

UNITED STATES OF AMERICA  
CENTERS FOR DISEASE CONTROL

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NATIONAL INSTITUTE FOR OCCUPATIONAL  
SAFETY AND HEALTH

+ + + + +

ADVISORY BOARD ON RADIATION AND  
WORKER HEALTH

+ + + + +

112th MEETING

+ + + + +

TUESDAY  
AUGUST 9, 2016

+ + + + +

The meeting convened at 8:30 a.m.,  
Mountain Time, in the Residence Inn by Marriott,  
635 West Broadway, Idaho Falls, 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  
JAMES E. LOCKEY, Member  
WANDA I. MUNN, Member  
JOHN W. POSTON, SR., 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

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BARRIE, TERRIE\*  
BLAZE, D'LANIE  
CLAYDEN, DAVID  
COLLEY, VINA\*  
CRAWFORD, CHRIS "FRANK," DOL  
DOMINA, KIRK  
FESTER, JOSH\*  
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1 P-R-O-C-E-E-D-I-N-G-S

2 10:32 a.m.

3 **Welcome and Introductions**

4 CHAIRMAN MELIUS: (presiding) Good  
5 morning, everybody. This is the Advisory Board on  
6 Radiation and Worker Health Meeting 112 here in  
7 Idaho Falls.

8 Ted?

9 MR. KATZ: Yes. So, welcome,  
10 everybody. Some preliminaries and, then, I will  
11 do roll call for the Board Members.

12 For people in the room and for people  
13 online, in the room at the back table there we have  
14 meeting materials for all the presentations that  
15 are going to be given today, including some  
16 background reading related to those presentations.  
17 So, you are welcome to those.

18 Also, for people in the room and on the  
19 line, there is a public comment session tonight at  
20 5:00 p.m., and we will start promptly at 5:00. So,  
21 please be ready to comment then, if you want to.

22 And if you are here -- if you are on the  
23 line, you don't need to sign in, of course, although

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1 some people have sent me emails, and that is  
2 fine -- but people in the room, the sign-up is  
3 outside. There is a sign-up book with Zaida, who  
4 is sitting outside. She will take your name, so  
5 that we can call on you first here in the room.

6 Online, the meeting materials for today  
7 are posted on the NIOSH website. It is under the  
8 Board section, Schedule of Meetings, today's date,  
9 you go there and all of the presentations and  
10 related background reading are posted there. So,  
11 you can open those, read those, download those.

12 There is also Live Meeting with the  
13 agenda for today. That is posted there. So, you  
14 can go on Live Meeting, if you want to actually sort  
15 of see the slides as they are being presented on  
16 your computer, for folks on the phone who are  
17 online.

18 Roll call, let's do that, and I will  
19 just run down the list. I will address conflicts  
20 for folks that have conflicts to make this simple.

21 But let's go with Anderson.

22 MEMBER ANDERSON: Here.

23 MR. KATZ: Beach?

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1 MEMBER BEACH: Here.

2 MR. KATZ: Clawson?

3 MEMBER CLAWSON: Here.

4 MR. KATZ: And Mr. Clawson has a  
5 conflict for the INL session.

6 Field?

7 MEMBER FIELD: Here.

8 MR. KATZ: Kotelchuck?

9 MEMBER KOTELCHUCK: Here.

10 MR. KATZ: Lemen I expect to be absent.

11 Dr. Lemen, are you on the line?

12 (No response.)

13 MR. KATZ: Someone in the hallway said  
14 no. Dr. Lockey?

15 MEMBER LOCKEY: Here.

16 MR. KATZ: Dr. Melius?

17 CHAIRMAN MELIUS: I'm here.

18 MR. KATZ: Ms. Munn?

19 MEMBER MUNN: Here.

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

22 MEMBER POSTON: I'm here, but it is  
23 awful hard to hear you.

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1 MR. KATZ: Okay. Welcome. I will  
2 adjust it. I think it should get better.

3 And Dr. Poston has a conflict when we  
4 get around to speaking about ANL West.

5 Dr. Richardson?

6 (No response.)

7 MR. KATZ: David Richardson?

8 (No response.)

9 MR. KATZ: Okay, we will come back  
10 around to him. Dr. Roessler?

11 MEMBER ROESSLER: Here.

12 MR. KATZ: Mr. Schofield?

13 MEMBER SCHOFIELD: Here.

14 MR. KATZ: Ms. Valerio? Loretta, are  
15 you on the line?

16 MEMBER VALERIO: I'm here. I'm here.  
17 Can you hear me?

18 MR. KATZ: Oh, super. Yes. Thank  
19 you. And Loretta has a conflict today for the INL  
20 presentation. And Dr. Ziemer?

21 MEMBER ZIEMER: Yes.

22 MR. KATZ: Super.

23 MEMBER ZIEMER: (Indiscernible.)

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1 MR. KATZ: Paul, I'm sorry, your voice  
2 was completely garbled. Can you run that by me  
3 again?

4 MEMBER ZIEMER: Yes, there is  
5 (indiscernible) on the line.

6 MR. KATZ: I think maybe we have an  
7 audio problem. I'm not sure, but -- oh, it is not  
8 on our end. Paul, are you on a speaker phone  
9 perhaps?

10 MEMBER ZIEMER: No, I'm not, but  
11 there's (indiscernible).

12 MR. KATZ: It sounds like your phone is  
13 breaking up, Paul. I mean --

14 MEMBER ZIEMER: Yes, I mean everything  
15 is (indiscernible).

16 MR. KATZ: Paul, we can't really  
17 understand what you're saying.

18 MEMBER ZIEMER: Okay.

19 MR. KATZ: Okay. Well, all right.  
20 Well, let me just go back again.

21 Dr. Richardson, have you joined us?

22 MEMBER ZIEMER: Okay, let me try it  
23 again, Ted.

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1 MR. KATZ: Oh, that's perfect.

2 MEMBER ZIEMER: Can you hear me?

3 MR. KATZ: Yes.

4 MEMBER ZIEMER: Yes. There was a  
5 constant clicking on the line. I don't know. But  
6 I am hearing that echo also.

7 MR. KATZ: Okay, we can hear you now.

8 Dr. Richardson, are you on the line?

9 (No response.)

10 MR. KATZ: Okay. So, I think we expect  
11 him, but not present.

12 Let me just ask, also, for everyone on  
13 the line, except for like public comment session  
14 and petitioners for their petitions, otherwise  
15 please mute your phones for non-Board Members,  
16 especially mute your phones. That will improve  
17 the audio for everyone else on the line and for  
18 people trying to hear them here in the room.

19 And please no one put the call on mute  
20 for people on the conference call. Hang up and  
21 dial back in if you need to go for a piece. I mean,  
22 don't put it on hold, I should say, because hold  
23 will mess up the audio for everyone else, too.

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1                   And with that, Dr. Melius, it is your  
2 meeting.

3                   CHAIRMAN MELIUS:    Okay.    Thank you,  
4 Ted, and we will get right to it.    The first speaker  
5 is NIOSH Program Update.    Stu Hinnefeld.

6                   MR. HINNEFELD:    Thank you, Dr. Melius.

7                   Normally, I don't have enough things to  
8 say to fill 15 minutes, but today, in addition to  
9 the program update, I am giving LaVon's SEC status.  
10 It is appended to the end of my presentation because  
11 LaVon is not here at the meeting this week.

12                  CHAIRMAN MELIUS:    He has gone fishing,  
13 I understand.

14                  MR. HINNEFELD:    Yes, drowning worms up  
15 in the UP.

16                  CHAIRMAN MELIUS:    Yes, they have good  
17 fishing out here.    I don't understand.

18                  MR. HINNEFELD:    Well, we had words  
19 about it.

20                                       (Laughter.)

21                   **NIOSH Program Update**

22                  MR. HINNEFELD:    Okay, just a few news  
23 items about the program since our last meeting.    I

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1 always try to keep us up-to-date on outreach  
2 activities.

3 A couple of things, one that has  
4 happened already and another that is coming up.  
5 Our participation in the Joint Outreach Task Group  
6 meetings. Joint Outreach Task Group is a joint  
7 effort among us, DOE, DOL, the Former Workers  
8 Monitoring Program, and, also, the ombudsmans from  
9 both DOL and our office. These are outreach  
10 efforts to provide updates to affected parties,  
11 affected populations, as we go.

12 We were here in June, here in Idaho  
13 Falls and at Pocatello, had several meetings.  
14 That was largely related to the Classes that were  
15 added at ANL-Westand Idaho recently. Just  
16 recently, those Classes became effective.

17 And then, we have meetings planned with  
18 Burlington and Ames facilities. Those are  
19 sponsored by the former Workers Monitoring  
20 Programs at those facilities, and the rest of us  
21 are participating as well for providing  
22 information about the program.

23 Additional activity that we consider an

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1 outreach activity is we are once again doing our  
2 dose reconstruction and SEC workshop in  
3 Cincinnati. This is done largely through our  
4 outreach contractor, ATL International. That  
5 will be toward the end of September, not exactly  
6 at the end, but toward the end of September.

7 We did, in fact, since the last Board  
8 meeting, I attended an advocates' meeting with the  
9 Department of Energy and the Department of Labor  
10 in Denver. We have done this now -- what -- three  
11 times I think. And it was a chance to answer some  
12 specific questions from a group of advocates who  
13 have kind of been longstanding members of the  
14 community, so to speak, in the participation of the  
15 programs.

16 The questions they had for us had to do  
17 with maybe making the dose reconstruction a little  
18 clearer whether the dose reconstruction report is  
19 close to compensable or not, because that would  
20 provide some evidence to them on whether it is worth  
21 really trying to pursue this and is this close? Is  
22 there a chance that this might change if we can get  
23 some additional information in?

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1           And I said, well, we don't officially  
2           run the Probability of Causation.   When we send the  
3           draft dose reconstruction to the claimant, that  
4           hasn't officially been run yet.   But we did agree  
5           that we would write in the dose reconstruction  
6           report if it was a best estimate, which would mean  
7           it is between 45 percent and 53 percent.   So, you  
8           are at least relatively close to the decision  
9           point.   And so, we agreed that we would be rigorous  
10          about saying that in the dose reconstruction, so  
11          they would know if it was particularly close or not.

12                 And then, at the meeting they also asked  
13          would it be possible to clarify on the IREP input  
14          sheet what type of dose each line refers to, and  
15          that turned out to be easier than I thought because  
16          that is something that is done routinely on the IREP  
17          input sheet that we see with the dose, with the dose  
18          reconstruction, the Excel file.

19                 But, when we took the picture of the  
20          IREP input sheet in order to make it legible, it  
21          was too far out to the right on the page to get those  
22          notes onto the picture, because the picture would  
23          become illegible.   But there is a column that is

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1 essentially unused in the IREP picture. So, what  
2 we agreed to do is we would move our comments from  
3 that part of the right column into that unused  
4 column in the IREP picture. So, those will appear  
5 now in the picture of the IREP input sheet in the  
6 dose reconstruction. So, we were able to do that.

7 They also asked about Santa Susana  
8 Field Laboratory and whether there was going to be  
9 progress on that. And we have managed to make some  
10 progress on Santa Susana this year, and we expect  
11 we will have a presentation for the Board at the  
12 next meeting on Santa Susana.

13 And then, other questions were about  
14 our use of exemptions, redacted material for FOIA  
15 exemptions. And we gave a little explanation  
16 about some of that.

17 They also had a question for DOE about  
18 the Kadlec Hospital, which is a hospital in  
19 Richland. In dose reconstructions the radiation  
20 exposure has to be at the site. So, X-rays that  
21 are taken on an offsite facility are not included  
22 in the dose reconstruction.

23 Information came to light that the

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1 Kadlec Hospital, where the X-rays are taken at  
2 Hanford, was actually part of Hanford until 1956.  
3 So, we changed our technical documentation to show  
4 that. So that, at least through 1956, X-rays at  
5 Hanford are now included in dose reconstructions,  
6 and we are in the process of preparing a PER to  
7 determine if any claims are going to change because  
8 of that. So, those were items that came out of that  
9 discussion with them.

10 Real briefly, about personnel actions,  
11 we have managed to hire a technical support team,  
12 a computer person, and indoor technical support  
13 team. You guys don't really deal with them very  
14 often, once in a while on the phone maybe. We  
15 managed to hire one of the people who had been a  
16 contractor, a support contractor, for us in that  
17 group. So, that person came onboard this summer.

18 You probably know that we have had some  
19 attrition in the health physics ranks in the last  
20 year or so. We have had the retirements of J.J.  
21 Johnson and Greg Macievic and, then, Sam Glover  
22 transferred to another NIOSH division. We are  
23 attempting to fill, backfill the health physics

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1 positions, at least a couple. We are trying to  
2 replace two of the three.

3 We did a personnel action, a hiring  
4 action, this summer, selected two candidates, and  
5 they both declined our offer. So, we will be going  
6 back out with another competition right away in the  
7 new fiscal year when it gets started, when the new  
8 fiscal year gets started, and see what we can do  
9 there.

10 The electronic records is something  
11 that I want to comment on because I don't  
12 know -- many of you have been to our facility at  
13 least once or twice, I hope. I think maybe some  
14 of you got the tour of our B2 area where all the  
15 claims come in. We have these huge file cabinets  
16 just stuffed with paper. That's all gone. That  
17 has all been verified and imaged, and it is all  
18 electronic now and the paper is all gone.

19 We get only a little bit of paper now  
20 from two of the four District Offices. Two of the  
21 District Offices submit the claims to us now on a  
22 Secure Access Management System, which is a  
23 computer system where they get a credential, one

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1 of our credentials, and they can submit these  
2 claims. So, two of the District Offices are doing  
3 that. Two of the District Offices, the other two  
4 are in the process of switching to that system. In  
5 the meantime, they are sending us encrypted CDs  
6 and, then, still some paper.

7 So, we made a big headway. I thought  
8 that was really, really neat, to finish that up and  
9 get that verification and get electronic down  
10 there. So, we have done that.

11 A couple of items that didn't even  
12 make -- I had such a busy slide, these didn't even  
13 make the slide. We have had a couple of contract  
14 awards this summer. That kind of maintains our  
15 operation the way we like to maintain it.

16 Our outreach contract was expiring at  
17 the end of this fiscal year, and we had a  
18 replacement contract in place, and it is in place  
19 now in plenty of time. And the incumbent ATL was  
20 the successful bidder on that.

21 Also, our contract with the company  
22 that used to be called SENES, which is now Oak Ridge  
23 Center for Risk Analysis, was expiring at the end

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1 of this fiscal year. We were able to award a new  
2 contract to them as well. So, those two support  
3 contracts will remain after, into the new fiscal  
4 year.

5 Okay. Now at the last meeting I  
6 suggested I not do the 5 and 10 thousand report  
7 anymore. And so, I was asked to do a 20,000 case  
8 report. So, I have a report on the statistics of  
9 the first 20,000 cases.

10 These are the totals so far: the  
11 numbers sent to us, the numbers returned. You can  
12 see with, not counting administratively-closed  
13 cases, we have about 1200 that are counted with us.  
14 Of the ones that we have returned to DOL, most of  
15 them were returned with a dose reconstruction.

16 There are a couple of other categories,  
17 either an SEC pull or a pull for some other reason  
18 by DOL. That is when they send us a claim and,  
19 then, they tell us later on, "Oh, you know, that  
20 was a mistake. That one shouldn't be done. We're  
21 going to ask for it back." Also, a pull occurs  
22 sometimes when the claimant dies before the case  
23 is done and there is no eligible survivor or DOL

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1 hasn't found an eligible survivor.

2 Of the cases that are still with us,  
3 there are 200 of those 1200 that are essentially  
4 in the hands of the claimants; the draft dose  
5 reconstruction is with the claimant. So, we are  
6 awaiting them if they have any additional  
7 information to tell us. And then, some are  
8 actively being worked on by the dose  
9 reconstructions and others in case development,  
10 which means getting their exposure records or  
11 whatever has to happen to get the case ready to turn  
12 over to a dose reconstructor.

13 Here are the Probability of Causation  
14 results of the ones that have been returned with  
15 dose reconstruction. I did the math real quickly  
16 upstairs, and I believe it is about 28 percent are  
17 successful. And that is kind of where we have been  
18 for I think a couple of years.

19 Here is our summary of the first 20,000  
20 claims. Most of those are back at DOL either being  
21 pulled or with a DR. There are 400 claims counted  
22 with us. Most of those are  
23 administratively-close.

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1           When a case administratively-closes,  
2           it stays with us. It can be reopened. A case is  
3           administratively-closed when the claimant doesn't  
4           return the OCAS-1 form to tell us that they don't  
5           have anything more to say, to add. OCAS-1 doesn't  
6           mean they agree with the dose reconstruction; it  
7           just means that they don't have any more  
8           information to add. And so, when those are  
9           administratively-closed, they stay with us. If,  
10          later on, the claimant changes their mind and  
11          returns a OCAS-1, then we will reopen an  
12          administratively-closed case.

13                 There are 14 claims with claimants, 14  
14          DRs with claimants and 30 DRs that are being worked  
15          on. Most of these returns, I looked up the three  
16          initials because that always bothers me when there  
17          are initials in here. And there are two categories  
18          of these. I forget which one has two and which one  
19          has one.

20                 One category is that it is a claim that  
21          was paid through an SEC and, then, the claimant  
22          later filed a claim for a non-SEC cancer for medical  
23          benefits, a cancer that they got later. So, that

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1 is one category, and I forget if that is one or two  
2 of these cases.

3 The other category is a claim that was  
4 administratively-closed, which in this case a  
5 claimant opted-out of the process. You know, read  
6 the dose reconstruction, realized it wasn't  
7 compensable. Said, I'm done. Didn't return the  
8 OCAS-1. That case was administratively-closed.

9 It, then, was reopened with an  
10 additional cancer. The claimant got an additional  
11 cancer, thought he would try again. And so, that  
12 claim has been reopened. Since it was closed and  
13 never returned to DOL, we count it as an initial  
14 in our system.

15 And then, 33 numbers were deleted.  
16 Those are early numbers from when DOL would send  
17 us claims by mistake. They would send us a claim  
18 for, essentially, not a radiation cancer claim.

19 **SEC Status Update**

20 And onto our petition summary, our SEC  
21 petition summary. I will probably do a poor job  
22 standing in for LaVon on this.

23 We have received 234 petitions. We are

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1 now in the process of four in the qualification  
2 process. That doesn't mean they will qualify. It  
3 means we are deciding if they will qualify; 142 have  
4 been qualified, and we have one of those is in the  
5 evaluation process now. The other 41 at least the  
6 DRs have been completed and delivered. I think one  
7 of those might be today.

8 And there are 14 total with the Advisory  
9 Board. Most of those have had action on a portion  
10 of the SEC, and there is a portion of the SEC where  
11 the action has not been assigned yet. Most of  
12 those, there is an SEC Class. It is just other  
13 portions of the employment, other portions of the  
14 facility are still under consideration. And then,  
15 a number of the claims have not qualified for  
16 evaluation.

17 These are the claims in the  
18 qualification process. We have one from Y-12 that  
19 extends past the current Y-12 Class, one from  
20 Pinellas. I think there are actually two from  
21 Pinellas, yes, and one from Carborundum.

22 I think the rather unusual time period  
23 here is it is the residual period and maybe some

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1 time that was added after the initial, added time  
2 after the initial listing for the site, I believe  
3 is what happened there.

4 Our petition under evaluation is Santa  
5 Susana Field Laboratory. This is an 83.14. We  
6 have the petition in-house now, and we are pretty  
7 confident we will have that to the Board well in  
8 advance of the next meeting.

9 And we have determined if an  
10 infeasibility, we are not entirely sure that things  
11 become feasible the next day, the next year. So,  
12 there is still some work to be done on this, but  
13 we do have an infeasibility for some period of time.

14 Here are items are awaiting the initial  
15 Board action. Actually, the Idaho National Lab,  
16 there has been some initial Board action on that.  
17 There is still a piece there, there has not been  
18 where we recommended, adding some years for the  
19 chem plant.

20 Carborundum and Blockson were just  
21 recently provided to the Board, and I think the  
22 initial review of the Evaluation Reports are either  
23 underway or getting close to being done. And then,

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1 Bliss & Laughlin I believe were presenting at this  
2 meeting.

3 And these are the other 10 that are with  
4 the Board. All of these I think have Classes for  
5 some portion of the Class, of the petition, and  
6 there are portions still being determined.

7 These are potentially 83.14s that we  
8 know about, we believe are infeasibility, but we  
9 have not received a claim that would fall into  
10 these petition periods. And so, we don't have a  
11 claimant to file the Form A and start the petition.

12 Let's see here. I hope that is the end  
13 because it won't advance anymore. I am pretty sure  
14 that is the end.

15 Anybody have any questions?

16 CHAIRMAN MELIUS: Okay. Thank you,  
17 Stu. Yes, tell LaVon he is in trouble. I don't  
18 know. We have a very excellent substitute here.

19 (Laughter.)

20 MR. HINNEFELD: Well, LaVon is a lot  
21 more fun about it than I am, though.

22 CHAIRMAN MELIUS: Well, I don't know.  
23 He had better be on his game next meeting. Maybe

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1 a recommendation from the Board.

