curiosity, have
10 any of these smaller agreement states expressed any
11 interest in relinquishing that status and going back
12 to NRC status?

13 MR. LOHAUS: In those cases and in this
14 case, it does happen to be at least one small program
15 and then a second that I would characterize as an
16 intermediate-sized program, where they have
17 experienced performance difficulties, principally due
18 to staffing, retention of staff. Those programs were
19 placed on what we call heightened oversight. It's a
20 program where we request a program improvement plan.

21 The issue of consideration of should we
22 continue the program is certainly a consideration that
23 both of those states have looked at in one way or
24 another. But to date, we're not aware of any formal
25 request, if you will, to NRC to consider taking back

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1 a program.

2 I think in the cases where it's been
3 examined, the thought is that the program can provide
4 good or better service at lower costs and be more
5 responsive, if you will, to local needs. And that the
6 considerations --

7 DR. DIAMOND: So there's still a thinking
8 out there that the states can manage these programs in
9 a more cost effective matter as opposed to paying the
10 licensing fees?

11 MR. LOHAUS: That's correct. And also
12 what these programs have done is to look at seeking
13 legislative relief to increase these.

14 A couple of examples. One program for
15 example that was on heightened oversight about four
16 years ago took a concerted effort to work with the
17 community and their legislature, and they recently
18 received legislative approval for an increase in their
19 fees.

20 And another part of this, which other
21 programs have found to be very effective, is the fees
22 are earmarked for that program. So, they go directly
23 into the program. And it has really improved the
24 performance of that program significantly.

25 So I think the thinking is we need to deal

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1 with it at the state level. We need to seek the kind
2 of relief, whether it be an increase in fees or
3 adequate funding to support the programs. That, to
4 me, has been the bottom line that I've seen as opposed
5 to "Here NRC, you take it back."

6 CHAIRMAN CERQUEIRA: Okay, Bill Uffelman
7 from the SNM would like to make a comment.

8 MR. UFFELMAN: I had a question for Lloyd.
9 You enumerated four documents. One of them was the
10 August SRM, and I've checked with my other colleagues
11 from some of the other effected organizations, which
12 obviously are stakeholders in this, and I don't
13 believe any of us have seen that SRM. It has no
14 signed number, so we're kind of shooting in the dark
15 when we go on these website searches.

16 And Dr. Diamond had commented earlier
17 about how the effected parties find out they are
18 effected. We certainly would like to, if it's
19 available, we would like to be able to look at it.

20 MR. LOHAUS: It is available. And I may
21 stand to be corrected, but I'm pretty certain we
22 shared this with the agreement states with an all
23 agreement states' letter, which should be on the STP
24 website. But we can double-check that and certainly
25 make sure that you have a copy.

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1 MR. UFFELMAN: The Society of Nuclear
2 Medicine, ACR, ASTRO, et al would certainly like to
3 have a look at it.

4 MR. LOHAUS: We'll certainly follow up on
5 that.

6 MR. UFFELMAN: Thank you.

7 CHAIRMAN CERQUEIRA: Any other questions?

8 DR. NAG: I have one.

9 CHAIRMAN CERQUEIRA: Yes.

10 DR. NAG: Now that the National Security
11 is interested in nuclear terrorism and so forth, and
12 they have a huge budget, is that a source of funding
13 that the National Materials Program can tap into?

14 MR. LOHAUS: I guess I'll answer it two
15 ways. One is I'm not aware of anything explicit at
16 this time. But I think in terms, if there were to be
17 particular activities that might address increased
18 security, that could be a possible source.

19 But I would say at this point, the answer
20 is "no". There's been no consideration of that and I
21 don't see anything in the future coming from that
22 particular budget area.

23 CHAIRMAN CERQUEIRA: Great. Well, Paul,
24 we've got five minutes to go, but Fred and Tom would
25 like to address a couple of the problems that we've

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1 identified this morning before the lunch break. So
2 thank you very much, Paul, for an excellent
3 presentation.

4 MR. LOHAUS: Thank you very much.

5 MR. ESSIG: We've been reflecting on some
6 comments that were made earlier this morning, where
7 the committee had in mind certain expectations and our
8 presentations on a couple of issues didn't deliver.

9 We're mindful of that, and what we want to
10 do is to explore -- right now I'd like to maybe just
11 plant the seed and then we could pick up on it later
12 this afternoon -- explore the ways in which we could
13 interact, maybe myself as the designated federal
14 official, interact more effectively with the committee
15 prior to the committee meeting so that we understand
16 what the expectations are on a given items that's
17 going to be on the agenda.

18 CHAIRMAN CERQUEIRA: Right.

19 MR. ESSIG: And so that we have the right
20 person presenting the right material. And so, at this
21 time, I'll just offer that to the committee for
22 consideration.

23 If we want to engage in the form of a
24 conference call, say a month ahead of the time or some
25 other appropriate interval ahead of the scheduled

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1 meeting date, and then have, if not the entire
2 committee, at least a suitable representative sample
3 of the committee relay to us what the expectations are
4 on the particular agenda items so that we can --

5 CHAIRMAN CERQUEIRA: I think that would be
6 important. I can tell you in the past the staff,
7 several months ahead of the meeting, actually
8 initiated preliminary agenda to be discussed. It
9 would be presented to me and then we would get it out
10 to the committee, seeking other people's input and to
11 try to get a little bit more clearly defined
12 expectation of the materials to be presented.

13 I think in part, since we were working so
14 intensively on Part 35 revision, it was kind of a
15 recurring agenda to some extent. Now we've kind of
16 gotten past that, and there are some of these other
17 issues that we've brought up. And, things happen at
18 the last minute like the presentation with the GAO
19 this morning. I didn't know about it until it
20 happened now.

21 So, we've had sort of a shifting and the
22 designated federal official and -- but I would think
23 certainly starting well in advance of the meeting
24 would be helpful. But other committee members --

25 DR. NAG: I think that's only addressing

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1 part of the problem. I think the second part of the
2 problem would be the feedback back to us. And I think
3 what's going to be important there is anytime any
4 action material is discussed, it's impossible to read
5 through the entire minutes of the proceedings. But
6 anytime you have any action items those should be
7 given back to us. You know, this is what this was,
8 and this is what was investigated.

9 We never know what's going on until six
10 months later, and we may or may not go back. So
11 within a certain period, within two weeks or within
12 four weeks of the meeting, the officer should say this
13 was the action item and this was the action statement.
14 So, I think that would be really helpful to close the
15 loop.

16 CHAIRMAN CERQUEIRA: But see, again,
17 sometimes we have a lot of discussion that's never
18 quite clear to you or to us what is wanted or needed.
19 And what we've tried to do over the last several
20 meetings is actually formulate specific motions that
21 we vote on, and those are action items that we need
22 follow up.

23 Ideally, we'd like to get the follow up as
24 soon as possible. And once the information is
25 available through the Internet, to be sent out to the

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1 committee. But certainly, if not in that timeframe,
2 at least at the next meeting we should get follow up
3 on those items that were flagged requiring action.
4 So, again, that's something we need to re-institute.

5 Jeff?

6 DR. WILLIAMSON: Well, I'm going to bring
7 up one issue here that's a little bit delicate and
8 sensitive to bring up in public.

9 But, I think it would be useful if you
10 looked over some of the transcripts from the past, say
11 two or three years ago when Barry Siegel and Judith
12 Stitt were Chairmen of this committee. And I think
13 you will see that there's a lot more interactivity,
14 give and take, between the designated federal official
15 and others that he or she designates in the group.

16 And what it seems to me to have happened
17 over the last couple of years is we essentially
18 conduct our discussion and our efforts to come to a
19 consensus in a vacuum. And sometimes it's like
20 pulling teeth to get a perspective from the Commission
21 staff.

22 So I think we as a group would appreciate
23 somebody that interacts more intensely with us because
24 it helps us to gain a perspective of the limitation
25 that the agency has by virtue of its charter and

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1 various other commitments to Congress and so on. And
2 we don't necessarily know that.

3 It's been very helpful to have these very
4 detailed technical dialogues over these issues. And
5 I think the best way you can get a perspective on this
6 is to go back and look at some of the transcripts with
7 an eye towards this kind of interaction back during
8 the time Cathy Haney and Larry Camper were the
9 designated federal officials.

10 One of my complaints has been that too
11 often we seem to be in too much of a vacuum. And I
12 think it's a very important role that you are taking
13 on.

14 CHAIRMAN CERQUEIRA: Sally?

15 MS. SCHWARZ: I think one specific point
16 this particular meeting, as far as the overall input
17 of the training and experience in terms of the work
18 that Dr. Vetter's committee did in writing these
19 regulations and presenting them with no feedback to
20 essentially see any revision of those requirements --
21 because had we seen the revision, we might have had
22 discussion.

23 So I think that if can just see,
24 specifically, the return from the staff.

25 CHAIRMAN CERQUEIRA: And again, there was

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1 no mechanism in place to even bring that up. I mean,
2 when we put together the agenda, I was the one that
3 requested some of that and it was just hard to get the
4 information out. And, even until now, I didn't really
5 fully know the status.

6 I think, Ralph, you had your hand up, and
7 then David.

8 MR. LIETO: Did we want to go ahead? Were
9 we going to be taking this up again in the afternoon
10 about this specific issue, or do you just want to go
11 ahead and carry on right from here?

12 CHAIRMAN CERQUEIRA: In terms of the --

13 MR. LIETO: Feedback mechanism.

14 CHAIRMAN CERQUEIRA: Well, it's noon. We
15 will bring it back --

16 MR. LIETO: Okay.

17 CHAIRMAN CERQUEIRA: -- for discussion in
18 the afternoon. I think Angela has some time built in
19 at the end. I mean, if the Committee wants to delay
20 lunch, I'm willing to do that, but I think we probably
21 need the break. Is that reasonable?

22 Why don't we break for lunch and come back
23 at 1:00 o'clock and then we will resume this dialogue
24 in the afternoon session. Thank you.

25 (Whereupon, the above-entitled matter was

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1 concluded at 12:05 p.m.)

2 CHAIRMAN CERQUEIRA: All right, so now,
3 we're back from our lunch break and I'd sort of like
4 to, you know, just I think it's sort of understood but
5 we should clearly state that we're not trying to point
6 the finger at anybody, you know. I'm kind of sitting
7 there thinking maybe it's my fault as chairman that
8 we're not getting things done, but rather, I mean, all
9 of us are spending time and effort in the process and
10 for various reasons we're all committed to it and I
11 think it's in everybody's interest to make it as
12 efficient and effective as possible and so that's
13 really our objective for going at some of these
14 various issues.

15 And we'll come back and discuss some of
16 these things we were talking about just before lunch.
17 And Mr. Essig has put at your desks that actual
18 material that was sent to the Commissioners and it
19 says, you know pre-decisional, not for public
20 disclosure at the bottom, but committee members now
21 have it and we can -- you know, we won't talk directly
22 about this, I guess, unless people have had a chance
23 to look at it.

24 All right, so the next item on the agenda
25 then is the Health and Human Services data base and I

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1 guess Linda, is she going to present it?

2 MR. BROWN: Well, we've managed to run
3 Linda into the ground in sending her around the
4 country for the stakeholder meetings so she called in
5 sick today. So, I'm afraid you're stuck with me for
6 most of the rest of the afternoon. I'll try to muck
7 my way through it in my best normal process here.

8 What we wanted to do today was basically
9 inform you of something that we've been working on for
10 several months now and that it's hopefully nearing
11 completion and that is NRC reporting to the Health and
12 Human Services data base called the Health Integrity
13 and Protection Data Bank and I'll basically go through
14 what that is, what we have to report, and the status
15 of agreement state reporting as well, walking you
16 through these slides.

17 The next one. What is it? Basically it
18 came about as a result of the Health Insurance
19 Affordability and Accountability Act which is
20 documented up there and I assume that probably many of
21 you are more familiar with this than I am or we are
22 actually, because it effects other activities or
23 effects you in other ways beyond just NRC regulated
24 activities. But the bottom line with this Act, I
25 believe, was that it was important that if a medical

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1 provider or a health care provider or someone involved
2 with health care was found guilty, to use a general
3 term, of a major infraction in one jurisdiction, one
4 state, one locality, that that information would be
5 available to both employers and other health care
6 professionals in other jurisdictions. And so this
7 data base, I believe, is intended to be the way to
8 make that information available to other people where
9 an individual might work.

10 The data base is confidential in terms of
11 access to the general public. It is not available to
12 the general public but it is available to
13 professionals and institutions that would be
14 interested in the information. Anyone who has a
15 report filed into the data base receives notification
16 of that report and a copy of the information so that
17 they have an opportunity to challenge the accuracy and
18 work out with whoever the reporting body was a
19 hopefully resolution of those concerns. And then as
20 I've indicated, the people with access to the data
21 base are specified there.

22 How is the NRC involved? The regulations
23 pertaining to this Act are, as I said, Health and
24 Human Services regulations and they're in Title 45 of
25 the Code, Part 61 and those regulations are applicable

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1 to the NRC and agreement states. So we are required
2 by the statute and the implementing regulations to
3 provide reports to the data base. There is also
4 reporting required from health plans as indicated on
5 the slide.

6 Okay, what will the NRC report?
7 Fundamentally, we report final actions that are
8 publicly available to the extent that they relate to
9 medical practice and health care and it's limited to
10 those actions that are adjudicable. So if the
11 agency -- if an agency could take an action against an
12 individual and the individual would have no recourse
13 to challenge the validity of it, then that action is
14 not reportable to the data base. Only things that can
15 be challenged are reportable to the data base.

16 So for NRC purposes the adjudicable
17 actions that the NRC would take are revocation or
18 suspension of a license, actions to limit the scope of
19 practice and actually the biggest one which didn't
20 make it onto the slide would be escalated enforcement
21 actions. So those are the things that the NRC will be
22 required to report.

23 The next slide goes over who this rule
24 would be applicable to and it's basically anyone
25 involved in the health care field in a way that

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1 impacts patient safety. So I guess as an example of
2 an exception at a broad scope licensee, a broad scope
3 medical licensee, someone doing surveys in the waste
4 decon area, waste disposal area would not be
5 reportable or a violation associated with that,
6 because that's not health care.

7 I'm going through this pretty quickly and
8 I'll --

9 DR. VETTER: Can you give us an example
10 here?

11 MR. BROWN: Sure. A physician who would
12 be required by the regulations to have a dose or
13 dosage calibrated prior to administration of that dose
14 who failed to do so, if that violation met the
15 criteria for escalated enforcement and the agency took
16 escalated enforcement action against the individual AU
17 or the licensee, that would be reportable to the data
18 base.

19 DR. VETTER: But a medical event itself
20 wouldn't be?

21 MR. BROWN: No, only violations.

22 DR. VETTER: I'm sorry. Okay, well, a
23 medical event ends up being a violation. The
24 inspectors always turn it into one. So if it's a
25 violation, even though it's not escalated enforcement,

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1 it would --

2 MR. BROWN: No, only escalated
3 enforcement.

4 DR. WILLIAMSON: I must say, we've had
5 medical events from this Administration reported at
6 Washington University that did not result in
7 violations.

8 MR. BROWN: Thank you. I didn't think
9 it's worth me arguing the point.

10 DR. WILLIAMSON: Could you define
11 escalated enforcement and identify that class of
12 violations more exactly that would appear in here?

13 MR. BROWN: Certainly, yeah, it's severity
14 level 1, 2 and 3 violations are escalated under the
15 enforcement policy. Severity level 4 violations are
16 not. Minor violations and NCVs are not escalated.

17 DR. WILLIAMSON: NCVs?

18 MR. BROWN: Non-cited violations.

19 DR. NAG: Right now, any medical events
20 anyway by NRC?

21 MR. BROWN: Not into this data base, no.

22 DR. NAG: No, but I mean, so it's public
23 knowledge.

24 MR. BROWN: It's publicly available
25 information but it is not centrally maintained or

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1 readily searchable by for instance, an institution
2 looking at a hiring a physician or obtaining service
3 from a radio-pharmacy or someone else.

4 DR. DIAMOND: Fred, I have a number of
5 questions. Firstly, the health integrity and
6 production data bank, that was established under the
7 statute of 1996 that you enumerated, when did this
8 data bank become active or how long has it been
9 active?

10 MR. BROWN: The implementing regulation,
11 I believe, is about two years old. I'm not sure how
12 long the data base itself has actually been active,
13 per se. I would -- I'll give you a guesstimate of 12
14 to 18 months.

15 DR. DIAMOND: Twelve to 18 months. As I'm
16 thinking through this, I have absolutely no idea
17 whatsoever what the value of this is. As was already
18 just said, this Administration and so forth are
19 publicly available on website and other resources. I
20 just have absolutely what was being considered by our
21 legislators when something like this was passed, what
22 value it has to whom, for what purpose. Does anyone
23 share this sense at all of mine? I'm just -- not that
24 you can do anything about it, of course.

25 DR. BRINKER: My understanding was that it

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1 was primarily used for situations in which
2 practitioners, et cetera, who cross state lines would
3 not be able to hide problems that existed in another
4 state and that was the up front thing. I don't know
5 how the NRC part got into it but I think it was -- I
6 think it started initially as malpractice -- well, for
7 the government, more likely fraud and they got rolled
8 into one.

9 MR. UFFELMAN: By way of example, Bill
10 Uffelman, Society of Nuclear Medicine, by way of
11 example, I believe the incident about a year and a
12 half, two years ago the nuc med tech, I think up in
13 the Minnesota walked somebody -- a new tech over the
14 phone. They were on call but they didn't bother going
15 in so they walked somebody else through milking the
16 technetium generator and all of that went well, but
17 then they lied about it to you when they were
18 confronted with it and they were banned, I think, for
19 three years or five years, I forget now which, from
20 working in any nuclear -- you know, anything regulated
21 by the NRC, so I would presume that that incident
22 would have made it to the list.

23 The recent situation, that I presume,
24 hasn't been resolved in Michigan with the I-131
25 patient who apparently died, not as a result of I-131,

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1 but then the family was exposed to the extent that if
2 the authorized user and the health physicist involved
3 become the subject of action, then I would presume
4 that incident would be reported. Is that correct?

5 MR. BROWN: The first example, certainly,
6 we did take escalated enforcement in that action would
7 be reportable. The second event is still working its
8 way through the process.

9 MR. UFFELMAN: That's what I said.

10 MR. BROWN: I can't really comment on that
11 but yeah, I mean, I'm sure that's the flavor of
12 Congress' intent and just to follow up, Health and
13 Human Services was the agency responsible for writing,
14 implementing legislation. And when they did it, they
15 made it applicable to all federal agencies which
16 enveloped us, not necessarily because that was, you
17 know, clearly called out in the legislative language
18 anywhere that it was intended to apply to our
19 licensees, but that's where we end up.

20 DR. NAG: Now that (undiscernible) in my
21 authorized user's name, it would come under my
22 supervision, so that would come under my name and it
23 would be by the name of the authorized user or by
24 institution, who would the final report come?

25 MR. BROWN: That's a very good question

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1 and I believe the answer is that it's our licensee
2 that we take action against and the reporting will be
3 by the individual against whom action is taken. So in
4 most cases, it would be a licensee that was reported
5 rather than an individual. Now, the exception to
6 that, as Mr. Uffelman identified, there are exceptions
7 where we take enforcement actions against individuals,
8 typically for willful violations but also, I mean, it
9 doesn't have to be willful in that context. It could
10 be careless disregard or gross negligence on the part
11 of an individual. In that case it would be the
12 individual but that's a very rare occurrence that we
13 take action against individuals.

14 DR. WILLIAMSON: And this Administration
15 wouldn't necessarily appear unless it's tied to, as we
16 said, a severity level 1, 2, or 3 violation which --

17 MR. BROWN: Correct.

18 DR. WILLIAMSON: -- I don't know if the
19 majority -- probably the majority of medical events in
20 the Administration is life and death but certainly not
21 all.

22 MR. BROWN: And the other thing is we're
23 in a new age today, so now there are medical events
24 and I think that we'll see fewer -- I suspect that
25 we'll see fewer enforcement actions out of medical

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1 events than in the past because of the change in the
2 underlying reg so the QMP.

3 CHAIRMAN CERQUEIRA: Can you give me a
4 feel for the number, say under the old rules over the
5 last year, how many reportable events to this data
6 base would have been documented? Are we talking about
7 100 or are we talking about 1,000?

8 MR. BROWN: Well, let me preface my answer
9 by saying that I was most deeply involved with this
10 about six to nine months ago and since then I've been
11 focused on the new Part 35 and Linda is out sick, so
12 I picked up this presentation this morning.

13 CHAIRMAN CERQUEIRA: Sure.

14 MR. BROWN: So in that context, I think
15 the answer is in the medical area we're probably at
16 the largest bounds talking in terms of if the
17 agreement states used NRC enforcement criteria, it
18 would probably be 40 cases nationally, that range, but
19 because the agreement states aren't even required to
20 have enforcement programs, I wouldn't -- you know,
21 two-thirds of those may not have involved actions
22 against the facility. In NRC space, maybe a dozen,
23 and that, I think is at the outside.

24 CHAIRMAN CERQUEIRA: I don't have a good
25 feel, you know, when you tell me severity level 1, 2

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1 or 3 with exhalation. You know, I would not want
2 somebody who gives an extra five milli-curies of
3 technetium to a patient to have their names appear on
4 this, but at the same time, you know, if someone is,
5 you know, totally negligent in verifying pregnancy or
6 other things in administering a dose, that would be
7 appropriate.

8 MR. BROWN: Yeah, and unfortunately, I
9 didn't bring in the enforcement guidance and your
10 point is well-taken and in enforcement space we do try
11 to be more risk informed with what a violation is.
12 And so in terms of occupational exposure, it would
13 take an over-exposure to reach the level of escalated
14 enforcement and obviously, that's not directly
15 transferrable into the practice of medicine, but
16 procedural issues and minor issues should not reach
17 the level of escalated enforcement unless there is
18 extenuating circumstances, willfulness or --

19 CHAIRMAN CERQUEIRA: Are you presenting
20 this to committee just for information? Do you want
21 our input? Are we actually going to perhaps see a
22 little bit more detail of what sort of events are
23 reportable to get feedback for severity?

24 MR. BROWN: The purpose of this
25 presentation was primarily informational for you. I

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1 can certainly take feedback. This is the -- as you
2 sometimes feel that you're handcuffed by the
3 restrictions of the staff on what you can do, and this
4 is a case where the NRC staff feels handcuffed by
5 another federal agency in terms of how we implement
6 this. The approach that we've taken in -- talking out
7 loud here somewhat. The approach that we've taken is
8 in implying -- in applying the regulations from Health
9 and Human Services, we've attempted to limit the
10 burden on our external stakeholders and ourselves in
11 implementing this and I think it would be reasonable
12 for us to share with the committee the current draft
13 management directive and ask for your insights in
14 terms of areas that maybe you can see a way to limit
15 that negative impact and burden but there aren't any
16 decision makers, per se, even in the NRC staff that
17 will be able to address some of the issues because
18 there are things that we are uncomfortable and unhappy
19 with but they're beyond our control.

20 CHAIRMAN CERQUEIRA: Now, in terms of the
21 committee members is there anyone who has special
22 concerns? I mean, Doug, you feel that the nuclear
23 medicine community is going to be fine with this?

24 DR. EGGLI: Again, I don't think we have
25 a -- we're probably going to have a whole lot of

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1 choice.

2 CHAIRMAN CERQUEIRA: Right. Although,
3 again, if the violations have no negative adverse
4 impact, I mean, you know, risk based and if there's
5 minimal risk to the patients or to the users, then I'm
6 not sure that it needs to go to the level of severity
7 where --

8 DR. EGGLI: It's taking quite a bit to get
9 to the -- it's taking quite a bit to get to the
10 reportable medical event stage these days. It's going
11 to take something close to 50 rem to the target organ
12 to get to a reportable event stage now. So you can --
13 it's -- and at that point, maybe it's reasonable.

14 CHAIRMAN CERQUEIRA: Now for the radiation
15 therapy people, are there any concerns?

16 DR. WILLIAMSON: Well, I think you don't
17 have to have a medical event to appear in this. If
18 you leave your cesium room door unlocked and a
19 terrorist comes by and steals your cesium, my guess is
20 he'll find your institution on this list. So a
21 significant security violation in this climate or any
22 kind of a procedural violation of Part 35 or your
23 license that is classified as Level 3 and a fine is
24 made could end up -- it would be on this list. As
25 long as it involved health care. It might not have

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1 anything to do with a medical event.

