

**Official Transcript of Proceedings**  
**NUCLEAR REGULATORY COMMISSION**

Title: 1996 All Agreement States Meeting

Docket Number: (not applicable)

Location: Rockville, Maryland

Date: Wednesday, September 18, 1996

Work Order No.: NRC-847

Pages 245-390

230016

NEAL R. GROSS AND CO., INC.  
Court Reporters and Transcribers  
1323 Rhode Island Avenue, N.W.  
Washington, D.C. 20005  
(202) 234-4433

NA 1/24/97

9610100259

Delete: File Center  
OSP

0/1

ORIGINAL

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

+ + + + +

1996 ALL AGREEMENT STATES MEETING

+ + + + +

WEDNESDAY,

SEPTEMBER 18, 1996

+ + + + +

ROCKVILLE, MARYLAND

+ + + + +

The meeting came to order in the auditorium at  
Two White Flint North, Rockville Pike, Rockville,  
Maryland, at 8:00 a.m., F.X. Cameron, Facilitator,  
presiding.

PRESENT:

F.X. CAMERON, Facilitator

AUBREY GODWIN

KIRKSEY WHATLEY

BERNARD BEVILL

ED BAILEY

VICKI JEFFS

WILLIAM PASSETTI

THOMAS HILL

PAUL EASTVOLD

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

## 1 ALSO PRESENT:

2 DON FLATER  
3 VIC COOPER  
4 WILLIAM SPELL  
5 ROBERT SCHELL  
6 ROLAND FLETCHER  
7 ROBERT HALLISEY  
8 ROBERT GOFF  
9 BRIAN HEARTY  
10 STANLEY MARSHALL  
11 DIANE TEFFT  
12 WILLIAM FLOYD  
13 GENE MISKIN  
14 PAUL MERGES  
15 STEVEN GAVITT  
16 RITA ALDRICH  
17 MICHAEL BRODERICK  
18 AARON PADGETT  
19 KENNETH WANGLER  
20 ROGER SUPPES  
21 RAY PARIS  
22 STUART LEVIN  
23 MARIE STOECKEL  
24 MAX BATAVIA  
25 HENRY PORTER

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 ALSO PRESENT: (CONTINUED)

2 EDWARD NANNEY

3 RICHARD RATLIFF

4 ALICE ROGERS

5 WILLIAM SINCLAIR

6 JOHN ERICKSON

7 WILLIAM HUTCHISON

8 ROBERT QUILLIN

9 PAUL LOHAUS

10 RICHARD BANGART

11 PATRICIA HOLAHAN

12 LARRY CAMPER

13 FRANK CONGEL

14 MELCOLM KNAPP

15 RICHARD BANGART

16 NICK COSTANZI

17 DENNIS SOLLENBERGER

18 KATHY ALLEN

19 KATHY SCHNEIDER

20 JOHN RICCI

21 JAMES MEYERS

22 LEWIS CLAYMAN

23 HUGH THOMPSON

24 TRISH HOLAHAN

25 CHERYL TROTTIER

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701



1 ALSO PRESENT: (CONTINUED)

2 WILL HUTCHINSON

3 TOM HILL

4 MIKE WEBER

5 FRANK CARDILE

6 WILLIAM OLMSTEAD

7 STEVE COLLINS

8 CARL PAPERIELLO

9 TOM ANTUSH

10 FRED CONKLIN

11 CRAIG GORDON

12 BILL HEHL

13 CARDELIA MAUPIN

14 ROBERT KULIKOWSKI

15 BRUCE SZANAS

16

17

18

19

20

21

22

23

24

25

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

## I N D E X

	<u>AGENDA ITEM</u>	<u>PAGE</u>
1		
2		
3	NMSS Perspectives by Chip Paperiello	6
4	Incident Response Issues	28
5	Frank Congel, AEOD	
6	Tom Antush, FEMA	
7	Craig Conklin, EPA	
8	Lessons Learned from Recent Events	
9	Two Cases of SNM Internal Uptake-Ed Bailey	57
10	Irradiators in Secondary Schools-Craig Gordon	77
11	Break for Tours	
12	Adequacy and Compatibility Working Group	
13	Cardelia Maupin	93
14	Robert Kulikowski	99
15	Aubrey Godwin	107
16	Agreement State Flexibility to Adopt NRC Requirements	
17	in a Form Other Than Rules	
18	William Olmstead, OGC	376
19	Meeting Adjourned	
20		
21		
22		
23		
24		
25		

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS  
 1323 RHODE ISLAND AVE., N.W.  
 WASHINGTON, D.C. 20005-3701

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

(8:14 a.m.)

MR. CAMERON: I hope everybody had a good night last night and that certainly was a good reception. We are going to try to reschedule the tours, the one tour that I guess did not go this morning, and we'll have some announcements about that later on.

But let's get to our first session today. I'd like to introduce Dr. Carl Paperiello. He's the office director of Office of Nuclear Material Safety and Safeguards. He's going to talk about NMSS perspectives.

Carl, do you want to sit or do you want to stand? Okay, good.

DR. PAPERIELLO: Good morning. A quick question. How many here in your organization are involved in downsizing? Enough. Not everybody, but enough. Well, anyway, in this Agency in the federal government, it's a fact of life. It's a fact of life that I have to live with, and I think some of you have to live with, and maybe more of you may have to live with over the next several years.

The responsibilities in my Office of Nuclear Material Safety and Safeguards right now are both increasing and changing. Yesterday, we issued a press release. A Federal Register notice will appear on

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 Thursday and I have issued a director's decision that the  
2 gaseous diffusion plants are certifiable. Unless somebody  
3 appeals within 15 days, and the petitioning process is  
4 narrowly restricted to people who have already commented.  
5 By early in October, I will sign the certificates  
6 certifying the safety of the gaseous diffusion plants.  
7 And then on March 3rd, responsibility for regulating the  
8 gaseous diffusion plants will pass from DOE to the NRC.  
9 That's a major activity.

10           There's been a major expansion, if you read  
11 the press, at least in my side of the house, an area of  
12 high level waste in the use of dry cast storage. Because  
13 of problems in that area, the number of inspectors that  
14 are inspecting dry cast storage in NMSS -- that's not  
15 counting the reactor side. This is me inspecting vendors  
16 -- has gone from three to 12 in the last two years.  
17 Obviously, there's great uncertainty over the fate of  
18 Yucca Mountain. You know, it goes from everything that  
19 we're going to put the thing on the back shelf and it will  
20 be done in the year 2100, and we're going to have interim  
21 storage somewhere -- central, to central, at site, you  
22 know, all over the place. Two, you're going to do it  
23 you're going to license it in 18 months. So, anything  
24 could happen there.

25           Decommissioning is a growth area and there's

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

(202) 234-4433

1 clearly, potentially significant regulatory activities  
2 with respect to DOE. In fact, yesterday afternoon, I met  
3 with DOE over doing licensing work at Savannah River. I  
4 know I'm going to be licensing an interim storage facility  
5 for TMI fuel at Idaho Falls. That is mandated by the, I  
6 think, Waste Policy Act of 1992, one of them. I've been  
7 approached by DOE on all kinds of licensing work. In this  
8 year's budget, we'll be getting \$3 million from Congress  
9 to begin the process to regulate and license the  
10 vitrification of waste at Hanford. So, things are  
11 changing; things are increasing and we're in a period of  
12 downsizing.

13 About one-third of the resources in this  
14 office, both in headquarters and the field, are involved  
15 in responsibilities that we both share. That is, the  
16 materials program. Let's take a look over the next five  
17 to ten years, which I've given a lot of thought about.  
18 I'm looking at long-term that there will be 35 agreement  
19 states. You know, obviously, there's 29 right now with  
20 the 30th coming along, and a couple of other people who  
21 have announced and making progress. This will leave the  
22 NRC with roughly 3,500 licenses spread from the Arctic  
23 Circle to the Caribbean Sea and from the Atlantic to the  
24 Pacific Ocean. Currently, we have 6,500. The fee burden  
25 alone would require me to cut the program resources

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 proportionately.

2 Additional responsibilities in other areas  
3 makes the materials program an attractive source for staff  
4 and other resources, just the fact of the matter.  
5 Therefore, I'm making the current scenario that we're  
6 going to have half the number of licensees and maybe only  
7 one-third of the current resources five to ten years out.  
8 Money is shrinking faster than staff. So, it's not like,  
9 "well, pay somebody to do something that you do." I can't  
10 do that because the money is going away even faster than  
11 the staff.

12 Then there's an overhead question. The number  
13 of rules, licensing guides and inspection procedures  
14 depends only slightly on the number of licensees. So,  
15 that's to me a problem that I need to face over the next  
16 five to ten years.

17 What's the current problems? Many of you know  
18 about them. Many of you are involved in various efforts  
19 to solve some of these. We know we have problems  
20 generally with license gauges and their melting and the  
21 like. We have problems in the medical area. How much do  
22 we regulate? Even if changes in the technology -- even if  
23 the current depth of effort would continue, we have to  
24 change our medical regulation because of new modalities  
25 that are not reflected in the regulations and are likely

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 to continue to change.

2 Part 33, broad scope rule. We have Commission  
3 go-ahead to revise it. We want to beef up the  
4 responsibilities and the authority of the radiation safety  
5 officer and the Radiation Safety Committee. Actually,  
6 what I'm looking for is put more of the burden on the  
7 licensees. You have it. You run it. In turn, I'm going  
8 to let you change some of your procedures and the like and  
9 I'm not going to get involved with license amendment  
10 process.

11 With the reduction of radiation protection  
12 standard to 100 millirem a year -- and which, for  
13 everybody's information, the EPA plans on parsing that.  
14 They want each source limited to something like 15 or 20  
15 millirem a year. So, when they talk about decommissioning  
16 to 15 millirem a year, that's because to keep a person  
17 from getting 100, we're going to assume they live in a  
18 place that's been decommissioned and they work in a place  
19 where there's a friendly MD. Therefore, if the EPA would  
20 have their way, I think they would wind up shielding all  
21 your X-ray installations to about 15 to 20 millirem a  
22 year. I'm not saying that's going to happen. I'm just  
23 saying that if their philosophy were implemented -- but  
24 the fact of the matter is, radiation protection standards  
25 have ramped down from the 500 millirem a year to 100.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1           Many of our current requirements and  
2 generally, license gauges and devices are one of them,  
3 don't fit. They were written in another era. If you turn  
4 around and take a look at the dose design requirements in  
5 the current Part 32, you'd never get that through now. I  
6 mean, that's a fact. They were written in a different  
7 era. Part 40, unimportant and small quantities get you  
8 into trouble even at 500 millirem a year. And yet, if I  
9 turn around and lower the 500 part-per-million threshold  
10 for licensing of source material, I rapidly get into a  
11 diffused norm very fast. I mean, we all know that. I  
12 mean, we're HPs. We know what the hell is going on out  
13 there. But then, we turn around and say, "okay, we'll  
14 take off our scientist hat and move into the legal arena",  
15 and you can see, you get into a lot of trouble very fast.

16           Guidance documents: licensing guides and  
17 regulatory guides I have are out of date. That's a fact  
18 of the matter. I knew they were out of date when I came  
19 here and there's never been resources within the Agency to  
20 revise them. They always had the lowest -- you know, that  
21 went on the bottom. So, how do we solve the problem?

22           I don't have an answer. Or let me put it this  
23 way. I think I have an answer, but because of the  
24 Commission's strategic assessment which covers a lot of  
25 the areas, I'm not going to lay money out on the table.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 Although, in fact, I have provided input to the Commission  
2 on this. In the strategic assessment papers that deals  
3 with materials and interactions with the agreement state,  
4 I feel that I've heard input on the thing. But what I'm  
5 going to do is define potentials to solve the problem.

6 One, most uses of radioactive material are  
7 routine. Now, 40 years ago, nuclear might have been  
8 magic, but today it's textbook, for the most part. There  
9 are large numbers of highly skilled users and professional  
10 organizations involved in the uses. Medical, we have the  
11 American Association of Physicists in Medicine. They have  
12 large numbers of standards on how to do things. For a  
13 long time we've had the NCRP. We have the Health Physics  
14 Society. We have ANSI Committees. We have the American  
15 Nuclear Society standards. We need to make the greatest  
16 possible use of their knowledge and skills. Relying on  
17 consensus standards in place of our current regulatory  
18 guides, particularly for how to do things is clearly one's  
19 possible way to save on resources.

20 And what do I mean by how to do things? How  
21 to do surveys. How to do calibrations. How to install  
22 and test alarm systems. How to do bioassays. In my area,  
23 I have over 100 regulatory guides on criticality, or on  
24 fuel cycle. Things that you don't see, but things that I  
25 have to maintain, most of which were written prior to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 1975. Criticality controls for various types of systems.  
2 What do you do, emergency analysis for inadvertent  
3 criticality? Things that I have you may not have.  
4 Ventilating systems for all kinds of facilities: fuel  
5 facilities, material facilities. Unlike these, if I can  
6 get these regulatory guides replaced by suitable consensus  
7 standards, one, it certainly meets a current intent of  
8 Congress; and two, could save all of us a lot of  
9 resources.

10 Another area is the streamline regulations and  
11 licensing -- certainly, in licensing, it's an approach  
12 that I'm doing right now and to a lesser extent, when I  
13 get an opportunity, to do it on regulations -- to focus on  
14 performance standards and limit prescriptiveness to known  
15 risk. For example, when you take a look at radiography,  
16 we know where the problems are. There's a handful of  
17 problems. Portable gauges: we have put out for public  
18 comment, a revised licensing guide for portable gauge. It  
19 looks very different mechanically than any guide we have  
20 ever issued. It's full of visuals. It is a how-to-do-it  
21 for people who use portable gauges. I told the staff we  
22 need to emphasize two things. There's two bad things that  
23 go wrong with gauges: people lose them and people run  
24 over them. To get into long gory details on how you  
25 analyze your dosimetry badges when hardly anybody ever

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 gets an exposure from a gauge is a waste of your  
2 resources. Put your resources and put your effort where  
3 the problems are. The damn things get lost, and at the  
4 construction site, they get run over.

5 I think that's how we've got to work our  
6 regulations. Put the effort where the risks are. If  
7 you're going to have performance based or prescriptive  
8 requirements, make the prescriptive requirements where  
9 there's a risk. It will be prescriptive to survey a  
10 radiographic camera each time after it's used. It will be  
11 more performance based to do some of the other things. In  
12 other words, put the effort where there's risk.

13 We need to make more use of information  
14 technology and I do not necessarily mean that we always  
15 say, "well, we've got to use more computers." Yes,  
16 computers are part of information technology, but it's the  
17 whole system including the telecommunications. Some of  
18 you toured the BPR facility upstairs this morning. My  
19 goal there is to take a document, anything -- whether it's  
20 a rule or a licensing guide -- to at least in this Agency  
21 has taken a year to two years to develop and get out on  
22 the street and shrink that time, at least initially, to  
23 six months. In fact, that's what we did with this  
24 portable gauge guide. We started in June. It is now out  
25 on the street for public comment. We've had agreement

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 state participation in the development of that thing. But  
2 to shrink the time using the technology.

3           Then once we have all these documents on an  
4 electronic format, make revisions electronically. For  
5 example, one of the problems right now is you change a  
6 rule and all the references to that rule and all your  
7 guides are wrong. Hell, if you had the thing in the right  
8 computer format, all you do is put in, you know, one  
9 generic change instruction and it would change all the  
10 documents just like that.

11           Virtual workgroups. Virtual workgroups is a  
12 strong potential. We have tried it with mixed success.  
13 You have to learn how to work in a virtual workgroup.  
14 What does it mean? You're part of a team right in your  
15 office. You can with Groupware, you can be part of a team  
16 all working on the same document and it can be spread  
17 around the world. In fact, there was an article in the  
18 Washington Post earlier this week that medical  
19 transcriptions are being done overnight in India.  
20 Basically, you send the oral material to India by E-mail.  
21 Somebody types it up when it's day over there and people  
22 are asleep over here, and the following morning you get it  
23 all back. It doesn't make any difference.

24           In fact, I was kidding. I was on vacation in  
25 Europe two weeks before -- you know, just got back on

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 Sunday. I said I can't go on vacation in the United  
2 States anymore. Because when I go on vacation, I drag my  
3 laptop with me. When I go to the motel, plug it in, get  
4 into my office here and my computer, I might as well be  
5 here. I mean, some things don't really get a whole lot  
6 better for me. You know, I get relief when I can't  
7 possibly communicate well with this place. Anyway, I  
8 think that's a way of working and that way, you know, we  
9 can do things together.

10 And that gets me into my next issue, share  
11 responsibility for maintaining the overhead across the  
12 country. Frankly, the NRC, if we get the scenario that I  
13 paint, ten years from now there will be no way that the  
14 NRC can possibly maintain all the rules, all the licensing  
15 guides, and all the regulatory guides we now have for the  
16 entire country with one-third the staff we have now.  
17 That's just all there is to it. It can't be done.  
18 Somewhere, the work is going to have to spread around. I  
19 think it is possible to run a national program with  
20 individual states being the lead for a different piece.  
21 I'm not saying that's what we're going to do, but I'm  
22 saying that is a potential solution of the problem as I  
23 see it.

24 We would need standard formats. I mean, we  
25 would have to each give up part of ourselves and say,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 "well, in my organization, I like it this way." We  
2 wouldn't have to go with standard formats. We would need  
3 common software. Yes, and we'd have to fight the battles  
4 out and achieve consensus. But think about it, we do it  
5 with automobiles. You know, buried in your motor vehicle  
6 codes are probably rules on how good the brakes have to  
7 be, and how many lights you have to have, and where  
8 they're placed, and how bright they have to be. By and  
9 large, we have achieved a national standard so I can drive  
10 a car from here to California and with few minor  
11 exceptions on whether or not I can make a right turn on  
12 red or something like that, and a few differences in the  
13 way we post speed limits, the rules of the road and the  
14 rules for the automobile are the same and you can do it.  
15 My feeling is eventually, that is the point we're going to  
16 have.

17           And so, that is a goal toward which I'm  
18 working. The facilities we have in the BPR are being used  
19 for the current revisions, but I'm working on establishing  
20 an infrastructure, a set of tools, that could support such  
21 a national program.

22           Let's talk about the progress we've made to  
23 date, and I'm not talking within the context of BPR, but  
24 just, I think, things that we in the agreement states have  
25 worked together on that I think are going well.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



(8:30 a.m.)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

I think the working group on the general licensing has done a good job and that is moving forward. We've received permission from the Commission, as I mentioned earlier, to put out a AN Advanced Notice of Proposed Rulemaking for broadscope licensees. I will tell you, that has been in large part, plagiarized from the state of Illinois. The Materials Event Database, the information seems to be going into it and I think that's extremely important. I think we need to learn from the events that we have where the risks are.

I do believe that we're going to have to simplify our rules. One of the things that somebody came to me and told me a couple of months ago is we have taken a look at the NRC regulations and discussed them with the agreement states. We now have, you know, what belongs in Division 1 and Division 2, and you know, then the ones we don't care about. I asked, "why do we even have any rules on the book at all that we don't care whether the agreement states have them or not?" You know, that's what I mean by simplification. You know, get things down to the essence.

Anyway, that's all I have to say. I want to point out, I think it is important, as Ben Franklin once said, "we either hang together or we're all going to hang

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 separately." I think in this era where resources are  
2 shrinking, if we are going to get our job done, we are  
3 going to have to be working much more closely together  
4 than we ever have in the past on things that are really  
5 important, the real basic stuff.

6 I think we've pretty well got us back on  
7 schedule here.

8 Questions?

9 MR. CAMERON: Any questions for Carl?

10 That was a particularly thoughtful  
11 presentation, a number of provocative ideas.

12 Do we have questions or comments?

13 Richard?

14 MR. RATLIFF: Just one, Carl. On the gauges,  
15 you know, getting lost or run over. Those are not the  
16 problems. It's when they get smelted is where we run into  
17 problems.

18 DR. PAPERIELLO: Yes, I understand, but that's  
19 part of the loss. What I said, the two things that can  
20 happen is they get lost, whether they're stolen or they  
21 get run over. I mean, you know, the issues are -- should  
22 I have great elaborate procedures for making sure the  
23 person knows the biological effects of ionizing radiation  
24 when the reality is, they hardly ever get any dose at all.  
25 You know? I mean, where should we put the bang and

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 everything?