2 I have one suggestion on the SEC  
3 petitions. You like to put all the onus on the  
4 Board to complete a number of petition evaluations,  
5 but there are -- and I believe LaVon has been  
6 keeping track of these -- there are a number of  
7 petitions where you have reserved sections and have  
8 yet to complete the reports on.

9 MR. HINNEFELD: Yes, that's true.

10 CHAIRMAN MELIUS: And I think it would  
11 be useful to sort of keep us updated on those on  
12 a regular basis because it is --

13 MR. HINNEFELD: Sure.

14 CHAIRMAN MELIUS: -- there are  
15 sections, and I think for people interested in  
16 those particular sites also.

17 MR. HINNEFELD: Okay.

18 CHAIRMAN MELIUS: Certainly, I think  
19 parts of INL and other sites are. So, if those  
20 could be included in the update process, I think  
21 it would be useful. Some of them I think are  
22 residual periods that sort of got left over.

23 MR. HINNEFELD: Well, there are some

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1 Classes we recommended because we found what we  
2 considered insufficiency, data insufficiency.

3 CHAIRMAN MELIUS: Right.

4 MR. HINNEFELD: And we know it is  
5 insufficient for that. So, let's add this Class,  
6 so these people can get paid.

7 CHAIRMAN MELIUS: Yes.

8 MR. HINNEFELD: But we are still  
9 working at others --

10 CHAIRMAN MELIUS: Yes.

11 MR. HINNEFELD: -- is what you are  
12 talking about.

13 CHAIRMAN MELIUS: Yes, yes. Or a  
14 large site like INL where there is --

15 MR. HINNEFELD: Right, right.

16 CHAIRMAN MELIUS: -- sections that you  
17 just have to --

18 MR. HINNEFELD: Right. That would be  
19 one for sure, I know.

20 CHAIRMAN MELIUS: Yes.

21 MR. HINNEFELD: Yes, yes.

22 CHAIRMAN MELIUS: Any other questions  
23 or comments for Stu?

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1 (No response.)

2 CHAIRMAN MELIUS: Okay. Well,  
3 thanks. On the phone?

4 (No response.)

5 CHAIRMAN MELIUS: Silence? Okay.  
6 Thank you, Stu.

7 Do we have -- oh, there you are. You  
8 were hiding back there. We were looking for you.  
9 We thought Delta might have you, you know, might  
10 have flown you to Europe by mistake or something  
11 like that.

12 (Laughter.)

13 CHAIRMAN MELIUS: You and many others.  
14 Anyway, welcome, Frank.

15 **DOL Program Update**

16 MR. CRAWFORD: Well, good morning.  
17 I'm Frank Crawford from the Department of Labor,  
18 and I am basically here with statistics on what our  
19 claims processing area has done in conjunction with  
20 NIOSH.

21 MR. KATZ: Could you get a little  
22 closer to the mic, please?

23 MR. CRAWFORD: Sure. Then, we see the

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1 money that has gone out. That is for you, Wanda.

2 MEMBER MUNN: Thank you, Frank.

3 MR. CRAWFORD: And we are going to see,  
4 I think, Part E catching up over time. That is  
5 where a lot of future work resides for the  
6 Department.

7 The figures here, this 185,000 cases,  
8 essentially. It gives you an idea of the flow of  
9 work, and \$12.6 billion in total compensation so  
10 far in the program.

11 Now Part B cases with final decisions,  
12 one category that we emphasize, and here we see that  
13 there are a little less than 10,000 with dose  
14 reconstructions that are accepted, but there's  
15 about 24,000 SEC cases accepted. And less than 3  
16 percent of those cases were accepted under both  
17 criteria, Part B, dose reconstruction, plus SEC.  
18 And then, the total cases come to about 35,000.

19 Again, statistics, these are all on the  
20 Board website or the SEC website. So, if you are  
21 curious, I don't think there is any reason to write  
22 anything down.

23 We do have about 46,000 cases that were

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1 referred to NIOSH for dose reconstruction; 44,000  
2 cases, roughly, have been returned. And we think  
3 there's about 2,000 cases currently at NIOSH.

4 I looked at Stu's numbers, and that is  
5 pretty close. We are always a little off. We have  
6 different stop dates when we collect the  
7 statistics, and so forth.

8 So, cases, again, another view of cases  
9 with dose reconstructions and final decisions. We  
10 see that approvals are running about 35 percent and  
11 denials 65 percent, based on dose reconstructions.

12 This is simply cases filed. We see  
13 that the NIOSH part of it is only about a third of  
14 the total caseload. The other category we have  
15 discussed before.

16 I just wanted to comment again, as I do  
17 every meeting, that the other category is rather  
18 large, but it includes silicosis cases, beryllium  
19 disease, and chronic beryllium disease. So, that  
20 is a fairly substantial portion of our claimants,  
21 I would say.

22 And we see that SEC cases that didn't  
23 go to NIOSH represent 15 percent of the total cases,

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1 and RECA cases 9 percent.

2 And now, Part B cases or the final  
3 decision, just another little slice in the data.  
4 Here, with the SEC cases included, we now have  
5 approximately 48,000 approvals and 45,000 denials.  
6 So, the SEC cases make an enormous difference.

7 These sites don't change much, but the  
8 top four sites, Hanford, Savannah River, Y-12, and  
9 Los Alamos, they are generating the most new cases.

10 This chart of DOE versus AWE cases  
11 doesn't seem to change much, either. I keep  
12 expecting the AWE cases to fade away since most of  
13 that work was far in the past now, but they are still  
14 holding up at 12 percent of the total cases.

15 Now, on the petitions being considered  
16 today, I won't go through all the numbers here, but  
17 this will give you some idea of the size of the site,  
18 based on the number of cases filed at the site and  
19 what is at stake for each petition. It also gives  
20 you some idea of how many cases have been filed and  
21 approved or denied for each site. And this is  
22 Blockson, INL, and ANL-West shown on the screen  
23 now.

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1                   Now we are going to Westinghouse  
2           Electric, which is quite a small site, 75 cases  
3           filed. And Savannah River, the opposite, 17,000  
4           cases filed. And Bliss & Laughlin, the 88. And  
5           moving on to Pinellas and United Nuclear.

6                   Now I would like to discuss briefly our  
7           outreach events for 2016.

8                   MR. KATZ: I'm sorry, was someone  
9           asking a question on the line? Paul? I don't know  
10          who is speaking even. People on the phone line,  
11          can you hear this? Someone on the phone line, like  
12          Paul, can you hear the audio?

13                   (No response.)

14                   MR. KATZ: Okay. I think we need to  
15          recess for a moment and sort out this audio problem.

16                   (Whereupon, the above-entitled matter  
17          went off the record at 9:04 a.m. and resumed at 9:09  
18          a.m.)

19                   CHAIRMAN MELIUS: Keep going.

20                   MR. KATZ: Yes.

21                   MR. CRAWFORD: All right, I'll resume.  
22          We are talking about outreach events. Let's move  
23          along here. You have all seen the members of the

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1 Joint Outreach Task Group. So, there we go.

2 These are outreach events in fiscal  
3 year 2016. And I believe on the last slide we added  
4 the tail-end of calendar year 2016 as well.

5 So, for the folks at home, we have had  
6 events now in Moab, Utah; Idaho Falls; Grand  
7 Junction; Pocatello; Bridgeport, Missouri. And  
8 then, earlier in the year at Tampa; Orlando;  
9 Grants, New Mexico; Farmington, New Mexico, and  
10 Niagara Falls, New York.

11 And then, we see the schedule for the  
12 Traveling Resource Center: Los Alamos in August  
13 and September and Albuquerque also  
14 August-September; and Albany, Oregon for an  
15 outreach event later in August. In September,  
16 Burlington, Iowa; the same month, of course, Ames,  
17 Iowa. And in October, we have Huntington, West  
18 Virginia.

19 And the rest of the slides are repeated  
20 from every single presentation, and they are on the  
21 Board website. So, we won't go through them, but  
22 they are the details of Part B and Part E, who  
23 qualifies as a survivor and that sort of thing.

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1 Any questions?

2 MEMBER ZIEMER: This is Ziemer. I  
3 have one question. Am I coming through okay?

4 MR. KATZ: Yes. Yes, Paul, that's  
5 great.

6 MEMBER ZIEMER: I am wondering how many  
7 of the sites were first-time outreach events; you  
8 hadn't been to that location before.

9 MR. CRAWFORD: I don't think I caught  
10 the question, Paul.

11 CHAIRMAN MELIUS: I believe the  
12 question was, of the outreach sites, how many had  
13 you not been to before?

14 MR. CRAWFORD: Oh, unfortunately, that  
15 I can't answer. I am just not sure. I have little  
16 to do with that part of the program, so I don't keep  
17 track of it myself. But many of the names seem  
18 quite familiar. The only one that was really new  
19 to me -- well, there were two. Albany, Oregon and  
20 Burlington, Iowa were new names to me, but that is  
21 all I know. Wah Chang in Albany Wanda Munn  
22 mentions.

23 CHAIRMAN MELIUS: Okay. Any other

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1 questions?

2 (No response.)

3 CHAIRMAN MELIUS: Okay. Thank you.

4 Sorry for the glitches, but we are back on track.

5 Okay, our DOE update.

6 **DOE Update**

7 MR. LEWIS: Yes, good morning,  
8 everyone. I'm Greg Lewis from the Department of  
9 Energy. And you will probably notice that Pat  
10 Worthington was on the program, but due to some  
11 scheduling conflicts, she had to travel elsewhere  
12 this week. So, she apologizes and I think will  
13 probably be at the next meeting, but you're stuck  
14 with me.

15 I'll go over this quickly and, then,  
16 address a couple of issues that were raised before  
17 the meeting by some folks over at NIOSH.

18 So, our core mandate is to provide  
19 records. That is what we do. We provide them to  
20 you all at NIOSH, the Advisory Board, et cetera.  
21 We do that in three different ways: on individual  
22 claims for specific case records, for large-scale  
23 research projects like the Site Exposure Matrix or

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1 the Special Exposure Cohorts, things like that, and  
2 then for facility research. And right now -- I was  
3 talking to Brad -- we doing some research into a  
4 few different facilities at Kerr-McGee in  
5 Oklahoma, for example.

6 Our site contacts at each of the DOE  
7 sites, that provides records, has a main point of  
8 contact for the EEOICPA program. They are the ones  
9 that manage the program onsite. They are the ones  
10 who help with the large-scale research projects,  
11 things like tours, special requests for  
12 information. They are the ones who really do the  
13 heavy lifting in terms of data-gathering. At  
14 Idaho, our contacts are Julie Finup on the federal  
15 side and Craig Walker on the contractor side.

16 We do about 16,000 records requests a  
17 year, give or take. I think it is actually a little  
18 bit higher than that recently, but that is a  
19 ballpark figure.

20 And these requests, people might have  
21 worked at multiple sites or over a 30-year career  
22 or 20-year career, multiple divisions, multiple  
23 job titles, and through multiple contractors if the

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1 contractors changed at the site or if the  
2 individual moves around.

3 So, many times we might have to go to  
4 10, even 20, different places for one individual;  
5 particularly if they have had a long career. And  
6 these responses can be from 10 pages long to, I  
7 think I have seen 3,000 or somewhere up in that  
8 -- you know, boxes of records on one single  
9 individual.

10 The large-scale research projects, as  
11 you guys know, are driven by the needs of NIOSH and  
12 the Department of Labor. We respond to their  
13 requests and try to facilitate the data-gathering  
14 as best we can. Here's a few of the sites that we  
15 are working on now for SEC projects, or  
16 NIOSH-related projects, I should say.

17 And then, document reviews; we review  
18 documents at the headquarters level. Those are  
19 typically final reports, things like that. We  
20 turn those around in about an average of eight  
21 working days and sometimes have done it in one to  
22 two days.

23 Also, depending on the classification

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1 of the record, for source documents that NIOSH or  
2 the Department of Labor requests from our sites,  
3 those are documents that are DOE-generated,  
4 usually historical, that provide the information  
5 that you all need to generate those reports. Those  
6 are typically much longer than these final reports,  
7 and they can take considerably longer than eight  
8 working days, but it depends on what is requested.

9 Typically, after a NIOSH visit or an  
10 Advisory Board or an Advisory Board contractor  
11 visit, they might be requesting 20, 50, hundreds  
12 of documents, and these hundreds of documents can  
13 be hundreds of pages long each. So, depending on  
14 the size of that request, you know, it could take  
15 us months to clear out the whole thing.

16 But, when possible, we try to work with  
17 a requester. If we can segment it or prioritize  
18 it, we will do that. And we typically try to be  
19 as accommodating as we can, but, you know,  
20 classification staff are pretty well set. They  
21 have expertise and training. We can't often add  
22 to that staff. So, we kind of have the staff that  
23 we have at the site. And so, depending on the

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1 request, we do the best that we can to get it back  
2 in a reasonable timeframe.

3 And then, I mentioned earlier facility  
4 research. When new documents or information comes  
5 to light, we conduct research into the facilities  
6 and either make a decision with respect to Atomic  
7 Weapons Employers or provide it over to the  
8 Department of Labor to make a decision for DOE  
9 sites.

10 I think outreach has been mentioned a  
11 few times in the previous presentation. So, I will  
12 skip past that.

13 And then, I always mention at the end,  
14 we also, my office, supports the Former Worker  
15 Medical Screening Program, which is a free  
16 screening program for all former DOE workers for  
17 all sites. We can do this close to your home. If  
18 you in a DOE area like Idaho Falls, we can certainly  
19 accommodate you. But, if you have retired to  
20 Florida or moved away, we have a National  
21 Supplemental Program that can find a clinic close  
22 to your house to screen you.

23 For Idaho, there are two programs that

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1 cover the site. The Worker Health Protection  
2 Program covers the production workers, and you can  
3 see the contact information there. And the  
4 Building Trades National Medical Screening Program  
5 covers the construction and trades workers. And  
6 again, the contact information is there. It will  
7 be on the Board's website and is on our website as  
8 well.

9 Before I get to questions, I just wanted  
10 to mention there was -- I think it came from NIOSH,  
11 although I think they indicated that some of the  
12 Board Working Group was interested in this.

13 To help facilitate the SEC, we are doing  
14 two projects right now, indexing information that  
15 will help provide dosimetry or badge information  
16 because that one badge is critical. And these two  
17 projects, one is visitor cards. So, these are one  
18 card per individual, and I think we had, it was  
19 basically about eight shoeboxes worth of cards.  
20 Think of, I guess, an old library card catalog,  
21 something to that effect.

22 MEMBER BEACH: You didn't mention what  
23 site you were talking about.

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1 MR. LEWIS: Oh, Idaho. Sorry. Yes.

2 MEMBER BEACH: I knew, but I didn't --

3 MR. LEWIS: I knew also, but I just  
4 didn't tell you. Sorry. So, that is with respect  
5 to the Idaho SEC.

6 And here at Idaho, they are working on  
7 these two indexing projects. One is the visitor  
8 cards, about eight shoeboxes worth. The other is  
9 temporary badge reports, and those are -- actually,  
10 I don't have in front of me the number of pages,  
11 but it is a huge collection. It is just pages of  
12 names and dosimetry results. And so, it can be,  
13 I think they said, about an average of 20 names per  
14 page, but could be anywhere 10, 30, something like  
15 that.

16 These are very time-intensive  
17 data-entry projects. So, every entry, you need to  
18 put in the name, the dose they received. We are  
19 entering it into a database, so we will be able to  
20 just call it up with the touch of a button.

21 As it stands now, we have started the  
22 visitor card project, and we are planning to do the  
23 visitor card project, and when we finish that, to

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1 transition into the temporary badge reports. We  
2 have four people working full-time currently on  
3 those visitor cards.

4 We are still early in the process, but  
5 based on our initial estimates -- and that may  
6 change; they are hoping they kind of get a little  
7 faster as they get more experience -- but they are  
8 anticipating finishing the visitor card indexing  
9 project by around the end of October. And, then,  
10 the temporary badge reports at that rate would  
11 probably take until somewhere around May of 2017.

12 However, right now we are exploring  
13 ramping-up the staffing, maybe going from four to  
14 eight, something like that. We don't know exactly  
15 what that will look like, but we are exploring,  
16 trying to do that a little bit faster. It will  
17 require us to get a difference space because,  
18 physically, the four people and the records are  
19 filling that space. We will need to find a new  
20 space, something that has the security for the --  
21 you know, this is a lot of personal information,  
22 Social Security numbers, names, things like that.

23 Anyway, there are some logistical

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1 issues are on our end, but we are looking into  
2 trying to ramp-up that project and get it done  
3 quicker. We will have more information in the next  
4 couple of weeks, as we figure out what exactly we  
5 can do staffing-wise, budget-wise, things like  
6 that.

7 And I think that's it.

8 MEMBER SCHOFIELD: For all this effort  
9 that DOE is putting into this, and stuff is  
10 appreciated, what kind of funding is there  
11 available to ramp it up from four people to eight  
12 people?

13 MR. LEWIS: Well, that's kind of what  
14 we're -- I think funding is not really the big  
15 problem at this point. It may be temporarily  
16 because we are close to the end of the fiscal year.  
17 But, even then, I think we have carryover money,  
18 and enough money so they should be able to have  
19 carryover into the next year. As long as we can  
20 set aside the money next year, they can start  
21 spending that carryover on this project.

22 The one thing we want to avoid is  
23 running out of money, so they are not only not able

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1 to continue this project, but not able to do  
2 individual claims as they come in. So, our first  
3 priority is always making sure there is enough  
4 funding to do individual claims. But we do think,  
5 if -- you know, depending on if we can get the staff  
6 and the space, and it all looks like it is possible,  
7 I don't think funding will be a huge issue,  
8 certainly not in the long-term, maybe over the next  
9 couple of months. But, once we get into the next  
10 fiscal year, which starts October 1, I think we  
11 should be okay on funding.

12 MEMBER SCHOFIELD: Thank you.

13 CHAIRMAN MELIUS: Any other questions  
14 for Greg?

15 (No response.)

16 **Dose Reconstruction Report to the Secretary and Future**  
17 **Review Methods**

18 CHAIRMAN MELIUS: Okay. Thank you.  
19 So, in your handouts or pile of documents that Ted  
20 sent you a few days ago there is an updated report  
21 from the Advisory Board on the dose reconstruction  
22 review process. I would like to talk a little bit  
23 about that. And then, Dave has some comments to  
24 make about one of the recommendations, I believe.

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1 And so, let me start.

2 What we have done is the Methods Review  
3 Committee -- whatever we are called -- has met. We  
4 have put together a report that includes the Dose  
5 Reconstruction Review Committee sort of technical  
6 report, and appended onto that, an introduction,  
7 some introductory material and some conclusions  
8 and recommendations.

9 I believe at our last Advisory Board  
10 meeting I had presented an outline of those. They  
11 have since been incorporated into the report along  
12 with some revisions to the Dose Reconstruction  
13 Review Committee's sort of technical report,  
14 mainly for purposes of making it all sort of flow  
15 together a little bit better and be a little bit  
16 more readable.

17 And then, the plan would be, once we  
18 have gone through probably at least another  
19 iteration of that, that we would produce a final  
20 report, and then, attached to that would be a letter  
21 to the Secretary that would be, essentially, an  
22 executive summary of the overall report. Because  
23 no matter what you do in this program, it gets down

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1 into the weeds and the jargon pretty quickly.

2 So, I think what I would like to draw  
3 your attention to is page 14 of the report and the  
4 conclusions, which, again, are taken from the  
5 report, basically, sort of summarizing what the  
6 findings were on that. Number 3 is about the blind  
7 reviews, into that. And then, Number 4, we have  
8 added a recommendation based on essentially  
9 addressing one of our other mandates to the Board,  
10 which was is it good science or not that is being  
11 used. I think that is a new recommendation that  
12 most people haven't seen -- or excuse me -- a new  
13 conclusion.

14 And then, we have, following that, a  
15 series of recommendations. One is we need to  
16 continue the individual review process, which we  
17 are mandated to do anyway. So, it is sort of a  
18 no-brainer. Can we make it more efficient? Dave  
19 will talk about that in a second, we have talked  
20 about that before a little bit at the Board  
21 meetings.

22 We should continue the blind reviews  
23 recommendation, and then, a recommendation on some

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1 more focused reviews, looking at some of the  
2 consistency issues. Are people with similar work  
3 histories and exposures being treated -- you know,  
4 are their claims being handled in the same way?  
5 Are the same sort of judgments and assumptions  
6 being used in those? That would focus, again, on  
7 situations where this is significant exposures for  
8 people and, therefore, a small difference in how  
9 a person makes, a dose reconstructor makes a  
10 judgment about that. Or inconsistency can make a  
11 significant difference in terms of compensability.

12 That we have sort of laid out there, but  
13 it is something that the case review, Dose  
14 Reconstruction Review Methods Work Group needs to  
15 flesh out a little more, and we will be doing some  
16 future meetings on that.

17 So, what I was going to suggest as a  
18 process is that at this meeting is to focus on sort  
19 of the bigger picture, and particularly sort of the  
20 overall report, structure of the report, and does  
21 everyone agree with the conclusions and  
22 recommendations?

23 Get back individual comments from Board

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1 Members, including Board Members that aren't here  
2 who haven't had adequate time to review the report,  
3 say within a two-week period, a three-week period,  
4 whatever you think is reasonable, given that it is  
5 August and everyone is pretty busy.