2 MR. BROWN: Well, yeah, actually, I don't
3 believe that's correct in this case because one of the
4 criteria is that the violation itself has to be
5 associated with health care. So a security and
6 control violation, I don't believe meets the criteria
7 that we've established for --

8 DR. WILLIAMSON: So it has to be something
9 involving the treatment of a particular patient.

10 MR. BROWN: Or a group of patients.

11 DR. WILLIAMSON: Or the maintenance of
12 infrastructure necessary to support the treatment.

13 CHAIRMAN CERQUEIRA: Dr. Nag and then --

14 DR. NAG: Yeah, and one thing that we have
15 to worry about is a medical event like under dosing
16 which in many times that may not really make any
17 difference to the patient. For example, I might give
18 the patient 4000 and I know -- 4000 centi (phonetic)
19 and other people might give 5000. That in itself is
20 a 20 percent variation. That wasn't made by mistake.
21 It really had no bearing on the patient but it will be
22 a medical event. So on these things, I mean, are
23 these reported or not?

24 MR. BROWN: Well, I would like to go back
25 to Dr. Williamson's point, which is, just because you

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1 have a medical event does not mean that the agency
2 will take enforcement action.

3 DR. NAG: Right.

4 MR. BROWN: If the investigation -- the
5 event follow-up, concluded that there was a violation
6 and that the significance of the violation rose to the
7 level of escalation, then it would be reportable,
8 although, again, there is a right to challenge each
9 individual case.

10 CHAIRMAN CERQUEIRA: Ralph, before we come
11 back.

12 DR. WILLIAMSON: Well, as I think back on
13 my history with NRC, I don't think I've personally
14 been involved where we've had a finable offense, but
15 I've been involved long enough to know that sometimes
16 the regulatory and enforcement actions have more to do
17 with protocol and dotting Is and crossing Ts and so
18 on, and really aren't a good marker of the quality of
19 patient care delivered by the institution.

20 So while I think the new Part 35 and the
21 maybe more how should I say, risk informed,
22 performance based attitude, we hope, of the inspectors
23 will resolve discrepancies between these two goals of
24 regulatory compliance and isolating out bad apples,
25 you know, there still is the potential that, you know,

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1 what NRC might consider a finable offense has nothing
2 to do with the quality of the health care delivered.

3 So that would be, you know, my concern is
4 that in whatever guidelines you make up, you really
5 consider the purpose this data base is going to be
6 used for which is to -- for others to identify, add
7 practitioners and institutions and so on and be, you
8 know, really careful in articulating your guidelines
9 and try to keep that purpose in mind and not do it
10 mechanically.

11 CHAIRMAN CERQUEIRA: Dick, you had a
12 comment.

13 DR. VETTER: Yeah, a question, two
14 questions actually; what efforts have been made to
15 communicate this to licensees and the second one you
16 addressed briefly and I'm not sure I understood it,
17 and that was the accessibility of this information to
18 the public.

19 MR. BROWN: Okay, where we're at right now
20 is still internally working out the process of
21 reporting and that's not done yet. Once that's done,
22 we'll issue a generic communication. I'm going to go
23 -- later in a couple of the presentations, go through
24 the way we've been doing that for regulatory issues
25 like this but the point is well taken. We shouldn't

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1 surprise anyone with a double whammy here. Here's
2 your escalated enforcement and then by the way, here's
3 the report of Health and Human Services.

4 That was one half of your question and the
5 second half --

6 DR. VETTER: Access of the DOEs the
7 public.

8 MR. BROWN: Yeah, I'm going to have to
9 admit ignorance. The slide basically provides the sum
10 total of my familiarity with the actual statute and
11 the underlying regulation, but it is -- it should be
12 accessible, 45 CFR Part 61, and I can do some follow-
13 up and get back to you. It will be later in terms of
14 what the controls or access to that data base are. I
15 know there is a password protection on the system and
16 you have to be a registered user.

17 Even for reporting agencies, there's a lot
18 of administrative hurdles to get through to be able to
19 report data in and QA back on that data. So I think
20 it's not inconsequential but I'm not sure who all it's
21 limited to when it says you know, health plans will
22 have access. I'm not sure what that means.

23 CHAIRMAN CERQUEIRA: Dr. Brinker?

24 DR. BRINKER: Just a clarification
25 perhaps, did I misunderstand you? If so, I apologize,

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1 but did you state that the agreement states might not
2 have either the investigatory wherewithal, whatever,
3 to do what is necessary to report cases in their
4 jurisdiction?

5 MR. BROWN: Enforcement is not a mechanism
6 subject to compatibility in our arrangement with
7 agreement states. We require agreement states to do
8 event follow-up and assessment but we do not require
9 states to have a mechanism to take adjudicable actions
10 against licensees. The way the Health and Human
11 Resource regulations are written is only adjudicable
12 actions are subject to reporting.

13 Now, I can't imagine that there's an
14 agreement state that doesn't have the capability to
15 revoke a license and I think pretty much universally
16 that would be a reportable event. But in terms of
17 taking escalated action and fining a licensee and
18 having an adjudicated process, some agreement states
19 have that kind of system and others don't.

20 DR. BRINKER: My point is, isn't that --
21 isn't it unfair then to practitioners who happen to be
22 in an NRC state to be held to a level that might be --
23 reportable level, a level in reporting that's
24 different from an agreement state?

25 MR. BROWN: I guess it's a matter of, you

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1 know, Congress' intent in publicly accessible
2 information both for health providers and for
3 licensing boards. Really what you're saying is for
4 jurisdictions with NRC oversight, there's better
5 information available to decision makers and it's less
6 good information in other jurisdictions.

7 DR. BRINKER: Well, it's punitive to -- in
8 a way or less punitive to the individuals and license
9 holders to be in an agreement state than it is if you
10 happen to be in an NRC state because not only are you
11 getting reported but this report goes on a data base
12 that's accessible by people that might have your
13 future -- a role in your future.

14 DR. DIAMOND: My specific concerns along
15 these lines is this; it is certainly possible that a
16 medical event could occur which has my real medical
17 adverse impact, as Dr. Nag was giving an example of,
18 that this information is thought to reach a level of
19 severity that requires reporting by a group of
20 individuals that have no true capacity to evaluate the
21 severity of the event in medical terms, then this
22 makes it to health care plans or makes it to attorneys
23 and the next thing you know, you have a lawsuit, you
24 can't get malpractice insurance, you can't get on
25 health plans. It is a very, very real possibility,

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1 particularly in the context of a medical/legal
2 environment that already is just salivating over every
3 action that we physicians take.

4 I can certainly see -- and take my own
5 state, the State of Florida, the folks in the state
6 office are very nice people but they know very little
7 about medicine. I do not have confidence that if they
8 received information regarding an event, they could
9 make a reasonable decision regarding the true medical
10 severity of that event and I could certainly see
11 instances where there is a reporting to this entity
12 and this escalates with very untoward ramifications.

13 CHAIRMAN CERQUEIRA: So I think we all
14 understand the need to do this and you're obligated to
15 do this, but just in terms of the specifics, I think
16 we'd like to see a little bit more clarification both
17 at the NRC level as well as the agreement states on
18 what's going to be reportable. And if it's
19 definitely, you know, a high risk to patients and has
20 a negative medical impact, it should be reported but
21 there can be other things that even though they're not
22 -- they don't endanger patients or the public or the
23 people using the isotopes but could end up on this
24 reporting profile with a lot of adverse consequences
25 to it. So I guess the question is where do we go from

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1 here on this? Do you need more input from us? Does
2 the committee want to see some feedback from the NRC
3 and what they're going to do?

4 DR. WILLIAMSON: I think it might be good
5 to see the Management Directive that Fred mentioned
6 and give more specific feedback on that at our next
7 meeting.

8 MR. BROWN: Yeah, we can certainly
9 distribute both a copy of the statute, the Health and
10 Human Services regulations and our Management
11 Directive and any help in finding a more creative and
12 constructive way to satisfy our requirements from the
13 committee would be a great help.

14 CHAIRMAN CERQUEIRA: And give us some idea
15 again you know, based on your -- the data that you
16 have, what the number of events that would have been
17 sent to this data base and what they consist of so we
18 can get a feel for whether they're medically
19 appropriate or not.

20 MR. BROWN: Yeah, I guess let me caution,
21 number one, with a change in the regulations, I don't
22 really want to do that, quite honestly. I think
23 that's apples and oranges I think. I think we could
24 get very excited about under the old regulations and
25 the QMP actions that were taken by the NRC and would

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1 be spending energy that's not usefully spent when
2 we've already changed the rule to address a concern.

3 And I guess the other point I would make
4 is we've introduced now the implication that the data
5 base is only intended to come into effect when there
6 are dead bodies or there's deterministic effect and
7 certainly from an NRC enforcement perspective, we look
8 at the precursors with a reasonable potential for
9 outcome like that. We don't just start when -- you
10 know, when there's an organ loss because of a medical
11 event. So I just request that when you look at what
12 we send out that you think not only about is there
13 always an outcome with a severity Level 3 violation
14 but are we doing a good job at tying escalated
15 enforcement to the types of events with potential for
16 outcomes as well.

17 DR. WILLIAMSON: So you can send us a list
18 of these events?

19 MR. BROWN: We can do that.

20 DR. WILLIAMSON: I think that would be
21 most helpful.

22 CHAIRMAN CERQUEIRA: That would be --
23 yeah.

24 DR. WILLIAMSON: If you could give us like
25 that last 12 events that have been reported to you

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1 that you think would be reportable on this --

2 CHAIRMAN CERQUEIRA: Under the new
3 regulations. I just still don't -- we've been talking
4 about this, you know, for a half an hour now but I
5 still don't have a feel for what kind of events within
6 the diagnostic area and certainly within the
7 therapeutic. You know, the example that Dr. Nag gave,
8 that's, you know, sort of within the practice of
9 medicine even though it may have some implication on
10 the regulations, and I'm not sure that should be
11 reportable, but we're kind of beyond our time.

12 You have a few more slides and I know
13 there's probably other questions, but if we're going
14 to stay on time, we should --

15 MR. BROWN: No, actually, I think we've
16 done a better job covering the topic than what the
17 slides would have done. So that's all I have.

18 CHAIRMAN CERQUEIRA: Tell Linda she did a
19 good job.

20 MR. BROWN: I will pass that on.

21 CHAIRMAN CERQUEIRA: All right, so that
22 brings us to the next item which is the status of
23 implementation of revised rule and Mr. Brown and
24 Young.

25 MR. BROWN: Actually, what I'd like to do

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1 is probably go out of turn if Tom's ready so I can
2 make notes to myself about the last topic, and when
3 Tom's covered the inspection, then I'll jump in and
4 cover everything else. But if I hear you asking
5 questions of Tom that I know I'm going to cover --

6 CHAIRMAN CERQUEIRA: So he's going to deal
7 with revised inspection guidance.

8 MR. BROWN: Yeah.

9 (Pause)

10 CHAIRMAN CERQUEIRA: You're using up your
11 time, Tom.

12 MR. BROWN: Another lesson learned on
13 prior preparation.

14 MR. YOUNG: Okay, do you have a copy of
15 what I -- okay, good. There's only five slides, four
16 slides actually because my name is on the first one
17 but Dr. Cerqueira, I want to tell you and your
18 committee today about the medical inspection
19 procedures that are being revised so that you'd have
20 an understanding of how they fit with the revised Part
21 35. And as I recall, as a matter of compatibility,
22 they would not be required in agreement states to
23 implement these same procedures. They can continue to
24 use their own procedures.

25 The medical inspection program is in

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1 Manual Chapter 2800 in the NRC Inspection Manual and
2 it's publicly available on the NRC Web. What we've
3 done is we've started a pilot program to streamline
4 the administrative procedures that are in Manual
5 Chapter 2800. These medical inspection procedures are
6 being used under those administrative procedures, so
7 we're introducing these inspection procedures as part
8 of a pilot program which was also made available to
9 agreement states. So we've been in this pilot program
10 for about six months.

11 And if you look at slide 2, you see there
12 just is a quick summary, that we currently have four
13 inspection procedures but we've expanded it to an
14 additional fifth inspection procedure. We're changing
15 the inspection procedure numbers so that we can refer
16 to them in our -- with our inspectors the way they
17 charge our time to a new set of numbers and then we've
18 changed the format to include seven risk informed
19 focus elements which are similar to what was being
20 used with the nuclear medicine inspection procedures
21 for about the past year and a half.

22 And in slide 3 you see the new inspection
23 procedures numbered. It's 87-130 series and the
24 titles are new titles that fit with revised Part 35.
25 So the first one you see there is for low risk

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1 diagnostic nuclear medicine and then the next one, IP
2 87131, is for the nuclear medicine therapy where a
3 written directive would be required. Both of these
4 are replacing the existing inspection procedure 87115.

5 And then the brachytherapy programs have
6 their own inspection procedure just as before and it
7 includes the remote after loader units also and it's
8 a new number, 87132 and then the next procedure,
9 87133, we've added the medical GSR units to that one.
10 Formerly it was just 87116 for teletherapy and then
11 lastly is the medical broad-scope programs.

12 And on the next slide, the fourth slide,
13 these are the seven risk informed focus elements that
14 will provide guidance to our inspectors. The way the
15 inspection procedures were revised, each procedure has
16 the same objectives as the current procedures and then
17 the requirements section of the inspection procedure
18 has the seven focus elements, risk informed focus
19 elements and then Section 3 provides the matching
20 guidance for each of these focus elements.

21 What we did essentially in our revision
22 was to -- there was a lot of redundant information in
23 these procedures and formerly in Sections 2 and 3 for
24 requirements and for guidance, and we've eliminated
25 the redundant information and then reformatted it to

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1 these seven focus elements. So you see in the past, it
2 -- for example, security and control of licensed
3 material, but now we've focused it, concentrated it to
4 one area for the inspectors to use. The same way for
5 shielding.

6 For number 3 there the comprehensive
7 safety measures would be other types of hazards or
8 events that would promoted or promulgate a
9 radiological condition that would be a problem such as
10 a fire, for example, or an explosion. And then the
11 fourth element is that the licensee should implement
12 a radiation dosimetry program to accurately measure
13 and record radiation doses to workers and members of
14 the public from the licensed operations.

15 So it's essentially the same information,
16 it's been reduced in size and then it's been
17 reformatted into these seven focus elements and the
18 last slide again, is just a reminder that our
19 inspectors are using a performed based approach and
20 we have again reinforced that into these inspection
21 procedures that on the last slide, they're to observe
22 and interview, if possible, have the licensee
23 demonstrate a procedure or a radiation safety practice
24 for them and to take measurements along with the
25 licensee or independent of the licensee whichever may

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1 be needed and rather than just looking at records or
2 just looking at a written procedure.

3 And of course, the second bullet is the
4 inspectors should not interfere with patient care or
5 patient privacy. They should be attuned to patients
6 in the area while they're on site doing the
7 inspection. And then the inspectors should exercise
8 discretion when they're interviewing the licensee
9 staff in the presence of a patient, so that the
10 patient doesn't have to become involved with the
11 inspection.

12 So those are the revised medical
13 inspection procedures.

14 CHAIRMAN CERQUEIRA: Dick.

15 DR. VETTER: Just to reflect on some
16 personal experience relative to the last slide, we
17 just had an inspection last week and the inspector
18 followed this procedure. I don't know if they're
19 supposed to yet or not but he was anticipating if not,
20 and it went extremely well. I mean, I considered it
21 to be a very professional inspection focused on the
22 risk, areas of risk, spent very little time looking at
23 records.

24 He did look at records, but mostly looking
25 for whether or not we had some performance problems,

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1 not looking whether or not we dotted every I. It was
2 really a very, very well conducted inspection.

3 MR. YOUNG: That's good to hear because we
4 want them to only just spot check records to see that
5 they exist, you know, for the type of activity that
6 they're observing and that they would be able to not
7 really look at the licensee's procedures unless they
8 see radiation safety practice seems to be lacking in
9 some manner and then they would be asking the licensee
10 for better information about that, perhaps training on
11 that.

12 CHAIRMAN CERQUEIRA: That was a real plus.
13 I kept waiting for the but, and it didn't come. Now,
14 I think again, I know that the SNM is here and they
15 had a lot of problems before, they felt a lot of the
16 regulations were now being put into the guidance
17 documents and you know, Doug or Ralph, do you have any
18 concerns about what's --

19 MR. BROWN: I will get to that.

20 MR. LIETO: I'd like to hear what Fred has
21 to say first before --

22 CHAIRMAN CERQUEIRA: Okay.

23 MR. BROWN: Then he can explain to my why
24 I'm wrong.

25 CHAIRMAN CERQUEIRA: Okay, all right,

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1 Jeff.

2 DR. WILLIAMSON: Can you give me an idea
3 of what performance would mean in the area of
4 radiation oncology perhaps, with an example, what this
5 performance means, whether you observed that the
6 activities comply with the regulation or the
7 performance end point is not having a medical event?
8 Can you give me a little more of a description maybe
9 through some examples, how the procedure, new
10 procedure for inspection would differ from the old
11 one?

12 MR. YOUNG: If there were -- if the
13 inspector is on site and they know that there's an HDR
14 procedure scheduled, for example, they might work
15 their inspection schedule so that they could do some
16 observations during that procedure and then they would
17 do some interviews of the staff involved with that and
18 they would just observe to the extent possible how the
19 console is operated and how the lights are working and
20 how the survey instruments are being used and that
21 type of activity is what we would expect.

22 MR. BROWN: And then discussion with
23 licensee staff about emergency procedures, are you
24 familiar with them, is the equipment staged for source
25 recovery if necessary.

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1 MR. YOUNG: And if there's not a procedure
2 being conducted that day, perhaps at some time
3 convenient to the staff, they could do a walk-through
4 or a demo of that. They wouldn't necessarily have to
5 expose a source, that it would be up to what they want
6 to do.

7 DR. WILLIAMSON: So the performance end
8 point would be whether they observe -- whether the
9 actual or simulated patient treatment as you observed
10 it, complied with the regulations versus how the
11 documentation complied.

12 MR. YOUNG: Yes.

13 DR. WILLIAMSON: So that's the major
14 changes and emphasis on observation as the basis for
15 having citable violations --

16 MR. YOUNG: Correct.

17 DR. WILLIAMSON: -- versus the records.

18 MR. YOUNG: Right, because we realize once
19 we're out there it's a just a snapshot, a view of
20 licensed operations and based on the equipment that we
21 see and the condition of the equipment and the ability
22 of the staff to perform or to answer questions. You
23 know, we understand that some days may be better than
24 others but we should reach a level of assurance of
25 radiation protection while we're on site observing the

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1 operations.

2 CHAIRMAN CERQUEIRA: Other questions for
3 Tom?

4 MR. LIETO: Tom, you said that the IP's,
5 the Inspection Procedures were on the website, is that
6 -- do you mean ADAMS or is there some place that's
7 more accessible?

8 MR. YOUNG: They'll probably be in ADAMS
9 but they are going to be on the NRC website. I could
10 give you the path for it. It's not very clean but or
11 I could e-mail it to you. That would probably be the
12 best.

13 MR. LIETO: Okay, if you would give that
14 to the whole community that would be appreciated.

15 MR. YOUNG: Sure.

16 MR. BROWN: And the other action we can
17 take is to make sure they're linked from the Part 35
18 page as well, because they're probably in the
19 Inspection Procedure index rather than the Part 35. So
20 we can make a note to fix that as well.

21 MR. YOUNG: I'll e-mail this to Angela and
22 she can --

23 CHAIRMAN CERQUEIRA: She can get it out to
24 the committee, that would be appropriate, okay.
25 Sounds good. All right, any other questions for Tom?

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1 If not, we can move onto Mr. Brown.

2 MR. BROWN: Thanks. I did want to capture
3 the thoughts on the HHS data base and so I apologize
4 for that little break in continuity. The topic that
5 I have is basically the status on implementation. It
6 covers several issues. The first slide talks about --
7 the second slide talks about the licensing guidance,
8 NUREG 1556, Volume 9 and basically to kind of recap
9 what happened over the last six months, since the last
10 time the committee met and saw a draft of the NUREG.
11 What had previously been available was a March 2002
12 copy of the NUREG. It largely reflected year-old or
13 18-month old thinking and content. We distributed
14 that for public comment, had a couple of public
15 meetings requesting comment on it and I'm reasonably
16 confident that provided it to the ACMUI and if we
17 didn't, I'm sure I'll hear, to get comments on it.

18 And we went through several months process
19 of attempting to incorporate many individual comments
20 on the contents, both of the licensing guidance and
21 some of the model procedures. After doing that in
22 August of this year, we entered the process of making
23 sure that the document really conformed to the higher
24 level objectives that we have. And we did that in
25 what was called a Pink Team of managers and senior

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1 staff.

2 And the final thing we did was went
3 through what we call a Red Team review -- I'm sorry,
4 wrong one on that slide -- a Red Team review which is
5 the management review to insure that the document is
6 legally enforceable, not that this is a legally
7 enforceable document but that it doesn't overstate the
8 regulations and that it's consistent with senior
9 management perspectives. The next slide, please.

10 The review team philosophy for the big
11 picture was to, number one, make sure that we were not
12 regulating in guidance space. That was the most
13 critical thing we did. We took the position that the
14 regulations provide for adequate safety where the
15 regulations speak to new requirements in Part 35. And
16 so, anything that was in the guidance document that
17 appeared to require action from applicants or
18 licensees we clearly either deleted it or separated it
19 from the part of the procedure that does provide
20 guidance on required submittals.

21 There were several other parts that go
22 hand in hand with that. Looking for unnecessary
23 burden in the submittal information from applicants,
24 making sure that the document was understandable. And
25 then, as I indicated, making sure that we listened to

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1 the comments that we got that were specific to things
2 that stayed in the NUREG and through all of that,
3 obviously, we were again focused on safety, but the
4 outcome is that the NUREG that you all have copies of
5 is really divided into two parts.

6 The first part is what's required in a
7 license application and the information that's
8 required is very limited and it's directly tied to
9 either Part 35 or to the Radiation Protection Program
10 requirements of Part 20. There is not a requirement
11 to provide us a description of information that isn't
12 supported by the underlying regulation. I think the
13 volume and the scope of submittals under this guidance
14 will be significantly less than under previous
15 licensing guidance in the medical area and it actually
16 sets a new standard, I think, across the Part 30 area.

17 The second thing that we did is we
18 addressed the issue of model procedures. And as
19 you're aware there had been concern that model
20 procedures because de facto requirements either
21 through license conditions that were forced on
22 licensees or through inspector expectations. And we
23 drew a clear line that said model procedures are not
24 requirements, they're simply tools that you can use if
25 you see fit as a licensee. We seriously discussed

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1 deleting them in their entirety from the NUREG and the
2 reason that we didn't do that was public stakeholder
3 comments requesting that we provide these documents to
4 licensees who may find them useful, but the
5 fundamental bottom line is that anyone that uses one
6 of these model procedures does so because they want to
7 and they have all of the freedom to revise that to
8 suit their own situation when they put it into use.
9 It is not something that we will regulate to.

10 So the next slide, the status, now the
11 NUREG is currently available and we got it up on the
12 website as you can see, just hours before the rule
13 went into effect and it's unfortunate because we had
14 had -- we had hoped to have the NUREG done probably a
15 month sooner than we did. We hope to be able to
16 distribute it at the stakeholder meetings. We hope to
17 be able to get it out to the people at the stakeholder
18 meetings and to this committee well in advance of the
19 time that it took us to finally get it done.

20 But it is now done and hopefully when you
21 look at the finished product, you won't have the type
22 of concerns that you had with the earlier versions and
23 I'll just give one example, because some of you may be
24 interested in it. In the area of calibration
25 procedures, we deleted calibration procedures, model

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1 procedures for all instruments other than simple
2 survey instruments. So there were lots of public
3 concerns and comments about our model procedures for
4 calibration. Those are addressed. The model
5 procedures are removed from the NUREG.