2 MR. CAMERON: Aaron?

3 MR. PADGETT: I think your comments are on  
4 target as far as they go. However, I think that as we're  
5 all aware, there are broader issues out there. For  
6 instance, you're focused just on those materials that the  
7 NRC licenses. To give you an example of what we're facing  
8 daily, let's take the standards that we all use in the  
9 area of liquid discharges from licensees. EPA has a  
10 generally applicable environmental standard out there  
11 that, in our state at least, the water quality division  
12 has used to develop specific discharge regulations. They  
13 now impose through the MPDES permit and the sewer  
14 authorities back to licensees. Which, in effect, since  
15 they're much more stringent than the regulations through  
16 Part 20 and our own similar regulations, in effect, make  
17 our regulations superfluous.

18 You can move on over to the air quality area  
19 and there, you have the EPA NESHAPS. Of course, EPA  
20 supposedly will rescind NESHAPS in some time in the  
21 future. But right now, the only thing that kept the air  
22 quality division in North Carolina from setting up  
23 expertise to regulate NESHAPS is because we entered into  
24 an agreement with and we will implement as quickly as that  
25 is delegated to the states. We will be the lead agency to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 regulate the airborne discharges to NESHAPS. And then, of  
2 course, you can go right on to the broader issues such as  
3 naturally occurring materials and things like this.

4 So, the issues are even broader is all I'm  
5 saying. They expand beyond what you covered. Everything  
6 you covered is on target but we also have other targets to  
7 look at and consider and plan for.

8 DR. PAPERIELLO: Yes, I recognize that.

9 MR. CAMERON: Any other questions or comments?

10 I did have one clarification that I would ask  
11 from the facilitator's point of view, Carl. One of the  
12 last ideas you mentioned was the idea of perhaps assigning  
13 responsibility to different states or different groups of  
14 states to take care of particular issues.

15 DR. PAPERIELLO: A particular area, right.

16 MR. CAMERON: And you also talked about the  
17 strategic assessment process. Has that particular idea  
18 been put into the strategic assessment process in terms of  
19 the materials --

20 DR. PAPERIELLO: Not quite. Not quite that  
21 way. But the paper I wrote, the observation, I commented  
22 to the Commission on a number of strategic assessment  
23 papers. I did play out the concepts of using computers  
24 and Groupware and having the states participate in the  
25 generation of rules. What I'm thinking of is, you know,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 one group of states take responsibility for the medical  
2 area. Now, when I say lead, I don't mean you do it and  
3 everybody else says, "okay, that's what we're going to  
4 do." I mean, it would have to be -- but that would be the  
5 lead of the coordination of a particular area.

6           Again, obviously, you know, the issue is the  
7 NRC pays for a number of things that the agreement states  
8 do and that burden is passed on to our licensees in fees.  
9 The question is, "is that fair?" I don't want to get into  
10 that argument. One of the proposals I'd say, "okay, we'll  
11 make quid pro quo. You'll pay your share of the expenses  
12 by helping write some rules." I mean, you know, the  
13 presentation I made to them was along that line.

14           The point is, you can do it a lot easier now  
15 than in the past where you'd have to turn around and we  
16 would have to transport a bunch of people to the same  
17 room. I mean, the fact of the matter is, we can all  
18 communicate and we can even do telecommunications over the  
19 Internet. I mean, you can see up in that BPR room -- in  
20 fact, I saw advertised in the paper this morning for  
21 \$150.00, a TV camera that's that big. You put it on your  
22 computer and you literally can do teleconferencing over  
23 the Internet with a PC and \$150.00 camera. You get the  
24 camera, the software, the microphone, all that kind of  
25 stuff from Computer City, \$150.00.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           So, there are things we can do. The  
2 technology is going to get -- and that's just today's  
3 technology. What are we going to have in five or ten  
4 years, you know? That's the thing. We can do this and we  
5 can do it out of our offices. I mean, one of these days,  
6 people are going to realize that for a lot of the things  
7 we do, we can do at home. We're going to save one hell of  
8 a lot of money on office buildings.

9           MR. CAMERON: Well, I think there's talk about  
10 having a separate agreement state session as part of a  
11 strategic assessment. I think the issue like that, it  
12 would be really worthwhile for agreement states to discuss  
13 that particular possibility. So, you may want to be aware  
14 of when that particular session is.

15          DR. PAPERIELLO: Yes.

16          MR. CAMERON: Anybody else from the states  
17 that have a comment or question for Dr. Paperiello?

18          DR. PAPERIELLO: Could I add one thing?

19           The one thing that's been in the back of my  
20 mind -- you know, I attend the conference meetings and I  
21 realize there's more states than agreement states. But  
22 think about a system run by the conference and it would  
23 cover all the rulemaking and guidance you people need to  
24 deal with. Not just, you know, by-product material but  
25 also, the -- and remember, it's a system. This stuff is

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 not outrageously expensive. The hardest part is the  
2 training and the conditioning of the people that work in  
3 that environment. I can tell you that. And the price is  
4 coming down. So, it's something that the conference could  
5 ultimately take over.

6 MR. CAMERON: Kathy Allen, state of Illinois,  
7 Commonwealth, whatever.

8 MS. ALLEN: This sounds really good, but some  
9 of our experiences with things like industrial radiography  
10 rules where they were developed by states and where really  
11 states supported those ideas, it didn't seem to fly when  
12 they got here. Do you see a way of changing the thought  
13 process here to accept work done by states? I mean, I've  
14 obviously seen it with the Part 33, but --

15 DR. PAPERIELLO: I understand it. No, I agree  
16 with you. I agree with you. That's why I said the people  
17 part of it is actually harder than the computer and the  
18 things like that.

19 I'll tell you, the other issue is, as a  
20 regulator, stopping all the practice of holding licensee  
21 hands.

22 MS. ALLEN: Are there other things we can do  
23 to facilitate that, to help change things?

24 DR. PAPERIELLO: Well, you know, you and your  
25 staffs interact with the Commission. I want to be careful

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 on this thing. I'm not trying to preempt the Commission's  
2 decision on how they want to work on strategic assessment.  
3 I'm not telling you anything I haven't told them by-and-  
4 large, and my thinking is evolving in this area. Clearly,  
5 the current -- you know, what happens is, every six months  
6 we change what you can do. I mean, six months ago, I  
7 didn't see this little camera for \$150.00 that I can put  
8 on my computer that I can run a teleconference over the  
9 Internet. I mean, you know, that adds another piece to  
10 the whole thing. You know, so God knows what we're going  
11 to have in five years from now.

12 MR. CAMERON: Ed Bailey?

13 MR. BAILEY: I like what you're saying.

14 There's only one minor point that we may be start doing  
15 differently. That is, we have a great emphasis right now  
16 in our state on making the permit process as simple as  
17 possible. The governor's initiative on what we call  
18 California Competes, trying to get back from getting  
19 plummeted over the last few years. We're actually looking  
20 at going out to a licensee or going out to an applicant  
21 and essentially completing the application for them, doing  
22 that kind of work. If they have a seal sourcing device  
23 that they want evaluated, going out to them and saying  
24 "here's what we want you to do."

25 DR. PAPERIELLO: Ed, visit the eighth floor.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 I'm serious. Look at the computer-aided review and  
2 application process that we have up there. It will do  
3 what you want to do, I think.

4           You know, we all have to come up with a good  
5 product. We've got to develop and go to our managers, you  
6 know, go to our political leaders and say, "hey, you know,  
7 it's a tradeoff." We all have to trade off our eggs in  
8 other words. That's part of the process. You know, we're  
9 going to give up something. We're not going to "well,  
10 this is the NRC way to do it or the state way to do it",  
11 or something like that. And say but the bottom line is,  
12 it improves trade.

13           Again, I use the car issue. The interesting  
14 thing, I was over in Central Europe and you talk about a  
15 zoo. You drive 100 miles and you've crossed another  
16 international border. And being on the tour bus, the  
17 wheels are somewhat greased, so it only took about two  
18 hours. But you have these long lines at the German-Polish  
19 border. Five miles and it takes 36 hours when it's good  
20 for a truck to get through the Polish-German border. And  
21 yet, what would we do in this United States? You know,  
22 the Constitution was written because of trade conflicts  
23 among the colonies, among the various states.

24           So, if we can come up with a good product, we  
25 go to our political leaders -- well, it may not win. I

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 mean, you know, we know the realities of all these things  
2 -- and say "hey, look, here's a way. It may not be the  
3 perfect way. But by doing this on a national basis, we  
4 can make it good for everybody." You know, maybe  
5 eventually, someday, we'll have licenses that can go from  
6 one state to the other. Hell, I showed up from Illinois,  
7 walked into the licensing office here for a card in  
8 Maryland. They looked at me. I showed them my ID, you  
9 know, my photograph on my Illinois license and showed them  
10 another picture ID, and they turned around. Five minutes  
11 later I walked out with a Maryland Driver's License.  
12 Maybe in an ideal day, we'll be able to get to that point,  
13 you know?

14 MR. CAMERON: Richard?

15 MR. RATLIFF: I think just one summary, I  
16 think, that we've brought to our staff is that change is  
17 inevitable, misery is optional.

18 DR. PAPERIELLO: That's right. No, I think  
19 you've put it very, very, very right. That's exactly what  
20 it comes down to.

21 MR. CAMERON: Thank you very much for that  
22 provocative presentation, Carl. We're all going to chip  
23 in for your next trip to Europe and get you one of those  
24 \$150.00 video conference things. But thank you.

25 DR. PAPERIELLO: Okay.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 (Applause.)

2 MR. CAMERON: Okay, our next presentation is  
3 going to be a panel discussion lead by Frank Congel from  
4 our Office of AEOD. I would ask Frank and his colleagues  
5 to come down here and we'll give them some room.

6 I'll just turn it over to Frank.

7 MR. CONGEL: Good morning. I'm Frank Congel.  
8 I've interacted with a number of you in the past. I see  
9 some familiar faces. I welcome you all here. As head of  
10 the Agency's Incident Response Division, we've had many  
11 opportunities to interact, hopefully, mostly in a very  
12 positive way.

13 Originally, it's scheduled on the agenda, a  
14 general discussion of what we thought would be principal  
15 topics of interest here. But over the past couple of  
16 weeks, at the discussions in Turley here, decided to spend  
17 a little bit of the time allotted me to talk about the  
18 FRERP. And in particular, how it is used to respond to  
19 events other than the ones that we drill for and practice  
20 the most for, namely those associated with nuclear power  
21 plants.

22 Joining me at the table today are two of my  
23 colleagues from other federal agencies that also have a  
24 principal role with the FRERP. We have Tom Antush from  
25 FEMA and Craig Conklin from EPA. They were kind enough to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 get up even earlier than they normally do to come out here  
2 and assist me with the discussion this morning.

3           What my intentions are today is just to do a  
4 quick overview again of what the FRERP is, and then spend  
5 some time discussing -- I clearly want feedback, but I  
6 guess I never had to say that to this group. I'd get it  
7 even if I -- seriously though, we do want some feedback.  
8 But what we'll do is an overview. Then we'll discuss a  
9 recent incident that involved some contaminated steel that  
10 was found in Arkansas.

11           But first of all, I'll just do an overview  
12 again. The FRERP, the FRERP as we love to phonetically  
13 pronounce acronyms -- some people when they hear them for  
14 the first time wait for you to say excuse me. This is one  
15 of those. But in any case, the FRERP or the FRERP, as we  
16 love it when they called it, is the plan that talks about  
17 the integrated approach that the federal government would  
18 have to any peacetime radiological emergency in the United  
19 States. It is not the plan that is used for anything that  
20 happens overseas or in other parts of North America  
21 including Canada and Mexico.

22           The intent, of course, of the plan is to  
23 prevent or minimize when you can't prevent, any of the  
24 consequences of a radiological accident. Now, that would  
25 be the impact both on the public or on the environment, or

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 both. It also is an advanced plan to describe the manner  
2 in which the federal agencies, the signers of this, would  
3 interact because each one of the agencies, of course, has  
4 a capability to bring to bear to respond to an accident.

5           What kind of responses you get, of course,  
6 would be dependent upon the incident and the emergency.  
7 I'll talk about whether something is an emergency or not  
8 in a few moments because that's really where the gray area  
9 is. The first and foremost thing is though that the level  
10 of federal response starts with a request from the state.  
11 The principal responsibility rests with the state. You  
12 get into the federal government's domain by requesting the  
13 assistance. How much assistance you get and the type, of  
14 course, is going to be dependent upon the kind of accident  
15 that takes place from a small spill all the way up to,  
16 perhaps, God forbid, a radiological emergency at a nuclear  
17 plant. It certainly would be dependent upon the location:  
18 rural area, isolated versus something in an urban area,  
19 and of course, how large an area is potentially affected.

20           Not included in the FRERP, or not a concept or  
21 an intent of the FRERP is to implement it requires some  
22 kind of a federal declaration of an emergency. That's not  
23 the case at all. All of the signers of the FRERP are  
24 there to respond. You make the request; the situation is  
25 evaluated and a response is provided. There are

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 escalating series of responses with, for example, Stafford  
2 Act Declarations, but that is not necessary for a prompt  
3 response to an emergency situation. Typically, cleanups  
4 after an accident are not regarded as an emergency. There  
5 are certain situations where it could be, but in general,  
6 that's not the case. It's not up to the states to even  
7 worry about what federal capabilities are available, or  
8 what federal agency would respond. Once you enter into a  
9 request to the federal government for support, the plan  
10 should be such that the appropriate capabilities of the  
11 respective federal agencies would be made available to  
12 you. Contrary to popular belief, the feds won't be there  
13 to take over the response to the accident. I say that  
14 only with a little tongue-in-cheek simply because there  
15 are situations where that kind of a concept may have been  
16 -- or something like that may have happened in the past.  
17 But the way the plan is written, the states still have the  
18 ultimate authority with the federal government providing  
19 the resources.

20           When it comes to non-emergency situations, the  
21 response and capabilities brought to bear by the federal  
22 government will be determined on a case-by-case basis.  
23 For example, whatever agency would be designated the lead  
24 federal agency down to the FRERP may not have anywhere  
25 near the same kind of a role if it's a non-emergency

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 situation. Again, it's case-by-case. Still, the most  
2 likely would be federal coordination necessary. But  
3 again, it wouldn't be within the context of responding to  
4 an actual emergency. The only thing is by virtue of a  
5 definition of non-emergency, we wouldn't expect a prompt  
6 or immediate response to be mustered.

7           How do you get involved? And I think most of  
8 you know that anyway. How do you get the feds involved to  
9 assist you in responding? Well, from the perspective of  
10 the NRC, what I'd like to make as an important point in  
11 this group is that the headquarters operations officers  
12 that are just in the building above us here are on duty 24  
13 hours-a-day, seven-days-a-week, every day of the year.  
14 Regardless of the location of the emergency, our strong,  
15 strong recommendation, encouragement is to call the OPS  
16 officer. The OPS officers are very well trained and very  
17 knowledgeable about how and who would be involved to  
18 respond to an emergency. They have capabilities to call  
19 virtually anyone and they know the people to whom you  
20 should be speaking. They will take care of it all. The  
21 phone number you probably all know. Even if you're in a  
22 phone booth and don't have the money, they take collect  
23 calls. Even though it's not an 800 number, it is a  
24 commercial number. But you call them and those people  
25 should get you rolling.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 In fact, in one of the situations we had,  
2 there were calls from the states for a particular response  
3 and you used your personal network. You people, like my  
4 people, like myself, are frequently out, frequently on  
5 travel, out and about. Although we have voice mail, we  
6 don't have very much secretarial coverage anymore.  
7 Getting a person to speak to can be difficult. Not the  
8 case with the OPS officer. They'll find the right person  
9 for you. So, I can only encourage that. In fact, we just  
10 had a couple of these handy cards that I keep in my wallet  
11 that talk about how this agency responds to an emergency  
12 and who to contact. We have just a couple of them. One  
13 of my colleagues brought down 800.

14 What I'd like to do is have you take a couple  
15 for yourself and for your staff people, look them over and  
16 keep them handy. But we do have, and I'm not kidding,  
17 eight packs, each with 100 cards in them. We have more  
18 than enough. If you want more, we'd even be happy to  
19 provide more. But I do keep them in my wallet myself and  
20 will --

21 Should we just distribute them or leave them  
22 at the back and you can pick up as many as you want?

23 MR. CAMERON: Pass them around.

24 MR. CONGEL: Pass them around, okay.

25 The most important thing though, call our OPS

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 officers and they'll get you rolling.

2           What I would like to do at this point is have  
3 my colleagues and I up here just give an overview of how  
4 we would respond, typically, to a non-emergency event.  
5 You've been to, most likely, lots of our training and  
6 conferences and things like that and how we respond, like  
7 I said, to emergencies I believe is a fairly well settled  
8 issue. The one that resulted in questions, very  
9 legitimate, very fundamental questions, was an incident  
10 that took place, oh, a couple of months ago. It involved  
11 the finding of contaminated steel at a scrap yard in  
12 Arkansas.

13           What was found is that some imported scrap  
14 metal had some radioactivity in it that resulted in a dose  
15 rate of like 3 mr per hour on contact. That, of course,  
16 raised a number of questions as to where the material came  
17 from, and what it was ultimately going to be used for.  
18 Had any of the material already been distributed? If so,  
19 in what form, and so on. From all indications on our  
20 part, it did not constitute an emergency like a loss  
21 source, or a source that fell off the back of a truck, or  
22 a potential release from a power plant. There were some  
23 phone calls made and the Arkansas Rad Control Office told  
24 our regional office about it. We, the NRC, contacted EPA  
25 Region 6.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1                   Would you like give an overview of it from  
2 here?

3                   MR. ANTUSH: Well, from our perspective, our  
4 Region 6 radiation protection manager worked with the  
5 Arkansas Radiation Control Office to determine what kind  
6 of response was needed. There was quite a bit of  
7 discussion between Bernie and our RPM. Our RPM and then  
8 calling myself at headquarters to talk about it. The  
9 concern, of course, was that this was -- I think it was  
10 depleted uranium type of device. We weren't quite sure  
11 what was in it. The device was under control. It was  
12 under lock and key when I got the call, so the item had  
13 been identified out of the scrap metal shipment and had  
14 already been isolated and such. Based on my discussion  
15 with the RPM, I said, "well, there doesn't seem to be an  
16 emergency existing because there's no real danger for  
17 over-exposing the general public." There wasn't, at that  
18 time, many loose contamination detected.

19                   So, at headquarters, we thought things were  
20 under control and there was not an emergency situation.  
21 That doesn't mean that assistance isn't needed on a  
22 technical basis or some other form. So, under the FRERP,  
23 I honestly did not think this was an emergency situation  
24 as defined by that document.

25                   In further workings with Bernie, DOE got

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 involved and tried to supply some information on some  
2 places that could take this device. Because if I remember  
3 right, DOE did not want to take it, or refused to take it,  
4 to their hot cells. The issue there was, was there  
5 anything inside of this device? I think it weighed about  
6 1,200 pounds and there was a concern that there might have  
7 been a source inside of it. They ended up calling several  
8 numbers that DOE provided and a lot of those did not work  
9 out -- or none of them worked out, I don't think. They  
10 ended up talking to the folks in Tennessee and identified  
11 Haki Incorporated. They ended up taking the device and  
12 opening it up and confirming that nothing was inside. To  
13 the last of my recollection, it's sitting there still  
14 awaiting disposition and final decisions on how it's going  
15 to be disposed of. But over all, we did not think it  
16 necessitated an emergency response under the FRERP.

17 MR. CONGEL: What I wanted to do is at least  
18 bring this up as an example. One of the issues that we  
19 discussed amongst ourselves, in particular, in preparing  
20 to talk with you is that there is not any clear definition  
21 of what constitutes an emergency versus what doesn't.  
22 When an issue is raised that's in this gray area. The  
23 response that you would get from the federal government  
24 would clearly vary depending upon the individual to whom  
25 you spoke, probably the status of budget negotiations at

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 the time, a whole range of potentially human responses  
2 versus things that may be written down procedurally.

3           What Tom was just mentioning to me is, I do  
4 think it's an area that requires more discussion,  
5 certainly at the federal level first. This issue is going  
6 to be brought up with the FRPCC, the Federal Radiological  
7 Protection Coordinating Committee, of which all of the  
8 FRERP signers are members. What I'd like to do in that  
9 case -- we've done all the talking -- is to get some  
10 reaction or feedback from you on this particular event  
11 because it did point out what disagreements are possible  
12 when an issue like this comes up.

13           We had an earlier event, I guess it was a  
14 couple of years ago, where there was a source found -- I  
15 believe it was in Illinois. That was the one that was a  
16 buried source, a hot source. As I recall it, there was a  
17 federal response that resulted in the source being removed  
18 by a DOE lab.

19           No? Okay.

20           MR. CAMERON: A clarification here from  
21 Illinois.

22           MR. EASTVOLD: We asked for federal  
23 assistance. There was none available. We took care of  
24 it. But the DOE did agree to accept the source.