6 And then, circulate another version of  
7 the final report along with a draft of the letter  
8 to the Secretary that would be the executive  
9 summary for that, again, with a reasonable time  
10 period for feedback. If there is no significant  
11 differences remaining, I think we can sort of close  
12 out on that. If not, if there are still some issues  
13 that need to be discussed, we have a Board call --  
14 I forget exactly when, but we could certainly do  
15 it in October. We can certainly do it by then.  
16 So, we will do that.

17 That would be the process, and I have  
18 already gotten comments back from Dr. Ziemer on  
19 this latest version and some correspondence with  
20 him. But, again, I am just sort of looking for  
21 questions, comments, or sort of bigger-picture  
22 items in terms of things you think should be added  
23 or not included in the report or changed.

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1                   So, Henry, go ahead.

2                   MEMBER ANDERSON: Yes, my questions is  
3                   on Recommendation Number 4. I was just wondering  
4                   how would you go about identifying when the  
5                   individual judgments for cases that are -- I mean,  
6                   is that --

7                   CHAIRMAN MELIUS: I think we have a --

8                   MEMBER ANDERSON: Do we have a  
9                   mechanism to do that or how --

10                  CHAIRMAN MELIUS: Yes. I mean, it  
11                  is --

12                  MEMBER ANDERSON: How is that tracked,  
13                  I guess is the question.

14                  CHAIRMAN MELIUS: It is not directly  
15                  tracked. We have some work going on by NIOSH under  
16                  contract to look at those and sort of flesh-out some  
17                  of them at particular sites.

18                  We have some recommendations from  
19                  SC&A --

20                  MEMBER ANDERSON: Okay.

21                  CHAIRMAN MELIUS: -- on some possible  
22                  ones to do. And I think those are all both  
23                  identifiable and feasible to do. I think we need

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1 to do a little bit more work in terms of piloting  
2 doing that and making sure we can identify an  
3 adequate number of cases, and so forth.

4 MEMBER ANDERSON: I mean, I am very  
5 supportive of it. I think it definitely moves us  
6 in the right direction. It was just the mechanism  
7 to do it was a question, and I think you have  
8 answered that.

9 CHAIRMAN MELIUS: Yes.

10 MEMBER ANDERSON: And so, I would  
11 certainly be supportive of that. I think the  
12 other, of course, we will go over one of the sites  
13 tomorrow that the AWE Group had, where the coworker  
14 models -- you know, we haven't updated a lot of the  
15 TBDs for in some cases almost 10 years, some of the  
16 procedures. So, it could be those would be a place  
17 to start or there are more likely individual  
18 decisions are needed, because it is not clear in  
19 the TBDs.

20 CHAIRMAN MELIUS: Yes, and there may be  
21 inconsistencies over time.

22 MEMBER ANDERSON: Yes, yes.

23 CHAIRMAN MELIUS: They were handled

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1 one way --

2 MEMBER ANDERSON: Yes.

3 CHAIRMAN MELIUS: -- 10 years ago and  
4 a totally different way now because of updates, and  
5 so forth.

6 Other comments or questions?

7 (No response.)

8 CHAIRMAN MELIUS: Anybody with strong  
9 objections to anything in the report? I can tell  
10 you that, draw your attention to it, the final  
11 conclusion, Dr. Ziemer and I went back and forth:  
12 you know, is the work scientific? And I think one  
13 answer is yes. I mean, the methods are  
14 scientifically-based and so forth.

15 The problem is that, overall, in the  
16 program the way they are applied is changing. As  
17 both the methods changed, the amount of information  
18 to base those methods on changed. Essentially,  
19 NIOSH had to gear up very quickly to be able to do  
20 individual dose reconstructions across the  
21 complex. And so, we are constantly changing the  
22 science.

23 So, if one looked back at the beginning,

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1       what was done the first two years, and look at the  
2       way we are doing it now, one might say, well, that's  
3       not scientifically appropriate the way that it was  
4       being used. But now it is.

5                So, we tried to craft something that  
6       would sort of reflect that fact that we are  
7       constantly updating the science as we go along or  
8       the application of the science.

9                If there are no additional comments,  
10       Dave, I don't know if you want to do your part or  
11       you had another comment.

12               MEMBER KOTELCHUCK:        No, just  
13       generally --

14               MR. KATZ: Dave, can you speak into the  
15       microphone, please?

16               MEMBER KOTELCHUCK: Yes.

17               MR. KATZ: Thanks.

18               CHAIRMAN MELIUS: Dave?

19               MEMBER KOTELCHUCK: No, I was pleased  
20       with, also, the added from the DRSC Subcommittee,  
21       what was added both at the beginning and the end  
22       I liked. I think, overall, it is quite good.

23               There are details in some of the areas

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1 that I would like to go over, actually, that I have  
2 typed up and I can send in, based on what you said.  
3 If you would like me to respond to Item Number 2  
4 down below, the Recommendation Number 2, I would  
5 be glad to.

6 The Subcommittee has spoken at length  
7 with folks from SC&A. They, SC&A staff, made a  
8 proposal to speed up the review process, to make  
9 it more efficient by establishing -- there were a  
10 couple of rounds of this. But, as it eventually  
11 was completed, it was a recommendation that the  
12 NIOSH and SC&A decide that there are two categories  
13 of reviews that we do: one where there is  
14 substantial agreement on the findings, and it  
15 really doesn't require the Committee to go over the  
16 full detail of -- all the details of the dose  
17 reconstruction, and then, other ones where there  
18 are still substantial disagreements and we will  
19 need to focus much more carefully on those.

20 Now in the new proposal, the  
21 Subcommittee will go over every single case. It  
22 would not be as in earlier drafts, which I think  
23 were mentioned before the Board, where one or two

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1 people from the Subcommittee or the Board would  
2 check the decision to whether there is relative  
3 agreement or there is relative disagreement.  
4 Everything would come to the Board, but it would  
5 speed things up for us to know in advance that their  
6 determination was these are in pretty good  
7 agreement, and we wouldn't have to go over every  
8 single detail.

9 So, that is their proposal, and I would  
10 like to send it out. It was given to us this  
11 summer. With your permission, I would send it out  
12 to folks. Or we can discuss it more here, but there  
13 is detailed discussion there.

14 MEMBER BEACH: Dave, can I ask you a  
15 question? Wasn't that the difference between the  
16 findings and observations or --

17 MEMBER KOTELCHUCK: No.

18 MEMBER BEACH: It was not? Okay.

19 MEMBER KOTELCHUCK: No, it wasn't.  
20 These were findings, that they will give us a  
21 preliminary sense from the staff, SC&A and DCAS,  
22 of what they think the level of disagreement is or  
23 whether there is pretty good agreement based on

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1 their views and their discussion, or not.

2 CHAIRMAN MELIUS: Because as I recall,  
3 the -- it has been a while since I looked at the  
4 original recommendation was that those sort of  
5 lower-priority findings, whatever you want to call  
6 them, or observations would not come to the  
7 Committee. They would just be handled between  
8 NIOSH and SC&A. And that, I have some pretty  
9 strong concerns about.

10 MEMBER KOTELCHUCK: Right, right.

11 CHAIRMAN MELIUS: So, whatever we  
12 circulate, let's make sure that it is not the  
13 original proposal.

14 MEMBER KOTELCHUCK: Absolutely. In  
15 fact, the Subcommittee went over that. I think we  
16 agreed with your concerns, and there was a revision  
17 and there was a second draft of that in which the  
18 responsibility is on the Subcommittee to make the  
19 decision in each and every case. But they can give  
20 us recommendations and help speed things up. And  
21 we have that.

22 We looked it over, and the Subcommittee  
23 voted to approve the second one and recommend it

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1 to the Board. So, it is just a matter of sending  
2 it out now in detail to the Board.

3 CHAIRMAN MELIUS: Well, if we can get  
4 that circulated, and we need to get it into a --

5 MEMBER KOTELCHUCK: Right.

6 CHAIRMAN MELIUS: -- form that we  
7 can -- I am not sure we need to change -- we need  
8 to flesh out that recommendation. I am not sure  
9 we need to add much more detail to it because it  
10 is a little bit in the weeds --

11 MEMBER KOTELCHUCK: Right, right.

12 CHAIRMAN MELIUS: -- in terms of sort  
13 of how we function. And it is not, I think, a  
14 significant change as currently proposed.

15 MEMBER KOTELCHUCK: Right. Whatever  
16 we pass as a change, the  
17 implementation -- modifications will be made, even  
18 as we implement it, and details will be filled in.

19 CHAIRMAN MELIUS: Yes. I was going to  
20 point out -- and I think it is also in the answer  
21 to address Henry's questions he added -- I think  
22 as we change the methods used in the Dose Review  
23 Subcommittee and how that is being applied, that

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1 I think we need, you know, frequent updates for the  
2 whole Board on how that is going. So, kind of plan,  
3 include that in the agenda of every meeting, not  
4 just sort of a process update, but sort of something  
5 a little bit more -- what has been identified, what  
6 is working, what is not working is the --

7 MEMBER KOTELCHUCK: Yes, I would be  
8 happy to.

9 CHAIRMAN MELIUS: Yes. Yes, Phil?

10 MEMBER SCHOFIELD: I have got just one  
11 question about it. At what level would it be, say,  
12 a minor change recommendation or a more major  
13 change? And if there is a major change, how are  
14 we going to address or DCAS is going to address,  
15 and the Department of Labor, those people who have  
16 already had dose reconstructions done?

17 CHAIRMAN MELIUS: I don't think that  
18 process is changed. If there is a major problem  
19 found, then they have a mechanism in place to  
20 identify the cases that might be affected and  
21 determine to what degree that might change the  
22 outcomes of those cases.

23 MEMBER SCHOFIELD: Okay. That is what

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1 I wanted to know.

2 CHAIRMAN MELIUS: Yes. I think what  
3 Dave is proposing is not -- doesn't change much,  
4 I would say. It is just sort of procedurally  
5 within the Subcommittee I think it is important  
6 that it is getting implemented and formalized.

7 Because I think one of the problems is  
8 nobody in the past -- it is very easy to get hung  
9 up on, as you are going through, you are on that  
10 Subcommittee, and you have a question about  
11 something. You are not quite sure if it is  
12 important or not important. And so, there goes a  
13 half-hour, or whatever. That is sort of what got  
14 us as far behind as we are in terms of keeping up  
15 with all the reviews that have been done. So, that  
16 was a change.

17 And it doesn't mean that we can't change  
18 more at some point in time. So, it is not something  
19 that should be static. That was one of our  
20 problems, is that we got so hung up with trying to  
21 get caught up and getting a report to the Secretary,  
22 and so forth, that we sort of lost sight of the  
23 process and what we could be doing and should be

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1 doing going forward.

2 Henry, you had another?

3 MEMBER ANDERSON: Yes, just I think it  
4 is fine the way it is. I mean, it is a fairly long  
5 report now at 16 pages, and it is going to the  
6 Secretary. At least at the state level, my  
7 experience has been anything over a page, some of  
8 it isn't going to get read.

9 So, I am just wondering if we don't want  
10 to put either an executive summary or put -- I mean,  
11 the conclusions and the recommendations really are  
12 supported by the 16 pages. I am just wondering  
13 whether we should lead with that. Or is there a  
14 format we are supposed to use?

15 It is fairly easy to find these at the  
16 end, but do we want to make some kind of an initial,  
17 very short paragraph statement: we've done this.  
18 There are X number of recommendations and  
19 conclusions. So, you get that right when you first  
20 look at the first page of the document. Otherwise,  
21 we provide the background, but I am not sure  
22 everybody is going to want to look at that  
23 background or need that.

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1 CHAIRMAN MELIUS: Yes, you may have  
2 missed what I said earlier. The plan is that the  
3 letter to the Secretary that we would attach --

4 MEMBER ANDERSON: Oh, okay, I had  
5 forgotten that.

6 CHAIRMAN MELIUS: -- would be the --

7 MEMBER ANDERSON: Never mind.

8 CHAIRMAN MELIUS: -- sort of the  
9 executive summary.

10 MEMBER ANDERSON: Yes, that's good.  
11 Yes.

12 CHAIRMAN MELIUS: Because I think we  
13 all agree with you.

14 MEMBER ANDERSON: Yes.

15 CHAIRMAN MELIUS: We thought do we add  
16 an executive summary to the report, but it is --

17 MEMBER ANDERSON: That's fine.

18 CHAIRMAN MELIUS: Yes, yes. And if we  
19 tried to make the report understandable by somebody  
20 in the Secretary's office, I don't want to  
21 underestimate their intelligence or ability, but,  
22 I mean, it is, in a sense, a lot of jargon, a lot  
23 of -- you have to understand the law and how it has

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1       been implemented and how we function in order to  
2       understand something in the report.

3               Our Dose Review Subcommittee has some  
4       significant ownership of this report and some  
5       resistance to trying to tone it down.

6               (Laughter.)

7               MEMBER ANDERSON: We have been working  
8       on this so long, I had forgotten about the letter.

9               (Laughter.)

10              CHAIRMAN MELIUS: Yes, yes, yes, yes,  
11       yes. Go ahead, Dave.

12              MEMBER KOTELCHUCK: I respect that it  
13       is long now. On the other hand, the Secretary not  
14       only wants to read the report, but her staff members  
15       want to know where's the beef, right? What's  
16       behind this? And I think it details it, and I trust  
17       that her staff will review it for her and with her.

18              MEMBER ANDERSON: I am not suggesting  
19       shortening it. I think it is a great report the  
20       way it is. I was just thinking, and I hadn't  
21       thought about the cover letter. That will cover  
22       what I was just raising as a --

23              MEMBER KOTELCHUCK: Exactly.

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1                   MEMBER ANDERSON: I wasn't suggesting  
2                   changing it or shortening it or anything. It is  
3                   pretty concise now.

4                   CHAIRMAN MELIUS: Wanda?

5                   MEMBER MUNN: I would just request a  
6                   little clarification. It has been difficult for  
7                   me throughout this entire process to try to focus  
8                   on exactly how we can legitimately accomplish some  
9                   of the goals that we have been talking about  
10                  accepting.

11                  Recommendation Number 2, for example,  
12                  it is my understanding -- please clarify for me it  
13                  if I am incorrect -- that the thinking that went  
14                  into this recommendation was that in this  
15                  Subcommittee there would be, essentially, a  
16                  selection process with respect to the concept of  
17                  what is a crucial part of the dose reconstruction  
18                  for any given case that we are looking at.

19                  Where that decision gets made and by  
20                  whom remains unclear in my mind. Perhaps we have  
21                  discussed it here and I have missed it a little bit.  
22                  But, when we are discussing something that is the  
23                  basis of our program here, it is helpful for me if

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1 I can actually see exactly how this is going to  
2 progress. And I don't see that quite yet.

3 Can anybody help me a little with who,  
4 how, when, and where are we going to make the  
5 decision about what is the critical portion of an  
6 individual or any group of individual dose  
7 reconstructions?

8 CHAIRMAN MELIUS: Yes, but let me just,  
9 first, some background. I think where we  
10 originally started was with a sense that we needed  
11 to have some way of making the dose case review  
12 approach that we were using much more efficient  
13 because we were getting farther and farther behind,  
14 and so forth, I think.

15 And then, we came up with some  
16 recommendations. We talked about -- some came  
17 from SC&A; some others we talked about. That sort  
18 of caught us between, one, making it more  
19 efficient, but at the same time not sort of ceding  
20 our authority and our obligation as Board Members  
21 to be involved in the process and to be doing that.  
22 So, a charge to the Board, not a charge to a  
23 contractor to the Board.

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1                   However, I think that Dave and the Dose  
2                   Reconstruction Review Subcommittee at the same  
3                   time heard that we were going to change what they  
4                   were doing, were thinking about it, and I think sort  
5                   of focused more on how can they more efficiently  
6                   go through the dose review process and do it more  
7                   quickly, more efficiently. And I think they have  
8                   done that without any major changes to the process,  
9                   simply by sort of better managing their time and  
10                  effort, you know, the limited time they have to go  
11                  over these cases. And I think SC&A and NIOSH have  
12                  also assisted in that part of it.

13                  So, I think one answer is that  
14                  historically we are not changing it as much I think  
15                  we originally were talking about changing the  
16                  process. So, the authority will stay with the  
17                  Subcommittee, but the Subcommittee reports to the  
18                  Board.

19                  And I think one of the things -- and I  
20                  have said this before, and I fault myself and I  
21                  fault us as a Board, in a sense -- is that we have  
22                  sort of ignored what was going on in the dose  
23                  reconstruction review. We heard about it. We got

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1 reports at every meeting. It is not their fault,  
2 but we never really sort of dug into it and said,  
3 you know, does it need to be changed and what could  
4 be done to make it better?

5 MEMBER MUNN: It probably would have  
6 been impossible for the full Board to have  
7 addressed what the Subcommittee has gone through.

8 CHAIRMAN MELIUS: Well, no. Well, it  
9 is hard because it is --

10 MEMBER MUNN: Right, yes.

11 CHAIRMAN MELIUS: -- a task, a big task  
12 to do it.

13 MEMBER MUNN: It is. It has been a  
14 task.

15 CHAIRMAN MELIUS: It is why we have a  
16 Subcommittee to do it.

17 MEMBER MUNN: My clarification now is  
18 that, essentially, we have initiated the kind of  
19 process that we want to start looking at, and we  
20 are going to initiate, as stated in Number 4,  
21 further processes. We don't have that laid out  
22 entirely in anyone else's mind now that I haven't  
23 been able to latch onto.

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1 CHAIRMAN MELIUS: Correct.

2 MEMBER MUNN: All right.

3 CHAIRMAN MELIUS: And as we implement  
4 both the efficiency part of it and the consistency  
5 reviews -- whatever you want to call them -- we will  
6 need to evaluate. And I think the Board needs to  
7 be involved in understanding is that working, are  
8 they working, not working, because it is something  
9 new.

10 I think we are still going through the  
11 same process with the blind reviews. We didn't  
12 implement those for a period of time, and we are  
13 just sort of learning to what extent they are  
14 valuable or not valuable and what is the best way  
15 of doing it. They take up a fair amount of time  
16 and resources, and we need to evaluate what is going  
17 on.

18 There is nothing, I think, that says in  
19 our charge that we need to use the same methods all  
20 the time.

21 MEMBER MUNN: Hardly, hardly. But,  
22 yes, the blind reviews have been very helpful, I  
23 think. They have been revealing for all of us.

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1                   CHAIRMAN MELIUS: Thank you. Let me  
2 ask a question. Paul or anyone on the line have  
3 any further comments or questions?

4                   MEMBER ZIEMER: Sure. I have just a  
5 couple of minor comments, more editorial. But I  
6 want one point to emphasize, that since the last  
7 time they reported, they have changed from 3.5  
8 percent to 1 percent on the number of cases that  
9 we review. That is pointed out in the report.

10                  I did still want to get the  
11 clarification on the statement which is still in  
12 the report that says there is a 1-percent goal for  
13 each site. I don't think the Board has ever  
14 adopted such a goal. I raised that in our last  
15 Subcommittee meeting, and I thought Dave was going  
16 to change that, but I noticed it is still in the  
17 final report. So, at that time I think it is still  
18 there.

19                  But, other than that, I think the report  
20 is pretty well done and I am feeling comfortable  
21 with it.

22                  CHAIRMAN MELIUS: Dave?

23                  MEMBER KOTELCHUCK: Paul, we did make

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1 the change that you had suggested. But I must say,  
2 in re-reviewing the report, I noticed that there  
3 was one spot where the word goal for an individual  
4 plant snuck back in.

5 MEMBER ZIEMER: Yes.

6 MEMBER KOTELCHUCK: It didn't sneak  
7 back in. I did not remove it.

8 MEMBER ZIEMER: That is what I was  
9 referring to. I did point that out in my editorial  
10 changes --

11 MEMBER KOTELCHUCK: Right.

12 MEMBER ZIEMER: -- to Jim yesterday.

13 MEMBER KOTELCHUCK: Right.

14 MEMBER ZIEMER: You are still  
15 comfortable with removing that, I gather, then?

16 MEMBER KOTELCHUCK: Right. In fact, I  
17 also pointed out where we got most of it changed,  
18 but we didn't get it all done, and there was just  
19 one spot where the word goal for an individual plant  
20 did sneak in. And we agree, and I trust that the  
21 final report will have that change in it. And we  
22 both recommended it, and you will get to verify it.

23 MEMBER ZIEMER: Good.

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1 MEMBER KOTELCHUCK: Yes.

2 CHAIRMAN MELIUS: So, if there are no  
3 more comments, moving forward, how long do you need  
4 to review this draft and get comments? What is  
5 fair? Two weeks? Three weeks? What?

6 MEMBER BEACH: May I suggest the  
7 October 4th conference call? Is that too long?

8 CHAIRMAN MELIUS: That's too long.

9 MEMBER BEACH: Too long? Okay.

10 MEMBER MUNN: Two weeks.

11 CHAIRMAN MELIUS: Yes, we have to do at  
12 least one more draft and a Secretary's draft before  
13 then.

14 MEMBER KOTELCHUCK: I guess I can put  
15 my suggestions in what I send to you, Jim, but there  
16 seemed to me to be a couple of changes that may be  
17 worthy of talking about in the Board now.

