

UNITED STATES OF AMERICA  
CENTERS FOR DISEASE CONTROL

+ + + + +

NATIONAL INSTITUTE FOR OCCUPATIONAL  
SAFETY AND HEALTH

+ + + + +

ADVISORY BOARD ON RADIATION AND  
WORKER HEALTH

+ + + + +

90th MEETING

+ + + + +

TUESDAY, MARCH 12, 2013

+ + + + +

The meeting convened at 9:45 a.m.,  
Eastern Daylight Time, in the Augusta Marriott  
Hotel, Two Tenth Street, Augusta, Georgia,  
James M. Melius, Chairman, presiding.

PRESENT:

- JAMES M. MELIUS, Chairman
- HENRY ANDERSON, Member
- JOSIE BEACH, Member
- BRADLEY P. CLAWSON, Member
- R. WILLIAM FIELD, Member\*
- DAVID KOTELCHUCK, Member
- RICHARD LEMEN, Member
- WANDA I. MUNN, Member
- DAVID B. RICHARDSON, Member
- GENEVIEVE S. ROESSLER, Member\*
- PHILLIP SCHOFIELD, Member\*
- LORETTA R. VALERIO, Member
- PAUL L. ZIEMER, Member\*
- TED KATZ, Designated Federal Official

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REGISTERED AND/OR PUBLIC COMMENT PARTICIPANTS:

ADAMS, NANCY, NIOSH Contractor\*

ANDERSON, DAVE

ANDERSON, VIRGINIA

BARRIE, TERRIE\*

BURGOS, ZAIDA, NIOSH

CALHOUN, GRADY, DCAS

CRAWFORD, FRANK, DOL

FITZGERALD, JOE, SC&amp;A

HAND, DONNA\*

HINNEFELD, STU, DCAS

LEWIS, GREG, DOE

LIN, JENNY, HHS

LONG, J.G.

MAKHIJANI, ARJUN, SC&amp;A

MAURO, JOHN, SC&amp;A\*

McFEE, MATT, ORAU Team

McKEEL, DAN\*

RINGEN, KNUT

RUTHERFORD, LAVON, DCAS

SEABROOK, RON

STIVER, JOHN, SC&amp;A

STOTLER, CHARLES

WORTHINGTON, PATRICIA, DOE

\*Participating via telephone

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

2 (9:50 a.m.)

3 CHAIRMAN MELIUS: Good morning.  
4 Welcome, everybody. It looks like one more  
5 Member got lost trying to find the room. So  
6 let me turn it over to Ted to do the phone  
7 stuff and to call the roll.

8 MR. KATZ: Welcome, everybody.  
9 This is the Advisory Board on Radiation and  
10 Worker Health. This is our 90th meeting --  
11 number 90. It is a nice round number -- here  
12 in Augusta.

13 We are going to -- let's just --  
14 well a few things for everyone on the phone  
15 before we begin with roll call. The materials  
16 for this meeting, all the presentations are on  
17 the NIOSH website under the Board section,  
18 under Board Meetings, under today's date.

19 So everyone who is listening on  
20 the phone, you can follow along with the  
21 presentations and they should be listed there  
22 more or less in the order that they will be

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1 given today.

2           There is a public comment session  
3 that begins tonight at 6:00 p.m. and goes  
4 until either we run out of commenters or 7:00  
5 p.m., whichever comes first.

6           And let me also say for everyone,  
7 particularly members of the public, when you  
8 are listening to this meeting, please mute  
9 your phones. If you don't have a mute button,  
10 press \*6. That will mute your phone. If you  
11 do need to address the meeting because you are  
12 an SEC petitioner or during the public comment  
13 session, you just press \*6 again and that will  
14 take you off of mute. But keeping your phone  
15 muted will improve the audio quality for  
16 everyone else listening.

17           Okay, let's begin with roll call.

18           We have a number of Members who are actually  
19 attending by phone. We do not have a  
20 situation of any conflicts of interest for any  
21 of the sessions today. So I don't need to run  
22 through Board Members' conflicts for today.

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1 But let's go with roll call and I will just  
2 run alphabetically.

3 (Roll call.)

4 CHAIRMAN MELIUS: Thanks. We will  
5 start and our first presenter is Stu Hinnefeld  
6 to give us the NIOSH program update.

7 MR. HINNEFELD: Thank you, Dr.  
8 Melius.

9 Again, I am going to run through  
10 our NIOSH program update. I will give a  
11 little bit of news items first and then go  
12 through the statistics that are in the package  
13 rather quickly. If you have any questions  
14 about those, please be sure to speak up and  
15 ask or any questions about anything else.

16 (Pause.)

17 MR. HINNEFELD: Are we in Live  
18 Meeting up here, Ted?

19 MR. KATZ: Yes, we are in Live  
20 Meeting, yes. It is that little squiggly box  
21 on the bottom.

22 MR. HINNEFELD: So we are

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1 connected to the internet then. So it is the  
2 internet connection we are waiting for. Is  
3 that right?

4 MR. KATZ: Yes, it was working  
5 fine --

6 MR. HINNEFELD: Since we are in  
7 Live Meeting, we must be on the internet.

8 MR. KATZ: It was working 30  
9 seconds ago, a minute ago, because I tried it.

10 It looks like you might need to  
11 reconnect -- there you go.

12 MR. HINNEFELD: There we go.  
13 Okay. Sorry about that.

14 Program news, I try to give a  
15 little bit of program news every three months  
16 and surprisingly it is hard to think of much  
17 news.

18 First on the personnel front, I do  
19 have one item to report. I think I reported  
20 fairly recently that Chris Ellison, our team  
21 leader of our communications team was on a  
22 detail to the World Trade Center Program and

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1 she did such a good job that they wanted her  
2 to stay there. So Chris has transferred to  
3 the World Trade Center Program and is working  
4 there now.

5 At this time, we don't have plans  
6 to select a new team leader, communications  
7 team leader. Communications that have gone to  
8 Chris in the past should go to Dave Sundin,  
9 the Deputy Director of the Division and Glenda  
10 Leary, who is a communications team member who  
11 maintains most of the information on our  
12 website and she is the one who gets the  
13 information up on the website.

14 So certainly Chris did a great job  
15 for us for a long time. I counted on Chris  
16 quite a lot and, in fact, she served as an  
17 acting capacity as the Deputy Director when  
18 Dave was serving a detail across the street in  
19 another organization in NIOSH temporarily. So  
20 I was a little -- I was sad to see her go but  
21 you never want to get in the way of someone  
22 who considers a career advancement -- who

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1 considers an assignment a career advancement.

2 With respect to budget, I put that  
3 on the slide because I thought I might have  
4 more to say than I actually do -- am able to  
5 say. Of course everyone knows that the  
6 government got sequestered this month. The  
7 law that imposed the sequester, sequestration,  
8 required the removal of some 85 billion  
9 dollars from federal spending for this year  
10 and there are a series of guidelines that came  
11 down from the Office of Management and Budget  
12 and Health and Human Services for how that  
13 will apply.

14 And we are now working with Health  
15 and Human Services, with the Department and  
16 with OMB to determine exactly how it will be  
17 executed in our program.

18 Our administrative budget, the  
19 budget that pays for our travel, that pays our  
20 salaries, and pays our contractors is subject  
21 to sequestration. So there is going to be  
22 some money missing from that program for the

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1 remainder of the fiscal year, compared to what  
2 was anticipated at the start of the year.

3 It is my understanding that the  
4 money for compensation and medical benefits is  
5 not affected. So that money is not affected  
6 by the sequestration but the money to run the  
7 program is.

8 So once the actual -- essentially  
9 the implementation actions are final, I will  
10 be able to share those. But at this point,  
11 nothing has been finally decided and so it  
12 would be premature to talk very much about  
13 what is going to happen. I really thought by  
14 now I might have more to say but I really  
15 don't at this point. I can try to answer any  
16 questions on that, if anyone wants.

17 Okay and while we are on the news  
18 topic, I didn't put this on the slide but I  
19 think this is probably the time to address it,  
20 I wanted to speak a little bit about some not  
21 news stories but blog entries that have been  
22 written based on emails that were obtained

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1 from the Freedom of Information Act from our  
2 program. These emails go back a number of  
3 years. And reading the emails was  
4 particularly disheartening to me because of  
5 what they conveyed and the attitudes that  
6 seemed to be conveyed by those emails,  
7 attitudes that I would say probably didn't  
8 portray our commitment, DCAS's commitment to  
9 the Board process in the way that I feel that  
10 our commitment to the Board process has to  
11 operate. It is clear to me that this program  
12 was designed not to please a bunch of people  
13 sitting in Cincinnati. You know we are not  
14 supposed to be the deciders of this. We are  
15 not the ones to judge the quality of opinions.  
16 We are not the ones to judge the rectitude of  
17 opinions. And to make comments that would  
18 tend to indicate that we are not fully  
19 committed to this discussion process is just  
20 not to be done.

21 Since this has come to light, I  
22 have had a series of communications with our

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1 staff, starting with an all-DCAS email shortly  
2 after this blog first appeared. I sent it to  
3 everybody on the staff expressing my  
4 expectations for our commitment to the Board  
5 process, to an open and honest discussion with  
6 the Board and our contractor and appropriate  
7 weight given to all the opinions that come to  
8 this discussion.

9 I reinforced that with a meeting  
10 with all of our DCAS health physicists who are  
11 the ones most likely to deal on technical  
12 matters with the Board. I had the same  
13 message again to an all-hands meeting. About  
14 a week ago, we had an all-hands meeting which  
15 we have about once a quarter and I included  
16 that message to them, that nothing is  
17 satisfactory except a full commitment to an  
18 open and full discussion with the Board.

19 I addressed it in our monthly  
20 project meeting with our contractor, our dose  
21 reconstruction contractor, the same message to  
22 them. And our contractor's project manager

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1 addressed it with all the staff on the  
2 contractor team through an email message very  
3 similar to my email message.

4 I just wanted to reassure the  
5 Board that some of the attitudes that appeared  
6 to be displayed in those emails are not the  
7 attitudes of our organization and we are not  
8 going to allow those behaviors that reflect  
9 those attitudes in our organization.

10 So I can answer any questions  
11 about that. I can speak to some of the  
12 specifics in the emails. There was some  
13 indication that perhaps a number -- at Rocky  
14 Flats the number of thorium strikes was  
15 underplayed at some time during that  
16 discussion. Well, we know for a fact that  
17 right now we are reinvestigating that  
18 particular issue as part of the new SEC  
19 Evaluation Report at Rocky Flats. That is one  
20 of the items that is being -- how many thorium  
21 strikes were there really? So that is being  
22 addressed now.

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1           There was also discussion about  
2 surrogate data uses at Hooker Electrochemical  
3 and did the Board see all of the information  
4 about that. And the Board did see all of the  
5 information. We had developed a process,  
6 NIOSH had developed a process at that time  
7 that if in fact we intended to use surrogate  
8 data in an Evaluation Report, we had to first  
9 of all get the Office of Director's  
10 authorization to do it. And so the Office of  
11 the Director had a particular set of criteria  
12 that needed to be satisfied before he would  
13 support our use of surrogate data. And so we  
14 justified to the Office of the Director that  
15 this is -- here are your criteria. This is  
16 why we believe this use of surrogate data  
17 meets your criteria. And once he said okay,  
18 then the Evaluation Report was delivered to  
19 the Board with the use that we had proposed.  
20 And that is evaluated then, in accordance with  
21 the Board's criteria for the use of surrogate  
22 data. So there was nothing withheld. There

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1 was nothing saying one thing to one person and  
2 another thing to another person. That is not  
3 what was going on. It was kind of a process  
4 step we had to go through in order to even put  
5 it in the Evaluation Report.

6 So if there are other specific  
7 questions, I can try to answer those. I take  
8 this very seriously. This was not something  
9 that you can just say oh, well, boys will be  
10 boys. People say what they say. That is not  
11 what we did here. We take this very seriously  
12 and we intend to focus very seriously on  
13 issues like this.

14 CHAIRMAN MELIUS: Any questions or  
15 comments?

16 I would like to follow up a little  
17 bit because I was certainly quite disturbed by  
18 the tone and content of the emails that were  
19 posted or excerpts from emails that were  
20 posted. And they certainly undermine the  
21 credibility of the program and our effort.  
22 And I think that they also sort of point out a

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1 tendency to think of this as, at least on the  
2 part of some staff and contractor staff, that  
3 it is some sort of a game that we are playing  
4 of gotcha, and we will fool SC&A or whatever.

5 And I don't think it is speaks well. And it  
6 certainly reinforces some other perceptions at  
7 times where there have been problems in the  
8 past. So I think those have changed in a very  
9 positive direction over the past couple of  
10 years. So I am hoping this is something from  
11 the past and not something that reflects an  
12 ongoing concern but it is something I think  
13 we, as Board Members, have to take seriously  
14 also and be vigilant about. Because again, it  
15 is our credibility that is at risk here.

16 Also for this program, I will say  
17 two things. One is I know I have been in  
18 discussions with John Howard and have been  
19 following the NIOSH response and NIOSH took  
20 this very seriously. And I think their  
21 follow-up and efforts have been very serious  
22 and appropriate, including specific actions

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1 and so forth regarding some of these emails.

2 I did talk to Henry Anderson, and  
3 as Stu mentioned, one of these emails  
4 concerned the Hooker Electrochemical SEC  
5 evaluation. I went back through the  
6 transcripts of some of the early meetings and  
7 early reports where this email concerned and I  
8 couldn't see any indication that it affected  
9 the evaluation or certainly not the ultimate  
10 outcome of that evaluation. And I think this  
11 really had to do with some earlier drafts of  
12 reports or whatever.

13 And I also talked to Henry  
14 Anderson, who is the chair of that Work Group  
15 and brought these to his attention, actually.

16 I think Henry had a similar conclusion based  
17 on his recollection of running that Work Group  
18 and going through the SEC evaluation there.

19 So as best we can tell, I don't  
20 think has affected the ongoing work of the  
21 Board but it is something that is disturbing  
22 and I appreciate your response, Stu, and that

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1 of NIOSH. And I think it is something that  
2 the Board just needs to be aware of as we go  
3 forward as we are working on this.

4 Henry, do you want to add?

5 MEMBER ANDERSON: Yes. I did much  
6 of the same as what Jim said, looked through  
7 it. And I think this may have been one of the  
8 first where surrogate data really was the sole  
9 reliance. And what you just said, I guess, we  
10 weren't aware at the time. It may be in the  
11 minutes somewhere but we weren't aware that  
12 NIOSH's procedure was to first go and get the  
13 internal approval. So this, in one sense we  
14 were somewhat surprised when it first came as  
15 surrogate data because there was no data at  
16 the site. And I know a lot of the petitioners  
17 were concerned about that as well. And then  
18 we sort of worked on it long enough so that we  
19 got the Board's policy on that. And I think  
20 if we have anything like this coming up again,  
21 it would be helpful so that we sort of had a  
22 backfill with the Board, with the policy as we

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1 were looking at it.

2 So I think we are now up to speed  
3 on all of this. I think everybody is  
4 comfortable with our procedures. We are  
5 reviewing whether or not surrogate data can be  
6 used or not. But as a first go-around, I  
7 think we spent, it delayed our progress on the  
8 side a bit. But ultimately, I think we  
9 followed everything that needed to be done.  
10 So I am confident that despite what was in the  
11 emails, we really did get all the data and  
12 review it, site specific. It worked well in  
13 Hooker. How well it works elsewhere, we still  
14 have to see.

15 MR. HINNEFELD: Right. Thank you.

16 CHAIRMAN MELIUS: Any other -- any  
17 Board Members on the phones have questions or  
18 comments?

19 MEMBER SCHOFIELD: Jim, this is  
20 Phil. I would just like to throw out a  
21 comment that these emails really reflected bad  
22 is the only way to say it. They reflected bad

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1 on the Board and DCAS. You know I mean this  
2 kind of stuff -- we have to operate -- people  
3 need to understand that they can trust us. If  
4 we are going to try and do what some of these  
5 seems to imply, then people won't be able to  
6 trust us. And that was my only real comment.

7 I think it was good that this came  
8 out. I think it will make us stronger in the  
9 long run.

10 CHAIRMAN MELIUS: Thanks, Phil.  
11 Anybody else on the phone have questions or  
12 comments? Yes, Dave.

13 MEMBER KOTELCHUCK: What, if  
14 anything, was shared with other Board Members  
15 about this situation, beyond what Stuart has  
16 just said?

17 CHAIRMAN MELIUS: I mean the blog  
18 -- it is on the blog. It is publicly  
19 available. That's all. I mean the actual  
20 full emails and so forth really are not  
21 something I think we have -- necessarily would  
22 have full access to nor would we want to and

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1 so forth. They are redacted and there is  
2 issues like that.

3 These came from an FOI. If  
4 anybody -- if you are not aware of those, I  
5 can give you the link and so forth.

6 MEMBER KOTELCHUCK: I would  
7 appreciate it.

8 CHAIRMAN MELIUS: Yes, I can do  
9 that. I will add that my understanding is  
10 that as a result of the emails that people  
11 have requested that the HHS Inspector General  
12 evaluate the situation also. That happened  
13 just recently.

14 Any other questions or comments?  
15 Okay.

16 I would just add that Stu, again,  
17 as I said I think some of this -- much of this  
18 is from the past and so forth but I think you  
19 will have to understand and your staff ought  
20 to understand that the Board Members and our  
21 contractor are going to probably be a little  
22 bit more consistent on sort of making sure we

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1 have all the information and that following up  
2 on references and so forth do that and maybe a  
3 little less accepting of well we can do it or  
4 this is what I found and so forth because of  
5 this.

6 MR. HINNEFELD: It occurs to me,  
7 in particular, the Rocky Flats Work Group in  
8 the current work may want to look carefully at  
9 things that were thought about last time.

10 CHAIRMAN MELIUS: Right.

11 Okay, any other questions for Stu?  
12 Anything on the statistics?

13 MR. HINNEFELD: I can page through  
14 those relatively quickly.

15 CHAIRMAN MELIUS: Yes.

16 MR. HINNEFELD: It is the same as  
17 typically has been. The numbers go up a  
18 little bit every quarter. Division of the  
19 active cases and quite a number of them are in  
20 the hands of claimants.

21 The compensation rate, I did the  
22 arithmetic just a minute ago, it is just about

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1 29 percent. It has been pretty close to 30  
2 for quite a while. So it is just about 29  
3 percent there.

4 I attributed dropping from the low  
5 30s down to 29 to the fact that with the  
6 addition of quite a number of SECs, some of  
7 the cancers that are more readily compensated  
8 by dose reconstruction don't get dose  
9 reconstructions anymore. They are compensated  
10 by SEC and so that is, I think, what has  
11 probably caused that gradual decline in the  
12 overall compensation rate.

13 And as you can see, our submittal  
14 versus production rate has been pretty flat  
15 for the last several years.

16 Let's see, the first 5,000 claims.  
17 Anything in here with still on its initial  
18 cases, is a CLL case that had been erroneously  
19 referred a long time ago and then pulled  
20 because CLL at that time was not a covered  
21 condition. And then because since we added  
22 CLL to the covered conditions, it has just

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1 recently been reinstated. So anything that is  
2 new is in that category or they come back as  
3 reworks -- they were done and they have come  
4 back as reworks.

5 DOE's numbers on response to  
6 exposure requests, I did check and make sure  
7 that these numbers are both lower than they  
8 were in the last report. The total number of  
9 outstanding requests is about 50 lower than it  
10 was last time I reported. And the outstanding  
11 requests greater than 60 days are about ten  
12 lower than the last time I reported.

13 And our Special Exposure Cohort, I  
14 know LaVon will provide some information about  
15 that later on in the day about how we are  
16 doing on that. So far we have added some 99  
17 Classes and that represents 70 different sites  
18 that have SECs for at least some portion of  
19 their covered period.

20 I think that is my last slide and  
21 I don't seem to be moving forward very  
22 quickly. Yes, that is the last slide.

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1 CHAIRMAN MELIUS: Quick question.

2 I know Dick had a question.

3 MEMBER LEMEN: I just had a quick  
4 one. I probably should know the answer to  
5 this but when you talked on the first slide  
6 and there were a couple of others that say the  
7 same that you had 600 and --

8 MR. KATZ: Dick, can you please  
9 speak closer to the mic? Thanks.

10 MEMBER LEMEN: Now can you hear me  
11 better?

12 MR. KATZ: Thanks.

13 MEMBER LEMEN: I probably should  
14 know the answer to this but on the first  
15 statistics slide you had 642 or two percent of  
16 cases that were administratively closed. Can  
17 you just explain to me what that means?

18 MR. HINNEFELD: Yes, there are two  
19 reasons. One is the predominant reason. The  
20 predominant why a case would be  
21 administratively closed is after we have  
22 completed the dose reconstruction and we send

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1 the draft dose reconstruction to the claimant  
2 with the OCAS, what we call an OCAS-1 form  
3 where we ask them to attest that they have no  
4 more information to provide relevant to their  
5 dose reconstruction. It doesn't mean they  
6 agree with the dose reconstruction, just they  
7 have no more information to add.

8 And when we get that form back,  
9 then we finalize the dose reconstruction and  
10 send it to the Department of Labor but we  
11 won't finalize it and send it to the  
12 Department of Labor unless they do send that  
13 form back. So a number of people will opt out  
14 of the process at that point. If they get a  
15 dose reconstruction that is a non-compensable  
16 draft dose reconstruction, they essentially  
17 just opt out of the process there and don't  
18 return the OCAS-1. That is the -- the  
19 majority of the cases are because of that.

20 The other category where a case  
21 would be administratively closed at this point  
22 would be that during the claim process, the

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1 Energy employee died after they claimed --  
2 before the claim was finally done and there  
3 are no qualifying survivors.

4 MEMBER LEMEN: All right, thank  
5 you.

6 CHAIRMAN MELIUS: Any other  
7 questions? Any Board Members on the phone  
8 have questions on the information that Stu  
9 just presented?

10 Okay, thank you, Stu.

11 MR. KATZ: Stu, can you bring up  
12 the Labor presentation?

13 MR. HINNEFELD: I don't have any  
14 idea. I will see.

15 (Laughter.)

16 MR. KATZ: It should still be  
17 under that --

18 MR. HINNEFELD: Well, I'm still on  
19 Live Meeting for now. Do I need to sign back  
20 in?

21 MR. KATZ: No, I think you just  
22 closed out Live Meeting.

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1 MR. HINNEFELD: Okay well then who  
2 signed me in?

3 MR. KATZ: Zaida.

4 CHAIRMAN MELIUS: Our Live Meeting  
5 is dead, temporarily.

6 MR. HINNEFELD: Well I tested the  
7 slides on my computer laptop but I neglected  
8 to get in Live Meeting and test them that way.

9 (Pause.)

10 MR. KATZ: Zaida, can you come in  
11 here, please?

12 (Pause.)

13 MR. KATZ: Stu, you want to be  
14 with the mic and you, too, Dave.

15 MEMBER RICHARDSON: So I was  
16 looking at like for the first 5,000, the first  
17 10,000 and then the overall 32,000 claims or  
18 38,000 claims. It looks like the proportion  
19 pulled from DR for SECs has not really changed  
20 much over time, like maybe it is about ten  
21 percent.

22 MR. HINNEFELD: Well, let me think

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1 how this would work. What would your  
2 expectation be, that the number would go up?

3 MEMBER RICHARDSON: I was thinking  
4 it would because there are a number of recent  
5 SECs and that somehow you would see more  
6 recently that a larger fraction of them would  
7 get pulled out. But maybe they are not --

8 MR. HINNEFELD: Well it is a  
9 little bit of a complicated question because  
10 it is not only what proportion of cases got  
11 pulled but what was the status of a particular  
12 claim when it was added. For instance, if we  
13 had already done a dose reconstruction and  
14 then an SEC Class was added that included that  
15 claim, that claim will not look like it was  
16 pulled. It will not show as pulled for SEC.

17 So I can understand your question  
18 but it is a fairly complicated thing to  
19 interpret and I don't know that I would draw a  
20 lot of conclusion from any changes or a non-  
21 change in that percentage.

22 MEMBER RICHARDSON: Okay.

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1                   CHAIRMAN MELIUS: And I also think  
2 it had to do with the dynamic of what the  
3 early outreach was for the program. And I  
4 think that since SECs tend to be for the  
5 earlier years, those people were harder to  
6 reach in terms of knowledge of the program and  
7 filing claims because it was often spouses.  
8 So again, I think as Stu mentioned, it is a  
9 very complicated picture.

10                   Okay, are we ready? I know that  
11 is not Jeff Kotsch. This is the first time  
12 Jeff has not appeared probably in 89 meetings  
13 like in a row. I can remember in the early  
14 days he is -- you know, we sort of miss him  
15 now. But welcome Chris and we will welcome to  
16 doing this, Frank.

17                   MR. CRAWFORD: I will do the best  
18 I can. I certainly, since Jeff has  
19 represented us for 89 meetings, I don't have  
20 his depth of knowledge.

21                   CHAIRMAN MELIUS: Oh, okay.

22                   MR. CRAWFORD: So I will just

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1 follow along with the slides.

2 The first slide is just a brief  
3 review. My understanding is that these slides  
4 will be available on the NIOSH website.

5 CHAIRMAN MELIUS: They are.

6 MR. CRAWFORD: Good for those  
7 listening by telephone. I think the salient  
8 figures here, we have 160,000 some cases  
9 filed, over nine billion dollars in total  
10 compensation paid to date.

11 By the way, Jeff warned me you  
12 won't be able to reconcile these numbers very  
13 directly with NIOSH's numbers for recording  
14 differences and other things.

15 We show 39,000 cases referred to  
16 NIOSH for dose reconstruction and NIOSH has  
17 returned almost 37,000 of those; 31,000 with  
18 dose reconstructions and about 5,600 without  
19 dose reconstructions.

20 We show 2,400 cases currently at  
21 NIOSH, including 840 some reworks or returns.

22 You will see here this pie chart.

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1 Those of us who are here can see it anyway.  
2 I think the salient facts here of the 31,000  
3 cases returned by NIOSH, 25,000 and some were  
4 with the DR and a final decision by now. And  
5 we show 9,000 final approvals and 16,000 final  
6 denials. So about a 36 percent approval rate  
7 on these Part B cases.

8 We see here on this slide the Part  
9 B cancer cases with final decision to accept.

10 We have about 8,500 accepted dose  
11 reconstruction cases, 18,000 accepted SEC  
12 cases. With cases that are accepted both  
13 because of an SEC and on a dose reconstruction  
14 shows a PoC above 50 percent, we have only  
15 600. So the overlap is very small.

16 And the total of all accepted SEC  
17 and dose reconstruction cases, about 27,000,  
18 with four billion in compensation paid for  
19 that part of the program.

20 The top four worksites, this won't  
21 be a surprise, Hanford, Savannah River, Y-12,  
22 and K-25 are the top sites for Part B.

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1           Just another presentation of the  
2 data. Of the 40,000 final decisions approved,  
3 we see denials of 24,000 roughly. And some of  
4 those denials 6,000 are based on medical  
5 information being insufficient to support the  
6 claim and we have another 1,700 where there  
7 were no eligible survivors. And the balance  
8 about 16,000, the PoC was less than 50  
9 percent.

10           DOE cases versus AWE cases, AWE  
11 cases we see is a small fraction, ranging from  
12 18 percent down to about seven percent as of  
13 last month of the total cases.

14           We have been continuing, of  
15 course, the Department's outreach events. We  
16 recently had a meeting, recently being  
17 December, in Farmington, New Mexico with 80  
18 individuals in attendance. And I don't even  
19 know how to pronounce Kayenta, Arizona on  
20 December 5th, with 77 individuals in  
21 attendance.

22           Other recent meetings, October for

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1 Hanford, Clarksville in November, X-10 in  
2 February, Los Alamos also in February.

3 Quite a few attendees. As you  
4 see, not many new claims filed but I think  
5 that is just because the word has gotten out  
6 on this program over the past ten years or so.

7 We have also done medical benefits  
8 meetings and those, as you see, are pretty  
9 well attended.

10 Joint Outreach Task Group has been  
11 quite active with monthly conference calls.  
12 And we have tentative meetings scheduled in  
13 Las Vegas, Chicago, and California during this  
14 fiscal year.

15 This slide is a little complicated  
16 to describe for the folks on the phone. This  
17 is SEC petition site discussions. Of  
18 interest, Brookhaven has about 2,000 claims  
19 for both Part B and E. Baker Brothers has  
20 eight and Savannah River has just over 14,000  
21 claims.

22 Part B approvals -- I am going to

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1 skip a couple of rows here -- were 661 for  
2 Brookhaven, one for Baker Brothers, that is  
3 one out of eight, remember, and 2,675 for  
4 Savannah River.

5 Part E approvals are actually  
6 pretty close, 619 for Brookhaven, one for  
7 Baker Brothers, 2,866 for Savannah River.

8 These next few slides just present  
9 some of the outstanding features of the Act.  
10 This one concerns employee eligibility for  
11 Part B. We see that DOE contractors and  
12 subcontractors are eligible, DOE federal  
13 employees, AWE employees, beryllium vendors,  
14 and RECA are all eligible.

15 The difference for Part E is that  
16 eligibility is only for DOE contractors and  
17 subcontractors and RECA individuals.

18 The other categories are not  
19 eligible.

20 We all know this but I will just  
21 mention, again for the benefit of those on the  
22 phone, that the next slide is about covered

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1 conditions. Part B covers a chronic beryllium  
2 disease, beryllium sensitivity but only for  
3 medical monitoring, chronic silicosis, cancer,  
4 and does not cover any toxic exposures. Part  
5 E, by contrast, covers all of those  
6 conditions.

7 Survivor definitions differ  
8 between the two parts of the Act. The  
9 particular difference, the spouse, of course,  
10 is eligible, a spouse at the time of death;  
11 the children under age 18, or under age 23 if  
12 full time students, or any age if medically  
13 incapable of self-support. Those categories  
14 are survivors in both Parts B and E.

15 The final part, adult children,  
16 they are only considered survivors for Part E  
17 cases -- Part B cases, not Part E.

18 Benefits, Part B cases \$150,000  
19 paid to the employee and/or the survivor;  
20 \$50,000 for RECA employees and survivors.

21 Under Part E, the impairment is a  
22 scale. It is \$2,500 per percent of impairment

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1 to the employee, wage loss is also paid,  
2 \$10,000 to \$15,000 per year to the employee  
3 and \$125,000 payment can be made to a  
4 survivor. There is a cap of \$400,00 for Parts  
5 B and E combined.

6 And that is the end of the slide  
7 show. Are there any questions? Wanda?

8 MEMBER MUNN: Frank, your slide 12  
9 is a perfect distillation of most of the  
10 pertinent information that some of us like to  
11 see. I was disappointed to see that you  
12 didn't include the four large sites which,  
13 traditionally, have the largest numbers to  
14 report there. I realize that that has been  
15 done in the past and sometimes skipped over.  
16 But could I request that that slide continue  
17 to be a part of our presentation and that you  
18 incorporate at least the four or five larger  
19 sites as well each time you report those?

20 MR. CRAWFORD: Yes, I am making a  
21 note of that, Wanda, and I will transmit that  
22 to Jeff to have that put back.

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1                   CHAIRMAN MELIUS:           Any other  
2 questions? Board Members on the phone, do you  
3 have questions?

4                   MEMBER ZIEMER:           No, I have no  
5 questions.

6                   CHAIRMAN MELIUS:           Oh, okay.  
7 Thanks.

8                   MEMBER ZIEMER:           That was Ziemer,  
9 in case there is a court reporter.

10                  CHAIRMAN MELIUS:          Okay. Thanks,  
11 Paul.

12                   Anybody else? Okay, thanks.

13                   You can tell Jeff even though you  
14 did a fine job, he is welcome back also.

15                   MR. CRAWFORD: Thank you.

16                   (Pause.)

17                   DR. WORTHINGTON: Good morning. I  
18 want to thank the Board for the opportunity  
19 to give some highlights from DOE today. It is  
20 always a pleasure and an honor to appear  
21 before the Board to talk about this great  
22 program and support from the Department of

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1 Energy.

2 I also want to give some remarks  
3 from Glenn Podonsky who couldn't come to the  
4 Board today. He is back in Washington doing a  
5 number of things, but he wanted Greg, Melissa,  
6 and myself to reconfirm our commitment to this  
7 program.

8 I probably should also follow my  
9 colleague's lead from NIOSH and talk a little  
10 bit about where we are regarding the budget  
11 and how it relates to this program.

12 Certainly this program is subject  
13 to reductions from the sequestering activities  
14 that are going on across the federal agencies.

15 With regard to this program, though, we are  
16 still committed to delivering the services  
17 that I will talk about briefly here today.

18 At the beginning of this fiscal  
19 year, Greg Lewis and his organization started  
20 to look closer at the spending and how we  
21 could be more efficient and effective with the  
22 funds that we do have. So we have a head

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1 start in looking at how to do things a little  
2 bit better in working with the sites and with  
3 NIOSH on conserving costs wherever we could.

4 So we believe that while we don't  
5 have any definite numbers, that we will be  
6 able to continue to deliver the services as  
7 long as we work closely with the organizations  
8 in terms of managing those activities.

9 Those activities certainly have  
10 not changed from the time that we have been  
11 given this responsibility and that is to be  
12 strong advocates for the claimants and to  
13 assure that all available work and facility  
14 information is made available to NIOSH to DOL  
15 and to the Advisory Board and their  
16 contractors.