6 Let me pause and ask if there are
7 questions about 1556, Volume 9.

8 MR. LIETO: I'll start. What then is the
9 purpose of the appendices?

10 MR. BROWN: There's two sets of
11 appendices. The first couple are forms, the form for
12 an application of a license and then a form that can
13 be used to submit the information in the 313 form.
14 The -- all of the appendices after letter H, I
15 believe, are clearly information -- that's I through
16 W, are informational purpose only appendices and a
17 licensee could tear this portion of a NUREG off of the
18 back and throw it away and it would make absolutely no
19 difference. They could write all of the procedures
20 that they wanted to, to address the things in that
21 appendix. That's perfectly fine.

22 None of those are submitted to us and --
23 let me be careful. The rule requires submittal of
24 some emergency procedures. Those do have to be
25 submitted. There's a little bit of guidance back

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1 there on ways to do that but it's not like you can
2 just take the NRC procedure and send it in. You know,
3 we wanted to get away from that. The only appendix
4 that has any information in it that is essentially a
5 requirement is Appendix G, which is information needed
6 for transfer of control. And that basically comes
7 right out of a different volume of the 1556 process
8 and if you transfer a license it explains the
9 requirements for that. But everything else is for
10 illustrative purposes other than the forms themselves.

11 MR. LIETO: Fred, there was a document
12 that was submitted that was a combined review of the
13 previous draft from three of the radiological
14 societies and some of them had some very, I think,
15 severe changes. Can you comment on any of that
16 material and I guess probably in terms of things that
17 were not incorporated into the revision, the final
18 draft.

19 MR. BROWN: I can comment to the extent
20 that I know we went through -- there were comments
21 that were specific to calibration for the dose
22 calibrators and for the 630 therapeutic treatment
23 device calibrations. And we actually had gone through
24 and incorporated many of those changes and we got to
25 the point that we realized to leave those guidance

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1 documents in 1556 would actually set up our licensees
2 to violate the regulations because the regulations
3 require a calibration to a nationally recognized
4 standard and this document does not meet that
5 requirement. And so we deleted those model procedures
6 in their entirety.

7 To the best of my knowledge, we did not
8 ignore any substantive comments in the body that
9 remains unless there was a clear regulatory basis to
10 require the submittal of information or to make a
11 commitment. Now, that -- there are -- I'm not sure
12 there's anyone in the room that can help me but there
13 are about 900 individual comments and I've been
14 through them at a high level but I can't quote all 900
15 of them. Susan?

16 MS. FRANT: Just to tell you, Ralph, that
17 the -- all the comments and the responses are going to
18 be out in a document that's an appendix. So I'm not
19 sure what -- it's almost ready. It may be posted on
20 the web in the next week or so, maybe, but if you want
21 we'll send you an e-mail when it's posted. But they
22 follow each of the comments and what we did with them.

23 MR. BROWN: Okay, thank you, Susan.

24 MS. FRANT: Susan Frant, F-r-a-n-t.

25 MR. LIETO: A couple of the issues, since

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1 this stuff just came out, you know, within the past
2 week, I've gotten feedback that a couple of the more
3 controversial issues regarding these appendices. The
4 concern is that agreement states especially, are going
5 to take these and keep them as a model guidance for
6 licensees to follow. And there still is in there the
7 issue about the 200 DPM per square centimeter for I-
8 131 which has been something that has been a major
9 problem and really is an unreasonable level.

10 The patient release examples have errors
11 in them and these were pointed out and the -- in terms
12 of what they're showing and so see, it doesn't -- from
13 what I've been able to just, you know, glance at in
14 the last, you know, day or so, it doesn't seem like
15 those issues which were brought up by those
16 organizations have been -- well, obviously, they've
17 been looked at and they're going to keep them in
18 there. There must have been some reason why they're
19 not going to be changed.

20 MR. BROWN: I don't mean to interrupt but
21 I can address definitively the contamination control
22 action level issue. The former model procedure
23 basically established expectations on contamination
24 levels inside restricted areas for action and outside
25 restricted areas. The new guidance, if you go through

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1 it, you will see that it provides the same discussion
2 but then it very specifically says that if you want to
3 establish as a licensee different criteria, you are
4 completely free to do so and here are the regulatory
5 requirements you have to meet in doing that.

6 You have to meet ALARA. Your values have
7 to be ALARA and you have to worry about disposal of
8 the facility long term and beyond that, you are free
9 to do as you see fit with respect to those levels.
10 And that's very specifically added in to address the
11 basic concern of the stakeholder comment. With
12 respect to corrections on the 35.75 release, although
13 I didn't do it, I do know that we did make changes to
14 some of the examples and formulas to address those
15 questions.

16 Now, we may not have gotten them all and
17 by the look on your face, we haven't and we'll have a
18 continuing battle over that, I'm sure, but the effort
19 was to do that. We went back to the people that had
20 written the original guidance and worked out with them
21 some obvious errors as were pointed out.

22 MR. LIETO: Because the issue has to do
23 mainly with the patient release issue, deals
24 specifically with when you can ignore internal
25 contamination and using the criteria that's in the

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1 appendix which is basically what was essentially the
2 same as previous, you are not going to be allowed to
3 release patients, okay, based on occupancy factors and
4 so forth in the examples, I think it's above 185
5 millicuries of I-131. So there's some specific things
6 and this was all written up in the comments that were
7 submitted, so I really think, I guess maybe also this
8 brings up an issue of the concept of a living document
9 and going back and addressing some of these specific
10 issues in terms of the concerns that you know, may
11 still not have been addressed.

12 MR. BROWN: I think that's a good point.
13 I mean, it may very well be that we make conscious
14 decisions that are in excess of 100 millicuries of I-
15 131. We didn't think release was appropriate. I
16 mean, I won't swear to that but that is the sort of
17 thing that we can follow up with a living document on.

18 MR. DIAZ: Okay, other questions? Dick?

19 DR. VETTER: I know we can't go through
20 this in a lot of detail but I think it was either at
21 the last meeting or the one before we raised the issue
22 of security and the fact that facility diagrams ended
23 up on the ADAMS site. In the guidance here, once
24 again, the licensee or the applicant must provide a
25 facility diagram, room numbers, et cetera. All that

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1 information ends up in the public record. So it seems
2 a bit of a contradiction here where we are supposed to
3 do everything we can to protect and secure radiation
4 sources and yet we are to make available to the public
5 where all of this stuff is.

6 Is there any thought about allowing
7 licensees to keep that confidential?

8 MR. BROWN: Redacted. I think Susan Frant
9 would like to --

10 MS. FRANT: Hi. It seems to be
11 contradictory and I agree with you, there was a
12 decision made by the Commission not by the staff, that
13 this information should remain public. And I think
14 that if the advisory committee believes that it's
15 contradictory to some of the security issues, that
16 would be a good idea to raise that. We also are
17 looking at interim compensatory measures, as you know,
18 which are those things that are the delta between
19 existing security requirements and what we know about
20 potential use by terrorists and others that might be
21 intentional misuse rather than accidental misuse or
22 theft or diversion and as we're reviewing that, it may
23 be that we make a different decision, but right now,
24 based on the fact that this information has always
25 been public, the Commission decided there was no

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1 reason to not continue to make it public.

2 They have diagrams of waste sites also and
3 spent fuel and other things. The only thing that I
4 know that isn't publicly available any more and used
5 to be is the longitude and latitude of nuclear power
6 plants coordinates. So I think that that's -- okay,
7 so it's been a very contentious issue within the
8 Commission because you have to balance the need for
9 people to know the openness of the information and the
10 process. There are issues on which we make regulatory
11 decisions and the regulatory process has to be
12 transparent to the public.

13 So you have lots of reasons to have it
14 public and you have to have a reason not to have it
15 public to show where it compromises security and as
16 yet, there hasn't been that kind of information to
17 make it clear. So that's -- I think it's intuitive,
18 you would say, well, why would you send a road map,
19 you know, why leave crumbs, but since it has been
20 public and it's usually posted in the hospital or in
21 the licensee, it's not as if it's a big secret in
22 terms of where the nuclear medicine department is. So
23 that's part of the thinking.

24 CHAIRMAN CERQUEIRA: David.

25 DR. DIAMOND: Well, Richard, I'm very glad

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1 you asked the question. I was under the assumption
2 that one would continue to submit this information but
3 this information was not going to be available on the
4 website. So I'm glad you asked the question, I'm glad
5 Susan answered it.

6 I simply don't understand, for example,
7 why the commissioner would go and remove the latitude
8 and longitude of a nuclear power plant which can be
9 seen from any aircraft of the naked eye 20 miles away
10 whereas we would continue to go and post the
11 locations, security arrangements for a gamma knife
12 stereotactic radiosurgery unit using Cobalt-60 which
13 probably of everything that we're discussing in our
14 purview is the thing that would have the greatest
15 concern as far as a misuse as a radiologic dispersal
16 device, so I'm glad you brought that to our attention,
17 Susan.

18 I particularly --

19 MS. FRANT: I didn't bring it up.

20 DR. DIAMOND: Well, I'm glad Dick brought
21 it up.

22 CHAIRMAN CERQUEIRA: Okay, are there other
23 comments from Mr. Brown before we move on? So do we
24 need any follow-up either from your perspective or
25 from the committee's perspective on this? You know,

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1 Ralph, you've gone over it in some detail.

2 MR. LIETO: Well, not so much in terms of
3 the appendices because just -- you know, the document
4 just came out and I'm sure there are going to be more
5 issues, but there were -- I know we're going to be
6 talking about a couple of these a little bit later on
7 in the schedule, but there were also several things
8 that came out of the workshop, stakeholder
9 presentations that I know Fred gave the one in Region
10 3 and I think Susan also gave a couple of the others,
11 and there were things that were coming out in terms of
12 how the regulations would be followed in terms of some
13 of the specific issues, some regarding radiation
14 safety committees, some regarding calibration of
15 survey meters that would meet the requirements, about
16 licensing of field sources and model numbers and so
17 forth which we're going to talk about a little bit
18 later, dual operation machines.

19 There were several things that came out
20 that I don't -- some of them, I think, were addressed
21 but I think they were very eye-opening because people
22 didn't realize that this is how the guidance was going
23 to be or the regulations would be interpreted. And,
24 you know, I think that I would be interested to know
25 if there's anything that's going to come out of these

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1 stakeholder meetings in terms of clarification and
2 interpretation of some of these regulations.

3 MR. BROWN: We're four or five slides
4 ahead of ourselves, but the point is well-taken and I
5 did plan on getting to them. The next slide is
6 diagnostic only guidance. As I'm sure ACMUI is aware
7 coming out of the spring stakeholder meetings. There
8 was a lot of discussion about splitting the guidance
9 for diagnostic off from other uses and the resolution,
10 what we did over the course of the summer or more
11 specifically Society of Nuclear Medicine, did over the
12 summer was to develop a guidance document that's
13 applicable to diagnostic only and they shared that
14 with us and the bottom line is that the NRC in general
15 supports that document.

16 We think it's valuable to SNM members and
17 to non-members for a fee, but the agency is working
18 with SNM to make the document widely available to
19 everyone that's interested for no fee. And what the
20 document does essentially is to provide a road map to
21 license applications for diagnostic only facilities in
22 a way that is easier to follow.

23 Now, hand in hand with that, hopefully,
24 we've done the same thing in Volume 9 with a couple of
25 the tools that show applicants for a diagnostic

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1 facility or a 100 or 200 or both, what they have to
2 submit in 15.56 Volume 9 as well and what they don't
3 have to address. But that's the status on the
4 diagnostic only guidance document. We actually hoped
5 to have it widely available now, but the
6 administrative process tripped us up.

7 The next thing I wanted to just let
8 everyone know and it kind of envelopes what Tom
9 addressed is we did go out and train the regional
10 staff on the new rule and the approach for performance
11 based risk informed inspection. It was one part rule
12 training and another part let's make sure that we're
13 going to implement the rule in the manner that was
14 intended and that we not regress back into the old way
15 of doing business. It was a very -- it was
16 interactive training. It was spirited in some cases
17 and hopefully it was effective. There was certainly
18 a lot of discussion and the proof will be in the
19 pudding.

20 There was also agreement state
21 participation in those training sessions and
22 hopefully, Dr. Vetter's experience is the proof of the
23 pudding and hopefully others will experience the same.
24 Yes.

25 MR. MALMUD: I have a question about the

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1 diagnostic only guidance document. I've not seen it
2 and I'm a past president of the Society of Nuclear
3 Medicine. Has any member of this committee seen it?
4 Dr. Eggli?

5 DR. EGGLI: No.

6 MR. MALMUD: I'm not oppositional to it,
7 but I just --

8 CHAIRMAN CERQUEIRA: Mr. Uffelman, comment
9 from the SNM?

10 MR. UFFELMAN: The guidance document in
11 question went through an extensive internal and
12 external review and was reviewed over here at the NRC
13 and but for the administrative glitch that they talked
14 about, I would have had copies available to hand out
15 to all of you today and you could have seen the
16 document, but we had the Board, the Board of Regents,
17 the Government Relations Committee and a number of
18 other folks in fact, reviewed it.

19 MR. MALMUD: Has the membership seen it?

20 MR. UFFELMAN: Many of the members have
21 seen it.

22 MR. MALMUD: Have members of this
23 committee seen it?

24 PARTICIPANT: I'm a member of both and
25 I've not seen it.

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1 MR. MALMUD: Now, this is my own
2 organization, so I'm not speaking hostilely about it,
3 but I'm speaking about this process. How can this
4 committee see that slide, accept this as an approved
5 document not having seen it. Dr. Eggli, you represent
6 the Society of Nuclear Medicine to this committee. I
7 represent the Administration to this committee. We've
8 not seen the document. So if we aren't to be informed
9 about what's going on, we might as well stay home. If
10 we are to be a part of the process, then we should be
11 reviewing some of this material and I've intentionally
12 chosen something that's from my own specialty and my
13 own organization to point out the deficiency in the
14 process.

15 MR. UFFELMAN: And to you I apologize. I
16 know it's at your institution because Al Bauer
17 (phonetic), in fact, had a copy.

18 MR. MALMUD: But Alan Bauer hasn't given
19 me the copy.

20 MR. UFFELMAN: I'm just telling you where
21 there is one.

22 CHAIRMAN CERQUEIRA: Hey, Bill, would it
23 be possible for the Society to send the committee
24 copies electronically?

25 MR. UFFELMAN: I think I can but because

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1 of the way we were doing it with the NRC, it may be
2 easier for me to send you a printed out copy. I would
3 give you the complimentary \$40.00 copy that they would
4 have given you for free.

5 MR. MALMUD: And what does it mean
6 "diagnostic only"? Does that mean that you can't do
7 I-131 therapy?

8 MR. UFFELMAN: This document relates to
9 diagnostic nuclear medicine only. There's another
10 therapy document that will be forthcoming after but
11 the way -- the way the discussion went relative to the
12 resolution of the issues with Congress this past year
13 was with the focus on diagnostic nuclear medicine. We
14 said we would do a diagnostic only nuclear medicine
15 document in conjunction with the NRC at this time and
16 then we would produce a therapy document.

17 CHAIRMAN CERQUEIRA: Thank you.

18 MS. FRANT: Fred, let me make a comment
19 because I think this is not an NRC document. The
20 Commission did not review it. This was a document
21 that was developed by the Society of Nuclear Medicine.
22 They had a review process within their own
23 organization. We looked at it and commented on
24 whether we thought it was complimentary or
25 supplementary or whatever words you want to use, to

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1 Volume 9.

2 We thought it did not have anything -- and
3 this is what our review was about. It did not have
4 anything that was negative in terms of complying with
5 either the regulations or was contradictory to Volume
6 9. Volume 9 is the NRC document and that document, I
7 believe, this committee has seen in various stages.
8 So what I guess my point is, is that it's not an NRC
9 document. It is a Society of Nuclear Medicine
10 document and what we are planning on doing is having
11 a licensing agreement whereby something we think is
12 useful and we've done this with other documents by
13 other groups, something we think is useful in order to
14 prevent people who might not be able to either afford
15 the membership in the Society of Nuclear Medicine or
16 by the copy we are effectively having a licensing
17 agreement for unlimited distribution of a Society of
18 Nuclear Medicine document. So that, I think, makes a
19 distinction between something that would be
20 appropriate for us to make sure that ACMUI reviewed,
21 which is Volume 9, and the regulations because you
22 advise the Commission on things that the Commission
23 does. So I can't speak to how it didn't get to you as
24 a member of the Society of Nuclear Medicine, that's
25 why I asked Bill to answer.

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1 MR. MALMUD: I wouldn't expect you to
2 address how it didn't get to me as a member. I
3 intentionally chose something in my own area to point
4 out the relative impotence of this committee in
5 dealing with material. What's the name of the
6 committee? It's the ACMUI. How is it that we don't
7 see something the NRC supports? Where are we in the
8 loop? Should we be in the loop? Should we be --

9 MS. FRANT: Well, I understand your point.
10 I guess my question would be, do you believe that all
11 the work that the staff does should be reviewed by
12 ACMUI? I don't really want to -- you know, I mean,
13 that is -- there are a lots of things that we do that
14 aren't reviewed by ACMUI.

15 MR. MALMUD: That relate to the medical
16 use of isotopes?

17 MS. FRANT: Yes.

18 MR. MALMUD: Isn't that what this
19 committee is supposed to be doing?

20 CHAIRMAN CERQUEIRA: I guess that's a
21 broader question in terms of what eventually gets down
22 to the committee level and you know, I serve on
23 several Medicare committees and we've got the same
24 issue. I mean, when they get any kind of, you know,
25 decision making, they set up these panels and what

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1 comes to us is very arbitrary. So you know, maybe we
2 can get to that at the end of the day. I think to
3 try to keep on schedule, we should go on as soon as
4 Ralph has a comment.

5 MR. LIETO: Well, I have to agree with Dr.
6 Malmud. Even the fact that it's coming out of the
7 Society of Nuclear Medicine, the fact that this --
8 that the NRC is going to make this available whether
9 you like it or not, it's going to be construed as an
10 endorsement by the NRC. And I think anything that's
11 going out to the general stakeholders as an endorsed
12 means of compliance, I think we ought to have a crack
13 at it, okay.

14 Maybe everything in it is totally benign
15 and there's not going to be any problems with it but
16 it's just like, you know, the first page of the
17 handouts here, on the slides, there's an issue summary
18 that went out a week ago about new modalities under
19 Part 1000. The first I saw of it was this, yet this
20 has gone out to all the stakeholders and all NRC
21 licensees. And I think we ought to have -- and there
22 is some objections to this and I think what's again,
23 to emphasize, is that when are we going to be part of
24 the loop and why do we have to come back and find out
25 about all this stuff because our societies are going

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1 to ask us, didn't the ACMUI comment on this.

2 CHAIRMAN CERQUEIRA: Care to comment,
3 Fred?

4 MR. BROWN: Well, obviously, none of you
5 represent Societies before the Commission. You're
6 providing advice to the NRC staff where requested and
7 we respect that and use it greatly. And everything
8 that we're talking about today, although you may not
9 be 100 percent, hopefully you see the imprint of the
10 advice that you've given us. And you know, I'm not
11 sure that you should wish for some of the things that
12 you seem to be wishing for here today if you hope to
13 continue to practice and have lives outside of this
14 advisory committee.

15 But you'd have the blood pressure of some
16 of us that work for the NRC, but that would be my
17 observation.

18 CHAIRMAN CERQUEIRA: Okay, one last
19 comment and then we really should move on. And again,
20 some of these are more administrative things and --

21 DR. WILLIAMSON: I guess one request for
22 the future, it sounds like there's going to be the
23 possibility of a 35.300 document coming out from the
24 Society of Nuclear Medicine that the NRC may or may
25 not endorse and since that -- since much of 35.300 or

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1 some of 35.300 is done in radiation oncology, I do
2 think it would be prudent for that document to be
3 reviewed by this committee in view of the multi-
4 disciplinary nature of radio pharmaceutical therapy
5 and get a broader perspective than just the Society of
6 Nuclear Medicine before you go ahead and endorse it.

7 MR. BROWN: I think harking back to
8 Susan's point, it's not an NRC product and as an
9 advisory committee, NRC staff, I don't think we're
10 going to bring it forward unless we reconsider that.

11 DR. DIAMOND: Wait a second, hold on a
12 second here. So here's going to be a document that de
13 facto will be construed as having an NRC endorsement
14 that will include activities that sometimes extend
15 outside the purview of the one society that is
16 drafting the document; is that correct?

17 MR. BROWN: Well, to be quite honest, I'm
18 not familiar at all with the document. This is the
19 first time I've heard of it.

20 DR. DIAMOND: 35, Subpart 300 does include
21 some activities outside the exclusive purview of
22 nuclear medicine. I think it is essential that some
23 individuals or entities outside that particular
24 specialty also have a crack at it before it goes out.
25 It may be perfectly crafted, eloquent language, but if

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1 there's a problem, then we have to go back as a
2 committee and pick up the pieces and it takes three
3 times as long and our blood pressure also goes up.

4 DR. WILLIAMSON: So we do not have control
5 over what the Society of Nuclear Medicine publishes
6 but we can give you advice as to whether you ought to
7 endorse it or not in its present form.

8 MR. UFFELMAN: On behalf of the Society of
9 Nuclear Medicine, I can assure you that before the
10 therapy document goes as far as this document has gone
11 you all, in fact, will see the text of that document
12 and your comments will be invited, I mean, as
13 reviewers. I will --

14 DR. DIAMOND: I appreciate that and I
15 don't anticipate there necessarily being any problems
16 but the point coming from Fred is that it's our
17 discretion whether we choose to share that with you in
18 advance and I ask myself what the heck am I doing
19 here.

20 CHAIRMAN CERQUEIRA: Could you use the
21 microphone?

22 MR. UFFELMAN: In their defense, we
23 initially -- we started out to do the guidance
24 document, this -- to do this thing, without the NRC.
25 We were doing it as a service to our members and in

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1 the process of the various -- all the stakeholders'
2 meetings and other things that went on, it became --
3 there was an opportunity, if you will, to make it more
4 widely available and that's what in fact, the outcome
5 of the licensing agreement is.

6 MS. FRANT: Okay, let's just back up a
7 little bit which Bill has suggested. There's been no
8 discussion between NRC and the Society of Nuclear
9 Medicine to develop a guidance document for use by NRC
10 licensees. I think the Board of the Society of
11 Nuclear Medicine has asked why there was a diagnostic
12 only document and wasn't there a point at which it
13 would be useful to have something related to
14 therapeutic uses particularly within the Society's
15 practitioner base, and so we haven't even looked at
16 it. We haven't even discussed it and I think if you
17 want to say to us, well, before there's any document
18 that the NRC endorses, we're not endorsing it. We're
19 making it available.

20 CHAIRMAN CERQUEIRA: But by making it
21 available, though, that is sort of a tacit endorsement
22 and you know, and again I think certainly the nuclear
23 cardiology community had no input into the SNM
24 document on that aspect of it and similarly the
25 radiation oncologists and medical physicists when

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1 you're dealing with, you know, the 300 series, there
2 are some things in there that are not done exclusively
3 by nuclear medicine physicians and --

4 MS. FRANT: Understood, understood, but I
5 think that not to belabor the point, if we are going
6 to have something that isn't widely reviewed, this
7 document did have a significant review process.

8 CHAIRMAN CERQUEIRA: But only by one
9 Society. The one thing that's unique about this
10 committee --

11 MS. FRANT: No, no, I don't so.

12 MR. UFFELMAN: It went to ACR, it went --

13 CHAIRMAN CERQUEIRA: To ASNC?

14 MR. UFFELMAN: To ASTRO, I believe there
15 were ASNC members involved in the review.

16 CHAIRMAN CERQUEIRA: I'm not so certain.

17 MS. FRANT: I think that -- I take your
18 point. We'll discuss further what to do and how to do
19 it, but I think that it's not fair to Fred to say to
20 him, "How come you didn't come forward with this",
21 because the process was not an NRC document and I
22 think that maybe we need to --

23 CHAIRMAN CERQUEIRA: But if it's going to
24 be distributed by the NRC, as Dr. Diamond said, it --
25 you know, this is the advisory committee and you're

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1 basically --

2 MS. FRANT: We distribute many documents,
3 ANS, ANSI, many documents that don't review -- that
4 aren't reviewed by any advisory committee to the
5 Commission. ACRS and ACNW do not review documents
6 that are distributed necessarily in support. Even
7 part of the regulations in 50.55(a) there are a lot
8 of documents that are standards and put out by
9 different societies, including EPRI that are not
10 reviewed by ACRS or ACNW. So I think that ACMUI is
11 not being treated as if you're different from the
12 other advisory committees.