18 Overall, I think it is an excellent  
19 report. I must say I also went over some of the  
20 writing that we worked on in the Subcommittee.  
21 Looking it over now, it can use a bit of redrafting,  
22 but there are one or two issues that I thought we  
23 could raise. And if we had time, I would raise them

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1 now, or as you wish, as you wish to handle it. The  
2 changes will be sent to everybody.

3 CHAIRMAN MELIUS: Yes, why don't we do  
4 it through -- send the changes to me.

5 MEMBER KOTELCHUCK: Okay.

6 CHAIRMAN MELIUS: And we will get  
7 another draft out. Give everyone three weeks. We  
8 will get another draft around and, then, talk.  
9 Then, let's see where we are then, if there are  
10 still issues. But I actually think we can  
11 resolving wording issues, and so forth, but I think  
12 the other Board Members need -- we have done it  
13 within the Methods Work Group, and I think the other  
14 Board Members need to get an opportunity for input.

15 MEMBER MUNN: Yes, I would, however,  
16 like to have Dave's pointing out to us the two or  
17 three points that you would like to make. If the  
18 Subcommittee is going make that focus on that, then  
19 I would certainly like to know from you what you  
20 think.

21 MEMBER KOTELCHUCK: My feeling is it  
22 has left the Subcommittee. It is at the Board  
23 level. So, in a way, there are changes -- a lot

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1 of them are editorial. There are one or two where  
2 there are, if you will, sensitivity questions.

3 MEMBER MUNN: Could we just request  
4 that you send that out to us when we --

5 CHAIRMAN MELIUS: Yes, circulate an  
6 email with those questions.

7 MEMBER KOTELCHUCK: I will circulate  
8 the email.

9 CHAIRMAN MELIUS: Absolutely.

10 MEMBER MUNN: Yes, that would be great.

11 MEMBER KOTELCHUCK: Sure, sure.

12 CHAIRMAN MELIUS: Yes, do you have one  
13 question?

14 MEMBER LOCKEY: That 4 percent,  
15 Conclusion 1, where there was a significant impact,  
16 which way did that go? Is that both ways? I was  
17 trying to figure that out. I couldn't figure that  
18 out.

19 MEMBER KOTELCHUCK: Pardon?

20 MEMBER LOCKEY: On Conclusion 1 there  
21 is 4 percent of 22, 4 percent of these findings have  
22 potential for a significant impact on the outcome.

23 MEMBER KOTELCHUCK: Yes.

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1                   MEMBER LOCKEY:   Which way?   Or both  
2   ways?

3                   MEMBER KOTELCHUCK:   As I recall -- and  
4   Subcommittee Members should join in -- the 4  
5   percent to have a significant impact, it was mostly  
6   that they might have impacted on compensation when  
7   the decision was not to compensate, if I am not  
8   mistaken.

9                   Do others remember?   Is that correct?  
10   I believe it is.

11                  CHAIRMAN MELIUS:   I believe it is,  
12   based just on the way the cases are chosen, because  
13   most were near 50 but under 50.

14                  MEMBER KOTELCHUCK:   Right.

15                  CHAIRMAN MELIUS:   There were some over  
16   50, and I don't -- yes, but let's get clarification  
17   on that.   That is a good question.

18                  MEMBER LOCKEY:   It should be just  
19   clarified.   Okay.

20                  MR. KATZ:   I mean, I think I can  
21   clarify.   It is significant impact on dose, not  
22   necessarily on the compensation outcome, and not  
23   on the compensation outcome of the case that was

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1 actually reviewed. That's different. But these  
2 are -- the more serious findings are findings that  
3 could have a significant impact on dose. Whether  
4 that affects the compensation outcome is an  
5 individual thing, right? It depends on all the  
6 particulars of the case.

7 MEMBER LOCKEY: Because when I looked  
8 at some of the tables, the NIOSH dose, it looked  
9 like there was a trend for higher NIOSH dose than  
10 there was on the review dose. So, I was just  
11 wondering where that 4 percent -- it should be  
12 clarified what that 4 percent means.

13 CHAIRMAN MELIUS: Again, I think we  
14 have to be careful. You have our lawyer sitting  
15 on the edge of her chair here. We have to be  
16 careful how we word some of this.

17 MEMBER LOCKEY: Yes.

18 CHAIRMAN MELIUS: But what NIOSH does,  
19 what we review, and who actually makes the  
20 compensation calculation or decision, you know, so  
21 we still need to sort of incorporate some of that  
22 into this.

23 MEMBER LOCKEY: I think so.

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1 CHAIRMAN MELIUS: Yes, okay. Any  
2 other questions, comments?

3 (No response.)

4 CHAIRMAN MELIUS: If not, we will take  
5 a break and come back at 10:15.

6 MR. KATZ: Yes.

7 (Whereupon, the above-entitled matter  
8 went off the record at 9:59 a.m. and resumed at  
9 10:23 a.m.)

10 MR. KATZ: We have a quorum still. Go  
11 ahead, John.

12 MR. STIVER: Okay. We're all set?  
13 You guys can hear me fine?

14 MR. KATZ: Mm-hmm.

15 **Review of Pinellas Plant Site Profile**

16 MR. STIVER: All right. My name is  
17 John Stiver. I'm with SC&A, and we are the  
18 technical support contractor to the Advisory  
19 Board.

20 Today I am going to give an update on  
21 the Pinellas Plant Site Profile review. Some of  
22 you may recall at the March meeting I gave a fairly  
23 detailed description and it was kind of long on

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1 process. I am going to try to keep that to a  
2 minimum this time.

3 Basically, this slide just kind of lays  
4 out the fact that the Pinellas review has gone on  
5 for about 10 years. The Site Profile documents  
6 were some of the earlier ones developed in the  
7 2005-2006 timeframe. We did our review in 2006,  
8 came up with 11 primary findings and 8 what we  
9 called secondary issues at the time, which we now  
10 refer to as observations.

11 Subsequently, there were six Work Group  
12 meetings and one set of classified interviews in  
13 2012. I guess a long pole in the tent was the Issue  
14 2, which is the stable metal tritides and NIOSH  
15 developing a model for that. They did that last  
16 year, I believe in December.

17 Let me just go ahead and move ahead on  
18 the slides here.

19 MR. KATZ: John, try speaking very  
20 directly into the microphone, please.

21 MR. STIVER: Okay. All right. Let me  
22 just move ahead here. As of the March 2016 Board  
23 meeting, we, SC&A and the Pinellas Work Group, had

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1       agreed that all the primary and secondary findings  
2       have been adequately addressed and resolved.

3               Primary Issue 2 was held in abeyance  
4       until NIOSH was able to put together a revised TBD-5  
5       for occupational internal dose assessment. And  
6       the Work Group recommended closure on the remaining  
7       issues.

8               A little bit about primary Issue 2, this  
9       was the potential dose from insoluble metal  
10       tritides. We felt that it had not been  
11       sufficiently addressed. NIOSH did come back with  
12       their coworker -- not really a coworker model, but  
13       a model for SMT.

14              We reviewed that. There were five key  
15       aspects. We delivered our report in February.  
16       And then, shortly thereafter, we discussed this in  
17       a Work Group setting.

18              There are five key aspects of the model  
19       which we have been through before, the first being  
20       resuspension factor. That was increased by a  
21       factor of 50 to bring it in line with a similar model  
22       for Mound.

23              The use of the highest tritium

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1       contamination measurement, which is about two  
2       orders of magnitude higher than what it was at Mound  
3       for a similar operation. We felt it was very  
4       claimant-favorable.

5               Probably the one issue that was still  
6       kind of not -- we weren't really comfortable with  
7       was the technical adequacy of the method. It was  
8       a bit different than what was going on at Mound.  
9       I think we discussed that quite a bit in detail.

10              The problem being that there was a  
11       potential to possibly lose or not capture any  
12       particulates that might have been on the cotton  
13       ball swipes based on this method. However, NIOSH  
14       came back with a health physics report that showed  
15       that the amount of tritium vapor that was  
16       off-gassed from new tubes was about a factor of two  
17       or three higher than any particulates that might  
18       have contributed. So, we felt that was pretty well  
19       handled.

20              Magnitudes and potential for tritide  
21       contamination is pretty well adequately discussed  
22       now. Who is potentially at risk, what was handled  
23       and where and when, and the choice of the solubility

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1 type. Basically, NIOSH is going with the highest  
2 type M or type S, depending on the organ of  
3 interest.

4 The February meeting, basically, like  
5 I said, we focused mainly on Issue 3, and the Work  
6 Group accepted the SMT model and motioned to put  
7 Issue 2 into abeyance. One thing we were a little  
8 bit concerned with was how organically-bound  
9 tritium was going to be captured and treated.

10 NIOSH went ahead and released the  
11 internal dose TBD last month, in July of 2016. And  
12 some of these sections -- this was taken right from  
13 the first page of the publication updates, and some  
14 of these sections are a little bit off, but all the  
15 information is actually there, as shown here in  
16 this slide.

17 Our position on TBD-5 is kind of  
18 summarized in the next couple of slides. We are  
19 looking at tritium gas, tritiated water, and  
20 organically-bound tritium as well as the stable  
21 metal tritides. Basically, HTO and OBT are going  
22 to assessed using workers' urine sample data, which  
23 we agree with. And NIOSH is kind of taking an

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1 either/or approach. They are going to assess  
2 100-percent HTO or 100-percent OBT. Depending on  
3 the exposure and the organ of interest, whichever  
4 gives the highest dose is what they are going to  
5 go with.

6 Potential exposures to tritiated gas or  
7 tritium gas and tritiated water are going to be  
8 addressed assuming it is 100-percent HTO because  
9 it is the most dosimetrically-significant. We  
10 agree with that approach.

11 A little bit more about HT and HTO.  
12 They are using OTIB-11 for the reasons cited here.  
13 We are okay with OTIB-11.

14 Organically-bound tritium, this is  
15 one, as I said earlier, that we were a bit concerned  
16 with. They are going to be using -- this is all  
17 laid out in the TBD in detail -- they are going to  
18 be using IMBA, assuming 100 percent of the intake  
19 is attributable to ODT, using OTIB-60.

20 As I said, the detailed guidance for  
21 intakes is included to ensure claimant  
22 favorability and consistency among the different  
23 DRs. So, we are okay with that.

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1           Finally, stable metal tritides, all of  
2 five key aspects of the model are incorporated into  
3 the TBD. And we agree that the method proposed is  
4 adequate and claimant-favorable and that NIOSH has  
5 faithfully incorporated the changes that were  
6 agreed upon in the Work Group meetings.

7           There was one issue that Dr. Richardson  
8 raised at the last Board meeting. That was  
9 regarding the adequacy of the monthly bioassay  
10 frequency for detecting tritium because of the  
11 quick or fast biological clearance rate. And so,  
12 we went back and looked into that, had Joyce  
13 Lipsztein, Dr. Lipsztein, look into this.

14           She cited ICRP Publication 78 and the  
15 follow-on, 130, which was released in 2015, both  
16 of which advocate a mechanism by which the intake  
17 would not be underestimated by more than a factor  
18 of three, based on an acute intake. This kind of  
19 lays it out here, how that would happen. For  
20 tritium, the ICRP recommends monitoring intervals  
21 of up to 30 days. So, based on that, we feel like  
22 the monitoring frequency at Pinellas was adequate.

23           And that is really all we have to say

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1 about this. Any questions?

2 CHAIRMAN MELIUS: Questions?

3 Comments?

4 So, this, essentially, closes out the

5 TBD. Do we need to do a motion or anything?

6 MR. KATZ: I think you should do a close

7 motion.

8 CHAIRMAN MELIUS: Okay.

9 MEMBER ANDERSON: As far as the Work

10 Group, anybody from the Work Group having problems

11 closing it?

12 MEMBER CLAWSON: No.

13 MEMBER SCHOFIELD: I would suggest

14 that we --

15 CHAIRMAN MELIUS: No, you move.

16 MEMBER SCHOFIELD: Move? I'm sorry.

17 (Laughter.)

18 MEMBER SCHOFIELD: Move to close

19 Pinellas as a site that has been completed.

20 CHAIRMAN MELIUS: Pending further

21 revisions.

22 MEMBER SCHOFIELD: Correct.

23 CHAIRMAN MELIUS: Or new information.

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1 MEMBER MUNN: Second.

2 CHAIRMAN MELIUS: Second from Wanda.

3 Okay. I think we do a voice on this or  
4 do you --

5 MR. KATZ: I think you can just do an  
6 all in favor -- a general call.

7 CHAIRMAN MELIUS: Yes. I just didn't  
8 know if you wanted to call everyone by name.

9 MR. KATZ: Yes, I'm saying I don't  
10 think we need to.

11 CHAIRMAN MELIUS: I don't think so,  
12 either. All in favor say aye.

13 (Chorus of aye.)

14 CHAIRMAN MELIUS: Opposed?

15 And we have a few abstentions.

16 MR. KATZ: Right, we have a few  
17 absences.

18 CHAIRMAN MELIUS: Okay, very good.

19 Okay. Blockson. Wanda, I guess  
20 you're starting off.

21 **Blockson Chemical Company SEC Petition**

22 MEMBER MUNN: I am assuming I won't  
23 have to give you too much background with respect

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1 to Blockson. As you all know, Blockson is a very,  
2 very long-time interest site for us, and we have  
3 seen it several times before.

4 Our current Work Group members are  
5 myself as Chair, Dr. Melius, Brad Clawson, Dr.  
6 Roessler. We will try to be very, very brief with  
7 respect to the site operational history because I  
8 am fairly sure most of you remember; we have been  
9 through this many times before.

10 Originally, this site, which is located  
11 in Joliet, Illinois, was manufacturer of a wet  
12 process phosphoric acid, which they derived from  
13 ore that was mined in Florida. The Blockson  
14 Company made a number of products from the  
15 phosphoric acid after they had derived it.

16 In late 1950/early 1951, the AEC came  
17 to them asking them to develop the process for  
18 extracting uranium from the phosphoric acid, which  
19 was their basic product. They agreed to do that,  
20 and in 1951 a contract was entered. They  
21 constructed a special building, which they called  
22 Building 55, specifically for this particular  
23 separation for AEC, and they continued to process

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1       it there through June 1960. Blockson continued to  
2       produce a number of products at that particular  
3       site and operated through 1991, but Building 55 was  
4       among the buildings that was demolished in 1996.

5               The Blockson Site had been designated  
6       as an AWE employer from 1951, when that contract  
7       was first initiated, to 1960, when the production  
8       stopped. The residual period was originally  
9       defined as ending in 2009, but was later revised,  
10      so that the residual period, which is the only thing  
11      we are looking at today, was revised to March 2011.

12              The first petition for this site, which  
13      was Petition Number 58, came to us in May of 2006.  
14      It covered all the employees on the Joliet site,  
15      and it covered the entire operating period, which  
16      we have already discussed, from 1951 through June  
17      30 of 1960.

18              We approved that petition on October  
19      3rd, 2010. The basis for approving the petition  
20      was quite limited. It was our inability to  
21      reconstruct with sufficient accuracy -- those are  
22      keywords -- the exposure of workers to radon in  
23      Building 40, where digestion of the phosphate rock

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1 had been taking place throughout the entire  
2 operational period. That was the only item which  
3 made this SEC possible.

4 I'm trying to get you a new slide, and  
5 there. Our second petition -- that is the one we  
6 are looking at today, the one that the Work Group  
7 has been trying to define, come to a conclusion for,  
8 was received in February of 2015. That petition  
9 number is 255, and it is covering that residual  
10 period which I discussed earlier, July 1st, 1960  
11 throughout the year 1991. It covers all the  
12 employees on the Joliet site, and we don't have to  
13 consider dose reconstruction feasibility because  
14 AEC activities were no longer underway during this  
15 residual period.

16 We were aware that residual  
17 contamination was possible in two of those  
18 buildings, Building 40 and Building 55, which, as  
19 I mentioned earlier, had been built specifically  
20 for the uranium extraction.

21 There was also some concern about the  
22 external phosphogypsum pile, all of which was  
23 outside and was an entirely different issue than

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1 the closed buildings.

2 Our NIOSH evaluation assured us that  
3 dose reconstruction was going to be feasible, and  
4 SC&A was told to take a look at this and review all  
5 of the findings. They got that assignment in  
6 November of last year, and they came back with five  
7 findings and one observation.

8 On a sunny day the last week of June,  
9 last month, a month-and-a-half ago, our Work Group  
10 met by teleconference to address the items that  
11 SC&A had brought to us. Two findings were  
12 determined to be Technical Basis Document issues  
13 and were not going to be applicable to a petition  
14 for claims that occurred after the operational  
15 period. We will go back to that a little later.  
16 And three findings and the observation that they  
17 had brought to us were closed.

18 The residual period findings and  
19 observations began with Finding Number 1, which was  
20 an unresolved comment on how the Technical Basis  
21 Document estimated residual photon dose. It was  
22 transferred from an SEC 223 finding and attached  
23 to the Blockson TBD in the Board review status group

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1 -- our detail that we handled digitally. And NIOSH  
2 can provide further response to this finding at a  
3 later date because it is specifically seen as a  
4 Technical Basis Document issue, and as such, can  
5 be transferred from our considerations of the  
6 residual period SEC.

7 Finding Number 2 was concern of  
8 determination of external dose from the  
9 phosphogypsum plant stack. There was  
10 considerable discussion about this item. It was  
11 resolved by agreeing that the exposure had been  
12 bounded by the exposure to the employees who worked  
13 in Building 55. You recall that is the primary  
14 operational building for this particular contract.

15 Finding Number 3 was an issue on  
16 residual beta dose, which, again, had considerable  
17 discussion, but was agreed that it was specifically  
18 a Technical Basis issue and is transferred to that  
19 group for further decision.

20 Finding 4 was concern with the  
21 particulates and the possible inhalation from the  
22 phosphogypsum stack. Again, this was another one  
23 of those things which was approached as being most

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1 definitely bound by the exposures that had been  
2 seen in Building 55, and the Work Group closed it.

3 The final finding, Number 5, was  
4 concerned with estimates of residual radiation  
5 exposure that had been resolved after we discussed  
6 the methods were reasonable and favorable. SC&A  
7 had provided a reply to the original NIOSH  
8 response, and we did have considerable discussion  
9 at our meeting on clarifying the basis for the  
10 methods that have been used. The parties agreed;  
11 the Work Group closed the finding.

12 Observation 1 was an additional comment  
13 on the radiation exposure, which was covered in our  
14 discussion of Finding 5 and was closed accordingly.

15 Based on the discussion of the  
16 questions that have been raised with respect to the  
17 Petition 225, the Work Group agreed with the NIOSH  
18 conclusion that sufficiently accurate dose  
19 reconstruction is possible for all covered  
20 Blockson Chemical Company workers during this  
21 residual period from July 1, 1960 to December 31,  
22 1991. The Work Group, therefore, recommends that  
23 the petition be denied.

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1           As you know if you have looked at your  
2 agenda and read your material, there was  
3 considerable concern over the radon exposure there  
4 and, as such, it was agreed that we would give you  
5 a little more background on that discussion and how  
6 those conclusions were reached. If you have no  
7 questions for me on this one, then, immediately  
8 following our decision in this regard, Dr. Jim  
9 Neton will talk to you a little bit about the radon  
10 involved.

11           Any questions?

12           CHAIRMAN MELIUS:           Questions?  
13           Comments?

14           (No response.)

15           MEMBER MUNN: If not, then we will let  
16 Jim fill in some of the blanks, if you have any with  
17 respect to radon. And then, I will suggest that  
18 we move on the recommendation of the Work Group.  
19 Thank you.

20           CHAIRMAN MELIUS: DCAS is reverting to  
21 black-and-white slides?

22           MEMBER MUNN: He really didn't have the  
23 help I had.

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1                   CHAIRMAN MELIUS:  He didn't want to  
2 show you up, either.

3                   (Laughter.)

4                   MEMBER MUNN:  Yes, I appreciate that.

5                   CHAIRMAN MELIUS:  Go ahead, Jim.

6                   DR. NETON:  Okay.  Thank you.  At the June  
7 28th Work Group meeting, there was, as Wanda  
8 indicated, a fair amount of discussion about the  
9 reconstruction of radon exposures at the  
10 phosphogypsum stacks at Blockson.  Since we had  
11 used surrogate data there, the Work Group asked  
12 that we provide a summary to the full Board on our  
13 approach to using the surrogate data to reconstruct  
14 radon at that Blockson Chemical.  So, that is what  
15 the subject of this presentation is about.

16                   As Wanda indicated, radon, the residual  
17 contamination period was the subject here from 1960  
18 to 1991.  Specifically, we want to talk about the  
19 radon exposures at these large phosphogypsum  
20 stacks that were created during the operations at  
21 Blockson between '60 and '91, although I will point  
22 out that the first 10 years the AEC activities were  
23 involved.  So, there was 10 years of production of

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1 phosphogypsum stacks related to that exposure;  
2 subsequently, about 30 more years of material was  
3 added on top of those stacks that is not relevant  
4 to the AEC activities. So, they have been covered  
5 over a 30-year period.

6 These are large stacks. They are 227  
7 acres, 90-feet tall, that sort of thing. So, it  
8 is a pretty big area to cover. I want to point out  
9 the radon exposures and residual period is from  
10 waste generated during the covered period I just  
11 said, from 1951 to 1960 and, then, all subsequent  
12 material that was added to the stacks are not  
13 covered exposure.