17 Our responsibilities, again,  
18 remain the same, but I want to kind of just  
19 reiterate those again, I think they are  
20 important and they are necessary if we are  
21 going to be able to help the claimants get all  
22 of the information that they need to describe

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1 their conditions while they were working at  
2 Department of Energy. And so our  
3 responsibility for employment verification  
4 exposure records remains. We have dedicated  
5 staff and processes associated with delivering  
6 those services.

7 We also want to support and assist  
8 DOL and NIOSH and the Advisory Board on large-  
9 scale research. They are certainly very  
10 intense in terms of costs associated with them  
11 but very necessary. So we continue to work on  
12 those activities.

13 We want to conduct research in  
14 coordination with DOL and NIOSH on issues  
15 related to the covered facilities.

16 This is a huge job. It is very  
17 diverse missions and different activities and  
18 management systems associated with operating  
19 DOE today, as well as in the past. And so we  
20 have, it is just not our office but certainly  
21 is a commitment across DOE wherever work was  
22 being performed. And so we have a network of

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1 site POCs. They are very important and the  
2 claimants, we have had a lot of feedback from  
3 them over the years in terms of working with  
4 some of these individuals and how helpful they  
5 are in doing that.

6 And so these site POCs are  
7 important in coordinating research activities  
8 in planning tours and working with our office  
9 and to make sure that all of the available  
10 information can be delivered as needed.

11 Individual records certainly the  
12 individual records are important. Our  
13 employment verification numbers, about 6,000 a  
14 year are those records for NIOSH. And our  
15 DARs, as you can see from those numbers, they  
16 remain high. So it is critical for us to be  
17 able to find ways to be more efficient so that  
18 we are still able to deliver all of those  
19 services.

20 Claimants often work at multiple  
21 sites. DOE individuals, whether it is Hanford  
22 or other places, whether they are moving

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1 around different parts of the site or whether  
2 they are going to other locations, they often  
3 have unique expertise and so they are moving  
4 around. And they are contractors sometimes,  
5 they are subcontractors. But whenever data is  
6 needed, we want to be able to help process it,  
7 to be able to provide that information to  
8 them.

9 Record packages can be huge. They  
10 can be hundreds of pages long and we want to  
11 make sure again that the packages are complete  
12 and they have all of the relevant information.

13 Individual records -- a typical  
14 request for workers will have to go to  
15 different site departments. Again I mentioned  
16 earlier about the diversity of the missions  
17 and the different activities going on. And so  
18 there are, in some cases, multiple departments  
19 at a site that one would need to pulse or to  
20 get information. And there are different  
21 databases, some of them speaking to each  
22 other, some of them manual or old data bases

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1 but we want to exhaust all of the  
2 opportunities to find that information.

3 Large scale research projects,  
4 again, these projects are driven by the needs  
5 of DOL and NIOSH. They come to us with  
6 specific requests and we want to facilitate  
7 that from headquarters and to ensure that the  
8 sites are available and they are doing that.  
9 And again, some of these things can be costly.

10 And so it is our responsibility to provide  
11 the funding for that. And so we want to make  
12 sure that we understand and again, facilitate  
13 that.

14 DOE must review many of the  
15 records, due to classification concerns.  
16 Certainly, again because of the mission of DOE  
17 in the past and certainly missions that are  
18 going on now, there is a need for not only  
19 just the safety of the workers but also  
20 security of the nation. So we have to balance  
21 those priorities and make sure we are meeting  
22 the requirements of both sides.

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1           And so DOE is often supporting  
2 four to five projects at once. So we have, in  
3 some cases, a juggling act but we never want  
4 to put things to the side and not address  
5 them. So we are looking for opportunities to  
6 be able to move forward with our POCs with  
7 NIOSH, the Department of Labor in terms of  
8 getting these activities done.

9           We have a number of large scale  
10 research projects. They are listed here on  
11 this slide. Some of them are more active,  
12 more intense than others. But whatever the  
13 need is, we are trying to work those issues  
14 and provide the information.

15           Document reviews. DOE is  
16 committed to providing documents. It is our  
17 responsibility to do that.

18           Some years ago, it seems like just  
19 a few years, but maybe it was two or three  
20 years, we were having a need to be more  
21 careful with regard to security. And so we  
22 developed a DOE security plan that we worked

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1 with the various agencies on and many of you  
2 reviewed those documents. You were trained on  
3 those documents. And while it was painful and  
4 took longer than we wanted to develop it, we  
5 think that now that we have it in place, it is  
6 certainly serving us as well and it doesn't  
7 get in the way of doing business.

8 The average turnaround time for  
9 review and release of documents is typically  
10 work days. I mention that because there was a  
11 time when it was much longer. I think that  
12 all of us are pleased and we can hold our  
13 heads up that we are able to get it down to  
14 eight working days, on average, and that we  
15 work to keep things moving and, where possible  
16 to speed it up.

17 In certain cases where an  
18 expedited review is necessary, DOE has  
19 returned documents in one to two days. So we  
20 want to remain flexible and responsible. Even  
21 though we may have a process and average time,  
22 if we need to expedite things, we do that.

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1                   We are fortunate within the  
2 Department of Energy, in terms of Glenn  
3 Podonsky's organizations, that we have safety,  
4 we have security, all in one organization. So  
5 in one family we can certainly work together  
6 to try to deliver the services where needed.

7                   Facility research, again, we  
8 research and maintain the covered facilities  
9 database. It is very important for that  
10 database to be accurate. So that certainly is  
11 a high priority for us as well.

12                   I want to spend just a few minutes  
13 talking about the Security Electronic Records  
14 Transfer System, or SERT. That is something  
15 that we are proud of and I believe from our  
16 discussions with NIOSH and Department of  
17 Labor, that they are also proud and they are  
18 pleased with this activity. It is one in  
19 which we have the security, or the electronic  
20 transfer, but also in terms of we can expedite  
21 getting records to the right place very  
22 quickly. And so we are very pleased. I know

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1 that it took some time for us to stand up to  
2 this particular activity, but we did it sort  
3 of together collectively. I think we learned  
4 as we moved forward and we look forward to  
5 utilizing this process in the future. And so  
6 hopefully we will look back a couple years  
7 from now and see just how far we have really  
8 come. But all the feedback we have received  
9 to date on this is that it has been very  
10 helpful and it certainly was the right way to  
11 go with this system.

12 Some recent initiatives. One of  
13 the things that Greg Lewis has done in his  
14 office is that they are really truly  
15 activists, or supporters of workers, in a lot  
16 of different ways. And a lot of things are  
17 going on and they wanted to have an  
18 opportunity in a very informal way to put out  
19 a newsletter and share information in terms of  
20 what they are doing. But also if some of you  
21 have had an opportunity to look at the  
22 newsletter, Greg has taken the opportunity to

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1 kind of talk a little bit about some of the  
2 individuals in his office and kind of what  
3 they do so you can see behind the scenes the  
4 people that are working on these programs or  
5 on related programs.

6           So if you haven't had an  
7 opportunity to look at the newsletter, I  
8 believe there may be some on the table back  
9 there. And also I think Greg has an extensive  
10 list, email list and if you are not on it, you  
11 can get on it and get a copy of it. I think  
12 you will find it very useful. Again, a very  
13 informal but very informative document, I  
14 believe.

15           Outreach, we have heard the other  
16 agencies up here today talk about outreach.  
17 Outreach is still important. We have done  
18 quite a bit of work as agencies on this  
19 program. Do we have a lot of work remaining?

20           Yes, we do. And while a lot of people have  
21 heard about the program, did all the right  
22 people hear about it or do we need to remind

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1       them?   And so we do quite a bit of outreach  
2       and a lot of it is in combination with the  
3       other agencies.   I think that is really good  
4       like one-stop shopping, when groups are able  
5       to come in and they can talk to multiple  
6       agencies at one time about what the federal  
7       government is doing in terms of trying to  
8       support them.   And so whether it is town hall  
9       meetings, or other types of meetings, I think  
10      they have been very helpful.   We want to  
11      continue those.   I think at a time when  
12      resources are scarce and we are all concerned  
13      about our budgets, I think if we can come  
14      together in one place and offer services,  
15      certainly it is a very good thing.   So I am  
16      very pleased to work with these other agencies  
17      on that.

18                   I will mention, as Greg has done  
19      probably in some of the previous meetings, the  
20      Former Worker Medical Screening Program.  
21      While it is not part of the EEOICPA program,  
22      it is closely related.   It is the federal

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1 government's commitment to workers that worked  
2 at DOE doing hazardous operations, that once  
3 they retire from the government from DOE  
4 activities they can come back and they can  
5 have a physical, a physical that is targeted  
6 at them, targeted at the hazards that they  
7 were exposed to and some exams that would be  
8 unique to look for things that they may have  
9 adverse health effects from their work at DOE,  
10 and that these exams are done by individuals  
11 that are very knowledgeable and experts in the  
12 occupational medical area.

13           And so we have that program. It  
14 is available to serve all former workers for  
15 all DOE sites. And I have listed the website  
16 here for people that may not be familiar with  
17 it. You are going to pass it on to other  
18 individuals. And we do find things sometime  
19 that we are able to act upon quickly, and  
20 improve the quality of health or, in some  
21 case, mitigate these adverse health effects  
22 altogether. And so we would encourage you to

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1 share this information with others.

2           The       Former       Worker       Medical  
3 Screening Program again is for all workers all  
4 across DOE. We have a number of programs,  
5 individual programs. The ones that are  
6 focused for Savannah River, they are a local  
7 program. We have two components of what we  
8 call the production workers and the  
9 construction workers. I have that information  
10 here on the screen and we would encourage you  
11 again to share that for individuals to be able  
12 to get physicals if they have left DOE, again,  
13 targeted at the hazards that they were exposed  
14 to. And this program was designed in such a  
15 way that if they are not physically here in  
16 this area, that there are places that when  
17 they call this number that they can tell them  
18 that they can go nearby and have the experts  
19 perform the exams.

20           That was kind of a quick overview  
21 of DOE and where we were. Again, the primary  
22 focus today was to remind everybody that we

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1 remain committed to this program at a time  
2 when resources are scarce but we are not  
3 anticipating. We are looking for ways that we  
4 don't have to shave off what we are doing in  
5 any way but just to be more efficient and get  
6 more done with the resources that we have.

7 I will be happy to answer any  
8 specific questions and a reminder that Greg  
9 Lewis is here and he will be helping me with  
10 these questions, since he is wrapped up in  
11 these activities every day. So thank you  
12 again.

13 CHAIRMAN MELIUS: Thank you very  
14 much and by the way, put in a plug for Greg.  
15 He has been very good and responsive here. So  
16 we appreciate his efforts.

17 DR. WORTHINGTON: Thank you for  
18 the feedback.

19 CHAIRMAN MELIUS: And it was  
20 unsolicited.

21 DR. WORTHINGTON: Actually he  
22 looks quite young but Greg has been working on

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1 the program, at one point when he was  
2 extremely young, sort of in the trenches of  
3 the program but he has come up through the  
4 ranks. But he has put quite a bit of time in.

5 He is very, very knowledgeable and  
6 experienced and he still has a lot of  
7 enthusiasm and energy on this program and that  
8 is very important.

9 CHAIRMAN MELIUS: Board Members  
10 with questions? Board Members on the phone?

11 MEMBER ZIEMER: This is Ziemer.

12 CHAIRMAN MELIUS: Yes, Paul?

13 MEMBER ZIEMER: I have a comment  
14 and a question.

15 The comment, first of all, just to  
16 reiterate our thanks to Dr. Worthington and to  
17 Greg for their commitment to the program. And  
18 I hope, Dr. Worthington, that you will also  
19 tell Mr. Podonsky how much we appreciate his  
20 efforts to give this high priority support  
21 during this period of a federal budget  
22 squeeze. I appreciate that.

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1 My question is, are the slides  
2 that are used today available electronically?

3 Those of us on the phone didn't have access  
4 to the details on the presentation.

5 DR. WORTHINGTON: They are  
6 available.

7 MR. HINNEFELD: This is Stu. They  
8 may come up later today on the website.  
9 Because the website updates like once a day in  
10 the afternoon and I think we got these  
11 yesterday afternoon. So I think they will  
12 come up this afternoon.

13 MEMBER ZIEMER: Thank you very  
14 much.

15 CHAIRMAN MELIUS: Any other  
16 questions from Board Members on the phone?

17 Okay if not, I have one. I just  
18 want to raise one issue. I don't think there  
19 is necessarily anything that can or  
20 necessarily should be done but I think we are  
21 reaching a stage in some of our evaluations  
22 now where we are getting into some of the more

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1 difficult areas in terms of retrieving  
2 documents in some of the bigger sites and so  
3 forth. And I think the cooperation from DOE  
4 has been very good. The cooperation of the  
5 sites is not always as good but we usually try  
6 to work with it. I mean, one or two sites.  
7 But I do get concerned that with the  
8 sequester, which I think, as I understand it,  
9 all the federal agencies are trying to still  
10 understand how that affects them and affects  
11 particular programs.

12 I do get concerned that on some of  
13 these larger sites where we have pretty  
14 significant document requests because in order  
15 to move along with an SEC evaluation, the  
16 difficulties at the site plus the sequester  
17 reduction resources may affect us. And I just  
18 think we would want to work with you even more  
19 closely and try to coordinate it as best we  
20 can.

21 But it appears that in some of  
22 these sites it is very hard, at least

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1 initially, to target particular document. The  
2 sources though, they tend to be fairly  
3 significant document requests and then making  
4 the arrangements I think is becoming more  
5 difficult, partly as people adjust to the  
6 sequester and so forth.

7 DR. WORTHINGTON: We understand  
8 your concern and we will be working with you  
9 and with the sites. And I have asked Reagan,  
10 who is doing a great job there, to try to  
11 monitor progress in terms of difficulty. And  
12 when I need to, I will work directly with the  
13 site managers. And if we need to also, with  
14 headquarters, their programs in headquarters  
15 saying look, we have some concerns here and  
16 how can we address those. And so we will try  
17 to monitor that carefully and we always  
18 welcome the feedback on where we are so that  
19 we don't recognize that we can get right on  
20 it.

21 CHAIRMAN MELIUS: Okay. And  
22 likewise, if there are things that we can do

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1 in terms of what we are requesting from you  
2 that would make it more efficient or easier to  
3 handle, please let us know also.

4 DR. WORTHINGTON: All right. And  
5 again, thank you.

6 CHAIRMAN MELIUS: Thank you.

7 Okay, we are running a little bit  
8 ahead of schedule. And since we will be  
9 discussing a petition and the petitioner may  
10 be on the line, I think we should take a short  
11 break. I don't think there will be any  
12 argument. Fifteen minutes but be back here  
13 promptly and ready to go at 11:15 because that  
14 is when we are schedule done that SEC.

15 (Whereupon, the above-entitled matter went off  
16 the record at 10:59 a.m. and  
17 resumed at 11:19 a.m.)

18 CHAIRMAN MELIUS: Okay, if  
19 admirals and other people, please take your  
20 seats. Or if you are going to talk, go  
21 outside, please.

22 Next on our agenda is the

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1 Brookhaven SEC petition discussion. And  
2 Josie, I believe you wanted to speak first.

3 MEMBER BEACH: Yes.

4 CHAIRMAN MELIUS: I don't know if  
5 you are going to speak from the table or from  
6 the --

7 MEMBER BEACH: No, I will just  
8 speak from the table.

9 CHAIRMAN MELIUS: Okay, thanks.

10 MEMBER BEACH: Brookhaven. It has  
11 been a while since we discussed Brookhaven so  
12 I wanted to just go ahead and bring you up to  
13 speed of what has been happening over the last  
14 year and especially over the last month. The  
15 Work Group has been very active and I  
16 understand even the last couple of days, which  
17 Grady will fill us in on that part of it.

18 So let's go back to the SEC  
19 petition 83.14 Evaluation Report: was approved  
20 on January 6, 2012 for all employees at BNL  
21 from January 1, 1980 through December 31,  
22 1993. This was also coupled with the

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1 preceding SEC for 1947 to 1979.

2 So the Work Group met immediately  
3 after that 83.14 approval on February 21,  
4 2012. And I want to give you just a little  
5 bit of background of where we started there.

6 SC&A provided an updated issues  
7 matrix reflecting the new SEC and addressing  
8 remaining SEC questions and Site Profile  
9 issues for the period after 1993, including a  
10 needed assessment by SC&A of any issues with  
11 the 1993 end date.

12 Okay so with that meeting, SC&A  
13 and NIOSH were both assigned issues. NIOSH  
14 was to look at the neutron fading issues,  
15 neutron dosimetry questions regarding CR-39  
16 and the Lexan and the need for an internal  
17 coworker model, verification of transfer of  
18 data to electronic files, and we requested a  
19 so-called radiological footprint.

20 Just a little bit on that. The  
21 Work Group understood there was a form or some  
22 document that would give the radiological

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1 footprint from BNL. However, we were never  
2 able to come up with that. So that is where  
3 is that stands.

4 SC&A was asked to assess the end  
5 date adequacy of bioassay data to support the  
6 dose reconstruction.

7 NIOSH provided to SC&A the matrix  
8 issues on March 28, 2012 and SC&A responded on  
9 May 22nd, again in 2012. Part of SC&A's  
10 response was analysis of the SEC end date in  
11 terms of bioassay data adequacy and  
12 completeness. SC&A selected five actual  
13 cases, claimant cases from Brookhaven in which  
14 the CATI indicated work and potential  
15 exposures at the high flux beam reactor during  
16 the post-1993 period for which routine  
17 bioassay monitoring would be expected.

18 The Work Group and NIOSH turned  
19 its attention to addressing this critical  
20 question over the remainder of 2012.

21 NIOSH provided the Work Group a  
22 response to SC&A's end date bioassay sampling

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1 analysis on January 4, 2013 concluding that  
2 improved records response from Brookhaven made  
3 it possible to explain the gaps in bioassay  
4 data, most of which were found not to reflect  
5 missing data. SC&A responded, as did NIOSH,  
6 again before the February 14th Work Group  
7 teleconference meeting.

8 And at the February 14th  
9 teleconference meeting, the Work Group  
10 addressed the end date issue and requested  
11 that NIOSH provide a dose reconstruction  
12 approach for each of the four remaining cases  
13 to substantiate the availability of relevant  
14 records from Brookhaven post-1993.

15 By March 6th, the next scheduled  
16 teleconference meeting, NIOSH was able to  
17 provide its substantiation of the four cases  
18 to the satisfaction of the Work Group and the  
19 Work Group closed the question of the post-  
20 1993 inadequacies in bioassay data. However,  
21 in returning to the remaining SEC and Site  
22 Profile issues, there were three remaining SEC

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1 questions that did remain from the last Work  
2 Group meeting.

3 Let's see. At that point, the  
4 Work Group decided a technical call was in  
5 order and just before this Board meeting, SC&A  
6 and NIOSH were able to agree that two of these  
7 three issues are of Site Profile nature.

8 And we are kind of at an  
9 interesting place here because SC&A and NIOSH  
10 agreed. You caught that. The Work Group  
11 hasn't had a chance to discuss it. I did send  
12 an email out saying that I agreed with that.  
13 But at this point, I haven't heard from any  
14 other Work Group Members. So that will be  
15 part of the discussion today.

16 The three SEC questions, one was a  
17 need for neutron dose correction factor, given  
18 issues surrounding variability of results from  
19 the NTA and the Lexan dosimetry.

20 Both NIOSH and SC&A agreed that  
21 that became a -- they agreed that it could be  
22 done. Just how it was going to be done. So

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1 that was a Site Profile issue.

2 The second one was whether a  
3 coworker internal dose model is needed for  
4 individuals with potential for greater than  
5 environmental dose. That became moot based on  
6 the data post-1993.

7 The last issue, which I will cover  
8 where we were at the end of our meeting and I  
9 know there has been more information in the  
10 last couple of days was whether the electronic  
11 database for external dose had been verified  
12 and validated as being accurate and  
13 represented the original records. So that is  
14 the one that is still remaining on the table  
15 at this point.

16 Okay, so we haven't got a formal  
17 answer on that. NIOSH indicated that it  
18 understood the microfiche and the complete set  
19 of original records for external dose  
20 maintained at Brookhaven have already been  
21 used by NIOSH for selected dose reconstruction  
22 and are available for backup dose

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1 reconstruction, if needed. NIOSH is, at the  
2 time of this last meeting, trying to confirm  
3 this understanding as a final action to close  
4 out this remaining SEC question.

5 And Work Group Members, anything  
6 you want to add before Grady takes his --

7 MEMBER ROESSLER: Josie, this is  
8 Gen. I wanted to let you know I am on the  
9 line.

10 MEMBER BEACH: Great. Thanks,  
11 Gen.

12 CHAIRMAN MELIUS: Okay.

13 MEMBER BEACH: Okay, so Grady, I  
14 guess you can take over.

15 MR. CALHOUN: All right. It's  
16 been a long time since I have been here.

17 You covered just about everything  
18 I am going to cover, except for that last  
19 issue but I will go through it anyway and I  
20 actually have a couple of example of some of  
21 the things that we used.

22 This was a really good exercise

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1 for me as well. I always felt pretty good  
2 about the post-1993 data but this really  
3 enforced for me the completeness of that.

4 As Josie said, these are just the  
5 classes that we had established initially.  
6 The 83.13 went from January 1, 1947 to  
7 December 31, 1979. And then the 83.14 went  
8 from January 1, 1980 through December 31,  
9 1993.

10 And the reason for adding these  
11 Classes was the inconsistent availability of  
12 internal dosimetry records. You know, I don't  
13 know how much you guys remember about this but  
14 we had a very difficult time getting  
15 consistent records prior to 1993.

16 One thing I do want to add here is  
17 that we noticed just through the course of our  
18 typical responses to dosimetry requests that  
19 the volume of records we are receiving for  
20 each case increased significantly. And so  
21 when we got the question of the five cases, I  
22 re-requested that data.

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1                   Now, when we observed the larger  
2 volume, those were for new cases. So I talked  
3 to the people at Brookhaven and they had  
4 improved their data retrieval techniques and  
5 they are giving us a lot more data.

6                   Just for example, our average, I  
7 would say, response that we would receive from  
8 Brookhaven was probably 20 pages or less. Now  
9 we are routinely getting two, three, four  
10 hundred pages of data. And a lot of those are  
11 individual reads from Landauer and things like  
12 that, individual tritium results. Anyway I  
13 just wanted to bring that up. So I re-  
14 requested that data.

15                  As Josie said, the five cases that  
16 were selected were individuals who worked at  
17 the HFBR and at the High Flux Beam Reactor.  
18 And that is an area where tritium is of  
19 concern and tritium monitoring is required for  
20 individuals who worked there routinely.

21                  And what was focused on was, did  
22 the people work there post-93. Was there

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1 tritium urinalysis in the documents provided  
2 by Brookhaven? And we also looked at in vivo  
3 counts for those individuals.

4 And basically what the report  
5 showed or it looked -- it showed areas where  
6 there was apparent missing data. So I had to  
7 go and try to find that missing data.

8 Like I said, I re-requested that  
9 information from BNL. And what we found  
10 through that analysis and for several  
11 conversations back and forth is that the new  
12 data provided by BNL had the documents we were  
13 looking for or there was information  
14 describing why monitoring wasn't required or  
15 why there really wasn't missing data.

16 I have got a couple examples here  
17 of that. And these were really holy grail-  
18 type finds here for me. And it is things that  
19 you don't often find in some of our searches  
20 at different sites. And that is probably  
21 terribly difficult to read. It is. Okay.

22 I am just going to tell you what

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1 it says. And basically what it is, and I will  
2 point here first, is right up here there is a  
3 description of the requirement to monitor  
4 individuals who have the potential of  
5 receiving 100 millirem or more in a year. And  
6 these, I redacted the names but each one of  
7 these is the name of an individual and it goes  
8 through and it gives his tritium dose. And  
9 then there is a yes or no as to whether or not  
10 the individual needs to stay on routine  
11 monitoring.

12 So there was a conscious effort to  
13 evaluate the last six months' data and what  
14 their job category was and make a  
15 determination as to whether or not they needed  
16 to stay on routine tritium analysis.

17 One of the claimants that we  
18 looked at, Claimant A was listed on there and  
19 it was no. The issue with this case was that  
20 after 1992, there was no tritium monitoring  
21 for this individual. This is the document that  
22 says this individual doesn't need to be

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1 monitored after 1992. So that was a good find  
2 for us.

3           Okay, now here is another one. It  
4 is a little bit different. Another issue was  
5 okay, we have got monitoring but it appears  
6 that we are missing months. There may be a  
7 month or two where we don't have a tritium  
8 sample. So is it missing? And based on their  
9 past, it was a reasonable question. You know,  
10 is that data missing? And so what we  
11 received, and this was actually provided to us  
12 as well in the DOE response in Brookhaven is  
13 that we have got a list, and this is one  
14 individual, I took his name off of here again  
15 -- a different person -- and it gives the  
16 actual dates of the urinalysis and the days  
17 between his urinalysis for tritium.

18           And so you could see, and I will  
19 just use this for an example, in August of  
20 '95, the previous sample was May of '95. So  
21 it was reasonable to assume when you looked at  
22 the records that data was missing but it

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1 wasn't. He just wasn't monitored during that  
2 time.

3 So because of this document, we  
4 know what the actual sample dates were and we  
5 can do the dose reconstruction based on missed  
6 dose in-between those periods. So that one  
7 actually just answered the question that there  
8 really was not missing data, for example,  
9 between May and August of 1995.

10 Okay. Now, we had, as Josie said,  
11 we had three additional items that came up  
12 earlier and she discussed those. And those  
13 were the accuracy of the reported neutron  
14 dose, and basically that has to do with  
15 factors of the neutrons in different ranges  
16 and how we assign dose with the different  
17 energy ranges. The other one was how will  
18 dose be assigned to unmonitored individuals  
19 after the SEC period. And then the third one,  
20 which hopefully I have got a little bit more  
21 information on here is the potential errors  
22 associated with transferring data between

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1 different databases.

2           There were a couple of different  
3 data bases used at the site. The most recent  
4 one was started in 1996 and it is called the  
5 HPRS. It is the health physics record system  
6 database. That is the one that is in use  
7 today.

8           Prior to that, there was another  
9 database. Well the question was, do we know  
10 if the documentation or the data transferred  
11 from the previous database to this database,  
12 specifically between the years 1994 and 1995  
13 because the new one came in 1996. Do we know  
14 that there is anything -- that that was done  
15 accurately? Was anything missed?

16           So I will go through each of these  
17 and a lot of this, like I said, Josie just  
18 said these, but we decided that the neutron  
19 dose issue was actually a TBD issue because we  
20 decided that we could do the dose  
21 reconstructions. It is just a matter or a  
22 question of how, how we are going to approach

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1 that.

2 As far as the unmonitored  
3 individuals after the SEC period, we have got  
4 a good feeling that the people who were  
5 monitored after that period, who were supposed  
6 to be monitored were monitored and we will  
7 assign ambient internal and external dose to  
8 all individual working at the site who were  
9 not monitored after 1993.

10 And here is the one with the data.

11 Like I said, the one started in 1996 but what  
12 I found out -- and I just found this out like  
13 yesterday or the day before, there was no  
14 transfer of electronic database. There was no  
15 transfer from one database to the other  
16 database. Didn't have that. I didn't know  
17 that. Actually, the individual I was talking  
18 to at Brookhaven wasn't sure until she found  
19 out and made some calls. As a matter of fact,  
20 they don't even overlap. There is about a  
21 four-month difference between the previous  
22 database and the current database.

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1           When we receive responses for our  
2 requests and it overlaps that period, what we  
3 get is we get the previous database which is  
4 actually -- let me see if it is on this next  
5 slide -- yes, it was maintained by Landauer.

6           So Landauer was the company that  
7 was reading the badges and they were  
8 developing the electronic database. Okay?  
9 And so they gave Brookhaven a copy of that  
10 electronic database. When we get data  
11 responses and it goes -- it would cover both  
12 of those periods, what we get is we get a copy  
13 of the Landauer database and we get a copy of  
14 the HPRS database for that individual. Then  
15 we have got four months to deal with and we  
16 get copies of the hard data. Typically, those  
17 are actual Landauer readouts that we get for  
18 those four months in between.

19           In addition, all of the data from  
20 1985 to 1995 is available in hard copy and  
21 microfiche. Through our data capture efforts,  
22 we have got a bunch and bunch of that for

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1 every claimant that we have. But if for any  
2 reason we needed to go back and get that, we  
3 could.

4 Just to take a look, I had the  
5 five cases that we had reviewed for the  
6 initial issues. And so since I had those in  
7 top of my computer and I was relatively  
8 familiar with what documents were what and  
9 each one of these has sometimes 120 individual  
10 dosimetry files to go through and some of  
11 those files are 200 pages. But anyway, I  
12 looked and each one of those cases actually  
13 has a hard-copy copy of the Landauer printout  
14 for '94 or '95.

15 So I believe that we have  
16 everything we need as far as the external  
17 dosimetry goes as well.

18 Okay, this just goes back to the  
19 feasibility of dose reconstruction. We  
20 believe that the external exposure data is  
21 very complete for the monitored population.  
22 The internal data is very good after 1993.

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1                   This was really, like I said  
2 before, this was really a great exercise for  
3 me just because it makes me feel a lot better  
4 about it.       And the monitored population  
5 includes the people who -- the people who were  
6 supposed to be monitored were monitored after  
7 1993.

8                   And we still believe that the end  
9 date for the SEC of December 31, 1993 is valid  
10 and that we have all the information that we  
11 need to do dose reconstruction.

12                   And I believe that is the last  
13 one.   Questions?

14                   CHAIRMAN MELIUS:     Board Members  
15 with questions?   Henry.

16                   MEMBER ANDERSON:   Yes, I guess my  
17 question is when the decision, the original  
18 recommendation that went to the committee to  
19 end the SEC in 1993 and not up to 1995 was  
20 made, it appears to me that the basis for that  
21 decision didn't include any of the data that  
22 you subsequently dug out.   Is that true?   I

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1 mean, how did you -- I mean I think the  
2 ultimate review and the finding of this data  
3 has been very helpful and explains that. But  
4 the original decision, it made an assumption,  
5 rather than having the actual data.

6 MR. CALHOUN: Well there was a  
7 couple things that drove that. And we didn't  
8 -- I will say that we didn't have the volume  
9 of data on those individuals. But what we did  
10 have is that we had some documents that  
11 actually listed people by name and said this  
12 person needs a whole body count in this year.  
13 And so we went through those to see if they  
14 were required to have a whole body count, for  
15 example, did they have a whole body count.

16 Even the documentation of these  
17 five individuals wouldn't have raised a flag  
18 for me so much prior to 1993 because there was  
19 tritium data there. And I believed, based on  
20 some of the documentation and the program  
21 requirements for BNL that they were monitoring  
22 people appropriately.

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1           There was also a dosimetry --  
2 internal dosimetry document that was  
3 established in 1993 that talked about people  
4 that had the potential to receive 100 millirem  
5 needed to be monitored. So, there was a  
6 programmatic change that happened there and  
7 that was part of our decision as well.

8           So we had a lot of data that was  
9 used to come up with the 1993 data or end  
10 point and I was very comfortable with that  
11 then. I am just more comfortable with it now.

12           CHAIRMAN MELIUS: Any other Board  
13 Members that have questions?

14           MEMBER ROESSLER: Jim, this is Gen  
15 on the telephone. Josie made a comment  
16 earlier -- she got this information. Josie,  
17 you came to your conclusion. Can you review  
18 that a bit?

19           MEMBER BEACH: I didn't get that.

20           MR. KATZ: A little audio  
21 malfunction while you were speaking. Gen?  
22 I'm sorry if I said Josie but I meant Gen.

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1                   MEMBER ROESSLER:    Okay, Ted this  
2 is Gen. I'm not sure if you can hear me.

3                   MR. KATZ:        Yes, now we can hear  
4 you clearly. Thank you.

5                   MEMBER ROESSLER:    Okay, so I just  
6 wanted Josie's comment as to -- she said she -  
7 - well please say again, Josie, what your  
8 conclusion was after getting this new  
9 information from Grady.

10                  MEMBER BEACH:    What I said in an  
11 email was that I agreed with SC&A's  
12 recommendation that of the three issues, two  
13 of them became Site Profile issues and this  
14 last one I believe I would recommend that we  
15 accept NIOSH's on the verification. I believe  
16 that they have proven that they can verify  
17 that those documents exist.

18                  MEMBER ROESSLER:    And that dose  
19 reconstruction can be done --

20                  MEMBER BEACH:    Yes.

21                  MEMBER ROESSLER:    -- after '93.

22                  MEMBER BEACH:    Yes, that was my

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1 conclusion.

2 MEMBER ROESSLER: Okay, I just  
3 wanted to hear what you had to say on it.  
4 Thank you.

5 MEMBER BEACH: And again, we may  
6 want to hear SC&A's comments on that also  
7 because they are just hearing this for the  
8 first time as well or the -- earlier today. I  
9 don't know if Joe had any comments.

10 MR. FITZGERALD: Yes, hi. This is  
11 Joe Fitzgerald. Yes, this was a concern.  
12 This is actually a very standard question we  
13 raised at most of the site. How do you know  
14 the electronic records reflect the original  
15 records? Did anyone -- we call it sort of  
16 verification and validation. Has anyone  
17 validated it?