13 CHAIRMAN CERQUEIRA: Well, then speaking
14 not as chairman of the committee but as a nuclear
15 cardiologist who's, you know, sitting on this
16 committee, then it's not a process that I want to be
17 involved in. You know, I think as Dr. Malmud said, if
18 you're going to have the committee, there are certain
19 things -- obviously, we don't want to get every item
20 that comes through, but when clearly it relates to the
21 regulations, we should be involved. Leon?

22 MR. MALMUD: Perhaps -- may I ask a
23 question? Guidance doesn't mean regulation, does it?

24 MR. BROWN: That's correct.

25 MR. MALMUD: And therefore, there are no

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1 rules established by this document.

2 MR. BROWN: That is correct.

3 MR. MALMUD: So that my question may have
4 been overkill. This is only guidance, it doesn't
5 establish rules for anyone, is that a fair statement?

6 DR. DIAMOND: But there's this rules
7 creep.

8 MR. DIAZ: But some of the states
9 apparently are putting the guidance documents --
10 right.

11 MR. MALMUD: So that the non-agreement
12 states would be --

13 CHAIRMAN CERQUEIRA: It's only like 18 or
14 17 states. The majority are agreement states.

15 MR. MALMUD: So I see, so then my question
16 stands as it was. It is a risk.

17 MR. LIETO: And one other point related to
18 that, even in NRC regions, when they do a license
19 review or come in to look at a licensee, and they
20 inspect procedures, okay, they're going to grab what
21 is an acceptable guidance out there. Okay, so if
22 they're going to compare anything, they're going to
23 compare it to the guidance documents that are out
24 there and even in NRC states, it becomes a template by
25 which they will look at things if they have to review

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1 procedures.

2 MR. BROWN: I guess to build a
3 constructive point, take building on what Ralph just
4 said and what underlays some of this concern, one of
5 the things that we've dealt with inspectors in
6 implementing this new rule is we don't inspect
7 procedures and we don't expect inspectors to go out
8 and ask for all the records to prove that you were
9 keeping records or ask for your procedures to review
10 them to see if they're adequate because that leads to
11 the use of templates and challenges to the adequacy of
12 procedure when your performance is outstanding.

13 And so the whole fundamental shift that
14 Tom described is for inspectors to go out and watch
15 real people doing real work and if there isn't any
16 work, then to talk to real people about the real work
17 and come to conclusions about the adequacy of the
18 program based on that, not the procedure. So you
19 know, the importance of some of this informational
20 only procedures, we're doing a paradigm shift with our
21 staff and hopefully as we change, you'll see that
22 change and do a paradigm shift with yourselves with a
23 level of concern about some of these documents.

24 But I think the more fundamental point
25 that I took from Dr. Diamond's comments is you know,

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1 we need to be careful recognizing and promoting
2 procedures that are not NRC procedures if we haven't
3 had a chance to coordinate with the committee.

4 CHAIRMAN CERQUEIRA: One last comment and
5 we're falling way behind on the agenda and Ralph may
6 get his day tomorrow if we --

7 DR. NAG: Just on the therapy on the 300
8 document guidance, I think that will be more
9 controversy enforced by both nuclear medicine and by
10 radiation therapists and I don't think that you have
11 a guidance document by one society that may or may not
12 be supported by the other. It will be a major point
13 that you'll have conflicts.

14 CHAIRMAN CERQUEIRA: All right, we've beat
15 Fred enough on this issue. Now, so we've got two
16 topics, the Sealed Source Model Numbers and Practical
17 Issues Associated with Manual Brachytherapy Seed
18 Implant that we're supposed to finish before the 2:45
19 break. So, let's --

20 MR. BROWN: And actually, there are
21 important things on Part 35 implementation that go
22 back to Ralph's comments as well that I would like to
23 go over real quick.

24 CHAIRMAN CERQUEIRA: Why don't you keep
25 going because we actually haven't gone through yours?

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1 MR. BROWN: If we can skip the slides on
2 inspectors and skip the slide on stakeholder workshops
3 and go right to the current action. What we're doing
4 right now goes back to Ralph's point. There were a
5 lot of good things that came out of the stakeholder
6 meetings. There were issues identified that we
7 hadn't fully thought through ourselves and weren't
8 fleshed out by the committee and the staff doing the
9 rule change. And we're in the process of trying to
10 address those. As we address them, we put them up on
11 our external web and I've provided the link to what is
12 the question and answer list which where we address
13 the things that came up. There were questions about
14 RSO qualifications. There were questions about
15 instrument calibration ranges. So that the general
16 things were about maybe a quarter of the way through
17 those questions.

18 Now, the final slide is that there were
19 several questions that came up where the answer was
20 not this is not a problem. The answer was in fact,
21 this is a problem and we need to address it because it
22 will have a major unanticipated impact on the
23 industry. The first question was the Regulatory
24 Information Summary that's in your packet which
25 addressed 35.1000 modalities and what would be covered

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1 by 35.1000 versus what was covered by 400, 500, 600
2 types of uses or 300 types of uses.

3 We issued that regulatory information
4 summary. It covers intervascular brachytherapy which
5 based on the statements and consideration in the rule
6 was previously identified as a 35.1000 application.
7 It also addresses TheraSphere and other Yttrium-90
8 microsphere treatments and the GliaSlite brain
9 treatment and there are differences in the license
10 community about how to address those types of use and
11 actually I can talk to Ralph outside of the meeting at
12 a break that I think we're actually providing the most
13 flexibility by doing this the way we did it and
14 hopefully I can convince him of that.

15 The more important one, though, that was
16 a show stopper is that the requirements for manual
17 brachytherapy seed calibration in 35.432 requires seed
18 calibration but they do not require it to be performed
19 by an AMP and yet the record keeping requirement for
20 that calibration required the signature of an AMP and
21 the concern was that that would create the need for
22 all 35.400 licensees to go out and have an AMP do
23 their calibrations. And that was not the intent of
24 the rule, so we are rushing to get a regulatory
25 information summary out, clarifying that an AMP is not

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1 required for manual seed calibration.

2 A final one and it is an important area,
3 is the Strontium-90 eye applicator calculation of
4 treatment times based on the current calibration of
5 the sources and that is the only requirement in 35.400
6 types of uses for an AMP. And the question that has
7 come up is what type of qualifications were intended
8 for the AMP who does those calculations and the most
9 significant impact is in Puerto Rico where there are
10 a lot of eye applicators.

11 CHAIRMAN CERQUEIRA: Apparently 19 out of
12 the 20 that are registered, according to the
13 information. There's one in DC and 19 in Puerto Rico.
14 So we're talking about a fairly limited distribution.

15 DR. WILLIAMSON: These are licensed,
16 stand-alone eye plant licensees.

17 CHAIRMAN CERQUEIRA: That's correct.

18 DR. WILLIAMSON: Many institutions --

19 CHAIRMAN CERQUEIRA: Have them, that's
20 true.

21 DR. WILLIAMSON: -- that practice
22 radiation oncology have eye plaque therapy available.

23 CHAIRMAN CERQUEIRA: That's true.

24 MR. BROWN: And the basic thing that I
25 wanted to quickly point out here is that the direction

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1 the staff is looking at -- taking is looking for
2 demonstrated ability for that sort of review of an AMP
3 and the principle of having a limited AMP for only
4 that 35.400 it's not even a calibration, it's actually
5 a determination of activity to K and I was hoping to
6 get some feedback from the committee on that concept.

7 On the one hand, was it intended -- does
8 the committee believe that an AMP qualified under the
9 full qualification process would have to do those
10 activity corrections or is there flexibility for a
11 more performance based demonstrated ability for that
12 stand-alone requirement area of use?

13 CHAIRMAN CERQUEIRA: Well, that was a
14 closed session.

15 MR. BROWN: That was discussed this
16 morning.

17 CHAIRMAN CERQUEIRA: It was discussed this
18 morning.

19 MR. BROWN: Thank you. Very good, thank
20 you. You're well ahead of me.

21 DR. NAG: Although that was a closed
22 session, I think the part of it about whether we can
23 have limited authorized medical physicist that's what
24 we discussed here, I think.

25 CHAIRMAN CERQUEIRA: Jeff, do you care to

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1 --

2 DR. WILLIAMSON: Well, I think the summary
3 was -- I don't know how much I can say about this
4 morning, but the summary was that -- I think this is
5 fair to say, correct me if I'm wrong, that we felt
6 uncomfortable endorsing a sort of sub-AMP that would
7 have fewer qualifications than the main AMP that I
8 think the group felt that the concept of having a
9 graduate degree in medical physics or a science and
10 the two years of experience, supervised experience in
11 radiation oncology in fact, was intended, you know, as
12 the kind of person that should have oversight of an
13 eye plaque program as well as, you know, in general is
14 the practice with manual brachytherapy as well,
15 although not addressed by the regulations.

16 I think that in the situation that was
17 presented, you know, we stated that on a case by case
18 basis, exemptions to that requirement could be
19 submitted to this committee and you know, the level of
20 experience for individuals scrutinized but that we
21 weren't comfortable calling that person an AMP but
22 simply saying in the license 35.XXX notwithstanding,
23 so and so is authorized to perform Strontium-90. So
24 that came up with what we thought was a very limited
25 exemption and tried to reduce the probability that it

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1 would be taken as a -- how should I say, a precedent.

2 MR. BROWN: Excellent, thank you.

3 MR. LIETO: Did you want us to discuss the
4 first item on your slide there about --

5 MR. BROWN: I didn't really think it was
6 controversial but I am here to serve.

7 MR. LIETO: The 1000 emerging technology
8 because it came up earlier this morning about that
9 there was concern about Yttrium-90 microspheres being
10 under 1000 as opposed to be in 300 or do I have the
11 sections mixed up?

12 DR. VETTER: No, I think the concern was
13 the fact that 1000 requires that anyone who applies
14 the microspheres must qualify under the radiation
15 oncology and that it doesn't qualify under therapeutic
16 nuclear medicine.

17 MR. BROWN: Let me just, we're going to
18 confuse a lot of people but to jump directly to that,
19 for limited scope licensees, they -- a licensee to use
20 35.1000 will have to request approval and provide
21 their program and how they want to deal with
22 microspheres and the current guidance suggests that
23 35.400 provides an adequate program. Now, there's two
24 things to be aware of in that discussion.

25 Number 1, broad scope licensees are

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1 exempted from the requirements to come to us to
2 describe how they're going to do 35.1000 treatments
3 and so there are current NRC licensees who are using
4 300 kinds of AU's for the TheraSpheres or the
5 MicroSpheres and that's perfectly acceptable and
6 there's nothing in this approach that prevents that.

7 The second thing that we've had
8 discussions about internally is that just because it
9 may be correct that generally TheraSpheres look more
10 like brachytherapy than they do unsealed radioactive
11 material, that doesn't mean that a licensee can't have
12 a perfectly good approach and an AU that's a 35.300 AU
13 who could do this very well, and we ought to learn
14 from what broad-scopes have done successfully and
15 shape our approval of specific license requests and/or
16 guidance around that.

17 DR. VETTER: I guess it's not clear to me
18 from this issued summary that that's the case.

19 MR. BROWN: And yeah, all the issued
20 summary was to let an applicant come in who was about
21 to begin to use MicroSpheres to make it clear that we
22 do for a specific licensee, expect to see a license
23 request that we can look at how they're going to do
24 it.

25 DR. WILLIAMSON: Well, I think this

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1 brought up one of the concerns we had as a committee
2 that was raised during our closed session is that we
3 recall being consulted on the TheraSphere issue and
4 what sort of licensing guidance there should be when
5 it was raised maybe 18 months ago, approximately, but
6 we never really got to see the final licensing
7 guidance. So that was a concern about follow-up and
8 now it's a matter of grave concern to several members
9 of the committee that the licensing guidance appears
10 to exclude a discipline, you know, that was heavily
11 involved in the development of clinical testing of
12 this modality and so it's not fair.

13 And so I think it would be prudent and
14 useful, let's say, to circulate to this committee the
15 licensing guidance for that product and probably the
16 other ones that have been mentioned before this
17 committee and at least give us an opportunity to
18 express our opinions.

19 MR. BROWN: I think it's a good idea.

20 CHAIRMAN CERQUEIRA: I think Susan's
21 right, though, our e-mail boxes are going to be
22 overwhelmed but --

23 MS. FRANT: It's a question of timing
24 because we meet once every six months and if you had
25 a standing subcommittee, we'd be happy to work with

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1 them.

2 MR. BROWN: I guess, let me go back. If
3 you have a specific request of us to see something,
4 I'm not sure we're saying we're not going to give it
5 to you. Then there's the other issue, the process
6 issue of -- you know of ACMUI --

7 CHAIRMAN CERQUEIRA: Well, a lot of the
8 things we don't know what to ask for because we don't
9 know all the things that are out there.

10 DR. WILLIAMSON: I think the 35.1000 is
11 very controversial within the regulated community, who
12 should do what and NRC is caught in the middle of
13 often times unfortunately perhaps for you, in turf
14 wars and such and so I think one useful strategy would
15 be I think whatever licensing guidance is made for one
16 of these new modalities, I think it would be useful to
17 have a standing subcommittee of this committee that
18 could review and give advice, at least, you know, I
19 suspect it would help in the final acceptance of the
20 product to have a lot of these things worked out in
21 advance, you know inter-vascular brachytherapy and
22 some of these applications which are on the boundary
23 between radiation oncology and nuclear medicine are
24 bound to be quite controversial and I think it can
25 only be to the Commission's benefit to seek the advice

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1 of a multi-disciplinary group such as this.

2 DR. NAG: Can you explain how are you
3 handling radioimmunotherapy like Zevalin where the
4 radioisotope is bound to antibodies?

5 MR. BROWN: I wasn't really prepared to
6 specifically address that.

7 DR. NAG: That's something that will come
8 up and it probably is going to be coming up in
9 licensing.

10 MR. BROWN: Dr. Donna-Beth Howe is going
11 to grab a microphone.

12 DR. HOWE: Some of the basic guidance that
13 we use is we look to see how our regulations will --
14 how a new product will fit into our regulations. And
15 so it may be a new and emerging technology to you but
16 the basic elements for radiation safety may have been
17 well established for the product. And so for the case
18 of Zevalin, it's a radio-pharmaceutical. It's a
19 monoclonal antibody so a monoclonal antibody may be
20 new to the medical community but radio-pharmaceutical
21 and radiation safety programs that go with radio-
22 pharmaceuticals are not and so we looked at our
23 current regulations for therapeutic radio-
24 pharmaceuticals and determined that there was nothing
25 in the monoclonal antibody that was outside of our

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1 regulations for the therapeutic radio-pharmaceuticals
2 and so Zevalin is being covered under 35.300 and even
3 though it is a new technology for you and you may be
4 administering it slightly differently, the radiation
5 safety concerns, we believe are covered.

6 DR. WILLIAMSON: Well, I think you have to
7 be more than concerned with just radiation safety and
8 technical concerns because the high risk modalities
9 also specify the training and experience necessary for
10 those modalities and it was agreed philosophically
11 along some years ago that as the risk escalated to a
12 certain point, as is the case with therapeutic
13 modalities, clinical experience would be required and
14 so when you have cross-over modalities like this, I
15 think you have to look at what parts the community are
16 you going to include or exclude from use. So it's
17 more complicated, I think than --

18 DR. HOWE: But I think the new Part 35
19 with its requirements for the training and experience
20 for the therapeutic authorized users is significantly
21 up'd because of the risk than the old Part 35 and so
22 I think our Zevalin positions would fit very well in
23 the new 35.300.

24 DR. WILLIAMSON: Well, I think that if the
25 training and experience requirements are repaired as

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1 proposed, there would be a route to include radiation
2 oncologists in 35.300. Who got excluded from
3 practicing radio-pharmaceutical therapy as the
4 regulations are currently published?

5 DR. DIAMOND: But, Jeff, if I recall
6 correctly when we rewrote 35.300, we did make those
7 modifications. I was hoping to see those today to see
8 if what I wrote was still what I wrote.

9 DR. WILLIAMSON: They're there.

10 CHAIRMAN CERQUEIRA: It's there. You just
11 got them late, but --

12 DR. WILLIAMSON: Anyway, I think it is --
13 it would all be solved if we had some sort of a
14 standing unit that could look at things like this that
15 come up on and where there's a short-term need for NRC
16 to get feedback more quickly than every six months.

17 CHAIRMAN CERQUEIRA: With the 1000, this
18 is something that will continue to recur and there are
19 issues related to radiation safety but there's also
20 issues of who's going to be practicing the use and all
21 right, I think we should take a break now and there's
22 a couple of topics that we didn't hit that we'll have
23 to come back to after the break, but let's just take
24 a 10-minute break and be back at 3:00 o'clock. Leon,
25 do you want to make one last --

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1 MR. MALMUD: It's a question again. I
2 have a very simple concrete question. I'd like to
3 think in simple terms.

4 CHAIRMAN CERQUEIRA: Microphone.

5 MR. MALMUD: Oh, excuse me. When I go
6 back to Philadelphia, and my colleagues who practice
7 nuclear medicine ask me are they going to be allowed
8 under NRC regulations to use Yttrium-90
9 therapeutically, what's the answer, yes or no?

10 MR. BROWN: Broad-scope licensee?

11 MR. MALMUD: No.

12 MR. BROWN: Specifically licensee.

13 MR. MALMUD: They're in community
14 hospitals around Philadelphia and they practice
15 nuclear medicine full time.

16 MR. BROWN: They'll have to submit a
17 license request -- if they don't already have it on
18 their license, they'll have to submit a license
19 request and make their proposal on why they -- what's
20 the safe way to apply the treatment and there's no
21 foregone conclusion at this point.

22 CHAIRMAN CERQUEIRA: Then how are you
23 going to make a decision?

24 MR. BROWN: Well, I think we're going to
25 do it in consultation with the ACMUI.

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1 CHAIRMAN CERQUEIRA: So this committee --
2 (Laughter)

3 CHAIRMAN CERQUEIRA: No, no, right but the
4 thing is this is such a common issue that rather than
5 having every application go before the Committee, this
6 is you know, an opportunity to create some rules that
7 would establish that for you.

8 MR. BROWN: Yeah, I agree and I thought I
9 heard maybe a recommendation that the committee was
10 going to establish a subcommittee to work with NRC
11 staff on the guidance for 1000 applications and the
12 thing with guidance, you know, I guess that I would
13 say is we want to have flexibility and a range of
14 options rather than the only way to do things, and so
15 that -- we're looking at that in the agreement state
16 space and certainly we'd like to do it with the ACMUI
17 and if that's, you know, your recommendation to the
18 staff, then we can respond to that recommendation.

19 CHAIRMAN CERQUEIRA: Yeah, let's make a
20 motion and so we somehow get it into the minutes.

21 MR. LIETO: Before you make a
22 recommendation, I guess one thing in follow-up to Dr.
23 Malmud, what was the criteria that made the Yttrium-90
24 and the MicroSpheres not being Part 300 but in 1000?
25 What was the health and safety issues that determined

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1 just like the monoclonal antibodies why wasn't it 300,
2 why shouldn't it have been -- you know, why did it go
3 in 1000? And I guess that's --

4 MR. BROWN: The answer again is it
5 involved sealed sources. The MicroSphere is actually
6 a sealed source.

7 DR. NAG: Then it could be 400, why not
8 being 400?

9 MR. BROWN: It's not in 400 because you
10 cannot do an inventory of sources as required by 400
11 for MicroSpheres.

12 MR. LIETO: A MicroSphere is a sealed
13 source?

14 DR. NAG: Yes.

15 MR. BROWN: That's correct.

16 MR. LIETO: Then why isn't a sulfur
17 colloid?

18 MS. FRANT: How can you define a
19 MicroSphere as a sealed source?

20 MR. BROWN: It's in the sealed source --
21 I mean, you asked me a simple question and I don't
22 know sealed source and devices like other things I
23 don't know but the answer is, it's a sealed source.

24 CHAIRMAN CERQUEIRA: You know, 1000 was
25 this emerging technologies and so if we had --

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1 MS. FRANT: That's not the title of the
2 sections.

3 MR. BROWN: Others, other modalities.

4 CHAIRMAN CERQUEIRA: Okay, so I guess
5 there are no established criteria.

6 DR. WILLIAMSON: Except that it doesn't
7 fit cleaning in 300 or 600 or 200.

8 DR. NAG: Similar to the question that Dr.
9 Malmud asked, if I had my community radiation
10 oncologist ask me what is there -- can they use
11 Zevalin or not, would the answer be the same, they
12 have to ask for it and we have to look at it or what?

13 MR. BROWN: Unless it's a broad-scope
14 licensee.

15 DR. NAG: No, a community person.

16 CHAIRMAN CERQUEIRA: So we're getting back
17 to the real role of this committee. This is the
18 playing field for the various turf issues that come up
19 that -- Leon, you had a comment?

20 MR. MALMUD: It may be -- I mean, this has
21 nothing to do with the NRC. It may be that the
22 manufacturer of the Yttrium MicroSpheres in applying
23 for FDA approval went through the -- not the radio-
24 pharmaceutical approach but went through the
25 instrumentation and technology approach. What do they

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1 call that?

2 PARTICIPANT: Device.

3 MR. MALMUD: Device, the device approach.

4 And if they went through devices, then it may have
5 been seen as being a device in much the same way as a
6 tomato is a vegetable rather than a fruit. It's
7 because we say it is, not because it is.

8 And therefore, the NRC may have responded
9 to that which came from industry in the way that the
10 NRC usually responds to something directly from its
11 source. I'm not attributing any blame to anyone. I
12 just would like to be able to answer the question of
13 my colleagues in a straightforward way so that we can
14 reassure them that their practice of giving I-131
15 therapy, et cetera, will now be allowed to expand with
16 application to Yttrium-90, MicroSphere, that's all.

17 CHAIRMAN CERQUEIRA: I don't have a good
18 answer for that, Fred.

19 MR. BROWN: I think there's one --

20 CHAIRMAN CERQUEIRA: Yes.

21 MS. WARBICK: My name is Ann Warbick from
22 MDS Nordion and it's exactly as you said. MDS Nordion
23 represented TheraSphere as an implantable device and
24 so it's a device, not a drug.

25 MR. BROWN: That's the answer.

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1 MS. WARBICK: So that's the answer to your
2 question.

3 MR. MALMUD: May I ask, did Nordion intend
4 for nuclear physicians ever to use the drug as a
5 therapeutic agent?

6 MS. WARBICK: In the early clinical trials
7 in Canada it was used by a nuclear medicine physician
8 in partnership with diagnostic radiology and other
9 medical specialties.

10 MR. MALMUD: Thank you.

11 CHAIRMAN CERQUEIRA: All right, one last
12 comment and then we will absolutely break. Jeff?

13 DR. WILLIAMSON: Shall we make our motion
14 about --

15 CHAIRMAN CERQUEIRA: Yes, yes, we're going
16 to the motion, yes.

17 DR. WILLIAMSON: Okay. All right, here's
18 the motion; the ACMUI recommends that the Chairman of
19 the ACMUI form a standing subcommittee to review
20 35.1000 licensing guidance as it is developed by NRC
21 staff.

22 PARTICIPANT: Make recommendations on
23 licensing guidance?

24 CHAIRMAN CERQUEIRA: Licensing guidance,
25 okay. And training and experience would be part of

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1 that. Do we have a second for that?

2 DR. NAG: Second it.

3 CHAIRMAN CERQUEIRA: All right, any
4 further discussion? Should we call for a vote? All
5 in favor?

6 (Aye)

7 CHAIRMAN CERQUEIRA: Opposed?

8 (No response)

9 CHAIRMAN CERQUEIRA: No abstentions?
10 Okay, so Fred, if we could form the committee. Now,
11 do we have -- I mean, we've identified one -- the
12 MicroSpheres obviously belong in that category but are
13 there any other things that are out there?

14 MR. BROWN: The two that are not IVB, and
15 IVB has been around the table several times --

16 CHAIRMAN CERQUEIRA: A few times, right.

17 MR. BROWN: -- is GliaSite, treatment of
18 brain tumors, the MicroSpheres, there's actually two
19 products, and then the question of the Zevalin which
20 actually is coming to you from us, actually.