14 We have a little bit of radon data from  
15 the phosphogypsum stacks at Blockson, but not  
16 enough in itself to come up with an estimate based  
17 solely on the data at the site. There were several  
18 radon measurements in Building 55 in 1978 as a  
19 FUSRAP survey was done by Argonne National  
20 Laboratory.

21 And I think there were five  
22 measurements made in 1978, and they were all low.  
23 A maximum reported value was .61 picocuries per

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1 liter. They didn't measure anything on the  
2 stacks, though, because their focus was really to  
3 look at Building 55, which was the AEC operation  
4 between '51 and '60.

5 There were also some measurements made  
6 in 1983 at several locations onsite. This was done  
7 by a consultant who actually subcontracted Dr.  
8 Herman Cember to do the radon measurements, who  
9 some of you on the Board may know. He is a  
10 prominent health physicist who has passed away some  
11 little while ago.

12 He made 10 measurements at the site and  
13 all reported as being low. The highest value at  
14 the STPP, sodium tripolyphosphate, area, the  
15 production area onsite, was reported at .0042  
16 working levels. He reported values in working  
17 levels and actually said -- he only converted one  
18 value to a working level and said all other values  
19 were lower than that, but he did provide count-rate  
20 data.

21 So, I was able to take the count-rate  
22 data and convert it to an activity concentration.  
23 This last bullet here indicates that a single

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1 measurement taken at the phosphogypsum pile was  
2 .0012 working levels, which I calculated as  
3 slightly less than 3/10ths of a picocurie per  
4 liter. So, keep that in mind. So, we do have some  
5 data for radon concentration values at the plant.

6 There was also some radon flux data  
7 measurements, quite a bit of it, actually. In  
8 1993, 300 flux measurements were taken at that  
9 point, an inactive phosphogypsum pile, and these  
10 flux measurements don't give you radon  
11 concentration. They give you an emanation rate in  
12 picocuries per square meter per second. They were  
13 taken to demonstrate compliance with the EPA's  
14 requirement for flux inactive fly ash piles. I  
15 think the limit is 20 picocuries per square meter  
16 per second.

17 So, these were taken over a fairly  
18 protracted period of time in that year, 1993. And  
19 of the 300 measurements, the highest mean, the  
20 weighted mean flux measurement was 4.1 picocuries  
21 per square meter per second, with the highest mean  
22 value reported at 10.1, which was taken around the  
23 sides of the stacks, which is kind of what you might

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1        imagine.

2                    Unfortunately, no radon concentration  
3 values were reported with the flux. We talked  
4 about the idea of converting the flux to  
5 concentration, but that is a pretty difficult  
6 process. There are a lot of factors involved in  
7 doing that conversion. So, we weren't comfortable  
8 with coming up with an estimate based on these 300  
9 flux measurements, although we do use this later  
10 on.

11                    So, to estimate the radon exposures at  
12 Blockson given what I just said we had, the limited  
13 information, we looked at the radon flux values at  
14 Texas City Chemicals. This is the surrogate data  
15 approach that we developed that has been outlined  
16 in the Site Profile in 2014. It has been there for  
17 a while. The Site Profile is on Rev 4, so this  
18 process has been in place for a while. This isn't  
19 something we invented or developed for the  
20 Evaluation Report. This is actually in the Site  
21 Profile.

22                    But the average value of the flux  
23 measurements at Texas City was 10.5 picocuries per

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1 square meter per second. At both of these sites,  
2 flux measurements were taken both around the  
3 inactive -- they were both inactive fly ash piles  
4 after the plants were permanently closed. So, you  
5 have 10.5 picocuries per square meter per second  
6 at Texas City. You have got 4.5 or so at Blockson,  
7 with a 10.5 as the highest value at Blockson. So,  
8 Blockson values tend to be a little lower than those  
9 measured at Texas City.

10 Interestingly, the flux data for Texas  
11 City also included radon concentration at the top  
12 of the stack. So, that gave us a nice correlation  
13 of radon concentration to flux.

14 MEMBER MUNN: What was the highest for  
15 Texas City?

16 DR. NETON: Texas City, the average  
17 value was 10.5. I don't have the highest value.  
18 That wasn't reported in the document that we had.  
19 These values were reported in a court case that was  
20 ongoing at some point in time.

21 Now remember that these values were  
22 taken at the inactive fly ash piles, and it is well  
23 known that active fly ash piles have a higher

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1 concentration because in the inactive state a crust  
2 forms on top of the stack, essentially, which sort  
3 of inhibits the emanation of the radon out of the  
4 stack.

5 There is some pretty good EPA guidance  
6 on this, and the recommendation in the EPA reports  
7 or the measurements indicate that it is about a  
8 factor of five; you can expect the ratio of an  
9 active-to-an-inactive fly ash pile will be about  
10 five times higher.

11 This doesn't show up on my screen.  
12 Does it show up on your screen? There should be  
13 a graph there.

14 MR. KATZ: Yes, it does.

15 DR. NETON: It is pretty plain. But I  
16 just wanted to give you a depiction of what we have  
17 done then.

18 You can see that on 1993 we are using  
19 the .42 picocuries per liter measured on top of the  
20 stack at Texas City Chemicals as the radon  
21 concentration surrogate for the stack at Blockson.  
22 And then, we have adjusted the value to be an active  
23 fly ash pile back in 1960 by a factor of five. So,

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1 we just took the .42, multiplied it times five, and  
2 came up with a 2.1 picocuries per liter on top of  
3 the stack in 1960. And then, we just fit an  
4 exponential function in between those two to  
5 predict the concentration at any point in time  
6 during those two periods. So, that is our model  
7 in a nutshell.

8 Just for reference, I have put the .29  
9 picocuries per liter measured at Blockson in 1983,  
10 calculated based on the Cember data, on the graph,  
11 which shows that it is slightly lower, although,  
12 to be fair, I really don't know where on the fly  
13 ash pile that measure was taken, it could have been  
14 near the fly ash pile or it could have been somewhat  
15 distant from the fly ash pile, as opposed to the  
16 one taken at Texas City that was literally taken  
17 on top of the fly ash pile. Nonetheless, it  
18 shows that there is some pretty good agreement  
19 there between the actual value of Blockson and the  
20 one that was measured at Texas City.

21 Okay. So, to get into the review  
22 against the Board's criteria, I have listed the  
23 five criteria that are in the Board's 2010 document

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1 that is out on our website. I reviewed it against  
2 the Board's criteria. If you recall, NIOSH also  
3 has our surrogate data criteria. They are very  
4 similar, minor differences.

5 We did review in the Evaluation Report  
6 the use of surrogate data against NIOSH's criteria.  
7 And so, I thought for completeness here I would just  
8 report on how we evaluated against the Board's  
9 criteria, and here you have the list of the five.

10 Hierarchy of data. That is pretty  
11 obvious. That is, you know, we start with the best  
12 type of data, which would be personal monitoring  
13 data, followed by coworker data, air sampling data,  
14 and then, process/source term-type data. So, you  
15 need to use the best data source that you have.

16 The exclusivity constraints talks  
17 about, if you are going to exclusively only use  
18 surrogate data, you have got a pretty high bar to  
19 pass. There's got to be stringent justification  
20 about that is the only point you are going to use  
21 there, and you have got to evaluate the  
22 completeness of the data and the quality of the  
23 data.

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1           Cite a process similar. It is pretty  
2 obvious that they have to be similar, similar  
3 situations of the chemicals and equipment, that  
4 sort of thing. Temporal considerations is also  
5 somewhat obvious.

6           And the plausibility. Do the data that  
7 you are applying really make sense, in light of what  
8 you know scientifically and technically about the  
9 site and processes?

10           Okay. So, here is the first criteria,  
11 is the hierarchy of data. There are no personal  
12 monitoring data for radon available. And again,  
13 we had only one radon ambient concentration measure  
14 from 1993. So, we felt like we were going to  
15 use -- that is a good case of using surrogate data.  
16 We have ambient airborne value at Texas City that  
17 we could substitute in here.

18           The process and source term were known  
19 at Blockson as well as Texas City, but it is not  
20 useful, in our opinion, of characterizing the radon  
21 levels at the stacks. Just knowing the amount of  
22 radium in the pile doesn't really give you a good  
23 sense for modeling. We have tried to do that

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1 before, if you remember, in Building 55, and that  
2 didn't work out very well.

3 So, modeling radon in the atmosphere  
4 based on the source term that is known in the  
5 stacks, and I think radium in the stacks is upwards  
6 of about 30 picocuries per gram, something like  
7 that. So, it is not a huge source term, between  
8 5 and 30 picocuries. So, we think that was useful  
9 for characterizing the values.

10 And the surrogate data here has a  
11 distinct advantage over the above because we do  
12 have actual flux radon measurements and we also  
13 have corresponding flux measurements at Texas  
14 City. But, as I mentioned before, it does require  
15 some adjustment because of the  
16 inactive-versus-active comparison of the fly ash  
17 pile, part of the phosphogypsum piles.

18 Here we are getting into the  
19 exclusivity constraints where stringent  
20 justification is required. The available data,  
21 the flux measurements were taken using  
22 EPA-approved methodology. These were taken to  
23 demonstrate compliance with the EPA requirement of

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1 20 picocuries per square meter per second.

2 They both represent a considerable  
3 amount of data. They were taken over an extended  
4 period of time. It wasn't a snapshot in one  
5 instance. So, they are fairly complete datasets  
6 that we feel are fairly representative of the flux  
7 rates at both sites. And the simultaneous radon  
8 and flux measurements at Texas City we believe does  
9 allow for interpretation of the flux data that was  
10 taken at Blockson.

11 So, in this case this is a situation  
12 where we are not exclusively using Texas City and  
13 substituting it for Blockson. We are taking what  
14 we have at Texas City and using it to supplement  
15 the data we have, which is the flux and the radon  
16 concentration values.

17 Site or process similarities are fairly  
18 good in this situation. Both sites create a  
19 phosphogypsum waste by producing phosphoric acid  
20 from the wet chemical, what is known as the wet  
21 chemical process. They both relied on a phosphate  
22 rock that was taken from Florida, and these ores  
23 contained about .01 percent natural uranium. That

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1 is why they were contracted by the AEC to produce  
2 uranium from their waste streams.

3 And the phosphogypsum stack at Blockson  
4 is about 227 acres, 90-feet tall, but the stack at  
5 Texas City was somewhat smaller. It was only 35  
6 acres and 30-feet tall, which might give you some  
7 concern because it is a smaller pile. However, the  
8 measurements were taken at Texas City right on top  
9 of the stack, and near-in measurements that are  
10 taken on the stack are less sensitive to the size  
11 of the pile than ones that may be taken further out.  
12 And that is fairly well-documented in this EPA  
13 report that is cited. I believe it was  
14 actually in our report, but also in the SC&A review  
15 of this use of surrogate data. So, that would tend  
16 to mitigate any -- since it was taken on top of the  
17 stack, it would mitigate any issues related to the  
18 size difference, we think, of the two stacks.

19 Temporal considerations. Both  
20 Blockson Chemical and Texas City produced material  
21 in the early '50s. I think Texas City was between  
22 '52 and '56; Blockson processed between '51 and  
23 '60. So, they are in that same timeframe, using

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1 the same chemical process. And flux measurements  
2 at both sites were taken on inactive piles. And  
3 again, we have taken adjustments to account for the  
4 relative emissions from active-versus-inactive  
5 piles. Like I said, we have increased those values  
6 by a factor of five to account for that difference.

7 Plausibility, the values that we are  
8 using at 2.1 at the start of the process, in 1960,  
9 at the end of the production era, and .4 in '93,  
10 are consistent with known low concentrations of  
11 phosphogypsum stacks. We, of course, have the  
12 value at Texas City, but there is also Florida  
13 Institute of Phosphate Research data that  
14 demonstrates that -- I think there was a cite in  
15 this EPA report that gave a range, a median value  
16 range of I think between 1 and 2.7 picocuries per  
17 liter for active fly ash pile. A considerable  
18 range, but, nonetheless, very consistent with the  
19 low values that we are using here.

20 Again, slightly less than the 3/10ths  
21 of picocurie per liter measured in 1983 at Blockson  
22 is bounded by the predicted concentration of about  
23 .7 that we are using at Texas City Chemical. If

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1 you look at the predicted value in 1983 on our  
2 model, it would be about .69 picocuries per liter.  
3 Again, the measured value at Blockson is bounded.  
4 The Texas City value bounds that value.

5 And while the values are likely  
6 overestimates for the portion of exposures due to  
7 the AEC operations, because, like I said, between  
8 1951 and '60 they produced -- the production was  
9 pretty constant, about 6,000 tons per week over  
10 this entire period. That is a lot of production.

11 And so, between '51 and '60, the AEC  
12 waste was put in the piles, and then, over the next  
13 30 years it was covered by the commercial  
14 activities. So, we are not making any adjustment  
15 for that. We are just assuming the entire emission  
16 of the radon off the stack is all due to AEC  
17 activities. And that is consistent with the  
18 amendment to the Act that says, if you can't  
19 differentiate between the commercial and  
20 AEC-derived sources, then you just assume that it  
21 is all AEC-derived.

22 Our conclusion is that we believe that  
23 the available information at Blockson and Texas

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1 City allows for the application of outdoor radon  
2 concentrations to the phosphogypsum stacks at  
3 Blockson, and we do believe that it meets the  
4 Board's criteria for surrogate data usage. We  
5 believe that, with the appropriate adjustments  
6 that we made, the radon concentration plausibly  
7 bounds the exposures to workers between 1961 -- or  
8 '60, and 1991.

9 I think that is all I have. I would be  
10 happy to answer any questions if there are any.

11 CHAIRMAN MELIUS: Thank you.  
12 Comments? Questions?

13 Yes, Bill?

14 MEMBER FIELD: Yes, I was just curious,  
15 with the radon measurements, were these grab  
16 samples at most of the buildings and in the piles?

17 DR. NETON: Which ones?

18 MEMBER FIELD: Both. Were they all  
19 pretty much grab samples?

20 DR. NETON: Yes, yes. I know the  
21 Cember samples were basically filters, air  
22 filters. I am pretty sure the Argonne ones would  
23 have been as well.

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1                   MEMBER FIELD:    And at Blockson, you  
2                   talked about --

3                   MR. KATZ:    Bill, can you just bring the  
4                   microphone even closer, please?

5                   MEMBER FIELD:   Yes.   At the Blockson  
6                   Site, you talked about the pile height and  
7                   everything, but where were the workers situated  
8                   near the piles?  Were they at a distance or were  
9                   they close?  I can't get a feel for it from ---

10                  DR. NETON:    Yes, I believe they are  
11                  pretty far distant.  Tom Tomes is on the phone.  
12                  Tom, can you help with that question?

13                  MR. TOMES:   I don't know, yes, I don't  
14                  know of any workers who actually worked on those  
15                  tracts on a full-time basis.  The actual plant  
16                  buildings were some distance away.  But they did  
17                  have personnel out there on occasion; I know that.

18                  DR. NETON:    Yes, it was a fairly large  
19                  site, and the workers were I don't think very close  
20                  to these piles, like Tom said.

21                  MEMBER FIELD:    So, I guess my only  
22                  question is it sounds reasonable, what you are  
23                  presenting.  My question is the limited amount of

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1 data, you know, how representative is it to  
2 longer-term potential exposures?

3 When you take a measurement off the  
4 pile, I guess moisture also plays a role. And  
5 there was only one or two measurements performed,  
6 is that right, at these sites, of the pile  
7 measurements?

8 DR. NETON: Well, no, the flux  
9 measurements are a lot. I mean 300 at Blockson.

10 MEMBER FIELD: Okay. That makes me  
11 feel better, yes.

12 DR. NETON: And if you compare the flux  
13 to flux, they are very similar.

14 MEMBER FIELD: Yes, yes.

15 DR. NETON: And then, the one  
16 measurement, you're right, on top of the piles was  
17 .42 picocuries per liter. But keep in mind that,  
18 again, we are assuming that this is all  
19 AEC-derived.

20 MEMBER FIELD: Right. No, I know.

21 DR. NETON: So, I think the factor of  
22 four or five difference in the amount of material  
23 there that was added due to commercial operations

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1 tends to mitigate some of that uncertainty.

2 MEMBER FIELD: Yes, and I don't know  
3 what the outdoor levels are. Normally, it is  
4 probably around .4 or so. So, we are not talking  
5 much different than what you see onsite anyway in  
6 some of these areas.

7 DR. NETON: Right.

8 MEMBER FIELD: Okay. Yes, if you have  
9 that many flux measurements, I feel better --

10 DR. NETON: Yes.

11 MEMBER FIELD: -- about it. I didn't  
12 realize there were that many.

13 CHAIRMAN MELIUS: Josie?

14 MEMBER BEACH: Yes, Jim, my question is  
15 in regards to Building 55, the spot samples. You  
16 talked about one.

17 DR. NETON: Mm-hmm.

18 MEMBER BEACH: And I know they are  
19 relatively low.

20 DR. NETON: Right.

21 MEMBER BEACH: Can you remind us, was  
22 there some cleanup done between the production time  
23 and the residual time period or during the residual

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1 of Building 55?

2 DR. NETON: I am not sure there was any  
3 official cleanup done, I don't recall. But,  
4 remember, what happened here is Building 55 was  
5 made to process and make uranium. It is sort of  
6 an offshoot of the normal process that they ran  
7 through and, then, kind of looped back through the  
8 plant.

9 When you are running 6,000 tons of  
10 commercial material through there a week, after the  
11 first week or so, any AEC -- the contribution of  
12 any AEC radon/radium is pretty much gone because  
13 you have, essentially, flushed out the stream of  
14 any. So, any of the measurements made in Building  
15 55 would have to be, essentially, related to the  
16 uranium source term that was produced, and that is  
17 what we have assumed.

18 There was uranium there, though. They  
19 did some spectral measurements. Argonne did some,  
20 and they definitely found that there was some  
21 uranium there. It wasn't gone completely.

22 But, again, we feel that the continued  
23 production of the commercial activities would

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1 flush out any of the source term related to the  
2 radon in the plants for sure.

3 CHAIRMAN MELIUS: Okay. Any other  
4 questions? Board Members on the line, do you have  
5 questions?

6 MEMBER ZIEMER: I have no questions.  
7 Ziemer.

8 MEMBER VALERIO: This is Loretta. I  
9 have no questions.

10 CHAIRMAN MELIUS: Okay. John?

11 MEMBER POSTON: John Poston has none.

12 CHAIRMAN MELIUS: Okay. Thank you.  
13 Henry here has a question. You are not getting  
14 away that easy, Jim.

15 (Laughter.)

16 MEMBER ANDERSON: Just a quick  
17 question. When you have done the dose  
18 reconstruction on some of these individuals, how  
19 much to their total exposure does this radon  
20 contribute?

21 DR. NETON: Well --

22 MEMBER ANDERSON: I mean, during the  
23 residual period, obviously, it is --

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1 DR. NETON: I was going to say, yes,  
2 during the covered period --

3 MEMBER ANDERSON: -- but when you look  
4 at a cumulative --

5 DR. NETON: Well, we don't calculate  
6 dose for radon. We calculate working-level  
7 months' exposure.

8 MEMBER ANDERSON: Right. Okay.  
9 Well --

10 DR. NETON: It is pretty small. I am  
11 not sure what you are getting at.

12 MEMBER ANDERSON: Well --

13 DR. NETON: Is it enough to compensate  
14 someone, if that is what you are --

15 MEMBER ANDERSON: I mean, we have spent  
16 a lot of time on this --

17 DR. NETON: Yes.

18 MEMBER ANDERSON: -- for, basically,  
19 something slightly above background.

20 DR. NETON: Right.

21 MEMBER ANDERSON: And the question  
22 is --

23 DR. NETON: Well, these exposures are

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1 low. I mean, if you look at the EPA-recommended  
2 limit of 4 picocuries per liter --

3 MEMBER ANDERSON: Yes.

4 DR. NETON: -- in a residence, I mean,  
5 they are below that.

6 MEMBER ANDERSON: Yes.

7 DR. NETON: But that doesn't mean that  
8 you couldn't get some probably causation values  
9 that were elevated based on -- for lung cancer, for  
10 example. I don't have a good feel for that.

11 MEMBER ANDERSON: Okay. I was just  
12 wondering on that. Yes. Okay. That's fine. I  
13 am just curious as to whether -- you know, where  
14 does this fit, especially where you talk about  
15 bounding, but we never talk about bounding low  
16 particularly.

17 DR. NETON: Well, we believe these are  
18 bounded high values --

19 MEMBER ANDERSON: Yes, yes.

20 DR. NETON: -- because of the fact  
21 that --

22 MEMBER ANDERSON: Yes.

23 DR. NETON: -- it represents only a

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1 small period of time, and we have assumed that all  
2 of the activity is due to the AEC operations.

3 MEMBER ANDERSON: Okay.

4 CHAIRMAN MELIUS: But we are also  
5 assuming that the work histories are that people  
6 weren't really on the pile very much.

7 DR. NETON: Well, no, we are assuming  
8 that they were on the piles. I mean, that the  
9 values we are using would be if they were on top  
10 of the pile.