25           MR. CONGEL: Okay. I don't want to put the

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 slightly different spin on it.

2 MR. EASTVOLD: No timely assistance available.

3 MR. CONGEL: No timely assistance, all right.

4 Was it over a weekend or a holiday or  
5 something?

6 MR. EASTVOLD: It was between Christmas and  
7 New Years.

8 MR. CONGEL: Right, right. I remember, right.

9 MR. EASTVOLD: And everybody was on vacation.  
10 They said "call us in a week. We'll be able to help you."

11 MR. CONGEL: Okay, all right. Very good  
12 example.

13 MR. CAMERON: Bernie, do you want to lead off  
14 on this one since we used you as the example?

15 MR. BEVILL: That's no problem.

16 I guess the emergency came from the fact that  
17 the New Course Steel Mill did not want the damn thing on  
18 their facility. They made it perfectly clear to the  
19 broker and then they also used their political influence  
20 during a dinner meeting with the President a couple of  
21 weeks later, and I think that put on some extra pressure  
22 on our federal friends here. In addition to that -- so,  
23 perhaps that was where the emergency was. Again, the  
24 Congressional delegations were involved. By the time I  
25 spoke with the Congressional staff, the device was

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 fortunately in Memphis.

2           Again, it's one of these things where nobody  
3 wanted the thing. Certainly, the steel mill -- it was in  
4 a secure place. Again, under normal circumstances with  
5 scrap metal that's generated in the United States, we have  
6 a mechanism under DOT exemptions, just load that baby up  
7 and within a half-day it's back in Missouri. But this was  
8 one of those oddballs. Nobody wanted it and DOE, to go  
9 the commercial route and we didn't find anybody easily  
10 that would take it on the commercial area to bring it in  
11 to let us open it up and look at it. We had sort of some  
12 Satan's rabbits in that we were seeing some U-235 peaks.  
13 Of course, the people that wanted to get rid of this said  
14 we've got some national security matters here. There was  
15 a lot of debate as to how much U-235 was really here.

16           And again, I'm a very patient person. I said,  
17 "we don't want it, but we'll wait and let the system work  
18 it out." However, the NUCOR people weren't as patient  
19 with the President, and some things got moving. But  
20 again, you know, it's something we'll just have to work  
21 out.

22           MR. CONGEL: Yes, well, Bernie referred to a  
23 communication to the federal government that is not listed  
24 in the FRERP. It's one of the ad hoc responses.

25           Yes?

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 PARTICIPANT: I think one of the initial  
2 things if I recall, Bernie, was that the container had  
3 been defaced. It had had some places -- to hide its  
4 identification. We, quite frankly, did not know what was  
5 on the inside of it. It was sort of like a bowling ball.  
6 We knew something may be in the center, but we didn't know  
7 what. We didn't know how to get to it. I don't think we  
8 were going to attempt to do that -- a lot of discussion of  
9 -- uranium, but what's there? That was a big puzzle as to  
10 where it came from and what it was? We did know what the  
11 potential was. We knew what -- problem --

12 MR. BEVILL: And Frank, we referred to this as  
13 a wedding cake. Again, as with many weddings, you're not  
14 quite certain what you're getting.

15 MR. CONGEL: At least over the long haul,  
16 right?

17 Well, I thought this was a good example. In  
18 fact, it's the one that we're going to use in talking in  
19 front of the whole committee. But as we can see,  
20 emergencies can also be in the eye of the beholder. I  
21 guess there's several different ways in which we could  
22 have approached this differently. Perhaps a recognition  
23 that with a world economy, there's probably a much higher  
24 probability now that we're going to be dealing with  
25 products or materials that aren't clearly domestic. I

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 just can see this growing in the future. In fact, in this  
2 case we had a country of origin. But when you have mixed  
3 products, or a product that is a result of several raw  
4 materials, I could see them coming from several different  
5 areas and resulting in an item that we have to deal with.

6 So, this is something that we're going to have  
7 to think more about. It also is a classic example of how  
8 quickly issues associated with radioactivity escalate in  
9 the public's eye. That's another thing that we have to  
10 keep in perspective. But in terms of freeing resources,  
11 be it a found source like Illinois between Christmas and  
12 New Years or the steel, you do have to do a truly accurate  
13 technical assessment as to what the immediate problem is.  
14 That steel had probably been there for some period of time  
15 and the source that was buried had been there for I don't  
16 know how long. It was some extended period of time. It  
17 doesn't seem reasonable in those situations to muster  
18 resources quickly, planes flying people in. But in any  
19 case, on top of it all, if it happens to be a situation  
20 where the home state of the President at the time, it  
21 could very well get a little bit more attention.

22 MR. CAMERON: Okay, we have Don Flater and  
23 then Kathy Allen.

24 Don?

25 MR. FLATER: Yes, Frank, I'd like to get just

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 to the general points of it. I've got two general  
2 questions.

3 One, what happens if we feel we don't need  
4 your help, but you decide we really do need your help?  
5 Second, what do we do when this is all over? Who  
6 determines when it's done and we would like to go back to  
7 the normalcy of the state and get the feds to go back  
8 home? Who has the right to ask you to leave?

9 MR. CONGEL: Well, you know, we're like the  
10 gorilla that gets into the living room sometimes.

11 In all seriousness, the initiation of a  
12 request for assistance comes from the state. The ideal  
13 case is, if you want help you call. If you don't call,  
14 I'd like to say we won't come. As you also know though,  
15 the capability of the states to respond to different  
16 radiological events varies enormously, enormously. Some  
17 states have rather extensive capabilities, large staffs,  
18 and others don't. But the initial response is going to be  
19 determined by a call from the state to the feds for help.

20 In all candor, I could imagine a situation  
21 that Bernie just described that we could probably be --  
22 I'm just being completely up front. I certainly could  
23 imagine a call to me, or EPA getting a call that said such  
24 and such an incident is happening --

25 (Mr. Congel's beeper went off.)

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. CONGEL: This wasn't planned. Sorry.

2 Excuse me.

3 MR. ANTUSH: While they are responding, from  
4 the EPA perspective, I have told our Regional Radiation  
5 Program Managers that they should adhere to the wishes of  
6 the states. If the state requests assistance, provide it  
7 as they can. If they can't, if it gets beyond their  
8 bounds, call me at headquarters and then we'll coordinate  
9 other federal agencies or the labs. As far as  
10 demobilizing, if you will, if the states say they don't  
11 need help -- and they think things are well under control  
12 and they don't need EPA assistance, I've told the RPMs  
13 they should take that as a cue and get on back home. They  
14 should not be there any longer than the states desire them  
15 to be there.

16 Now, one thing that we do have on the other  
17 side of our house at EPA was our on-scene coordinators.  
18 Under the NCP, there can be responses to radioactive  
19 material. Now they respond differently than we do. They  
20 carry a lot more authority for contracts and for bringing  
21 resources to bare on situations. They have a different  
22 mentality. We call them, basically, cowboys. I think in  
23 Illinois, they might have showed up fairly quickly in that  
24 situation. I was told they were there, but that they were  
25 not asked to be there. So, depending on the situation,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 they can show up unannounced if they hear about something  
2 going on. And they do this typically with chemical and  
3 hazardous materials things. They will show up without  
4 being called and ask if they need assistance, or can  
5 provide assistance. So, there's two different sides.  
6 I've always told the folks that if the state doesn't want  
7 you there, you shouldn't be there.

8 MR. CAMERON: Thank you for that  
9 clarification.

10 Don, does that take care of your issues?

11 MR. FLATER: Well, Frank really didn't. He  
12 talked about the real world and not the political world.

13 MR. CONGEL: Well, I don't know what else I  
14 can say. That's why I started to say in all candor before  
15 I was interrupted by the page, I could certainly imagine a  
16 situation where we were asked some difficult questions at  
17 the federal level. But as far as I am concerned, our  
18 modus operandi is just as Craig, I think, articulated very  
19 well. We're there to provide help. The calls come in  
20 from the state. If they don't, we don't.

21 MR. FLATER: I guess to take it one step  
22 further, I would suggest -- and I don't know if it has  
23 ever been -- is that there be some practice done with this  
24 because we've had some problems relative to the reactor  
25 side of the house where some people didn't necessarily

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 know exactly what they were supposed to be doing. They  
2 were probably more of a detriment than they were a help.  
3 That, I think, has been straightened out though.

4 MR. CAMERON: Okay, Dick Bangart has one  
5 follow-up to this conversation.

6 MR. BANGART: I think there are two reactions  
7 on the part of either NRC or the federal government. One  
8 is formal assistance through FRERP. I think that's less  
9 likely to be a situation where the feds are going to say,  
10 "we think you need our help even though you think you  
11 don't." There's also a layer of interaction below that  
12 though and that occurs primarily between you and the NRC.  
13 If it's a significant event in your state, it gets NRC  
14 high level management attention.

15 In terms of communication, if not in some  
16 sense an oversight role, you will often see if you have a  
17 significant event that's ongoing that the NRC -- or  
18 specifically an NRC region is going to be discussing with  
19 you, "have you thought about the need for a DOE  
20 oversight?", for example. Or "would you like to have an  
21 NRC regional rep join your folks in helping to respond to  
22 the event?" Or "would you mind if an NRC at least came  
23 and observed so that we could facilitate communications  
24 and end up with some level of comfort inside NRC that the  
25 situation was being handled appropriately?"

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           And those kinds of situations do occur. They  
2 occurred in the Illinois situation. You guys had it well  
3 in hand. We had a Region III rep there. Jim Lynch was  
4 there. It happened in Texas. We had an NRC Region IV  
5 person or persons there. You didn't ask for them. And  
6 that's reality. We appreciate that there is that degree  
7 of cooperation because the pressures within our own agency  
8 about knowing what's going on get fairly intense at times,  
9 and it does help. So, we appreciate that.

10           MR. CAMERON: That's a good point.

11           Let's go to Kathy. Then we'll go to Bruce and  
12 then Aubrey.

13           Kathy?

14           MS. ALLEN: Just something to consider when  
15 you're looking at your definition of an emergency. One of  
16 our latest incidents happened on the Fourth of July  
17 weekend where there was a train derailment. Not much  
18 radiological emergency, but there was a very big emergency  
19 from a commerce point of view. They needed to tear up  
20 those tracks and re-lay those tracks, so we needed to be  
21 there overnight to make sure that they cleaned up the  
22 site. So, from a radiological point of view, no  
23 emergency. But from a commerce point of view, a big  
24 emergency. I think you need to keep that in mind. Aside  
25 from the other politics involved, other commerce type --

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. CONGEL: In that particular case, I'd just  
2 ask, was there a request for federal assistance and it  
3 wasn't -- was there any difficulty or anything because I  
4 hadn't heard about that?

5 MS. ALLEN: No. I was just pointing that out  
6 as an example of something that could be construed as an  
7 emergency that wouldn't fall under your typical definition  
8 of an emergency.

9 MR. CONGEL: Okay, I appreciate that.

10 MR. CAMERON: Bruce?

11 MR. SZANAS: I just have a question for this  
12 panel. I notice they have people from EPA, FEMA and NRC.  
13 Was DOE invited to sit on this panel or were they -- I  
14 mean, because they play a big role in the response. Even  
15 if they're not the ones we call, they're usually the ones  
16 that come.

17 MR. CONGEL: Yes, absolutely.

18 MR. SZANAS: I wonder how that works? Were  
19 they invited?

20 MR. CONGEL: Yes, it was simply a logistics  
21 thing. Again, we made a decision to have a panel rather  
22 late in the formulation of this meeting. I screwed around  
23 until the last minute to get principals here to discuss  
24 with you the issues. I was fortunate to get EPA and FEMA  
25 to come. If I had had an opportunity and the time to get

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 someone from DOE, or even DOD, I would have done that as  
2 well. I think considering the time that I had to put this  
3 together, that this was enough to at least have a  
4 representation of the issues in our initial response to  
5 them. And also when we do have further discussions, these  
6 two fellows will be with me at the FRPCC to formulate the  
7 issue and come up with, hopefully, a better resolution  
8 than we have right now.

9 MR. CAMERON: Aubrey?

10 MR. GODWIN: Godwin, Arizona.

11 There's a couple of issues involved involving  
12 public information that gets related to these events. The  
13 first one we'll take is a non-reactor event. Typically  
14 when we call in to the NRC, I guess primarily, something  
15 called a PN gets generated and rather quickly, ends up on  
16 the Internet. Some of the information that we may be  
17 giving NRC is speculative in nature and may not be  
18 something we want to put in a press release. It's awfully  
19 embarrassing when the press starts calling you and asking  
20 questions about things that you were speculating on. You  
21 might want to consider how you handle putting PNs on the  
22 E-mail system or Internet system.

23 There's also a potential problem when you go  
24 to the reactors -- a very similar type thing that a lot of  
25 technical information related to an event may get into the

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 public arena even though it is speculative in nature. It  
2 would violate the idea of having a singular release point  
3 for public information which you usually go to around a  
4 late alert stages in site areas. You need to look at how  
5 you're going to make sure you have a singular release of  
6 information. I've had that reported to me. You know,  
7 that's just something you need to look at, how you're  
8 going to handle that.

9 MR. CONGEL: Okay. The only thing I wanted to  
10 say is, PNs are released to the public either in written  
11 form or we do use the Internet. Information though that's  
12 released in the form of a PN is public information and the  
13 problem -- the potential that you mentioned would exist  
14 regardless of whether it came out in written distribution  
15 form or published on the Internet. Of course, the issue  
16 with the Internet is its wide and easy availability. But  
17 hopefully, there's nothing that's released that way that  
18 would not have been -- or is not released via a normal  
19 mechanism with a piece of paper.

20 The issue of communication during an emergency  
21 is another procedure that we follow. In responding to an  
22 emergency and interacting with the states and their  
23 response, there is then one point of information to the  
24 general public and to the news media, a choke point. We  
25 certainly attempt to keep everything consistent and

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 controlled. So, there's two things but PNs are put out in  
2 the public.

3 MR. GODWIN: I understand that. Mostly, I'm  
4 telling the state to be aware of what's going to happen.

5 MR. CONGEL: Yes.

6 MR. GODWIN: You may get blind-sided. You  
7 didn't think -- discuss some issues in public and you may  
8 have.

9 MR. CONGEL: Well, the thing that we might do  
10 is -- I'm just thinking.

11 MR. GODWIN: And it says on the PN that this  
12 is preliminary.

13 MR. CONGEL: Yes.

14 MR. BANGART: Aubrey, the author of the PN  
15 should be calling you and reading it to you to make sure  
16 it accurately describes the situation as you understand at  
17 the time. I don't know if that's happening or not, but  
18 that's the guidance to our own people.

19 MR. CONGEL: Charlie knows.

20 Charlie?

21 Because the regions frequently put out the PN,  
22 right.

23 PARTICIPANT: Yes, when we get information  
24 from the state or from whatever source we get the  
25 information we usually discuss it. Well, if they call us,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 you know, we talk about it. If they call back -- call  
2 back. We do send them a copy of the PN but as Aubrey  
3 said, that's too late. I mean, I think that's good point.

4 MR. CAMERON: Is there an action item,  
5 anything we need to do, resulting from this discussion?

6 MR. CONGEL: I'll write it down myself. I  
7 hear the comment.

8 PARTICIPANT: But I don't know, generally,  
9 when we discuss it, we try to get information -- as it is  
10 --

11 MR. CAMERON: Ed? Ed Bailey?

12 MR. BAILEY: Yes, Ed Bailey from California.

13 We have sort of had the reverse situation  
14 occur on several occasions. The federal DEA calls us up  
15 in the middle of the night and says "we've just done a  
16 drug lab raid and we have some radioactive material here.  
17 Can you come get it?" So far, we have been able to  
18 respond to their request. The only problem, I'm thinking  
19 we probably won't do it anymore since we shipped out some  
20 of that stuff for about \$17,000. It turns out it's mixed  
21 waste. It's thorium nitrate, uranium nitrate, those kinds  
22 of things that are insignificant quantities.

23 Is that what they're called? Unimportant.  
24 Unimportant quantities of source material. But they do  
25 now go as mixed waste so you have a little greater

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 expense.

2 We did find a way though that EPA and FEMA  
3 will really help you with contamination problems. If you  
4 happen to have a disaster such as a flood, they send in a  
5 hazardous waste team to pick stuff up. We had some radium  
6 that a doctor had and it contaminated quite a bit of  
7 material and facilities. We got FEMA to pay for it. So,  
8 if you have a flood or an earthquake or something, take  
9 all your waste and throw it in --

10 MR. CAMERON: There's another helpful  
11 suggestion.

12 Before we get a couple more questions, I  
13 wanted to ask Frank for the states' information, you  
14 talked about the Coordinating Committee is going to get  
15 together to take a look at some of these lessons learned.  
16 Is there any way that the agreement states can have input  
17 to that process to help you in your deliberations?

18 MR. CONGEL: Well, there's two things. The  
19 information I gather here, along with my colleagues, is  
20 part of it. And when we come up with any recommendations  
21 -- when the committee comes up with recommendations, they  
22 are put out for comment.

23 MR. CAMERON: Then we'll make sure we get  
24 those to the agreement states.

25 Bill?

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. SPELL: Bill Spell, Louisiana.

2 First of all, I really never would have  
3 characterized Bernie as a name dropper, but I think --

4 I'd like to ask Dr. Congel what involvement  
5 the NRC would like to have, if any, in any emergency which  
6 involves non-agreement material if any of us have a  
7 potential, particularly in transportation? And do you  
8 want, or are you willing to assist in an emergency which  
9 might involve non-agreement materials?

10 MR. CONGEL: My general tendency to respond to  
11 those is always yes. I, personally, feel -- and I know  
12 that the agency perspective is consistent with mine that  
13 wherever we can be of help, positive assistance, we will  
14 provide it. We'll do whatever is within our capability.

15 We have, in this agency, been blessed in a way  
16 of not having, or not being held real tightly to  
17 justifying every expenditure in our budget like some  
18 agencies have had to do. We have a general charter when  
19 it comes, particularly to radioactive materials, to  
20 protect the public health and safety. That has been  
21 interpreted in a very literal sense.

22 So, the first answer that wherever we can  
23 provide assistance, you want it, you call. We'll do what  
24 we can. The assistance might even be in the form of  
25 communicating with our fellow agencies as well. Like we

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 mentioned, DOE certainly has, of all the agencies probably  
2 along with DOD, the most extensive equipment and number of  
3 people with large backgrounds. So, we would help  
4 directly, indirectly, or in both, yes.

5 MR. CAMERON: Okay, well thank you very much  
6 Frank, and our colleagues from FEMA and EPA. Thanks for  
7 putting that panel together for us.

8 MR. CONGEL: All right.

9 MR. CAMERON: Is there anybody else who has a  
10 question before we go on?

11 Okay, thanks Frank, Tom, Fred.

12 (Whereupon, off the record at 9:30 a.m., until  
13 9:31 a.m.)

14 MR. CONGEL: Actually, two things. Since Carl  
15 Paperiello generously took some of my time, I ran a little  
16 short. Also, I found the conversations interesting. We  
17 had hoped for just a half-an-hour with the panel and a  
18 half-an-hour for me to cover the other topics that we  
19 originally had scheduled. But what I wanted to do is just  
20 make two points, and then run off to respond to the page I  
21 got.

22 Incidentally, this is a classic what I call a  
23 political emergency. I got paged because the EDO wants to  
24 see me. When the EDO calls, no matter where you are, you  
25 go. So, I held them off for a few minutes.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           There's two things I'm going to have  
2 disseminated. The status of our state outreach training  
3 for this calendar year and the two sessions that are  
4 remaining before the end of the calendar year. If you  
5 have specific questions, Eric Weinstein is here. He's the  
6 guy in my group who is head of it. Also, some materials  
7 that were published this year that you may or may not be  
8 aware of. I'll distribute these. We'll make some copies.

9           Not only do we have RTM 96 that came out a  
10 couple of months ago, which hopefully most of you have,  
11 but we're now also printing -- it's at the printer right  
12 now -- a response coordination manual. It is a  
13 compilation of materials that Eric has used over the years  
14 in the training sessions with the states. I think it  
15 serves -- even though it's somewhat thick and may look a  
16 little imposing, but I believe it's an excellent reference  
17 to have to get a better appreciation of the manner in  
18 which responses are put together.

19           We also have the geographic information  
20 system. The formal distribution is supposed to be next  
21 month. That's the one that has, you know, all of the maps  
22 with overlay capability across a country.