21 (A brief recess was taken.)

22 CHAIRMAN CERQUEIRA: You're back.

23 MR. BROWN: I enjoyed it so much. No,
24 actually I would like to say, you know several people
25 have said, you know, if you're bleeding put bandages

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1 on and I hark back to Dr. Williamson's comment early
2 on that, you know, there should be an effective and
3 active interchange between staff and the committee and
4 I completely believe that that's true and support it
5 and I think this is productive as long as we're making
6 progress. And so, you know, I come from a school of
7 knocks where this is how business gets done and then
8 you're done with business and you move on.

9 CHAIRMAN CERQUEIRA: Right, and we could
10 attack the SNM as well as -- you know, as the NRC, so
11 you know no one is without fault here, but --

12 MR. BROWN: I think the interchange has
13 been very healthy.

14 CHAIRMAN CERQUEIRA: Good, good. Now,
15 we've covered, I guess -- so we still need to cover
16 Sealed Source Model Numbers as License Conditions.

17 MR. BROWN: This is an issue that came up
18 with a stakeholder. Ralph probably has some comments
19 on it. I was going to provide the background so the
20 committee would understand where we're at and the
21 potential ways forward. I'll leave it at your
22 discretion, whether you want to rely on the slides or
23 if you'd like me to talk through it very quickly.

24 CHAIRMAN CERQUEIRA: Well, what's the
25 desire of the committee here? Do you want him to

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1 summarize it or go through the slides?

2 MR. BROWN: Okay, the very quick
3 summarization is that Part 35 does not require
4 individual sources to be listed on licenses. However,
5 Part 30 does. Part 30 governs over Part 35 unless
6 there's more specific requirement in Part 35. So in
7 the licensing guidance that just came out, licensees
8 will be required to list by manufacturer and model
9 number either all of their sources or if they have
10 multiple sources in a single device, then the device.

11 This is a change and it's a more
12 burdensome way to do business than had previously been
13 the case and it caused concern in the stakeholder
14 community when we rolled this out. It's -- you know,
15 it is what it is. There are other licensees that deal
16 with this and the last slide talks about some of the
17 ways that other groups of licensee types deal with it.
18 Multiple seeds, for instance, in manual brachytherapy
19 could be registered under a single device so that the
20 licensee, the medical facility would have the device
21 on their license and then you know, manufacturer XYZ
22 could provide multiple seeds for that single device.
23 Therefore, the medical facility wouldn't have to
24 update their license every time a new seed came out.

25 All that would have to be done would be

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1 the SSDR would have to be updated to reflect the new
2 seed. That's one way this is done. Questions?

3 DR. WILLIAMSON: That's just not clear to
4 me. Could you -- what device is there? We're talking
5 about prostate implants there really isn't any device.
6 There are the seeds. There are 18 different models of
7 seeds manufactured by approximately a dozen companies.

8 MR. BROWN: Yeah, and one thing you could
9 do is simply list all those seeds on your license
10 application. That's one way. The other thing is that
11 four instance, if seeds are provided in an applicator,
12 then the applicator could have a device review and the
13 manufacturer, distributor could provide various types
14 of seed in that single applicator as long as they had
15 listed all those seeds on the SSDR. I mean, that is
16 a way to work through this cumbersome process.

17 DR. WILLIAMSON: So you're thinking a
18 cartridge for example.

19 MR. DIAZ: Subir?

20 DR. NAG: Again, I think the same problem
21 that we use loose seeds, I mean, when you're applying,
22 you're applying for Manufacturer Y and tomorrow that
23 same kind of seeds might be from Manufacturer X
24 because of pricing reasons or other reasons and you
25 don't want to change your license for that. I mean,

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1 they're all equivalent seeds.

2 CHAIRMAN CERQUEIRA: Ralph and then Ruth.

3 MR. LIETO: Go ahead, Ruth.

4 MS. MCBURNEY: In that case you would
5 probably list all the manufacturers from which you
6 plan to purchase those seeds.

7 DR. NAG: Tomorrow there will be a new
8 manufacturer with seeds at half the price.

9 MR. LIETO: I think if I -- a lot of the
10 problems in radiation oncology is that new
11 manufacturers come out with new seeds and so forth and
12 to go through the amendment process, before you can
13 use that is really burdensome. And it really offers
14 no additional health and safety. The intent is, I
15 think as Fred pointed out, was originally that all you
16 had to do was agree to use sources that were listed in
17 the Sealed Source and Device Registry and now even
18 though that's what's in guidance, we have this Part 30
19 overriding regulation and I'm wondering, one, should
20 there be maybe a petition for rulemaking to change
21 this. I didn't like the look of that. Or could this
22 be handled as opposed to an amendment process, could
23 it be handled via a notification process in that the
24 licensee would notify the region or the licensing
25 agency and say, "We want to use this new source in

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1 Sealed Source Registry", blah, blah, blah, you know,
2 for Part 400 sources.

3 And that way you don't have this maybe
4 three-month plus delay in getting authorized to use it
5 and so forth.

6 MR. BROWN: Yeah, there are three
7 proposals there, all -- I mean, and I guess all I can
8 say is it will take rulemaking to change Part 30 or
9 rulemaking to change Part 35 to allow notification
10 specifically for manual brachytherapy seeds or new
11 sources and those are options. And anyone that wants
12 to submit a petition for rulemaking can certainly do
13 so. They get prioritized by staff resources
14 available and I mean, that's basically -- the point
15 that we're at is where on the list of priorities does
16 addressing this problem fall?

17 You know, and both of those rulemaking
18 changes are -- would have benefits. And I'm sorry,
19 Ralph, the third thing that you mentioned, the last
20 thing was?

21 MS. McBURNEY: It was to do it by --

22 MR. BROWN: Notification, that would be a
23 35.14 change to specifically override 34.32(g)(1).

24 CHAIRMAN CERQUEIRA: So Fred, help us out
25 here. Again, we made another mistake in the

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1 rulemaking for Part 35 in the sense that we couldn't
2 anticipate all of these things, but we've all agreed
3 that it's not an issue of safety. So, you know, in
4 the rulemaking, like you said, prioritization and
5 there's no short thing to do it. Is there any other
6 means, I mean, between Ruth and the agreement states,
7 counsel and you? Is there a way that we can implement
8 the intent?

9 MR. BROWN: We've had several discussions
10 on this topic and we --

11 CHAIRMAN CERQUEIRA: Right, and your best
12 choice for that?

13 MR. BROWN: We have not found a way around
14 this other than what I have basically on the slide,
15 which is additional burden on the regulated community
16 to work around it and demonstrate that burden to us so
17 that it justifies rulemaking to fix it, but in terms
18 of working around it without a rule change --

19 CHAIRMAN CERQUEIRA: But can't this
20 committee initiate a rulemaking like we did for the
21 authorized medical physicist and --

22 MR. BROWN: What you've provided staff is
23 a recommendation that we send to the Commission as a
24 proposal for rulemaking. It's not actually a
25 rulemaking action at this time.

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1 CHAIRMAN CERQUEIRA: So if you've got
2 something that's quick and dirty like this, one little
3 thing, I mean, do you have to go through the whole --
4 I mean, the Federal Registrar that's easy, but --

5 DR. NAG: Instead of having a new
6 rulemaking, like it would all -- a source act, all
7 equipment is source so that when it's made by a
8 different manufacturer, yet it's an equivalent source,
9 let it go through.

10 DR. WILLIAMSON: Why couldn't you say all
11 interstitial I-125 seeds listed in the SSDR.

12 MR. BROWN: The exact words up on the
13 screen are listed, the source by manufacturer and
14 model number.

15 DR. WILLIAMSON: But they are all listed
16 in the SSDR by source and manufacturer number, right?
17 So why couldn't you refer to that list in your license
18 with just this code word?

19 CHAIRMAN CERQUEIRA: Yeah. Now did you
20 talk to counsel about doing this?

21 DR. WILLIAMSON: About doing this?

22 MR. BROWN: Yes.

23 CHAIRMAN CERQUEIRA: And what did counsel
24 say?

25 MR. BROWN: The guidance document is what

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1 the guidance document is and it has counsel review and
2 approval.

3 DR. WILLIAMSON: The guidance document?

4 MR. BROWN: 15.56 Volume 9 is where this
5 is called out as a licensing requirement.

6 DR. WILLIAMSON: Is this a requirement for
7 broad-scope licenses as well as specific scope
8 licenses? And secondly, why is -- why do we have this
9 problem today? How come we didn't have it two years
10 ago? Part 30 has not changed, so why -- surely we
11 weren't required in the past to do business this way.
12 So what has changed that has put this new burden on
13 us?

14 MR. BROWN: We revised the guidance which
15 brought it to the attention of counsel that we weren't
16 implementing our regulations as written.

17 PARTICIPANTS: What is the question,
18 broad-scope licensees?

19 PARTICIPANT: They are required.

20 MR. BROWN: The interesting thing about
21 broad-scopes, I think you need to look at the example
22 license for broad-scope in the appendix for 15.56,
23 Volume 9 and it appears that we've concluded that Part
24 33 has specific guidance that overrides 30.32(g)(1) by
25 being more specific on authorizations for Type A

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1 Broad-Scopes because I think if you'll look at the
2 example license, it does not list all the sources
3 individually.

4 DR. WILLIAMSON: Okay, so you're saying
5 this is not a problem for broad-scope licensees?

6 MR. BROWN: That's -- the last time I
7 recall looking at the sample license that's how I read
8 it.

9 DR. WILLIAMSON: Convoluted.

10 DR. NAG: I would like to make a motion.

11 CHAIRMAN CERQUEIRA: Please.

12 DR. NAG: I make a motion that the ACMUI
13 direct the initiation of a rulemaking process to fix
14 it so that sources that are virtually identical or
15 identical sources be covered under one umbrella or you
16 know, one plan. We have to start the rulemaking
17 process to fix this. It is a mistake that was
18 unintentional and we have to fix it as soon as
19 possible.

20 CHAIRMAN CERQUEIRA: Yeah, I think we
21 should vote on it, and like Fred said, I mean, it's
22 probably not going to get enough of a priority and so
23 the regulated community is just going to have to face
24 the hassle but I don't -- and counsel has already
25 reviewed it and made a decision and once you've done

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1 that, then you're sort of stuck. So do I hear a
2 second on this motion?

3 PARTICIPANT: Second.

4 CHAIRMAN CERQUEIRA: Discussion? Yes, do
5 you want to modify it?

6 DR. WILLIAMSON: A friendly modification
7 that the ACMUI recommends that rulemaking be initiated
8 to modify 35.14 to override 10 CFR 30.32(g)(1) to
9 allow a more generic listing of interstitial seeds and
10 sources.

11 CHAIRMAN CERQUEIRA: Okay. That's good.
12 Staff has got that and, all right, do I hear a second
13 for the modified motion? Sally, okay.

14 MS. MCBURNEY: I just had question.

15 CHAIRMAN CERQUEIRA: Discussion?

16 MS. MCBURNEY: We're just talking about
17 for the seeds, not the big sources.

18 DR. NAG: Equivalent sources, any sources
19 that basically are very similar and there is no
20 essential difference.

21 DR. WILLIAMSON: Yeah, we are talking
22 about manual brachytherapy sources. I think we're not
23 talking about sources that go in devices like remote
24 after-loaders and teletherapy units that have to be
25 mentioned specifically.

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1 MR. LIETO: But I think the intent is like
2 cesium, iridium, those types of sources.

3 DR. WILLIAMSON: For manual brachytherapy.

4 MR. LIETO: Right, manual, irridium wires.

5 DR. NAG: I mean, the most common one now
6 is 1-125 palladium. Palladium is now being
7 manufactured by more than one company.

8 DR. WILLIAMSON: To date it's not
9 regulated by NRC, at least at the moment.

10 DR. NAG: Right.

11 DR. WILLIAMSON: But it could be depending
12 upon the success of their national materials program.

13 CHAIRMAN CERQUEIRA: So, Ruth, how do we
14 want it?

15 MS. McBURNEY: No, I was just clarifying
16 that --

17 CHAIRMAN CERQUEIRA: Clarifying.

18 MS. McBURNEY: -- we're only talking
19 about manual brachytherapy, things that are not in a
20 device.

21 CHAIRMAN CERQUEIRA: Okay, all right, any
22 further discussion? Yes.

23 DR. VETTER: A question.

24 CHAIRMAN CERQUEIRA: Yes.

25 DR. VETTER: Is it even possible for

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1 something in Part 35 to override a requirement in Part
2 30? So are we proposing something that's even
3 feasible?

4 MR. BROWN: No, as long as there's more
5 specific regulatory language in one of the subparts of
6 30, in this case, Part 35, that is fine, you can
7 modify the higher level with a more detailed lower
8 level.

9 CHAIRMAN CERQUEIRA: Okay, should we call
10 the vote? All in favor?

11 (Aye)

12 CHAIRMAN CERQUEIRA: Opposed?

13 (No response)

14 CHAIRMAN CERQUEIRA: Abstained?

15 (No response)

16 CHAIRMAN CERQUEIRA: Good unanimous.
17 Excellent.

18 MR. BROWN: One quick thing, just to point
19 out to everyone, at your facilities, this requirement
20 applies at the time of license application. So if you
21 have a license today, as a 35.400 facility and you
22 don't have all these sources listed, that's fine, it
23 won't come into play until you go for another license
24 application process. So just so no one walks out
25 thinking they can't use a source not listed on their

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1 license.

2 CHAIRMAN CERQUEIRA: All right, what's
3 next, Fred?

4 MR. BROWN: The next presentation was one
5 of the two remaining, manual brachytherapy issues.
6 This topic actually came up at two of the stakeholder
7 meetings and what I did is I provided a copy of the
8 new rule language 10 CFR 35.40(b)(6) written
9 directives for manual brachytherapy and this didn't
10 really change significantly. The basic structure of
11 the written directive is as it was. Before
12 implantation the AU identifies a treatment site,
13 radionuclide and dose and then -- you don't have it?

14 CHAIRMAN CERQUEIRA: It was a separate
15 handout that was -- packaging manual brachytherapy.

16 MR. BROWN: There's two handouts done
17 Friday night at 5:00 o'clock that weren't pre-
18 distributed. Packaging comes after manual
19 brachytherapy issues.

20 DR. NAG: We got the packaging, we got
21 this one but not the other one.

22 MR. BROWN: All right. Basically, if you
23 can work off what's on the screen for the sake of
24 time. The second part of the written directive is
25 after implementation, after implantation but before

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1 completion of the procedure, the AU records the
2 radionuclide treatment site, number of sources and
3 then the dose -- total dose or the total source
4 strength and exposure time. And as I said, it's not
5 a big change from what existed before.

6 What came up at stakeholder meetings,
7 though, were several comments that I thought were
8 significant enough that I wanted advice. I wanted
9 advice from the ACMUI so I'm bringing them to you.
10 One comment which several people made at two different
11 stakeholder meetings was there's an inability to
12 identify exact organ boundaries during implantation.
13 So for instance, on a prostate implant, when that is
14 -- the needle is in the patient's body, when exactly
15 at the finite detail am I in the prostate and when am
16 in the area of the prostate?

17 The second question that came up that's
18 really related to that is, if you're at a teaching
19 institution and you look at the skill level for
20 someone in their initial treatments, you know, the
21 ability to be in the organ boundary may not be as
22 great as after experience.

23 The third issue was -- really deals with
24 the when do you record the post-implantation
25 information? Is it while you're still in scrubs in

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1 the room? That would interfere with treatment
2 obviously, and the final comment and I put some
3 questions marks after it because I'm not sure I
4 correctly heard the question and so I'm not stating it
5 as fact but it sounded like someone said that on
6 occasion as needles are withdrawn from the patient,
7 you may have seeds drop out of the needle on
8 withdrawal, so that one is kind of fuzzy.

9 DR. NAG: Yeah, I think I can explain
10 that.

11 MR. BROWN: Okay.

12 DR. NAG: Basically, you have the seeds
13 inside the needle. You put it in the prostate. When
14 you're withdrawing, one of the seeds may not have been
15 dropped into the prostate and as you're withdrawing
16 it, it may drop into the path when you're coming out.
17 So legally you are not within the prostate but
18 basically those are accepted procedures. I mean, they
19 have not problem with that and that can be solved by
20 saying that seeds that were dropped within the organ
21 or that were implanted within the organ but migrated
22 are not considered mis-administration.

23 We have under Part 35 a provision that
24 seeds implanted into the area but that migrated do not
25 constitute a medical event or mis-administration.

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1 That is acceptable.

2 DR. WILLIAMSON: It is also possible that
3 it is by clinical intent that not all of the seeds are
4 implanted directly into the prostate but into the
5 peri-prostatic tissue depending upon how the planning
6 target volume or clinical target volume is drawn.
7 Often, especially around the lateral and superior
8 margins of the prostate, they'll add margin full well
9 knowing, you know, that the seeds move and to insure
10 coverage, they'll put some seeds intentionally a few
11 millimeters outside the prostatic capsule.

12 DR. NAG: And that's only for prostate. In
13 other organs you are not even sure exactly where the
14 tumor was, especially if the tumor has been removed.
15 So you put it in the broad area of where the tumor
16 was. So, you know, if there is not a precise -- you
17 cannot precisely say -- you cannot precisely say I
18 implanted in Organ X, it's Organ X and some area
19 around Organ X. So if an area implanted in the
20 immediate vicinity of that organ that is within that
21 organ and that is not a wrong treatment site.

22 CHAIRMAN CERQUEIRA: So when do you switch
23 from the practice of medicine and the vagaries of
24 clinical medicine into mis-administration or --

25 DR. NAG: Because the wording of mis-

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1 administration is the wrong site. And it depends how
2 accurately you call the site, you know, depends on
3 administration. Say you put the injected material
4 into, you know, Organ X. And is the Organ X boundary
5 here or is it one millimeter outside or 10 millimeters
6 outside? So, you know, it's just like saying.
7 Basically I don't think those are -- they're not mis-
8 administration at all.

9 DR. DIAMOND: Also it's possible to put a
10 seed in the correct site and then the seed to migrate
11 to a different site so occasionally you'll have a seed
12 that you intended to place in the prostate was in the
13 prostate, made it's way into a small vessel and winds
14 up in the lung.

15 DR. NAG: Right.

16 DR. DIAMOND: There's no clinical
17 ramifications to that.

18 MR. BROWN: Right. And that's
19 specifically addressed in the wording for medical
20 event, reporting requirement that migrated seeds are
21 not a problem. If we could skip the next slide and go
22 to the final slide.

23 CHAIRMAN CERQUEIRA: So it sounds like
24 there is not problem, at least from what the committee
25 is telling you, right?

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1 MR. BROWN: Well, the issue is that there
2 are members of the regulated community who struggle
3 with the words in the regulation and the words which
4 were the slide that we skipped, were was is a
5 treatment site, what's the completion of the procedure
6 and is there an issue with this dropping of seeds.
7 And my basic questions to the ACMUI were if it's -- if
8 some members of the community are quite comfortable
9 with the safety and regulatory issue correct
10 interpretation but others are not, is that indication
11 that some kind of guidance would be appropriate and if
12 some kind of guidance would be appropriate, would you
13 have a recommendation on where that guidance came from
14 either a preface of medicine type guidance or a
15 regulatory type guidance?\

16 DR. NAG: I think a guidance is
17 appropriate and especially for permanent implant.
18 That is the question I get from many radiation
19 oncologists, you know, when do you call -- you know,
20 when is the implant over, because the implant is
21 continuing for a long time. What is the right organ?
22 You know, I think those can be qualified by a guidance
23 by, you know, intending to implant the organ, plus
24 some margin. Those -- I think those can be just added
25 on in a little more detail and most of the

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1 brachytherapy books will have some idea on how to do
2 the implants.

3 DR. WILLIAMSON: I think you have to
4 recognize though that there is limited precision and
5 geometric accuracy that the systems, image guidance
6 systems that we use for delivering prostate implants
7 and by extension other sites too, they cannot deliver
8 seeds with one or two millimeter accuracy, so a small
9 number of seeds that lie a few millimeters outside the
10 identified clinical target volume is certainly part of
11 routine practice.

12 Now, unfortunately if your Office of
13 General Counsel gets hold of this, you know, there
14 could be a problem because even if one seed is outside
15 that boundary there is going to be at least some small
16 bit of tissue right next to the seed that probably is
17 going to get a dose 50 percent in excess of the amount
18 that would have been given had the seed been implanted
19 in that boundary, but the problem is, you know, many,
20 many prostate implants that are absolutely properly
21 done from a clinical perspective would be called
22 medical events and obviously, that is not your intent.

23 So, you know, you have to take into
24 account the precision of the delivery systems that are
25 available and recognize, you know, that they don't

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1 have an absolute accuracy much better than about five
2 millimeters.

3 CHAIRMAN CERQUEIRA: So, Neki, do you feel
4 -- what they're saying is, "Trust me, I'm a doctor".
5 Do you feel comfortable with that?

6 MS. HOBSON: Well, yeah, I do. I think
7 the medical community does a really good job of self-
8 policing. I mean, you guys have all these, you know,
9 boards and committees and you've got a lot of
10 oversight within the medical community.

11 CHAIRMAN CERQUEIRA: Practice of medicine.

12 MS. HOBSON: And I think I'm comfortable
13 with that. If there are huge problems that arise, it
14 will come up and the medical community will -- I mean,
15 that's how medical practice changes over time is that
16 someone does it one way and it works better, so
17 everyone follows that lead.

18 DR. NAG: On the other side of that, if a
19 huge error is made, for example, instead of putting it
20 in the prostate, putting it the rectum which is only
21 two millimeters away, you're going to end up with a
22 mistake, then you end up with a malpractice, so I
23 think we're automatically policing ourselves that we
24 are -- you know, the imprecisement that is there is in
25 an area that would pose it no harm, and in the area

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1 where no harm, that you want to have a position that
2 you don't want to go beyond the target area.

3 CHAIRMAN CERQUEIRA: So, Fred, do you
4 still have questions?

5 MR. BROWN: Well, someone made -- I think
6 Jeff made the comment about you know, the legal
7 compliance with the regulations, and the regulations
8 are clear that the treatment site has to be identified
9 and it's the treatment site as defined on the written
10 directive and the treatment site is really an issue of
11 practice of medicine. The NRC doesn't define it.

12 All I'm still kind of trying to pin down
13 is, is this the sort of issue where someone could add
14 value to help AU's understand how they should write
15 treatment sites for efficacy of the treatment and
16 compliance under the regulations. And if you thought
17 so, as a committee, where you would point that, should
18 you point me to go off and do that or would you like
19 to think about it and come back or --

20 DR. WILLIAMSON: Well, I think these are
21 really difficult questions. I'll point out another
22 one that occurs. The completion of the procedure is
23 not specified. Now, some NRC personnel that I have
24 talked -- I recently wrote a review article on this
25 for the Journal of Brachytherapy on the interpretation

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1 for medical event for prostate implants, so I
2 discussed this with a couple members of the staff.
3 And you know, there's one view that the end of the
4 procedure is the time you insert the last seed and
5 once you've inserted that last seed, you can no longer
6 write a revision to the written directive.

7 So here's the problem is that the dose
8 delivered by this implant is not known maybe for as
9 long as a week after the implant, maybe three weeks.
10 It depends on the scanning protocol at the different
11 institutions. Some institutions do a post-treatment
12 CT scan the same day. Others prefer to wait until
13 prostate edema has resolved and do it two weeks later,
14 and maybe a week after that the final treatment plan
15 will be available and it is well-known that the
16 minimum dose, the D-100 dose, can differ by as much as
17 20 or 30 percent from the minimum dose intended.

18 The D-90 dose usually doesn't -- you know,
19 differ as much but it can be easily 10 percent and 20
20 percent would not be out of line. There's literature
21 documenting series of implants from a Memorial showing
22 that the minimum dose which can result from just the
23 perturbation of a single seed by a few millimeters can
24 change as much as 40 percent from the dose intended.
25 So you have a problem that because of the limited

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1 precision of the delivery device, the fact that
2 prostate edema and other factors intervene to change
3 the implant geometry and you're using a different
4 imaging modality to do the final dosimetry compared to
5 the one you used for delivery, you do not have control
6 over what the final dose will be.