11 CHAIRMAN MELIUS: Yes. Okay. Yes,  
12 but it is conservative. Yes, yes.

13 DR. NETON: Oh, but, yes. Okay. I'm  
14 sorry. Yes, you're right.

15 MR. KATZ: Yes. So, this is Ted. Now  
16 we have correspondence from the petitioners which  
17 they asked that we would read to the Board and  
18 distribute. I have distributed this. So, this is  
19 what the petitioners say. It is bullet points, in  
20 effect, in the front-end.

21 "A 1978 radiological survey indicated  
22 significant residual contamination from the  
23 AEC/DOE activities at Blockson/Olin. NIOSH said

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1 in 2011 the potential for significant residual  
2 radiation existed at Blockson." That is the first  
3 point.

4 The second point: "We know that 90  
5 percent of Blockson claimants said they worked  
6 overtime when they were interviewed over the phone.  
7 We know our dad worked many hours of overtime during  
8 his 25 years at Blockson from 1959 to 1985. We  
9 believe that SC&A has it right when they say it is  
10 not consistent to have a 90 percentile for Blockson  
11 claimants and a 95th percentile for Simonds Saw  
12 claimants.

13 "It appears that some cleanup of  
14 radiation was performed at Simonds Saw during the  
15 AWE work. However, no cleanup of radiation was  
16 ever performed at Blockson. We" -- the Blockson  
17 claimants -- "feel that, since there was no cleanup  
18 of radiation at Blockson, nor was there ever credit  
19 given for overtime at Blockson during the period  
20 of June 1st, 1960 through December 31st, 1991, in  
21 order to be claimant-favorable, the Board should  
22 apply a 95th percentile value and 2500 hours per  
23 year for Blockson.

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1            "In order to fair, consistent, and  
2 based on the best-available science, we urge you  
3 to compare the Blockson SEC to that of Texas City  
4 and Simonds Saw. Thank you."

5            CHAIRMAN MELIUS: Jim, were you going  
6 to say something?

7            DR. NETON: Yes, I would just like to  
8 point out that the issue of 2,000 and 2500 hours  
9 came up as one of the issues that Wanda discussed.  
10 And we are taking that under advisement, whether  
11 or not we should increase the number of hours to  
12 2500 worked during the residual period. But that,  
13 we believe, is a Site Profile issue, not an SEC  
14 issue.

15           CHAIRMAN MELIUS: But it is something  
16 that you normally -- based on the evidence, that  
17 you would normally take into account in your  
18 individual dose reconstructions?

19           DR. NETON: Yes.

20           CHAIRMAN MELIUS: Great. Any other  
21 questions or comments?

22           (No response.)

23           CHAIRMAN MELIUS: I would just add,

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1 also, I know Texas City was a different situation  
2 in terms of being added to the Special Exposure  
3 Cohort because of the availability of other data  
4 there. And I don't recall Simonds Saw in detail.

5 Okay. So, we have a recommendation  
6 from the Work Group?

7 MEMBER MUNN: We do. The Work Group  
8 recommends that the SEC petition, as outlined  
9 earlier, be denied on the basis of the fact that  
10 dose reconstruction can be made for this period,  
11 a residual period for Blockson Chemical Company.

12 CHAIRMAN MELIUS: I think what we are  
13 saying is that the Work Group is supporting NIOSH's  
14 conclusion.

15 MEMBER MUNN: Yes, that is correct.

16 CHAIRMAN MELIUS: Do I have a second?  
17 We don't need a second.

18 MR. KATZ: We don't need a second.

19 CHAIRMAN MELIUS: We don't need a  
20 second.

21 Any other further questions or  
22 comments?

23 (No response.)

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1 CHAIRMAN MELIUS: If not, can you read  
2 the roll?

3 MR. KATZ: Yes. Alphabetically, Dr.  
4 Anderson?

5 MEMBER ANDERSON: Yes.

6 MR. KATZ: Ms. Beach?

7 MEMBER BEACH: Yes.

8 MR. KATZ: Mr. Clawson?

9 MEMBER CLAWSON: Yes.

10 MR. KATZ: Dr. Field?

11 MEMBER FIELD: Yes.

12 MR. KATZ: Dr. Kotelchuck?

13 MEMBER KOTELCHUCK: Yes.

14 MR. KATZ: Dr. Lemen is absent. I will  
15 collect his vote after, per the Board's procedures.

16 Dr. Lockey?

17 MEMBER LOCKEY: Yes.

18 MR. KATZ: Dr. Melius?

19 CHAIRMAN MELIUS: Yes.

20 MR. KATZ: Ms. Munn?

21 MEMBER MUNN: Yes.

22 MR. KATZ: Dr. Poston?

23 MEMBER POSTON: Yes.

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1 MR. KATZ: Dr. Richardson, are you on  
2 the line?

3 (No response.)

4 MR. KATZ: Okay. So, he is absent. I  
5 will collect his vote as well after the meeting.  
6 Dr. Roessler?

7 MEMBER ROESSLER: Yes.

8 MR. KATZ: Mr. Schofield?

9 MEMBER SCHOFIELD: Yes.

10 MR. KATZ: Ms. Valerio?

11 MEMBER VALERIO: Yes.

12 MR. KATZ: And Dr. Ziemer?

13 MEMBER ZIEMER: Yes.

14 MR. KATZ: Okay, and it is unanimous  
15 among participants, and the motion passes.

16 **Board Work Session**

17 CHAIRMAN MELIUS: Okay. We have a  
18 little bit of time before our lunch break. So, why  
19 don't we try to do some of the Board work session  
20 issues?

21 I will remind you, your homework  
22 assignment for lunch is to read the public comments  
23 from the last session, making sure you don't have

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1 any questions, and so forth, because we tend to go  
2 over them fairly quickly. So, those of you who  
3 haven't had time yet, before you can -- yes, that  
4 is your appetizer, as Ted put it.

5 (Laughter.)

6 CHAIRMAN MELIUS: Why don't we  
7 actually start at the bottom here on the agenda,  
8 which is the location for November, and get some  
9 input on that? And then, also, do some of the  
10 scheduling, at least start the scheduling.

11 MR. KATZ: Yes. So, this is Ted again.

12 I have just a little bit of food for  
13 thought to help you with this decision as to where.  
14 So, it is November, late November I think, our Board  
15 meeting. I am thinking of sort of fairweather  
16 ports for that time of year.

17 (Laughter.)

18 MR. KATZ: But that doesn't cancel out  
19 the opportunity to come back here where it is  
20 wintery, or whatever.

21 But we have Santa Susana, which will be  
22 done, the 83.14, in advance of that meeting. So,  
23 that would be a Los Angeles-based meeting.

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1                   We have Savannah River Site. I mean,  
2                   there is going to be lots of discussion tomorrow  
3                   about work products and schedule for the Savannah  
4                   River Site, but some of those products are due well  
5                   before that. So, that is a possibility, I suppose,  
6                   to think about at least.

7                   And then, LANL, there is a substantial  
8                   amount of work that will be done for LANL. Maybe  
9                   not everything buttoned-up, but in particular, as  
10                  I understand from Stu, it is uncertain whether they  
11                  will button-up all the matters related to the  
12                  petitioners, the firefighters, emergency  
13                  responders there. But there will be quite a bit  
14                  of work that will have been issued and probably  
15                  opportunity for a Work Group meeting in advance  
16                  there.

17                  So, those are three that come to mind  
18                  for me as possibilities, but do you happen have  
19                  others?

20                  CHAIRMAN MELIUS: Well, I would add one  
21                  other. But, first, a comment. An issue, I think,  
22                  on Savannah River, if I understand the schedule,  
23                  is we will not have had time for SC&A to do any

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1 reviews on that information. So, I'm not sure what  
2 we gain by --

3 MR. KATZ: Okay. I thought there were  
4 some products coming out late summer even, but --

5 CHAIRMAN MELIUS: Well, but I think  
6 those are fairly -- I would expect it has been so  
7 long -- they have taken so long, they would be  
8 fairly substantial. And I think a review for -- I  
9 mean, they involve coworker models -- the review  
10 is not straightforward.

11 MR. KATZ: Right. That is why I am not  
12 arguing for doing this.

13 CHAIRMAN MELIUS: No, no, no.

14 MR. KATZ: I am just saying it is, you  
15 know --

16 CHAIRMAN MELIUS: Santa Susana we have  
17 been to recently.

18 The other one that I would throw that  
19 we haven't been in a long time, it is not a  
20 warm-weather area, but for that matter, Los Alamos  
21 may not be, either, that time of year depending on  
22 where we meet. But it would be Argonne East. We  
23 have a Site Profile we are going through. We

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1 haven't been there for an awful long time, right,  
2 as I recall?

3 MR. KATZ: Not in my tenure, yes.

4 CHAIRMAN MELIUS: Okay.

5 MR. KATZ: So, it has been an awful long  
6 time, yes.

7 CHAIRMAN MELIUS: Yes. Obama was  
8 running, starting. Yes, yes, it was the beginning  
9 of the presidential then.

10 MR. KATZ: So, how does that look in  
11 terms of work products? Is that --

12 CHAIRMAN MELIUS: We need to set up, by  
13 the way, I need to appoint a Work Group. Again,  
14 remember, one of the reasons to go to these sites  
15 is to get information and give people an  
16 opportunity, and I don't recall from that meeting  
17 there 10 years ago, I don't recall a large number  
18 of people coming in. So, I don't know.

19 I am not sure, where are we  
20 with -- someone needs to refresh at least my memory  
21 on Los Alamos, what the holdup there is.

22 MR. HINNEFELD: Well, at Los Alamos,  
23 the main task now is to determine an approach for

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1 dealing -- you know, is dose reconstruction  
2 feasible after 1994, because the Class goes up  
3 through 1994.

4 CHAIRMAN MELIUS: Yes.

5 MR. HINNEFELD: So, then, you get into  
6 a different regulatory scheme, 10 CFR 835  
7 regulatory scheme. And is the data generated? Do  
8 we feel like it is sufficient to reconstruct doses  
9 in what is essentially the modern era?

10 And then, beyond that, the specific  
11 petitioners at Los Alamos were the [identifying  
12 information redacted]. And so, their question is,  
13 did we get overlooked; are we being considered  
14 appropriately in this regulatory scheme, this '94?

15 So, that specific question about  
16 whether the security officers are adequately  
17 considered, I am not so sure that is going to be  
18 ready. I think the approach for the post-'94 era,  
19 I think that might be ready.

20 CHAIRMAN MELIUS: So, sort of  
21 continuing, would hearing more from -- I don't know  
22 what has been done in terms of interviews and  
23 information-gathering. Would hearing more from

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1 the security guards and others there about the  
2 situation be helpful?

3 MR. HINNEFELD: That may be. I am not  
4 directly involved in it, but that may be.

5 CHAIRMAN MELIUS: Yes, yes, yes, yes.  
6 And we also have ongoing work at Sandia.

7 MR. HINNEFELD: Yes, there's the 835  
8 task is the same at Sandia. You know, do they have  
9 the information --

10 CHAIRMAN MELIUS: Right.

11 MR. HINNEFELD: -- essentially, in the  
12 modern era that is suitable?

13 CHAIRMAN MELIUS: Any other Board  
14 Member thoughts on -- when is our next meeting after  
15 the end of November?

16 MR. KATZ: I believe it is in March. I  
17 am almost certain it is March.

18 MEMBER KOTELCHUCK: Do we have a date  
19 for that meeting in November?

20 MR. KATZ: Yes, we have dates for all  
21 these. We do.

22 MEMBER KOTELCHUCK: What is the date in  
23 March?

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1 MEMBER BEACH: The 22nd and 23rd.

2 MR. KATZ: Right. So, November's  
3 meeting is actually the 30th through December 1st.  
4 And then, we have a teleconference in January, but  
5 March 22nd-23rd, right.

6 CHAIRMAN MELIUS: Any other sites that  
7 people would like?

8 MEMBER SCHOFIELD: Are you sure we  
9 don't want to do Buffalo at that time in November?

10 MR. KATZ: What?

11 CHAIRMAN MELIUS: No, the lake is  
12 still -- you have to go a few more weeks until you  
13 get the snow. I mean, the Chicago area in late  
14 March is probably not too high-risk. What makes  
15 sense is Los Alamos. We haven't been there in a  
16 while in that area. I should say the New Mexico,  
17 the Albuquerque/Santa Fe area.

18 MR. KATZ: Yes, Santa Fe is what we have  
19 typically done.

20 CHAIRMAN MELIUS: And then, it would  
21 give a little bit more time for our Work Group to  
22 get focused on Argonne, instead of going back there  
23 in the late March meeting.

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1 MR. KATZ: How does that sound for the  
2 rest of you? Because we have to start these  
3 arrangements early.

4 MEMBER MUNN: Los Alamos in November is  
5 what you were talking about?

6 MR. KATZ: Yes, that is, I think, what  
7 Jim is putting on the table.

8 MEMBER MUNN: It sounds reasonable to  
9 me. The first snows will have come.

10 CHAIRMAN MELIUS: Yes. Can you get  
11 your four-wheeler and make it to the airport here?  
12 Okay. Okay.

13 MR. KATZ: Okay, then, we will go with  
14 that.

15 MEMBER MUNN: So, the 30th and December  
16 1st?

17 MR. KATZ: December 1st, right.

18 MEMBER MUNN: December 1st?

19 MR. KATZ: That's correct.

20 MEMBER MUNN: Okay.

21 MR. KATZ: November 30th-December 1st.  
22 What is the question?

23 CHAIRMAN MELIUS: No, no, Los Alamos.

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1 MR. KATZ: LANL, yes. And so, keep in  
2 mind, I think the week before that, then, is  
3 Thanksgiving week. It will mean for staff and Work  
4 Groups and all thinking ahead because people aren't  
5 going to be wanting to put together their  
6 presentations at Thanksgiving dinner, right? It  
7 might happen anyway, but it would be good to prepare  
8 for that.

9 CHAIRMAN MELIUS: Gravy on the slides,  
10 it is going to be a mess.

11 MR. KATZ: Yes, yes. Okay, then.

12 CHAIRMAN MELIUS: I thought you were  
13 trying to schedule a meeting for Thanksgiving.

14 (Laughter.)

15 CHAIRMAN MELIUS: So, then, we have a  
16 Board call to --

17 MR. KATZ: To schedule.

18 CHAIRMAN MELIUS: -- to schedule.

19 MR. KATZ: Right, for either the week  
20 of -- I mean, the good range is the week of the 5th  
21 or the 12th of June. So, that would be following  
22 that March face-to-face. The week of June 5th, I  
23 think the 7th would be a Wednesday.

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1 CHAIRMAN MELIUS: The 7th I can't do  
2 it, but --

3 MR. KATZ: Okay. The 5th? How's  
4 that? Or the 6th?

5 CHAIRMAN MELIUS: The 6th.

6 MR. KATZ: June 6th, how is that for  
7 everyone in the room? June 6th of next year.  
8 Good? Do you have dinner dates in the way?

9 And on the line, Paul, June 6th, is that  
10 okay, teleconference?

11 (No response.)

12 MR. KATZ: And Loretta? And John?

13 MEMBER VALERIO: That works for me.

14 MEMBER POSTON: Okay for me.

15 MR. KATZ: 11:00 a.m. It is pretty  
16 standard. Okay, so June 6th it is for a  
17 teleconference, 2017.

18 And then, meeting, the range is about  
19 the week of July 24th or the 31st. So, that would  
20 be moving into August. How about that week of July  
21 24th? How is that on people's schedules? Like  
22 the Health Physics Society, is that in the way or?

23 MEMBER MUNN: Sorry. What date?

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1 MR. KATZ: So, the week of July 24th.  
2 The 24th would be a Monday, but --

3 MEMBER ROESSLER: It does not conflict  
4 with Health Physics Society.

5 MR. KATZ: Oh, good. All right. And  
6 it is not immediately before, the Health Physics  
7 Society?

8 MEMBER ROESSLER: The Health Physics  
9 Society meeting is the 9th through the 13th of July,  
10 2017.

11 MR. KATZ: Okay. So, that gives us a  
12 couple of weeks. For those that are taken away by  
13 that.

14 All right. And on the line, the week  
15 of -- Jim, does that work for you?

16 CHAIRMAN MELIUS: I don't know yet.

17 MR. KATZ: The week of July 24th?  
18 Okay.

19 CHAIRMAN MELIUS: Tuesday and  
20 Wednesday should.

21 MR. KATZ: Okay, that would be 25-26.  
22 Paul, July 25-26? And Loretta? And John Poston?

23 MEMBER ZIEMER: Okay.

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1 MEMBER VALERIO: I'm okay.

2 MR. KATZ: John Poston?

3 (No response.)

4 MR. KATZ: Okay. Is that good for you,  
5 Jim, 25-26?

6 CHAIRMAN MELIUS: I think so, but I  
7 won't know --

8 MR. KATZ: Oh, okay. For now?

9 CHAIRMAN MELIUS: Yes, for now it will  
10 be okay. We have time.

11 MR. KATZ: So, let's go with that for  
12 now.

13 CHAIRMAN MELIUS: Where is the Health  
14 Physics Society meeting?

15 MEMBER ROESSLER: Where is it?

16 CHAIRMAN MELIUS: Yes.

17 MEMBER ROESSLER: Raleigh, North  
18 Carolina.

19 CHAIRMAN MELIUS: Okay.

20 MEMBER ROESSLER: What date did you  
21 pick?

22 MR. KATZ: So, the 25th and 26th of  
23 July.

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1                   MEMBER FIELD:   And we do not have a  
2                   location for March, right?

3                   MR. KATZ:        So, we do not have a  
4                   location, although we talked about possibly doing  
5                   that in Chicago for ANL-East.

6                   CHAIRMAN MELIUS:   A long trip for you,  
7                   Bill.

8                   (Laughter.)

9                   MR. KATZ:        Okay.

10                  CHAIRMAN MELIUS:   Okay. With that, do  
11                  you want to start with our -- do you have a list  
12                  of --

13                  MR. KATZ:        Work Groups?        Sure.  
14                  Absolutely.

15                  CHAIRMAN MELIUS:   So, let's start with  
16                  our Work Group reports. We will go for about 15-20  
17                  minutes, and then, we will break for lunch. Is  
18                  that fair? Okay?

19                  We will start with Ames.

20                  **Work Group Reports**

21                  **Ames**

22                  MEMBER KOTELCHUCK:   We are waiting for  
23                  reports from Tom Tomes and the staff. Nothing new.

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1 We have one report completed. Other reports are  
2 coming, and we are not going to hold a meeting until  
3 we have a few reports of the three that are due us.

4 CHAIRMAN MELIUS: And do we have a  
5 schedule on those reports?

6 MEMBER KOTELCHUCK: Not firm. I can  
7 give you -- they will be a few months. I can  
8 double-check his predictions, but I think we are  
9 talking about the fall.

10 CHAIRMAN MELIUS: Okay. So, that is  
11 not far away.

12 MEMBER KOTELCHUCK: No.

13 CHAIRMAN MELIUS: Fall of '16?

14 MEMBER KOTELCHUCK: Yes.

15 CHAIRMAN MELIUS: Yes. Okay. Okay.

16 MEMBER KOTELCHUCK: I will just  
17 double-check that.

18 CHAIRMAN MELIUS: It should be on the  
19 NIOSH --

20 MEMBER KOTELCHUCK: Oh, yes.

21 MR. KATZ: Coordination Report.

22 CHAIRMAN MELIUS: -- Coordination  
23 Report, that'll hold their feet to the fire.

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1                   MEMBER KOTELCHUCK: It will be just a  
2 moment, if you would, or I will come back to it.

3                   MR. KATZ: Stu is coming with it.

4                   MR. HINNEFELD: Yes. We actually  
5 didn't put a date on our Coordination, but we are  
6 evaluating some data that we recently got from -- is  
7 that right? Oh, I was looking at the wrong one.

8                   Yes, we haven't really quite -- we are  
9 looking at data we got from Ames, and we have not  
10 quite established a date yet when we will be able  
11 to collect.

12                  CHAIRMAN MELIUS: Okay.

13                  DR. NETON: Well, Tom Tomes indicates  
14 that we might have these documents by the end of  
15 September for internal review, which means they  
16 will take a month or so after that. So, it is going  
17 to be probably late fall.

18                  CHAIRMAN MELIUS: Late fall?

19                  DR. NETON: Late fall, yes.

20                  CHAIRMAN MELIUS: Okay. Okay. It is  
21 a Site Profile issue.

22                  DR. NETON: Yes.

23                  CHAIRMAN MELIUS: Blockson we have

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1 heard. Brookhaven?

2 **Brookhaven**

3 MEMBER BEACH: I have no update for  
4 Brookhaven. We are waiting for TBDs to be issued.

5 Oh, there's Jim.

6 DR. NETON: This is Jim. I can tell  
7 you that the TBD revision at Brookhaven is  
8 scheduled for April 2017. It is being held up by  
9 a neutron issue that is also the same issue that  
10 is at a couple of other sites, interpretation of  
11 these NTA films, a lower limit of detection, that  
12 sort of thing.

13 MEMBER BEACH: Thank you.

14 CHAIRMAN MELIUS: Okay, thanks.  
15 Carborundum. Gen?

16 **Carborundum**

17 MEMBER ROESSLER: We have a Work Group  
18 meeting August 18th, which is next Wednesday or  
19 Thursday. I will look it up and make sure.