18 So this was a question that was in  
19 the original matrix for this site. And we  
20 turned to what was a much more fundamental  
21 question, which was, is the end date suitable  
22 for the adequacy of bioassay data. So we did

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1 spend a lot of time on that and I think we  
2 were satisfied with the answer on that.

3 But when we went back and realized  
4 that we didn't even really get a good firm  
5 answer on this validation of the electronic  
6 database after the '93 period, we did have a  
7 technical call right after our Work Group  
8 meeting on Wednesday. So this was kind of on  
9 the fly. But in that discussion, it was very  
10 helpful because even though there wasn't a  
11 validation sort of in the traditional sense  
12 going back and validating, it turns out that,  
13 and I think it was Jim Neton that said it, his  
14 recollection was there was this hard copy or  
15 it was microfiche -- a complete set of  
16 microfiche of all of the external data, which  
17 is even better, because then you can go back  
18 to the original information if you have to,  
19 which is getting to this point of if the  
20 electronic database shows any gap and any  
21 question arises, you can go back to the  
22 original source.

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1           So at that point we felt if the  
2 Work Group could be given an affirmation that  
3 in fact this data -- because again Jim wasn't  
4 sure at that point in time -- if it could be  
5 confirmed that that information exists, that  
6 it was available to NIOSH and it was complete,  
7 then I think that was enough that we were  
8 satisfied that there would be this source  
9 information that would be available for dose  
10 reconstruction. So that is kind of where we  
11 left it.

12           MEMBER BEACH: Thanks, Joe.

13           CHAIRMAN MELIUS: Who else is on  
14 the -- first of all, does anybody else on the  
15 phone have any comments or questions?

16           (No response.)

17           Okay. And then I will go back to  
18 Josie. So where does the Work Group stand on  
19 this? This is what has got me confused here.

20           MEMBER BEACH: Well I think at  
21 this time the Work Group needs to state  
22 whether they agree with the recommendation

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1 that the three SEC issues are now Site Profile  
2 issues and then that would close out, if  
3 everybody agrees, that would close out our SEC  
4 issues and we would vote on that end date, I  
5 believe from post-93. And I would finish my  
6 report out on what the rest of the Work  
7 Group's job will be.

8 I believe that is where we are at.

9 CHAIRMAN MELIUS: Okay. And so is  
10 the Work Group --

11 MEMBER BEACH: Ready to make a  
12 recommendation?

13 CHAIRMAN MELIUS: Yes. I mean --

14 MEMBER BEACH: I think the Work  
15 Group should have a chance to say what they  
16 think. Then I think we would be ready, yes.

17 CHAIRMAN MELIUS: And I think I  
18 would just add, I mean a fair option if a Work  
19 Group Member doesn't feel comfortable --

20 MEMBER BEACH: Then we can wait.

21 CHAIRMAN MELIUS: -- then we can  
22 convene a Work Group meeting.

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1 MEMBER BEACH: Absolutely.

2 CHAIRMAN MELIUS: There is no --  
3 you are not required to complete at this  
4 meeting.

5 MEMBER BEACH: No.

6 CHAIRMAN MELIUS: I don't want  
7 anyone to -- you know, it is certainly the  
8 most complicated circumstance I have seen  
9 trying to catch up here. And I don't know who  
10 else is on the Work Group.

11 MEMBER BEACH: It is Brad, Wanda,  
12 Henry and Gen Roessler.

13 CHAIRMAN MELIUS: Okay. So Brad?

14 MEMBER CLAWSON: Well Wanda was up  
15 there first.

16 CHAIRMAN MELIUS: Oh, I'm sorry.  
17 I didn't -- I just saw Wanda smiling.

18 MEMBER MUNN: That is so novel,  
19 you don't know how to address it.

20 I was prepared to respond to  
21 Josie's suggestion at the outset and then we  
22 had an internal email from SC&A saying they

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1 didn't understand what Grady had told us. And  
2 so since I understood it, I just didn't say  
3 anything. But yes, I think that our chair's  
4 position is the appropriate one.

5 Yes, from my perspective, all  
6 three of those are clearly side issues.

7 CHAIRMAN MELIUS: Okay, Brad?

8 MEMBER CLAWSON: That is the same  
9 thing that I wanted to bring up. Part of the  
10 thing that was interesting when we had the  
11 Work Group and then kind of a technical call.

12 And then there have just been a few things  
13 that came up. But as a Work Group Member, I  
14 am now satisfied with NIOSH's ability to be  
15 able to reconstruct dose.

16 CHAIRMAN MELIUS: Okay. Henry?

17 MEMBER ANDERSON: Yes, being a new  
18 Member of this kind of thing, having to try to  
19 reconstruct from 2011 on, I would agree. I  
20 think we have exhausted the need for further  
21 review on this. So I think it is pretty good.

22 CHAIRMAN MELIUS: Okay. And Gen?

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1 MEMBER ROESSLER: Yes, I agree  
2 also --

3 CHAIRMAN MELIUS: Okay.

4 MEMBER ROESSLER: -- with the rest  
5 of the Work Group on this.

6 MEMBER ANDERSON: So we are  
7 unanimous.

8 CHAIRMAN MELIUS: So do I have a  
9 motion, then?

10 MEMBER BEACH: Yes, I would like  
11 to present a motion and I will wait for the  
12 legal terms of it, that we accept that NIOSH  
13 can do dose reconstruction from 1993, I  
14 believe, until 2007 for internal.

15 MEMBER ANDERSON: Ninety-four.

16 MEMBER BEACH: Ninety-four, yes.  
17 Thank you. 1994 through 2007.

18 CHAIRMAN MELIUS: And before we  
19 take any action on that, I believe the  
20 petitioner may be on the line. My  
21 understanding is petitioner did not wish to  
22 speak but if the petitioner does want to make

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1 any comments?

2 (No response.)

3 Okay, thank you.

4 So we have a motion from the Work  
5 Group. So we don't need a second and we can -  
6 - any further discussion or comment? Okay,  
7 Ted. This is your one chance to do it right.

8 MR. KATZ: I'll try. I am going  
9 to also read. There are several Board Members  
10 that may or may not be on the phone. So I  
11 will run down the list because I am not quite  
12 certain whether they are listening.

13 So Anderson?

14 MEMBER ANDERSON: Yes.

15 MR. KATZ: Beach?

16 MEMBER BEACH: Yes.

17 MR. KATZ: Clawson?

18 MEMBER CLAWSON: Yes.

19 MR. KATZ: Field?

20 MEMBER FIELD: Yes.

21 MR. KATZ: Griffon?

22 (No response.)

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1 MR. KATZ: Okay, I will collect  
2 his vote, absent. Kotelchuck?

3 MEMBER KOTELCHUCK: Yes.

4 MR. KATZ: Lemen?

5 MEMBER LEMEN: Yes.

6 MR. KATZ: Lockey?

7 (No response.)

8 MR. KATZ: I will collect his vote.  
9 Melius?

10 CHAIRMAN MELIUS: Yes.

11 MR. KATZ: Munn?

12 MEMBER MUNN: Yes.

13 MR. KATZ: Poston?

14 (No response.)

15 MR. KATZ: I will collect his vote.  
16 Richardson?

17 MEMBER RICHARDSON: Yes.

18 MR. KATZ: Roessler?

19 MEMBER ROESSLER: Yes.

20 MR. KATZ: Schofield?

21 MEMBER SCHOFIELD: Yes.

22 MR. KATZ: Valerio?

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1 MEMBER VALERIO: Yes.

2 MR. KATZ: And Ziemer? Ziemer,  
3 Paul?

4 MEMBER ZIEMER: Sorry, I had to  
5 get off mute here. Yes.

6 MR. KATZ: That's nice. The  
7 suspense is good.

8 (Laughter.)

9 MR. KATZ: Okay, so we have a  
10 majority. The motion passes.

11 CHAIRMAN MELIUS: Okay and I think  
12 Josie wants to say a few words.

13 MEMBER BEACH: I just want to  
14 finish off my Work Group report. At this  
15 time, we had 13 Site Profile issues. NIOSH  
16 put out the new Site Profile for Brookhaven on  
17 February 7, 2013. Correct? So the action  
18 item is with SC&A at this time to look at the  
19 13 previous issues, the new Site profile and  
20 to come back to the Work Group with a new set  
21 of issues or explain the issues that were  
22 issues.

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1           So anyway, that is where we are at  
2 now is just to review and conclude the Site  
3 Profile issues. And I believe Joe promised  
4 that in about two months, 60 days. So, we  
5 will reconvene at that time.

6           CHAIRMAN MELIUS: Okay, the record  
7 shows 60 days, Josie.

8           Okay, any other comments or  
9 questions? Okay, we are a little bit early.  
10 So why don't we -- since we don't have  
11 anything that is timed until we get to the  
12 Savannah River later today and the public  
13 comment period, why don't we break a little  
14 bit early for lunch but instead come back at  
15 1:30? Does that give everybody enough time?

16           MR. KATZ: Yes, okay.

17           CHAIRMAN MELIUS: And we will  
18 reconvene then. Thanks, everyone.

19           (Whereupon, the above-entitled  
20 matter went off the record at 11:52 a.m. and  
21 resumed at 1:34 p.m.)

22

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

2 (1:34 p.m.)

3 CHAIRMAN MELIUS: If everyone will  
4 get seated, we will get started.

5 MR. KATZ: So good afternoon.  
6 Advisory Board on Radiation and Worker Health  
7 reconvening after lunch break. And I just  
8 want to check on the line to see which Board  
9 Members we have of folks who may be on the  
10 line.

11 Dr. Field? Bill?

12 MEMBER SCHOFIELD: Here

13 MR. KATZ: Was that Phil or Bill?

14 MEMBER SCHOFIELD: Oh, Phil. I'm  
15 sorry.

16 MR. KATZ: Oh, Phil, great. It's  
17 good to have you, too, Phil.

18 So Bill Field, are you on the  
19 line?

20 (No response.)

21 MR. KATZ: And Dr. Poston, are you  
22 on the line?

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1 (No response.)

2 MR. KATZ: Dr. Lockey?

3 (No response.)

4 MR. KATZ: Mr. Griffon?

5 (No response.)

6 MR. KATZ: And last but not least,  
7 Dr. Ziemer?

8 MEMBER ZIEMER: I am here.

9 MR. KATZ: Great.

10 CHAIRMAN MELIUS: Gen?

11 MEMBER ROESSLER: Yes?

12 MR. KATZ: And Gen? I'm sorry.

13 MEMBER ROESSLER: I guess I  
14 missed. This is Gen.

15 CHAIRMAN MELIUS: No, you didn't  
16 miss, Gen. I had to remind Ted.

17 MR. KATZ: Yes.

18 MEMBER ROESSLER: Oh, gee.  
19 Thanks, Ted.

20 MR. KATZ: I'm falling down on the  
21 job but I'm glad you are there.

22 MEMBER ROESSLER: Thank you.

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1                   MR. KATZ:     Thank you.     And that  
2 completes it.

3                   CHAIRMAN MELIUS:     Okay.     This  
4 afternoon, we are going to, as we talked about  
5 last meeting with the Procedures Review and we  
6 have picked out the three procedures to talk  
7 about.     I think Wanda, I think, has worked  
8 with SC&A, produced three separate PowerPoint  
9 presentations and Ted, before the meeting,  
10 sent out to everybody some of the background,  
11 key background information on the review of  
12 that procedure and the database that tracks  
13 the SC&A technical review comments and the  
14 resolution, though we are still trying to make  
15 that document legible.     But maybe we will get  
16 there someday.

17                   So I think everyone has had that  
18 information.     I thought we would go through  
19 them one at a time.     Wanda would present and  
20 then we would ask questions.

21                   MEMBER MUNN:     Sounds fair to me.

22                   CHAIRMAN MELIUS:     That was your

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1 understanding, too?

2 MEMBER MUNN: That was my  
3 understanding, surprising though that may be.

4 CHAIRMAN MELIUS: Okay, very good.  
5 So Wanda, it is yours.

6 MEMBER MUNN: Thank you very much.  
7 As you know, the Board has expressed interest  
8 in more finely examining the work that we have  
9 done in Procedures. And we have attempted to  
10 select a few for which we have now closed our  
11 deliberations to give you an opportunity to  
12 more closely review what we have done.

13 A special thanks today to Steve  
14 Marschke and to John Stiver for doing the  
15 yeoman's work in putting the actual slides  
16 together for us. If we have any questions as  
17 we go along, please feel free to interrupt me,  
18 if you have a pressing issue that requires  
19 discussion over and beyond the now do we have  
20 any questions slide.

21 We are going to start with the  
22 OTIB that you have seen in great detail

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1 before, the parameters to consider when  
2 processing claims for construction trade  
3 workers. This is OTIB-52.

4 We have worked on the premise from  
5 the outset, the entire Board has, and indeed,  
6 all of the agencies involved, have worked on  
7 the premise that most of the workers at this  
8 site are slightly different than construction  
9 workers. And because construction workers are  
10 as mobile as they are and move from so many  
11 places and include such a wide variety of  
12 trades, typically, they need to be treated  
13 with some special consideration.

14 Because of that, the way that we  
15 approach our dose reconstructions for  
16 government employees may not always be  
17 appropriate when we are looking at  
18 construction trade workers.

19 This particular OTIB provides the  
20 guidance that our dose reconstructors need to  
21 be able to look at construction trade workers  
22 and the doses that they are likely to have

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1 received as compared to workers that are  
2 always monitored and for whom we have better  
3 records.

4 In the DOE complex, in general,  
5 partly because the time periods that are  
6 involved, we normally assume that I think it  
7 can be fairly well justified that the highest  
8 doses received by Atomic Weapons Employers  
9 would bound those that were to be expected for  
10 construction trade workers. This provides  
11 adjustment factors in this TIB that makes it  
12 possible for the Agency to address in a  
13 constructive way how to look at this  
14 particular set of claims.

15 We have been working with OTIB-52  
16 for quite some time. We first approached it  
17 as a group in 2007 right after SC&A had  
18 reviewed Rev 0. SC&A has reviewed two  
19 revisions since then and so what we see as we  
20 are looking at it in hindsight is some of the  
21 changes that have occurred that precipitated  
22 revisions 1 and 2. It is used to calculate

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1 coworker doses. It isn't used directly. It  
2 is a guideline.

3 The recommendation is that  
4 construction trade workers external doses are  
5 to be adjusted to 1.4 times the standard  
6 worker dose. And that the internal doses are  
7 the same with one or two exceptions, the  
8 primary exception being Hanford.

9 You see before you the sites for  
10 which we have data that have formed the basis  
11 for the decisions that were made in OTIB-52.  
12 There are, as you have noticed on the slide,  
13 over a million histories, with 250,000  
14 construction worker histories involved.

15 When we first undertook the review  
16 of this OTIB, SC&A had provided us with what  
17 turned into four different findings, not all  
18 of them on Rev 0. The 16 findings spanned  
19 more than one revision.

20 We have closed all 16 of them. As  
21 you know, when we consider a finding to be in  
22 abeyance, it is for all intents and purposes

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1 closed for our deliberative purposes. It  
2 means the issue has been closed but the  
3 adjustment to the written document has not yet  
4 occurred. That is what happens when we call  
5 it in abeyance.

6 We are going to show you some of  
7 the details that we have worked from in the  
8 Board Review System. There is more detail in  
9 that system, if you choose to go there and  
10 take a look at it.

11 The first item had to do with  
12 addressing the differences in doses from the  
13 various construction occupations. The  
14 procedure calls out the specific trades that  
15 are involved and it is a very broad  
16 definition.

17 We agreed in the Subcommittee that  
18 the appropriate way to approach this to make  
19 certain that the trade workers were  
20 appropriately considered was to add  
21 instruction in OTIB-20 that would create the  
22 need to use the 95th percentile dose

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1 calculation in doing these dose  
2 reconstructions.

3 Finding number two was the  
4 databases were perceived to be lacking  
5 sufficient data during those very early years.

6 That was a common finding, I think, in most  
7 of our major sites. And NIOSH did concur and  
8 on page 77, they postulated a reason for the  
9 low exposure during the early years of site  
10 operation and that was accepted as an  
11 acceptable rationale.

12 Finding number three had  
13 identification of the fact that construction  
14 trade workers were not always clearly  
15 identified and the occupations weren't well  
16 called out. But as I mentioned earlier, we  
17 have done our best to do that and we closed  
18 the finding.

19 Finding number four, NIOSH didn't  
20 make modifications to the internal dose  
21 calculation methods. The Center to Protect  
22 Worker Rights had called to their attention

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1 the fact that a different process or at least  
2 a different approach should be undertaken.  
3 And NIOSH felt that there was some merit to  
4 that and they chose to use actual bioassay  
5 data, rather than assumed intakes. And that  
6 was the basis for the discussions that had  
7 gone on. And that was agreed to appropriate  
8 conclusion and was closed.

9 Finding five had to do with  
10 comparison of the two different sets of worker  
11 data with regard to plutonium and uranium but  
12 not with respect to other nuclides. And the  
13 contractor had raised a question in that  
14 regard.

15 In Rev 1, NIOSH put a limitation  
16 on the use of internal dose reconstruction and  
17 we closed the issue based on the change to the  
18 procedure itself and SC&A's concurrence.

19 Finding number six said that the  
20 OTIB did not address how to determine  
21 construction worker doses at sites that don't  
22 have coworker procedure. And NIOSH gave an

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1 initial response that in sites where they  
2 lacked coworker studies, the dose is  
3 reconstructed the same way as other  
4 unmonitored workers and they had essentially  
5 the same potential for uptakes. And it was an  
6 agreed position. We closed the finding.

7 Finding number seven had to do  
8 with how neutron doses were addressed for  
9 construction workers. And SC&A did agree with  
10 the NIOSH response. They were not  
11 intentionally differentiated and, therefore,  
12 they closed the finding.

13 Finding number eight was Savannah  
14 River external doses were from the HPAREH and  
15 they wanted to have other databases checked.  
16 But NIOSH pointed out that the database that  
17 was being used was shown in all cases to be  
18 claimant-favorable and more so than the other  
19 Savannah River databases. That was an  
20 acceptable resolution because of its claimant-  
21 favorability. And we closed the finding.

22 Finding nine was an evaluation of

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1 DOE's annual exposure report that needed to  
2 address the MUD dose basis for INL. We closed  
3 that in 2011, based on SC&A's concurrence that  
4 the data that appeared in the annual report  
5 was equivalent to the MUD data and there were  
6 overlapping time periods involved and it was  
7 established that the approach was an  
8 appropriate one and we closed the finding.

9 For finding number ten, involved  
10 the post-1974 ratio of penetrating doses that  
11 construction workers were likely to  
12 experience. And SC&A felt that the ratio did  
13 not agree with the NIOSH EPI study from INL.  
14 The correction factor for that was somewhere  
15 near two and would have been greater for some  
16 job types. So that engendered quite a bit of  
17 discussion. It was closed based on NIOSH's  
18 statement that they added to this procedure  
19 when they did Rev 1. It was considered to be  
20 acceptable and we closed the finding.

21 Finding number 11 again revolved  
22 around what was going on at INL in the early

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1 period of external doses. It said claimant-  
2 favorability couldn't be determined for those  
3 early years. But again, NIOSH appropriately  
4 revised the procedure with a statement that  
5 was acceptable to SC&A and we closed the  
6 finding.

7 Finding number 12, the REX dose  
8 database hadn't been used and the request was  
9 that the results needed to be evaluated based  
10 on the REX database. And NIOSH proposed an  
11 editorial change in Section 6 when they issued  
12 Rev 1. We have not yet inserted that wording  
13 into OTIB-52. So this is the one that is in  
14 abeyance rather than closed. The finding has  
15 been addressed and the resolution agreed to  
16 but it has not yet appeared in the published  
17 OTIB.

18 Finding 13, construction worker  
19 doses need to be compared favorably with the  
20 other worker databases and not non-CTWs. At  
21 the time that the finding was issued, there  
22 were different sections performing different

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1 comparisons for this particular cohort. But  
2 NIOSH was able to demonstrate that it had a  
3 minor effect on the results and the margin of  
4 uncertainty for most of the dosimetry programs  
5 was higher than the difference in the margin.  
6 It agreed that under those circumstances, we  
7 could close the finding.

8 Finding 14 revolved around missed  
9 dose, which was described as not being  
10 consistent. And NIOSH was able to demonstrate  
11 that the inclusion of missed dose did not  
12 really affect to an appreciable degree the  
13 trade worker to AMW ratio. Again, less than  
14 the margin of uncertainty for the dosimetry  
15 programs that was acceptable and we closed the  
16 finding.

17 Finding 15, cumulative exposures  
18 are suspected and instructions were not given  
19 as to what to do if they were very high or  
20 very low. And the concern was transferred to  
21 OTIB-20, which had a more direct bearing on  
22 exactly what needed to be done in those cases.

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1 We added a statement to OTIB-20 that called  
2 the dose reconstructors' attention to the fact  
3 that some of the construction trade workers  
4 would probably need special consideration and  
5 we closed the finding.

6 The last of the findings was  
7 number 16. Some construction occupations like  
8 pipefitters do actually receive exposures that  
9 are higher than the average construction trade  
10 worker and might have exposures above the 95th  
11 percentile. As rare as that may be, it is  
12 still a possibility. With two of the  
13 preceding issues, that was transferred to  
14 OTIB-20, which is a more appropriate cite to  
15 address these issues.

16 And again, OTIB-20 now alerts the  
17 dose reconstructor that they may have to make  
18 special consideration for some segments of the  
19 construction trade worker population.

20 I hope you have had an opportunity  
21 to review those findings and their resolutions  
22 before you came. If you have any questions,

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1 we have the folks who have worked most closely  
2 on the technical issues available to help  
3 answer your questions.

4 Yes, Brad?

5 MEMBER CLAWSON: I guess I am not  
6 fully understanding what this -- I guess I am  
7 looking at it from Fernald's standpoint. Each  
8 one of these you are telling me that we have  
9 got a -- we are going to take the monitored  
10 workers and the construction workers that  
11 weren't monitored, we are going to give them a  
12 1.2 or 1.4 for that and each one of the sites  
13 has a different one for it.

14 I thought if we did have  
15 monitoring data for them, that was part of the  
16 SEC. I guess I am wondering what they are  
17 going to use this procedure for. Because if  
18 they don't have the data, what are we going to  
19 -- I thought that was part of the SEC.

20 To tell you the truth, I am really  
21 wondering. Because we got into this with  
22 Fernald and we have come to find out they

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1 wanted to give a two percent over the normal  
2 Work Group there but we couldn't really  
3 segregate out who the construction workers  
4 were and all the incident database in there.  
5 I really don't see how this procedure would be  
6 used in this.

7 MEMBER MUNN: I guess I am not  
8 really clear on what you are asking, Brad. It  
9 seems to me that you are just -- is your  
10 question how the ratio was determined or is  
11 your question whether there is validity to  
12 determining -- to establishing the ratio to  
13 begin with?

14 MEMBER CLAWSON: Both of those  
15 questions is what I am getting at. Where do  
16 they come up -- how do they come up with the  
17 ratios?

18 And I understand and I looked at  
19 the graphs and I understood where we get the  
20 95 percentile out. But then we come back to -  
21 - it is not tied up. They painted a pretty  
22 picture with this but I really have a hard

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1 time understanding how this procedure is going  
2 to be able to be used. Because if we have  
3 construction workers that don't have  
4 monitoring data and -- to me it looks like we  
5 are putting a number to this so that we don't  
6 end up giving the SEC. I will be right  
7 honest. That is what it comes down to me.

8 I have really had a hard time with  
9 this and I have a hard time putting on to this  
10 just from what I have seen in the other sites.

11 I think that this is just trying to put a  
12 Band-Aid on it. That is my personal opinion  
13 but if we don't have the data there, we don't  
14 have the data. And that is why I thought we  
15 had the SEC put in the process.

16 MEMBER MUNN: Well I would hate to  
17 give you incorrect information. Stu?

18 MR. HINNEFELD: I can offer a  
19 little bit here, Brad. I think it will help  
20 out a little.

21 I believe early on this procedure  
22 started as sort of an investigation of were

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1 construction workers treated differently at  
2 some sites, maybe not captured as readily as  
3 the prime contractor's employees. Is there  
4 some way to deal with this different treatment  
5 in the coworker models. So if you have people  
6 who are not monitored, that is when you use  
7 the coworker model.

8 If there were people who were not  
9 monitored, is there something you could do  
10 differently for construction workers than you  
11 would for the prime contractor employees? And  
12 is there a reason to do that? So it started  
13 out with that basis to sort of be this general  
14 approach.

15 Now I think during the discussion  
16 and resolution, I think what people recognized  
17 is what is true for one site is not  
18 necessarily true for another site. And so it  
19 is not really appropriate to take something  
20 like this and apply it carte blanche to every  
21 site. So the investigation you have to do --  
22 for each site you are investigating, you have

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1 to evaluate what you know about that situation  
2 and what you can learn about that site.

3 So it is not a fact that somebody  
4 is going to come up and say well because TIB-  
5 52 says if you just do this for the coworker  
6 or for the construction workers and apply it  
7 to your prime contractor coworker model, you  
8 are okay. That is not a valid argument.  
9 People can't make that argument. Each side  
10 has to be investigated based on the  
11 information available at that site. And that  
12 position came out of the discussion and  
13 resolution of TIB-52.

14 This provides more of a sort of a  
15 history or a background of what was observed  
16 in the set of records that could be obtained  
17 where it was possible to identify for a large  
18 population -- well, you saw there were 200,000  
19 contractor records out of a million total  
20 records used in this study. So there are some  
21 sites where you can find a large number of  
22 records and distinguish them but it doesn't

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1 mean that you can use the experience or what  
2 you learned from these sites just carte  
3 blanche and use it everywhere.

4 CHAIRMAN MELIUS: But you don't  
5 really specify any parameters for doing that.  
6 I mean how is -- what are the -- what kind of  
7 evaluation quantitatively needs to be done when  
8 applying this or determining whether to apply  
9 this at a particular site?

10 MR. HINNEFELD: I am trying to  
11 fill in for Jim here who did most of this  
12 conversation. He is at the NCRP meeting this  
13 week so he couldn't be here.

14 CHAIRMAN MELIUS: Right.

15 MR. HINNEFELD: And I am not aware  
16 of a set of criteria that were specified that  
17 if you have this, then this applies. I think  
18 in my view it is going to be kind of a  
19 difficult situation to argue to use these,  
20 other than the sites for which we had the data  
21 and the data were developed for. In order to  
22 extend that to other sites, I think it is

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1 going to be a little kind of a -- not a very  
2 tenable position to just expect that all sites  
3 are going to expect -- show the same type of  
4 behavior.

5 This analysis that was done, you  
6 know on the one side there was an  
7 investigation done that what can you say about  
8 construction workers versus prime contractor  
9 employees. And so it was a fairly large study  
10 that was done for some sites and you can make  
11 some judgments about some sites about what you  
12 can say about the kinds of exposures.

13 So if you are in the situation  
14 where unmonitored folks who feel like -- look  
15 like they would normally be badged, they put  
16 you in a coworker situation, there are in some  
17 cases are some adjustments you would make to a  
18 coworker for those sites.

19 But I think it is extendibility to  
20 just general, I think is was as a part of the  
21 discussion and resolution in TIB-52, I think  
22 that has sort of been decided that that is

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1 probably not warranted. And I don't think it  
2 went further to determine what are your  
3 qualitative analyses to say that you can use  
4 this or not. I don't think TIB-52 went  
5 further.

6 John Stiver may have been involved  
7 in this more than I was, so he might -- I  
8 don't know if you want to add anything or not.

9 MR. STIVER: I think that what you  
10 said is pretty much in line.

11 MEMBER LEMEN: I have several  
12 questions. One is a very basic question. And  
13 that is, it relates back to what Brad just  
14 said. If you don't have data, who made the  
15 decision that we were going to put  
16 construction workers in a category of using  
17 coworker data? That is one question. And  
18 that deals with the whole broad issue.

19 The second question -- or maybe  
20 you want to take them one at a time. Do you  
21 want to address that first? Who made that  
22 decision? And why are we doing this and

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1       wasting our time using coworker data when  
2       these people clearly, in my opinion, I agree  
3       with Brad, should just be put into an SEC?

4               MR. HINNEFELD:       Well, the SEC  
5       option is available when there is not a way to  
6       reconstruct the dosage, when dose  
7       reconstruction is not feasible.

8               MEMBER LEMEN:    But this is --

9               MR. HINNEFELD:    It does not say if  
10       you don't have the specific monitoring data it  
11       is an SEC.    What it says is if it is not  
12       feasible to do dose reconstruction, using the  
13       dose reconstruction techniques and the  
14       hierarchy of data in a regulation, if it is  
15       not feasible, then it is not feasible.    And  
16       that is when you go in an SEC.    It doesn't  
17       mean if there is no data.    Because in some  
18       instances, without specific sets of monitoring  
19       data, you can reconstruct that dose with some  
20       confidence.    So it is not a fact that no data  
21       translates into an SEC but an infeasibility in  
22       dose reconstruction translates into an SEC.

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1                   MEMBER       LEMEN:           Well,       I  
2       respectfully disagree with that.

3                   But the second question is how did  
4       you come up with for external dose, 1.4 times  
5       and no difference on internal dose and what is  
6       the science behind this 1.4? Do you apply it  
7       across the Board to every job title in the  
8       construction industry? Because several times  
9       you separate out pipefitter as being a higher  
10      exposure. Does the pipefitter then get a 1.4  
11      thrown to them? And what about the carpenter  
12      or what about the laborer that is working in  
13      the construction industry?

14                  I mean, these are going to differ,  
15      depending upon the jobs they have and in some  
16      studies of construction workers, it is not  
17      always the pipefitters that have the higher  
18      exposure. What is the justification for that?

19                  MR. HINNEFELD:   Well some of the  
20      caveats that were adopted in these resolutions  
21      that we talked about and during the discussion  
22      of the procedure were that there may

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1 situations -- pipefitters was the example that  
2 was chosen in that finding. But as you say,  
3 that might not always be the case. There may  
4 be instances where certain trades,  
5 construction trades are the more highly  
6 exposed and, therefore, they should not get  
7 the 1.4, they should have the upper limit, you  
8 know, the 95th percentile, presumably if it  
9 were a 1.4 site, times the 1.4. The 1.4,  
10 again, the science behind the 1.4 adjustment  
11 is laid out in OTIB-52, which describes the  
12 exposure histories for construction workers  
13 and all monitored workers for those sites that  
14 were named on the slides where we have a large  
15 amount of data for construction workers and we  
16 have a large amount of data for all monitored  
17 workers whichever -- I forget exactly how it  
18 broke out.

19 So in those instances where you  
20 had a large amount of data over the years and  
21 you could see what the mean exposures were  
22 over those years. And that is the science.

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1 That is where the 1.4 came from.

2 MEMBER LEMEN: Yes, but that  
3 addresses the general overall picture. It  
4 takes not -- it doesn't take into  
5 consideration individual work sites. It  
6 assumes that every work site is going to have  
7 the same difference.

8 MR. HINNEFELD: You are talking  
9 about at a work site, at a given site -- a  
10 given covered facility you mean.

11 MEMBER LEMEN: That's right. And  
12 they are all going to have the same. And I  
13 still don't see in any of the data that I have  
14 read, and I read through this pretty clearly  
15 before I came, a justification for the 1.4 to  
16 be a number that just is used all the time and  
17 I don't understand still why the internal dose  
18 is not any different, while the external dose  
19 is different. I don't understand your  
20 justification.

21 MR. HINNEFELD: Both those numbers  
22 came out of the OTIB-52 document, not the

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1 slides here but the OTIB-52 document. And  
2 what it is is a comparison of the values that  
3 were measured for sites, for the sites in the  
4 slides, where you have a large amount of data  
5 for construction workers and a large amount of  
6 data for non-construction workers or all  
7 monitored workers. And it was a comparison, a  
8 year-by-year comparison of those monitoring  
9 results of construction versus others. And in  
10 some instances, there was a clearly higher  
11 external exposure for construction workers  
12 when that comparison was made that looked like  
13 about 1.4. It is not 1.4 every year but that  
14 looked like a sort of encompassing ratio.

15 And when you did that same  
16 comparison for the internal monitoring data,  
17 there was not that ratio. There was not that  
18 difference. And so that is where those  
19 numbers came from.

20 And there is not an intent to use  
21 this from covered facility to covered  
22 facility. It is covered facility specific and

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1 really only for the ones that were used to  
2 develop those numbers.

3 CHAIRMAN MELIUS: Maybe some  
4 perspective for you, Dick, is that I think  
5 when it started out it was -- I think the  
6 intent was to be able to use it at all  
7 facilities or at least be able to apply it  
8 more widely.

9 I think as you start to look at it  
10 in more detail and some of the exceptions that  
11 came up in the SC&A review, I think now we  
12 view it just as sort of a historical document  
13 that is not being applied at all or certainly  
14 not widely. I'm not sure where it is being  
15 applied at the present time. So it is a piece  
16 of historical information that has some  
17 usefulness but is not no longer being touted  
18 or used as a general method for reconstructing  
19 doses for construction workers. It is site by  
20 site.