23           The other question that's frequently asked is  
24 the status of the reevaluation of the potassium iodide  
25 policy. I wanted to give you just a quick update. I

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 don't have any bottom line. The process is continuing.  
2 But primarily, as a result of a petition that was given  
3 both to the NRC as well as to FEMA, there is a process  
4 underway that is relooking at the policy that was  
5 formulated in 1985. The parallel paths are going to FEMA  
6 and the NRC. FEMA handed over the issue to the FRPCC  
7 which, in turn, reinstated a subcommittee to look at the  
8 KI policy issue again. The subcommittee had a public  
9 meeting in June of this year and in just a week or so was  
10 in the process of formulating a draft position that will  
11 be delivered to the full committee. The expectation is  
12 that we'll have a full committee meeting sometime next  
13 month.

14           Within the NRC, we're in the process of  
15 preparing a paper to the Commission that would outline  
16 staff proposals and options for the Commission  
17 consideration and ultimate decision regarding the KI  
18 policy. I'm sure that all of you around here are probably  
19 painfully familiar with the issue. I say painfully  
20 because it's a very, very difficult one to deal with. It  
21 involves lots of difficult technical analyses, and it is  
22 subject to subjective and emotional evaluations as well.  
23 It's a fine line that one has to draw in trying to come up  
24 with an objective perspective regarding it.

25           But the most important thing is that I think

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 the issue is finally getting ripe. Certainly, by the end  
2 of the calendar year -- I hope I don't have to eat my  
3 words. I've done this enough times in the past where I  
4 say "momentarily, we'll be done with Part 20." I remember  
5 that. If I was Pinocchio, my nose would be two feet long.  
6 But I do expect some positions to be at least formulated  
7 and introduced to decision makers before the end of this  
8 calendar year.

9 MR. CAMERON: Okay, thank you, Frank.

10 We do have to move on, but does anybody have  
11 any questions, clarifications on either the training  
12 exercises materials or the potassium iodide?

13 MR. CONGEL: Thank you.

14 MR. CAMERON: Okay, thank you very much. Good  
15 luck with the EDO.

16 Okay, we have our next panel, Craig Gordon and  
17 Ed Bailey from the state of California. Craig is with  
18 Region 1 and they're going to talk about some lessons  
19 learned from past events.

20 MR. BAILEY: Good morning, everyone.

21 I'm going to talk about two companies in  
22 California where we have, in this year and the latter part  
23 of last year, discovered internal doses of transuranic  
24 materials. Quite frankly, there's some interesting things  
25 when we start looking at internal doses from transuranics.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           The first case I want to talk about occurred  
2 February 1st. This was a company who manufactures gauges.  
3 They, apparently, are doing quite well manufacturing  
4 gauges and they just moved to a brand new facility from an  
5 old facility that they had been in for several years. As  
6 part of the move and all in the new facility, they started  
7 cleaning out some old sources they had. They had six  
8 sources americium-241 oxide that had been in storage for  
9 many years. The sources were originally obtained in 1969  
10 from a French company. The origin of the sources was a  
11 little clouded in the company's mind. The present  
12 president of the company's father had gotten them somehow  
13 when he was president of the company. They were never  
14 licensed.

15           But he was cleaning out the thing and he said,  
16 "hey, we don't need these anymore." So, being a nice,  
17 good company man, he was going to leak test them before he  
18 shipped them out for waste. He opened up the container  
19 and saw a small little puff. Didn't think much about it.  
20 He took the wipe samples and walked about 200 feet across  
21 the entire new facility to the counting room. On counting  
22 it, he found out "yes, I've got a leaking source here."  
23 So, he took his gamma survey meter and started checking  
24 around the area and really, didn't find much of anything.  
25 Didn't think much about it. He put the sources back in

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 the pit.

2           The next day, they started handling the source  
3 container again. They wiped it and found yes, it was  
4 contaminated too. Then they wiped the table where they  
5 had been working and found it was contaminated too. They  
6 contacted their waste broker that they were packaging this  
7 for and he said, "well, you know, you probably ought to  
8 close that room off until you get an evaluation of it. By  
9 the way, have your employees wear shoe covers around so  
10 that if they pick up stuff, they won't track it around  
11 home and all."

12           That was on a Friday. Monday, they closed off  
13 the room and they found that the floor in the room was  
14 contaminated too. About 11:00 that Monday morning, they  
15 notified us that they had a leaking source. We didn't  
16 really think too much about it. We had heard of leaking  
17 sources before. They did hire a consultant though to come  
18 in and look at the contamination. He arrived that  
19 afternoon and confirmed that there was contamination.  
20 Then they started requiring all employees to wear shoe  
21 covers in the entire building. And this is one of the  
22 strange things. We don't know why they really did that,  
23 but throughout the building they were having them wear  
24 shoe covers.

25           On the eighth of February, they gave the

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 workers a day off. The reason they gave them a day off  
2 was that the consultant was going to come in and start  
3 decontamination. They also made arrangements for  
4 conducting urine bioassays on the employees that were  
5 immediately involved in it. The next day and for the next  
6 several days, decontamination continued. On February  
7 12th, they took urine samples on 14 additional employees.

8           They continued on the decontamination work --  
9 and this is one of the things, in looking back at the  
10 incident, we really wonder why we allowed this to go on.  
11 But the consultant that was coming in would come in and do  
12 a little bit of decontamination. For instance, he worked  
13 on February 12th, 13th, 15th and then skipped to the 20th,  
14 21st, 29th. Into March, he didn't come until the 5th of  
15 March and he was there for about three days, and they  
16 continued working. They finally decontaminated the  
17 majority of the facility, but the source room, the room  
18 where the source had been, was now closed off. On the  
19 13th of March, they started to decontaminate that.

20           It wasn't until the 13th of March that the  
21 urine results were obtained. This is another thing that  
22 if you have an incident, you need to make them pay the  
23 extra bucks to get quick turnaround time on urinalysis.  
24 It generally runs about 30 days if you don't get them to  
25 pay the extra money. One of these showed 8.8 picicuries

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 per liter of americium-241. We weren't really expecting  
2 this actually. We had said, "hey, everybody go and get a  
3 urinalysis done", but we really did not expect to see  
4 much. I mean, with other leaking sources, we've done it  
5 as a precautionary thing. We just didn't anticipate that  
6 we were really going to see anything.

7           Based on that, the consultant estimated a CEDE  
8 of 116 rem. That's a considerable dose, we felt. We also  
9 did some calculations and we came up with 160. So, we  
10 thought, "hey, that's pretty good." This is another thing  
11 that you'll see in this case and in the next one is how  
12 you come up with these doses is really -- it's an art.  
13 It's not a real science. I mean, one person will do it  
14 one way and another person will do it another way and you  
15 get slightly different answers. When this result  
16 occurred, we then called the bioassay company and got the  
17 results that there was another employee's urinalysis that  
18 came up with 9.32 picocuries per liter which would have  
19 come out to about 170 rem CEDE.

20           We contacted the US transuranic and uranium  
21 registries as a potential source of further evaluation of  
22 these two people. That was on the 15th of March. This  
23 is, you know, now 45 days after the actual event. The  
24 next morning, essentially, those people were put on a  
25 plane and flown to Richland, Washington. As a result of

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 the analysis there, the dose estimates were refined. The  
2 second individual was found not to have any americium. We  
3 suspect that there was contamination of the sample, of the  
4 sample collection container or something. We don't know  
5 what happened. But anyway, one of them was ruled out as  
6 not being contaminated. The other one came in with a dose  
7 of about 100 rem.

8           If you have transuranic cases, I would highly  
9 recommend that you get in touch with the registry because,  
10 among other things, all of the workups that are done are  
11 free if the individual becomes part of the registry.  
12 Becoming part of the registry means essentially, upon that  
13 individual's death, the registry gets pieces of bones and  
14 tissue and stuff sent back to them. This case was  
15 interesting to them because they did not have any real  
16 human data on americium oxide. It had all been in some  
17 other form. So, they were very interested in this  
18 particular case.

19           The individual, who happens to be the  
20 president of the company -- we think that's slightly  
21 fortunate from their financial perspective -- did enroll  
22 in the registry. He goes up about once-a-month for whole  
23 body counting and is now participating in that program  
24 fully. The real catch to this though, if they agree to  
25 volunteer to be in the program, they can always withdraw

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 at any time. So, it's sort of a win-win situation for  
2 anybody that's had an exposure, to sign up.

3 In looking at this, the site was finally  
4 cleaned up. The consultant presented his survey. We sent  
5 in our inspector and the inspector, of course, cheated and  
6 wiped the tops of the lights and the top of the partition,  
7 and guess what he found? He found some more americium.  
8 So, it took about another month before the place was  
9 finally cleaned up. The cost was over \$100,000 for the  
10 cleanup. The sources are still on hand. Once you get a  
11 contaminated americium source, it's real hard to get rid  
12 of it. At one point, we were looking at sending it to Oak  
13 Ridge for analysis. We were working with NRC on that.  
14 The decision was finally made that since these were not  
15 routinely used sources -- these were sort of prototype  
16 sources -- that it probably wouldn't be worth the expense  
17 to go ahead and find out why they failed. They were very  
18 old.

19 A couple of things have come out of it, and we  
20 have not gotten the final report from the licensee yet.  
21 It has made us wonder about the storage condition where  
22 you don't have to leak tests until you take something out  
23 of storage, and whether or not we should reconsider that  
24 and have a periodic leak testing of three years or  
25 something. The other thing that we looked at is perhaps

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 not allowing singly encapsulated sources to be placed in  
2 storage for extended periods of time. The americium  
3 source was a singly encapsulated source being used for its  
4 x-rays rather than, you know, a neutron source.

5           The other thing that the company came up with  
6 is, they sort of chastised us for not requiring them to  
7 have an alpha meter. It was sealed sources. They had  
8 never had any loose material. We had gone with what I  
9 imagine most people do, had required them to have a gamma  
10 survey meter and that's all they had ever needed. Had  
11 they had an alpha meter, they would have known that day  
12 that they had pretty extensive contamination. We probably  
13 could have short-circuited that whole thing. We were very  
14 slow to recognize and appreciate the extent, as was the  
15 licensee and the consultant. As a result, there was too  
16 much time between the incident and the recognition of the  
17 exposure to have keylation performed on the individual.

18           The next case I want to talk about is a  
19 company where in December and January -- December of last  
20 year and January of this year, we had an inspector go in  
21 to inspect the company. One of the things they did was  
22 look at the air sampling results. You know, these are  
23 things that every inspector is supposed to do every time  
24 they go to a facility that's handling loose material.  
25 This is a source manufacturing facility.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           The inspector that went, I would have to rank  
2 her as one of the best inspectors we've ever had and  
3 that's probably in no small part, due to the fact that she  
4 was trained by NRC. She's a former NRC inspector. She  
5 followed an inspector that was one of these people that  
6 "good people, good operation, no problems" type guy. You  
7 know, go in and find nothing and I'm sure all of you have  
8 somebody or have known somebody that's sort of like that.  
9 She went in and found 20-something violations in this  
10 facility that before had had one or two.

11           She looked at the air sampling results. Now,  
12 I don't know how many of you just offhand sort of  
13 intuitively know what an ALI is, or a DAC is when you see  
14 those numbers, you know, written down on an air sampling  
15 result. She looked at them and said, "there's something  
16 wrong here." She found a day back in May of '95 where air  
17 samplers in the room, in a source fabrication room, had  
18 117 DACs and another one had 50-something DACs. She said,  
19 "you know, I'll bet the employees that were in there  
20 inhaled a snootful of americium."

21           Sure enough, we finally got the employees in  
22 there and had urinalysis run on them. We found all kinds  
23 of things -- or they found all kinds of things. They  
24 found americium, as was expected. They found cesium.  
25 They found plutonium. They found curium. So, we began to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 wonder what was going on. So, we said "okay, we want you  
2 to pick some other employees in your facility and send  
3 them off." So, they sent off urinalysis on 14 other  
4 employees. Nine of those came back positive. And we're  
5 talking, in some cases, doses in the neighborhood of, you  
6 know, rems. This all occurred, basically, between  
7 February and May.

8 We started getting back all the urinalysis and  
9 it suddenly dawned us that when you start interpreting  
10 urinalysis data, it's very important when the exposure  
11 occurred. You get orders of magnitude difference in the  
12 doses depending upon when you assume the exposure  
13 occurred, or if you assume that it was not a one-time  
14 event but it was a result of low-level contamination or  
15 low-level air levels. So, we had, looking at the 14  
16 urinalysis that were sent in, nine people that had  
17 positive results and their doses varied considerably from,  
18 you know, almost insignificant to overexposures. So, we  
19 decided that we really didn't understand enough about  
20 this. We got their consultant released from working for  
21 them and he came to work for us.

22 We were befuddled enough about this that we  
23 actually had a meeting. We got the consultant to come  
24 down to Los Angeles and we met with the Los Angeles County  
25 people who had done the inspection. We started looking at

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 all of the bioassay results. This is essentially the  
2 sheets and the dates and the different doses for the  
3 employees. Well, we were trying to figure out what was  
4 really going on. We knew at two or three incidents that  
5 had occurred that we found in the RSO's book -- his  
6 notebook like Bernie has there -- that he did not consider  
7 official part of the company's records. He kept  
8 repeating, "these are not company records. These are not  
9 company records." But there were two or three incidents  
10 where sources had either ruptured or material had been  
11 spilled or so forth, that he had recorded in his book.

12 We had this meeting in LA on the 15th of July.  
13 It was a Monday. We spent all day discussing, looking at  
14 these numbers, trying to figure out did we have  
15 overexposures or didn't we have overexposures on each of  
16 these employees. Well, as a result of that and our  
17 conversations, we decided that these people needed to be  
18 shut down. So, we flew back to Sacramento and started  
19 drafting an emergency order.

20 Unfortunately -- that was Monday -- July 16th,  
21 the next morning, they were fabricating a 25 millicurie  
22 americium source for Oak Ridge and the source popped, as  
23 they said. There were three people standing there  
24 watching it. They took it out of the welder and made some  
25 measurements. The highest measurements they found were

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 700,000 d per m alpha per 100 square centimeter. The  
2 individual who had been standing right at the welder was  
3 sent the next morning to Hanford for whole body counting.  
4 He came back with about 1.5 ALIs. The two other employees  
5 were sent the following day. Interesting enough, all of  
6 them showed up with americium and all of them except one  
7 showed up with cesium-137 which, in some cases, they had  
8 not worked with.

9 Well, the accident on the 16th spurred us on a  
10 little and gave greater emphasis to getting something  
11 done, you know. And here we are, again, we're feeling  
12 really bad because we should have stayed there Monday  
13 night, written the emergency order, and delivered it to  
14 them Monday night or bright and early Tuesday morning.  
15 This incident wouldn't have occurred if we had shut them  
16 down on Monday like we decided we were going to do.  
17 Anyway, on the 17th, we issued an emergency order.

18 We ordered them to cease and desist all  
19 activities involving the use of transuranic materials  
20 except safe storage. We ordered them to transfer all the  
21 materials to safe and secure storage. They were to  
22 provide in vivo analysis and other analytical and medical  
23 follow-up to the three employees that had been right at  
24 the welder. Then we ordered them to conduct bioassays on  
25 all workers who entered that room or were near that room.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 We knew of one individual who had been standing at the  
2 door to the room so we wanted that person counted. We  
3 prohibited them from receiving any additional transuranic  
4 material.

5 We prohibited them from doing decontamination  
6 of the lab. Now, this was an interesting thing. We  
7 debated this one probably longer than anything else. What  
8 do we tell them to do with that lab? Do we tell them to  
9 seal it off? Which meant they might have to go back into  
10 it and we didn't feel real confident of their ability to  
11 do that. But we finally told them that they were to seal  
12 the lab off and before they did any decontamination, that  
13 they had to present us with a recovery plan. This really  
14 took them quite a while to develop. We were quite  
15 surprised.

16 We also asked that they provide an accurate  
17 and complete inventory of all radioactive material in  
18 possession. During the inspection, the inspector had  
19 noted that there wasn't a real accurate inventory. For  
20 instance, they claimed according to their inventory -- I  
21 think it was they had -- this is an example -- two curies  
22 of americium. But she looked in the glove box and there  
23 was a container that said 14 curies of americium. When  
24 she asked "well, where is that 14 curies?" And somebody  
25 said, "well, there's not really 14 curies in there."

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 There's only 10 curies in there." You know? So, it was a  
2 real mess there.

3 We also ordered them to do a complete report  
4 of the incident that occurred on the 16th and have it to  
5 us within a month. The further thing that we ordered was  
6 a comprehensive audit of the Radiation Protection Program  
7 shall be completed and a report of that audit submitted to  
8 the department not later than the 16th, which is today?  
9 No, two days ago. I don't know if they submitted it or  
10 not. But we said that audit had to be done by people we  
11 approved of doing it. We told them that we weren't  
12 talking about Joe Blow down the street. That we wanted  
13 people who were nationally recognized people to come in  
14 and do this audit because we had a lot of concerns about  
15 their air handling system, their procedures on how they  
16 were doing things. We wanted a complete review of this  
17 facility.

18 We also ordered that they do a comprehensive  
19 internal dose assessment on all current and former workers  
20 -- anybody who had worked there since January 1, 1993.  
21 Now, I don't know how many people that's going to be. The  
22 report on those was supposed to be in on Monday too. But  
23 there's over 100 people involved in this. So, this  
24 internal dose assessment that we have ordered for them  
25 also had to be done by somebody that was recognized as

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 expert in internal dosimetry. Let me tell you, there are  
2 not a whole bunch of those people out there that are  
3 available for consulting work.

4           We are still looking at this facility. About  
5 60 percent of their activity, or their business is from  
6 transuranic work. The transuranic problems that we see  
7 are that, number one, you need to get the bioassay  
8 immediately if you suspect anything. You need to make  
9 sure that they send it to a lab that can really detect it.  
10 If you do whole body counting, be very leery of portable  
11 van-based counting systems and rinky-dink counting systems  
12 because they will not pick up things like americium,  
13 plutonium, or so forth. You've got to go to a facility  
14 that's really equipped to do that.

15           The keylation therapy is being tried on one of  
16 the individuals that was involved in the welding accident.  
17 This has raised a very interesting question which we have  
18 posed to NRC. Because of the keylation, it appears that  
19 the internal deposition will be less than an ALI. Now,  
20 can we cite them for an overexposure or not? We've had  
21 some philosophical discussions about it and I understand  
22 NRC is coming out and saying no now, that we can't cite  
23 them for an overexposure because there was intervention  
24 that prevented the individual from getting that exposure.  
25 I think our lawyers are going to have to look at it a

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 little bit because at the extreme, you could have  
2 someone's hand contaminated so that they were going to  
3 have a reportable dose and you decide to amputate the hand  
4 so that they don't get the exposure. So, I think we've  
5 got to look at how the regs are written and decide how  
6 we're going to handle cases where you actually are able to  
7 prevent someone from getting an overexposure by medical  
8 intervention.

9 One of the things that we have finally  
10 impressed upon this company I think is that arguing with  
11 an inspector is like wrestling with a pig in the mud.  
12 After a while, you realize the pig enjoys it.

13 I'll be happy to answer any questions.

14 MR. CAMERON: Thank you, Ed.

15 Questions for Ed?

16 MR. LEVIN: Ed, do you all do bioassays for  
17 your inspectors -- transuranic facilities?

18 MR. BAILEY: No, we have not. The facility  
19 that was making sources is an interesting facility in that  
20 there are a lot of wipe tests and stuff available. We  
21 don't see alpha around. But they have a practice of  
22 taking a dry mop and covering it with a cloth of some sort  
23 and wiping, and doing the whole floors. They're picking  
24 up measurable amounts in the nanocurie range of  
25 transuranics on those wipes. Now we're having trouble

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 relating that back to their allowed contamination limits.

2           We look at the employees that are there and we  
3 don't feel that it's necessary -- you know, over all the  
4 employees that are there and we don't feel that it's  
5 necessary to do our own employees. If our employee asks  
6 for it, we would certainly do it, you know. But they're  
7 generally not there long enough and are not working,  
8 generally, with the material immediately, yes. It's a  
9 good idea. We might do it. We've got one employee that's  
10 been there several times now. In fact, she spent -- I  
11 think it was five days during the initial inspection.

12           MR. CAMERON: Okay, Aaron?

13           MR. PADGETT: Do you mind sharing with us the  
14 name of the licensee? Because that licensee certainly may  
15 be shipping materials to some of our licensees.

16           MR. BAILEY: Both of them?

17           MR. PADGETT: The source manufacturer.

18           MR. BAILEY: The source manufacturer was  
19 Isotope Products Labs.

20           MR. PADGETT: That's what I was afraid of.

21           MR. BAILEY: Interestingly enough, the sources  
22 that have been involved in the incidents have all been  
23 going to National Labs. The last one that ruptured was  
24 going to Oak Ridge. Some before, one was going to Los  
25 Alamos and I don't know what all. Anyway, it seems like

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 they have had luck making sources for National Labs.