20 CHAIRMAN MELIUS: Good. Dose  
21 Reconstruction Review, gone. Fernald.

22 **Fernald**

23 MEMBER CLAWSON: I don't have any more

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1 to update. We are still waiting, I believe -- and  
2 they can correct me if I am wrong -- I thought it  
3 was in NIOSH's hands. There were some  
4 discrepancies. They are all TBD issues that we are  
5 trying to come to a resolution with.

6 MR. HINNEFELD: Yes. We wrote a  
7 revised internal dosimetry TBD chapter and that  
8 just cleared. And so, it will be on our website  
9 probably this week.

10 There is a follow-up, another revision  
11 to the environmental to make sure it is consistent  
12 with the internal, but that is going to be really  
13 quick, too.

14 And we have been in conversation or we  
15 have exchanged some messages with SC&A about the  
16 uranium coworker model and the findings on that and  
17 the time-weighted average approach. I think that  
18 discussion is ready for the Work Group.

19 So, we are getting pretty close to being  
20 able to have, I think, one Work Group meeting with  
21 everything that is on the table being discussed.

22 MEMBER CLAWSON: Thank you.

23 CHAIRMAN MELIUS: And we need to assign

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1 a review of the internal dose document to SC&A since  
2 it is about to go --

3 MR. KATZ: I can do that, as a matter  
4 of course, when it is issued.

5 CHAIRMAN MELIUS: Yes. No, I am just  
6 making sure it gets --

7 MR. HINNEFELD: Yes. I mean, that is  
8 the expectation. This is to see that we revised  
9 it in accordance with the way we said we would  
10 revise it.

11 MR. KATZ: Right, verification.

12 CHAIRMAN MELIUS: Okay. Okay. Okay.  
13 Way to move things along, Brad. I didn't mean to  
14 make you choke.

15 (Laughter.)

16 CHAIRMAN MELIUS: Grand Junction.  
17 Bill?

18 **Grand Junction**

19 MEMBER FIELD: Yes. SC&A provided a  
20 review of the NIOSH evaluation on May 2016, and  
21 there was one finding. And then, NIOSH provided  
22 a review July 17th or so.

23 So, we need to meet as our first Work

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1 Group meeting. We have to schedule that.  
2 Exciting.

3 **Hanford**

4 CHAIRMAN MELIUS: Okay, great.  
5 Hanford, no real update. We are still getting our  
6 new NIOSH person oriented, but I don't think there  
7 is anything coming up shortly. So, I think we are  
8 set there.

9 **Lawrence Berkley Lab**

10 Idaho we have heard about. Lawrence  
11 Berkeley. Paul? Paul, did you hear me?  
12 Lawrence Berkeley Lab.

13 MEMBER ZIEMER: Yes, I was on mute at  
14 first. Yes. The data capture work is still going  
15 on at Lawrence Berkeley and the analysis. We are  
16 awaiting that material. So, the status remains  
17 pretty much the same.

18 CHAIRMAN MELIUS: Yes, there is a good  
19 update from NIOSH on their report.

20 MEMBER ZIEMER: Right. If you look on  
21 the NIOSH summary sheet, it has a pretty good update  
22 on Lawrence Berkeley as well.

23 CHAIRMAN MELIUS: Okay. To keep the

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1 Board Members awake and challenged, NIOSH does not  
2 list everything in alphabetical order. They have  
3 a separate grouping.

4 (Laughter.)

5 CHAIRMAN MELIUS: But you can't fool  
6 us. We can still find it. Okay. Kansas City.

7 **Kansas City and Mound**

8 MEMBER BEACH: Yes. Kansas City, I  
9 heard from Pete last week that he believes NIOSH  
10 is going to be ready to hold a Work Group meeting  
11 in September-October, early October, late  
12 September timeframe. So, I am still waiting to  
13 hear back from NIOSH on that schedule, if it is  
14 going to go forward or not.

15 DR. NETON: Is that Kansas City or  
16 Mound that you are talking about?

17 MEMBER BEACH: Kansas City. I believe  
18 that is what Pete indicated.

19 DR. NETON: We talked about a Work  
20 Group meeting at Mound --

21 MEMBER BEACH: Was it Mound?

22 MR. KATZ: Yes.

23 DR. NETON: -- in late September.

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1 MEMBER BEACH: Oh, I apologize.

2 DR. NETON: Yes, I don't know if there  
3 is any Work Group required at Kansas City.

4 MR. KATZ: It was Mound that we were  
5 talking about.

6 DR. NETON: Yes, that's what I thought.

7 MR. KATZ: Yes.

8 MEMBER BEACH: Well, there you go.

9 DR. NETON: We have updated the TBD at  
10 Kansas City in response to the Working Group's Site  
11 Profile issues that remained after the SEC  
12 evaluation. And that Site Profile review was  
13 submitted for ADC review July 29th.

14 So, it will take a while to wind through  
15 the system, but in the next few months it should  
16 be issued. At that point, maybe the Work Group  
17 would look at it to make sure that we addressed the  
18 issues properly or to their satisfaction.

19 MEMBER BEACH: Okay. So, it is Mound.  
20 I apologize. The two sites are -- Pete has both  
21 of them, and I was mistaken. So, Mound, it looks  
22 like we are soon to meet for that.

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1       **Lawrence Livermore**

2                   CHAIRMAN MELIUS:  As I was looking at  
3       Kansas City, something caught my eye, which I don't  
4       think we actually have a Work Group on, was Lawrence  
5       Livermore.  It is a very succinct report from  
6       NIOSH, schedule to be determined, which is an  
7       addendum to the Evaluation Report.

8                   MR. HINNEFELD:  Right.  Right.  We  
9       completed -- remember, we added a Class for a  
10      certain period of time and withheld judgment on  
11      later period.  This work is competing with  
12      resources with other sites.  And so, right now, it  
13      is sort of waiting.  We don't have a schedule for  
14      the next piece of it right now.

15                  CHAIRMAN MELIUS:  I guess editorial  
16      comment, I think it is -- I'm a little concerned  
17      if we have an outstanding Evaluation Report that  
18      hasn't been -- I mean, it is an SEC and it is a  
19      request, right, if I am recalling?  And we are sort  
20      of leaving it open-ended.  I understand the  
21      competing resource issue, being responsible for  
22      some of that.

23                  I think it would be nice at least to be  
24      able to give some sort of idea.  We have

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1 petitioners there and a site that we have, because  
2 I remember concerns about it. I don't remember  
3 what hasn't been evaluated yet. But maybe for our  
4 next Board call, or something, or whatever, we can  
5 just get an update or something.

6 MR. HINNEFELD: Yes, certainly by the  
7 next Board call. I might be able to refresh my  
8 memory over lunch and be able to say more this  
9 afternoon about it.

10 CHAIRMAN MELIUS: Okay. Yes, if you  
11 could, that would be helpful.

12 **LANL**

13 Okay. LANL, I think we talked about it  
14 a little bit already, but --

15 MEMBER BEACH: Yes, we did. It sounds  
16 like NIOSH will have some work to do.

17 If you remember the last meeting I  
18 reported that SC&A and NIOSH went and dug through  
19 some boxes, and we are just waiting for NIOSH's  
20 report on that, extending the SEC time period. So,  
21 that is all I have on that.

22 CHAIRMAN MELIUS: That's LaVon's site?

23 MEMBER BEACH: Yes. Yes.

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1 CHAIRMAN MELIUS: Gone fishing.

2 MR. KATZ: Gone fishing. That's what  
3 I was just thinking.

4 (Laughter.)

5 CHAIRMAN MELIUS: Okay. Nevada.

6 **Nevada Test Site**

7 MEMBER CLAWSON: We are just finishing  
8 up the last TBDs. We don't have anything right  
9 now. I believe that NIOSH had some action items.  
10 I believe it was part of the coworker or something  
11 like that. To tell you the truth, it has been quite  
12 a while.

13 DR. NETON: This is Jim. The Nevada  
14 Test Site, we sent two White Papers in response to  
15 some resuspension issues that were raised by SC&A  
16 that they generated back in July 2015. So, those  
17 White Papers are out. SC&A I am sure has got them  
18 in the review cycle in some way.

19 So, once those are reviewed, we might  
20 be able to meet and talk about that.

21 MEMBER CLAWSON: So, that is in SC&A's  
22 hands.

23 MR. KATZ: What is the schedule for

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1 SC&A for that?

2 MR. STIVER: Probably looking at  
3 sometime in September, I would think, about that  
4 timeframe.

5 CHAIRMAN MELIUS: So, we think about a  
6 meeting down the road, yes?

7 MEMBER CLAWSON: Yes. We are just  
8 finishing up the last TBD issues.

9 **Oak Ridge and X-10**

10 CHAIRMAN MELIUS: Oak Ridge and X-10.  
11 Gen?

12 MEMBER ROESSLER: As far as I know,  
13 NIOSH is still collecting data.

14 DR. NETON: Yes, we are collecting a  
15 lot of data. You know, we were reviewing the -- we  
16 had some issues with what the site was providing  
17 us and trying to validate their database, if we were  
18 getting all of the information.

19 Eventually, we determined that we  
20 weren't getting all of the information we thought  
21 we were getting on claims. So, in fact, we have  
22 gone back to the site now and are requesting them  
23 to review the responses they provided us for

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1 bioassay data, going back possibly up to 1800  
2 claims. Anything that was issued before September  
3 2013. So, they are working on that now. We are  
4 collaborating with DOE and others to get that  
5 moving. Once we get the responses there, we will  
6 be able to move forward with the other issues.

7 CHAIRMAN MELIUS: Thank you. It is a  
8 little disturbing, but -- Pacific Proving Ground.

9 **Pacific Proving Grounds**

10 MEMBER LOCKEY: There is nothing to  
11 report, Jim.

12 CHAIRMAN MELIUS: Pantex. Jim, do you  
13 have --

14 **Pantex**

15 DR. NETON: Well, I can report on the  
16 Pacific Proving Grounds that there were nine  
17 outstanding issues there, and the last Work Group  
18 meeting I think everything was listed either closed  
19 or in abeyance. We have revised the TBD and issued  
20 it on July 11th, 2016, so not too long ago. So,  
21 I think the remaining effort is to take a look at  
22 that and see if we have responded properly to the  
23 items that were indicated as being in abeyance.

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1                   MEMBER LOCKEY:  Then, you and I, we can  
2           do it at the conference call, I think.

3                   DR. NETON:  Oh, yes, I'm sure.

4                   MEMBER LOCKEY:  Okay.

5                   CHAIRMAN MELIUS:  And SC&A is doing  
6           that or is now going to start doing that?  Okay.  
7           Okay, good.  It has been three weeks.  Gee, you can  
8           do that.

9                   And all of this, Jim, without a site  
10          visit?

11                  MEMBER LOCKEY:  What's that?

12                  CHAIRMAN MELIUS:  All of this without  
13          a site visit?

14                  MEMBER LOCKEY:  Yes.  I am personally  
15          going next --

16                  MR. KATZ:  Do you want to cover PPG at  
17          the conference call?  Were you saying yes to that?

18                  CHAIRMAN MELIUS:  What?

19                  MR. KATZ:  I'm sorry, someone said  
20          something about --

21                  DR. NETON:  I think Dr. Lockey  
22          suggested we could cover --

23                  MR. KATZ:  Oh, at a Work Group

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1 conference call?

2 DR. NETON: Yes, a Work Group  
3 conference call.

4 MR. KATZ: Okay. Thank you. Okay.  
5 Thanks.

6 CHAIRMAN MELIUS: Last, but not least,  
7 for this session, Pantex. Sorry, Brad.

8 MEMBER CLAWSON: No problem. We just  
9 had a Work Group. We had, basically, six items.  
10 When we finally got to the Work Group, it was down  
11 to two to three. We just have one outstanding one.  
12 SC&A just wanted some further clarification, but  
13 the Work Group, we were pretty well satisfied with  
14 it. We just needed some clarification. When that  
15 is done, Pantex will be completed.

16 CHAIRMAN MELIUS: Excellent. Okay.  
17 So, why don't we break for lunch, do the homework  
18 assignment, read over the comments, and then, we  
19 will come back at 1:30? And we have further Work  
20 Group updates and quite a few more issues to catch  
21 up on. And then, we will start the reports on  
22 Idaho. I think that is, what, 3:15?

23 MR. KATZ: Yes. Idaho, 3:30.

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1 CHAIRMAN MELIUS: 3:30? Okay.

2 MR. KATZ: Right. Idaho and ANL-West.

3 CHAIRMAN MELIUS: Yes. Okay.

4 MR. KATZ: So, are we adjourned for  
5 lunch or recessed for lunch?

6 CHAIRMAN MELIUS: We're adjourned for  
7 lunch.

8 MR. KATZ: Recessed for lunch. Thank  
9 you.

10 (Whereupon, the above-entitled matter  
11 went off the record at 11:48 a.m. and resumed at  
12 1:46 p.m.)

13 CHAIRMAN MELIUS: Okay. What we have  
14 to continue our work period is the Work Groups.

15 I have got to get caught up here with  
16 where we are. So, we finished Pantex. Brad was  
17 last, but not least. And Pinellas we have done  
18 really.

19 Phil, Portsmouth, Paducah, K-25?

20 **Portsmouth, Paducah, K-25**

21 MEMBER SCHOFIELD: Paducah we are  
22 pretty good on. We still have the neutron/photon  
23 issues at Portsmouth and Oak Ridge. Those are

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1 issues we still have outstanding.

2 CHAIRMAN MELIUS: What are you waiting  
3 on? Do you recall?

4 MEMBER SCHOFIELD: Yes, still waiting  
5 on NIOSH/DCAS with the neutron issue. We haven't  
6 met since 2012, though.

7 DR. NETON: We are working on the  
8 neutron issues. Neutron exposures are high in  
9 enriched uranium at those two facilities, and there  
10 is a White Paper being prepared. I think it is  
11 October, is the scheduled date? It is soon.

12 CHAIRMAN MELIUS: Okay.

13 DR. NETON: It is in the next few  
14 months, I guess.

15 CHAIRMAN MELIUS: Okay. Good.  
16 Thanks, Jim.

17 Rocky?

18 **Rocky Flats**

19 MEMBER KOTELCHUCK: Basically, look,  
20 we have resolved all the outstanding issues but  
21 one, the critical mass lab.

22 MR. KATZ: Dave, would you please speak  
23 into the microphone?

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1 MEMBER KOTELCHUCK: Oh, I'm so sorry.

2 MR. KATZ: Thanks.

3 MEMBER KOTELCHUCK: Yes, yes. Thank  
4 you.

5 We have resolved all of the outstanding  
6 issues except critical mass lab. A lot of their  
7 records are in LANL. They were originally  
8 promised us in January of this year. It got  
9 postponed to March. It seems to just be postponed  
10 and postponed. That is to say, there is a lot of  
11 data; it is not apparently sorted out according to  
12 that lab. And so, there is just a lot of work.

13 And so, we are at the stage where I would  
14 say that it is dragging. We don't have -- unless  
15 somebody can report from DCAS -- I don't think we  
16 have a firm date. The date has been postponed and  
17 postponed, not because work hasn't been done, but  
18 because there is a lot of information to gather and  
19 it is just taking a while.

20 So, we are settled, but for that one  
21 issue, and that issue, as soon as we get the  
22 data -- and LaVon is the key person on that, and  
23 probably could give us a little better date -- but

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1 it is clear that it could be, I would assume -- I  
2 would hope we would have it done in the fall, yes.

3 DR. NETON: Jim, I think LaVon  
4 indicated that maybe in November we might be able  
5 to have that revised revision to be done by the end  
6 of November sometime.

7 CHAIRMAN MELIUS: Yes, right. Okay.

8 MEMBER KOTELCHUCK: It certainly isn't  
9 for lack of effort and lack of attention to it.

10 CHAIRMAN MELIUS: Questions, comments  
11 on that?

12 (No response.)

13 CHAIRMAN MELIUS: Okay. Sandia, Dr.  
14 Lemen isn't here. Any --

15 MR. KATZ: There is no report.

16 **Santa Susana**

17 CHAIRMAN MELIUS: Yes. Santa Susana?  
18 I think we heard earlier. I don't know, Phil, do  
19 you know more about what is happening?

20 MEMBER SCHOFIELD: No. I have been  
21 kind of out of the loop, and I apologize on that.

22 DR. NETON: I believe Stu a little  
23 earlier indicated that we are working on an

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1 Evaluation Report for Santa Susana to extend the  
2 SEC, and we hope to have that report done for the  
3 next Board meeting.

4 CHAIRMAN MELIUS: Can you describe  
5 that a little bit, just to keep us all --

6 DR. NETON: Well, it is in draft form,  
7 so I am a little reluctant to flesh --

8 CHAIRMAN MELIUS: Well, the subject  
9 matter, I think is -- shouldn't be --

10 DR. NETON: Well, it is to extend the  
11 Class, and I don't remember the exact end date.

12 CHAIRMAN MELIUS: Okay.

13 DR. NETON: It will be for a while.  
14 But it is based on infeasibility to reconstruct  
15 certain other nuclides at the facility --

16 CHAIRMAN MELIUS: Okay.

17 DR. NETON: -- rather than the main  
18 ones. That is the best I can say right now.

19 CHAIRMAN MELIUS: And we still have  
20 Class site definition issues? Are those going to  
21 get resolved?

22 DR. NETON: Not so much from NIOSH's  
23 perspective.

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1 CHAIRMAN MELIUS: No, I know it is not  
2 your perspective.

3 DR. NETON: Yes, there is a -- yes,  
4 there is always --

5 CHAIRMAN MELIUS: There is an ongoing  
6 issue there. I just was curious if there is any  
7 movement in the other agencies.

8 MR. HINNEFELD: We at NIOSH are not  
9 really pursuing that. I mean, there is  
10 information that is being provided to DOE and DOL,  
11 you know, who kind of make that judgment about it.

12 CHAIRMAN MELIUS: Okay. I was just  
13 curious because that would affect, obviously, what  
14 else needs to be done there, if something changes.  
15 Is that fair? Yes.

16 Savannah River we will hear about later  
17 tomorrow, Science Issues? No?

18 **Science Issues**

19 DR. NETON: I don't think Dr.  
20 Richardson is on the phone, but I do have something  
21 to communicate here.

22 We finally received the long-awaited  
23 Dose and Dose Rate Effectiveness Factor Report from

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1 Oak Ridge Center for Risk Analysis. We got that  
2 just a couple of months ago. I am still sort of  
3 looking at it. Other things have been competing  
4 for my time, including the extension of the SENES  
5 contract.

6 (Laughter.)

7 DR. NETON: It is long. It is, I  
8 think, 350-360 pages long. So, once I digest  
9 it -- I did send an email to Dr. Richardson last  
10 week, Friday I believe, indicating that, once I am  
11 satisfied with the content, I would like to pass  
12 it onto the Sciences Issues Work Group for their  
13 review, or whatever they want to do with it. I  
14 offered that, and we will see what happens.

15 CHAIRMAN MELIUS: Okay, great.  
16 Nothing like an upcoming contract renewal to have  
17 deadlines being met from the contractor.

18 (Laughter.)

19 DR. NETON: Right.

20 CHAIRMAN MELIUS: Okay, good.  
21 Special Exposure Cohort Issues, I don't think there  
22 is anything outstanding there.

23 Subcommittee on Dose Reconstruction.

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1 Dave?

2 **Subcommittee on Dose Reconstruction**

3 MEMBER KOTELCHUCK: Well, we are  
4 moving along well, and we have already completed  
5 two more of the --

6 MR. KATZ: Dave, can you speak into the  
7 microphone, please?

8 MEMBER KOTELCHUCK: Again, we have  
9 completed two more of the blind cases that were not  
10 in this report that are from, I guess, Set 14 on.

11 So, we have a meeting coming up on  
12 Tuesday, September 13th. I think things are  
13 running smoothly and I believe according to  
14 schedule.

15 Any other Committee members want to say  
16 something?

17 (No response.)

18 MEMBER KOTELCHUCK: Okay.

19 CHAIRMAN MELIUS: Okay. Questions?  
20 Comments?

21 (No response.)

22 CHAIRMAN MELIUS: Okay. Procedures  
23 Subcommittee.

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1       **Procedures Subcommittee**

2                   MEMBER MUNN: We last met in May, and  
3 we are so effective and so efficient that we just  
4 cleaned up almost everything on our plate at the  
5 moment.

6                   We are in the process right now of  
7 developing what our next series of challenges are  
8 going to be, and I am awaiting word from both NIOSH  
9 and our contractor as to when they will have enough  
10 material ready for us to deal with for us to call  
11 another meeting. I currently anticipate that that  
12 will happen in the next month or so.

13                  CHAIRMAN MELIUS: Excellent upbeat  
14 report there. Does our contractor or NIOSH have  
15 any comments or update?

16                   (No response.)

17                  CHAIRMAN MELIUS: No? Okay. Shaking  
18 their heads.

19                   Paul, TBD-6000?

20       **TBD-6000**

21                   MEMBER ZIEMER: All right, yes. There  
22 is a good summary in the SC&A review for all of the  
23 things going on at this time. But, specifically,  
24 I'll highlight a couple items.