21 And I think when we first heard  
22 about this document, remember this goes back

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1 to 2006, 2007, a long time ago. Some of these  
2 same issues were raised at that time and that  
3 is what has been looked into. What are the  
4 differences between sites? What are the  
5 differences between trades? How are we sure  
6 that this would apply to the sites that  
7 weren't included in that analysis? And what  
8 happens in different years of operation. Does  
9 that change also?

10 I think at the present time we  
11 should be careful to sort of not over-read,  
12 over-interpret what the utilization is.

13 MEMBER LEMEN: Well clearly, I  
14 wasn't around in this -- on the Board in 2006.

15 CHAIRMAN MELIUS: You weren't  
16 listening in to all our meetings and reviewing  
17 the website daily?

18 MEMBER LEMEN: I didn't do that.

19 CHAIRMAN MELIUS: I'm surprised.

20 MEMBER LEMEN: But I still have a  
21 basic bottom line and I agree with Brad. Why  
22 are we going to all this effort in a

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1 compensation program to try and reconstruct  
2 dose when it is, to me, obvious that these  
3 people should just be put into a SEC.

4 MS. LIN: Dr. Lemen, under the  
5 statute, the EEOICPA statute, the Agency has a  
6 legal responsibility to do dose reconstruction  
7 for those specifically who are even not  
8 monitored. It is very clear spelled out in  
9 our statute.

10 And the SEC is about dose  
11 reconstruction feasibility. It is not about  
12 whether monitoring data are available to the  
13 extent that the Agency cannot do dose  
14 reconstruction at all.

15 So there is a distinction --

16 MEMBER LEMEN: Well I am not  
17 saying they don't have -- they can't do dose  
18 reconstruction. But when you don't have data  
19 and you are basing it on what I consider  
20 inadequate data, I don't see that you should  
21 be wasting the time to do dose reconstruction  
22 when you have no data on construction workers

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1 to start with. You don't have any base data  
2 on construction workers really.

3 MS. LIN: So I think that line of  
4 discussion would be site-specific, as opposed  
5 to a general rule of thumb that if you are  
6 applying this OTIB-52 to a specific site, it  
7 necessarily means that there is no data and an  
8 SEC should be granted. I think that is  
9 contrary to the legal construct of the EEOICPA  
10 program.

11 MEMBER MUNN: And we do have a  
12 great deal of monitoring construction data,  
13 yes. They are not --

14 MEMBER LEMEN: But from other  
15 sites. And you are taking that as a general  
16 over umbrella.

17 MR. HINNEFELD: No, that is what  
18 we are specifically not going to do because of  
19 the resolutions.

20 MEMBER LEMEN: Well, it doesn't  
21 read that way.

22 MR. HINNEFELD: To your point, Dr.

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1 Lemen, six or seven years ago, I mean, in the  
2 last six or seven years, there has been a  
3 great deal of convergence among the  
4 participants in this process about what is a  
5 feasible dose reconstruction. And so six or  
6 seven years ago, for lack of a better of term,  
7 NIOSH has been recalibrated in those six or  
8 seven years. And so maybe six or seven years  
9 ago it was envisioned as being able to take --  
10 being able to use this generally as an  
11 adjustment for construction workers. But as  
12 we continued our research and continued to  
13 arrive at feasibility decisions, we have not,  
14 we are not at that position any more. We do  
15 not believe it can be generally applied to  
16 all.

17 MEMBER LEMEN: Can I give you an  
18 example which might explain where I am coming  
19 from? And this is just a fictitious example.

20 Say you have Site A and you have  
21 construction workers on that site. And there  
22 is absolutely no monitoring data taken on any

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1 one of those construction workers. Are you  
2 then telling me that you go to Site B, C, and  
3 D and average that out and that is where you  
4 come up with your 1.4 and you apply it to Site  
5 A?

6 MR. HINNEFELD: That is not our  
7 intention now, no.

8 MEMBER LEMEN: Well what is your  
9 intention?

10 MR. HINNEFELD: Our intention now  
11 -- well, if we are speaking hypotheticals. If  
12 there is not monitoring data on construction  
13 workers and we have no other of our data  
14 hierarchy, nothing else in our data hierarchy  
15 allows us to do a feasible dose  
16 reconstruction, then that is an SEC.

17 MEMBER LEMEN: So my Plant A would  
18 be an SEC?

19 MR. HINNEFELD: Yes, the  
20 construction workers, presumably, at Plant A  
21 would be in an SEC.

22 MEMBER LEMEN: Okay.

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1                   MR. HINNEFELD:     Presumably.     I  
2     mean if we had no other avenue in our  
3     hierarchy of dose reconstruction that would  
4     allow us to reconstruct those doses.

5                   CHAIRMAN MELIUS:     Dave, you have  
6     been patient.

7                   MEMBER KOTELCHUCK:     I, being new,  
8     this was the first chance I had to read the  
9     ORAUT, the old 2006 paper in terms of trying  
10    to understand now what you are doing.

11                   And I see the rationale.     I see  
12    that the all other monitored workers, their  
13    annual doses were larger in general than the  
14    construction workers, except for some years  
15    and that that was the basis, as I understood  
16    it, for saying well, there are a couple of  
17    years where CTW exceeds AMW and it was about  
18    between 1.2 and 1.4.     And so the decision was  
19    made in a claimant friendly way to go to 1.4.

20                   The concern that I had as I read  
21    the paper, though, was the -- I buy that all  
22    the way up through the mid-'80s and then there

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1 were several remarks about the numbers getting  
2 much larger after the mid-'80s. There was, in  
3 the ORAUT paper, it was triggered by an  
4 initial statement that I think was  
5 statistically just wrong and I will point that  
6 out. But that is not critical. When you went  
7 to the conclusions which was on page 35, you  
8 said CT doses occasionally exceed -- you  
9 probably don't have it right there -- CT doses  
10 occasionally exceeded AMW during the late '80s  
11 and 1990s. However, this reflects work within  
12 the DOE complex when radiation protection  
13 programs were well-established and nearly all  
14 potentially exposed workers were monitored.

15 And then it goes on to say  
16 furthermore, these occasional exceedances have  
17 been identified as artifacts caused by a large  
18 number of AMWs with no measurable dose. And I  
19 had a problem, A) it was not occasional as I  
20 looked at the data. I then went back to the  
21 data from the individual complexes, the  
22 plants, and by my reading, which was Tables

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1 5.1, 5.2, and 5.3, which is SRS, Rocky Flats,  
2 and the Oak Ridge National Laboratory. Of the  
3 35 data points from '86 through '99, more than  
4 half of them were above 1.3 and many of them  
5 were up near 1.8 and 2.0.

6 And I began to think, well  
7 consider it -- my consideration was these are  
8 independent measurements on different workers.

9 And to be sure the radiation safety  
10 procedures that have been implemented in all  
11 of these places, reduced the level of exposure  
12 of the full-time workers, the regular  
13 monitored workers. But that had no bearing on  
14 the construction workers. The construction  
15 workers, for whatever reason did not come down  
16 as much as the AMW workers. And that seemed  
17 to me it might reflect -- it does reflect a  
18 reality.

19 And I thought I was concerned that  
20 -- you obviously have talked about this -- but  
21 that the 1.4 made sense up through the middle  
22 '80s but it really seemed to me worth looking

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1 again at whether we should raise that number  
2 beyond the middle '80s.

3 Now I gather I am reading it for  
4 the first time as a new Board Member. So this  
5 may have been discussed a long time ago. But  
6 the data there, the constant of 1.4 doesn't  
7 become realistic by the time you hit the mid-  
8 '80s and it is not an occasional thing. Of  
9 course some of the data I am looking at has  
10 been -- well no, it is not 2006 data. So you  
11 had it before.

12 But it seemed to me that the  
13 construction worker number might be  
14 significantly larger up to 2.0. I didn't sit  
15 and calculate it, nor do I think -- I think it  
16 I needs to be looked at and maybe changed just  
17 a bit from having the flat number of 1.4,  
18 which works well from the mid-'80s all the way  
19 back. And the data is good there.

20 MR. HINNEFELD: David, I will just  
21 have to say I will have to come back because I  
22 am not familiar with that aspect.

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1                   CHAIRMAN MELIUS: Does SC&A have a  
2 comment on that?

3                   MR. STIVER: I could basically  
4 comment in general in response to that.

5                   CHAIRMAN MELIUS: Well then I  
6 don't think -- we have gone a long time on  
7 this.

8                   MEMBER KOTELCHUCK: Yes, I am just  
9 asking --

10                  CHAIRMAN MELIUS: We are looking  
11 for a response to Dave's question.

12                  MEMBER KOTELCHUCK: Yes. If that  
13 hasn't been looked at recently, I hate to  
14 throw something, how should I say, in our  
15 proceedings. But it does seem to me that that  
16 is something that should have been or should  
17 be looked at again and possibly increased the  
18 number would increase as we go beyond the mid-  
19 '80s. And that will affect people who are  
20 coming downstream.

21                  CHAIRMAN MELIUS: Well, it is not  
22 being used. It doesn't matter.

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1 MEMBER KOTELCHUCK: Pardon?

2 CHAIRMAN MELIUS: If it is not  
3 being applied, it doesn't matter.

4 MEMBER KOTELCHUCK: I assume that  
5 it would be applied -- that it might be  
6 applied.

7 CHAIRMAN MELIUS: Well Stu just  
8 told us it is not being applied.

9 MR. HINNEFELD: There really, at  
10 this point, needs to be a site-specific  
11 evaluation in those particular sites that  
12 evaluation is done. So I will have to go back  
13 and see. To be honest, I have to go back and  
14 see what we are doing.

15 MEMBER KOTELCHUCK: That would be  
16 fine.

17 CHAIRMAN MELIUS: Yes, let's get  
18 that answer.

19 MEMBER KOTELCHUCK: That's fine.

20 CHAIRMAN MELIUS: And then we will  
21 see whether it is relevant or not.

22 MEMBER LEMEN: Building on Dave's

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1 thing, I still didn't get my question  
2 answered. And that is, do you give the same  
3 number to pipefitters, carpenters, and other  
4 job titles or are you -- I mean, is that the  
5 same number for everybody?

6 MR. HINNEFELD: Yes.

7 MEMBER LEMEN: Why?

8 MEMBER MUNN: Because it is  
9 higher.

10 MEMBER LEMEN: But that seems  
11 different when you talk about pipefitters and  
12 all of these. You say it is higher. I don't  
13 necessarily agree with that but I don't see it  
14 being an umbrella number to be given to  
15 everybody the same.

16 MR. HINNEFELD: As I understand  
17 it, the revision to TIB-52 that was made in  
18 response to that issue that some construction  
19 workers are more highly exposed than others,  
20 is that as the investigation of a site, a  
21 site's experience indicates that you have a  
22 group of construction -- a trade, whether it

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1 is pipefitters or something else or some other  
2 trade, that looks like they really were in the  
3 highest exposure work and, therefore, would  
4 not be represented by some sort of general  
5 population dose, that you would use the 95th  
6 percentile of the model as an approach to  
7 that.

8 So that is what one of the caveats  
9 written into TIB-52. The resolution of these  
10 various findings in 52, essentially makes 52  
11 not a broadly applicable approach. What the  
12 resolutions say is that each of these sites  
13 needs to be investigated and that is more of  
14 an historical summary of this study that was  
15 done for the sites that are described there,  
16 rather than something that can be applied with  
17 confidence and say okay, we have got this  
18 ratio so it is good. We will just use that  
19 ratio. That is what the resolution of the 52  
20 discussion pretty much arrived at.

21 CHAIRMAN MELIUS: David  
22 Richardson.

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1                   MEMBER RICHARDSON:    Yes, you are  
2                   giving me a concerned look.  I'm just --

3                   CHAIRMAN MELIUS:    No, no, no.  You  
4                   put your --

5                   MEMBER RICHARDSON:        I'm just  
6                   filling time now because Wanda logged us off.  
7                   So it is going to take a while to get the  
8                   computer back up.

9                   CHAIRMAN MELIUS:    Oh, okay.  No,  
10                  if you have a question, go ahead.  No, you  
11                  started to put your sign down.  That is why I  
12                  was confused.  I thought you changed you mind  
13                  about asking.

14                  MEMBER RICHARDSON:   Well I sort of  
15                  have because it seems like this document is in  
16                  some sort of ambiguous space.  I mean is it  
17                  like kind of a scientific oddity that we put  
18                  in a glass bottle with formaldehyde and look  
19                  at to remember like the bizarre past?  Or is  
20                  it something that people are going to pull out  
21                  and play with again?  And if they are, then I  
22                  have got questions about a lot of what I

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1 consider kind of a little bit strange ways of  
2 having resolutions on things which were well,  
3 it is plus or minus 30 percent so we don't  
4 need to care about it.

5 So maybe what we need to know is,  
6 is this -- you are sort of saying it is not  
7 used. But does it exist as a document which  
8 someone may pull out and refer to as the basis  
9 for a dose reconstruction in even one case or  
10 not?

11 CHAIRMAN MELIUS: Can I suggest a  
12 way forward on this? Because I think the  
13 points are good. And I think one is we need  
14 to be able to know specifically how it is  
15 being used now, where it is being applied.

16 Secondly, I think what people are  
17 raising are general issues about coworker  
18 models and how they are being used. There is  
19 at least there are other OTIBs. OTIB-20 deals  
20 with coworker models for external dose and it  
21 might -- one thing, I have a thought and there  
22 may be others too -- I haven't gone through

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1 the list. An approach would be to one, let's  
2 get clarification for our next meeting on how  
3 this is being used. Because then I think we  
4 know which issues we want to raise specific to  
5 OTIB-52.

6 Secondly, let's talk about OTIB-20  
7 and maybe some of the other coworker OTIBs  
8 that might be, at least give us a series of  
9 similar issues and maybe get a more sort of  
10 comprehensive look at that issue. Is that  
11 making sense to you Dave?

12 MEMBER KOTELCHUCK: Yes.

13 CHAIRMAN MELIUS: Because I am in  
14 the same -- I have the same series of issues.

15 You know, one, three is a lot of problems  
16 with the approach. And then secondly, well,  
17 if the approach is being used, then there are  
18 some further issues about how they have  
19 interpreted that and applied that data also.

20 And meanwhile, we are still signed  
21 off.

22 MEMBER LEMEN: So what did you

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1 resolve to do?

2 CHAIRMAN MELIUS: Well, I am  
3 asking if that is satisfactory to the Board.  
4 And we also have some people on the line that  
5 haven't had a chance to ask questions either.

6 But meanwhile, we are having some computer  
7 presentation problems here.

8 MEMBER CLAWSON: Jim, this is  
9 Brad. I would agree with what you said  
10 because I didn't understand how this was being  
11 implemented.

12 I have heard this OTIB being  
13 thrown around that well this is how we could  
14 do the construction workers is through this.  
15 And there are some serious implementation  
16 issues.

17 CHAIRMAN MELIUS: And I think  
18 there are also issues related to well, if it  
19 is being potentially used, well what are the  
20 parameters for using it? Are people going  
21 back at each site and are they actually  
22 looking at say pipefitters versus other trades

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1 or construction workers. How are they making  
2 that evaluation in terms of its applicability?

3 So in some ways the more we talk  
4 about it, the more issues that come up. But I  
5 think it is hard to resolve until we have more  
6 specifics on how it is being applied. And  
7 unfortunately Jim Neton is not here today.

8 But meanwhile, Ted has fixed the  
9 computer.

10 MEMBER BEACH: Well Jim, I just  
11 have one quick comment. These OTIBs are being  
12 revised also. The latest one for this was  
13 February 17th of 2011.

14 CHAIRMAN MELIUS: Right.

15 MEMBER BEACH: And I know that is  
16 still two years old but they are still  
17 revising them as we go as well. So there must  
18 be a use if we continue to keep looking at  
19 them, and correcting them, revising them.

20 CHAIRMAN MELIUS: Yes.

21 MEMBER BEACH: So just a thought.

22 CHAIRMAN MELIUS: But I suspect

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1 the revision for OTIB-52 probably was assigned  
2 in 2009 or something.

3 MEMBER BEACH: Probably.

4 CHAIRMAN MELIUS: Yes.

5 MEMBER LEMEN: Is there any  
6 Subcommittee looking at just construction  
7 workers? I don't think so.

8 CHAIRMAN MELIUS: No.

9 MEMBER LEMEN: Would that be  
10 appropriate?

11 CHAIRMAN MELIUS: Well can I ask  
12 any of the Board Members on the phone? You  
13 have been patient. Do you have questions?

14 MEMBER SCHOFIELD: No. I have the  
15 same questions I think everybody else does  
16 about application. This is Phil.

17 CHAIRMAN MELIUS: Anybody else? I  
18 don't want to ignore you.

19 MEMBER FIELD: This is Bill. I  
20 think the discussions are very helpful.

21 CHAIRMAN MELIUS: Okay, thanks.

22 MEMBER MUNN: And NIOSH has agreed

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1 they will issue a statement for us to try to  
2 cover the salient points that you brought up.

3 MEMBER LEMEN: What are those  
4 points?

5 MEMBER ANDERSON: It is being  
6 used? That's number one.

7 MEMBER LEMEN: That's number one.  
8 Is that the main point we want an answer to?

9 CHAIRMAN MELIUS: Well I think we  
10 need to have that in order to figure what to  
11 focus on.

12 MEMBER CLAWSON: And also Jenny's  
13 point that she brought up today about the  
14 legal part of this what they had to do. I  
15 found that interesting because I hadn't ever  
16 looked at that when she made that comment. So  
17 that was a little bit of a clarification to  
18 me.

19 CHAIRMAN MELIUS: Well it is how  
20 the Act reads. I mean --

21 MEMBER CLAWSON: Right, I  
22 understand.

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1                   MEMBER ANDERSON:    It is what it  
2                   is.

3                   CHAIRMAN MELIUS:    That is why our  
4                   lawyers often jump up when we are having some  
5                   of our discussions.

6                   MEMBER CLAWSON: I appreciate that.

7                   MEMBER MUNN:        Are we ready for  
8                   OTIB-70?

9                   CHAIRMAN MELIUS:    Yes.    Are you  
10                  ready?

11                  MEMBER MUNN:    Well, it is up.

12                  CHAIRMAN MELIUS:    Okay.

13                  MEMBER MUNN:    OTIB-70 is the dose  
14                  reconstruction        during        the        residual  
15                  radioactivity periods at AWEs.  It is the OTIB  
16                  that we use for estimating dose to workers at  
17                  AWEs when NIOSH has determined that there is  
18                  enough        residual        contamination        to        be  
19                  significant.  It also helps the reconstruction  
20                  of        internal        doses,        with        respect        to  
21                  resuspension        of        particulate        surface  
22                  contamination.  As you know, the Board has had

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1 a particular interest in that specific issue.

2 It is certainly applicable on a wide number  
3 of sites. And we have worked with it at great  
4 length in Subcommittee.

5 Only the internal and external  
6 radiation exposures that are defined in the  
7 statute are the ones that are included in the  
8 residual period of reconstructions. Any  
9 commercial sources are not included.

10 This is another ones of those  
11 procedures that we have worked with over a  
12 significant period of time. Rev 0 was issued  
13 in 2008 and later that year we received the  
14 review and established the findings. We have  
15 resolved them just last year. The final  
16 discussions were taking place in July.

17 This guidance for reconstruction  
18 of internal doses recommends six methods for  
19 estimating the internal exposures that depends  
20 on the type of data available, whether it is  
21 only surface contamination or whether we have  
22 air samples as well. And the timing of those

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1 samples, whether it was during operations or  
2 whether the data that we have was all taken  
3 post-operational, which is the case in some  
4 sites.

5 A resuspension factor of one times  
6 ten to the minus six per meter was based on a  
7 group of studies that extended over several  
8 decades.

9 In Rev 1, the revision was made to  
10 depletion rate of 0.00067 and that was the  
11 result of a great deal of data that had been  
12 accumulated over a number of decades as well  
13 from four different AWE sites.

14 We had 15 total findings and, as  
15 always, you can check out the full history on  
16 the BRS. We have one of the findings that was  
17 addressed in TBD-6000, which is also closed.  
18 So we have all 15 now closed for our purposes.

19 Finding number one was observation  
20 with respect to the inconsistent use  
21 resuspension factors. It had implications  
22 that were nearly two orders of magnitude

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1 higher than what NIOSH had been recommending.

2 In the Revision 1 changed the source term  
3 from one percent per day to 0.00067 per day  
4 and that was consistent with what had been  
5 used elsewhere. It was, as I said, only  
6 closed last July. This was about the last  
7 one, I believe, that we actually closed from  
8 OTIB-70. It had considerable review both in  
9 the Subcommittee and elsewhere.

10 Finding number two was concerning  
11 the fact that the references that had been  
12 used were for outdoor soil contamination and  
13 weren't really felt to be applicable by SC&A  
14 to the building surfaces.

15 Rev 1, we agreed in Subcommittee,  
16 would be recalculating the default source-term  
17 depletion rate during the residual radiation  
18 periods. The recalculation was based on  
19 actual data that was gathered specifically  
20 from sites and not from soil contamination.

21 That was found to be acceptable to  
22 all concerned and we closed the finding.

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1                   Finding number three had to do  
2 with the source-term depletion rate that  
3 airborne contaminants were uniformly  
4 distributed through the interior volume --  
5 that was an assumption -- and removed with 100  
6 percent efficiency and, as the contractor  
7 pointed out, neither assumption they felt was  
8 likely to exist.

9                   The source-term was recalculated  
10 and -- the default source-term was  
11 recalculated based on observed depletion rates  
12 at the four sites where we had good reliable  
13 data.

14                   And that was, therefore, closed on  
15 July 31st.

16                   TBDs-6000 and 6001 regarded large  
17 air concentrations during facility operations  
18 and they were, in all cases in that procedure,  
19 job-specific. But this particular procedure,  
20 Attachment B was identifying a single value  
21 for three different thorium sites and they  
22 excluded process air sampling data.

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1           It was determined that air samples  
2 were selected to be indicative of the general  
3 conditions in the area where the facilities  
4 were to be found at the start of the residual  
5 period. It was not potential exposure during  
6 the operational period. And that was an  
7 adequate descriptor of the explanation needed.

8           We closed that finding four.

9           Finding five regarded the data for  
10 three thorium facilities that was shown in  
11 Attachment B and didn't have any further  
12 guidance indicated on how these datasets were  
13 going to be used. And the explanation that  
14 was given by the Agency was that this was not  
15 being used for dose reconstruction purposes  
16 and Appendix B was unnecessary. Therefore, it  
17 was removed from the procedure during Rev 1  
18 and that cleared the question with respect to  
19 its use.

20           Item number six was the use of  
21 Horizons' summary survey data as a default  
22 value for operational air concentration was

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1 not appropriate when it was used from a  
2 thorium refining facility.

3 And that was also closed, based on  
4 the fact that it was not going to be used --  
5 Appendix B was not going to be used and it was  
6 removed.

7 The finding number seven with  
8 regard to the same construct was again talking  
9 about Attachment B data, which had been  
10 removed and wasn't used, in any case, with  
11 respect to DRs.

12 Finding number eight, the  
13 derivation of Appendix B air concentrations.  
14 Again, an Appendix B issue. By removing  
15 Appendix B, several of the questions were  
16 cleared out.

17 Finding number nine, more  
18 derivation of Appendix B issues. One more  
19 that was removed when Appendix B was removed  
20 from the instruction of the Technical  
21 Information Bulletin.

22 Finding number ten was the

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1 recommendation of the ten to the minus six  
2 meters as being inappropriate. I mentioned  
3 that earlier. And a Table 5 footnote was  
4 inserted to indicate that a site-by-site  
5 analysis would be conducted to establish the  
6 sites where the post-operational clean-up had  
7 been performed and the value that had been  
8 identified would not just used as a default on  
9 a routine basis. That was an acceptable  
10 response. We closed the finding.

11 Finding 11 with regard to NUREG-  
12 1400, the position was that it was not  
13 appropriate and that it probably wasn't  
14 technically feasible because of the lack of  
15 data.

16 And the response was a  
17 consideration of NUREG-1400 has been deleted  
18 from the OTIB so that it does not become an  
19 issue for contention.

20 We have closed that finding, since  
21 it was not being used in any case.

22 Finding 12 had to do with, again,

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1 TBD-6000, assigning operational air quality  
2 values. The concern was that it might not be  
3 claimant favorable. It was addressed  
4 appropriately in TBD-6000 additional issue for  
5 that particular procedure.

6 And the Work Group will tell us  
7 when they have closed that issue. From our  
8 perspective, it is a decision for them to make  
9 and a solution for them to find.

10 Finding number 13 was judging  
11 whether the basic approach to developing  
12 inhalation doses in the TBD-6001 was going to  
13 be claimant favorable. The position was that  
14 it was not possible to judge that.

15 TBD-6001 has been canceled. And  
16 since it was canceled, we were able to close  
17 that finding, since it is now moot.

18 Again, Finding 14 had to do with  
19 TBD-6001 also. Again, inhalation doses were  
20 the concern. It has been canceled and that  
21 finding, therefore, is again moot.

22 Finding 15, many of the

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1 assumptions that form the basis of TIB-9, the  
2 ingestion model, were too restrictive. The  
3 concern was that the yield of dose  
4 reconstruction would, therefore, be low. It  
5 has closed just last month because the finding  
6 had been resolved and was closed. We were  
7 advised of that and we now, as a result, have  
8 closed this particular finding on our OTIB-70  
9 review.

10 That wraps up our findings for the  
11 Subcommittee. And we are ready for questions.

12 CHAIRMAN MELIUS: Anybody have  
13 questions on OTIB-70?

14 MEMBER SCHOFIELD: Yes, Jim. This  
15 is Phil Schofield. I have got a question.  
16 Going back to the early part there, are they  
17 going to apply the default assumption of  
18 resuspension? And how are they going to apply  
19 that? Because different material types are  
20 going to have different amount of different  
21 characteristics for resuspension. We were  
22 talking about an oxide or whatever particular

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1 form was processed there.

2 MEMBER MUNN: Which finding are  
3 you addressing, Phil?

4 MEMBER SCHOFIELD: The default  
5 resuspension factor. That could be based -- I  
6 mean, that can change on the site because of  
7 what material was used in that particular  
8 building. The nature of it, whether it was an  
9 oxide or whatever it was. And even the  
10 humidity factor could go in, and particularly  
11 when you get out in the soil, if you are in an  
12 area where it is very humid, the soil tends to  
13 be damp, one suspension factor for that versus  
14 an area where the soil is very dry and it is  
15 windy, then you are going to have a totally  
16 different resuspension factor.

17 And what I am wondering is if they  
18 are going to use a default assumption, how are  
19 they going to apply that and where are they  
20 going to get that default from?

21 MEMBER MUNN: Well we are talking  
22 resuspension factors in closed facilities, for

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1 the most part, that are production facilities,  
2 Phil. And I guess there are fairly standard  
3 expectations with respect to what you are  
4 going to see there. I guess I am not really  
5 clear as to why you would expect similar  
6 production facilities to have vastly different  
7 resuspension rates.

8 MEMBER SCHOFIELD: Well, what I am  
9 particularly looking at is during the  
10 decommission, you know when they are tearing  
11 down the facility, then now you get into all  
12 these other factors. Like I said, if you have  
13 a very dry atmosphere versus very wet,  
14 particularly like when it talks about where it  
15 is in -- you have contaminated soil and stuff,  
16 you know, if that soil is damp and wet, it is  
17 not going to blow around or be -- you know you  
18 don't have much of it getting up in the  
19 atmosphere, into the air where the workers are  
20 versus an area where the soil is very dry.  
21 Like I said, the same thing, you know, going  
22 back to the same thing, you know, depending on

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1 the type of material that was used there, you  
2 know, the physical form it was would determine  
3 how easily that is resuspended.

4 MEMBER MUNN: I believe this OTIB  
5 addresses specifically residual radioactivity  
6 periods inside the facility. I think that is  
7 what we are talking about here. I don't  
8 believe we are talking about soil  
9 contamination anywhere.

10 CHAIRMAN MELIUS: John, do you  
11 want to clarify? You look like you are --

12 MR. STIVER: I would like to say a  
13 couple of words.

14 MEMBER ZIEMER: This is Ziemer.  
15 Can I make a comment?

16 CHAIRMAN MELIUS: Go ahead, Paul.

17 MEMBER ZIEMER: Okay. I just  
18 wanted to clarify what I think maybe Wanda  
19 did. But this default factor is intended to  
20 apply to indoor facilities that have been  
21 cleaned up, where operational cleanup has been  
22 performed. Otherwise, it would not apply.

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1           I don't know if Jim Neton is on  
2 the line or is there at the meeting but if he  
3 could speak to that in a little more detail,  
4 but it is my understanding that this would  
5 only apply in cases of facilities that have  
6 been previously cleaned up. And there is very  
7 good data to support the use of ten to the  
8 minus six for all kinds of situations where  
9 cleanup has already occurred.

10           MR. STIVER: Yes, Dr. Ziemer, this  
11 is John Stiver. Jim Neton is not able to  
12 attend. He is at an NCRP meeting today, I  
13 believe.

14           But you are exactly right. This  
15 TIB applies to AWE facilities during the  
16 residual period. And that ten to the minus  
17 six resuspension factor is applicable to  
18 facilities that have been decontaminated or  
19 cleaned prior to the residual period. And I  
20 believe one of the findings here, the  
21 resolution, was for situations where you have  
22 facilities that may be -- that don't fit that

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1 particular description why a resuspension  
2 factor would be derived based on the site-  
3 specific information for that particular  
4 facility. And that was a topic of discussion  
5 over several different Work Group meetings  
6 when we came to that decision.

7 MEMBER ZIEMER: Okay, so that  
8 answers my question. So I have got that  
9 answer now, thanks.

10 MEMBER MUNN: Yes, thank you,  
11 Phil.

12 CHAIRMAN MELIUS: Other -- yes,  
13 Brad?

14 MEMBER MUNN: Yes, Brad?

15 MEMBER CLAWSON: I am looking at  
16 this procedure a little bit like the last one.

17 This is going to be kind of on a case-by-case  
18 basis, wouldn't it be used? To me, I am  
19 hearing a lot of different things play into  
20 this procedure for it to be able to work  
21 right. And each site is going to be somewhat  
22 a little bit different. Correct?

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1                   MEMBER MUNN:     I think you are  
2 correct, yes. I believe that was the intent.

3                   CHAIRMAN MELIUS: I mean certainly  
4 with the residual time period, I think we have  
5 a practice in looking at particular sites that  
6 we -- because it comes up in terms of the SEC  
7 reviews fairly often. We look for the nature  
8 of the activity on that site during the  
9 residual period.

10                  Remember, I believe the Linde  
11 Site, where we had a lot of ongoing demolition  
12 of some of the -- one of the buildings and so  
13 forth. So that was different. I think there  
14 has been some other sites where the nature of  
15 the activities on the site led us to have some  
16 caution in terms of how we would use, sort of  
17 general assumptions that are in OTIB-70.

18                  And I don't know if this is more  
19 of a procedural issue for both the Work Group  
20 and for NIOSH is do those sort of caveats or  
21 instructions don't always seem to get captured  
22 in the review all the time nor in the actual

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1 OTIB. And whether that is a problem for  
2 somebody from the outside looking at it like  
3 us, to what extent it is a problem for the  
4 people within the program, I don't know  
5 because there is so much other ancillary  
6 instructional and technical material that is  
7 being used. But is one of the things I think  
8 would help to clarify some of these OTIBs as  
9 we go through is if that information was  
10 captured in the revision somehow.

11 Again, it is not a major finding  
12 but at least for people looking at this or  
13 whatever, it might helpful. And maybe it is  
14 something we need to keep an eye on as we are  
15 going through, looking at some of these other  
16 OTIBs.

17 I suspect that the Work Group or  
18 the Subcommittee has talked about all of these  
19 issues. The question is, do they warrant a  
20 revision or changes to the OTIB itself? Is  
21 that worth the effort, so to speak? I don't  
22 know. Josie?

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1                   MEMBER BEACH:     When you look at  
2     the revision that was put out March of 2012,  
3     it is very specific in the walkways, whether  
4     it was D&Ded or not D&Ded, people walking,  
5     people running, vigorous activity, it is one  
6     of the better ones in my opinion for  
7     clarification.

8                   MEMBER MUNN:       Yes, you are  
9     correct.     It has been discussed at great  
10    length in the Subcommittee.

11                  CHAIRMAN MELIUS:       Any other  
12    questions or comments on that?   Okay.

13                  MEMBER MUNN:     All right, shall we  
14    go on?

15                  CHAIRMAN MELIUS:     Before the  
16    computer fails us, let's -- Ted, your turn.

17                  MEMBER MUNN:     As I believe you are  
18    aware, internal guidance documents are exactly  
19    that.     They are internal guidance.   The ones  
20    that we are dealing with in the Subcommittee  
21    are all very, very early documents, very basic  
22    in nature.   They are not used as a specific

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1 instruction. They are general guidelines that  
2 are to help the dose reconstructor in  
3 decisions about which direction to go, not how  
4 to do things.

5 IG-001, by its nature is the first  
6 of those, External Dose Reconstruction  
7 Implementation Guide.

8 As I said, it is very general  
9 guidance on how to approach things. It is  
10 detailed implementation guidance being  
11 provided in very other site-specific and  
12 issues-specific technical documents,  
13 workbooks, and the procedures that we review  
14 in our committee.