7 So you know, you could call all these mis-
8 administrations or medical events, but again, this is
9 -- you're going to be actually culling out, I think,
10 a large part of the practice if you interpret this too
11 rigidly.

12 DR. NAG: I think that --

13 CHAIRMAN CERQUEIRA: Ralph had a comment.

14 MR. LIETO: Yeah, I think, you know, in
15 defense of Fred, it's -- I think what they're looking
16 for is obviously there are licensees out there that
17 are sensitive and that if there are medical events,
18 they want to know where's the threshold for reporting.
19 And I don't think there's an objection to what both
20 Dr. Williamson and Nag are saying. I think what he
21 would like is let's give them the guidance, if it's a
22 two-week period that you establish as completion of
23 the procedure, then maybe that's what they should have
24 in their procedures and also what they're going to
25 establish as the treatment site. And I think that's

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1 what he's asking for is -- because there's not
2 anything out there to give licensees to say, "Here's
3 your threshold and when you're outside this threshold
4 that's --

5 DR. WILLIAMSON: I wasn't attempting to
6 criticize Fred. I was just pointing out that if you
7 adopted this sort of narrow, everyday language
8 interpretation of end of the -- or completion of the
9 procedure, there actually will be very large problems,
10 whereas, if you were to say completion of the
11 procedure is completion of radiation, that would
12 obviously allow an enormous time window during which
13 the authorized user could revise the prescription and
14 select the isodose, you know, that he or she thinks
15 best covers the treatment and it may or may not be
16 exactly the same one that was prescribed initially.

17 So just this sort of simple identification
18 deciding legally when the treatment begins and is over
19 can have enormous implications for how many medical
20 events you're going to have reported to you and their
21 significance or insignificance.

22 CHAIRMAN CERQUEIRA: David?

23 DR. DIAMOND: I understand the concerns
24 that you raised. I do not off-hand know of a simple
25 way that as a guidance document these issues can be

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1 clarified with any sense across the board in the
2 therapeutic community as being satisfactory. And
3 therefore, my recommendation would be to go and pursue
4 no further action on this. You're not going to be --
5 there's no way you're going to be able to make all the
6 different practitioners happy with the different ways
7 that things are done and I think you can really put
8 yourself into a pickle, so I disagree with any process
9 to go ahead with any guidance document on this.

10 DR. NAG: On the other hand --

11 CHAIRMAN CERQUEIRA: Ruth, from an
12 agreement states' perspective, how do you handle the
13 agreement states?

14 MS. McBURNEY: I think that we have some
15 latitude on the procedures when they put treatment
16 site. I mean, as far as completion, I'm not sure. Of
17 course we haven't implemented these particular rules
18 at this time but for the permanent type implants, it
19 would be at the end of the decay.

20 CHAIRMAN CERQUEIRA: At the end of the
21 decay, yeah.

22 DR. WILLIAMSON: That would be, I think,
23 what the community is assuming.

24 MS. McBURNEY: Yeah.

25 CHAIRMAN CERQUEIRA: Dick, do you have any

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1 feelings on this?

2 DR. VETTER: I'm not aware of any specific
3 situations where people are having trouble
4 interpreting. Obviously, there are some, but I'm not
5 personally aware of any.

6 MS. MCBURNEY: No, we haven't had that.

7 DR. VETTER: They understand that the end
8 of the treatment is the end of decay. There's -- you
9 know, seeds do migrate but the regulations cover that.
10 The dropped seeds thing I don't really know what --
11 I'm not sure I understand whoever used that word.
12 Certainly seeds will follow a needle out but that's
13 the prostate pushing it out. It's not a mistake that
14 the radiation oncologist is making. So I don't know
15 exactly what that third bullet is getting at.

16 CHAIRMAN CERQUEIRA: So I think the sense
17 of the committee having polled most of the people that
18 are either doing it or are involved in the regulating
19 it, it seems like you've got some comments that, you
20 know, do bring up some issues but I'm not sure that
21 you can come up with the exact language to identify
22 it. Any new comments to make on this?

23 DR. BRINKER: Just one and this is
24 obviously, from a foreigner who doesn't do this sort
25 of thing but in cardiology, even in intravascular

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1 brachytherapy, there's a litany of literature about
2 target areas, marginal areas, injury areas, et cetera.
3 And it just blows my mind that nowhere in the urologic
4 cancer literature is there -- there must be literature
5 on what would be considered appropriate or usual
6 distribution for treatment sites.

7 And if there isn't then it would be a
8 short -- I think a short thing to develop a summary
9 paper on what has been published without the specific
10 purpose but gives the kind of information that would
11 be something that people could be referred to. So I
12 actually think it would be a good idea to have --
13 there must be some understanding of what's right.
14 You're saying that everybody knows it, they just can't
15 write it down.

16 DR. WILLIAMSON: There are limits, you
17 know, and there's sort of a spectrum of cases ranging
18 from sort of normal to something that's clearly out on
19 the tail as Dr. Nag mentioned. There are cases on
20 record which have been, I believe, pursued as mis-
21 administrations where a large fraction of the seeds
22 were implanted in the bladder base instead of in the
23 prostate and that's a very clear-cut case where, I
24 think regulatory action would be justified.

25 You know, I actually think some guidance

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1 could be put together --

2 CHAIRMAN CERQUEIRA: But Fred needs
3 concrete things. Like you said, if it's in the rectum
4 which is close by, it may or may not be a problem. I
5 mean, but how far, what sort of --

6 DR. WILLIAMSON: I think some rules of
7 thumb could be give and we could probably --

8 CHAIRMAN CERQUEIRA: There's nothing in
9 the literature --

10 DR. WILLIAMSON: If I could finish.

11 CHAIRMAN CERQUEIRA: Get to the point.

12 DR. WILLIAMSON: All right, yeah, I think
13 that the guidance could be written, I think, with a
14 certain vagueness that's involved and probably a role
15 carved out for a medical expert to make judgments on
16 a case by case basis where it really is marginal and
17 I think, you know, just to emphasize to the inspectors
18 and everybody else in NRC involved with this the
19 limits of the current procedure so that if they see,
20 you know, that some seed is implanted five millimeters
21 away from where the intended position was, they
22 understand that that's a high likelihood in any
23 properly executed prostate implant.

24 CHAIRMAN CERQUEIRA: But I can see Dr.
25 Brinker coming back, you know, in a few months telling

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1 us that a cardiologist, once he gets it into the
2 coronary, then it's not an issue as to whether he got
3 the right area or not.

4 DR. WILLIAMSON: What if it moves five
5 millimeters during --

6 CHAIRMAN CERQUEIRA: They don't leave it
7 in there permanently. Okay, one last comment and --

8 DR. WILLIAMSON: Then it could move and
9 then it would be a mis-administration, so they
10 actually have the same problem. Whenever you use
11 image localization of an anatomic target volume, you
12 are going to have this problem where you do not have
13 an imaging modality that you can use to actually -- to
14 do some quantitative verification of where the seeds
15 are. The problem doesn't exist because there's no way
16 to evaluate it.

17 DR. BRINKER: But you could actually say
18 that in scientific terms if you have on a large number
19 of cases done at a reasonably good institution or a
20 number of reasonably good institutions, the
21 distribution away from the central target,
22 retrospectively, you could define what is probably
23 clinically acceptable within one or two standard
24 deviations.

25 DR. WILLIAMSON: I think one could give

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1 some rough guidelines of what is clearly within the
2 limits of current practice, what are the gray areas
3 and what's some rough rules of thumb of what's clearly
4 outside and would be fair game for being
5 administration, I agree. So you know, I don't quite
6 agree with Dr. Diamond. I actually think so many of
7 these procedures are being done that if we just ignore
8 this issue, it will come back to bite us.

9 CHAIRMAN CERQUEIRA: Ruth, one last
10 comment and then we have to move on.

11 MS. MCBURNEY: Yeah, I don't think the
12 inspectors are going to be looking at the little
13 narrow details and it would only be if it went to the
14 area of medical event.

15 CHAIRMAN CERQUEIRA: I don't think this is
16 one area where we can actually make a motion or take
17 a vote on it. I think you've gotten a sense of the
18 discussion from the group. Fred?

19 MR. BROWN: Yeah, but I think actually it
20 was good to sit on this side of the table for this
21 particular discussion. I guess the one thing that I
22 would offer, though, is if after this conversation,
23 you know, someone comes up with some good ideas or
24 someone is starting down a path that we could
25 communicate after there's a product, then if at the

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1 next committee meeting or between meetings, you
2 communicate with us, that would help me deal with
3 inspectors who are going down a path maybe than --

4 CHAIRMAN CERQUEIRA: Dick wants to make a
5 comment.

6 DR. VETTER: One real quick comment, we
7 haven't talked about trainees, the implication that
8 maybe trainees weren't doing as well. But they're
9 actually practicing under direct observation of the
10 preceptor. They're in the same room and the relation
11 with trainees is they have higher fluoroexposure. It
12 has nothing to do with the implant itself. They just
13 take longer and so their fluoroexposure is higher and
14 that's in the literature.

15 CHAIRMAN CERQUEIRA: We really do need to
16 move. Fred?

17 MR. BROWN: The final one is Packaging
18 Brachytherapy Seeds. And the first slide, yeah,
19 basically goes over what happens now. The Sealed
20 Source and Device Registry, which is covered in the
21 new rule, you're all familiar with it, what we are
22 requiring vendors and distributors to do is not only
23 have a registration for individual seeds when they
24 produce a new seed or modify their seed, but we're
25 also requiring device reviews if the packaging -- and

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1 packaging in this case could be a Mick applicator, it
2 could be a strand, either an absorbed strand or
3 otherwise. If that packaging could effect the spacing
4 of the seeds at the time of implantation or seed
5 integrity and integrity is usually an issue of
6 temperature or pressure during the loading or
7 encapsulation of the seeds, we're requiring a separate
8 review.

9 Now, not all jurisdictions are doing that.
10 And so what I was interested in is feedback from the
11 perspective of the committee about whether individual
12 seeds received in bulk and then handled individually
13 represent more or less of a safety problem than for
14 instance strands or pre-loaded, pre-sterilized seeds
15 and also if in the opinion of the committee, the
16 spacing was a significant issue or temperature,
17 pressure mechanical forces on seeds and strands was an
18 issue in your knowledge or opinions.

19 DR. NAG: A lot of questions in one. If
20 you go one by one, I can give you some idea, but I
21 think it's best if you -- if you are just having
22 different spaces and different length of spaces, I
23 don't think that it is an issue that NRC should go
24 into. In terms of sterilization, we have a different
25 type of sterilization, steam sterilization,

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1 autoclaving for different lengths of times and these
2 are not things for ACMUI to go into. So I think it's
3 best to be handled at -- unless you are making a new
4 device per se and a new device would be when you are
5 sending out the radioactive material back in
6 differently. Otherwise, you know, the seed spacing,
7 we sterilize all the time and that's our normal
8 practice.

9 DR. WILLIAMSON: Well, I'm very confused
10 exactly what the scope of the question is. I think
11 there are at least three different things, maybe, I am
12 hearing you talk about. One is, you're concerned
13 about the seeds in Vicryl suture, the Model 6720 sold
14 by Amersham (phonetic). As I understood that had a
15 separate FDA clearance. It's sold as a separate
16 product. It has been tested to insure that the seed
17 integrity is not violated by the procedure of
18 annealing the seeds in this Vicryl strand to make it
19 rigid, so I'm not sure why there is a particular issue
20 with that.

21 The second cluster of issues I'm imagining
22 but perhaps I misunderstand is, are you referring to
23 vendors who supply a service to licensees by pre-
24 packaging the seeds in needles and in cartridges and
25 so on to minimize the need to load these things in

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1 sequence?

2 MR. BROWN: That's one aspect.

3 DR. WILLIAMSON: Okay, so you're concerned
4 about whether the process of this vendor performing
5 the activity that the licensee used to perform
6 themselves would be causing a problem. Okay, and so
7 I guess my question would be, if you feel that the
8 individual licensee can take these seeds and put them
9 into a cartridge for use in a Mick loader or some
10 other device, why would you feel uncomfortable having
11 a vendor do that, as long as they're licensed to
12 receive --

13 CHAIRMAN CERQUEIRA: And they had quality
14 control steps in place.

15 MR. BROWN: Yeah.

16 DR. NAG: Especially, the vendor is doing
17 it hundreds and hundreds of times, they will be even
18 better at doing it than ones doing it for the first
19 time.

20 DR. WILLIAMSON: This is certainly one
21 issue.

22 CHAIRMAN CERQUEIRA: Ruth and then Ralph.

23 MS. McBURNEY: I think it depends on
24 whether that original evaluation of those seeds was
25 done with those temperature ranges and chemical

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1 reactions in mind. When you package them all together
2 and there is an issue of impact of temperature or
3 pressure, or chemical reaction, then perhaps it should
4 be re-evaluated under the Sealed Source and Device
5 Registry to take those into account.

6 DR. WILLIAMSON: I'm surprised. Is the
7 Model 6720 not included in the Device Registry, SADR
8 as a separate product?

9 MR. BROWN: I can't speak to all of the
10 products and I didn't really want to speak to any
11 actually.

12 DR. WILLIAMSON: Yeah, I'm just using it
13 as a prominent example. I'm not trying to pick on
14 them. I think now there may be at least one or two
15 other companies. But I believe it is. I'm sure it
16 had a separate 510(k).

17 MS. McBURNEY: That is the current
18 practice.

19 MR. BROWN: Right. The current situation
20 is that we, in many states, require this and the
21 question is, since other states haven't required it,
22 is there a safety basis for our current practice or
23 are we not where we should be and that's what I wanted
24 the feedback on. And one of the interesting points is
25 the assumption of QA.

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1 You know, if an individual licensee is
2 doing this, it's essentially under the supervision of
3 the AU in accordance with the licensing procedure. If
4 a radio-pharmacy is doing it, then it's under the Part
5 32 QA program, but someone in between, what would your
6 thoughts be on an appropriate level of QA.

7 DR. WILLIAMSON: Well, I think that's a
8 reasonable question. That if you get a needle loaded
9 by a commercial company with some presumed sequence of
10 spacers and active seeds, what assurance do you have
11 it's loaded properly. I think an institution that
12 really has good quality assurance with audio-
13 radiograph or radiograph those needles to insure that
14 they're in the proper sequence but you know, there is
15 no rule in Part 35 that requires end users to do that
16 kind of a check. I mean, it's part of current
17 practice standards but I don't believe it is addressed
18 -- if a user take seeds and puts them into a needle
19 themselves, I don't know that there's a specific rule
20 which requires a redundant check of that loading
21 sequence.

22 DR. NAG: No.

23 DR. WILLIAMSON: I mean, there's general
24 requirements that you deliver to the patient what you
25 say or what is stated in the written directive that

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1 it's delivered properly.

2 MR. LIETO: I mean, the treatment plan, I
3 think is what Jeff's referring to. I guess my
4 question was, it appears from the slide there that
5 you're asking about changes in the Sealed Source
6 Device Registry and I guess that question, I would
7 say, no, that you don't really -- that that would not
8 be appropriate to require changes in that just simply
9 because you're going to get pre-packaged seeds and
10 spacers and strands. But I would agree that there
11 needs to be documented QC procedures that whoever is
12 preparing these has some means of verifying that they
13 are packaging them in accordance with the authorized
14 user's request or directive.

15 DR. WILLIAMSON: So I would say, too,
16 that, you know, if a -- when a licensee receives loose
17 seeds and loads them into a cartridge or needle
18 themselves, that is a normal variant of usage and I
19 don't think there's any evidence that that subjects
20 the seed to any kind of corrosive chemical or
21 excessive pressure. You know, as far as I know, I
22 have -- I am unaware that that causes any problems.
23 So if a commercial intermediary, some in between
24 source vendor and the user is hired under the guidance
25 of the licensee to take over some component of routine

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1 source preparation that's within the limits of normal
2 practice and which normally a licensee would do
3 themselves, I'm not sure that that's necessarily an
4 NRC concern. It seems to me it's an acceptable
5 variant of clinical practice.

6 CHAIRMAN CERQUEIRA: Any other members
7 have any comments other than Jeff?

8 DR. WILLIAMSON: Well, you wanted some
9 suggestions about calibration, too.

10 MR. BROWN: Well, actually, yeah.

11 DR. NAG: The next slide.

12 MR. BROWN: Yeah, the next slide goes to
13 the issue that's actually come to us from a large
14 calibration lab and that is that in the revised Part
15 35.400 licensees are required to calibrate the sources
16 unless they rely on the manufacturer's calibration or
17 the results of an AAPM certified lab, and the
18 fundamental problem is that if an intermediate company
19 loads some of these devices, there's absolutely no way
20 to do individual seed calibration after the loading at
21 the facility of use.

22 So you're left in the position of how do
23 you insure continuity or traceability of the original
24 vendor's calibration to the point of use.

25 CHAIRMAN CERQUEIRA: Jeff?

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1 DR. WILLIAMSON: Well, the first thing to
2 my knowledge all of the vendors supply NIST-traceable
3 calibrations for all their seeds, so that is not going
4 to disappear, you know, after they're loaded into a
5 cartridge, that cal. So I think the -- unless one had
6 some experimental or novel seed that happened not to
7 have a NIST-traceable calibration, I don't think this
8 issue would arise because the seed does have a NIST-
9 traceable calibration. It comes that way from the
10 original preparer and the certificate would follow it
11 to the how should I say, the package, and would, I
12 presume be included along with the material that the
13 end licensee receives.

14 CHAIRMAN CERQUEIRA: But once the package
15 is opened and the seeds are manipulated, how do you
16 tie the seeds to the calibration record?

17 DR. WILLIAMSON: Well, this is a problem
18 that could occur for the licensee, too. You receive
19 a Vicryl suture which is -- along with its certificate
20 and you take it out of the package, and you might
21 have, you know, 10 other stocks of seeds. How do you
22 assure that? The same problem exists at the licensee
23 level as it would at the vendor level. I'm not sure
24 that the problem is complicated particularly by the
25 fact that there's a third party involved. You know,

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1 this is a difficult problem. There are several
2 suggestions that have been made in the literature, how
3 to deal with it.

4 There are some calibration apparatuses
5 that can be used that maintain a sterile field for
6 putting the Vicryl suture into. Another common
7 practice that licensees often use is to order a
8 separate container from the company of loose seeds
9 that have the same batch number as the seeds that are
10 in their Vicryl suture so that they can check the
11 calibration using that sample of seeds.

12 Others have developed variance of the
13 calibration procedure that take into account the
14 additional attenuation in the wall of the needle or, you
15 know, the package essentially that the seeds come
16 into. So there are different strategies that can be
17 used for institutions that want to verify the seed
18 strength. And so then they would use something that's
19 analogous to a geometry correction factor used in
20 nuclear medicine when the preparation of the
21 radiopharmaceutical deviates substantially from the
22 NIST standard ampule geometry upon which the dose
23 calibrator settings are based.

24 I don't know if this is helpful.

25 MR. BROWN: Well, where we're left with is

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1 deciding whether the rule, you know, as written and
2 implemented, which does require the calibration of the
3 seeds and if the licensee relies on the manufacturers,
4 then the expectation is traceability. The fundamental
5 question for the committee is, does the situation with
6 repackaging represent a compliance issue in the
7 opinion of the committee.

8 CHAIRMAN CERQUEIRA: Dick?

9 DR. VETTER: The seeds themselves are
10 traceable to NIST, that's correct, right?

11 DR. WILLIAMSON: That's correct.

12 DR. VETTER: So, I mean, an individual
13 seed not the package.

14 MR. BROWN: No, no, the individual seed
15 is not serialized or --

16 DR. VETTER: No, I'm sorry, I meant -- I
17 didn't mean each individual one but when you purchase
18 a quantity of seeds they are manufactured in such a
19 way that that -- one of them has been calibrated.

20 MR. BROWN: Or maybe all of them.

21 DR. VETTER: Or maybe all of them but that
22 calibration then is traceable to NIST.

23 MR. BROWN: Yes, and the issue is how do
24 you tie the calibration record to the seeds.

25 DR. VETTER: Okay, that's keeping the

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1 paperwork straight.

2 MR. BROWN: Yes.

3 DR. VETTER: Ultimately the seed ends up
4 in the tissue whether it was surrounded by suture
5 material or not, it ends up in --

6 MR. BROWN: Right, and the issue here is
7 as a licensee if you have multiple shipments of seeds,
8 it's within your control and ability to segregate the
9 boxes and keep the shipping papers with them and the
10 records. You know, in the regulatory environment when
11 we have intermediary groups, was it the expectation of
12 the committee in giving advice on this new rule, that
13 people doing these loading operations would have to
14 independently perform calibrations that, you know,
15 under the labs, or that they would establish
16 traceability programs in-house under their license
17 that would obviate the need for an individual licensee
18 to deal with this issue after the fact.

19 DR. WILLIAMSON: I think they should do
20 that latter.

21 MS. McBURNEY: The second. Yeah, that
22 they need to establish a program for that.

23 DR. WILLIAMSON: That insures the
24 paperwork doesn't get mixed up.

25 MR. BROWN: Very good. Thank you very

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1 much.

2 CHAIRMAN CERQUEIRA: Thank you. I guess
3 the next item is update, recommendations for the
4 Spring 2002 meeting and I guess Angela is going to
5 give us an update. There are minutes in the book from
6 the last meeting and I guess one of the things we
7 should always do is, you know, approve the minutes at
8 the beginning of the meeting, which is kind of
9 standard policy. And Angela, I think, you know, you
10 and I worked on the minutes of the meeting awhile
11 back. We probably should get it out to people once
12 they're finished.

13 Now, is there a reason that we couldn't do
14 that? Does the NRC prohibit?

15 MS. WILLIAMSON: I Believe that a copy --
16 I thought that a copy was forwarded at least to you.
17 If it wasn't then we'll have to --

18 CHAIRMAN CERQUEIRA: No, I did get -- you
19 know, you send me the version and I kind of made
20 changes and we worked on it, but once that's done, we
21 should get it out to the committee members.

22 MS. WILLIAMSON: Okay.

23 DR. DIAMOND: These summary minutes are
24 very well done, very cogent and very useful and it's
25 a shame that this morning was the first time I saw

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1 them.

2 MS. WILLIAMSON: Okay, well, I can make --
3 definitely change that procedure and get the minutes
4 forwarded to the committee.

5 DR. DIAMOND: The summary minutes.

6 MS. WILLIAMSON: The summary minutes,
7 correct. I won't spend a lot of time on this because
8 we basically all know the outcome of this action, but
9 for the edification of everyone here, I'll quickly go
10 over it. And what happened, I have to go back to the
11 October 29th, 2001 meeting because what happened is at
12 that meeting ACMUI made a recommendation to amend what
13 was at that time the current Part 35 so that existing
14 medical physicists would be granted approval to
15 practice in a modality for which they had the
16 appropriate training and experience. And what
17 happened with that recommendation after NRC staff
18 considered it, NRC staff realized that we needed to
19 hold off on answering that recommendation, actually
20 have the committee revisit the recommendation at the
21 next meeting, the spring 2002 meeting.

22 Well, as you know, the spring 2002 meeting
23 actually happened in February and this issue was
24 revisited under a topic called Board Certification and
25 under that topic the motion was restated and basically

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1 the motion was stated to say the committee should --
2 the committee made a recommendation to revise what was
3 then the existing Part 35, revise the training and
4 experience requirements in the existing Part 35 but
5 you did it in -- you basically did it -- pardon me.

6 What you did was, you agreed to set up a
7 subcommittee to visit this issue in depth and to come
8 up with some specific recommendations to the staff to
9 amend the training and experience requirements. And
10 of course, that subcommittee did meet on June 21 and
11 the ACMUI met in tele-conference meeting that July the
12 8th to discuss the June 21 recommendation. And what
13 happened is that you formed your recommendations and
14 you forwarded them to the NRC staff and what we did
15 with your recommendations is we posted them to the
16 website. The training and experience recommendations
17 that you made, we did post to the website and of
18 course, you learned at one of the earlier briefings
19 that your training and experience recommendations had
20 been forwarded to the Commission along with an Options
21 Paper that the Commission directed the staff to
22 prepare.

23 So, I said all that to say this; your
24 training and experience recommendations have been
25 forwarded and will be considered and so that is the

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1 status of that action with regard to that
2 recommendation that you initially made in October and
3 refined and discussed in a subsequent meeting.