2 MR. PADGETT: They also make a number of  
3 sources for gauge manufacturers and other licensees of  
4 that type.

5 MR. BAILEY: Right. At this point, it seems  
6 that the majority of their problem is with the alpha  
7 material. Of course, a lot of that is because of the  
8 very, very small quantities of material required to exceed  
9 the concentration limits or dose limits.

10 MR. CAMERON: Stuart has a question.

11 MR. LEVIN: Stuart Levin, Pennsylvania.

12 Perhaps maybe from some standpoint you could  
13 look at the difference between the exposure and the dose.  
14 Maybe they got an overexposure but you prevented them from  
15 being overdosed -- something along those lines.

16 MR. BAILEY: Well, back before we redid Part  
17 20, the exposure limits for airborne concentrations were  
18 in concentrations. They weren't in dose limits. I  
19 remember one time in Texas we had a case where we got in  
20 trouble because the people obviously had more than body  
21 burden but we didn't have data to prove that they were  
22 exposed to concentrations. And we got into a real hassle  
23 in a court of law about trying to prove the  
24 concentrations. So, I thought, "hey, gee, this new thing  
25 of saying dose really improves the situation." But it

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 came back and sort of bit us.

2 I suspect that we're going to cite them for  
3 the overexposure and let them figure out why it's not an  
4 overexposure.

5 MR. CAMERON: Bill Floyd?

6 MR. FLOYD: Bill Floyd, New Mexico.

7 Ed, how long have they been licensed and what  
8 was their compliance history, or did you mention that?

9 MR. BAILEY: The company, basically, has  
10 always existed, or the individuals. This is a company  
11 that goes back to before -- or the people go back to  
12 before California was an agreement state. I don't know  
13 the exact date of when this particular company was formed  
14 but certainly, it goes back to the '60s. So, it's an old  
15 company. It is one that has been around for years and  
16 years and years. They've manufactured literally thousands  
17 of sources.

18 To me, it's pointed out that, again, a source  
19 manufacturer is a special breed of animal. We always sort  
20 of think of them as high tech and all this kind of  
21 garbage, but they're not. The ones I've seen, you go in  
22 and they're typically small outfits. I mean, I can think  
23 of the ones that were located in Texas when I was there.  
24 They weren't really highly sophisticated facilities. This  
25 facility is not highly sophisticated either. It basically

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 started out, I guess, as a mom and pop outfit and it has  
2 sort of grown from there.

3           The radiation safety officer at the time we  
4 began this investigation has since been relieved of his  
5 duties. This is, again, a case where probably we didn't  
6 look closely enough at the qualifications of the  
7 individual. I'm afraid that oftentimes we may fall into  
8 that where RSOs simply take data. They fill out all the  
9 forms they're supposed to fill out but don't understand  
10 what they mean. I think this is what happened with this  
11 particular RSO that he was sort of in over his head.

12           An interesting side light to this is that  
13 after the emergency order was issued saying you can't do  
14 anything with transuranics, one of their chemists, as they  
15 call them, accidentally manufactured a neptunium source.  
16 She accidentally manufactured it and her explanation was  
17 she didn't know neptunium was a transuranic. So, we've  
18 ever got them that they deliberately violated the order,  
19 or they did not adequately train their employee in the  
20 material they were using. So, this is one of those  
21 gotcha' type things, I guess.

22           Anyway, we're still having problems. We're  
23 still working with them. I doubt seriously that they got  
24 in the dose estimates Monday, and I doubt seriously that  
25 they were able to get in their whole plan. So there will

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 be probably some more action taken with regard to the  
2 company.

3 I would like to say one thing. NRC, through  
4 both of these incidents, has been very supportive,  
5 offering of help. We've participated in the events  
6 briefing by telephone each two weeks or monthly, whatever.  
7 We really appreciated the support and the help we've  
8 gotten there. We've gotten some great suggestions and  
9 help from NRC on this.

10 MR. CAMERON: Great. Thank you.

11 Let's go to Craig for Irradiators in Secondary  
12 Schools.

13 MR. GORDON: At first, I've got to tell you  
14 that it's truly an honor to be the one NRC individual  
15 selected on a two-member panel together with Ed.

16 We're going to title this Irradiators in  
17 Secondary Schools. The one beast is the RAMCO Gammator  
18 50. We're also going to talk about other materials found  
19 in high schools. After that, we'll talk a little bit  
20 about removal.

21 The Gammator 50 was manufactured by the RAMCO  
22 Radiation Machinery Corporation in Parsippany. It's a dry  
23 storage, self-contained type. I'll show you a picture in  
24 a second. The original activity was in the 400 curie  
25 range with a half life of cesium-137. They're down to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 about 200-plus curies now. They were distributed under  
2 the old Atoms for Peace program in the '60s. The AEC had  
3 given them to all types of educational institutions.

4 Lo and behold, RAMCO went belly-up and they  
5 entered the bankruptcy court. The AEC terminated the  
6 licenses in the early '70s. So, what we did was took a  
7 look at -- they got thrown into the Oak Ridge screening  
8 study. Subsequent to that, there was a sealed source  
9 review of the terminated files. So, in the region, we've  
10 got a bunch of these and I'll tell you about the results  
11 in a second.

12 Here's a copy of a copy from the manual, kind  
13 of a primitive device. Physically, they're pretty big  
14 units. The source chamber has a control arm here where  
15 you put the source in, flip the control arm that's  
16 attached to an assembly and expose the source. Flip it  
17 back open and you know, you've got your exposed sample.

18 Here's the distribution data. After we went  
19 through all the files, we found about 120 of these  
20 throughout the country. The one number I think -- we're  
21 always falling in love with the numbers. I found that  
22 there were 48 in agreement states. Of the 48, there was  
23 32 which were unaccounted for. Now, when we say  
24 unaccounted for, basically we mean that we went through  
25 the files and we didn't find a good disposition of the

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 material. Most were distributed to colleges,  
2 universities, hospitals, high schools and they also have a  
3 couple in private facilities.

4 Most of the licenses were retired or  
5 terminated as opposed to being reissued or transferred.

6 Right now, we've only done the follow-up in the NRC  
7 jurisdictions so we don't have a lot of good information  
8 on what's been done out there in the agreement states.

9 Now, we took all the files together and what I  
10 tried to do here was to put all the information together  
11 in one table. I used the states that we were able to come  
12 up versus the different types of facilities that were  
13 involved. I guess if you don't see your state up there,  
14 that pretty much tells you we don't have a file that had  
15 any irradiators -- any of these RAMCO units in that state.  
16 The breakdown basically is by the two numbers -- I know  
17 there's a lot of numbers here. But really, what this  
18 means is, particularly in California, the four is the  
19 total number of files we were able to find in colleges and  
20 universities in California. The one refers to the number  
21 that we were not able to find a good disposition of the  
22 material. So, that suggested three, you know, were either  
23 terminated properly or transferred. One that belonged to  
24 a college or a university still may be out there. In  
25 Illinois we have four -- batting 1,000 there -- it's four

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 files we showed that were not -- all the units are still  
2 out there somewhere.

3 Most, as you can see, are in New York City. I  
4 don't know if it's because it's close to Parsippany or  
5 there was a lot of activity there, or just in our region.  
6 These are mostly regional files. But there's still about  
7 13 out there in New York that, again, we just don't have  
8 good information on.

9 This is the second page. I added this in  
10 because it gives you a little more identifying information  
11 as to where these things could be. The information for  
12 Illinois, for example, where it says "no record", that  
13 basically means we don't have a good record of the unit  
14 being transferred or dispositioned. We have the file. In  
15 Iowa, for example, that one was at Graceland College and  
16 I'm assuming it was relicensed by the college. You may  
17 want to check the information in here and, you know, try  
18 to go back and verify that these things were relicensed.

19 Some of the information may not be that good.  
20 I don't know how many Children's Hospital there are in  
21 California, but --

22 PARTICIPANT: You don't have a town?

23 MR. GORDON: Well, we might. I guess maybe we  
24 should flip over to the next slide. What we wanted to do  
25 is give you some information on what to do to try to -- if

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 you find these things, you know, how to get rid of them or  
2 where they might be.

3           Basically, the facility has the primary  
4 responsibility. They were given to the facilities with  
5 the understanding that, you know, they had to do something  
6 with them when they were done with them. This really came  
7 up a short while ago where we found two of these units in  
8 individual high schools in New Jersey. We sent an  
9 inspector out to each high school, did a survey, a leak  
10 test. Fortunately, they were both intact.

11           So, then the issue was, you know, what to do  
12 with them to remove them. Well, you know, the hospitals  
13 and the universities may have a way to, you know, try to  
14 transfer them back. In both high schools, actually, there  
15 was some DOE assistance. They gave them a hand. They  
16 were actually transferred to the JL Shephard in  
17 California, added to their license. But you know, that's  
18 only in unusual cases where the high schools didn't have  
19 really deep pockets to take the financial responsibility.

20           And you know, there also needs to be some  
21 transportation and packaging arrangements, you know, to  
22 get these things together. They're fairly large and they  
23 weigh a couple thousand pounds. So, it's really not that  
24 easy to get rid of them. NMSS has graciously offered to  
25 be a contact on this, to help you if you do find them.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 There is a contact number or you can call us, the RSOs and  
2 we can try to direct you to the right contacts. If you  
3 want anymore information, like I say, we might be able to  
4 access the files and, you know, try to give you some more  
5 locations as to where these things may be. This was just  
6 a subsequent screening after the Oak Ridge review. When  
7 we found out that these things were in high schools, you  
8 know, we got a little excited. The two cases in  
9 particular were -- the materials were picked up a couple  
10 of weeks ago, I believe, and transferred. So, there's  
11 really no issue there in the high schools.

12 Go back to the original purpose of this panel  
13 here, basically, it's a lessons learned type thing.  
14 Really, the lesson learned here is, you know, there was  
15 not a lot of good control in terms of the material,  
16 particularly in the high schools. These Gammator 50  
17 units, essentially, the high schools let the licenses  
18 expire and just didn't do anything with them. I think you  
19 may find that's the case in any other ones that you come  
20 across.

21 Also, we have a couple of things that we were  
22 involved in over the summer. There was a drum that was  
23 shipped from a Connecticut high school down to a New  
24 Jersey disposal facility. This was materials being used  
25 by a chemistry lab. It was rejected by the disposal

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 facility because it was found to contain radium. Another  
2 issue there was, you know, what to do in terms of getting  
3 rid of it. You know, we think that the high schools  
4 really did not have a good understanding as to, you know,  
5 what they had and how to get rid of it.

6 Also, I understand there may be some more  
7 irradiators out there, possibly manufactured by the old  
8 AECL and Nordion that are possibly unaccounted for. We  
9 don't have a lot of good information on that, but I would  
10 also keep your eye open for those as well.

11 Another example, here we have also in New  
12 Jersey, where a high school teacher had, you know, some  
13 old sources and some low activity sources that -- just  
14 didn't want to do anything, had no reason to keep them.  
15 He went over to his friendly power reactor and, you know,  
16 asked the licensee to get rid of them. You know, that's  
17 another issue there. So, I think the message that we're  
18 really trying to get across is that, you know, there  
19 should be a mechanism to try to communicate with the  
20 secondary schools and the local board of education, and  
21 just try to feed them the right -- or make them aware, you  
22 know, that the material may be out there and that, you  
23 know, they just can't throw it anywhere. It really needs  
24 to receive proper disposition.

25 That's about all I have.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 MR. CAMERON: Thank you, Craig.

2 Are there questions?

3 MR. GORDON: Yes, if you have any specific  
4 questions about locations of these things, please give us  
5 a call.

6 MR. PADGETT: Just a comment. You may want to  
7 look at your entry under South Carolina. It's possible  
8 that that's listed under the wrong state.

9 MR. CAMERON: Go ahead.

10 MR. GAVITT: Steve Gavitt, New York State  
11 Health Department.

12 Craig, the next time you look at this, you may  
13 want to give us a call and ask us about these facilities  
14 because we do have these facilities and places. We have  
15 been in contact and we are providing them with assistance.

16 MR. GORDON: Well, like I said, we just  
17 finished assembling this information and --

18 MR. GAVITT: Okay, but you have us listed for  
19 a number of facilities as there's no record.

20 MR. GORDON: Well, again, these are our files  
21 that we have in the office that show, you know, no record  
22 of disposition. We just finished compiling all the ones  
23 on the sealed sources and rather than giving it to you  
24 piecemeal, I think, we decided to do it all at once and  
25 make the presentation here. If you have updates for us or

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 if you have better information, that's good. I mean, that  
2 really puts us one step further along in the game.

3 MR. CAMERON: Ed Bailey.

4 MR. BAILEY: Yes, Ed Bailey from California.

5 What does NRC do, well in your region, when  
6 these source material type things are found in high  
7 schools and all? Does NRC pick them up or not? I'm  
8 talking, you know, uranium acetate, thorium nitrate,  
9 uranium nitrate?

10 MR. GORDON: Not the irradiators, you mean?

11 MR. BAILEY: No, just the chemicals.

12 MR. GORDON: Well, we make arrangements with  
13 DOE if they can take any material found out in the public  
14 domain. I think that's the --

15 MR. BAILEY: DOE will take the stuff from high  
16 schools, you think?

17 MR. GORDON: I believe so. You know, if we  
18 coordinate with them.

19 MR. BAILEY: Okay.

20 MR. GORDON: Of course, we've got to make the  
21 request.

22 PARTICIPANT: Can I ask a quick question?

23 DOE will consider requests -- it has to be a  
24 really good reason -- DOE --

25 MR. CAMERON: Thank you.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1325 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 Kevin?

2 MR. MCCARTHY: The situation in Connecticut  
3 was really understated there.

4 Kevin McCarthy, Connecticut.

5 When we arrived to take a look at that barrel,  
6 when we opened the barrel, most of the containers had  
7 poison signs on them and other hazardous material signs.  
8 So, our guy closed the lid and called our oil and chemical  
9 spills section in DOE and EPA, and EPA did respond --  
10 Boston. But it became kind of a tricky deal. It became a  
11 mixed waste, actually, with all the material that was in  
12 there. There was a lot of lead and a lot of contaminated  
13 material.

14 MR. CAMERON: Roland?

15 MR. FLETCHER: Craig, I guess my concern is a  
16 little of the same as the fact that a lot of this  
17 information, we say no record and I'm not sure that's an  
18 accurate description. Of course, we had to have had some  
19 record to even know it's out there, and at some point we  
20 lost some information. That's what we really need. We  
21 need to know up to which point we had it under control and  
22 we lost control.

23 The other part, you made a statement that the  
24 secondary schools, the high schools, the institutions  
25 failed to renew their licenses. Well, if we have them

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 under control, that's our responsibility to make sure that  
2 those licenses are renewed. I'm not sure in these  
3 incidences that hasn't already occurred in a lot of cases.

4 MR. CAMERON: Okay, thanks, Roland.

5 Let's have one last comment and then go to the  
6 tours.

7 Is it Bruce, Kathy or --

8 MS. ALLEN: Yes.

9 MR. SZANAS: It's both of us.

10 MR. CAMERON: Both of us, okay.

11 MR. SZANAS: First of all, am I correct in  
12 assuming that all source documents that the NRC currently  
13 has in possession will be transferred to each of the  
14 states that are involved in this study?

15 MR. GORDON: Well, I don't know.

16 MR. SZANAS: We need to do our own research.

17 MR. GORDON: I think we're working on it right  
18 now.

19 MR. SZANAS: We need to do our own research.

20 MR. GORDON: We've had some presentations  
21 yesterday that addressed the issue.

22 MR. SZANAS: You can't do it until we do our  
23 own research.

24 MR. GORDON: I understand.

25 MR. SZANAS: Also, in this Atoms for Peace, we

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 had sort of similar situation at a community college where  
2 they found a neutron howitzer. Now, it's not AEA  
3 material. This is radium, beryllium. We didn't know what  
4 it was because it was in German. I had to call Cologne  
5 and talk to Liebold to find out what was in it. But we  
6 got it licensed and it's in storage. There's not just  
7 these things. Apparently, this is probably just the tip  
8 of the iceberg for Atoms for Peace.

9 MR. GORDON: It may be. Again, the focus was  
10 on the Gammators but you're right, there may be more  
11 devices and units out there. These things were gifted  
12 under the Atoms for Peace. We're not really sure how many  
13 -- what types of devices there were in addition to the  
14 irradiators.

15 MR. CAMERON: Kathy, do you have a comment?

16 MS. ALLEN: So, these people are packaging  
17 them up and sometimes DOE provides assistance to package  
18 them up. But what happens? Are you taking possession of  
19 some of these and shipping them off? Are you getting DOE  
20 assistance to take them, NRC?

21 MR. GORDON: Well, I think what you need to do  
22 is encourage -- to go back to the facility and try. You  
23 know, if it was a university, at one time, they did have a  
24 license for it.

25 MS. ALLEN: No, I mean right now for the ones

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 that you are finding in the barrels.

2 MR. GORDON: Yes, in the case for the New  
3 Jersey high schools we were able to coordinate with DOE.  
4 They have their subcontractor who went to the high schools  
5 and took it, and transferred it to California.

6 MS. ALLEN: Well, I'm a little bit curious as  
7 to how you were able to get a determination that that was  
8 an emergency situation, but some of us states have been  
9 fighting with DOE to get similar things declared an  
10 emergency so DOE could --

11 MR. CAMERON: I think Bill --

12 MR. GORDON: Yes, Bill may have some --

13 MR. HEHL: Yes, I'm Bill Hehl from Region I  
14 and Craig works for me. Let me give you a little  
15 background on what transpired with this.

16 I think you're all familiar with the screening  
17 that was done in the Oak Ridge list of potentially  
18 contaminated sites that has been around for several years  
19 now. What has happened, and certainly we discussed a  
20 little bit about who's responsibility it is to follow-up  
21 on those contaminated sites. What occurred was, over a  
22 number of years in Region I, we had 279 of those  
23 contaminated site files. Basically, record reviews were  
24 done through the screening process that identified there  
25 is a potential problem here. So, what the regions did,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 they went back through all those packages, tried to look  
2 in the archives and determine which of these facilities  
3 there was a potential problem in. Then we would go out,  
4 take a look at them, and determine whether there was a  
5 real problem with it.

6           The same thing happened with sealed sources.  
7 Just recently, the regions have received a list -- in the  
8 case of Region I, we've got about 100 of these previously  
9 terminated licenses that were terminated by the AEC back  
10 in the '50s, '60s and '70s, early '70s, that there isn't a  
11 clear record of a proper disposition of that device. What  
12 we're doing is, we're going through these things. We're  
13 searching out in a lot of cases, trying to locate where  
14 these previously licensed facilities were. We're trying  
15 to contact people. In a case this summer, we just  
16 happened to find these two irradiators in New Jersey that  
17 were at high schools. These licenses were previously  
18 terminated, but there wasn't a clear record of the  
19 disposition of those sources.

20           In the case of these high schools, because  
21 they made the case that there wasn't funding available  
22 from the high school, from the board of education to  
23 dispose of these units -- I think JL Shepard runs  
24 somewhere around \$7,000 or \$8,000 a unit to dispose of  
25 these devices. They didn't have the funding. We made a

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 case in conjunction with NMSS in headquarters to DOE that  
2 because this board did not have the funding available, the  
3 state didn't have the resources to do this readily  
4 available. We made the case to DOE that because there  
5 was nobody there at the high schools left that had any  
6 idea -- there wasn't any radiation safety officer. There  
7 wasn't adequate controls on these devices. In one case,  
8 it was sitting over in a corner in a biology lab; in  
9 another case, in a storage room. Nobody knew, really,  
10 what they were or how long they had been there.

11 So, we made the case to DOE that it was better  
12 from a long-term health and safety to have them pick it  
13 up. They agreed to that and made arrangements -- it took  
14 about a month, I think, for the arrangements to be  
15 completed. But they picked them up through a subcontract  
16 with JL Shepard and JL Shepard is disposing of them.

17 But let me emphasize, this is an evolving  
18 process. We're just now beginning to go through these  
19 files. What we're trying to do is just alert you to a  
20 potential problem. We're not saying that in the case of  
21 these devices that are listed as "no record", that means  
22 that there is no clear record. There's not shipping  
23 papers or something else there that clearly delineates the  
24 disposition of the devices.