15 As you can see, very early May  
16 2002 it was not until the second revision was  
17 actually issued. That is, Revision 1 was  
18 available before SC&A was tasked with  
19 reviewing any of these.

20 A great deal of concentrated time  
21 was not spent with these early on because  
22 their lack of specificity did not lend them

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1 well to much of our attention. We spent a  
2 great deal more time looking at site-specific  
3 and issue-specific procedures.

4 These, we had attempted recently,  
5 however, to clean up once and for all and be  
6 able to provide you a history of how that has  
7 fleshed out over time.

8 Originally this IG had -- oh. And  
9 by the way, apologies for the heading. This  
10 is not OTIB-70. The cut and paste theme has  
11 bitten us. This is IG-001.

12 We had 24 findings in total.

13 CHAIRMAN MELIUS: You should have  
14 quizzed us.

15 MEMBER MUNN: I should have, yes.  
16 And what procedure are we on now?

17 We had 17 findings come out of the  
18 first revision and seven additional ones when  
19 Rev 2 was issued. We now have closed all 24  
20 of them and you can see the history, as always  
21 in the BRS.

22 The first finding was a deficiency

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1 regarding the layout of the procedure. As a  
2 matter of fact, there was quite a bit of  
3 discussion in IG-001 about the reviewers not  
4 being happy with the format that was provided  
5 there. But we have attempted to manage to  
6 respond to that in different ways other than  
7 completely revising the entire procedure. But  
8 it has, as I said, been revised more than  
9 once.

10 That issue is now closed.

11 Finding number two was guidance  
12 for getting film and dosimetry uncertainties.  
13 And the neutron source-term dosage. The  
14 occupational medical dose were all data that  
15 required resources that weren't available to  
16 the dose reconstructor.

17 The response to the concern was  
18 that this procedure, as I have stated earlier,  
19 is general principles and not specific  
20 guidance. When you need guidance as to where  
21 to find the values that you need for those  
22 specific doses and uncertainties, you go to

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1 the procedures that are there for the purpose  
2 of knowing not what to do but how to do it.

3 The concern for finding three was  
4 that inadequate guidance was not provided for  
5 classifying the case as above or below the 50  
6 percent PoC mark and that finding should  
7 identify the role of personnel.

8 But the response was, again, it is  
9 intended for general guidance, that the  
10 guidance that is being asked for in this  
11 finding is found in PROC-006. The finding was  
12 closed.

13 Finding four, the procedure  
14 recommended methods that were inappropriate  
15 for estimating TLD uncertainty. In the  
16 resolution, it was determined that a revision  
17 for this procedure was in order. It was  
18 issued and it eliminated recommending those  
19 methods for the TLD uncertainty and told the  
20 dose reconstructor to go to specific site  
21 documentation when it was available.

22 Finding five, concerning the

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1 recommendation of the procedure for a range of  
2 LOD values for the years '56 through '60. The  
3 reviewer thought that those ranges were too  
4 low.

5 Following that, Revision 2 of this  
6 procedure was issued and it referenced LOD  
7 values that were modified, so that there was  
8 no date-specific value included in this  
9 guidance.

10 Finding six, the reviewer found  
11 that the guidance was implying LOD for deep  
12 dose from gamma could also be applied to  
13 electron dose. And that is inconsistent with  
14 their historic value. Because of the  
15 uncertainty of shallow does, it is considered  
16 higher than deep dose.

17 In Rev 2 of IG-001, the example  
18 was removed that made that implication. And,  
19 therefore, we closed the finding.

20 Finding seven, the procedure was  
21 assuming NTA film dosimeters were insensitive  
22 to low energy neutrons but the reviewer felt

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1 that they were -- that those particular  
2 dosimeters were insensitive to neutron values  
3 that were less than one MeV, rather than less  
4 than 500 keV.

5 When the procedure was ultimately  
6 revised so that Revision 2 would indicate a  
7 variety of energy thresholds for those  
8 particular film dosimeters. Those  
9 recommendations were cited in the literature  
10 and the procedure now recommends reviewing the  
11 site-specific information when you are  
12 determining actual threshold values.

13 Finding eight was questioning the  
14 method for reconstructing the neutron doses  
15 from survey data or source-term data. The  
16 reviewer felt that those methods were not  
17 practical or defensible.

18 And ultimately just last year when  
19 Revision 3 was issued, the Agency has included  
20 the use of more practical methods. They are  
21 employing neutron to photon ratios. And that  
22 made it possible for us to close the finding.

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1           Finding nine, the concern was that  
2 the procedure doesn't acknowledge the likely  
3 use of neutron/photon ratio methods in the  
4 neutron dose reconstruction.

5           And the resolution involved the  
6 issuance of Rev 2, which modified the section  
7 that had the offending statement in it. And  
8 it included a statement acknowledging the use  
9 of site-specific neutron-to-photon ratios,  
10 which as you know is widely used now and  
11 acceptable practice. That closed the finding.

12           Finding number ten had to do with  
13 Appendix D. The dose correction factors for  
14 bone surfaces and red marrow were claimed to  
15 be underestimated. Again, as the Agency  
16 applied the current practices, Rev 2  
17 recommended applying a correction factor to  
18 the rotational and isotopic DCFs as well as  
19 for the esophagus and lung. That was an  
20 agreeable resolution. We have closed the  
21 finding.

22           Finding 11 did not account for

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1 laboratory uncertainty for film badge readings  
2 with respect to very low exposures, exposures  
3 lower than 200 millirem.

4           Again, this was closed by the  
5 addition of Rev 2, which indicated that site-  
6 specific dosimetry data could be found in the  
7 Site Profile in many cases. That was  
8 acceptable. We closed finding 11.

9           Finding 12, again Appendix B  
10 issue. The PA geometry correction factors are  
11 in error and underestimates dose according to  
12 the reviewer. And the response was that PA,  
13 DCFs are not routinely used in dose  
14 reconstruction but since that particular  
15 concept, that approach could prove useful in  
16 special exposure scenarios, then it should be  
17 kept in Appendix B. And after some discussion  
18 in the Subcommittee, it was agreed that this  
19 is appropriate and was left as it was in the  
20 procedure and the finding was closed.

21           Finding 13, again, Appendix B.  
22 With respect to the rotational and isotropic

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1 geometry of the dose correction factors, the  
2 stipulation was that they were in error  
3 because the doses were underestimated.

4 Again, after significant  
5 discussion, it was agreed to insert a  
6 discussion and a table of correction factors  
7 that should be applied into Revision 2 for  
8 rotation and isotropic DCFs. That was done  
9 and the finding was closed.

10 Finding 14 regarded angular  
11 sensitivity that wasn't accounted for in  
12 correcting measures that were used in film or  
13 TLD values.

14 And again, Rev 2 of this procedure  
15 incorporated such a discussion and guided the  
16 dose reconstructor to refer to site-specific  
17 documentation for more detailed information on  
18 how to proceed.

19 Finding number 15 was concerned  
20 that no correction was recommended for  
21 backscatter. And in some early, early pre-  
22 1984 calibrations, they had been done in air

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1 as opposed to on-phantom.

2 NIOSH pointed out that a non-  
3 correction for backscatter just makes the  
4 reported film dose higher and it has a  
5 tendency to build conservatism additionally in  
6 some later years. That was satisfactory to  
7 the Subcommittee and we closed the finding.

8 Number 16 indicated that  
9 environmental uncertainty hadn't been  
10 addressed in the procedure. No heat, light,  
11 humidity, things of that sort, were  
12 incorporated in the discussion.

13 And again, the response was that  
14 it is general guidance information and it is  
15 not specific for dose reconstruction and the  
16 reconstructor should refer to site-specific  
17 data for such things as environmental  
18 uncertainty.

19 Finding number 17 stated the  
20 guidance for the selection of uncertainty  
21 distributions for total organ doses creates a  
22 question of consistency and it makes necessary

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1 the use of professional judgment.

2 And again, the response was this  
3 is a general guidance procedure, not a  
4 specific one. And as such, this is not of  
5 major concern because it is not a specific  
6 guidance. You need to go to technical  
7 information for uncertainty distributions.

8 Finding number 18 identified  
9 deficiencies regarding the clarity and  
10 structure of the document. This is kind of a  
11 replay of what we saw with finding number one.  
12 Again, one of the reviewers was not happy with  
13 our format that was being used.

14 The later revisions did take away  
15 a lot of the excessive information that made  
16 it much clearer to the reader how to proceed.

17 And again, this is a general guidance  
18 document, not specific.

19 Finding number 19 indicated the  
20 deficiency that was identified under the Rev 1  
21 review centered around the fragmented  
22 structure. Again, this is a formatting

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1 concern with respect to how the procedure was  
2 originally written.

3 And the Subcommittee did feel, as  
4 was stated on this slide, that sequencing of  
5 information is really pretty subjective. And  
6 it is really not a key factor in providing  
7 guidance, especially as later revisions went  
8 to considerable effort to make sure that the  
9 procedure overall was cleaned up and  
10 simplified to the greatest extent possible.

11 Finding number 20, guidance wasn't  
12 provided regarding the methodology for  
13 assessment of neutron doses when you were  
14 using source term data. And we pointed out  
15 repeatedly that this is a general principle,  
16 not a specific guidance document and probably  
17 not appropriate for use in IG-001. We closed  
18 the finding on that basis.

19 And finding 22 was a concern -- I  
20 mean finding 21 was a concern over  
21 inconsistency in directing the dose  
22 reconstructor how to approach site-specific

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1 and technical documents. And we had two  
2 findings that were very similar and had the  
3 same general response.

4 Number 22 also indicated that the  
5 reviewer felt this procedure should but didn't  
6 direct the dose reconstructor to the right  
7 site-specific and technical documents.

8 And again, it was pointed out this  
9 is a guidance document. And where one goes  
10 for site-specific information varies from one  
11 site to another. So we closed the finding.

12 Number 23 had asked for more  
13 discussion on neutron-to-photon ratios. It  
14 didn't feel that what was given was adequate.

15 So one of the things that was done in  
16 Revision 3 was the addition of a full section  
17 to clarify the evaluation of missed neutron  
18 data and, again, referring to site-specific  
19 documentation as a method for proceeding.

20 Resolution to finding number 24,  
21 which had to do with all dose correction  
22 factors that were associated with PA

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1 geometries. Both geometries and environmental  
2 uncertainty and guidance for selection of  
3 uncertainty distributions all concerned with  
4 consistency and the need for professional  
5 judgment.

6 We determined that posterior and  
7 anterior DCFs are not routinely used in dose  
8 reconstructions, as we had said in an earlier  
9 finding. But again, this can be useful in  
10 singular situations and was reasonably  
11 retained in the Appendix.

12 It is general guidance information  
13 and not specific. We need to sites and to  
14 various workbooks in order to get to the  
15 minutia of how to proceed.

16 And that is the last of the IG-001  
17 findings. Do we have any questions?

18 CHAIRMAN MELIUS: Questions for  
19 Wanda?

20 MEMBER CLAWSON: I just have one,  
21 Wanda.

22 In reading this, and I understand

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1 what it is here for -- it is for guidance --  
2 but I guess this is more for Stu. So do we  
3 basically have a knowledge of the different  
4 film badges and what their limits were?

5 When I was reading through this, I  
6 saw quite a bit of variations on it. Is this  
7 how we would implement this when we are -- say  
8 the site had one of the film types. This is  
9 giving you the guidance of how to go for the  
10 inadequacy of the film, if you have film badge  
11 data for them.

12 MR. HINNEFELD: I don't recall  
13 what is in IG-001, if it specifies. I mean  
14 there were certain common film types that were  
15 used for dosimetry early, you know particular  
16 manufacture and type. And I don't remember  
17 now if IG-001 contains like performance  
18 information like limits of detection stuff or  
19 things like that because most of that  
20 information generally has to be derived on  
21 site-specific because not only do you have the  
22 film type, you also have the type of radiation

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1 that you have at that site.

2 So I think as a general rule we  
3 rely on what we can learn about the site-  
4 specific use of the film, rather than just  
5 have sort of a package deal whenever you use  
6 DuPont number such and such, you get this. I  
7 don't know that that is a definitive thing to  
8 do.

9 MEMBER CLAWSON: Yes, that is kind  
10 of what I was getting to. This comes back to  
11 the process of this is going to come down to a  
12 site-specific and film was used and what  
13 energies. Because reading through this, it  
14 made sense but I didn't know how you were  
15 going to implement it to specific sites  
16 because some of them like DuPont 502 film has  
17 -- I guess it comes back to this as being  
18 guidance but it is going to be site-specific.  
19 This is just to help.

20 MR. HINNEFELD: Yes, our Site  
21 Profiles really go to quite a lot of effort to  
22 try to determine what was the technology it

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1 was using and the capability of the technology  
2 at that site. So the Site Profile has really  
3 gone to quite a lot of effort.

4           You know, this document has more  
5 seniority with the program than I do. It was  
6 written before I started on the program. And  
7 early on, there was sort of this general --  
8 one, there was not a real well-defined process  
9 on how our technical documentation was going  
10 to be defined. And so this was sort of this  
11 principle stuff, you know, principles of  
12 external dosimetry kind of document. And as  
13 we got into it, we recognized that you needed  
14 far more specificity, site-specific  
15 specificity and issue-specific specificity, in  
16 order to provide some consistent guidance to  
17 people.

18           MEMBER CLAWSON: Right. And I  
19 guess my point that I was getting at, because  
20 many times as we are starting into a Site  
21 Profile, which we haven't done for a while,  
22 but you know they throw out well we can use

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1 IG-001 for the film badge discrepancy and then  
2 we continue on. And I am just wondering how  
3 we implement in that. Because each one of the  
4 sites, it seems like, is different. Each one  
5 of the energies that they are using. And in  
6 reading through this paperwork, each one is  
7 kind of a little bit different in that  
8 process.

9 MR. HINNEFELD: Yes, I think you  
10 are right. The early films I think were  
11 fairly well characterized in terms of what  
12 they did but then you have to know what the  
13 exposure, what the radiation types were.

14 MEMBER CLAWSON: Right.

15 MR. HINNEFELD: So it would have  
16 to be characterized for the radiation type  
17 that you encountered at that site in order to  
18 use sort of the general -- if you were trying  
19 to use a general source.

20 CHAIRMAN MELIUS: I have a  
21 question probably for -- maybe for both of you  
22 but also John Stiver. When SC&A or when the

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1 committee was reviewing this, to what extent  
2 did you utilize the experience in the  
3 individual dose reconstruction to inform this  
4 or is that sort of obviated by this sort of  
5 what Stu was just talking about that that  
6 really feeds more into the site-specific  
7 issues, as opposed to general issues?

8           Because I think one possible use,  
9 and I am not sure it is worth doing, but one  
10 possible use you would see of this document  
11 would be to sort of emphasize issues that sort  
12 of repeatedly come up in the dose  
13 reconstruction reviews to clarify certain  
14 issues or where there are sort of repeated  
15 problems found. Now maybe those are all site-  
16 specific issues and they may serve too general  
17 a document to make that worthwhile. But I was  
18 just curious what the --

19           MR. HINNEFELD: Yes, I hadn't  
20 really actually thought of that.

21           This was reviewed very early in  
22 the program and so there probably wasn't a lot

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1 of specific dose reconstruction review  
2 experience available at the time this document  
3 was originally reviewed. So I don't know that  
4 there were a lot of suggestions toward that  
5 end. But I can see what you are saying.

6 The key element is to make sure  
7 that when we have an observation from dose  
8 reconstruction review that said this is  
9 something we want to document and make sure is  
10 out there widely. I'm not sure IG-001 is so  
11 widely used and referenced that that might  
12 best placed. I think there might be other  
13 better places and other procedures or  
14 something.

15 MEMBER ZIEMER: Jim, this is  
16 Ziemer. I have a comment.

17 CHAIRMAN MELIUS: Go ahead, Paul.

18 MEMBER ZIEMER: If you go back and  
19 I don't know if you are actually supposed to  
20 look at IG-001 in actually in this  
21 presentation but it is really not a good  
22 number on how one does dose reconstruction.

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1 You know it gives the component of dose  
2 reconstruction like the missed dose and the  
3 medical and so on. It has a general  
4 discussion on uncertainty. It has some  
5 general discussions on film badge insert needs  
6 and then you find that the various factors  
7 that apply to a particular site.

8 So it really is a very general  
9 document. It is almost a primer on what dose  
10 reconstruction consists of. So there is no  
11 other dose reconstructor who would basically  
12 use those documents or anything to sort of get  
13 an overview of what the program is about.  
14 What is dose reconstruction? This sort of  
15 answers that question somewhat more  
16 technically than what we do for the public  
17 document on what is dose reconstruction. But  
18 it is not much more than that, really.

19 CHAIRMAN MELIUS: I think that  
20 makes sense. And I was just trying to  
21 understand where something is applied now.  
22 There seems to be a lot of differences,

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1 depending on the particular documents. Some  
2 of it is by history and some of it is by how  
3 the program has evolved.

4 John Stiver, you had a -

5 MR. STIVER: Yes, this is John  
6 Stiver. I would again like to echo what Dr.  
7 Ziemer was saying.

8 From our perspective, again, this  
9 is kind of, like you say, it is kind of an  
10 historic snapshot in time as to when this  
11 process was really getting implemented.  
12 Before there were a lot of dose reconstruction  
13 that really kind of laid out the elements of  
14 what different aspects might be, the types of  
15 dosimetry and how they are being applied.

16 Well I will also say that the  
17 review of this implementation guide predated  
18 my association with the program as well.

19 But be that as it may, my sense is  
20 that there wasn't a lot of feedback backup  
21 from dose reconstruction and how this was  
22 being applied.

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1 DR. MAURO: Dr. Melius, this is  
2 John Mauro. I am on the line. Would it would  
3 be appropriate for me to weigh in a little  
4 bit? I might be able to help.

5 CHAIRMAN MELIUS: Yes.

6 MEMBER MUNN: John knows the  
7 history.

8 CHAIRMAN MELIUS: A little bit,  
9 John, because we are running late.

10 DR. MAURO: I understand.

11 MEMBER MUNN: He knows it well.

12 DR. MAURO: This really, the  
13 bottom line is Dr. Ziemer's response is  
14 exactly what I was about to say. It is a  
15 framework. And from Brad's comment, yes.  
16 This issue of specific adjustment factors that  
17 have to be applied on a site-by-site basis is  
18 very important. It is not addressed in 001  
19 but it is very much part of our dose  
20 reconstruction reviews and I can speak that on  
21 some occasions I see adjustments are made for  
22 the differences in energy distributions

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1 between calibration and the actual experience.  
2 But that is not dealt with in 001. That is  
3 dealt with on each Site Profile and in each  
4 case. And I can say that sometimes we do find  
5 situations where that is one of our findings  
6 in a DR review, that the adjustment factors  
7 were not applied.

8 CHAIRMAN MELIUS: Okay.

9 MEMBER MUNN: Yes, this procedure  
10 essentially predates virtually every other  
11 procedure we currently have in use. And so  
12 it, therefore, by its nature was originally  
13 pretty vague. It was a specific issue to be  
14 in 2002, which wasn't very specific, as I  
15 recall.

16 CHAIRMAN MELIUS: Yes, that is why  
17 it is called number 001.

18 MEMBER MUNN: Yes.

19 CHAIRMAN MELIUS: Any other Board  
20 Members have questions? If not, I thank  
21 Wanda. This was very useful.

22 I think we need to also decide how

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1 to proceed for our next meeting, the Idaho  
2 meeting.

3 MEMBER MUNN: You are most  
4 welcome. I would like to make one suggestion  
5 before I leave the podium. And that is, I  
6 have not yet given to you a list, a  
7 prioritization of our subcommittee's view with  
8 respect to how to proceed regarding which  
9 procedures to follow next.

10 There are, if memory serves  
11 correctly, over 30 procedures that we now have  
12 closed and, would, therefore, be available for  
13 the Board to see. When you decide what you  
14 want to do for the next meeting, I would  
15 propose that I clarify what those available  
16 procedures are, submit them by email to the  
17 Subcommittee, so that the Subcommittee can  
18 express their opinions with respect to  
19 prioritization and then, consequently provide  
20 the top, say ten, of those to the remainder of  
21 the Board, if that suits the Board's need for  
22 the upcoming meeting.

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1                   CHAIRMAN MELIUS:     Yes, I would  
2     like -- I think that would be one way to  
3     proceed.

4                   An alternative that might overlap  
5     with that, because it depends on what you have  
6     reviewed and where you are is what we were  
7     talking about before with OTIB-52 is whether  
8     to focus on coworker modeled procedures.  
9     There is OTIB-20 and then there are a number  
10    of specific site OTIBs, some of which may have  
11    -- I'm not sure, for these mostly for internal  
12    dose, whether they -- some of them we either  
13    are currently dealing with in terms of SECs or  
14    have dealt with in terms of SECs. So I am not  
15    sure how appropriate it would be on all of  
16    them but it might -- I think there are others  
17    in there that if you have reviewed them might  
18    be appropriate. And I think it might help, in  
19    terms of our discussion and sort of trying to  
20    sort of wrap our arms around these issues is  
21    to focus in one area, rather than what we did  
22    today, three different areas.       That was

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1 helpful. So maybe that is something else to  
2 think about. We can talk about it later.

3 Does that make sense, Wanda? Is  
4 it possible?

5 MEMBER MUNN: Yes, it does. And  
6 if you, for example, wanted to take a closer  
7 look at the dose reconstruction process, the  
8 other IG that we have available is 002, which  
9 is also a very early implementation guide.  
10 But that referred specifically to internal  
11 dose reconstructions and we have completed  
12 that one. We have PR-7, which is dose  
13 reconstruction review.

14 So there are a number of available  
15 closed documents that could focus on, for  
16 example, DRs.

17 CHAIRMAN MELIUS: Okay. Or we  
18 could split it among different topics, too.

19 MEMBER MUNN: Yes, that's true.

20 CHAIRMAN MELIUS: So there are  
21 possibilities.

22 Josie?

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1           MEMBER BEACH: I was just going to  
2 reiterate what you were saying. I think it is  
3 important to go back to 52 and look at that  
4 and decide before we move on and pile more on,  
5 so that we can come to some closure agreement  
6 on how to proceed with that.

7           CHAIRMAN MELIUS: Okay. Maybe we  
8 can talk at the break or later and sort of try  
9 to figure out a strategy to deal with that and  
10 some of the other coworker issues also.

11           Let me move on a little bit. This  
12 will not take long because we haven't done  
13 much on that. Think of me as the warm-up act  
14 for LaVon's presentation.

15           And so the SEC issues Work Group  
16 was charged with looking at the issue of  
17 sufficient accuracy, again, in follow-up to  
18 the ten-year review. And so we had some like  
19 initial discussions as a Board and NIOSH then  
20 proceeded into doing two so-called White  
21 Papers that sort of looked at historically  
22 what had gone on and tried to pull out

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1 information. They both sound promising when  
2 we started out, to LaVon and NIOSH's credit.  
3 The results, though interesting and maybe  
4 helpful in some ways, were not very helpful  
5 dealing with sufficient accuracy.

6 It turns out, for example, the one  
7 on review of some of our thorium-related  
8 decisions basically found that those were  
9 probably much more -- did not deal with  
10 sufficient accuracy as much as much more based  
11 on the particular circumstances and facts  
12 about particular sites that were involved.  
13 What information was available? What kind of  
14 production went on at that site? What kind of  
15 monitoring and so forth? And those factors  
16 are what determine different outcomes for our  
17 review of those SEC evaluations.

18 And so again, I think they are  
19 interesting for review but actually when we  
20 had our Work Group meeting a few weeks ago to  
21 discuss this, we did not discuss those  
22 reports. At least not for very long. They

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1 weren't very helpful.

2           So we had sort of a general  
3 discussion on how to proceed and what would be  
4 useful. And what we thought was the Work  
5 Group was that a development of a document  
6 similar to the document we had developed on  
7 SEC evaluations or on sufficient -- excuse me,  
8 on surrogate data, would be useful. It would  
9 be a set of guidelines on what factors would  
10 need to be considered in looking at sufficient  
11 accuracy and evaluating it and to try to do  
12 that in a way that would provide better  
13 guidance and consistency in terms of our  
14 evaluation of that issue. But we probably  
15 couldn't come up with very -- didn't think we  
16 would come up with very specific parameters on  
17 a number or some sort of very quantitative  
18 approach to addressing that.

19           So where we stand is that NIOSH  
20 has agreed that they will develop the first  
21 draft outline for that type of a document,  
22 which would list some of the very sort of

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1 topic headings for evaluating -- guidelines  
2 for evaluating sufficient accuracy. We would  
3 then have a meeting of the Work Group to try  
4 to sort of review that outline and see if we  
5 wanted to add more or take away things or  
6 whatever. And then we would develop an  
7 expanded document. And we will schedule, I  
8 expect by the Idaho meeting in July, we will  
9 have made progress on this, sufficient  
10 progress, maybe not in terms of a final  
11 document or anything but certainly enough  
12 progress to bring back to the full Board for  
13 additional discussion on this.

14 And the idea on some of the type  
15 of guideline that we would do is I think one  
16 thing that we have been using in our  
17 evaluation of sufficient accuracy has been  
18 essentially is what is the magnitude of the  
19 exposure were involved. So again, in a  
20 residual period we are not usually dealing  
21 with as high exposures as during an  
22 operational period. So the amount of sort of

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1 leeway or whatever, or variability that we  
2 would allow in terms of judging sufficient  
3 accuracy would be greater. We are more  
4 comfortable because I don't have to be as  
5 exact in our dose reconstruction parameters in  
6 a situation where there is very low exposures  
7 or low doses as we would be where there is a  
8 much higher exposure dose and, therefore, a  
9 much great possibility that that -- how we do  
10 the dose reconstruction for that particular  
11 exposure would have a much greater impact on  
12 the IREP calculation probability of causation  
13 for people working at that site.

14 I think there is a number of other  
15 parameters that we need to take into account  
16 in doing that. We had some additional  
17 discussions but I think we can provide a  
18 better outline and a better subject for  
19 discussion by the Board. It really is  
20 something that affects all of our  
21 determinations. And I think it is something  
22 we need to come to grips with. I think the

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1       coworker issue fits into that also because I  
2       think that is going to follow some of these  
3       very same parameters are going to affect that.

4       Because again, it is trying to determine does  
5       that coworker model provide a sufficiently  
6       accurate dose reconstruction. And again, that  
7       is probably why I keep emphasizing that we  
8       need to address that issue, at least until  
9       Wanda throws something at me or gets upset  
10      about it or others.

11               But I think we have gone long  
12      enough, I think we do need that. Again, that  
13      was one of the ten-year review things.

14               So I don't know, Paul or any other  
15      Members of the Work Group want to add anything  
16      or comment?

17                       MEMBER ZIEMER:       Well this is  
18      Ziemer. I think you summarized it very well.

19               I think conceptually we have defined this in  
20      a very -- am I still on the line?

21               At least have some -- figures to  
22      look at -- What is the nature of sufficient

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1 accuracy and what tests can we apply to  
2 perhaps find a level of comfort and vision  
3 that we are sufficiently accurate.

4 So but I think Dr. Melius has  
5 summarized it quite well in terms of a path  
6 forward.

7 CHAIRMAN MELIUS: Anybody else  
8 wish to comment? Any other Board Members?

9 MEMBER ROESSLER: No questions.

10 CHAIRMAN MELIUS: Yes, David?

11 MEMBER KOTELCHUCK: Did I miss an  
12 earlier version of LaVon Rutherford's talk? I  
13 got it on Sunday for the Monday meeting --  
14 Tuesday meeting but I realized it may have --  
15 could it have been my mistake? I just didn't  
16 have a chance to really read it through and  
17 evaluate it for this meeting.

18 CHAIRMAN MELIUS: You will hear  
19 him in a second.

20 MEMBER KOTELCHUCK: Oh, okay. But  
21 that table was a very important table that he  
22 developed and I appreciate it.

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1                   CHAIRMAN MELIUS:     Oh, you are  
2 talking about the reports for the two White  
3 Papers?

4                   MEMBER KOTELCHUCK:   Yes.

5                   CHAIRMAN MELIUS:   Oh yes, they are  
6 useful. They just weren't -- I guess they are  
7 interesting. They are helpful. They just  
8 weren't -- we didn't think they were going to  
9 get us to a definition of sufficient accuracy  
10 or how to operate --

11                  MEMBER MUNN:       It didn't really  
12 answer the question.

13                  MEMBER KOTELCHUCK:   But it did  
14 give us the raw material to evaluate for  
15 ourselves.

16                  CHAIRMAN MELIUS:   They are useful  
17 as background for you. We decided not to  
18 present them. As I said, the Work Group, we  
19 didn't even, basically didn't discuss this. I  
20 think we all agreed that what I said, that  
21 they were interesting but weren't going to be  
22 helpful.

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1                   And LaVon introduced them that  
2 way, which we greatly -- you know, it is very  
3 nice when somebody actually starts out by  
4 saying rather than do a long presentation say  
5 and then we talk about it for an hour and then  
6 come to the conclusion that it is not helpful,  
7 he started out telling us they weren't going  
8 to be helpful.

9                   (Laughter.)

10                  MEMBER KOTELCHUCK: Well, I found  
11 it helpful.

12                  CHAIRMAN MELIUS: Any other  
13 comments?

14                  Okay, on that note, this is like  
15 the warm-up for his -- he will have another  
16 talk at 4:00, LaVon. So why don't we take a  
17 break and come back at 4:00 and hear from  
18 LaVon, the one and only?

19                  (Whereupon, the above-entitled matter went off  
20 the record at 3:35 p.m. and  
21 resumed at 4:09 p.m.)

22                  CHAIRMAN MELIUS: Okay, if we

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1 could reconvene now, it is time for the main  
2 act directly from Cincinnati. The highlight  
3 of our meeting.

4 MR. RUTHERFORD: Okay, I am going  
5 to talk our SEC, give you an SEC update. And  
6 as everybody knows, this update has been  
7 getting shorter and shorter as less petitions  
8 come in and more petitions get through the  
9 process.

10 We provide the update to the  
11 Advisory Board to give the Board an idea of  
12 what current petitions we have that are in the  
13 qualification phase. Petitions under  
14 evaluations and anything in the 83.14 process.

15 We also provide the information to the  
16 Advisory Board to support its preparation for  
17 future Work Group sessions and Advisory Board  
18 meetings.

19 The summary table hasn't changed  
20 hardly at all from the last meeting. We have  
21 208 petitions. We have no new petitions in.  
22 We haven't had a new 83.13 petition since June

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1 of last year. So it has been quite some time.

2 And I do have one correction.  
3 Obviously, I was getting lazy. The number of  
4 petitions with the Advisory Board for  
5 recommendation is actually nine and not five.

6 I missed that correction.

7 CHAIRMAN MELIUS: I thought I had  
8 missed a meeting or something.

9 MR. RUTHERFORD: Yes, we closed  
10 out a bunch of them.

11 Currently petitions that are with  
12 the Advisory Board for review, these petitions  
13 are evaluations that actually had actions  
14 taken on them at least once but portions of  
15 the petition are still not closed out. And so  
16 there is continued review with them.

17 And you can see that Fernald,  
18 Hanford, Pantex, Los Alamos National Lab,  
19 Savannah River Site, Brookhaven, which we  
20 actually closed out the SEC petition work on  
21 that today, there is still some Site Profile  
22 work, Baker Brothers, and Joslyn Manufacturing

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1 and Supply Company. Each one of these have  
2 continued with the Advisory Board and have  
3 Work Groups that are working through issues  
4 with them.

5 One petition evaluation where we  
6 haven't taken any action -- and I say we  
7 haven't taken any action on Rocky Flats. We  
8 did take action on a previous Rocky Flats  
9 petition a number of years ago, but this is  
10 the new Rocky Flats petition and it is under  
11 review by the Advisory Board and the Work  
12 Group and we are working through the issues  
13 associated with that one.

14 As for we had some potential  
15 83.14s, as I mentioned at the last Board  
16 meeting. However, the problem with these  
17 83.14s is we have no claims to serve as an  
18 active petitioner for them.

19 Sandia National Lab - Albuquerque  
20 1945 through 1948, originally the 1945 through  
21 1948 period was not defined at Sandia. It was  
22 part of Los Alamos National Lab, considered

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1 the Z Division. Since it is within the last  
2 year or so, that designation has changed and  
3 those years were added to Sandia National lab,  
4 Albuquerque. And as soon as we get a claimant  
5 with a presumptive cancer, we will move  
6 forward with the 83.14 on that site.

7 General Atomics was a site that we  
8 had actually identified some time ago that we  
9 wanted to modify the Class Definition because  
10 the Class Definition was defined in our early  
11 days and it had a significant number of  
12 building. It would not have passed our  
13 criteria for defining a Class today.  
14 Typically today we would have said all  
15 employees.

16 However, we have not received a  
17 claim that has been denied from DOL for that  
18 Class that we could move forward with  
19 modifying it.

20 Dayton Project, again, this  
21 designation was changed as well. The  
22 designation was changed from an AWE to a DOE

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1 facility. And so we want to move forward with  
2 an 83.14 to modify because of that  
3 designation. In addition, there is a nine  
4 month period when operations were being  
5 shifted from the Dayton Project to Mound that  
6 we want to encompass into that period as well.  
7 However, again, we have no claimant at this  
8 time to support moving forward with that.

9 Actually, Department of Labor has  
10 worked to try to go through their existing  
11 claims internally to see if they can get us a  
12 potential litmus, what we call a litmus claim  
13 to move forward with this one but to date we  
14 haven't got one.