4 Are there any questions? I think we've
5 kind of revisited this to death already earlier.

6 DR. WILLIAMSON: You're talking about the
7 October 29th, 2001 recommendation on 35.57, the
8 grandfathering clause?

9 MS. WILLIAMSON: Well, that whole issue
10 was revisited. We didn't actually forward -- we
11 didn't forward you a response to that because we felt
12 that it needed to be addressed further. So, we
13 addressed it -- you actually addressed it again at the
14 February meeting and when you restated the motion and
15 you made the motion a little bit broader at the
16 February meeting and what ended up happening, as you
17 well know, is that a subcommittee was formed.

18 CHAIRMAN CERQUEIRA: So I think the
19 subcommittee kind of dealt with most of the issues and
20 --

21 DR. WILLIAMSON: I don't know that we
22 really dealt adequately with the 35.57, the
23 grandfathering clause. I don't think we supplied an
24 interpretation, so actually that is still possibly a
25 problem, which maybe we should carefully consider.

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1 PARTICIPANT: That was not part of the
2 subcommittee's charge.

3 MS. WILLIAMSON: No, that actually wasn't
4 but that's what ended up happening with it.

5 DR. WILLIAMSON: So I actually think that
6 the staff should think about 35.57 in relation to the
7 existing regulation that's on the books and the
8 proposed ACMUI subcommittee version and see whether,
9 you know, there is any possible problem in terms of
10 restricting the supply of authorized personages
11 available.

12 MS. McBURNEY: I think that the new rules
13 will take care of that because the medical physicists
14 will be -- the ones that are on licenses now will be
15 grandfathered in and then the additional training
16 requirements are under the new rules. So I think that
17 that will be covered.

18 DR. WILLIAMSON: I think it might.
19 Actually, yes, if Board certification remains the
20 primary vehicle for shouldering most of the burden of
21 credentially these individuals, you know, then,
22 there's a reasonable requirement for acquisition of
23 supplementary training should work out, but -- so it
24 wasn't addressed directly is my point.

25 MR. BROWN: I'm sorry, Ralph brought up

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1 earlier that there was an issue with RSO
2 qualifications in Region 3 and hopefully the
3 grandfathering was primarily an issue with an RSO --
4 RSO's. And we're dealing with question and answer
5 space with the essential concept that a licensee can
6 have an RSO who is the primary person to run their
7 program in accordance with the provisions for RSO's
8 but that that person may require expertise from other
9 members of the licensee staff for some of the more
10 devices with which they are not familiar. And that's,
11 we believe, covered in the existing rule and we're
12 documenting that in Q and A space and we'll share that
13 with you as soon as we have it, and that may address
14 the concern with grandfathering, the underlying
15 concern about licensees being able to have access to
16 the right resources to meet the rule.

17 MS. WILLIAMSON: Okay, and then another
18 recommendation that was made at the February meeting,
19 this recommendation is closely related to the previous
20 recommendation in that its purpose was to preserve
21 Board certification as a primary pathway for
22 certifying users. And that -- in that recommendation
23 the ACMUI recommended that the Commission retain the
24 training and experience requirements for uses under
25 Part 35.600 as well as for all categories of

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1 authorized users until such time that a rulemaking
2 initiative could restore Board certifications as a
3 primary pathway.

4 And you all probably know that in response
5 the Commission did agree with that recommendation and
6 as a result sub-part J is being retained for two years
7 at which time it will expire in 2004, so the new
8 regulation went into effect October 24th of this year.
9 So in two years, October 24, 2002 (sic), sub-part J
10 will be deleted and that's basically it with the
11 recommendations as far as the last meeting.

12 CHAIRMAN CERQUEIRA: Although I guess one
13 of the things that we had wanted to do was the sub-
14 committee report that is that would deal with the
15 problems that were presently in the current revision.
16 We wanted to put that on a fast track which is why Dr.
17 Vetter's committee really, you know, spent a lot of
18 time to get it done and I asked the question early but
19 maybe Roger could comment. You know, what are the
20 chances that this rule that's before the commissioners
21 now will be implemented in a timely fashion within,
22 you know, 2004?

23 MR. BROWN: Well, I'm glad you came back
24 to that because what's before the Commission is an
25 options paper to proceed with rulemaking. As we kind

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1 of talked about earlier, you can't just change a rule
2 with a flick of the fingers once you've set it in
3 place.

4 So if the Commission agrees with
5 proceeding with the rulemaking, we anticipate that
6 that would be completed within two years prior to the
7 expiration of sub-part J and we'd, you know, do
8 everything to make that happen. The bigger issue is
9 in the case of the agreement states, as we discussed
10 earlier, that we would be in the position where the
11 new requirements would be mandated a year after the
12 revised requirements came out and they'd have to do a
13 two-step thing and that -- as you'll see in front of
14 you, that issue is identified but we don't know how to
15 resolve it at this point and it would have to be done
16 in the rulemaking process.

17 CHAIRMAN CERQUEIRA: But getting back to
18 my question, can we make -- you know, again, I
19 understand rulemaking is more than just the training
20 and experience requirements but the committee, the
21 sub-committee had a pretty detailed description.

22 MR. BROWN: Right.

23 CHAIRMAN CERQUEIRA: So once the
24 Commissioners sign off on that, what else is going to
25 really be needed?

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1 MR. BROWN: Legally that process -- that
2 would serve as essentially a proposed new rule that
3 would go out for public comment. We'd have an
4 opportunity to address some of the concerns that were
5 discussed here earlier this morning, get stakeholder
6 comment on it.

7 CHAIRMAN CERQUEIRA: Just like we did for
8 Part 35. We started that in '98, I think the Federal
9 Registrar Notice, and so here it is October 24th,
10 2002, so it's four years.

11 MR. BROWN: It is accelerated because we
12 were -- we would be at the point where we'd have a --
13 and this isn't my area of expertise, like many of the
14 things I discuss, some might wonder what my area of
15 expertise is, but we have a rulemaking plan now which
16 is something that could take years and years to get to
17 the point. So the effort that you undertook so
18 accelerated the process many years and we have a very
19 -- a product that should be very close to being
20 implementable with few public comments.

21 CHAIRMAN CERQUEIRA: Dr. Vetter is fairly
22 impatient, you know. He did his end, now, he wants to
23 know why the commissioners aren't jumping on this and
24 what can this committee do to facilitate the process
25 is my question.

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1 MR. ESSIG: I don't know that there's
2 anything in particular that the committee can do to
3 facilitate the process. You've given us your
4 recommendation. It's now at the hands of the
5 Commission.

6 CHAIRMAN CERQUEIRA: At the commissioner
7 level, right, and their staff people have reviewed it
8 and have favorably given it their blessing. It now
9 goes onto the commissioners.

10 MR. ESSIG: And they will dictate to the
11 staff then via staff requirements memorandum, what
12 they want us to do because we have outlined three
13 options in there as you've seen if you perused what I
14 gave you earlier. By the way, the EDO did sign that
15 out today, so the copy --

16 CHAIRMAN CERQUEIRA: EDO is?

17 MR. ESSIG: Executive Director for
18 Operations.

19 CHAIRMAN CERQUEIRA: Which means it then
20 goes to the commissioners.

21 MR. ESSIG: Yes.

22 CHAIRMAN CERQUEIRA: And they have how
23 many days to act on it?

24 MR. ESSIG: They have as long as they
25 need.

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1 CHAIRMAN CERQUEIRA: Right, but I think
2 this is the point where Dr. Williamson usually comes
3 in and we need a motion to --

4 DR. WILLIAMSON: Well, I would like to
5 ask, if the commissioners signed off on it tomorrow,
6 what's the minimum time frame for getting a rulemaking
7 completed? That's really, I think, what the question
8 is.

9 MS. MCBURNEY: Will this one have to go to
10 OMB? I mean, that takes awhile.

11 CHAIRMAN CERQUEIRA: Mr. --

12 MR. BROWN: Yeah, I apologize, because
13 you're catching us and we're stuttering over here and
14 we don't have the definitive answers for you. It has
15 been evaluated by the people that are supposed to know
16 and they're comfortable that where we're at now with
17 an answer from the Commission in the next couple of
18 months, we'll be able to move forward and based on all
19 the work that you guys have done, that the comments
20 shouldn't be difficult to address and that we
21 shouldn't have difficulty going through OMB and the
22 other regulatory reviews.

23 That, you know, we're in the right place
24 to proceed smartly and that's really all that we know.

25 CHAIRMAN CERQUEIRA: I guess what I'm

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1 asking from staff is some guidance on how we can push
2 this. I mean, the committee is, you know, powerless
3 in many ways but obviously, if we, you know, send a
4 note to the commissioners. When is our next meeting
5 with the commissioners?

6 MS. WILLIAMSON: Spring.

7 CHAIRMAN CERQUEIRA: Spring. Okay, so that
8 will be part of the scheduling process, but you know,
9 if we wait till then to put some pressure on them, I
10 don't think that's going to help very much. So nobody
11 is being terribly helpful in how we can move this
12 forward. I mean, you know --

13 DR. WILLIAMSON: I suppose you, as the
14 chairman --

15 MR. LIETO: Weekly phone calls by the
16 chairman.

17 DR. WILLIAMSON: -- could place a call to
18 the --

19 CHAIRMAN CERQUEIRA: So is that the wish
20 of the committee? Would you like me to --

21 DR. WILLIAMSON: Yes, I suggest that
22 here's a motion, okay. Okay, the ACMUI recommends
23 that Chairman Cherqueira contact the commissioner
24 chairman to inquire about the status.

25 CHAIRMAN CERQUEIRA: Good, okay.

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1 DR. WILLIAMSON: And express our concern
2 that it is not proceeding in a timely fashion.

3 CHAIRMAN CERQUEIRA: Okay, I will take
4 that charge. All right. All right.

5 MS. WILLIAMSON: And that's all that I
6 have.

7 CHAIRMAN CERQUEIRA: Okay.

8 MS. WILLIAMSON: I do have the Staff
9 Requirements Memorandum on the national materials
10 reports.

11 CHAIRMAN CERQUEIRA: You still have the
12 vacancies.

13 MS. WILLIAMSON: We did that this morning.

14 CHAIRMAN CERQUEIRA: But that was a closed
15 session, so we should at least discuss it in public
16 because we do have members of, you know, stakeholders
17 out there and --

18 MS. WILLIAMSON: Certainly. I should be
19 able to do this by memory. We reappointed five people
20 to the committee. Let's see how good I am.

21 CHAIRMAN CERQUEIRA: I can read it, I've
22 got the minutes here.

23 MS. WILLIAMSON: Okay.

24 CHAIRMAN CERQUEIRA: Diamond, Nag,
25 Schwarz, Williamson and Vetter were reappointed.

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1 MS. WILLIAMSON: Were reappointed for a
2 second term. We do have three vacancies coming up in
3 the relatively near future and they would be Chairman
4 Cerqueira, Ms. Hobson and Ms. McBurney. So my action
5 after this meeting would be to move smartly to start
6 the process to get the anticipated vacancies filled in
7 a timely manner. And one other vacancy that we can
8 foresee in the foreseeable -- well, in the near future
9 would be Mr. Lieto's position as medical physicist and
10 he could be reappointed to the committee.

11 DR. DIAMOND: Angela, we also have the
12 issue that Dr. Cerqueira is the chairman, so we need
13 to find a new chairman.

14 MS. WILLIAMSON: Exactly.

15 CHAIRMAN CERQUEIRA: So I would say that
16 we should -- somebody should make a nomination that we
17 initiate the process for identifying new members to
18 replace Cerqueira, Hobson and McBurney and selecting
19 a new chairman.

20 DR. WILLIAMSON: So moved.

21 CHAIRMAN CERQUEIRA: So Jeff makes the
22 nomination, you seconded it. Further discussion on
23 it?

24 MS. MCBURNEY: Who actually appoints the
25 chair? We don't select our own chair, do we? The

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1 Commission --

2 DR. WILLIAMSON: We could perhaps make a
3 recommendation from the remaining members of the
4 committee. It would probably be logical to have
5 somebody who has served and has some experience,
6 recent experience, on the ACMUI rather than getting
7 somebody cold.

8 MS. HOBSON: Exactly, I agree. Also just
9 for my own benefit, does the chairman -- is the
10 chairman required to be an MD, a physician or could
11 one of the other highly qualified but not a physician?

12 MS. WILLIAMSON: I don't know that it's a
13 requirement.

14 CHAIRMAN CERQUEIRA: I don't think it's
15 required.

16 MS. WILLIAMSON: I think it's usually the
17 case though, as sort of a past practice.

18 DR. DIAMOND: I was looking at the bylaws
19 today and I did not see any requirement that the
20 chairman be a physician.

21 DR. NAG: Now, how as the chairman decided
22 before, I mean, the previous chairman? How was it
23 decided and how --

24 DR. DIAMOND: Someone left the room for a
25 few minutes and they got dinged.

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1 MS. McBURNEY: He was the only doctor
2 left.

3 CHAIRMAN CERQUEIRA: You know, again, I
4 think the previous chairman, Dr. Seigel, had some
5 input into it with the committee members. I have to
6 admit, I'm not aware of how the process was --

7 MR. MALMUD: It was actually Dr. Stitt who
8 was the previous chairman.

9 CHAIRMAN CERQUEIRA: That's right, it was
10 Judith, yeah. There should be a process. You know, I
11 mean, every society that we're involved in has --

12 MS. McBURNEY: Maybe while you're on the
13 phone with the --

14 CHAIRMAN CERQUEIRA: The commissioner, he
15 won't know unfortunately, but I'm sure the staff, like
16 the people that were here for awhile, Larry Camper or
17 Cathy Haney have had the longest experience. I'll look
18 into it and I'll try to -- there has to be some
19 process.

20 MS. SCHWARZ: Maybe Dr. Seigel could --

21 CHAIRMAN CERQUEIRA: Could fill us in,
22 yeah.

23 MS. WILLIAMSON: I actually believe it was
24 recommended in a paper to the Commission by the staff.
25 Now, I don't know how the staff came to the

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1 recommendation frankly. I can always find that out
2 but I do remember seeing paperwork to that effect.

3 MR. MALMUD: But it's appointed, not
4 elected.

5 MS. WILLIAMSON: It's appointed, yes.

6 DR. WILLIAMSON: That's correct, but I
7 think, you know, our group could make a recommendation
8 to the staff if we wanted to, if we felt we had some
9 consensus within this group.

10 CHAIRMAN CERQUEIRA: But the initial
11 process is to just -- there's the three vacancies. We
12 have to publish it in the Federal Registrar and we
13 have, you know, a period of nominations being
14 submitted and so we should initiate that now. I think
15 our last meeting is the spring of 2004 but, you know,
16 we've had --

17 DR. NAG: That gives us some time.

18 CHAIRMAN CERQUEIRA: Right, okay. So
19 we'll do that and we'll try to find out the process by
20 which the chairman is appointed.

21 The second item, then, I guess is in terms
22 of Mr. Lieto's being reappointed and I don't -- again,
23 what are the -- I mean, he speaks up too much but he's
24 done a fairly good job. And so what's the process by
25 which a reappointment can be initiated. Is that up to

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1 the discretion of the chairman?

2 MS. MCBURNEY: If he wants to be.

3 DR. NAG: If he wants to be reappointed.
4 If he does, then there's no more questions.

5 DR. WILLIAMSON: Well, I guess the staff
6 could choose --

7 MS. WILLIAMSON: The staff could, right --

8 DR. WILLIAMSON: -- to recommend not to
9 reappoint him, as has happened in some cases.

10 MS. WILLIAMSON: So basically at the
11 recommendation of the staff, which the Commission
12 usually agrees with.

13 MR. LIETO: We know the answer to that
14 one.

15 CHAIRMAN CERQUEIRA: All right, so that
16 takes care of those items, but again, you know, we've
17 kind of made it a priority to avoid vacancies because
18 two years ago we had lots of vacancies and it was very
19 hard for the committee to do business. So we've got
20 17 months and if we initiate the process, we should
21 get it filled. Okay.

22 And then the next thing is still --
23 Angela, you're still there, administrative
24 conclusions.

25 MS. WILLIAMSON: That's just the routine

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1 discussion about the next agenda items and the next
2 meeting date.

3 CHAIRMAN CERQUEIRA: So we normally have
4 a meeting in the spring.

5 MS. WILLIAMSON: April.

6 CHAIRMAN CERQUEIRA: April.

7 MS. WILLIAMSON: Right, uh-huh.

8 CHAIRMAN CERQUEIRA: All right, and that's
9 when we meet with the commissioners.

10 MS. WILLIAMSON: That can serve as your
11 meeting with the commissioners, yes.

12 CHAIRMAN CERQUEIRA: And the tone of
13 today's discussion, I think the committee would like
14 to meet with the commissioners and --

15 DR. WILLIAMSON: Yes, I think so.

16 CHAIRMAN CERQUEIRA: We what we need to do
17 then, and the issue always comes up of how you get to
18 five commissioners to be in town. So we need to -- if
19 you could check with their staff to see when in April
20 we could possibly convene a meeting and there we need
21 the full day and a half because usually we have a
22 meeting before and are there any national meetings in
23 April?

24 DR. NAG: There is a Radiation Society
25 meeting at the end of April.

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1 CHAIRMAN CERQUEIRA: If people could just
2 look in their calendars.

3 DR. NAG: April 26th through 30th.

4 DR. VETTER: The NCRP meets in April.

5 DR. BRINKER: Early April is the NCRP.

6 PARTICIPANT: Is Easter in April?

7 CHAIRMAN CERQUEIRA: Late March.

8 DR. DIAMOND: Angela, if you're taking
9 notes, there's a Radiation Oncology meeting February
10 27th through March the 2nd.

11 DR. NAG: No, we are looking for April.

12 DR. DIAMOND: I understand but I'm giving
13 her all the dates I can think of.

14 CHAIRMAN CERQUEIRA: And there are things
15 like spring breaks that for some of us that's a little
16 bit more --

17 MS. WILLIAMSON: April is not written in
18 stone. I mean, we could have it a little bit sooner,
19 a little bit later, but normally we hold it in April.

20 PARTICIPANT: Sounds like mid-April.

21 CHAIRMAN CERQUEIRA: So Easter is April
22 20th, so a lot of the school vacations tend to sort of
23 cluster around that. End of April, is the end of
24 April -- that was the one that was bad.

25 DR. NAG: That is the Radium Society,

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1 although that --

2 CHAIRMAN CERQUEIRA: But again, we have
3 people representing various constituencies and it
4 would be important, I think, to have them here.

5 DR. VETTER: The first full week of April
6 is NCRP.

7 CHAIRMAN CERQUEIRA: The first full week.

8 DR. VETTER: It isn't all week long but I
9 don't remember the dates. It's that week.

10 DR. DIAMOND: So what about the second
11 week of April?

12 CHAIRMAN CERQUEIRA: April 7th, which is
13 a Monday?

14 DR. DIAMOND: That's the first full week,
15 isn't it?

16 DR. NAG: That week is open.

17 DR. VETTER: That's the week of NCRP.

18 CHAIRMAN CERQUEIRA: Okay.

19 MS. MCBURNEY: So before that?

20 DR. DIAMOND: What we need is a Monday,
21 Tuesday?

22 DR. NAG: No, it can be any day of the
23 week, right?

24 MS. WILLIAMSON: It can be.

25 DR. DIAMOND: Or Thursday, Friday.

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1 MS. WILLIAMSON: We try not to hold it on
2 Friday, but the flights, it's difficult.

3 CHAIRMAN CERQUEIRA: So what about -- here
4 again, this is probably not the most efficient use
5 but, you know, once we start sending e-mails to lock
6 in dates, we have to give the commissioners a couple
7 of alternative days to try to get it. So something
8 like April 23rd, 24th is that -- it's the middle of
9 the week.

10 DR. VETTER: I thought you said that was
11 Easter.

12 CHAIRMAN CERQUEIRA: Easter is April the
13 20th, I have, April 20th.

14 MS. WILLIAMSON: This would be after.

15 CHAIRMAN CERQUEIRA: So we would try to
16 avoid that Monday and Tuesday, the 23rd, 24th of
17 April?

18 DR. NAG: Yeah, that's okay.

19 DR. VETTER: Even the first week in May.

20 DR. DIAMOND: What about the first week in
21 May?

22 CHAIRMAN CERQUEIRA: May 5th, 6th, that's
23 a Monday, Tuesday?

24 MS. McBURNEY: When is the CRCPD meeting?

25 DR. NAG: Immediately after the ABS.

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1 CHAIRMAN CERQUEIRA: Let's go back to
2 maybe March.

3 MS. McBURNEY: Late in March, early April
4 around April Fools.

5 CHAIRMAN CERQUEIRA: How about like March
6 24th, that's a Monday and the 25th, it's a Tuesday?

7 DR. EGGLI: A lot of college spring breaks
8 have already started. My son is at Harvard, starts
9 that Monday.

10 MS. HOBSON: Yeah, but spring breaks
11 bounce all over. There's --

12 MS. McBURNEY: What about the following
13 week?

14 CHAIRMAN CERQUEIRA: Then we're into April
15 and April is kind of -- well, can we --

16 DR. DIAMOND: So let's -- we need two or
17 three different dates, so let's throw a couple out.
18 Let's do that --

19 MS. McBURNEY: March 30th?

20 CHAIRMAN CERQUEIRA: No, it was March
21 24th, 25th.

22 PARTICIPANT: March 30th and 31?

23 CHAIRMAN CERQUEIRA: So March --

24 MS. McBURNEY: I won't be available the
25 24th and 25th of March, so maybe March 30th, April

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1 1st?

2 DR. NAG: April Fools Day, yeah.

3 CHAIRMAN CERQUEIRA: That's March 31st,
4 April 1st. Okay, so let's try those two. So we had
5 April 22nd, 23rd, and then March 31st, April 1st. All
6 right, we'll try those dates to see if we can get the
7 commissioners, and if that doesn't work out, then
8 we'll send out the scheduling calendars again.

9 DR. DIAMOND: I think the only way we can
10 do it is find when the medical meetings are, get two
11 or three sets of dates, find when the commissioners
12 are available. There's no way we're going to be able
13 to accommodate everybody's schedule. We just can't do
14 it.

15 CHAIRMAN CERQUEIRA: Yeah, okay.

16 MS. WILLIAMSON: One other thing, Dr.
17 Cerqueira, as far as everyone's travel and your
18 services vouchers, if you don't mind signing those and
19 just giving them to me, that will really expedite the
20 settlement of those vouchers. You don't have to, it's
21 your choice.

22 MR. MALMUD: These two pages and just fill
23 them in.

24 MS. WILLIAMSON: Right, and just give the
25 information to me rather than -- yeah, exactly, then

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1 you don't have to send it through the mail.

2 DR. NAG: Do you need the hotel receipt or
3 can you use the fax on that because the only other
4 thing would be the hotel receipt that you would not
5 have.

6 MS. WILLIAMSON: I really should get the
7 original hotel receipt. People here get audited by
8 the IG like to have original hotel receipts, so not
9 faxed, they really -- unless you lose the hotel
10 receipt, they really do prefer that they get an
11 original of the hotel receipt.

12 CHAIRMAN CERQUEIRA: So if people can sign
13 those and give them to Angela. If you'd leave a
14 signed copy here then you can send her the --

15 MS. WILLIAMSON: You can just leave --
16 yes, and I can make copies for you.

17 MR. DIAZ: Now, Sally had a question.

18 MS. SCHWARZ: We had discussed the
19 possibility of a committee being formed to review 1000
20 modalities and I just thought maybe if you wanted to
21 do that before we closed.

22 CHAIRMAN CERQUEIRA: You know, I think we
23 should. The question is, you know, it's such a broad
24 topic and you'd like to get input from various members
25 of the community, both the stakeholders as well as the

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1 people that don't have an interest in order to -- and
2 you're almost talking about the whole committee in a
3 sense. You know, I guess we could try to break it
4 down but there are going -- when some of these things
5 come up, I mean, you know, having cardiology input is
6 of some value, radiation oncologists in some cases.

7 DR. WILLIAMSON: Well, there's nothing
8 that stops the subcommittee from inviting additional
9 members for a particular decision that requires their
10 input but I think the suggestion of the committee is
11 that we could have a standing -- some sort of a
12 standing structure to facilitate doing this quickly in
13 between our semi-annual meetings.