25 We do intend to provide you with any

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 information that we have. We were doing the initial  
2 screening of these packages to determine whether or not  
3 there needed to be any follow-up, whether or not we had  
4 any records. But we'll certainly be communicating with  
5 you in the future on these particular files. For those  
6 folks from other NRC regions, I would highly recommend  
7 that you contact, you know, your regional agreement state  
8 officer and they can work with the Divisions of Nuclear  
9 Material Safety within the regions who have these files to  
10 provide you with some more information.

11 MR. CAMERON: Thanks a lot for that  
12 clarification, Bill.

13 We really have to get moving on our tours. If  
14 you do have further questions for Bill or Craig, why don't  
15 you ask them?

16 The tour from this morning on the BPR Center  
17 will be leaving immediately, the second tour, from the  
18 lobby. Also, the tour number one for the Advanced  
19 Computer Center will also be leaving immediately from the  
20 lobby. Tour number two for the Computer Center will go as  
21 soon as the first tour gets back.

22 Thank you.

23 (Whereupon, off the record at 10:39 a.m.,  
24 until 11:25 a.m.)

25 MR. CAMERON: Okay. Well, we have a couple of

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 interesting sessions coming up here to finish off the day  
2 of joint sessions. I'd just like to thank Floyd Galpin of  
3 Rogers Associates. We had to hire a consultant to help us  
4 fix the viewgraph machine.

5 Floyd, when you're trying to fix that light up  
6 there, don't make much of a racket because it could be  
7 distracting to us, okay?

8 I have an announcement on what was called D&D  
9 Screen, I think. It's the NRC's decontamination and  
10 decommissioning software. It is available. Chris Daily  
11 from our Office of Research has given us some information  
12 on where you can get this software for free, and also be  
13 put on the list for notification of updates and all that.  
14 These sheets will be out on the main table out front. Or  
15 I guess we could pass them around now. I think you'll  
16 probably be interested in it. I'll pass them out in a  
17 minute.

18 Let me go to our next panel. These are  
19 representatives of the Adequacy and Compatibility Working  
20 Group. We have Cardelia Maupin from the Office of State  
21 Programs, Aubrey Godwin from the state of Arizona. The  
22 working group has been ably assisted by Bob Kulikowski in  
23 both of his guises, I guess. He's now working as a  
24 consultant for us.

25 With that, I'll turn it over to you guys. Go

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 ahead.

2 MS. MAUPIN: I'll be starting off. As you  
3 know, I'm Cardelia Maupin, Office of State Programs. I've  
4 been working on compatibility now, I guess, for at least  
5 nine years and we're still not compatible yet. But we're  
6 hoping and praying that we're going to get there. I also  
7 have my colleague to my immediate left -- everybody knows  
8 Dr. Kulikowski, formerly from the New York City program  
9 who now has been working with us very closely as a  
10 consultant; and also Mr. Aubrey Godwin, director of the  
11 Arizona program who is the "co-chair" now of this joint  
12 NRC/Agreement State working group for the development of  
13 implementing procedures for the final policy statement on  
14 Adequacy and Compatibility of Agreement State Programs.

15 We're not going to use overheads. All of you  
16 should have obtained a copy of our handout. What we're  
17 going to do is, in the first page of the handout we have  
18 outlined for you our presentation. I will be presenting  
19 to you the first three headlines there: the introduction,  
20 the working group, and charter. I will be followed by my  
21 colleague, Dr. Kulikowski who will talk to you on the next  
22 two items. Mr. Aubrey Godwin will conclude and we will  
23 take any questions at the end.

24 Please note that a copy of the working group  
25 package was distributed to the states on August the 23rd.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 If you did not get a copy -- it should have been a hard  
2 copy document along with a diskette containing some  
3 WordPerfect documents with a completion of all the  
4 documents that were generated by the working group.  
5 Looking at the magnitude and the volume of the working  
6 group's products, we decided it would be more advantageous  
7 to send it out on diskette. If you did not get a copy of  
8 that package, please let us know as soon as possible.

9 Right now, I will start into the first item  
10 and that's the introduction. Many of you know that  
11 compatibility has been very close to not only NRC's  
12 schedule, heart, or whatever, but it has also been of  
13 great concern to the agreement states. I remember back in  
14 like 1990, if you will, that OAS did its own task force  
15 and came up with a working group report on the issue of  
16 compatibility. So, we've been working on this issue for a  
17 very long time, to say the very least.

18 But we were so delighted that as of last year  
19 in 1995, we were able to finally submit to the Commission  
20 a final policy statement on adequacy and compatibility.  
21 That was done in May of 1995. What the basic intention  
22 there was to set out guidance for what the terms  
23 "adequate" and "compatibility" -- what the meanings of  
24 those words would mean in terms of their application to  
25 the Agreement State Program. The Agreement State Program,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 as you know, was instituted by the 1959 amendment to the  
2 Atomic Energy Act. However, we have been functioning  
3 without a clear definition, if you will, of those terms.  
4 What, basically, the policy statement did -- it was not  
5 something, as our lawyers told us -- that had the force of  
6 law, but was to set out something that would give the  
7 agreement states and the NRC, and also members of the  
8 interested public, guidance in terms of the application of  
9 these terms.

10 The key points of the policy statement was  
11 that there were five items identified in terms of  
12 adequacy. These included legislation and legal authority,  
13 licensing, inspection and enforcement, personnel, response  
14 to events, and allegations. As you know from the  
15 discussion on IMPEP, that these now are considered either  
16 a part of the common or the non-common performance  
17 indicators that are being used to evaluate states in terms  
18 of a performance-based evaluation.

19 In terms of compatibility, the policy  
20 statement outlined three components, one being basic  
21 radiation standards. We went back to the legislative  
22 history of the Atomic Energy Act basically to come up with  
23 these three component. It seemed to us that the formers  
24 of the 274 section clearly wanted there to be some type of  
25 uniformity in terms of basic radiation protection

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 standards. Also, there was a lot of discussion on things  
2 that were going back and forth across multiple  
3 jurisdictions.

4 So, that brings us to the second component  
5 which is those items which have significant and direct  
6 trans-boundary implications. Also, from that legislative  
7 history, in looking at what we could find in those  
8 discussions, what compatibility meant -- since there was  
9 no definition in the legislation was that it was necessary  
10 to avoid conflicts, duplications and gaps, but there was  
11 no indication that the programmatic items had to be  
12 identical. So, there was flexibility as outlined by the  
13 legislative history.

14 We were glad that after submitting this policy  
15 statement which contained those points I just went over  
16 with you, that the Commission issued on June 29th of 1995  
17 a Staff Requirements memo. We were very delighted that  
18 the Commission did approve the concepts laid out in that  
19 policy statement. However, the Commission, along with  
20 ourselves, knew that it would be difficult, if you will,  
21 to lay out a complete policy statement without having  
22 developed the implementing procedures. So, that was the  
23 biggest task and the real meat of the work from the joint  
24 working group between the NRC and the agreement states.  
25 My colleague will get into more detail on what we actually

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 did later on in the presentation.

2           Going to the next page, if you will, the  
3 working group was formed in October of 1995. Our first  
4 meeting was at the All Agreement States Meeting in  
5 Chicago, Illinois. The members of the working group  
6 include, as I said, Aubrey Godwin, Dr. Kulikowski. Also,  
7 I would like to recognize the distinguished gentleman from  
8 Maryland, Poland Fletcher; the distinguished NRC lawyer,  
9 Hampton Newsome; the distinguished gentleman from  
10 research, John Telford; the distinguished gentleman from  
11 our NRC Region II office, Mr. Richard Woodruff; and our  
12 distinguished deputy director of the Office of State  
13 Programs, Mr. Paul Lohaus.

14           We all worked very, very closely in terms of  
15 coming together and developing the working group package.  
16 As you can see, a lot of work went into that document.  
17 Basically, the overall task that we had before us as  
18 directed by the SRM from the Commission was that we had to  
19 go through all of the 10 CFR parts that were applicable to  
20 by-product -- or should I just say agreement materials.  
21 All those parts that were applicable to agreement  
22 materials, line by line, section by section. Needless to  
23 say that some of our working group meetings were very,  
24 very intense, especially Part 35. That was a real intense  
25 session for the group. We also made minor adjustments to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 the policy statement to accommodate the implementing  
2 procedures.

3           The next page, we talk about the charter.  
4 There were three specific tasks that we identified in the  
5 charter and that is also a part of the working group's  
6 report. One of them was the identification of program  
7 elements needed for compatibility. What we basically did  
8 was to examine the 30 indicators that had been used  
9 previously in reviewing agreement state programs, and  
10 looking at the need for -- asking some of the questions  
11 that we will get into later. Are there any trans-boundary  
12 implications here? Are these things the states suggested  
13 have flexibility in implementing?

14           We also analyzed, as I said earlier, the  
15 regulations in 10 CFR and we have developed draft  
16 implementing procedures. We have a management directive  
17 that will be used internally by NRC staff, and also a  
18 handbook in terms of how to look at each regulation and  
19 going through a series of questions to determine what type  
20 of compatibility, if any, is needed between NRC and the  
21 agreement state.

22           So, at this time, I'm going to turn the floor  
23 over to my distinguished guest and colleague, Dr.  
24 Kulikowski.

25           DR. KULIKOWSKI: Good morning everybody.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 I think Cardelia understated the fact that  
2 some of the meetings that we had were intense. Needless  
3 to say, they were interesting as well as intense.

4 To sort of pick up on something that  
5 Commissioner Dicus mentioned in her talk yesterday is that  
6 when we're looking at the regulation of agreement  
7 materials on a national basis -- and I think the working  
8 group is very sensitive to this. This is not a national  
9 program. It is the coherent regulation and materials on a  
10 national basis. That the states and the NRC working  
11 together form a comprehensive radiation protection network  
12 for this country.

13 However, the Atomic Energy Act does mandate  
14 certain responsibilities for the NRC with respect to the  
15 agreement states. Of particular significance here is to  
16 review the programs for adequacy and compatibility. If  
17 you note, there can be a difference in opinions between  
18 the NRC and the states about compatibility. People should  
19 recognize that, and that's enough said. Initially, it was  
20 discussed a lot during the working group as we went  
21 through the things.

22 Basically, adequacy, as defined in the policy  
23 statement, means the provision of an acceptable level of  
24 protection of public health and safety from the use of  
25 agreement materials. Compatibility -- and we will take

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 questions on this later on if anyone has any -- deal with  
2 the effects of the state action or inaction on things that  
3 are happening outside the state, either on the regulation  
4 of materials on a national basis or on other states. It's  
5 important to realize that when we were doing these  
6 implementing procedures that the policy statement  
7 addresses both adequacy and compatibility. Adequacy was  
8 really put on a shelf for the purposes of us because that  
9 was addressed by IMPEP. We really tried to just focus on  
10 the compatibility issue and I'll talk about that a little  
11 bit more.

12           The next page just has a little musing of mine  
13 about how we can view this -- it was inspired by Jim  
14 Myers' talk yesterday on the Internet about certain things  
15 are required. Those are the compatibility things for the  
16 whole system to work, and there are the things that each  
17 individual user or state needs. Those are the adequacy  
18 things. Then there are other things that are "no, never  
19 mind"s that really doesn't make a hill of beans whether  
20 the state does it or doesn't do it, or the NRC does or  
21 doesn't do it.

22           I'd like to spend a little more time on  
23 actually how the working group functioned and what the  
24 mechanics of it were. First of all, we held both  
25 telephone meetings which were, at some points, four hours

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 in length. There were times when, as Cardelia said, it  
2 was intense. And we also had a number of face-to-face  
3 meetings. All of these meetings were publicly noticed so  
4 that anyone had the chance to participate if they wanted  
5 to.

6 We started out using Title 10 of the Code of  
7 Federal Regulations, 10 CFR in the jargon, as sort of the  
8 paradigm or the model set of regulations to compare  
9 everything else to. In other words, what in the NRC's  
10 regulations and program elements would be required of a  
11 state to maintain a compatible program? Initially, we  
12 just went through it part-by-part and said, you know, Part  
13 20 is germane to agreement materials and Part 50 is not.  
14 So, we tossed out those parts that were not applicable to  
15 agreement states. Those that were, as Cardelia said, we  
16 went through on a line-by-line basis. Each member of the  
17 working group was assigned a number of parts. We went  
18 through, either in a telephone meeting or in person, on a  
19 line-by-line basis after that initial review by a single  
20 person.

21 We attempted in all instances to get a group  
22 concurrence. Decisions were not always unanimous. Often  
23 they were arrived at after a fair amount of heated  
24 discussion. This is not indicated in the final analysis  
25 in the charts that were presented in the package. As I

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 said, votes ranged from unanimous, to sort of evenly  
2 split, to everybody being for something with one person  
3 against it. So, I think, you know, there was a wide range  
4 of things. I think that's just the nature of the beast.

5           The criteria that were used to put the  
6 regulations in 10 CFR, into the various categories, were  
7 all based, to the best of our ability, on the policy  
8 statement. There were some questions that we developed  
9 and a flow chart to help us do that. I'll talk about  
10 those in a minute.

11           The regulations were considered first for  
12 compatibility purposes. This came up in various  
13 discussions with a number of NRC staff people. There's a  
14 somewhat artificial distinction if you say something is  
15 required for compatibility and there's a health and safety  
16 purpose for it as well. However, taking the grander  
17 scheme of things and looking for the mechanical coherence  
18 of the national regulation of agreement materials by  
19 everybody, we looked at the compatibility first. So, we  
20 went through and said "is it required for compatibility  
21 first?" If it fell out into one of the compatibility  
22 baskets, it does not mean it is not a health and safety  
23 issue.

24           There were some regulations that we felt would  
25 not be required for compatibility based on what the policy

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 statement said, but that the working group felt very  
2 strongly should be recognized as having some health and  
3 safety significance. The working group decided and has  
4 recommended that these be put over on to the IMPEP side  
5 under the legislation and regulations portion just as  
6 identified, so that during IMPEP reviews, these can be  
7 looked at as well.

8           The criterium that we used to identify those  
9 regs that would not be required for compatibility but that  
10 have a health and safety significance were that -- and the  
11 question we asked was if a state did not adopt that  
12 regulation, would that fact or that fact plus one other  
13 event such as a failure of an administrative protocol  
14 result in an individual being exposed in excess of the  
15 basic radiation protection limits? It seemed to work  
16 reasonably well.

17           One of the most important things is that what  
18 we did was developed, within the existing framework -- in  
19 other words, we started on the day that we began with what  
20 the existing framework of NRC's legal interpretations of  
21 the Atomic Energy Act, its policies, recognizing that  
22 those can and indeed, have changed during the course of  
23 the working group's deliberations. I'll refer you to the  
24 next talk by Bill Olmstead who will talk about one of  
25 those things that sort of threw a monkey wrench about two

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 days before we were ready to finalize our report.

2 To go back to the questions that we asked to  
3 categorize things -- the next couple of pages, there's a  
4 set of six questions. They're synopsized in the flow  
5 chart which follows them and you may want to just follow  
6 along with that.

7 It was an interesting experience on this  
8 working group because when we started out, we didn't have  
9 this set of questions. We started out by sort of doing it  
10 in an intuitive way, just reading the policy statement and  
11 saying "this falls here and this falls there." It really  
12 worked almost as a sort of feedback mechanism. As we did  
13 something and got more knowledge, we said "oh, yes" and  
14 then we had to go back and sort of -- not reinvent the  
15 wheel but reanalyze what we had done previously. At the  
16 end, we finally wound up with a series of six questions  
17 which we think can dump regulations or program elements  
18 into the various baskets of compatibility or health and  
19 safety.

20 First, we've had a question about what an  
21 essential objective is. I guess it's sort of intuitively  
22 obvious if you've been in this business for a while. But  
23 it's what you want the regulation to accomplish. What  
24 action or result do you want to have occur based on what  
25 the regulation says? So, if the regulation addresses the

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 regulatory area that's solely reserved to the NRC end of  
2 the Atomic Energy Act -- if that's yes, then it's an NRC  
3 and you don't go any further. It gets dumped out in that  
4 basket. If it's no, then you proceed to question two.

5 Does the regulation or program element address  
6 a basic radiation protection standard? Now, the policy  
7 statement was very specific about what it considered basic  
8 radiation protection standards, or a term, sign or symbol  
9 needed for common understanding of the radiation  
10 protection principles. If it was yes, then it was dumped  
11 into category one, component one. If no, then you go to  
12 the next one and so forth. The next one would be trans-  
13 boundary effects. It got put into component two.

14 If that was no you go to question four: is  
15 there some statutory basis, such as the Clean Air Act or  
16 UMTRCA, which requires the regulation and requires that  
17 states be at least as stringent as the NRC. If that's the  
18 case, that was put into the special category which we term  
19 3.a.S. If the answer to that was no, the question was  
20 asked if a state did not adopt the regulation, would a  
21 conflict or gap be created? If the answer is yes, then it  
22 became a component 3.a. If the answer is no, then proceed  
23 to the next question which basically says is it a health  
24 and safety issue? If the answer is yes, it became a 3.b\*  
25 indicating that it was not a compatibility requirement but

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 it was one that should be required for health and safety.  
2 And if the answer to it all was no, it turned out to be a  
3 3.b.

4 What we wound up with after going through some  
5 1,100 regulations were a series of chart which the  
6 distinguished gentleman from Arizona will now present, the  
7 results of what we did.

8 MR. GODWIN: I have 300 slides we'd like to  
9 show of all the charts. Actually, I'm kidding. We won't  
10 show you those charts.

11 As already mentioned, several things did come  
12 out of this. For example, a Draft Management Directive, a  
13 draft handbook, and also a draft of an internal procedure  
14 for the Office of State Programs, all of which would  
15 incorporate this evaluation system into the program  
16 officially and make it as a general policy, then the  
17 commission staff. It would handle future rulemakings, and  
18 I think this is important to understand.

19 For future rulemakings when the rulemaking  
20 plan is prepared, using this system, there would be a  
21 proposed compatibility assigned either to the entire rule  
22 or components of the rule. Because we found in many of  
23 our rules that only parts of it fell into certain sections  
24 and you subdivide it out into A, B, and C-1 and all this  
25 kind of stuff. They would make the assignment then. As

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 you know, that program now requires that to go to the  
2 states. The states would have an opportunity to challenge  
3 not only the rule, but also the assignment of the  
4 compatibility.

5 If it continues forward after that, they would  
6 take those comments into consideration. It would go out  
7 as a proposed rule in which, again, the states would have  
8 an opportunity to comment both on the rule and on the  
9 assigned compatibility, as well as the public and the  
10 regulated community. Again, they would have to address  
11 that before the final rule comes out and resolve the  
12 conflicts and comments before they go to a final rule.  
13 We're hoping that the procedure is so straightforward that  
14 you don't need a permanent committee assigned to  
15 compatibility around. We're hoping that it will work that  
16 well. And to that end, I thought we might try a couple of  
17 them that came up during this meeting and just see where  
18 we go, see if it works.

19 The first one I would like to suggest we look  
20 at is the Unauthorized Use Rule. If we go down through  
21 the questions, question one, is it reserved solely to NRC?

22 I've heard a no. It appears to be the answer  
23 is no, so we go to question two. Do the essential  
24 objectives of the regulation address a basic radiation  
25 protection standard as defined in the policy statement, or

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 is there a definition, term, sign or symbol needed for  
2 common understanding of radiation principles?

3 No? Okay. We'll go on to three. Do the  
4 essential objectives of the regulation or program element  
5 address or define an issue that is significant -- that has  
6 a significant, direct trans-boundary application?

7 Did I hear a yes? Okay. Question four. Do  
8 the essential objectives of the regulation or program  
9 element address or define an issue related to UMTRCA,  
10 Clean Air Act, other statute?

11 No. Proceeding to question five. Would the  
12 absence of the essential objectives of the regulation or  
13 program element from an Agreement State Program create a  
14 conflict or gap?

15 MR. BEVILL: A lot of difference of opinion on  
16 that, I'll bet.

17 MR. GODWIN: Anybody who said yes, would you  
18 like to explain why you think it is?

19 Well, the usual thing is, you wouldn't get a  
20 report for something. But remember, you're looking --  
21 exceeds the exposure limits. Because of that, if it  
22 exceeds an exposure limit, you're going to get a report  
23 anyway. So, you get that report. I suspect the group  
24 would probably conclude no is the answer to that one.

25 Going to question six. Would the absence of

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 essential objectives of the regulation create a situation  
2 that could directly result in exposure to an individual in  
3 excess of the basic radiation protection standards found  
4 in compatibility component one?

5 Do I hear a yes?

6 MR. BANGART: Maybe, but it's already covered  
7 by another reg.

8 MR. GODWIN: Right. It's covered by another  
9 reg so I don't see how you can do that. If your answer to  
10 the last question is no, it is a 3.b.