15 And that is it. Any questions?

16 CHAIRMAN MELIUS: That's it?

17 MR. RUTHERFORD: Yes, not much to  
18 tell you in the SEC world.

19 CHAIRMAN MELIUS: Questions?

20 (No response.)

21 CHAIRMAN MELIUS: Okay. All  
22 right, thank you.

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1                   We have our Board work time now.  
2                   If possible, I will try to finish so we can  
3                   have a short break before the public comment  
4                   period.

5                   MEMBER MUNN:     That would be kind  
6                   of nice.

7                   CHAIRMAN MELIUS:    Let's see how we  
8                   do.    And I am going to go through this not  
9                   quite in the order we have it here.    I would  
10                  like to start with the public comment  
11                  responses.    If Ted sent that out to everybody,  
12                  it is a spreadsheet listing and then there is  
13                  a separate longer document that as the  
14                  relevant transcript portions of this.    Again,  
15                  that has not been Privacy Act reviewed, has  
16                  it?

17                  MR. KATZ:     It is.

18                  CHAIRMAN MELIUS:    It is.    Okay.

19                  So I will go through these by sort  
20                  of grouping because there is a large number of  
21                  people that are broken up by questions.

22                  So the first two are from David

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1 Anderson regarding the Savannah River Site.  
2 The first one was a number of points about the  
3 particular report and some questions. And the  
4 second one was about referring this to SC&A  
5 for review, which was done. Any questions on  
6 those?

7 The second comment was from  
8 [identifying information redacted] also  
9 regarding the Savannah River Site. And again,  
10 the first one was requesting -- we sent it to  
11 SC&A to review, which I think we had already  
12 done by the time of the public comment, but it  
13 was appropriate. And then asking NIOSH and  
14 all of on the Board and SC&A do a better job  
15 of getting the reports out in a timely manner,  
16 so that people have a chance to read and at  
17 least do some initial review prior to them  
18 being presented at a meeting. I think we  
19 continually worked to do that. It is hard,  
20 given some of the deadlines and the tendency  
21 of all of us to procrastinate. And on top of  
22 that, we have DOE and Privacy Act reviews,

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1 which take up some time before some of these  
2 reports can go out. But again, acknowledging,  
3 it is a very important comment and it does put  
4 a burden on the petitioners and other  
5 interested parties when they either don't have  
6 a report or they get it a day or two before  
7 our meetings to respond to.

8           There are then a number of  
9 comments from Dr. Dan McKeel regarding the --  
10 I believe these -- yes, these all related to  
11 the GSI site. And I think they were all  
12 responded to there. I won't go through them  
13 one by one. Anybody have questions on those?

14           We also have again a comment from  
15 one of the petitioners on GSI simply  
16 supporting Dr. McKeel's comments. And then  
17 there were some more, I believe at a later  
18 point in the public comment period, some more  
19 public comments from Dr. McKeel sort of  
20 commenting on some of the discussion that had  
21 gone on in making a request, which is followed  
22 up on. So any questions on that?

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1           And I will point out that Ted did  
2 include the key to the category codes this  
3 time. I opened that up first and got very  
4 confused.

5           So those are taken care of. Now  
6 to go through Subcommittee and Work Group  
7 reports. I will --

8           (Music playing from phone line.)

9           CHAIRMAN MELIUS: Yes, you have  
10 got to cut that line. We will bear on with  
11 some background music. Whoever just put the  
12 phone on hold, we enjoyed the interlude of  
13 background music, but we would ask you if you  
14 are going to have to put it on hold, hang up  
15 and dial back in again. We promise you we  
16 will connect you again but it is rather  
17 annoying.

18           I will ask you when you do you  
19 Work Group Subcommittee reports, please look  
20 back at the -- we have schedules from both  
21 DCAS and from SC&A on reports. There are, I  
22 think, some changes in those and delivery

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1 times. And those are recent estimates. I  
2 want to make sure you are aware of those, in  
3 case you are not in doing a report and talking  
4 about what your future plans are for your Work  
5 Group would be helpful. Let me pull up that.

6 I am going to go through the  
7 alphabetical order on the website for the  
8 listing, which for some reason starts with  
9 Santa Susana under A. But since we have  
10 talked about Santa Susana, Phil, are you on  
11 the line? Phil, are you there? Phil  
12 Schofield? I guess not. Okay.

13 Then we will go back by the other  
14 -- the traditional method. Brookhaven, we  
15 have had a report on that. Fernald, Brad.

16 MEMBER CLAWSON: I am going to go  
17 a little bit in detail because we are coming  
18 to the end on Fernald and I just wanted to --  
19 and I know I have said that for the last year  
20 and a half -- but I will just read this to  
21 you.

22 In April of 2012, the Board voted

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1 SEC for 1968 to 1978 based on the inadequacy  
2 of thorium chest count data from the mobile in  
3 vivo. There is still three SEC issues. White  
4 Papers have been exchanged and it was just at  
5 the March 7, 2013, Work Group teleconference.

6 What remains is the thorium-232  
7 chest count data were data adequacy and  
8 completeness for the after years, which is  
9 1979 to 1989. Our results were reported in  
10 units of activity, two gamma emitters'  
11 daughter products, which is lead-212 and  
12 actinium-228.

13 SC&A delivered a report in October  
14 of 2012 that determined 1978 to 1989 data was  
15 suitable for a coworker model NIOSH to report  
16 out.

17 And what NIOSH has got to report  
18 out on is the low expected of lead-212 levels  
19 and how to deal with positive 228 without any  
20 lead-212, a change to the coworker model that  
21 implement one size fits all bounding strategy.

22 And what remains on the thorium-

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1 232 coworker model from 1953 to 1967 based on  
2 the DWE data is an example from NIOSH why  
3 Revision 4, which was done in February 2013 of  
4 the model, abandon the one size fits all  
5 bounding strategy and basically went back to  
6 Revision 3, which was in 2010, which the Work  
7 Group has deemed an acceptable practice but we  
8 just needed to see why this is still an  
9 activity.

10 What remains is OTIB-78, which was  
11 a uranium bioassay coworker model. The  
12 coworker model sufficiently represents and  
13 bounds for construction subcontractor  
14 employees for the period of 1986. If it can,  
15 is it possible to develop a separate model for  
16 the subcontractors or construction workers,  
17 however you want to put it? Based on the  
18 Work Group teleconference on March 7, 2013,  
19 NIOSH is to report out on the following sub-  
20 issues. Describe the logic behind the yet to  
21 confirm assumed 95 percentile of the coworker  
22 model will sufficiently bound construction

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1 subcontractor exposures, determine if it is  
2 possible to build a subcontractor coworker  
3 model, and the coworker data that we know we  
4 have. If so, what years would apply to the  
5 model when the data captured data for  
6 subcontractors has been linked to the  
7 claimant? And this one actually Stu Hinnefeld  
8 sent us some identifiers identify the claims  
9 that have the bioassay data and make those  
10 claims numbers available to the Work Group.

11 For a sample of the claims  
12 identified above, perform a DR to compare  
13 those claims were fair using the bioassay data  
14 versus the coworker model.

15 Sample 1968, nine construction  
16 workers referenced in the SC&A's latest work  
17 form a DR based on their bioassay records and  
18 compare that with the intake would be assigned  
19 from using the coworker model. Find out if we  
20 can determine which claims are employees and  
21 of subcontractors and which employees are of  
22 the prime contractor.

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1                   We are basically down to three  
2 issues.           Right now we just had a  
3 teleconference. Mr. Hinnefeld was on there.  
4 Mr. Rolfes was tied up in a jury duty, I  
5 believe. And these have been given to them  
6 and we are awaiting the response to come back.  
7 And hopefully in Idaho we will be able to  
8 bring a recommendation from the Work Group to  
9 the Board.

10                   CHAIRMAN MELIUS:           And if I  
11 understand this correctly, the response is due  
12 next week. Schedule for next week?

13                   MR. HINNEFELD:   Well we just had  
14 the teleconference on what, Thursday? So next  
15 week is a little quick. We intend to, on our  
16 side, have some internal discussions about  
17 what exactly can be provided in each of these  
18 pretty quickly and get past. But I don't have  
19 a delivery date yet for getting this  
20 information to the Work Group.

21                   CHAIRMAN MELIUS:   John do you have  
22 comments?

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1                   Okay, the next Work Group is  
2 Hanford, which I chair and have been in  
3 contact with Arjun recently because we had an  
4 inquiry from the petitioner. We are in the  
5 process of scheduling some more data review at  
6 the site and getting that set up. And it will  
7 probably take a while, given the nature of the  
8 data that is needed that SC&A needs for review  
9 purposes. So we are probably not expecting to  
10 be ready to move forward on that until  
11 sometime this summer. Is that accurate,  
12 Arjun?

13                   DR. MAKHIJANI: Well, Dr. Melius,  
14 you know the visit is scheduled, as you know,  
15 for next week.

16                   CHAIRMAN MELIUS: Right.

17                   DR. MAKHIJANI: Then it will  
18 depend on how long all the document  
19 declassification procedures. And there are a  
20 lot of uncertainties given the budget. We  
21 will try for July or the fall.

22                   CHAIRMAN MELIUS: Okay.

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1 DR. MAKHIJANI: Thank you.

2 CHAIRMAN MELIUS: Yes, thank you.

3 And I have communicated that to the  
4 petitioner with the indication we will also  
5 provide an update when we know a little bit --  
6 have a little bit more certainty about it.

7 Any questions on that?

8 (No response.)

9 CHAIRMAN MELIUS: Okay, Phil  
10 Schofield, are you on the line?

11 MEMBER SCHOFIELD: Yes, I am.

12 CHAIRMAN MELIUS: Okay, Idaho.

13 MEMBER SCHOFIELD: Still moving  
14 slow there. We don't have a valid petition  
15 yet. So we are kind of still sitting at the  
16 back of the pack.

17 CHAIRMAN MELIUS: How about the  
18 Site Profile?

19 MEMBER SCHOFIELD: They have some  
20 parts finished up. The medical part, I think,  
21 has just been finished up, if I remember  
22 right. I don't have that right in front of me

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1 but I believe they just completed the revision  
2 on that.

3 CHAIRMAN MELIUS: Yes, according  
4 to the NIOSH update, they are waiting on  
5 documents from INL that are due in two weeks.

6 MEMBER SCHOFIELD: Yes, we will  
7 see if they arrive in two weeks.

8 CHAIRMAN MELIUS: Okay. And we  
9 missed you earlier, Phil. Do you want to give  
10 us an update on Santa Susana?

11 MEMBER SCHOFIELD: Santa Susana,  
12 they received a lot of hard copies on records  
13 for exposures for personnel. Unfortunately,  
14 they are in -- they can't just hand them into  
15 computers. So they have to enter all that  
16 data manually. And that is going to take a  
17 while but they are working on that. And that  
18 will help open up a few things there that we  
19 can take a look at.

20 The other thing is we have gotten  
21 a lot of information recently from a lot of  
22 the activists and petitioners, which needs to

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1 be shared with all the Work Group and NIOSH  
2 and SC&A that I think it claims data that we  
3 haven't seen before, particularly in relation  
4 to they call it the Rose data. It is  
5 basically the wind directions and stuff with  
6 the numerous releases they had had there and  
7 how that moved around. And there has also  
8 been some documents showing that there were  
9 personnel in other areas, besides Area 4 that  
10 were working doing work for Area 4. They  
11 were in Areas 2 and 3. So this is some new  
12 data that is going to have to be looked at.

13 CHAIRMAN MELIUS: Okay. And I  
14 don't know if you have this in front of you  
15 but the NIOSH report indicates some coworker  
16 models under development and it looks like  
17 April and June for those. And then followed  
18 by the TBD revision. But there may be some  
19 opportunity after those coworker models  
20 because those appear to be separate reports  
21 that you may want to involve some review and  
22 so forth on that.

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1                   MEMBER SCHOFIELD:     I think the  
2     coworker model is going to actually be  
3     slightly delayed just because like I said they  
4     did receive all these records. But because of  
5     the fact that they have to be entered  
6     manually, it is going to take them some time.  
7     I mean, there is quite a few records.

8                   CHAIRMAN MELIUS:       They are  
9     estimating June. And LaVon just agreed. Let  
10    the record show we have a firm commitment.

11                  MEMBER SCHOFIELD:    Good, I will go  
12    with that.

13                  CHAIRMAN MELIUS:     Okay, thanks,  
14    Phil.

15                  MEMBER SCHOFIELD:    He will owe me  
16    a Diet Coke if he doesn't make it.

17                                       (Laughter.)

18                  CHAIRMAN MELIUS:     Paul Ziemer, are  
19    you on the line?

20                  MEMBER ZIEMER:       Yes, I am.

21                  CHAIRMAN MELIUS:     Okay, Lawrence  
22    Berkeley?

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1                   MEMBER    ZIEMER:           Right.        On  
2   Lawrence Berkeley, if you look in the DCAS  
3   work coordination chart, you will see the list  
4   of deliverables from DCAS. The main one that  
5   is in the pipeline right now is the adequacy  
6   and completeness evaluation. That is  
7   scheduled to be completed at the end of March.  
8   So that will trigger our next steps when we  
9   get to have a Work Group meeting after that  
10  and SC&A will need a chance to look at that.

11                   SC&A had delivered a number of  
12  White Papers last fall. Well actually the  
13  White Papers and responses attached that we  
14  did earlier this year that address some of the  
15  major issues that have been responded to  
16  initially. So, we will have a number of major  
17  issues to look at that the key thing now is  
18  the data adequacy issue. And we will follow  
19  up on that as soon as that is delivered from  
20  NIOSH.

21                   CHAIRMAN MELIUS:    And I will get  
22  LaVon to nod and agree that the end of March -

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1 -

2 MR. RUTHERFORD: Yes.

3 CHAIRMAN MELIUS: -- we will have  
4 delivery. Good. Thank you, Paul.

5 Anybody with questions for Paul?

6 (No response.)

7 CHAIRMAN MELIUS: Okay, Kansas  
8 City. Josie?

9 MEMBER BEACH: Kansas City we had  
10 our site visit last December. We are waiting  
11 for documents and SC&A to deliver the addendum  
12 to the Site Profile. Is that where we are at?

13 I mean I can read what you wrote here but it  
14 doesn't really give me any time lines.

15 MR. STIVER: Yes, this is John  
16 Stiver from SC&A. And we have received some  
17 of the hard copy records at this point but not  
18 all of them. And so it a matter of doing the  
19 comparison to the electronic records and then  
20 preparing an addendum based on what we find.  
21 So it is kind of the rate limiting step right  
22 now is getting those records back from

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1 classification review.

2 MEMBER BEACH: Yes, and so until  
3 that addendum is ready, there is nothing we  
4 can do or schedule a Work Group.

5 MR. STIVER: But I can certainly  
6 advise the Work Group as soon as I hear  
7 anything coming from the task leader on that.

8 MEMBER BEACH: Okay, thank you.

9 MR. STIVER: Thanks. Any  
10 questions for Josie?

11 CHAIRMAN MELIUS: LANL. Mark  
12 isn't here. I can't recall. So why don't we  
13 skip that?

14 Mound, I think we -- where were  
15 we?

16 MEMBER BEACH: Well, Mound is  
17 waiting for answers from NIOSH for Site  
18 Profile issues. We didn't make the work  
19 document but I have heard that has been  
20 rectified. I think it is a conspiracy.

21 (Laughter.)

22 MEMBER BEACH: So we are supposed

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1 to get those in what, two week?

2 MR. HINNEFELD: Yes. Dr. Neton  
3 took the blame for Mound not being on the work  
4 documents. I think he took the blame just  
5 before he left town to go to the NCRP meeting.

6 MEMBER BEACH: Got you. So as  
7 soon as we get those, we will probably  
8 schedule -- have some time to review them and  
9 then schedule a conference call.

10 CHAIRMAN MELIUS: See, Josie, you  
11 are such a hard task master, they are trying  
12 to -- they figure if they leave it off the  
13 list, you won't notice.

14 MEMBER BEACH: It took a while to  
15 get Worker Outreach on there. So they figured  
16 they'd give me one and they are going to drop  
17 one off.

18 CHAIRMAN MELIUS: Right. You get  
19 equal time in the public comment period.

20 Nevada Test Site. Brad?

21 MEMBER CLAWSON: Nevada Test Site,  
22 SC&A has reviewed all of the Site Profile

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1 issues. They have updated the matrix. That  
2 has been sent out. We are waiting for any  
3 comments from NIOSH on them and then we are  
4 going to set up a Work Group to be able to go  
5 over those.

6 CHAIRMAN MELIUS: Good. Thank  
7 you. I will also point out that they also --  
8 the alphabetizing of their documents is  
9 sometimes confusing also. We have Portsmouth  
10 followed by K-25, followed by Idaho. Let's  
11 make sure we don't see things here.

12 Gen Roessler, are you on the line?

13 MEMBER ROESSLER: I'm on.

14 CHAIRMAN MELIUS: Great. Oak  
15 Ridge?

16 MEMBER ROESSLER: We have the Work  
17 Group formed and we are waiting for action. I  
18 think it is in NIOSH's hands.

19 CHAIRMAN MELIUS: Well, NIOSH,  
20 what is going on? It is a little hard, isn't  
21 it? Here we go. Two separate lists there.

22 MR. RUTHERFORD: I think the main

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1 thing we are working on is actually the  
2 addendum for Oak Ridge National Lab. And we  
3 have done additional data captures at OSTI,  
4 done additional data captures down at Oak  
5 Ridge. And you can see those were completed.

6 We are still waiting on records to  
7 be received from Oak Ridge National Lab. That  
8 is kind of a process with getting those  
9 records released, the classification review  
10 and such. And we really don't have a date on  
11 that.

12 MEMBER ROESSLER: So no time line.

13 MR. RUTHERFORD: Yes.

14 MEMBER ROESSLER: Okay.

15 CHAIRMAN MELIUS: Okay, Pantex.

16 MEMBER CLAWSON: In October 2011,  
17 the Board voted an SEC for 1958 to 1983 based  
18 on the inadequacy of bioassay for depleted  
19 uranium exposure from the W28 system.

20 What remains from the original SEC  
21 were the before years and the after years,  
22 which are 1951 is the before years to 1957.

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1 And the after years are 1984 to 1991.

2 NIOSH specifically asked the Work  
3 Group to reserve judgment for the five year  
4 period 28 final disassembly from 1984 to 1989,  
5 depending on additional analysis.

6 At the September 12 Board meeting,  
7 NIOSH indicated it could not obtain certain  
8 worker access information from 1984 to 1989  
9 and it would stand on its January 12 White  
10 Paper method of reconstruction DU for the 1984  
11 to 1989 time period.

12 On-site data capture scheduled at  
13 Pantex for late February to review relevant  
14 documents and to interview additional workers  
15 for those bookmark time periods for the early  
16 periods, particularly attention to the  
17 presence of any uranium exposure pathway for  
18 before 1958.

19 The later period -- a technical  
20 call was held to further clarify NIOSH's  
21 approach provided in the 2012 White Paper,  
22 which is founded on the applying bounding dose

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1 scenario, which assumes chronic intake for new  
2 employees beginning at the end of the SEC,  
3 which is January 1, 1984. The assumption is  
4 that the pre-1984 W-28 workers would be  
5 already covered by the SEC.

6 We had an on-site visit which got  
7 canceled due to a major blizzard in Texas,  
8 which stranded many of us throughout the  
9 country but it is rescheduled for April 15th  
10 and the 19th.

11 CHAIRMAN MELIUS: Yes, that  
12 blizzard even made news up our way. They  
13 really got hit bad.

14 MEMBER CLAWSON: Yes, 18 inches  
15 and 70 mile an hour winds.

16 CHAIRMAN MELIUS: That is  
17 incredible.

18 MEMBER ANDERSON: Yes, but it  
19 didn't last very long.

20 MEMBER CLAWSON: But we are coming  
21 -- both Fernald and Pantex, we are coming to  
22 the end. The reason why I am going into

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1 detail on this is because it may come to the  
2 Board to be able to make a decision on some of  
3 this stuff. I just wanted people to be aware.

4 And if there is questions that are going on  
5 now that if they want clarification, that we  
6 get it for them.

7 CHAIRMAN MELIUS: Yes, I agree.  
8 We need to bring closure on both of these as  
9 quickly as we can.

10 MR. KATZ: So we will plan for  
11 both of these on the agenda at this point,  
12 technically.

13 CHAIRMAN MELIUS: Yes.

14 MR. KATZ: Assuming, we make  
15 progress.

16 CHAIRMAN MELIUS: Yes. And I  
17 think even if we don't have closure, then I  
18 think we should have an update and discussion  
19 at that point.

20 Phil Schofield, we are back to  
21 you. Pinellas.

22 MEMBER SCHOFIELD: Sorry, I was

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1 still on mute.

2 SC&A has been working on this and  
3 they have gone back over the interviews.  
4 There are still some questions on the tritium  
5 issues that we need to address, which we are  
6 going to have to schedule a Work Group meeting  
7 in order to address that issue there. It is  
8 one of the few outstanding issues that we have  
9 not been able to settle yet.

10 So maybe after the INL meeting up  
11 there at INL, we will be able to schedule a  
12 Work Group meeting, hopefully. But SC&A has  
13 been working on a summary of the interviews  
14 which is now posted.

15 CHAIRMAN MELIUS: Yes, John?

16 MR. STIVER: this is John Stiver.  
17 I would just like to expand on that just a  
18 little bit, Phil.

19 We had a Work Group teleconference  
20 on, I believe, November 19th. And one of the  
21 outstanding issues, kind of really the big  
22 one, is that NIOSH had prepared a model for

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1 the stable of metal tritides exposure from  
2 these neutron tubes. And kind of concurrent  
3 was the development and discussions regarding  
4 a similar model that is going to be used at  
5 Mound. And we had reached the point at Mount  
6 where we felt it was a good model. We had a  
7 lot of -- it involved considerably farther  
8 from the model that was proposed for Pinellas.

9 And it was kind of a two-pronged  
10 approach to this. SC&A is reviewing the swipe  
11 data that is going to be used in the model.  
12 And then Jim Neton is kind of leading the  
13 effort to kind of review the Pinellas model  
14 and kind of bring it up to date with the Mound  
15 model.

16 And so I believe we had agreed  
17 that we would, after we had that model and had  
18 a chance to look at it and comment and we  
19 would be in a position for another Work Group  
20 meeting. But I don't know the status of how  
21 that model is coming along at this point.

22 MR. RUTHERFORD: I can say that

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1 Jim is definitely involved in the review of  
2 this. And one of the things -- he does have  
3 some concerns with that. They have set up,  
4 they want to interview the HP that has  
5 knowledge on this down there. And so they are  
6 working on setting that interview up.

7 And as soon as they can get that  
8 interview completed and Jim can understand a  
9 little bit more, then we can move forward from  
10 that in doing any adjusting to that model that  
11 we need to.

12 CHAIRMAN MELIUS: Again, this is a  
13 site that has been around for a long while,  
14 even though I don't see it on your list up  
15 there. Maybe it is the next slide. But I  
16 think we deserve some resolution here on this.

17 Phil, Portsmouth, Paducah, K-25.

18 MEMBER SCHOFIELD: We got most of  
19 the matrices we went over. There was a few  
20 remaining issues at each site but I think we  
21 can probably closes out virtually -- I mean  
22 not Mound. The tritium issue is still one

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1 thing that I believe is still kind of  
2 outstanding and that seems to be one of the  
3 things we need to get cleared away. So I  
4 think most of them have now been -- there is  
5 just a few issues tentatively are due to be  
6 done by June, by the latter part of June, if I  
7 remember correctly.

8 CHAIRMAN MELIUS: Okay.

9 MEMBER SCHOFIELD: So then we  
10 should be able to schedule a Work Group  
11 meeting, once those three reports are done.

12 There is the highly-enriched  
13 uranium issue still outstanding at K-25. And  
14 I think that is it right now.

15 CHAIRMAN MELIUS: Okay, thanks,  
16 Phil.

17 Next up is Rocky Flats. Mark is  
18 not here. I believe you are still into site  
19 visit and data capture. And that is being  
20 done sort of jointly between NIOSH and the  
21 Work Group and SC&A.

22 MR. RUTHERFORD: Right. You are

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1 talking Rocky, right?

2 CHAIRMAN MELIUS: Yes.

3 MR. RUTHERFORD: Yes, actually we  
4 did -- Greg Lewis got some funding to Los  
5 Alamos and they were able to get the documents  
6 released, classified documents released from  
7 our November trip. We got those sent to  
8 Germantown.

9 And we are on schedule right now  
10 to come to conclusion for our tritium -- our  
11 review of the tritium in the May time period  
12 and really most of the issues that we have we  
13 are going to come back to the Work Group with  
14 responses by the May time period to have a  
15 Work Group meeting, give them a period of  
16 time, roughly a month to review that  
17 information and then have a Work Group meeting  
18 early June and then preparation for the July  
19 Board meeting.

20 CHAIRMAN MELIUS: Okay. So what  
21 are you expecting for the July Board meeting  
22 would be to reach a recommendation or sort of

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1 --

2 MR. RUTHERFORD: I would expect  
3 there will be at least we will have a  
4 recommendation. I would think that at least  
5 part of it would be available for that.

6 CHAIRMAN MELIUS: Okay. Thank  
7 you.

8 Sandia, Dr. Lemen.

9 MEMBER LEMEN: There was a site  
10 visit and data capture that was done in  
11 January at the Livermore facility. There is a  
12 scheduled data capture visit to the  
13 Albuquerque facility in late April. And as a  
14 result of the data capture at Livermore, Dr.  
15 Glover indicates to me that they are working  
16 on resolving some issues, historical issues,  
17 and that will take some time. So they are  
18 working with the personnel there.

19 And finally, that the dosimetry  
20 data is being put together for both  
21 facilities, as I understand it, through the  
22 Albuquerque personnel and there will be more

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1 information coming from that after the end of  
2 April when that site visit occurs.

3 Is that right? I just wanted to  
4 make sure you guys didn't have anything  
5 different.

6 CHAIRMAN MELIUS: Okay, great.  
7 Dave, science issues.

8 MEMBER RICHARDSON: I have nothing  
9 to report. We are waiting on the report from  
10 NIOSH.

11 MR. HINNEFELD: I think the  
12 current issue is with the DDREF issue, right,  
13 the Dose and Dose Rate Effectiveness Factor?  
14 We did get those. We did line up some peer  
15 reviewers, outside NIOSH peer reviewers and we  
16 have delivered to the peer reviewers for their  
17 review. I don't think we have any of them  
18 back yet.

19 MEMBER RICHARDSON: And I can't  
20 remember, you had proposed was it a three-  
21 month period they would have for the review?

22 MR. HINNEFELD: Yes, we gave them

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1 a fairly generous amount of time. We don't  
2 know if they are going to take that much time  
3 or not.

4 CHAIRMAN MELIUS: They will use  
5 days 85 through 90 probably, like any other.

6 MR. HINNEFELD: Yes, our motto is  
7 if it weren't for the last minute, nothing  
8 would ever get done.

9 CHAIRMAN MELIUS: Yes, exactly.

10 Okay, Paul Ziemer, TBD-6000?

11 MEMBER ZIEMER: Yes. The TBD-6000  
12 items in SC&A's report called status of SC&A  
13 Work Group Subcommittees. And under the TBD-  
14 6000 category, they have summarized the three  
15 facilities that we are addressing, General  
16 Steel Industries, Baker Brothers and Simonds  
17 Saw and Steel.

18 We met on February 21st and had  
19 discussions relating to all three of those  
20 facilities. And we are going to meet again on  
21 April 26th.

22 In the case of General Steel

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1 Industries, NIOSH has been tasked to indicate  
2 to us how we feel the administrative  
3 employees, the question is whether or not they  
4 were handled separately from those out in the  
5 work space, if indeed one can even distinguish  
6 between them. Otherwise, the bounding doses  
7 for the others would apply to administrative  
8 personnel as well.

9 MR. KATZ: Paul, I am sorry to  
10 interrupt you but the last few sentences we  
11 lost with some feedback noise.

12 MEMBER ZIEMER: Okay. The issue  
13 was whether or not administrative personnel  
14 would be handled separately from those in the  
15 operational areas or whether one could even  
16 distinguish between the administrative  
17 personnel and others. Otherwise, those  
18 bounding values for all of the other Work  
19 Groups, either the betatron workers or the  
20 layout men, will apply to everybody. But  
21 NIOSH is looking at that part of the model and  
22 have a deliverable to come back with that.

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1           Also, I just today became aware of  
2 some new information from Dr. McKeel, perhaps  
3 it was distributed to the Board, which  
4 identified those specifically an incident with  
5 a radium source. And I am sure we are going  
6 to want to look at that and pay attention to  
7 that.

8           On Baker Brothers, we have a  
9 deliverable from SC&A and we have asked them  
10 to look at the impact of fires at the end of  
11 the operation period or the impact of fires on  
12 the end of the operational period.

13           Also on Simonds Steel and Saw, we  
14 are awaiting some NIOSH responses relative to  
15 the issues matrix.

16           And so all of these we hope to  
17 have at least the next bits of information for  
18 assessing these areas for these three sites by  
19 the time of our April meeting.

20           CHAIRMAN MELIUS:       Great.     Any  
21 questions for Paul?

22           Okay, Henry, 6001?

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1                   MEMBER   ANDERSON:       Oh,   uranium  
2   refining.

3                   CHAIRMAN   MELIUS:       Yes,   you   can  
4   call it what you want.

5                   MEMBER   ANDERSON:   DuPont   Deepwater  
6   is basically done.   We have kind of kept it in  
7   abeyance open because there is the profile  
8   needs to be corrected and we wanted to be sure  
9   that was done before we would put it back in  
10  the bin as being done.

11                   The other one here, and I am not  
12  sure what that is but it is listed under  
13  United Nuclear that there is an internal  
14  review expected completion April 2013 of a  
15  White Paper to address the bioassay data. I  
16  don't remember the specifics of that but it is  
17  due, whatever it is.

18                   MR.   RUTHERFORD:   Yes, I can kind  
19  of update you.

20                   That was actually an issue, SC&A,  
21  when we closed out the --

22                   MEMBER   ANDERSON:   Yes, it was a

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1 Site Profile.

2 MR. RUTHERFORD: Right, it is a  
3 Site Profile issue that Hans Behling brought  
4 up and we are addressing that.

5 MEMBER ANDERSON: Yes, okay.

6 Otherwise, we are waiting for a  
7 new site to drop into our box.

8 CHAIRMAN MELIUS: Okay. Questions  
9 for Henry?

10 (No response.)

11 CHAIRMAN MELIUS: Okay, Weldon  
12 Springs?

13 MEMBER LEMEN: There is really  
14 nothing new to report on that at this time.

15 CHAIRMAN MELIUS: Okay. Worker  
16 Outreach?

17 MEMBER BEACH: Worker Outreach  
18 last met in November. However, we have been  
19 doing quite a bit of work via email.

20 Just to bring you up to speed, we  
21 chose our next site to review. That, if you  
22 remember was LANL. We requested that SC&A

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1 provide a scoping plan. Once the scoping plan  
2 was complete, we went ahead and asked them to  
3 do the full plan, review plan. That was sent  
4 out to the Work Group Members. It was  
5 approved and they were given the go ahead to  
6 start work on the LANL review plan. I believe  
7 the estimated time for delivery to the Work  
8 Group is in May, mid-May or the end of May.  
9 So that is underway.

10 We did have an Advisory Board  
11 procedure. If you remember PROC-10. SC&A  
12 suggested some changes, that is the data  
13 assess and interview procedures. Where we  
14 left that is it was sent to Greg Lewis, I  
15 believe, you looked at that. And from my  
16 understanding, it was reported back to the  
17 Work Group that DOE had no problems with the  
18 changes that were suggested. However, we  
19 haven't closed that out. We will do that at  
20 our next Work Group meeting, unless you have  
21 something to add on that.

22 And while he's coming -- I guess

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1 not. So if I am wrong, let me know but that  
2 was the last word I got.

3 And then the ten-year review  
4 items, really on that we are simply just  
5 getting updates from NIOSH as that moves  
6 along. The correspondence tracking was one of  
7 the last ones that they hadn't completed, and  
8 we are waiting for dates on that. But that is  
9 about all I can say on the ten-year review.

10 Did you have something --

11 MR. KATZ: Well I was just  
12 wondering, the PROC-10, really it doesn't need  
13 to wait for anything, really. Right? I mean  
14 it can be implemented because everybody is in  
15 agreement on the content.

16 MEMBER BEACH: That is my  
17 understanding, but I wasn't really sure how to  
18 progress to --

19 MR. KATZ: And this is a procedure  
20 to kind of streamline interviewing process to  
21 make it more efficient, particularly with  
22 classified interviews and so on, so we can get

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1 information back in a more timely fashion from  
2 DOE and move things along.

3 So I don't think it needs to await  
4 a Work Group meeting to be implemented, unless  
5 I am missing something, Stu?

6 MR. HINNEFELD: No, I don't think  
7 there is any need to wait for anything, other  
8 than we have a markup. What we sent to DOE  
9 was SC&A's proposed markup of it.

10 MR. KATZ: Right.

11 MR. HINNEFELD: And they didn't  
12 have any trouble with it. So I think we are  
13 ready to revise it to read the way the markup  
14 reads.