14 MS. SCHWARZ: If there were --

15 DR. WILLIAMSON: So that was the --

16 CHAIRMAN CERQUEIRA: Okay, what size
17 should we make the committee?

18 DR. DIAMOND: Probably get a
19 representative from each discipline that's represented
20 here, so one radiation oncologist, one nuclear
21 medicine, one physicist, one cardiologist and so
22 forth.

23 MS. HOBSON: That's the whole committee.

24 CHAIRMAN CERQUEIRA: The only duplicates,
25 I guess, there's two radiation oncologists. We have,

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1 I guess, two medical physicists. So basically it
2 would be everybody with the exception of three people.

3 DR. NAG: I think you don't need a patient
4 advocate, but you may need a technical thing so Nekita
5 might not be involved.

6 CHAIRMAN CERQUEIRA: No, but I think she
7 represents a unique constituency that should be there,
8 I mean, really because she doesn't have any ax to
9 grind in terms of you know, turf and I think it's
10 important to have that kind of input. Well, and then
11 as the chairman, I shouldn't be on it, so that leaves
12 Dr. Brinker. So it's a matter of which of the
13 physicists and which of the radiation oncologist we'd
14 leave off.

15 DR. WILLIAMSON: I'll volunteer.

16 CHAIRMAN CERQUEIRA: To be on or off?

17 DR. WILLIAMSON: On it. All right, okay,
18 so Subir wants to be on it then and Ralph, do you have
19 any strong feelings about being on it?

20 MR. LIETO: Well, no. I mean, I have no
21 problems. It's going to come back to the committee
22 anyhow.

23 DR. WILLIAMSON: If he wants to be on it,
24 I will happily withdraw.

25 MR. LIETO: I want to be able to criticize

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1 you, Jeff.

2 CHAIRMAN CERQUEIRA: All right, so I think
3 we have the committee then. I guess, you know, David
4 and Ralph and I are not on the committee and everybody
5 else is on the committee. I mean, is that --

6 MR. MALMUD: You don't need two --

7 CHAIRMAN CERQUEIRA: Yeah, but you're a
8 hospital administrator and you do need that
9 perspective.

10 DR. WILLIAMSON: Maybe he could cover
11 both.

12 MS. MCBURNEY: True. Most of these items
13 are going to be coming up as devices or something in
14 an agreement state or whatever --

15 CHAIRMAN CERQUEIRA: Yeah, we definitely
16 need that. All right, well, look let me -- I think
17 we've kind of identified it. The only question is do
18 we need two nuclear medicine. The other thing you
19 don't want is if you have too many -- I feel I've got
20 two people representing the same interest, then
21 potentially there's a conflict there but I think we
22 have the body of the subcommittee.

23 Let me talk to the staff people and then
24 I'll just send the list out to people unless there's
25 any other issues that come up. All right.

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1 MS. HOBSON: I think both Dr. Malmud and
2 Dr. Eggli, they would serve two different purposes on
3 the committee and I'm sure that they're big enough
4 that they would put aside any parochial interest.

5 CHAIRMAN CERQUEIRA: Okay, that's probably
6 true. So all right, other issues, any --

7 DR. DIAMOND: Yes, there were. I don't
8 know at this late juncture in the day we want to go
9 and raise our blood pressure again, but the main focus
10 of this morning's discussions were whether we wanted
11 to have some open and frank exchange of what can be
12 done in the future to improve the function and utility
13 of this advisory committee. Should we take five or 10
14 minutes to talk about this?

15 CHAIRMAN CERQUEIRA: Yeah, I think that's
16 -- what do you suggest?

17 DR. DIAMOND: Well, there are a couple of
18 issues. We talked about some housekeeping things,
19 such as getting the summary minutes out in a timely
20 fashion, getting the staff responses out to the
21 committee members in a timely fashion. So those are
22 very straightforward things. We also spoke about the
23 need to improve communication with the federal
24 designated official as a third point.

25 Other points really are you know, an open

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1 and frank discussion with response to what our purview
2 is and are we going to be receiving pro-active
3 communications from the staff or are we going to play
4 this game once again where we respond and have to
5 inquire as -- on our own as to what are the important
6 and developing issues. I think it's much better to go
7 and discuss these in a proactive fashion. It saves a
8 lot of heartache and I think it moves much more
9 efficiently.

10 CHAIRMAN CERQUEIRA: Well, it's a lot of
11 issues. Let's kind of go back then and maybe start
12 with the first point that you made.

13 DR. DIAMOND: So first is a more timely
14 communication of the summary minutes and of the staff
15 responses. I think that's not a subject of debate.

16 CHAIRMAN CERQUEIRA: All right, I think
17 one way to do that is once the minutes are finalized
18 and Angela, I think there's agreement that the
19 minutes, once they're finalized, should go out to the
20 committee members and when we open the meeting, we
21 should have the opportunity to review the minutes and
22 let people, you know, make changes or if they have,
23 you know, disagreements with what's said, that should
24 be done up front. So now we can do that. There's no
25 reason that the minutes are not allowed to be

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1 distributed to the committee.

2 We also identified action items that
3 during the discussions, we -- you know, we basically
4 made a motion and we took a vote on it and we should
5 have a clear -- in the minutes, we should have a clear
6 identification of the motions and that should come out
7 of the transcript. You know, I don't go through the
8 whole transcript, Angela or somebody does and we
9 basically come up with some, you know, nomination and
10 so that should go out to people and it should be
11 brought up at the meeting.

12 DR. DIAMOND: The next issue is an issue
13 that was formulated really by Dick, which was that we
14 should have standing reports. In other words, to
15 paraphrase Dick, for example, update -- staff update
16 on training and experience, staff update on the
17 National Materials Program, staff update on these
18 other issues. This way the clear onus, the clear
19 burden is on the staff to prepare in advance materials
20 that we can review and discuss instead of us having to
21 go and dig through these issues.

22 CHAIRMAN CERQUEIRA: Yeah. But who's
23 going to come up with a list of sort of standing
24 recurrent issues that --

25 DR. VETTER: Yeah, I would suggest that we

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1 actually simply have some broad categories that are
2 standing always on the agenda and maybe some meetings
3 there isn't anything there but we still never remove
4 that from the agenda. An example would be routine
5 trend reports. I think it would be good for this
6 committee to hear from the staff what are the medical
7 events that have occurred across the country and why
8 do we want to know that, to help them. They've
9 probably already got it figured out but at least give
10 them our input as representatives of the user
11 committee, on whether or not there might be some root
12 cause there or we might be able to contribute to the
13 base knowledge on route causes that might be effecting
14 these trends or contributing --

15 CHAIRMAN CERQUEIRA: Do you mean trends of
16 medical events or reportable events, or what?

17 DR. VETTER: Medical events is what I'm
18 suggesting. We can come up with -- I'm just saying a
19 broad category of routine trend reports. One example
20 would be medical events. There may be half a dozen
21 others over a period of time we would ask that they
22 update us on and a trend report, you know, one example
23 is if medical events are two next time and 10 the
24 following time meeting and 20 after that there's
25 obviously something going on. Obviously, the staff

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1 would have figured that out by now but the purpose
2 would be for us to have input as members of the user
3 community as to what might be happening out there.
4 That's an example.

5 So one of those categories that we would
6 always have on the agenda would be routine trend
7 reports, whatever we've all decided are good routine
8 trend reports.

9 MS. HOBSON: Would the same thing apply to
10 this new national data bank, what would be -- what's
11 been reported.

12 DR. DIAMOND: Sure, I think that's very
13 important.

14 MR. LIETO: You could maybe use the
15 category of enforcement actions because isn't that
16 what would trigger that type of reporting to the data
17 base, would be escalated enforcement?

18 MR. BROWN: In part, not -- it's not the
19 only reporting criteria but that's in part.

20 CHAIRMAN CERQUEIRA: Now, Tom and Fred, I
21 mean, you kind of get the sense of this. And it
22 sounds like it's a reasonable request from the
23 committee, so --

24 MR. BROWN: Well, yes. As you ask for
25 more information, the number of people available to do

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1 it and the status of their ability to do it is limited
2 by the hours of budget, so the more you ask for, the
3 less good any of it's going to be is essential rule of
4 thumb to understand.

5 We do trend analysis. It's a function.
6 It's actually a very important function and it's being
7 revised in its totality right now. I'd love to come
8 in and talk about it at the next meeting and once
9 you're informed of what we do, I mean, you can ask for
10 further updates, but the more updates that we're
11 preparing for you, the less opportunity we're going to
12 be having -- have to --

13 CHAIRMAN CERQUEIRA: But they're already
14 existing out there as part of the agency, you know,
15 policy. It would just be a matter of sharing the
16 material, right?

17 MR. BROWN: And some things are and we can
18 explore those. You know, the trend isn't a
19 presentation. It's actually a monthly meeting that
20 goes on to review not just medical events but all --

21 DR. DIAMOND: Right, we're not asking for
22 a 30-minute presentation. A one-page summary of
23 trends prepared by that particular agency or board
24 would be more than sufficient.

25 MR. BROWN: That agency or board is two or

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1 three people in my section and one page is something
2 we'll half-way do but that's a level of effort and it
3 detracts from all of the other levels of effort we
4 have.

5 DR. DIAMOND: Well, gee whiz, I'm spending
6 a lot of effort to come here, too, Fred.

7 DR. BRINKER: Well, I think before --

8 DR. DIAMOND: I mean --

9 DR. BRINKER: One thing, again, as a
10 newcomer, I'm seeing us going not parallel in our --
11 or not together in our thinking. We're not converging
12 and I think one of the things is our ideation of what
13 we should be doing may be different. I think it is
14 different from what the NRC staff's ideations, what
15 they want and need from us are different than what we
16 think the influence we ought to have and it's further
17 complicated by the fact that you have a bunch of very
18 well-doing, intelligent, hardworking people here that
19 want to contribute and want to be known that they
20 contribute and it's also complicated by the fact that
21 we meet every half a year or something and they do a
22 hell of a lot between the times we meet and they can't
23 -- and I guess they don't know how much of that and
24 how to communicate the ongoing process with us in a
25 way that would be beneficial for us to interact.

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1 But look at today. We are so -- I mean,
2 I feel that I am volume overloaded by all the things
3 that we discussed today and I'm not sure that we had
4 an adequate time to digest all the things Fred was
5 bringing up so that we could give the best -- I mean,
6 we gave the best answers that we could off the tops of
7 our heads in the 10 or 15 minutes that we had to
8 digest the data, but we didn't do the kind of job that
9 might have been done if we had days to think about
10 this and other information access.

11 So, again, I think one thing that would be
12 valuable to me, I think, is if the NRC staff really
13 had a soul-searching in terms of what they want from
14 us and in order of priority. And we conversely, had
15 a soul-searching and put down what we think we should
16 be doing in order of priority and see where they
17 match.

18 Now, an awful lot of good has been done
19 already and just as Dr. Vetter's subcommittee was an
20 immense amount of work, and I think that there is this
21 -- we're not connecting. A lot of people here think
22 that they're not appreciated for what they do, that
23 the NRC is not sensitive enough to the desires of the
24 group and I'm sure by the expressions on your faces
25 that much of what we say is, "Oh, boy, what do they

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1 want now and this is going to be a tremendous onus and
2 how can we possibly going to get that done. So to
3 make this work the best, we should be all on the right
4 line working together and we should know what each
5 other's needs are and how best to do them.

6 CHAIRMAN CERQUEIRA: Those are good
7 points. I think one of the things that would help is,
8 you know, there's a charter for this committee and I
9 have to admit I must have seen it at some point but
10 how many have --

11 DR. DIAMOND: It's in the back.

12 CHAIRMAN CERQUEIRA: It's in the back.
13 All right, well, people should look at that and again,
14 just to --

15 DR. WILLIAMSON: I actually think we
16 should be, you know, fairly careful about how much
17 stuff we request. I think we've made some reasonable
18 requests which is to be -- keep up to date on a
19 routine basis with the 35.1000. That's very important
20 to the community, very controversial. It's very easy
21 to make a misstep but no, I don't know -- I don't have
22 a strong feeling that we should get that involved in
23 tracking trends and so forth and routine information.

24 I think we've made some specific requests
25 that are reasonable.

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1 MS. HOBSON: But on the other hand when we
2 have worked long and hard on a particular issue and we
3 make a recommendation, it's just sort of like, you
4 know, many times we're just sort of dropped out of the
5 loop and we never hear anything else about it, or else
6 we're surprised by what actually has happened when we
7 do learn about it. So being kept informed is, I
8 think, huge.

9 CHAIRMAN CERQUEIRA: Leon?

10 MR. MALMUD: It might be useful because --
11 it would certainly be useful if we identified those
12 issues that we felt needed follow-up and that at each
13 meeting we identify the items for which we're
14 requesting follow-up at the next meeting and not over-
15 burden the staff here with tracking everything,
16 because their budget is limited and they're going
17 through an ordeal now, as most of government is in
18 trying to anticipate possible needs with respect to
19 bioterrorism, et cetera. So I would suggest that we
20 begin by our assuming the responsibility to identify
21 to you those limited items for which we are requesting
22 follow-up because of the intense involvement of this
23 committee and those issues, that we begin with that
24 and then see how that works. That will give us what
25 we want in terms of the feedback and that will give

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1 the staff an opportunity to see how burdensome this is
2 since you do have limitations on your own staffing
3 within your own organization and all of us working in
4 organizations recognize that reality. So maybe we
5 could begin with those steps. But we certainly have
6 to begin with something because it's wasteful of your
7 time as well as ours to discuss the frustration of the
8 committee rather than the items about which we feel
9 frustrated. So is that acceptable?

10 CHAIRMAN CERQUEIRA: Those are legitimate
11 points and I think the minutes and the action items
12 again will identify -- and we've tried to limit what
13 we, you know, include, certainly for action items and
14 --

15 MR. MALMUD: We could get e-mails. If we
16 have a meeting now and the question could be answered
17 next month and the e-mail comes to us indicating this
18 is the response, then it would make -- it should make
19 life a lot more compatible with the committee and the
20 staff and we'll build on that. I don't think we could
21 expect an overnight change. It's difficult to do that
22 overnight, but let's start out with a few steps.
23 Dave, how do you feel about it? A good beginning?

24 DR. DIAMOND: It's a nice beginning.

25 MR. MALMUD: And we'll build on it. We'll

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1 build on it as quickly as we can.

2 CHAIRMAN CERQUEIRA: That's a good
3 approach. Ruth?

4 MS. McBURNEY: I don't want us to be
5 perceived as trying to micro-manage the staff of the
6 Nuclear Regulatory Commission. That is not our job.
7 Our job is to advise on technical and on issues that
8 deal with regulating the use of byproduct material for
9 medical use. And beyond that, I don't want us to get
10 into the minutiae of the role of the staff of the
11 Nuclear Regulatory Commission.

12 CHAIRMAN CERQUEIRA: That's a good point
13 and Ralph, did you have a comment?

14 MR. LIETO: Yeah, I think that, you know,
15 I don't disagree with any of the statements that have
16 been made before. I think having data by which to act
17 on I think is what we're asking for and maybe with the
18 data we realize this isn't an issue we should worry
19 about. Okay, let's not, you know -- you know, maybe
20 like that data base. Maybe the events are so few and
21 far between in comparison that it wouldn't need to be
22 a standing item on committees and so forth.

23 But I think what we're trying to find
24 right now is that we're sort of like in a vacuum and
25 we want to make some decisions and we want to make

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1 decisions as to do we need to get involved or should
2 we not be involved and that's what we're looking for
3 is the data to make those decisions.

4 And maybe like Dr. Malmud said is maybe
5 what we should do is come together with our -- you
6 know, what do we think we should be -- or what do we
7 want to be asking for and determine as a group is this
8 really the issues that we want to direct the staff to
9 do.

10 CHAIRMAN CERQUEIRA: Good points. Leon?

11 MR. MALMUD: In many ways we have three
12 constituencies. We have the patient first. We have
13 the public second. We have the health care workers
14 third. We seem to be in total agreement as to what is
15 best for the patient. We seem to be in total
16 agreement with respect to minimizing the risks of the
17 public. Where we wind up in a squeeze is when we go
18 back to the community that takes care of the patients,
19 they ask questions of us and they are sometimes
20 startled with the responses and that's not good for
21 the NRC. It's not good for the patient. It's not
22 good for the public and not good for us.

23 So we need to be able to respond to some
24 questions more definitively than we can presently
25 given the amount of -- given the timeliness of some of

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1 the information given. Is that a fair statement?

2 CHAIRMAN CERQUEIRA: Yes, I think that's
3 a very fair statement and, you know, again, I think
4 you set the priorities, I think, correctly, in terms
5 of what this committee has focused on. All right, any
6 other comments?

7 DR. VETTER: If we could get back to the
8 business of the agenda, I find it a little difficult
9 to deal with a call for agenda items that comes just
10 a couple weeks before the meeting and wonder if we
11 couldn't do something about that, try to get them out
12 earlier. And then if, in fact, we are here to serve
13 the NRC, which I think that's what we're here for,
14 perhaps a little stronger leadership from them in
15 terms of what should be on the agenda, what are they
16 looking for.

17 CHAIRMAN CERQUEIRA: Right, and to get the
18 material out. Some of these items today that you
19 wanted input on, I mean, it was hard for us to see the
20 issue for the first time, to realize how our -- you
21 know, the people we represent, you know, what
22 approaches they take towards it, so whatever you can
23 get out ahead of time, it will give us more time to be
24 familiar with the issues, to seek some input and so
25 that when we're here, rather than just complaining

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1 that we haven't seen this and we think it's important,
2 we could give you very specific information that I
3 think would help solve the issue.

4 DR. NAG: Well, one quick question, we
5 were talking about nuclear fatalities and ACMUI
6 presented something to the Radiation Oncology
7 Committee about a month ago that was wonderful. We
8 were talking about having that presentation here at
9 the ACMUI and it never happened and we are the ones
10 that are going to be on the line if, you know,
11 questions are asked. And I think in the next meeting,
12 we could have a one day and a half meeting, about an
13 hour or so would be devoted to having a speaker here
14 who knows about all the things that are happening at
15 the national level so that we would be kept informed
16 and we can ask questions and they can ask questions of
17 us.

18 CHAIRMAN CERQUEIRA: Is that -- again, the
19 presentation this morning that didn't happen I thought
20 was going to address some of those issues and is that
21 something we could reschedule for next time?

22 MR. ESSIG: We could. The presentation,
23 I think the one you're referring to is by -- was by
24 Lynn Silvious?

25 CHAIRMAN CERQUEIRA: Yes.

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1 MR. ESSIG: I don't know if that would
2 have scratched the itch because she was going to be
3 talking on something related to security matters, but
4 it was primarily adapted from a presentation she made
5 to the staff on appropriately handling the information
6 that has a certain classification level to it. And so
7 --

8 CHAIRMAN CERQUEIRA: Yeah, that's --

9 MR. ESSIG: -- that's security. She
10 would not be the right person for that.

11 DR. NAG: No, we're are talking about the
12 team and you know, someone from Oak Ridge gave a
13 wonderful presentation to the radiation oncology
14 community and that really helped because there were
15 many things that we didn't know ourselves. You know,
16 what are the immediate things to be taken care of, at
17 what point, you know, do you have to clear the area
18 and so forth. What are the major signals, what are
19 the things you could look for, so basically a medical
20 emergency that would occur.

21 MR. ESSIG: Yeah, if I could just add, I
22 think what I mentioned this morning about some time
23 prior to the meeting having a conference call where we
24 clarified the agenda items and so that there aren't --
25 we know exactly what your expectations are in terms of

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1 well, I'd like to hear from the staff on item X. We
2 have an idea what the scope of the item is and what --
3 any sub-issues associated with that so that we could
4 adequately prepare -- make the right preparations for
5 our presentation and I mean, we don't want to -- as
6 Fred was pointing out, we have a certain amount of
7 budgeted resources for this activity and we certainly
8 don't want to squander them by preparing some material
9 that isn't of value to the committee and doesn't
10 clarify issues.

11 CHAIRMAN CERQUEIRA: Well, again the value
12 -- it's more of value to you.

13 MR. ESSIG: Agreed, but it's -- in many
14 respects, it's mutual. Yes, Jeff?

15 DR. WILLIAMSON: A specific suggestion
16 what we could put on a future agenda would be what
17 Susan Frant was talking about, did she call them
18 provisional or interim security measures? Do you
19 remember, Ralph?

20 MR. ESSIG: They are interim compensatory
21 measures.

22 DR. WILLIAMSON: Yes, interim compensatory
23 measures and I understand some will be on the drawing
24 board soon for medical use of radiation. I'm
25 wondering if the ACMUI could be involved in that

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1 discussion and have an opportunity to give our
2 feedback if only in a closed meeting, perhaps, because
3 of the secure nature of it.

4 MR. ESSIG: It would certainly have to be
5 done in a closed meeting --

6 DR. WILLIAMSON: And the classified nature
7 of the material but I think it would be -- again, we
8 could offer I think a benefit and service to you in
9 trying to discuss from our perspective difficulties
10 for -- that your proposals might have for continuing
11 with taking care of patients as well as ideas we might
12 have specifically for how to improve security.

13 MR. ESSIG: Well, in fact, that may be an
14 issue that because of timing, again, maybe if we don't
15 discuss it until next April, the possibility is that
16 that may be too late to provide any reasonable
17 feedback and that's where a subcommittee might be of
18 some value.

19 DR. WILLIAMSON: Then I think it would be
20 -- it's a very important issue. I would suggest we
21 consider having a small sub-group that could present
22 some advice or feedback on behalf of the entire
23 committee.

24 CHAIRMAN CERQUEIRA: Would that be helpful
25 to the -- yes. Maybe we could do that? We probably

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1 should break now because some people have flights and
2 things.

3 MS. HOBSON: Can I just say one more
4 thing?

5 CHAIRMAN CERQUEIRA: Sure.

6 MS. HOBSON: And this isn't anything that
7 you can kind of formalize, but you know, I would
8 personally be very appreciative if the NRC staff would
9 just keep us in mind when something is going on and
10 I'll give you a good for instance. I mean, we didn't
11 know to ask about the new nuclear materials program,
12 the National Nuclear Materials Program, until we heard
13 about it accidentally. I mean, we were never brought
14 into that process until it was well down the road and
15 I know a few of us would have probably appreciated at
16 least knowing that that was going on and you know, so
17 that we're not, you know, blind sighted by things that
18 come down the pipe.

19 CHAIRMAN CERQUEIRA: Yeah, I think the
20 staff has to sort of appreciate our position that
21 we're representing a community that has a lot of
22 questions and many times, you know, they ask us
23 questions about things that we should have some
24 knowledge about and we find out that things have been
25 going on and we don't know them, you know, don't have

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1 enough information. So it would be useful to sort of
2 keep us updated on some of these things because they
3 do impact on the people we represent and sometimes I
4 think we're embarrassed by not having information.

5 All right, well, I'd like to thank
6 everybody for taking time out of their busy schedules
7 and coming here and I'd like to thank the staff.
8 We've been critical, we're trying to help and if it
9 didn't seem that way, I do apologize, but we are
10 trying to make the process work. Yes, Jeff, last
11 word?

12 DR. WILLIAMSON: Yes, I'm sorry. Is
13 someone going to follow up on the appointment of a
14 sub-group to deal with the security measures?

15 MR. BROWN: Let me just say, that issue
16 has a life of its own driven by the Commission in a
17 different office to whom ACMUI is not an issue. And
18 what I would suggest we do is when the process matures
19 to the point that there is something to talk about
20 that we contact Dr. Cerqueira and have him put
21 together a subcommittee because otherwise you're going
22 to be frustrated if you set a time line and it's not
23 based on anything substantive.

24 MR. ESSIG: Because our office of nuclear
25 security and instant response is the lead and we're

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1 support.

2 DR. WILLIAMSON: I just wanted to make
3 sure that the ball was in some identified court and
4 the owners of the court take responsibility. I'm
5 hearing you say you'll take responsibility for
6 contacting the ACMUI when the time comes.

7 MR. ESSIG: At the right time, yes.

8 CHAIRMAN CERQUEIRA: Thank you.

9 (Whereupon, at 5:09 p.m. the above
10 entitled matter concluded.)
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