11 MR. BANGART: I think there's much debate to  
12 be had about the next to the last question.

13 MR. GODWIN: Yes.

14 MR. BANGART: I don't think it's as  
15 straightforward as automatically getting a 3.b.

16 MR. GODWIN: Okay. You see part of the  
17 difficulty with it. It is not fully, but it's the  
18 simplest method we found. If it does end up a 3.a, let's  
19 say, again, you have to capture the essential part of the  
20 regulation and not -- that's a point to look at.

21 Same thing if it was a 3.b\*. Again, you  
22 capture the essential elements of it and I would just  
23 comment. A lot of the discussion on the medical QC rule,  
24 35.32 I believe it is, debated about what was required  
25 there. Basically though, the requirement for some sort of

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 quality control program, quality management program. The  
2 details of it would be up to the state or the -- depending  
3 on how the state handled it would be up to the licensee to  
4 determine the actual prescriptive part of it.

5           What was talked about is that the delivery of  
6 the correct amount of material is an issue of safety.  
7 It's also a management issue and it's also a management of  
8 accountability. If they're not delivering the correct  
9 amount of material, they are not able to account  
10 accurately for the material. One way you could solve the  
11 problem is say that they must have a program that controls  
12 and delivers X percent variation. Inspection would be  
13 taken and on standards they can identify. Within that  
14 percentage, okay; if they can't, they're not. But the  
15 licensee would be totally responsible for coming up on how  
16 they did it, they could achieve that.

17           MR. CAMERON: Aubrey, I'm just trying to  
18 figure out when the best time to take questions on all of  
19 this might be. I think your example got people thinking a  
20 lot. Do you want to go through the second one and then  
21 open it up?

22           MR. GODWIN: We can stop now and take  
23 questions, or go on. Really, I was hoping to talk until  
24 we got down to dinner time and forget the questions. Yes,  
25 I'll take questions now.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. CAMERON: Well, do people have questions  
2 that we want to get into at this point?

3 DR. KULIKOWSKI: Are you going through the  
4 rest of the text?

5 MR. GODWIN: Oh, the remainder is just kind of  
6 in on the percentage it changed and things like that. But  
7 if you all would rather talk about the mechanisms of it, I  
8 think that might be of more interest. You can look at the  
9 statistics as well as I can read them to you.

10 MR. BAILEY: Bailey from California. I have a  
11 question.

12 MR. GODWIN: Yes, sir.

13 MR. BAILEY: On that summary of actions, were  
14 there ones that went from no to yes?

15 MR. GODWIN: There was a couple of them that  
16 did change.

17 MR. BAILEY: And I guess I would ask if they  
18 haven't been before and we didn't have them, how could  
19 they possibly suddenly become items?

20 MR. GODWIN: Because the early method of  
21 classification was somewhat ad hoc and they assigned them  
22 in a rather capricious and arbitrary way. I think there  
23 was a total of five just to be honest about it.

24 MS. MAUPIN: And from going through the  
25 statistics -- and hopefully no one will get too upset --

**NEAL R. GROSS**

COLLEGE REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 most of the increases that I noted were in Part 35 in  
2 terms of things that were not required which became things  
3 that were required. If you go back through your package,  
4 you will see that most of those -- a lot of those changes  
5 occurred in Part 35 where things were not required became  
6 things that were required. I'm just reporting -- no  
7 opinion here. I'm reporting.

8 MR. CAMERON: Roland, as another member of the  
9 working group, do you want to add a clarification on this?

10 MR. FLETCHER: Well, I was just going to point  
11 out the fact that when we went in and looked at the  
12 regulations, we didn't go in with a pre-determined "well,  
13 this is compatibility one, two, three." We went in and  
14 looked at the regulations and asked those questions. So,  
15 that's how something could, you know, actually be moved  
16 from one category to another because if we --

17 MR. CAMERON: You revisited them anew without  
18 any assumptions about what they had been in the past.

19 MR. FLETCHER: Yes. Usually, the  
20 compatibility status came up during a discussion after we  
21 had, you know, made our initial recommendation on the  
22 compatibility.

23 MR. CAMERON: Okay, thank you.

24 Aubrey, before we take more questions, do you  
25 want to do anymore presentation, or Bob or Cardelia?

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 MR. GODWIN: No, the only other one would be  
2 the Summary of Actions table which I think you need to  
3 look at. Aside from the first one which we've just had  
4 discussion on, there's some things under the old  
5 classification that were required. In fact, there's a  
6 whole slew of them that were required in the past that  
7 have been dropped down. The state wouldn't have to take  
8 any action, obviously, if it wasn't required in the old.  
9 If it wasn't required in the new one, you wouldn't have to  
10 do anything. It was required in the old one and required  
11 under the new classification.

12 There are a few things that have been held in  
13 abeyance pending development and some of those -- may have  
14 to do something. If the state adopted it but it was not  
15 compatible, they would have three years after the adoption  
16 of the policy. If they did not adopt it, again, they'd  
17 have three years after the adoption of the policy. If the  
18 state has adopted it, then they don't have to do anything,  
19 okay?

20 MR. CAMERON: Okay. I think it might be  
21 useful to do some questions. We do have this one item in  
22 the parking lot on the site cleanup rule and compatibility  
23 level. So, maybe we could get the questions going and  
24 then, as a final exercise, come back and have Aubrey go  
25 through the list of questions with all of us on that.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 Steve?

2 MR. COLLINS: Steve Collins from Illinois.

3 Two items, I think, for Aubrey. One of them,  
4 a point of clarification. What I heard you say is this is  
5 the process we went through and this is how we got to each  
6 result, not that you necessarily agreed with where you  
7 ended up on each one particularly with regard to Part 35  
8 stuff.

9 Is that what I heard accurately?

10 MR. GODWIN: I would say that with regard to  
11 Part 35 that there was a lot of cases where there was not  
12 unanimous agreement.

13 DR. KULIKOWSKI: Right. I think just to add  
14 on to that statement, when I said when we had discussions  
15 some things were very obvious and we all agreed and it was  
16 like three seconds. There were other things that we spent  
17 several days debating where they should fall. Just to  
18 reemphasize what Roland said, we tried to do this without  
19 prejudice to what the existing compatibility designation  
20 for a regulation was. And we really tried to be  
21 scientific and objective as possible and look at "the  
22 policy statement says this" and using that, this is where  
23 it will fall out without regard to its history.

24 MR. GODWIN: Yes, one other point I would like  
25 to make. A 3.b means it is not a compatibility issue. It

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 is strictly a health and safety issue -- a 3.b\*, excuse  
2 me. 3.b\* is strictly a health and safety issue and they  
3 may elect not to put this at all in the Commission. This  
4 is an option for the Commission to look at.

5 MR. COLLINS: Well, one of the comments I'm  
6 going to have is there ought to be a star by some of the  
7 other categories other than 3.6, probably because of the  
8 way the policy statement is written. If it is a health  
9 and safety matter, it ought to have a star by it whether  
10 it's a one, or a two, or a three. But that's a different  
11 system that you guys didn't go through and I'll do that in  
12 writing later.

13 Specifically with regard to the one that the  
14 private citizen from southern California sent us all  
15 comments on, on the 30 millicurie rule, did that one  
16 really end up being escalated to what would be currently  
17 called a Division I level compatibility? If so, how did  
18 you answer each one of those questions and get to that  
19 point?

20 Would you like for me to quote her statement?

21 MR. CAMERON: Are you clear on what Steve is  
22 referring?

23 DR. KULIKOWSKI: Absolutely.

24 MR. COLLINS: I can quote that sentence or two  
25 if you want me to.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. GODWIN: Yes, I recall the letter. I was  
2 trying to remember where it appeared in the rule, per se.

3 I think we ended up in a -- we were looking at  
4 the -- do you remember the rule number on it? I'll have  
5 to look it up and see.

6 Did it actually end up classified -- have you  
7 looked it up, Steve?

8 MR. COLLINS: Yes. I think it's 35.32.

9 MR. GODWIN: 35.32 is -- that's not it.

10 DR. KULIKOWSKI: Steve, isn't it the patient  
11 release criteria?

12 MR. COLLINS: Yes, you're right.

13 DR. KULIKOWSKI: She talks about the 30  
14 millicuries. I think that --

15 MR. GODWIN: We were looking at the dose limit  
16 of 500 millicuries as being the affected part and not the  
17 30 millicuries, per se -- the essential element was the  
18 500 millicuries for the patient -- 500 millirem, excuse  
19 me. 500 millirem.

20 DR. KULIKOWSKI: It was the dose, not the  
21 amount of material in the person when the patient is  
22 released.

23 MR. CAMERON: Thank you.

24 Stuart, while Steve is looking through his  
25 charts, do you want to make a point?

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. LEVIN: It's a quick question. What does  
2 the acronym PE stand for where it says six months for PE?

3 DR. KULIKOWSKI: Program elements. Sorry, I  
4 must have missed that one. I apologize.

5 MR. CAMERON: Okay.

6 MR. GODWIN: If you look at 35.75, I believe  
7 it's a 3.a.

8 MR. COLLINS: 3.a, yes.

9 MR. GODWIN: It is not a I. That means  
10 essential elements. One of the reasons we went to that is  
11 because we recognized that item was a problem. We were  
12 looking at those being the essential thing, not the  
13 concentration.

14 MR. HILL: Just out of curiosity, how does  
15 that fall out under that question? You said it was a 3.a?

16 MR. GODWIN: 3.a.

17 MR. HILL: Conflict or gap created if state  
18 does not adopt?

19 MR. GODWIN: Yes, because you might have a  
20 patient released in one jurisdiction that's on the line,  
21 going into another jurisdiction where they wouldn't be  
22 acceptable if you did not have something -- there. That  
23 could be a gap or a conflict.

24 MR. HILL: Well, my point is that we currently  
25 do it by license condition.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. GODWIN: That's acceptable. That's  
2 acceptable.

3 DR. KULIKOWSKI: That's acceptable.

4 MR. GODWIN: We don't have a problem with  
5 that.

6 MR. CAMERON: Is that clear?

7 MR. HILL: Okay, so we're now saying we don't  
8 have to have regulations --

9 MR. GODWIN: Wait until the next --

10 DR. KULIKOWSKI: Wait until the next talk.

11 MR. CAMERON: Yes, I think that particular  
12 issue is going to be covered by Bill Olmstead who is with  
13 us this morning. As soon as we get done with this  
14 particular session, he'll come up and join us.

15 Other questions or comments on the  
16 compatibility policy?

17 Rita?

18 MS. ALDRICH: All of the questions look fairly  
19 objective or quantifiable in some way except question  
20 five, conflict or gap. It seemed that that could cover  
21 just about anything and it seems extremely subjective.

22 Is it really necessary to have that? The  
23 other questions should take care of all the material.

24 MR. GODWIN: Well, that was part of the basic  
25 policy statement is the reason that was in there.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 DR. KULIKOWSKI: Right. I mean, first of all

2 --

3 MS. ALDRICH: And you can't question that?

4 MR. GOLWIN: And that goes back to the  
5 adoption of the Atomic Energy Act which part of the  
6 Congressional concern was that interstate commerce could  
7 flow freely and not have conflicts and not have  
8 duplications or gaps. That's what that goes back to.

9 MS. ALDRICH: But Bernie covered trans-  
10 boundary implications which covers interstate commerce.

11 DR. KULIKOWSKI: Yes.

12 MS. ALDRICH: So, this just seems to be a kind  
13 of a catch-all, I think.

14 DR. KULIKOWSKI: Well, it's actually not. We  
15 tried -- it's not in here and I apologize. It probably  
16 could have been in the handout as well. In the working  
17 group report which everyone got a copy of, we have  
18 identified what we viewed as a conflict or a gap. So, I  
19 mean, we tried to narrow it down. I mean, it was  
20 something that we wrestled with a lot with the broadness  
21 of what a conflict or a gap could mean.

22 I don't disagree with you, Rita.

23 MS. ALDRICH: Yes. I'm just thinking that,  
24 you know, a gap could essentially mean "we think you  
25 should have that", which gets right back to a very

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 subjective determination instead of --

2 DR. KULIKOWSKI: Except we did define conflict  
3 and gap in our report. If you use those definitions, then  
4 it does eliminate a great deal of the subjectivity.

5 MS. ALDRICH: Do you really think it's  
6 necessary -- that's what I'm saying -- given the other  
7 five questions?

8 DR. KULIKOWSKI: I don't know, you know. It's  
9 something that can be looked at, I think. You know, as I  
10 said in one of the caveats I said, we really worked within  
11 what the policy statement said and two, what the current  
12 interpretations and policies of the NRC were at the time  
13 we did it. I mean, it wasn't going to help us to try to  
14 second guess somebody at that point. But your point is  
15 well taken.

16 MR. CAMERON: And there's a rationale  
17 presented in the working group report and/or the policy  
18 statement for why conflict and gap is an element of  
19 compatibility. Is that right?

20 DR. KULIKOWSKI: Right.

21 MR. CAMERON: Ed?

22 MR. BAILEY: Maybe I was dozing off, but did  
23 you all ever say what category I -- I mean, does that mean  
24 identical? Category II mean identical? I'm losing some.  
25 I mean, we've gone from basically three categories to six

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 or seven and I'm not sure that helps me.

2 MR. GODWIN: One is the basic radiation  
3 standards and basic definitions which have to be  
4 essentially identical.

5 MR. BAILEY: What about two?

6 DR. KULIKOWSKI: Those are essentially  
7 identical. One and two should be essentially identical.

8 MR. GODWIN: There could be a little more  
9 variation in two than one.

10 MR. LOHAUS: This is Paul Lohaus, NRC.

11 In the policy statement itself, it defines the  
12 three basic components, one, two, and three. Then there's  
13 some further subdivisions within component three. But in  
14 looking at components one and two, for both of those --  
15 one, dealing with the radiation protection standards and  
16 basic definitions and two, dealing with those small number  
17 of requirements that have significant trans-boundary  
18 implications. For those two components, the requirements  
19 would have to be essentially identical. With respect to  
20 the other categories, there's greater flexibility.

21 And I know we haven't talked through the  
22 statistical information -- you may want to do that. But  
23 the bottom line is that about a third fewer requirements  
24 would be required for compatibility under the new policy  
25 as opposed to the current B.7 procedures.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. CAMERON: Going back to Ed's question,  
2 when you say required for compatibility, does that  
3 translate into identicality?

4 MR. LOHAUS: It does not. That would include  
5 all of the components combined. There would be a smaller  
6 number of requirements that would be required for  
7 compatibility where a state would have to be essentially  
8 identical. But you may want to go through the -- I think  
9 there's one table that we haven't actually gone through.  
10 I think if you look at it -- sometimes, it's difficult to  
11 do a one-for-one comparison because a current B.7  
12 procedure with four divisions, it's difficult to do a one-  
13 for-one comparison because you're sort of comparing apples  
14 and oranges. So, it's difficult to do that.

15 MR. CAMERON: Richard?

16 MR. LOHAUS: Yes, I was going to say while I  
17 have the microphone too, one of the comments I wanted to  
18 offer about the process. I think others have commented on  
19 really the success of the joint effort that we put into  
20 the working group process. I think having worked with  
21 this particular working group, I think it's a very, very  
22 positive part of the program.

23 I'd like to really recognize the effort that  
24 Aubrey, Roland, and Bob when he was director for the New  
25 York City program. I know with your regular

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 responsibilities and then having this as an added  
2 responsibility, the level of effort, I think, was just  
3 super. The extra effort, the after-hours effort that was  
4 put into it, making time available for conference calls  
5 that were extended -- I mean, some of these were three and  
6 four hours -- the travel, particularly for Aubrey, to  
7 travel east for a number of meetings.

8 But I think the bottom line, the product,  
9 really speaks for itself. It is, I think, a very positive  
10 part of the program. We may want to look to the working  
11 group process to help take issues like how we define  
12 compatibility and use that to help collectively address  
13 and help bring these issues to resolution. But I just  
14 wanted to recognize the effort that went into this, as  
15 others have commented.

16 MR. CAMERON: Good point, Paul.

17 Ed, do you have a close-out? I didn't want to  
18 cut you off before you're finished. Or do you want to  
19 look at some stuff and then come back in the conversation?

20 MR. BAILEY: Well, either I'm missing a page  
21 or something. I don't know. What, then, are the 3.a.s  
22 and so forth? I mean, in the old terminology -- okay,  
23 let's take the ones that were not items of compatibility  
24 at all, okay? Where do they fall in this?

25 MR. GODWIN: 3.b is it.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. BAILEY: 3 b is a no never mind.

2 MS. MAUPIN: Right.

3 DR. KULIKOWSKI: In NRC. In NRC, also.

4 MS. MAUPIN: And NRC. Like for those that  
5 were four, they became NRC. Those which were Division  
6 III, those basically became 3.6, if we can draw a  
7 correlation. Those in Division I fell out, basically.  
8 What we have in I and II and those that were under II  
9 where the state could adopt and have flexibility in  
10 adopting, that would be your 3.a and your 3.a.S, that they  
11 can adopt them and also be more stringent.

12 Roland?

13 MR. FLETCHER: I think maybe, Ed, if I'm  
14 hearing you correctly, one and two in the new  
15 classifications mean you adopt the regulation identical to  
16 the way it is. Three means it must be at least as  
17 stringent but it doesn't have to be identical.

18 MR. CAMERON: So, that would be equivalent to  
19 -- I hate to get into equivalence, but just for shorthand,  
20 that would be a present Division II.

21 MS. MAUPIN: Right. That would be a 3.a.S,  
22 your 3.a.S, as stringent.

23 MR. FLETCHER: Right. 3.a means you have to  
24 adopt. 3.a.S means you're going to have to adopt and it  
25 must be at least as stringent?

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 MS. MAUPIN: Right.

2 MR. FLETCHER: 3.b means it is entirely up to  
3 the state as to whether or not it is adopted either as a  
4 reg or as a license condition.

5 MS. MAUPIN: Right.

6 MR. GODWIN: Or neither.

7 MS. MAUPIN: Or neither, right.

8 MR. FLETCHER: Or neither, right.

9 MR. CAMERON: Richard?

10 MR. RATLIFF: Yes, I just want to state, when  
11 we put out the letter asking for volunteers, we got about  
12 three times as many people for IMPEP team members that  
13 could have fun and go travel, but I only had the people  
14 who volunteered -- the only ones who volunteered to be on  
15 this one because they knew it was going to be time  
16 intensive. I just want to thank them because it really  
17 was a job that I didn't volunteer for, for sure.

18 MR. CAMERON: I don't know if there was a  
19 mixed message there or not.

20 Thank you, Richard.

21 Any further comments before maybe we can -- do  
22 you still want to quickly run through the parking lot  
23 issue on the cleanup rule?

24 Steve?

25 MR. COLLINS: Steve Collins from Illinois.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           If there's not one in it -- and I've read the  
2 document and I don't think there is -- could the working  
3 group produce a list of all of those items that used to  
4 basically not be required that would now be required for  
5 an acceptable evaluation on an IMPEP review? In other  
6 words, those that went from a three to anything higher  
7 than that?

8           MR. CAMERON: Sounds like an action item. We  
9 can do that.

10          MR. COLLINS: There's not too many, but there  
11 are a few.

12          MS. MAUPIN: Right. But if you go back and  
13 look at that comparison chart --

14          MS. COLLINS: Yes, I know. We could go and do  
15 it --

16          MS. MAUPIN: -- we can summarize -- we did do  
17 some type of summarization. Maybe we can distribute that.  
18 But going back through the comparison, looking at old B.7  
19 versus what we have now, we can pull that information out  
20 for you.

21          DR. KULIKOWSKI: Right. We can do that.

22          MR. CAMERON: Okay, good.

23                Do you have anything further?

24          MR. COLLINS: There's just a few of those, but  
25 I think it would be very helpful to a lot of the states

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 that won't spend the hours and hours that's required to go  
2 through each one of those.

3 DR. KULIKOWSKI: Right. We will do that.

4 MR. COLLINS: Because a state that was  
5 adequate and compatible at a recent evaluation, if this  
6 goes through could all of a sudden find themselves non-  
7 compatible due to a rule change. I realize that it  
8 wouldn't happen until the next program review where it  
9 came up that all of sudden one that's now required for  
10 compatibility that wasn't would be at the next program  
11 review, three years from the effective date of the policy  
12 or whatever you want to call it.

13 DR. KULIKOWSKI: Let me remind everybody about  
14 performance approach to IMPEP and program assessment.  
15 Although our current procedure doesn't explicitly spell  
16 this out, the intent of the program compatibility  
17 determination is not just on whether or not all  
18 regulations are in place that are required per the new  
19 policy statement.