15 MR. KATZ: So that's great.

16 MEMBER BEACH: Okay.

17 MR. KATZ: So we can just go  
18 forward with that.

19 MEMBER BEACH: So that is one  
20 thing off the list then. Thank you.

21 CHAIRMAN MELIUS: Okay.

22 MEMBER BEACH: That's all I have.

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1                   CHAIRMAN       MELIUS:               Wanda,  
2       Procedures Subcommittee, anything to add?

3                   MEMBER MUNN:     No, I don't really  
4       have anything to add from the fairly  
5       substantial report that I gave at the telecon  
6       and today's meeting.

7                   We are scheduled to meet the 25th  
8       of April and, at that time, I anticipate that  
9       we will have our usual full complement of  
10      items to address. We have a whole gaggle of  
11      PERs coming up that we need to take under our  
12      wing. And as yet, we don't have those  
13      scheduled on the agenda, but they are coming  
14      along.

15                  CHAIRMAN MELIUS:    Okay, thank you.  
16       And that leaves the Subcommittee on Dose  
17      Reconstruction, and Mark is not here. I don't  
18      know if --

19                  MEMBER KOTELCHUCK:   Just say --

20                  CHAIRMAN MELIUS:    Okay.

21                  MEMBER KOTELCHUCK:   -- the day we  
22      met, we met on February 2nd and we went

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1 through a number of data groups. I forget  
2 which numbers, and I didn't bring my notes  
3 with me.

4 CHAIRMAN MELIUS: Yes, okay.

5 MR. KATZ: So we have another  
6 meeting March 25th, and we are making good  
7 progress at actually working through the sets.  
8 Now, ten through 12 or 13 is the focus right  
9 now. And we are doing it by site. We are  
10 meeting actually it is pretty rapid, a month  
11 and a half between meetings to try to clear up  
12 the backlog.

13 CHAIRMAN MELIUS: Okay, good.  
14 Okay, that completes Work Groups, unless I  
15 missed one.

16 We have -- actually it is a  
17 continuation. I circulated something looking  
18 for volunteers for an Ames Work Group which we  
19 need to set up.

20 We also have coming up and got  
21 lots of volunteers, I was going to talk to  
22 some people about being willing to be chair

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1 and then half of us didn't show. So it was a  
2 little difficult.

3 But there is also a General  
4 Atomics Site Profile review that was done some  
5 time ago, not a real long time ago, but some  
6 time ago. However, there is also some  
7 continuing work that SC&A is doing on an  
8 addendum or something, I can't remember,  
9 that's, I think, due this summer.

10 John, do you want to fill us in on  
11 that?

12 MR. STIVER: Yes.

13 CHAIRMAN MELIUS: Because what I  
14 was thinking is to go ahead and appoint both  
15 Work Groups with the understanding that the  
16 General Atomics one probably wouldn't start  
17 until the summer. But I wanted to make sure  
18 that that was a good deadline.

19 MR. STIVER: Yes, this is John  
20 Stiver, and I don't see any problem with that  
21 as far as the summer.

22 What happened was that we were

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1 doing a data validation with the electronic  
2 data, kind of similar to what was going on  
3 with Brookhaven. And it was tasked  
4 simultaneously with a report, but we didn't  
5 finish it up at the same time the report was  
6 delivered. So it is going to go in as an  
7 addendum.

8 CHAIRMAN MELIUS: Okay.

9 MR. STIVER: But I don't see that  
10 taking more than a few weeks to finish up. So  
11 it shouldn't be an issue, as far as  
12 scheduling.

13 CHAIRMAN MELIUS: Good. Thanks.  
14 And what I will do then is first of all, for  
15 Board Members, if you didn't indicate that you  
16 wanted to be on another Work Group but changed  
17 your mind or didn't get a chance to respond,  
18 let me know. And then I will reach out to  
19 some people about chairing those Work Groups.

20 And then hopefully by next week we will get  
21 those two appointed to move forward on that.

22 MEMBER CLAWSON: Dr. Melius?

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1 CHAIRMAN MELIUS: Yes.

2 MEMBER CLAWSON: Mark isn't here  
3 but the at the Dose Reconstruction, we were  
4 talking about it. We need to start getting in  
5 the mix so that probably around Idaho time  
6 frame we would be able to pick these next  
7 group. And I don't know. I just don't want  
8 to kind of get behind because it is almost a  
9 three, four month period to be able to get  
10 that put together. So we should be thinking  
11 about that.

12 CHAIRMAN MELIUS: I agree. And  
13 Ted and I will follow up with Mark and the  
14 meeting schedule to get that done.

15 Scheduling, one issue that is  
16 coming up and I don't want to make too much of  
17 it but, again, given some of the budget  
18 situation with the government, we probably  
19 should be, how can I say it, thoughtful about  
20 our scheduling of Work Group meetings and so  
21 forth, especially, obviously, in-person  
22 meetings. The telephone conferences are

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1 obviously less expensive to set up. So sort  
2 of this coordination and planning are going to  
3 be important. And my estimate and it may be a  
4 little bit early but we probably have,  
5 depending on what comes through, either a day  
6 and a half or two days' worth of work for the  
7 Idaho meeting. Have you thought about it Ted?

8 MR. KATZ: I am just, I mean, some  
9 of these are so hard to gauge.

10 CHAIRMAN MELIUS: Yes.

11 MR. KATZ: But I think it is  
12 certainly not two and a half days. I think  
13 it's two days or less.

14 CHAIRMAN MELIUS: Yes, but one  
15 thought I had is do we want to also consider  
16 scheduling Work Group or Subcommittee meetings  
17 in Idaho? You are already traveling, people.

18 MR. KATZ: We can. And the  
19 limiting issue there, and I can only attend  
20 one at a time. You need the DFO there.

21 CHAIRMAN MELIUS: We can do two  
22 half-day meetings or something.

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1 MR. KATZ: Sure.

2 CHAIRMAN MELIUS: But we can do at  
3 least one.

4 MR. KATZ: One or two in one day,  
5 absolutely. Because we already have a court  
6 reporter. And that would be fine.

7 CHAIRMAN MELIUS: Yes, the court  
8 reporter is more important than you.

9 MR. KATZ: Absolutely.

10 MEMBER MUNN: But of course you  
11 also have a limiting factor with staff and  
12 preparation time. You know, Ted is not the  
13 only person who would have to be in more than  
14 extremist for preparation for not only the big  
15 Board but also for the Work Groups as well.

16 We kind of, certainly in our  
17 Subcommittee, we rely on the availability of  
18 the NIOSH and SC&A personnel to give full  
19 attention to what we want to do at our  
20 meeting. And if they can't do that when we  
21 are having a major Board meeting simply  
22 because we all focus on what is going on at

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1 the Board.

2 I guess what I am trying to say is  
3 there is a certain amount of time that you  
4 can't extract from folks when they are  
5 thinking about other things.

6 CHAIRMAN MELIUS: Well I guess I  
7 don't quite understand that part. I do think  
8 I wanted to bring it up now because I think it  
9 requires some coordination in terms of the  
10 personnel that need to be there. And it  
11 probably isn't appropriate for every Work  
12 Group. And it may depend on what else gets  
13 scheduled in Idaho, so you don't have to bring  
14 ten extra people in and so forth.

15 And if a Work Group or  
16 Subcommittee chair doesn't want to do it  
17 there, that is fine. But at the same time, we  
18 have to be able to make use of, efficient use  
19 of the resources available to us.

20 And it seems if we are getting the  
21 entire Board there, it is not too much to do a  
22 Work Group meeting, again, within limits in

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1 terms of who else needs to be there. But  
2 let's talk about it now and be thinking about  
3 it and planning for it. We have got a few  
4 months.

5 MR. KATZ: No, I think that is  
6 helpful. And it may be that some of the same  
7 DCAS staff and SC&A staff that would be  
8 attending the Board would also be the right  
9 people to support the Work Group. It may work  
10 out nicely. We'll see.

11 CHAIRMAN MELIUS: Yes. Okay,  
12 scheduling. Ted?

13 MR. KATZ: So we need to schedule,  
14 scheduling out a teleconference meeting. So  
15 let me just remind you where we are in terms  
16 of meetings, what we have scheduled first.

17 Right now we have -- so Idaho is  
18 July 16th through 18th. We have -- next to  
19 schedule we need -- and we also have October  
20 16th to 18th Board Meeting.

21 MEMBER MUNN: Do we have a  
22 September telecon?

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1 MR. KATZ: Excuse me?

2 MEMBER MUNN: Do we have a  
3 teleconference in September?

4 MR. KATZ: Yes, that is what I am  
5 noticing if we do. I have to check my  
6 calendar.

7 MEMBER BEACH: It is on the 11th.

8 MR. KATZ: Of?

9 MEMBER BEACH: September.

10 MR. KATZ: Yes, that makes sense.  
11 September 11th teleconference.

12 MEMBER MUNN: Oh, it is? I had it  
13 the fifth.

14 MEMBER ANDERSON: I got it on the  
15 fifth, too.

16 MEMBER MUNN: On the fifth at  
17 11:00 in the morning.

18 MR. KATZ: We have a majority with  
19 the fifth at 11:00. Okay, so September 5,  
20 teleconference. October 16th to 18th we have  
21 a meeting -- no location yet. But so we are  
22 scheduling out from there another

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1 teleconference and another in-person meeting.

2 And the right time frame for the  
3 next teleconference is approximately the week  
4 of December 2nd, 9th, or 16th.

5 MEMBER MUNN: Let's take the  
6 second.

7 MR. KATZ: The second --

8 MEMBER MUNN: That is right after  
9 Thanksgiving.

10 MR. KATZ: -- which would be a  
11 Monday. December 2nd, 9th, or 16th is about  
12 the right time frame.

13 MEMBER BEACH: That week, I am  
14 only available on the second.

15 MEMBER MUNN: The second.

16 CHAIRMAN MELIUS: I can't do the  
17 second.

18 MR. KATZ: How about the week of  
19 the ninth? How is everyone with the week of  
20 the ninth?

21 MEMBER ANDERSON: The week --

22 MR. KATZ: Well it just needs to

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1 be -- it is a teleconference.

2 MEMBER ANDERSON: Well I mean, do  
3 you want the ninth, the tenth?

4 MR. KATZ: Right, so --

5 MEMBER ANDERSON: The ninth would  
6 be fine.

7 MR. KATZ: How is the ninth for  
8 others? That is a Monday.

9 CHAIRMAN MELIUS: The ninth is  
10 good.

11 MR. KATZ: How about on the phone?

12 CHAIRMAN MELIUS: How about Board  
13 Members on the phone? December 9th.

14 MEMBER ZIEMER: This is Ziemer.  
15 I'm okay anytime that week.

16 MR. KATZ: And how about you,  
17 Phil?

18 MEMBER FIELD: Bill Field, sounds  
19 good.

20 MR. KATZ: And Bill?

21 MEMBER SCHOFIELD: This is Phil  
22 and I am good any day that week.

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1 MR. KATZ: Okay well why don't we  
2 just -- that is easy, then.

3 Let's say December 9th at 11:00  
4 a.m.

5 MEMBER ROESSLER: 11:00 p.m.?

6 MR. KATZ: December 9th at 11:00  
7 a.m. -- p.m., that would be interesting.

8 CHAIRMAN MELIUS: Well Wanda said  
9 she has become a night person.

10 MEMBER MUNN: No, that wasn't me.

11 MR. KATZ: Okay. And then we need  
12 an in-person meeting. And the right time  
13 frame for that is the week of -- well January  
14 22nd through 25th is Wednesday through Friday  
15 because Monday and Tuesday don't work. I  
16 think there is a federal holiday or something  
17 that Monday. But so January 22nd through 25th  
18 is one option or the week of January 27th or  
19 the week of February 3rd.

20 MEMBER BEACH: I would prefer the  
21 week of the 27th.

22 MR. KATZ: How is the week of

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1 January 27th to others? January 27th is a  
2 Monday but we normally aim for --

3 MEMBER ANDERSON: We got a big  
4 winter storm then.

5 CHAIRMAN MELIUS: Only where we  
6 meet.

7 MR. KATZ: So the 28th, 29th,  
8 30th, does that work for everyone? How about,  
9 Paul, does that work for you?

10 MEMBER ZIEMER: I'm good.

11 MR. KATZ: And, Phil?

12 MEMBER SCHOFIELD: That works for  
13 me.

14 MR. KATZ: Bill?

15 MEMBER FIELD: Yes, that works for  
16 me, too.

17 MR. KATZ: Gen?

18 MEMBER ROESSLER: Yes, are you  
19 talking January?

20 MR. KATZ: Yes, January 28th,  
21 29th, and 30th.

22 MEMBER ROESSLER: Sounds good.

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1 MR. KATZ: Okay. And then I am  
2 not sure it makes sense to talk about the  
3 location for the October meeting yet. I think  
4 we are probably better off in July sorting  
5 that out. We will know more about what might  
6 be on our plate.

7 CHAIRMAN MELIUS: Yes, I think or  
8 maybe at the call. Probably more likely in  
9 July. Does July give you enough time?

10 MR. KATZ: That is still enough  
11 time.

12 CHAIRMAN MELIUS: Okay. Henry  
13 keeps mentioning Amchitka for January but I  
14 guess January or October, it doesn't matter  
15 there.

16 MEMBER ANDERSON: No, you can land  
17 anywhere there.

18 MEMBER MUNN: Well transportation  
19 would be interesting.

20 MEMBER ANDERSON: A little fog  
21 maybe but nothing else. Ice maybe.

22 MEMBER MUNN: I don't know if we

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1 would have much in the way of public comment.

2 MR. KATZ: Okay.

3 CHAIRMAN MELIUS: Okay. Yes,  
4 Loretta?

5 MEMBER VALERIO: Do we have the  
6 dates for the October meeting?

7 MEMBER BEACH: The 16th, 17th, and  
8 18th is what we have right now.

9 CHAIRMAN MELIUS: Yes. So more  
10 likely the 16th and 17th. And it is the  
11 Wednesday, Thursday, Friday because that is  
12 Columbus Day on the Monday. But it would most  
13 likely be the Wednesday and Thursday.

14 Any other Board business?  
15 Questions, comments, anything we have missed?

16 This was a hard meeting. Usually  
17 we are pretty good at procrastinating to the  
18 next day but we didn't have a next day.

19 Okay, I think we need to stay on  
20 schedule for the Savannah River. So why don't  
21 we break and come back promptly at 5:45. We  
22 will have our presentation on Savannah River,

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1 followed by the public comments.

2 MEMBER ZIEMER: Dr. Melius? Paul  
3 Ziemer, here. Just a quick question.

4 Do we have an official letter to  
5 approve on the Brookhaven petition?

6 CHAIRMAN MELIUS: No, because  
7 there was too much uncertainty going into this  
8 meeting. So I will prepare one and circulate  
9 it.

10 MEMBER ZIEMER: Okay.

11 CHAIRMAN MELIUS: Jenny reminded  
12 me also.

13 MEMBER ZIEMER: Okay, thank you.

14 CHAIRMAN MELIUS: But I was pretty  
15 confused coming in. Ted had briefed me, and I  
16 had no idea what was going to happen. But  
17 thanks for reminding me, Paul.

18 Okay, so come back here in about a  
19 little less than half an hour.

20 (Whereupon, the above-entitled matter went off  
21 the record at 5:16 p.m. and  
22 resumed at 5:47 p.m.)

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1                   CHAIRMAN MELIUS:    Before we start  
2                   our public comment period, we will have an  
3                   update on what is happening with the review of  
4                   the Savannah River SEC.   Unfortunately, Mark  
5                   Griffon who was scheduled to be here is unable  
6                   to be here today.   So John Stiver has agreed  
7                   to give a brief review.

8                   So, John, if you don't mind using  
9                   that microphone.

10                  MR. STIVER:    This is John Stiver.  
11                  I would like to give kind of a status update  
12                  on Savannah River, where the Work Group  
13                  stands.

14                  As you recall, back at the  
15                  December meeting, it became obvious there were  
16                  quite a few of these radionuclide-specific  
17                  coworker models that are being developed and  
18                  put out there.   And so we are tasked to review  
19                  that for neptunium.

20                  So basically at this point we are  
21                  looking at SEC-102, I believe Addendum 3,  
22                  which looks at the thorium coworker model,

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1 also neptunium, and also TIB-81, which is sort  
2 of the overall internal coworker model that  
3 NIOSH has recently put out.

4 And at this point, basically, we  
5 are looking at I believe it is Report 56 on  
6 neptunium. NIOSH is planning to use chest  
7 count data with not really a surrogate but  
8 using the ROI, region of interest, for the  
9 protactinium-233, which also happens to  
10 overlap with iodine-131 and chromium-51. And  
11 so we are looking at some of the technical  
12 issues associated with that.

13 Regarding the thorium, they're  
14 planning on using the trivalent bioassay  
15 method prior to 1994. We had some issues  
16 regarding the chemical separation of thorium.

17 It is a two-stage process. There are some  
18 exchanges of papers and deliberations going on  
19 in that. But I think we have a fairly good  
20 handle, technically, where we stand on these  
21 two issues at this point.

22 In our review of TIB-81, another

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1 issue that came up is that of a strontium-90  
2 and basically from 1966 to 1990, there are no  
3 data available. So we are also looking into  
4 producing a report on strontium-90.

5 At the Work Group teleconference  
6 back on I believe it was the 12th of February,  
7 we decided to really try to get as much done  
8 on this and reallocate resources as necessary  
9 to where we could have some of these bigger  
10 issues, namely, the neptunium, the thorium,  
11 the construction trade worker issue and now  
12 possibly the strontium issue pretty much  
13 wrapped up by June so that we could then bring  
14 this to the July Board meeting in Idaho.

15 And so basically in summary what  
16 we have, we have got about seven different  
17 reports that are due. Obviously, neptunium,  
18 thorium, strontium. We are going to take the  
19 radionuclides that have large amounts of data,  
20 the tritium, trivalent actinides and mixed  
21 fission products. We should probably put  
22 those into one report. Recycled uranium is

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1 another one.

2           There is the construction trade  
3 worker issue and the granularity, the ability,  
4 some of the things we were talking about  
5 earlier today. You know when you have  
6 disparities in different trades, different  
7 types of exposure scenarios, certain groups  
8 are possibly being exposed to different  
9 nuclides and different levels and different  
10 periods of time, and so we are looking at  
11 that. And finally, exotics. So we are  
12 looking at about seven models that we are  
13 going to produce reviews on.

14           And as I said, by June we hope to  
15 have neptunium, thorium, construction trade  
16 workers and also the strontium-90 ready for  
17 the Board.

18           And that is kind of it in a  
19 nutshell. And there is a lot more going on  
20 than this.

21           CHAIRMAN MELIUS: That was a lot  
22 in a nutshell.

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1                   Stu or LaVon, do you have anything  
2 to add for NIOSH.

3                   MR. HINNEFELD: Nothing to add.

4                   CHAIRMAN MELIUS: Okay. So you  
5 are just waiting. How about data, in terms of  
6 retrieving data and so forth?

7                   MR. STIVER: Yes, NIOSH has been  
8 pretty responsive on providing the data.

9                   CHAIRMAN MELIUS: Okay.

10                  MR. STIVER: Arjun can probably  
11 give us more of an update.

12                  CHAIRMAN MELIUS: Okay.

13                  MR. STIVER: He has been kind of  
14 up on the latest exchanges of spreadsheets and  
15 so forth. But, yes, I think we are in pretty  
16 good shape overall.

17                  CHAIRMAN MELIUS: He is doing a  
18 consultation. That is why I was hesitating.

19                  MR. HINNEFELD: Arjun did remind  
20 me of an action that we do owe to the Work  
21 Group and SC&A having to do with the question  
22 about I think this is sort of stratifying data

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1 into a job -- by job title and is there  
2 benefit to doing that.

3 And so we are trying to decide  
4 internally what our position on that is. So  
5 we have not yet provided that, but we do owe  
6 that to the Work Group.

7 CHAIRMAN MELIUS: That was what  
8 was missing.

9 MR. STIVER: Dr. Melius, there is  
10 one other thing that I forgot to mention. We  
11 do have a data capture interview or basically  
12 a data capture plan in place. We were hoping  
13 to get out there in April. Unfortunately,  
14 Savannah River has lost about 50 percent of  
15 their document review staff and so they are  
16 very short-changed or they are short-staffed.

17 And with the sequester also adding to that,  
18 we are kind of at their mercy in terms of when  
19 this may take place.

20 I think optimistically it is  
21 probably going to be the end of April, maybe  
22 into early May at this point.

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1 CHAIRMAN MELIUS: Thank you. Any  
2 Board Members have questions on that?

3 (No response.)

4 CHAIRMAN MELIUS: Okay, thank you,  
5 John. Thank you for substituting.

6 Ted, why don't you start the  
7 public comment period, but you need to do the  
8 intro.

9 MR. KATZ: Sure. Thank you.

10 Just to note for people who are  
11 planning to give public comment, that these  
12 Board meetings are fully transcribed verbatim.

13 So everything you say will be recorded, and  
14 then the transcripts are posted on the NIOSH  
15 website and available for all the public to  
16 see.

17 So if you have any very personal  
18 information you don't want the public to have,  
19 you probably should refrain from saying it.  
20 We won't redact any of that. So that will be  
21 made public. However, if you include  
22 information about other parties that is

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1 personal, private in your talk, that  
2 information, sufficient to keep their identity  
3 private, will be redacted.

4 So that is sort of the short  
5 skinny on it, and the full explanation of our  
6 Redaction Policy, as it is termed, should be  
7 on the side table, and it is also on the NIOSH  
8 website under the Board section. It explains  
9 how we handle this.

10 Thank you.

11 CHAIRMAN MELIUS: Okay. We have  
12 got a few people signed up for public comment.

13 And we will start with David Anderson. He  
14 has been here before.

15 MR. ANDERSON: I have. I note  
16 Knut Ringen was planning to speak, and he is  
17 not here. And I am wondering if he is taking  
18 a nap, but I can try to call him.

19 CHAIRMAN MELIUS: I will turn it  
20 over to Ted for a second.

21 MR. KATZ: Okay.

22 MR. ANDERSON: Thank you, Chairman

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1 Melius and Members of the Board. My name is  
2 David Anderson. I am the Administrative  
3 Manager with the law offices of Bob Warren in  
4 Black Mountain, North Carolina. We have  
5 adjudicated for scores of claimants under the  
6 EEOICPA, and we are also the lawyer for the  
7 petitioner [identifying information redacted]  
8 for the SEC for the Savannah River Site.

9 I last addressed you in Knoxville  
10 about concerns we have with NIOSH's Addendum 3  
11 to the SEC Evaluation Report. I'm sorry to  
12 read, but I have severe stage fright. So I  
13 will read and hopefully that will get us  
14 through it.

15 Of course we are very concerned  
16 about the definition of sufficient accuracy  
17 and how that impacts claimant favorability.  
18 We believe that accuracy begins with a  
19 thorough investigation of the source  
20 materials. We have tried to look at some of  
21 these source materials ourselves that NIOSH  
22 uses in their Addendum 3, but we have to go

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1 through a Freedom of Information request to  
2 get it, and we have filed that Freedom of  
3 Information request, and it will probably be  
4 next January before we actually get any  
5 materials, if we ever do.

6 So we have frequently questioned  
7 the reliability of the materials being used by  
8 NIOSH in its evaluations and its dose  
9 reconstructions. And while we are frustrated  
10 by how long this process is taking, we are  
11 delighted that SC&A and Arjun will be visiting  
12 the Savannah River Site, hopefully, to  
13 thoroughly investigate and analyze the  
14 materials that NIOSH has relied upon.

15 I am distressed to think that that  
16 might not happen because we have seen in the  
17 past that the source materials that NIOSH uses  
18 can be interpreted in different ways. And we  
19 would like for SC&A to analyze it from their  
20 perspective and I hope that can happen.

21 I would like to comment on some of  
22 the myriad of concerns we have with Addendum

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1 3, beginning with thorium inventories and  
2 location. You will recall that Addendum 2  
3 came along because the discovery of literally  
4 thousands of kilos of thorium that had not  
5 been previously identified or located in  
6 earlier inventory records. Now NIOSH  
7 confidently relies on three inventory  
8 documents and one memo to claim that they can  
9 now track 35 years of thorium inventory at the  
10 Savannah River Site.

11 Interestingly, in Addendum 3,  
12 NIOSH says that thorium was confined to just  
13 ten facilities after 1972. But a recent  
14 search of the Department of Labor's Site  
15 Exposure Matrix, or SEM, lists thorium present  
16 in no less than 66 buildings. And the EPA has  
17 found thorium contamination in buildings and  
18 other structures, ground water, sediment,  
19 sludge, soil, and solid waste in various  
20 places around the site.

21 While neither SEM nor the EPA  
22 documents specific time periods for these

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1 findings, it is clear that thorium was more  
2 widespread amongst facilities and workers than  
3 NIOSH would have us believe.

4 And of course if you are not sure  
5 where the thorium was, it is impossible to  
6 know who all might have been exposed to it.

7 Likewise, NIOSH confers great  
8 confidence in the radiological control  
9 programs at Savannah River Site in a search  
10 that anyone likely to be exposed was  
11 thoroughly monitored. Because they believe  
12 that, they rely heavily on badge data and  
13 bioassay records in both their dose  
14 reconstructions and this evaluation.

15 We seriously question that  
16 premise, not necessarily because DOE is not  
17 always forthcoming with complete records, but  
18 because years of working with employee  
19 claimants has illustrated to us a culture at  
20 the Savannah River Site that we could describe  
21 as a "get it done" culture.

22 Countless interviews with workers

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1 show a willingness to avoid radiation  
2 monitoring that was part of the spirit of the  
3 job. I would refer any new Board Member to  
4 the summary of Savannah River Site interviews  
5 done by SC&A in 2009 that is on the O: drive,  
6 as a matter of fact, as a part of a White  
7 Paper that SC&A produced about matrix issue  
8 number 12.

9           There are several pages of  
10 comments regarding the radiological monitoring  
11 program and, if you don't mind, I would like  
12 to read a couple, just short little things  
13 from those interviews. The very first one  
14 says production and health physics had a love-  
15 hate relationship. Workers tried to do most  
16 jobs without HP. Production wanted to do  
17 whatever had to be done. Day shift did not  
18 attend to maintenance that often. Much of it  
19 was done at night. Operations spent time  
20 avoiding HP, and HP tried to avoid them.

21           Operations had work to do, and  
22 HP's attitude was not conducive to getting

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1 the job done. It could take days to get the  
2 job done if HP was involved.

3 And then from another interview, a  
4 similar kind of thing. Again, that was the  
5 culture at the time. Don't ask and don't  
6 tell. Most of the older operators would swap,  
7 hide, or lose badges, in order to keep their  
8 boss out of trouble.

9 If you received a tritium intake,  
10 you would intentionally forget to give a  
11 bioassay sample that month. And once Health  
12 Protection realized the sample was late, a new  
13 one was requested two weeks later. Two weeks  
14 is generally enough time to pass a tritium  
15 uptake.

16 There are lots and lots of  
17 statements like that from former workers.  
18 Though they don't necessarily refer to  
19 thorium, these statements point to the  
20 problems inherent in assuming NIOSH has access  
21 to a dependable, complete set of exposure data  
22 for any worker at the Savannah River Site.

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1 Another troubling aspect of  
2 NIOSH's reliance and dependability on this  
3 data has to do with the frequency and  
4 reporting of exposure incidents at SRS, which  
5 are also part of that matrix issue number 12.

6 A White Paper was produced by SC&A  
7 and I don't believe NIOSH has responded to it  
8 yet. And it concludes, and I will read  
9 verbatim from it. "It appears possible that  
10 in some cases the incidents may not be  
11 recorded anywhere, including the worker's  
12 individual dose record or any data bank. In  
13 other cases, incidents may not be in the SHI  
14 index but may be in other databases, such as  
15 fault tree data banks or in log books. There  
16 is a distinct possibility of unrecorded  
17 incidents that may be shift-dependent. NIOSH  
18 has not yet addressed the issue of incomplete  
19 incident records in SRS dose reconstructions.

20 The issue of incident-related  
21 doses becomes even more complex in the context  
22 of coworker models. This is both a general

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1 matter of non-construction and construction  
2 workers, as well as a specific issue for  
3 construction workers to be considered in the  
4 context of the SRS construction worker SEC."

5 And again, this White Paper and  
6 those interviews I was quoting from are on the  
7 O: drive as part of matrix number 12.

8 Our contention is that incidents  
9 and worker actions resulting in unrecorded  
10 exposure were widespread at Savannah River  
11 Site and undermined the completeness and  
12 accuracy of the database NIOSH contends is so  
13 dependable.

14 By the way, so confident is NIOSH  
15 in its database, that all references by  
16 claimants to these types of incidents are  
17 glossed over in dose reconstructions. You  
18 have probably seen them. A common one, and  
19 this is mostly quoted from a dose  
20 reconstruction says, "The worker mentioned  
21 several incidents, one involving a permanent  
22 confiscation of his clothing and even wedding

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1 ring. However, no information on this was  
2 received from the Department of Energy and the  
3 general claimant favorability of the dose  
4 reconstruction will account for more exposure  
5 than the claimant was likely to receive."

6 We filed many Freedom of  
7 Information requests for incident records from  
8 the Department of Energy with very limited  
9 success. However, when we do receive  
10 information, such as we did just a month ago,  
11 it invariably backs up everything the claimant  
12 has told us. We believe these claimants are  
13 telling the truth, as are the interviewers.

14 So if the data regarding thorium  
15 inventory and its spread throughout the site  
16 are questionable and determinations about  
17 exactly who was exposed and where they were  
18 exposed is questionable, and data from the  
19 radiological monitoring program is  
20 questionable, how is it possible for NIOSH to  
21 confidently proclaim that they can reconstruct  
22 thorium dose to all workers?

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1           We respectfully contend that it is  
2 not possible within the bounds of sufficient  
3 accuracy and claimant favorability for them to  
4 make such a claim. And we request that the  
5 Board reject this Addendum and recommend the  
6 entire SRS workforce for an extended Special  
7 Exposure Cohort.

8           Thank you very much.

9           CHAIRMAN MELIUS: Thank you. Knut  
10 Ringen, I believe is signed up next. You were  
11 signed up first.

12          DR. RINGEN: What?

13          CHAIRMAN MELIUS: You were signed  
14 up first.

15          DR. RINGEN: I was signed up first  
16 and I was here on time -- just barely.

17          (Laughter.)

18          DR. RINGEN: Thank you very much,  
19 first of all, for entertaining me again. It  
20 is the seventh time I have been here. And  
21 what I want to comment on is, first of all,  
22 the OTIB-52 and also the SRS Evaluation

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1 Addendum because they hang together in a very  
2 significant way.

3 I have given you previously all of  
4 my professional disclosures. I am here on  
5 behalf of the National Building Trades Unions  
6 on behalf of the Augusta Building and  
7 Construction Trades Council, which is the  
8 umbrella for all of the unions that represent  
9 workers at the Savannah River Site and for the  
10 SRS SEC petitioners.

11 Let me first comment on OTIB-52.  
12 We actually agree that NIOSH has to have  
13 specific procedures for construction workers.

14 You have no argument about that. Because the  
15 construction workers are very different from  
16 plant workers and I think everybody also now  
17 agrees on that.

18 And NIOSH clearly acknowledges  
19 that it is difficult for it to do the dose  
20 reconstructions for construction workers. The  
21 reason for this is the difference that the  
22 construction workers have both in terms of

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1 their exposure patterns and their outcomes.

2 For exposure patterns, we know  
3 that construction workers are a very high-risk  
4 group and we have an industrial hygiene group  
5 that has conducted experiments to try to  
6 estimate what kind of exposures workers have  
7 from specific tasks, such as welding. And the  
8 same includes lots of industrial hygienists  
9 from the universities around the country that  
10 you all know. And these experiments have led  
11 them to conclude that constructions workers  
12 have exposures that are typically, in terms of  
13 their variants or the geometric means and  
14 distributions, about 1.4 times greater than  
15 for plant workers.

16 And actually, that is where the  
17 number comes from in the report that you heard  
18 this morning. We held a meeting with NIOSH  
19 back in 2004 and at the conclusion of that,  
20 Taulbee said we should create an adjustment  
21 factor if we agree on that. And that  
22 adjustment factor should be approximately 1.4.

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1 Just so you know. And then they tested that  
2 also with some of their -- some radiation dose  
3 data that they had.

4 In addition to having very  
5 different exposures from plant workers,  
6 construction workers have also very different  
7 outcomes. We now know that construction  
8 workers are a very high-risk group for  
9 occupational cancer in general. A new big  
10 review in the United Kingdom found that  
11 construction workers, who make up for seven to  
12 ten percent of the workforce account for about  
13 50 percent of occupational cancer mortality.  
14 And that reflects, pretty much what we are  
15 seeing in our own data here.

16 From our medical screening program  
17 that you heard Pat talk a little bit about  
18 this morning and that I direct for  
19 construction workers at the DOE sites, we know  
20 that construction workers have a much higher  
21 rate of illnesses, occupational illnesses,  
22 than other workers. Within our population,

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1 and we have about 30,000 screenings performed  
2 so far, within it we have a small sub-  
3 population of about 1500 administrative,  
4 scientific, and other non-crafts people who  
5 have worked for construction companies. And  
6 we use that as an internal control. And when  
7 we compare what happens in our population, we  
8 find that the crafts workers have outcomes  
9 that are three to six times higher than this  
10 control group.

11 So if you look, for instance, at  
12 x-rays and you see what the B Readers conclude  
13 in terms of occupational exposures, the  
14 control group has five to six percent  
15 prevalence and the craft workers range from 18  
16 percent at the low end to 30 percent at the  
17 high end of x-ray evidence of occupational  
18 lung disease. And we see that in other areas  
19 also such as hearing loss. Beryllium is a  
20 little different but I won't get into that.

21 But by and large, it is a much  
22 higher-risk category. And this leads me to

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1 wonder how NIOSH could conclude that, in OTIB-  
2 52, that construction, the radiation doses  
3 received by construction workers can be  
4 bounded by the dose distribution for all  
5 monitored workers. To me, that defies logic,  
6 reality, and everything I know about  
7 construction workers and their exposures in  
8 areas other than radiation. And I can't  
9 imagine that radiation is so different from  
10 other types of occupational exposures.

11 In addition, the discussion today  
12 left me really confused again about what NIOSH  
13 is doing with construction workers,  
14 particularly the unmonitored one. Is it  
15 really using OTIB-52 or is it not? Wanda  
16 seemed to indicate that they were. Stu seemed  
17 to indicate that they are not. And Wanda's  
18 slide number three said specifically this  
19 procedure gives guidance or provides guidance  
20 for developing a coworker model for  
21 unmonitored construction trade workers.

22 So presumably, it must be used

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1        somehow but I do not know if that is true or  
2        not.    So I would like to suggest to you that  
3        you ask NIOSH two questions.    If OTIB-52 is  
4        not being used, then what is being used to  
5        deal with construction workers?    Secondly, if  
6        OTIB-52 is being used, then how is it being  
7        used by the dose reconstructor?

8                    This is very significant.    This is  
9        a significant lead-in to a discussion briefly  
10       of the question of sufficient accuracy, which  
11       has been a thorn in the side of this program  
12       from the beginning and that we have asked for  
13       a definition forever, as you know.

14                   So let me be constructive and  
15       suggest a definition.    First of all, I think  
16       it should be defined based in scientific  
17       principles.    I think we all agree on that.  
18       And if we do that, I think the best definition  
19       is something like this.    A dose reconstruction  
20       is sufficiently accurate when, in independent  
21       replications, the results are within an  
22       accepted degree or margin of error.

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1           So that obviously still begs the  
2 question about what is meant by sufficient --  
3 what is meant by acceptable margin of error.  
4 And the answer to this question can only come  
5 from empirical study, I think, which would  
6 require a very large study using a stratified  
7 sample designed from the claimants that have  
8 gone through the program to capture critical  
9 variables, such as DOE sites, source terms,  
10 occupation, task, time period, incidence. And  
11 for each of the stratum within this sample,  
12 you would have to conduct several blinded dose  
13 reconstructions to test whether the original  
14 dose reconstruction is within the realm of any  
15 kind of meaningful variance in terms of the  
16 outcomes that they come to.

17           My guess is that if you were to do  
18 this and you would find that the predicted  
19 validity of the NIOSH dose reconstruction  
20 methods are going to be poor. It is going to  
21 be poor particularly for construction workers  
22 because of the complicated exposures that they

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1 have.

2 I propose to the Board that they  
3 should do a study like this. It is a big  
4 study, it will be a very costly study, and it  
5 is a difficult one to perform. But unless you  
6 do a statistical study of what has been done  
7 here, you don't know what in the world the  
8 program has accomplished in terms of accuracy.

9 Next, let me comment on another  
10 critical problem that relates to OTIB-52 and  
11 to coworker modeling for construction workers  
12 with missing dose information. And I think  
13 this starts to get at the heart of how it is  
14 important to understand how NIOSH applies its  
15 procedures. This is the problem: in its data  
16 system, NIOSH does not have a code for  
17 occupation. So somebody has to come up with  
18 what this person did when they are doing a  
19 dose reconstruction and presumably, that is  
20 the dose reconstructor. And the only way that  
21 the dose reconstructor can do that is to look  
22 at the free text that is in the claim, maybe

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1 in some occupational history or something like  
2 that. But there is no systematic way that I  
3 know of to give dose reconstructors directions  
4 as to how it assigns occupation to a person  
5 that it is doing a dose reconstruction on.  
6 And I think that is a really big issue that I  
7 don't believe this Board has ever addressed,  
8 but it should.

9 CHAIRMAN MELIUS: Can you wrap up?

10 DR. RINGEN: I haven't even gotten  
11 to the wrap-up. No, I am going to get to it.

12 I am going to comment briefly on  
13 the SRS SEC petition because you are  
14 considering that now. And I have to preface  
15 that by saying that I have not had access to  
16 any of the underlying documentation that is  
17 being requested. And there is also a new  
18 OTIB-81 which is supposed to be relevant but  
19 it is not publicly available yet.

20 I think there are a number of  
21 reasons why the Board and NIOSH should be very  
22 skeptical about the Evaluation Report that was

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1 presented to us at this last meeting,  
2 including the presentation that Dr. Taulbee  
3 made of it. Let me just draw some of the  
4 problems that I see in this and why I don't  
5 think that you can do dose reconstruction for  
6 unmonitored workers here at SRS the way that  
7 they say they can.

8 It says first of all in its  
9 conclusions that SRS implemented a thorough  
10 radiological safety program that managed  
11 hazards from an array of radionuclides.  
12 Several places in this report it said that  
13 NIOSH -- that SRS basically had an excellent  
14 nuclear safety program.

15 I don't think any of the available  
16 evidence supports that. Clearly, during the  
17 DuPont period, the radiological protection  
18 program was not very good. And that was also  
19 the case in the first years of the  
20 Westinghouse contract. I think sometime in  
21 the mid or early 1990s it was significantly  
22 improved. But importantly, NIOSH draws this

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1 conclusion really in part based on information  
2 that it got from four professional people who  
3 worked at the site and used that information  
4 in contradiction to all of the information  
5 that has been collected from the many  
6 interviews that workers have presented here at  
7 Savannah River would suggest that monitoring  
8 practices were not all that good for a lot of  
9 the period of time of this Evaluation Report.

10 It also says that it has complete  
11 inventory of thorium usage in operations, even  
12 though the data that it is presenting,  
13 including in Table 5.2 shows large periods of  
14 missing data for thorium. It gives no  
15 explanation of how 291 kilograms of thorium  
16 disappeared from the inventory of Building  
17 773A in 2003, for instance.

18 CHAIRMAN MELIUS: You need to wrap  
19 up, please.

20 DR. RINGEN: Okay. Let me wrap up  
21 and just say, first of all, the monitoring is  
22 not as good as the report claims. Secondly,

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1 the inventory of the operations is not as good  
2 as the report says. Thirdly, the way that  
3 this is going to assign dose by doing  
4 extrapolation from both surrogate data and  
5 from coworkers is not as good as they say it  
6 is. Thank you.

7 CHAIRMAN MELIUS: Thank you.

8 DR. RINGEN: Oh, and one last  
9 thing. They proposed to use the same method  
10 that this Board rejected to assign a worker to  
11 a thorium area, namely, by using the radiation  
12 badge code. And we have already shown that  
13 that is not a valid way to do it and they  
14 should have known better.

15 Thank you.

16 CHAIRMAN MELIUS: Thank you. And  
17 If you would like to submit more of the  
18 comments in writing, you are welcome to, also.

19 DR. RINGEN: We were going to do  
20 that.

21 CHAIRMAN MELIUS: Okay, thank you  
22 very much.

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1                   Mr. Long, I believe. Welcome.

2                   MR. LONG: Good evening. I just  
3 recently, within the last 24 hours, realized  
4 that this meeting was going on, this meeting  
5 was being conducted. So, I don't have a  
6 formal report. I just want to go on record.

7                   One is the first record I want to  
8 go on is saying that the information was not  
9 properly disseminated. I represent a number  
10 of DOE, Department of Energy, claimants and  
11 none of my people got a notice of this  
12 meeting. So as you see, the rule is not well  
13 represented in terms of claimants, only the  
14 people that have the authority and ability to  
15 understand and get this information from other  
16 sources. And I just by haps got the  
17 information.

18                   I was told when I entered the  
19 meeting that you all responded to already-  
20 existing claimants. But if this meeting is  
21 to extend the period, that would also include  
22 people that are not claimants now, which goes

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1 all the way up to 2007. So those individuals  
2 were not notified, nor were the individuals in  
3 my book, in my client base, was not notified  
4 that this was a meeting. I had to inform my  
5 individuals. And when one of my clients  
6 called to the hotel, they said that they  
7 weren't having a meeting with NIOSH.

8 So there is a lot of  
9 misinformation here in terms of trying to get  
10 the public's interest of participation. I  
11 hope you take that at note.

12 Let me just see if I can  
13 understand the process here. Once we make our  
14 public comments, you guys will do what?

15 CHAIRMAN MELIUS: It depends on  
16 what your public comment is.

17 MR. LONG: I mean, what was this  
18 Advisory --

19 CHAIRMAN MELIUS: Excuse me. We  
20 are not here for a dialogue. If you have  
21 comments, please make the comments.

22 MR. LONG: Well I am trying to

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1 ask, will you provide a report or will you  
2 send it to NIOSH? What will you do.

3 CHAIRMAN MELIUS: Well we work as  
4 the Advisory Board and we have certain  
5 responsibilities under the Act. I believe you  
6 have attended previous meetings here of the  
7 Board?

8 MR. LONG: I have attended one.

9 CHAIRMAN MELIUS: Yes, okay.

10 MR. LONG: Okay.

11 CHAIRMAN MELIUS: But here we are  
12 taking public comment. We are not here in a  
13 dialogue forum. If you want to make comments,  
14 that is fine.

15 MR. LONG: Well, I am not here to  
16 make dialogue. But I also want to know what  
17 happens after the meeting. You can answer  
18 that in some other way. But, please.

19 MR. KATZ: So Mr. Long, I think I  
20 understand what you are trying to get at here.

21 So the public comments,  
22 specifically about the public comments, what

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1 happens to the public comments after you make  
2 them, what we do is two things. One, these  
3 comments go back to the NIOSH program that  
4 does the dose reconstruction. They review  
5 those comments. And for comments that relate  
6 to work that they are doing, they take those  
7 comments into consideration and respond as  
8 they may need to what they heard, the new  
9 information.

10 The other thing that happens is we  
11 distribute those comments when they are  
12 related. For example, this is related -- you  
13 are going to be commenting about Savannah  
14 River Site, I assume.

15 MR. LONG: Yes.

16 MR. KATZ: So they then also go,  
17 we share the comments, again, after the fact,  
18 with the Work Group chair of the Savannah  
19 River Work Group of the Board. And they take  
20 those comments into consideration during their  
21 deliberations of the matters that are before  
22 them in the Work Group, whether it is an SEC,

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1 as it is with Savannah River Site, or a Site  
2 Profile, or whatever.

3 So that is how they get taken into  
4 account.

5 MR. LONG: Thank you.

6 CHAIRMAN MELIUS: And they are in  
7 the transcript of the meeting. So the written  
8 transcript that is posted on the website for  
9 each meeting will include all the comments  
10 that are made.

11 MR. LONG: Okay, thank you.

12 One last comment regarding the  
13 absence of individuals. I would hope that  
14 there is another opportunity for and public  
15 opportunity for other people to participate in  
16 this process.

17 Now as it relates to NIOSH and as  
18 it relates to the claimants for Savannah River  
19 Site, first of all I deal with a number of  
20 claimants with cancer, with all kinds of  
21 disease associated with Savannah River Site.  
22 It is my opinion, as Mr. Anderson said, had I

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1 had the opportunity to prepare a report, it  
2 would be much similar to what he has prepared  
3 and he is in North Carolina.

4           Given that my experiences with  
5 claimants are almost similar, if not exactly  
6 what his experience in terms of records, in  
7 terms of claimants' conditions, in terms of  
8 how the NIOSH process works, it is my opinion,  
9 and I think all of my claimants' opinion is  
10 that the dose reconstruction bar is extremely  
11 too high.

12           Fifty percent -- you have to have  
13 50 percent in order to be a claimant. And the  
14 Department of Labor really takes that as god-  
15 sent as it relates to determining whether a  
16 claimant is eligible for coverage.

17           So, if there is going to be a bar  
18 of 50 percent, I would ask that this committee  
19 and NIOSH consider other conditions outside of  
20 the rating, the dose reconstruction rating,  
21 which means that if the Department of Labor  
22 has some ability to determine, based on the

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1 information that has been provided from them  
2 that they have verified in terms of the  
3 claimant, they should have some free way to  
4 make a decision, based on some of that  
5 information, not just on the dose  
6 reconstruction process. Because I represent a  
7 number of claimants that has breast cancer,  
8 tumors in the brain, prostate cancer, gall  
9 bladder cancer, and all of these claimants  
10 haven't reached a bar of 50 percent. And they  
11 have worked out to the Site for at least 30  
12 years.

13           And as I said, if I had to write a  
14 report, it would be similar to what Mr.  
15 Anderson reported. And based on what Mr.  
16 Anderson just reported, my claimants would  
17 fall in that category that he reported that is  
18 not being covered because of a NIOSH report  
19 that says you have got to reach 50 percent in  
20 order to be claimant.

21           Secondly -- and I am going to wrap  
22 it up in just a second. Secondly, I think it

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1 is an injustice for NIOSH to provide the  
2 claimant an exit interview and the claimant  
3 has little or no idea what that represents in  
4 how NIOSH processes their dose reconstruction.

5 It is an injustice to use that as the  
6 claimant had an opportunity to review the  
7 report. These reports are made by scientists,  
8 Ph.Ds., people with well-read experience and  
9 background in these areas. But these  
10 claimants, some of them have less than a  
11 college degree or high school degree. And the  
12 expectation is that they have had an  
13 opportunity to review the report.

14 I think that you should increase  
15 this to 2007 because I come across a lot of  
16 individuals are way past the 1972 SEC already  
17 in place and so I would ask that you consider  
18 this from a non-technical perspective in terms  
19 of reevaluating the way this process works in  
20 terms of the NIOSH claim and covering these  
21 employees.

22 And secondly, I would hope that --

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1 I don't know how this Board is selected, but  
2 if ever I can participate in this process, I  
3 would be glad to do this because I think I  
4 have or any of us, or some of us, but I think  
5 I have some experience to share other than  
6 just at public comment. Thank you.

7 CHAIRMAN MELIUS: Thank you. Just  
8 so you know, to respond, the 50 percent is set  
9 in the law for this part of the program. And  
10 so it is not open to interpretation. There is  
11 a subtitle E, which is handled by the  
12 Department of Labor which can take into  
13 account other factors.

14 MR. LONG: But there is a process  
15 to appeal and there is a process to amend the  
16 law.

17 CHAIRMAN MELIUS: Yes, but not  
18 from the Board. That is from Congress.

19 MR. LONG: Well but I think the  
20 Board could make recommendations.

21 CHAIRMAN MELIUS: I think that is  
22 not within our charge.

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1 MR. LONG: Okay, thank you.

2 CHAIRMAN MELIUS: Thank you,  
3 though. Thank you for your comments.

4 Okay, Mrs. Virginia Anderson.  
5 Welcome.

6 MS. ANDERSON: I am not sure that  
7 any of you have ever been through cancer but I  
8 have.

9 I have worked at Savannah River  
10 Site from 1978 until 2005, when I retired.  
11 When I went out to Savannah River Site, I was  
12 in my early 20s, 23. When I turned 30, I went  
13 through the first breast cancer. By the time  
14 I turned 37, the second breast cancer. I  
15 don't know what you can do but I would just  
16 ask that you would take in consideration that  
17 those of us that have been through cancer,  
18 through the chemotherapy -- and that is some  
19 vicious stuff -- and also through radiation,  
20 really need to be looked at seriously. I am  
21 still going through changes. I am still going  
22 through a lot of things right now.

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1           And we have spent a lot of money.

2           My husband and I have spent a lot of money on  
3 my having gone through the cancer. Insurance  
4 is extremely high for me because I am -- I am  
5 a cancer survivor.

6           The things that we have had to  
7 endure as people having gone through cancer,  
8 it is very rough. And we just need to be  
9 given the opportunity, rather than each time  
10 we submit paperwork, we get rejection letters.

11          And I just don't think that is fair to us.

12          I didn't have cancer before I  
13 started working at Savannah River Site. But  
14 while working at Savannah River Site, I did  
15 contract cancer twice. And to have gone  
16 through it in the mid-point of my life when my  
17 children were small, it was a lot taken from  
18 them, as well as taken from me, as well as  
19 taken from my husband.

20          And all I ask is that you please  
21 go back and review it again. And for those of  
22 us that have been through cancer and that are

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1 still having problems from the cancer, take a  
2 serious look at it. And then work with us so  
3 that we can get what has been put out there  
4 for us. It can't bring back my health. The  
5 money that is put there, it can't bring back  
6 my health but it can help me and my family in  
7 the long run and it can help with some of the  
8 bills and everything else that I have gone  
9 through. I am still having dental problems.  
10 And all of this is stuff that stemmed from  
11 having gone through chemotherapy.

12 So please, take in consideration  
13 all of us that have been through cancer and  
14 realize that it is no joke. It is for real.  
15 It is our lives. And all we are asking for is  
16 just to be compensated for what we went  
17 through. Thank you.

18 CHAIRMAN MELIUS: Thank you.

19 Is there anybody else here in the  
20 audience who wishes to make public comments  
21 regarding Savannah River that didn't sign up?

22 (No response.)

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1 CHAIRMAN MELIUS: Okay, I just  
2 wanted to make sure.

3 I have one other person that  
4 emailed in to sign up. It is Dr. Dan McKeel.  
5 Dr. McKeel, are you on the line?

6 DR. MCKEEL: Dr. Melius?

7 CHAIRMAN MELIUS: Oh, okay. Now I  
8 hear you.

9 DR. MCKEEL: Yes.

10 CHAIRMAN MELIUS: Thank you. Go  
11 ahead.

12 DR. MCKEEL: All right. Good  
13 evening to the Board.

14 I am concerned about the process  
15 whereby the NIOSH Director and the HHS  
16 Secretary made a final decision on the General  
17 Steel Industry's SEC-00105. I believe my  
18 concerns with the process are serious enough  
19 they merit a written response from the Board.

20 The first point is the full Board  
21 voted nine to eight to deny the SEC on  
22 December the 11th, 2012. The Board

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1 transmitted a letter dated 1/31/13 to that  
2 effect to HHS.

3 Point two, I was told by the DFO  
4 that the 38 co-petitioner GSI White Papers  
5 would not be transmitted to the NIOSH Director  
6 or to the HHS Secretary as part of their  
7 review process. Rather, the full Board  
8 transcripts would convey the sense of SEC  
9 petitioner concerns.

10 I believe these transcripts will  
11 only include my limited ten-minute  
12 presentations on September the 19th and  
13 December the 11th, 2012 and do not remotely  
14 convey my technical input or full range of  
15 concerns, many of which were not addressed in  
16 meeting transcripts of the TBD-6000 Work Group  
17 and the full Advisory Board.

18 Point three, I requested the NIOSH  
19 SEC counselor to keep me fully informed about  
20 the SEC review by Dr. Howard, including when  
21 that was completed and when the Director's  
22 review was transmitted to Secretary Sebelius.

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1 I also asked that I be informed  
2 about the progress of the HHS Secretary's  
3 reviews of the Board letter, the DCAS  
4 materials and the NIOSH Director's review of  
5 SEC-00105. Mr. Kinman promised to do his  
6 best, stating that he usually got a packet of  
7 the materials sent to Dr. Howard.

8 Four, none of my requests were  
9 honored and I was kept out of the notification  
10 loop until March the 11th, yesterday, when I  
11 was surprised and shocked to see posted on the  
12 DCAS website two letters, both dated March 6,  
13 2013 from HHS Secretary Sebelius regarding GSI  
14 SEC-00105. One was the final decision to deny  
15 SEC-00105 and the second was a series of  
16 letters to congressional leaders informing  
17 them of her decision to deny the SEC-00105 for  
18 the GSI site in Granite City, Illinois.

19 Point five, I noted that many of  
20 the facts stated to be the basis for the  
21 Secretary Sebelius' decision were inaccurate  
22 and incomplete. For example, betatron

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1 radiographers were stated to receive the  
2 highest doses. That was true in 2007 but not  
3 in 2012 and 2013, where NIOSH and SC&A both  
4 assigned layout men, a surrogate for all other  
5 non-radiographer workers, the highest dose.  
6 Bounding of the portable radium-226 and its  
7 radon daughters, cobalt-60 sources, iridium-  
8 192 sources, and the 250 kVp portable  
9 industrial x-ray units were not even included  
10 in the list of HHS decisional facts.

11 In addition, no co-petitioner  
12 concerns were mentioned in either of the HHS  
13 letters dated 3/16 -- I'm sorry -- 3/6/13, as  
14 I had anticipated.

15 Point six, finally the DFO and the  
16 SEC counselor confirmed the petitioners now  
17 have 30 days to file for an administrative  
18 appeal, once they receive a FedEx letter  
19 informing them of the final decision of the  
20 HHS Secretary. The GSI SEC-00105  
21 administrative appeal submission clock starts  
22 now. The HHS packet arrived at 2:00 p.m.

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1 today.

2 Point seven, the Petitioners have  
3 several remaining questions about the process  
4 they will have to file for submitting an  
5 administrative appeal. Dan McKeel addressed  
6 those in an email sent yesterday to the Board  
7 Chairman and to the DFO and SEC counselor and  
8 has received an initial response. The lack of  
9 transparency about the NIOSH Director's review  
10 and the HHS Secretary's review of GSI SEC-  
11 00105 is very disturbing both to the  
12 petitioners and the GSI workers.

13 Finally, I want to mention that  
14 today I also circulated two new papers. One  
15 was an annotated transcription of my notes on  
16 the 2/21/13 TBD-6000 Work Group meeting. I  
17 noted that all GSI final doses are not yet  
18 agreed upon, Appendix BB was not addressed,  
19 and substantial work remains on the residual  
20 period model and the assigned job classes at  
21 GSI.

22 The second new paper is a UPI

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1 newspaper account that proves the GSI radium  
2 source was missing. This is referred to as  
3 the plumb-bob -- stolen plumb-bob incident for  
4 the week starting October the 20th, 1953.  
5 Drs. Ziemer and Anigstein had opined the story  
6 might be, quote, hearsay, quote, urban legend,  
7 or did not occur at GSI, all of which turned  
8 out not to be true.

9 Thank you very much for having the  
10 time to address the Board.

11 CHAIRMAN MELIUS: Okay. Thank  
12 you, Dr. McKeel.

13 Is there anybody else on the  
14 telephone line that wishes to make public  
15 comments?

16 MS. BARRIE: Yes, Dr. Melius.  
17 This is Terrie Barrie.

18 CHAIRMAN MELIUS: Okay. Hi,  
19 Terrie.

20 MS. BARRIE: How are you?

21 CHAIRMAN MELIUS: Good.

22 MS. BARRIE: Good. Well, good

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1 evening to you and to the Members of the  
2 Board. I won't keep you long.

3 This is Terrie Barrie with the  
4 Alliance of Nuclear Worker Advocacy Groups and  
5 I am calling in just to thank Mr. Stuart  
6 Hinnefeld for raising the issue this morning  
7 regarding the emails that I and the Hooker  
8 Electrochemical petitioner obtained through  
9 the Freedom of Information Act. I do  
10 appreciate his efforts to ensure that this  
11 type of behavior mentioned in these emails  
12 will no longer be tolerated by DCAS.

13 I was very dismayed to discover  
14 the intent to manipulate the Board by these  
15 two health physicists who were responsible for  
16 SEC evaluations for Rocky Flats and Hooker  
17 Electrochemical. What worries me is that  
18 these two were also involved in other SEC  
19 petitions. So, they are kind of a pall that  
20 is hovering over those SEC petitions, in my  
21 mind.

22 But I am also appreciative of the

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1 Board's concerns. I am still thankful that  
2 the Board tasked NIOSH in September to take  
3 another look at the thorium strikes performed  
4 at Rocky Flats.

5 And Dr. Melius and Dr. Anderson, I  
6 do applaud you for going the extra mile  
7 regarding the Hooker Electrochemical  
8 petitions. Reading the transcripts of the  
9 Work Group meetings must have taken a great  
10 deal of time. I thank you.

11 But I thought I would relate  
12 something to you that was not included in any  
13 of my blog posts or in ANWAG's letter to the  
14 Inspector General. There were many emails  
15 that were redacted under the FOIA exemption  
16 number five. This exemption allows agencies  
17 to withhold documents that are either related  
18 to interagency communications or are pre-  
19 decisional in nature. Because they were  
20 redacted, we have no way of identifying if  
21 these communications were between Department  
22 of Energy and Department of Labor or if they

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1 involve something else. The petitioner from  
2 Hooker Electrochemical has received some  
3 emails after they were reviewed by Department  
4 of Energy.

5 It is my hope that someone will  
6 review the redacted emails and assure us that  
7 nothing more untoward has taken place during  
8 the Hooker petition debate.

9 And speaking of FOIA requests, I  
10 was listening to Mr. Anderson's statement and  
11 he mentioned also that he is expecting his  
12 FOIA request to be fulfilled in January of  
13 next year and that is certainly applicable to  
14 my request for more Rocky Flats petitions.  
15 And that is kind of late in the game. And I  
16 don't think the Board can do anything about  
17 it. I just wanted to put that on record.  
18 These FOIA requests, for us to be effective in  
19 debating the SEC, we really need these  
20 documents.

21 But in conclusion, I am encouraged  
22 that everyone involved took the emails

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1 seriously and have pledged a more honest and  
2 open discourse for all involved. And again, I  
3 thank you.

4 CHAIRMAN MELIUS: Okay, thank you,  
5 Terrie.

6 Comments -- does anyone else on  
7 the line wish to make public comments?

8 MS. HAND: Yes. My name is Donna  
9 Hand.

10 CHAIRMAN MELIUS: Okay.

11 MS. HAND: I would like to make  
12 some comments. But first of all at the very  
13 beginning, is that the methods and the  
14 guidelines were established by the federal  
15 regulations and they became the rules of law.

16 And that was back in 2002 and then again in  
17 2004.

18 And in there, it said that HHS  
19 interprets these terms as far as reasonable  
20 estimates to mean estimates calculated using a  
21 substantial basis of fact and the application  
22 of science-based logical assumptions to

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1 supplement or interpret the factual basis.  
2 NIOSH will give the benefit of the doubt to  
3 the claimant in cases of scientific or factual  
4 uncertainty or unknowns.

5 From the very beginning of the  
6 program, this program has established the  
7 definition of reasonable estimates and this is  
8 put into the federal registry. So underneath  
9 the administrative law, if you are going to  
10 change that definition, that again has to be  
11 public noticed because you are changing the  
12 substantial right of the individuals.

13 The other issue is that underneath  
14 also the statute, a party can do a review of  
15 their dose reconstruction. However,  
16 Department of Labor refuses us to allow the  
17 claimant to do a review. A review is not a  
18 rework. A review is where it is sent back to  
19 NIOSH and an independent party then looks at  
20 that dose reconstruction and see if they  
21 followed the guidelines that has been  
22 established underneath this program and

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1 applied the correct methods.

2 This has not been done since the  
3 beginning of the program. I have been trying  
4 and trying to get reviews. In 2003, there was  
5 a memorandum of understanding between Peter  
6 Turcic and NIOSH for reviews and it is not  
7 allowed. We cannot get an independent review  
8 of the dose reconstruction.

9 The other issue is the Special  
10 Exposure Cohort. Pinellas Plant can't even  
11 qualify, even though we have several  
12 classified projects and also a classified  
13 metal tritide.

14 And underneath 83.3(b), the  
15 Director of OCAS may, which is at his  
16 discretion, determine that records and/or  
17 information requested from DOE, an Atomic  
18 Weapons Facility, or another source to  
19 evaluate a petition is not or will not be  
20 available on a timely basis. Such a  
21 determination will be treated mandatory for  
22 the purpose of the petition evaluation as

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1 equivalent to a finding that the records  
2 and/or information requested are not  
3 available.

4 In 2009 was the first petition for  
5 the Pinellas plant. They said that we did not  
6 qualify. However, the search for documents on  
7 the Pinellas plant, the majority of that  
8 didn't come until after 2010-2011. In 2012,  
9 instead of answering the question can you do  
10 the internal dose, which was asked by the  
11 Working Group to Peter Darnell, they came up  
12 with a new Site Profile and Technical Basis  
13 Document and never answered the question if it  
14 could do the dose or not.

15 According to Department of Labor,  
16 there is 19 radioactive substances at Pinellas  
17 Plant. According to the Department of Energy,  
18 there were 28 radioactive substances and six  
19 of those radioactive substances were larger  
20 than the curie limit. So we have issues there  
21 that is not concise or not consistent with the  
22 other sites. And they did have a depleted

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1 uranium that they refilled the beds with,  
2 according to DOE.

3 There has also been a Freedom of  
4 Information Act request for all of the  
5 documentation that NIOSH used to do the Site  
6 Profile and to not make a Pinellas Plant  
7 qualify. That is over 47,000 pages that is  
8 still going through review by DOE right now.

9 In January of 2012, you had  
10 interviews with the Q-clearance claimants and  
11 nothing has happened with that. We do not  
12 have any information on that and, according to  
13 Greg Lewis, they have already finished it and  
14 sent it back. So where are those interviews?  
15 What is the information that you can allow to  
16 be public out of those interviews? And will  
17 that change the dose reconstruction or would  
18 it make it qualify for a Special Exposure?

19 Also there was a report in 2008, a  
20 report of tritide study at the Responsive  
21 Neutron Generator Product Deployment Center  
22 Sandia number 7583, where it said the current

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1 single count analysis method for wipes is  
2 adequate for HTO but is not adequate to  
3 quantify suspected particulate tritium levels.

4 The majority of samples within  
5 neutron generator production operations may be  
6 expected to exhibit an increase in count rate  
7 over time and it is not currently possible to  
8 accurately predict which samples will not  
9 increase.

10 We recommend that the tritium  
11 sample vials within neutron generator  
12 operations at the RNGPDC routinely undergo a  
13 second count seven to ten days after the  
14 initial count. We further recommend that the  
15 samples found to increase more than 20 percent  
16 do another count again in 45 and 90 days to  
17 estimate their final counting ratio. If the  
18 expected overall increase is less than five,  
19 then the current ratio is five.

20 So that was 2008. They are saying  
21 that you can't do the suspension factors. But  
22 according to NIOSH's last report on the

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1 Working Group, they said that they can't.

2 You also have documentation done  
3 by research where restricted data was being  
4 told that if a worker worked with classified  
5 restricted data and wore a dosimetry badge,  
6 for them to mark that dosimetry badge as zero.

7 It doesn't matter what they had or not. We  
8 are looking further into that and I am  
9 researching further to see if that is  
10 accurate. But it was the policy at that time  
11 that if it was a classified or restricted or  
12 sensitive data, your dosimetry is always  
13 marked zero.

14 And then the other issue is that a  
15 report from improvement in radiation exposure  
16 measurement at Rocky Flats over the past 30  
17 years and its possible impact on  
18 epidemiological studies. This was done in the  
19 '70s. It is stated there that the neutron TLD  
20 badge in 1971, prior to that was all the  
21 neutron film would be misread. That after  
22 1971, that it met the criteria for the DOELAP

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1 to be a 30 to 40 percent performance criteria.

2 So even in your documentation back  
3 in the abstracts of studies are showing the  
4 neutron badge wasn't accurate until 1971. And  
5 they said, continued that this was the same  
6 for all the DOE sites.

7 So all I am asking you is that if  
8 you are going to do these dose  
9 reconstructions, please apply the law. Please  
10 apply the regulations and the guidelines. And  
11 if you are going to change it, then you must  
12 be aware that you have to do public notice  
13 before you can implement it into a dose  
14 reconstruction.

15 Also, all the dose reconstruction  
16 people that has been doing it, they keep on  
17 going back to the labor category. That is not  
18 what the law says. It says in the performance  
19 of duties. So even if he may be a janitor, in  
20 performance of duties, if his hand is cut on a  
21 classified waste drum, then that is exposure  
22 there and that is not being addressed. The

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1 radio-generating devices are not being  
2 addressed. Rooms are not being addressed. It  
3 is as if, you know, well no, we are not going  
4 to add it. And then they go and say that they  
5 had the highest dose available, the worst case  
6 application. And it wasn't.

7           Please, I will, like I said, as  
8 soon as I get the rest of my documentation I  
9 will be writing to the Working Group because  
10 the last thing we discussed is put it all in  
11 writing for them. And I told them I would.

12           But this is just one example of  
13 where the documentation is there and it is not  
14 being addressed in the radiation dose  
15 reconstruction.

16           Thank you.

17           CHAIRMAN MELIUS:        Thank you.  
18 Anybody else on the line that wishes to make  
19 public comments?

20           (No response.)

21           CHAIRMAN MELIUS:        Okay, that  
22 closes our public comment period and closes

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1 the meeting. And we will meet again on the  
2 phone in a couple months and in Idaho in July.

3 Get that snow melted, Brad.

4 MR. KATZ: Thank you, everybody.

5 (Whereupon, at 6:51 p.m., the  
6 above-entitled matter went off the  
7 record.)

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