20 In keeping with this broader approach to  
21 whether or not the agreement state program has in it as a  
22 whole, any elements or lack of elements that create  
23 conflicts, duplications or gaps on this collective  
24 national program, you could well have an individual rule  
25 or individual rules that you haven't yet promulgated

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHOJE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 within three years and still have the whole overall  
2 program determination found to be compatible. So,  
3 whenever I write something about compatibility in light of  
4 the new policy, the determination that we'll make on this  
5 kind of ongoing basis now -- not just a one time but rule  
6 compatibility determination on a one time basis, we're not  
7 going to say it's a compatibility issue. It's whether or  
8 not, as a result of the review of the rule, you're  
9 promulgating or proposing to promulgate. It satisfies the  
10 component criteria of the procedure.

11 That's different than a compatibility  
12 determination, per se, for the program. So, there's a  
13 distinction now between looking at individual regs and  
14 reviewing them to see whether they satisfy the component  
15 criteria. Is it a 3.a, a 2, a 1, a 3.a.S, or whatever?  
16 But that is not a program compatibility determination.  
17 That is only done at IMPEP review time and the MRB makes  
18 the final call on that in the big picture sense, not in an  
19 individual regulation sense.

20 MR. CAMERON: Okay, thanks for that  
21 clarification. I hope that's clear for you, Steve.

22 MR. GODWIN: Let me add one thing, Steve. All  
23 the things in 35 went from a 3 to a 3.b\*. I've scanned it  
24 and there's about a dozen, I guess, or so in there. So,  
25 that indicates that only the Commission agrees to make the

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 health and safety an issue. Then there will be an IMPEP  
2 review to see the overall program. It's not a  
3 compatibility issue.

4 MR. CAMERON: Okay, thanks, Aubrey.

5 Aaron?

6 MR. PADGETT: Just real quickly, if any of you  
7 have ever heard me beat on a guitar and then listen to  
8 someone like Chet Atkins, you'd understand that the same  
9 instrument, two different people, totally different  
10 output. I'm not nearly as interested in the particular  
11 instrument that you come up with -- though it is important  
12 -- as I am who's going to be playing it.

13 Do we get any input into the asking and the  
14 answering of the questions on compatibility? Has that  
15 been addressed yet?

16 MR. CAMERON: Who wants to handle that on the  
17 team?

18 Paul?

19 MR. LOHAUS: Paul Lohaus, NRC.

20 The answer is yes. Let's take the rulemaking  
21 process as one example. I think Aubrey touched on this.  
22 We've talked about the rule plan development process. As  
23 a part of that, NRC staff would use the procedures when  
24 they're finalized that are set out here, to develop a  
25 proposed compatibility assignment for each of the rules at

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 that point in time. That would then be provided in draft  
2 to the agreement states for review and comment, both with  
3 respect to the substance of the issues to be addressed in  
4 the rule as well as the proposed compatibility  
5 designation.

6 So, that would provide an early opportunity  
7 for input. Go through the same process, see if you arrive  
8 at the same conclusion. If not, any comments that you  
9 would have would be considered and addressed in developing  
10 a compatibility designation that would be then identified  
11 at the time that rulemaking action would be published as a  
12 proposed rule. So, at that point, you would have  
13 additional opportunity to comment on the proposed  
14 capability designation. So, I think at least through  
15 those two mechanisms, particularly for the rules, there  
16 would be an opportunity for early input and then also  
17 reviewing comment and input at the proposed rulemaking  
18 stage.

19 Other members of the working group, any  
20 additional thoughts or comments on that?

21 DR. KULIKOWSKI: I think just to add to that,  
22 I think we discussed this at some point. That the states  
23 will be given copies of the management directive and the  
24 handbook so they can actually go through -- under the  
25 rulemaking process that has been changed. I guess it was,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 what, Ray Paris' work done in the conference -- that  
2 cooperativity between the NRC and the rulemaking process.  
3 Everyone will have all the tools available and can do an  
4 independent review if you want, you know, and see if you  
5 come up with the same answer.

6           You know, somebody has got to take the lead  
7 and start the thing out. I think the important thing is  
8 is that the process incorporates the peer review of the  
9 states at an extremely early stage at the rulemaking plan  
10 stage. So, to answer your question, it is yes. There  
11 will be a lot more input from the states on rulemaking.

12           MR. CAMERON: Okay. Let's move on to our next  
13 topic. I know you're going to be thinking about this.  
14 Overnight you're going to get time to look at the  
15 materials. If we need to revisit compatibility, we can  
16 try to take some time to do that tomorrow.

17           It's my pleasure to introduce Bill Olmstead  
18 who is the Associate General Counsel for the Commission.  
19 He's going to address a topic which was touched on here  
20 which is the flexibility of states to adopt requirements  
21 through various generic mechanisms versus specific  
22 mechanisms.

23           I'll turn it over to Bill at this point.

24           MR. OLMSTEAD: You're all supposed to go to  
25 lunch now.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 Do you want me to stand or sit?

2 MR. CAMERON: You can sit or whatever you feel  
3 more comfortable doing.

4 MR. OLMSTEAD: In the words of an infamous  
5 general, "who am I and why am I here?" I'm the Associate  
6 General Counsel for Licensing and Regulation at the NRC  
7 and rendered an opinion that not everybody agreed with.  
8 So, I'm here to explain myself.

9 In that regard, I want to tell you a story of  
10 three scientists working in a radiation lab who had an  
11 explosion. They were dangerously exposed. And so the  
12 company doctor examined them and he said "you don't have  
13 long to live but I'm here to give you your last wish."  
14 One of the scientists was an Englishman and asked to  
15 return home so that he could go to the club with his chums  
16 and read the London Times. The second scientist was a  
17 Russian. He told the doctor, "my family lives on the  
18 outskirts of Leningrad and I would like to be with them,  
19 sharing the community and going to the heritage and  
20 enjoying radio lectures." The third scientist was a New  
21 Yorker. He looked at the doctor and said "I'd like a  
22 second opinion." With that note, you might all want to go  
23 get a second opinion.

24 If we could go to the first slide there?

25 I do have these slides on handouts if people

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 want to have copies.

2           The second slide shows you kind of the  
3 framework for which I want to discuss the question of  
4 generic requirements, or requirements that are applicable  
5 to all licensees. Essentially, in the compatibility  
6 statement, the objective is to have certain requirements  
7 that are imposed on every licensee of a particular class.  
8 If you look at just the standard dictionary definition,  
9 which is where, believe it or not, most lawyers and courts  
10 start, you'll find that a requirement is an essential  
11 requisite. That's about as strong as the word gets.

12           If you look at the United States  
13 Administrative Procedure Act which defines rules as  
14 generic requirements and adjudications and orders as  
15 individual requirements, you will find that a rule is  
16 defined as "a statement of general or particular  
17 applicability and future effect designed to prescribe law  
18 or policy." For purposes of the recently passed Small  
19 Business Regulatory Fairness Act, for example, the Federal  
20 Regulatory Agency has to look at not what the word is that  
21 a requirement is called -- whether that be rule, or policy  
22 statement, or legal opinion -- but what the effect of the  
23 document is. If the effect of the document is to impose a  
24 general or particular requirement of future applicability,  
25 it's treated as a rule and must be submitted according to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 the provisions of that Act.

2           If you look at state law, you find that forms  
3 other than rules are routinely used. I did a quick survey  
4 and I found 38 different definitions of rules among the  
5 states. So, in Gulliver's Travels, Jonathan Swift writes  
6 "the laws are best explained by those whose interests and  
7 abilities lie in perverting, confounding and eluding  
8 them." And in this case, I think the first place you have  
9 to go is to your state lawyers to find out if you have one  
10 of these beasts that we in the federal government call  
11 rules. If so, is it equivalent to the federal definition?

12           You will find that state vocabularies use the  
13 following analogous terms, although it varies by state.  
14 You have the word "code". You have the word "standards".  
15 You have the word "rules". You have "regulations". You  
16 have "attorney general opinions" and there's really a  
17 mixed bag here. In some states, attorney general's  
18 opinions are binding on everybody. In some states,  
19 they're binding only on state officials. In some states,  
20 they're not binding at all. So, you can't make a  
21 generalization that an attorney general's opinion is not a  
22 rule. For purposes of compatibility, you have to look at  
23 the opinion and see what its effect is in the state, and  
24 determine whether or not it is analogous to the  
25 compatibility statement.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           In terms of determining what the meaning of  
2 something is, I'll give you this little story. A good  
3 television or radio announcer knows that meaning depends  
4 on emphasis. Sometimes the word doesn't mean what it  
5 appears to mean and emphasis can mean more than the word  
6 itself denotes. Take a couple that had 11 children. The  
7 man explained that this was because his wife was hard of  
8 hearing. Every night they went to bed, the husband would  
9 ask "do you want to go to sleep or what?" "What?", she  
10 asked. So, not all terms are analogous and not all  
11 emphasis are the same.

12           So, individual agreements and individual state  
13 law needs to be reviewed, in light of the compatibility  
14 statement, to determine what is a requirement of future  
15 and general applicability and what is not. The real issue  
16 is, is the requirement imposed on all licensees of the  
17 same class?

18           Now, where do you get more information? The  
19 Agreement State Program Office -- made me say that. The  
20 Office of General Counsel will be happy to answer  
21 questions along this line, or your state attorney general  
22 or other state counsel that advises your particular  
23 program. This is really for lawyers despite what I may  
24 have said earlier, not rocket science. They can basically  
25 tell you whether or not the state device is equivalent to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 the federal device or not.

2 Hampton, I know, has been appointed by Chip as  
3 the one to ask these questions and he's -- you can also  
4 ask him. But it does remind me that Mark Twain once said  
5 that between he and Rudyard Kipling, he felt -- and I  
6 quote -- "we have all the knowledge in the world."  
7 Perhaps Chip, Hampton and I give the impression of having  
8 all the knowledge in the world on all sides of the  
9 question, but I assure you that that's not the case. I'm  
10 willing to have a short discussion with you now if you  
11 have any questions.

12 MR. CAMERON: Thanks a lot, Bill.

13 I think it's important since we do have the  
14 opportunity with Bill here, to clarify -- make sure that  
15 you understand what Bill is saying. Also, if you want to  
16 offer any opinions as to implications of this, feel free  
17 to do so.

18 How about questions or comments for Bill?

19 Richard, do you want to start off?

20 MR. RATLIFF: Richard Ratliff from Texas.

21 You know, you talked about rules, and all that  
22 and orders --

23 MR. OLMSTEAD: Right.

24 MR. RATLIFF: -- I think Ed had a question  
25 earlier. If we have something that we apply to all

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 licensees in a license condition, then is that what you're  
2 saying is equivalent as well?

3 MR. OLMSTEAD: Well, I would say that without  
4 looking at it. I think that when you get into the  
5 question as between adjudicatory orders and rules and you  
6 have something that requires you to impose something by  
7 order, that gets more complicated and depends on the State  
8 Administrative Procedure Act. The concern I know that the  
9 client here -- the Program Office has is how do they  
10 review it to ensure that it, in fact, is generic?

11 So, there's got to be something there that we  
12 can look at, either state law, state code, or your policy  
13 statements that assures us that, in fact, every licensee  
14 is going to have the requirement.

15 MR. CAMERON: That's an important  
16 clarification.

17 Steve?

18 MR. COLLINS: I just had a question. What's  
19 the difference between a legal LBR -- is that legally  
20 binding requirement -- versus program element?

21 MR. OLMSTEAD: That's correct, legally binding  
22 requirement.

23 MR. COLLINS: Okay. Would a license condition  
24 be an LBR --

25 MR. OLMSTEAD: As far as I'm concerned, it is.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 MR. CAMERON: Aaron, do you have a point?

2 MR. PADGETT: While you're hitting in the  
3 area, I wanted to ask him and get him to expand a little  
4 bit more on the generic orders and what he thinks that  
5 might entail. Give some examples and we already, I think,  
6 have a couple.

7 MR. OLMSTEAD: Well, I think the problem that  
8 I had when I start to talk here -- let me give you a  
9 caveat -- is that in a federal administrative procedure,  
10 generally, we would not consider orders as generic  
11 requirements. Therefore, it's difficult to talk about it  
12 in the context of the Federal Administrative Procedure  
13 Act. If your state APA looks just like the Federal APA,  
14 you need to be cautious about that. But not all states do  
15 that. Some states do allow state agencies to issue  
16 generic orders that are binding on all classes. Where  
17 that's the case, the order itself may amend the license or  
18 it may be free-standing, depending upon the state  
19 procedure.

20 I don't know if that makes sense. You kind of  
21 have to see one before you see what the -- I mean, an  
22 attorney general's opinion, for example, is really an  
23 order.

24 MR. CAMERON: Okay, Aubrey?

25 MR. GODWIN: I would warn the states to be

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 very careful because I know of some states where they have  
2 very specific restrictions relative to using conditions  
3 or, if you would, unique type things. When they say  
4 "unique", they mean unique. If you start applying it to  
5 every one of several members of a class, it's no longer  
6 unique. What you're doing, in effect, is denying public  
7 input to see that that's a validly needed regulation.

8 That could get you some problems when you get  
9 into the enforcement stage if they challenge you on the  
10 fact that this is not a unique one, if your state has that  
11 kind of provision. That's why you have to look at each  
12 state individually. We're not just a little black box  
13 sitting out here that "all states follow this." It can't  
14 be just stamped out. You've got to look at your attorney  
15 general and your agency legal adviser and say "can I do it  
16 this way?" or "can I do it that way?" But the big  
17 advantage is that any legally binding requirement method  
18 that you would want to use can be accepted. That's what,  
19 I believe, the bottom line is there.

20 MR. CAMERON: Rita?

21 MS. ALDRICH: I believe that answered my  
22 question. What I was hearing was that simple license  
23 condition not only accepted -- if it resulted from some  
24 sort of a generic order or attorney general's opinion.

25 MR. OLMSTEAD: Well, not necessarily. The

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 distinction that he was just making here is the correct  
2 one. If the licensee can challenge in an individual case  
3 that condition, and if you have to by law change it  
4 depending upon the factual circumstances of that challenge  
5 in an individual adjudication, then I would advise you to  
6 use some other advice. Because you're not going to be  
7 able to legally impose the same requirement on the same  
8 class and that's really the test. But in some states,  
9 they can, depending upon how their administrative  
10 procedure is set up and what the relationship between the  
11 state agency and the legislature is.

12 MS. ALDRICH: Because NRC has done the same  
13 thing in the past. In other words, imposed a --  
14 requirement by license -- regulation such as --

15 MR. OLMSTEAD: Yes. And the advice that we've  
16 always given the staff when they did that was that they  
17 were risking the very thing I'm talking about. Because if  
18 the licensee demands a hearing on that and says "for my  
19 facility, this requirement makes no sense", that's got to  
20 be individually adjudicated. We would not say to the  
21 client office here that that particular approach could be  
22 enforced against that licensee absent a factual record in  
23 the adjudicatory hearing.

24 MS. ALDRICH: Is that very much different  
25 though from somebody requesting a variance from a specific

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 part of a regulation? -- the same.

2 MR. OLMSTEAD: Procedurally, it's different  
3 because a variance usually -- or an exemption in federal  
4 practice usually means that the requirement would not  
5 accomplish the intended purpose of the regulation. So  
6 that what you're really saying in the -- I mean, I realize  
7 this gets real picky but in variances and exemptions, what  
8 you're really saying is that for this particular licensee,  
9 you're adopting a special rule to meet the intent of the  
10 compatibility requirement. And that would be different  
11 than an adjudication where the licensee could argue for  
12 alternatives.

13 MS. ALDRICH: If we use we as a New York  
14 standard license -- particular type of license as the  
15 standard --

16 MR. OLMSTEAD: Right.

17 MS. ALDRICH: So, it applies to all licensees  
18 -- documents --

19 MR. OLMSTEAD: We haven't reviewed a specific  
20 one but in the abstract, it sounds reasonable.

21 MR. CAMERON: And I think something Bill just  
22 said that underscores something of importance is that  
23 we're focusing in on legal aspects here. There may be  
24 policy aspects of administrative efficiency, public input  
25 or whatever that, obviously, you need to think about in

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 terms of deciding what type of mechanism you want to use.

2 Ed?

3 MR. BAILEY: I think that raises a really  
4 interesting question. What happens in something that's  
5 been declared an item of compatibility and you go to  
6 hearing on the rules, which we all have to do, and the  
7 preponderance of the evidence is that that rule should not  
8 be adopted, that there's no justification for it? What  
9 happens to us then?

10 An example that we could come up with would  
11 be, for instance, a QM rule and absence the redefinition  
12 of it. It would be very difficult, I think, based on the  
13 number of mis-administrations and so forth to demonstrate  
14 that that rule was necessary, which is one of the elements  
15 that we have to prove. What happens then? Would NRC say,  
16 "Okay, you've been through the process and you don't have  
17 to adopt it"?

18 MR. BANGART: Maybe. It depends on whether  
19 you create a conflict, gap or duplication, whatever that  
20 means.

21 MR. CAMERON: This example applies not only to  
22 the -- forget about the new policy that's being developed.  
23 It would apply to the old policy too. If you have a  
24 difference of opinion within the state if you're doing a  
25 rulemaking, on whether it's required by health and safety

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701



1 but the NRC has made a determination that it is required  
2 for health and safety, do you have to promulgate the rule  
3 in the state?

4 MR. OLMSTEAD: Just not to over-complicate it,  
5 but it does get complicated because in most adjudications  
6 where somebody would attempt to challenge a requirement  
7 like this, they would have to meet some larger threshold.  
8 They wouldn't be permitted to just litigate whether or not  
9 the evidence that supported the requirement that was  
10 adopted by rulemaking was adequate or not. They would  
11 have to show that it was flawed. They would have to meet  
12 a higher threshold.

13 This is typical in rulemaking versus  
14 adjudication. Now, whether it's a code, a standard, an  
15 attorney general's opinion or whatever, there are legal  
16 procedural devices that allow people to challenge generic  
17 requirements as being inadequately based in science or  
18 law. Adjudicatory bodies and judges allow them to do that  
19 if they meet this threshold. The reason for telling you  
20 that there is a threshold there is to say that it's not  
21 likely that one is going to be real successful in that  
22 type of challenge. But if they were, we would have to  
23 look at ours too because presumably, the same challenge  
24 would undercut the generic requirement itself.

25 MR. BAILEY: Well, my problem is that we have

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 to have a hearing and anybody can walk in off the street  
2 and present their statements to the hearing officer. All  
3 of that, then we have to justify why -- I mean, if they  
4 bring up something as ridiculous as, you know, the sign  
5 shouldn't be magenta -- it should be some other color  
6 because we've checked with 12 suppliers and there's no  
7 magenta paint -- then we have to explain that and justify  
8 it to our Office of Administrative Law why it should be  
9 required.

10 MR. OLMSTEAD: That's true. But in the state  
11 of California, your rules and your statutes can not be  
12 attacked that way.

13 MR. BAILEY: That's what I'm talking about.  
14 No, when we go to adopt a regulation, we --

15 MR. OLMSTEAD: That's fine in the rulemaking  
16 when you're doing that --

17 MR. BAILEY: Right.

18 MR. OLMSTEAD: -- when you're trying as a  
19 compatibility basis to adopt the rule. That's where the  
20 attack would probably lie most effectively. I understand  
21 what you're saying. At that point, you'd have to come  
22 back here and tell them that and they'd have to relook at  
23 it.

24 MR. CAMERON: Okay. And wouldn't you figure  
25 in California they'd make the signs magenta? I think

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 that's just perfect.

2 Any other questions or comments for Bill?

3 Okay, well I guess it seems pretty clear. Thank you very  
4 much.

5 MR. OLMSTEAD: More non-controversial than you  
6 thought.

7 (Whereupon, the meeting was adjourned at 12:43  
8 p.m.)  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

C E R T I F I C A T E

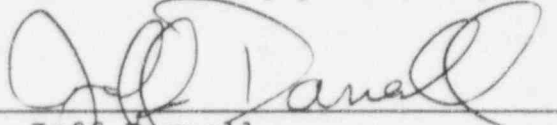
This is to certify that the attached  
proceedings before the United States Nuclear  
Regulatory Commission in the matter of:

Name of Proceeding: 1996 All Agreement States Meeting

Docket Number: n/a

Place of Proceeding: Rockville, MD

were held as herein appears, and that this is the original  
transcript thereof for the file of the United States Nuclear  
Regulatory Commission taken by me and, thereafter reduced to  
typewriting by me or under the direction of the court  
reporting company, and that the transcript is a true and  
accurate record of the foregoing proceedings.



Jeff Darnell  
Official Reporter  
Neal R. Gross and Co., Inc.