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1           We have reviewed the SC&A coordination  
2           update, which you should all have. First, the  
3           General Steel Industries, in June, NIOSH did chose  
4           Rev 2 of Appendix BB, which is the General Steel  
5           Industries document. And that has been assigned  
6           to SC&A to review. That review is in process,  
7           close to finishing, I understand. Depending on  
8           what we get from that in terms of whether there are  
9           any issues with the final revision -- well, I  
10          shouldn't call it final -- with Rev 2, we will  
11          determine whether we need to meet further to  
12          resolve anything.

13           I will just mention on TBD-6000 on  
14          Joslyn there are still some open items, but we are  
15          waiting for some responses from NIOSH on some  
16          outstanding issues. So, nothing specifically  
17          scheduled on that at this time.

18           So, that is my report at this time.

19           CHAIRMAN MELIUS: Okay. Thank you,  
20          Paul. Any questions, comments?

21           (No response.)

22           CHAIRMAN MELIUS: It has been a busy  
23          Work Group, yes.

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1           We have been working on some agenda  
2 changes here. So, I think Henry's report will come  
3 up as a -- I want to finish up. We have a few more  
4 Work Groups to go through, and then, we will switch  
5 over. Henry will give his report, which was  
6 scheduled for tomorrow.

7           I think the one Westinghouse I think we  
8 still need to keep on schedule, but the other one  
9 we can get done this afternoon. And then, we have  
10 a few more things to fill in. So, we will do that.

11       **Surrogate Data Work Group**

12           Surrogate Data Work Group, which I  
13 chair, there is nothing to report. I don't believe  
14 there is any real update on Weldon Springs, either,  
15 or on Worker Outreach. So, I think that actually  
16 completes our Work Group updates, and so forth.

17           And then, Henry, do you want a little  
18 time to get your act together, the slides?

19           MEMBER ANDERSON: We need the slides  
20 loaded up here, yes.

21       **Review of Site Profile for United Nuclear Company**  
22       **(Hematite, MO)**

23           Actually, just a quick update on our

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1 Work Group before I present that is we pretty well  
2 have closed out much of what we have been working  
3 on. We have two Site Profile catchups still to do  
4 on Hooker Electrochemical. We are waiting for a  
5 NIOSH response to the comments made by SC&A. And  
6 then, General Atomics has another couple of Site  
7 Profile issues that were still outstanding.

8 Okay. So, hopefully, some of you have  
9 at least looked at the presentation and the  
10 materials that we previously had. This is the TBD  
11 issues that we have looked at on an internal  
12 exposure coworker model for United Nuclear. We  
13 have been through this site for other issues  
14 previously.

15 Let's see. It is, just quick to give  
16 you an update, located in Hematite, Missouri.  
17 They manufactured uranium metal and compounds from  
18 natural enriched uranium for use as nuclear fuel  
19 for the Navy as well as some commercial customers.  
20 There was also some thorium uranium oxide pellets,  
21 a fairly short project in 1964. Operational period  
22 was '58 to '73; residual period, '74 to 2009.

23 Just to give you the chronology: this

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1 is part of the TBD-6001, which then was sunsetted,  
2 and we went into the current group names. And the  
3 Site Profile for United Nuclear was completed in  
4 March of 2008. We had SC&A do its review on  
5 then-Appendix D in September of 2009 and '10. In  
6 response to our review, there was a Revision 1,  
7 again, TBD-6001, a set of issues being cycled into  
8 new provisions. And in June, we had SC&A complete  
9 their review, and they looked at Rev 1 of the Site  
10 Profile and the addendum to the earlier report.

11 In March 2011, they issued the 008, Rev  
12 0, standalone TBD for UNC, just to show you there  
13 that we started out with 2008 as part of 6001. And  
14 then, it got its own standalone TBD as a replacement  
15 in 2011.

16 Between '10, July and September, the  
17 Work Group met on seven different occasions for  
18 discussions and resolutions of the findings  
19 pertaining to UNC as well as some of the other AWE  
20 facilities. The findings were identified, six of  
21 them by SC&A, were presented to our Work Group and  
22 to this Advisory Board, if you remember September,  
23 which you probably don't, of 2012 in Denver, a very

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1 nice meeting.

2 (Laughter.)

3 MEMBER ANDERSON: And there was  
4 complete resolution/closure of the findings. It  
5 was recommended by the Work Group. But there was  
6 some concern still for Finding 4, which  
7 pertained -- at that time I remember we were going  
8 through the reviews on surrogate data and there was  
9 concern for the internal coworker model.

10 We asked for some additional work to be  
11 done, and we had partially resolved regarding  
12 Finding 4. We had quite a lengthy, multiple  
13 session discussions on the 95th percentile value  
14 of the coworker model and how well that reflected  
15 and was it adequately bounding of exposures? And  
16 then, when sufficient bioassay data was available,  
17 they could be used to estimate intake, but coworker  
18 model data would be used only when bioassay data  
19 was absent or inadequate, which was the case in some  
20 particular instance.

21 And there was quite a bit of progress  
22 made, as I said earlier there, we had partial  
23 resolution, but there remained some peripheral

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1 issues that were identified just before the  
2 September meeting. As a Work Group, we hadn't had  
3 time to get together and discuss further. We did  
4 have a teleconference on September 7th, but there  
5 were some remaining issues that had to be  
6 developed. That is what we are finalizing today.

7 The initial review critically compared  
8 air monitoring data and urinalysis data for  
9 consistency with proposed internal coworker model.  
10 And then, we specifically had SC&A review  
11 monitoring records, and they found that there was  
12 limited correlation between the air monitoring and  
13 urinalysis data, which was providing the technical  
14 basis for the NIOSH coworker model for assignment  
15 of daily inhalation values of uranium.

16 And since the bioassay results and the  
17 procedures are given the highest priority, when  
18 available, SC&A focused its review on bioassay data  
19 for assessing the credibility of the internal  
20 coworker model. So, what we really did is take two  
21 cases that we had data on, and then, see how well  
22 the coworker model would have predicted or assigned  
23 exposures to them. And that was the activity that

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1 has been ongoing for some time.

2 And two operators who had high-end  
3 exposures, in order to, as you can see here,  
4 determine whether the coworker model would be  
5 bounding in the example of these two individuals,  
6 just to give a sense of how well the coworker model  
7 would actually work when applied to individuals  
8 with no existing data.

9 And bioassay-derived inhalation  
10 intakes for the two yielded values that were quite  
11 different than the originally-recommended  
12 geometric mean, standard deviation in the 6001  
13 Appendix D.

14 And then, Finding 4, based on that  
15 discrepancy that was found, that the intakes  
16 recommended by NIOSH for the pre-June '63 period  
17 would significantly underestimate the potential  
18 internal exposures for these two example  
19 operators. And there was some concern.

20 So, looked at that, and they were really  
21 quite different. We really wanted to determine  
22 how could that happen, because it seemed to be there  
23 had to be some kind of a technical issue involved

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1       there.  And NIOSH felt much the same way.

2                   And so, our conditional recommendation  
3       was based on having NIOSH demonstrate to us that  
4       they could confirm that the high bioassay-derived  
5       intakes for the two operators were evaluated by  
6       SC&A and determine whether the bioassay data  
7       representing the two operators had been included  
8       also in the coworker model data.

9                   So, there were a number of issues in the  
10       datasets that really needed to be looked at more  
11       closely by NIOSH as well as SC&A.  And after  
12       spending time doing that, NIOSH issued a White  
13       Paper in February of 2014 that addressed these  
14       outstanding issues regarding the internal coworker  
15       model.

16                   And the summary of their conclusions in  
17       their White Paper was for the two operators that  
18       were chosen as our examples to evaluate how good  
19       the model was working.  They identified that '68  
20       and '71 urinalysis were available, between '62 and  
21       '65.  And the urine bioassay data for each operator  
22       were put into the evaluation to derive the  
23       corresponding daily inhalation values and

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1 solubilities for types M and S uranium for two time  
2 periods.

3           Hopefully, you have had a chance, but  
4 here you can see the comparison between the NIOSH  
5 analyses, and then, the Site Profile 95th  
6 percentile. You can see there is really quite a  
7 consistent difference between the two, and you can  
8 see the pre-June '63 time period that was  
9 reassessed or was evaluated, and then, the  
10 post-'63. You can see there are considerable  
11 differences between the two methods that really  
12 needed to be further elucidated, so we could  
13 understand how the model was operating and whether  
14 all of the data on these individuals were also  
15 included in the coworker model.

16           And then, because there were quite a few  
17 bioassay values for these two individuals,  
18 compared the two operators' top 10 bioassay  
19 results. That helped define the coworker model  
20 for pre-'63.

21           On the next slide I will show you that  
22 50 percent, or seven bioassay data points,  
23 representing the two operators, were not included

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1 in the coworker model dataset. And it is not quite  
2 clear how that omission occurred. But, given all  
3 the work that was going on at the time, it was good  
4 that we took a look at this, but for some reason  
5 these two sets of high values were not included.  
6 And that helped explain some of the differences  
7 that were seen.

8 Here you can see the 10 bioassay values.  
9 I am not going to spend a lot of time going over  
10 all of this, but just to show you why it took us  
11 so long to get from the start to the finish on this  
12 particular question and set of questions, and  
13 confirming and getting quality control evaluation  
14 of the coworker model database. And then,  
15 looking at how one can use existing data to validate  
16 the utility of the coworker model.

17 But, when they looked at values that  
18 NIOSH subsequently had for these two, they were  
19 consistent with the derived values by SC&A, which  
20 gave us greater confidence in the process we had  
21 put in place to take a look at this. The pre-'63  
22 intakes for the two operators are likely the  
23 result -- or this is what NIOSH's conclusions

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1        were -- that there were some contaminated or  
2        false-positive bioassay results which skewed the  
3        comparisons, but did conclude that these two  
4        workers represented exposures above the 95th  
5        percentile that was going to be used in the coworker  
6        model.

7                    And the failure to include the seven  
8        bioassay data points, when looking at the overall  
9        coworker model and their geometric mean and  
10       percentile values, those seven bioassay data  
11       points that had been left out really didn't  
12       significantly alter the geometric mean and the  
13       percentile values, and just pointing out  
14       statistically why geometric means are a useful tool  
15       to use when you have perhaps some high or, on the  
16       other side, low outliers.

17                    So, the path forward was the Work Group  
18        requested that SC&A review, respond to the White  
19        Paper, addressing the coworker model. And SC&A  
20        completed that in a memorandum dated June 3rd,  
21        2016, and concluding that after this rather  
22        exhaustive re-evaluation -- all of the  
23        documentation pertaining to this Finding 4 -- that

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1 SC&A now could understand what had happened and  
2 they agreed with NIOSH's recommendations that the  
3 selective use of the 95th percentile for the  
4 unmonitored workers classified operators as  
5 appropriate, and recommended that the long and  
6 short of this is that we could close Finding 4.

7           Hopefully, the Committee Members, as  
8 well as NIOSH and SC&A, understand what went on  
9 through this whole period of time, but the  
10 conclusion was we are satisfied that we now could  
11 understand and utilize the coworker model. So,  
12 that is the long and short of from 2008, over the  
13 last eight years from when we first started this.

14           So, Committee Members, aside from  
15 talking about the travel issues and the  
16 illnesses --

17           MEMBER KOTELCHUCK: No. Right. By  
18 the way, on that Table 2 on this slide here, isn't  
19 the last column Worker BBB? It is just a little  
20 labeling if you are going to put it into the record.

21           MEMBER ANDERSON: This one?

22           MEMBER KOTELCHUCK: Yes. Yes, that  
23 one. Isn't that -- the column on the right, isn't

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1 that Worker BBB?

2 MEMBER ANDERSON: Oh, yes, I think so.  
3 Oh, well, that is the way it is. We did have two  
4 workers that we worked off, yes.

5 MEMBER KOTELCHUCK: No, we have an  
6 opportunity --

7 MEMBER ANDERSON: Thank you very much.  
8 Good.

9 MEMBER KOTELCHUCK: Yes, we have an  
10 opportunity to get that corrected for the record.

11 MEMBER ANDERSON: Yes, yes, yes, yes.  
12 Okay.

13 MEMBER KOTELCHUCK: No problem.

14 MEMBER ANDERSON: So, I guess what we  
15 are asking for, as a Committee, we are now closing  
16 this out, if there is no other comment. I don't  
17 know if we need to have a motion to accept our  
18 report.

19 CHAIRMAN MELIUS: Yes, yes, we should.

20 MEMBER ANDERSON: This is the last of  
21 our --

22 CHAIRMAN MELIUS: No, this A and B  
23 stuff, I am getting a little --

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1 (Laughter.)

2 MEMBER ANDERSON: A and B, yes. Well,  
3 of course, we couldn't just do A and B; it had to  
4 be AAA and BBB.

5 CHAIRMAN MELIUS: That's right.  
6 That's right.

7 MEMBER ANDERSON: You don't really  
8 want to have three meetings to discuss that, right?

9 CHAIRMAN MELIUS: Right. It shows you  
10 how much computer programs are driving our  
11 nomenclature.

12 MEMBER ANDERSON: Yes, but it was good  
13 to fully understand what was going on here. So,  
14 I would say the Committee is proposing that we  
15 accept the TBD revisions.

16 CHAIRMAN MELIUS: That's a motion from  
17 the Work Group. So, we don't need a second to that.

18 Any further questions, comments?  
19 Anybody have questions? I guess we haven't --

20 MEMBER MUNN: I'm surprised you need a  
21 second; it was a motion from the Work Group.

22 CHAIRMAN MELIUS: I said we didn't need  
23 one. I am sorry if I misspoke. You know, As, Bs --

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1                   MEMBER ANDERSON:   And I think you have  
2                   been sent all of the documentation, and it is all  
3                   in the database that Wanda put together.

4                   CHAIRMAN MELIUS:   Yes.

5                   MEMBER ANDERSON:   So, if you want to go  
6                   and read more of it, feel free.  But I think we,  
7                   as a group, have been over it pretty exhaustively.  
8                   So, I think we got it sorted out.

9                   CHAIRMAN MELIUS:   I think it actually  
10                  shows how much work it takes to look at some of these  
11                  coworker models.

12                  MEMBER ANDERSON:   Yes.  Well, I think  
13                  as a model, to pick two, and then, work from those  
14                  to see --

15                  CHAIRMAN MELIUS:   Yes.

16                  MEMBER ANDERSON:   -- how well the model  
17                  would predict if we didn't have their data was very  
18                  helpful.  And then, we found that their data wasn't  
19                  in the -- so, it was just further confounded.

20                  CHAIRMAN MELIUS:   Yes.  It is almost  
21                  more difficult in a smaller situation like that.

22                  MEMBER ANDERSON:   Yes.

23                  CHAIRMAN MELIUS:   So, okay, further

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1 questions, comments?

2 (No response.)

3 CHAIRMAN MELIUS: All in favor of  
4 accepting the recommendation from the Work Group  
5 say aye.

6 (Chorus of aye.)

7 CHAIRMAN MELIUS: Opposed?

8 (Chorus of aye from telephone.)

9 CHAIRMAN MELIUS: Those are delayed  
10 ayes I hope.

11 (Laughter.)

12 MR. KATZ: Yes, right.

13 CHAIRMAN MELIUS: Not quite as quick.  
14 Anybody opposed?

15 (No response.)

16 MEMBER ANDERSON: Good. Thank you  
17 very much.

18 CHAIRMAN MELIUS: Abstained? Thank  
19 you. Yes.

20 MEMBER ANDERSON: Do I have to keep my  
21 file folder?

22 (Laughter.)

23 CHAIRMAN MELIUS: One comment along

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1 the line of nomenclature. I was commenting to Ted  
2 earlier, as we get all these files for our meetings,  
3 and then once you get into the meeting, you have  
4 this whole list of 20 different files. And then,  
5 you try to figure out which one -- who is speaking  
6 now and what that is. Is that the backup? But I  
7 am not sure we will ever get everybody on the same  
8 page with the nomenclature for the file names.

9 Maybe we should get a little sign made:  
10 Board Members, do not touch. NIOSH staff only.

11 (Laughter.)

## 12 **Review of Public Comments from March Meeting**

13 CHAIRMAN MELIUS: Okay. So, we have a  
14 couple more -- I think they are straightforward  
15 housekeeping sort of things we need to finish up.  
16 One is the public comments. These are from the  
17 March meeting, and I am just going to go through  
18 them quickly.

19 Board Members have two forms. One is  
20 a spreadsheet that summarizes the comments and how  
21 they were handled, who they were referred to. And  
22 the other one references the public comments and  
23 includes the transcripts, if you are trying to

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1 clarify or better understand the comments.

2 So, I will go through these briefly, 21  
3 public comments, mostly on Pinellas because that  
4 is where we were. Want to do that.

5 We have one comment -- really, most of  
6 these are sort of informational about the site, and  
7 so forth -- the first one, second one -- the second,  
8 third, and fourth are from Donna Hand, which we will  
9 hear more from, questioning mainly the methodology  
10 more than the facts there.

11 A worker, then, for the next three  
12 comments, five through seven, just reporting on his  
13 experiences there, and then, another one with a  
14 person speaking mostly about beryllium disease,  
15 but both cancer and beryllium-related disease.

16 Number 9, again, a worker -- some series  
17 of workers that had worked there and was describing  
18 theirs. Again, almost all of these were referred  
19 back to Pete Darnell, who is the NIOSH project  
20 officer on those. That takes us up through Number  
21 12, to that.

22 There are some comments on behalf of Mr.  
23 Warren, who is one of the petitioners, representing

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1 the petitioners for the Savannah River Site.  
2 Again, some comments that we will be talking more  
3 about that site tomorrow.

4 Another person speaking to Pinellas.  
5 Again, these are more general comments about some  
6 of the other sites, including Portsmouth. And 18  
7 through 20 is Dr. McKeel, some questions mainly  
8 related to -- and comments related to General Steel  
9 Industries. Again, those are referred either  
10 through NIOSH or, actually, one went to DOL and was  
11 responded to by DOL.

12 And then, the last comment from the next  
13 day is some questions about the Lawrence Livermore  
14 Site from a person -- I believe he is the petitioner  
15 at that site -- I don't recall, but it is about the  
16 length and timing of the SEC there.

17 I think all of these are  
18 straightforward. At least to my review, it  
19 appeared that they were handled well and handled  
20 very efficiently. Any comments or questions on  
21 those?

22 (No response.)

23 CHAIRMAN MELIUS: Okay. Again, we do

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1 this with every meeting. It is just a good  
2 practice to make sure that, when we get public  
3 comments in, that they are followed up on and  
4 addressed in some way as best we can.

5 MEMBER KOTELCHUCK: I would just like  
6 to ask --

7 CHAIRMAN MELIUS: Yes?

8 MEMBER KOTELCHUCK: For the other  
9 file, the file where we have the transcripts of what  
10 was said, are we going to go over that next?

11 CHAIRMAN MELIUS: Well, at these  
12 meetings, we do not go over those unless there is  
13 a question about one or the other because they are  
14 quite lengthy.

15 MEMBER KOTELCHUCK: Right.

16 CHAIRMAN MELIUS: And they don't have  
17 how the comment was handled.

18 MEMBER ANDERSON: It is only to  
19 identify if there is a question that is missing that  
20 didn't get into the list, if you remember  
21 something.

22 CHAIRMAN MELIUS: Or some uncertainty  
23 about it.

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1 MEMBER ANDERSON: Yes.

2 MEMBER KOTELCHUCK: In the other file,  
3 the -- I don't recall seeing the transcripts of what  
4 was said in the two files that we got. We got both  
5 the summary of who spoke and what the basic topics  
6 were, and then, we had the actual transcripts for  
7 them. I don't recall having seen that in the past,  
8 but maybe --

9 MR. KATZ: Yes, we always have those,  
10 yes.

11 MEMBER KOTELCHUCK: Okay. I found  
12 that just very helpful in terms of looking at this  
13 and going back and seeing what the person, not just  
14 summarizing what they said, but actually reading  
15 what they said, and then, coming back to the  
16 response.

17 MEMBER ZIEMER: Well, Ted did  
18 distribute that transcript.

19 MEMBER KOTELCHUCK: Pardon?

20 CHAIRMAN MELIUS: No, that's  
21 essentially been our standard practice for quite  
22 some time. It is one of the problems with the  
23 titles on all these files. You get a bunch, a lot

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1 of files, and we tend to get those the week before  
2 the meetings.

3 MEMBER KOTELCHUCK: Right, right.  
4 Anyway, this was very helpful.

5 CHAIRMAN MELIUS: Yes, okay. Yes, and  
6 certainly, in the past where we have had questions,  
7 particularly when we first started out doing this,  
8 the spreadsheet was not always as clear about what  
9 the comment was and describing it, and so forth.

10 MEMBER KOTELCHUCK: That maybe -- and  
11 this is good.

12 CHAIRMAN MELIUS: Yes. And frankly,  
13 it keeps us on our toes also.

14 MEMBER KOTELCHUCK: Oh, yes. Okay.

15 CHAIRMAN MELIUS: Anyway, very good.  
16 We don't need any action on that.

17 Now I believe Ted is going to -- do we  
18 have a couple of letters that came in or comments?  
19 They were sent in by letter form, asking us to read  
20 them into the record.

21 MR. KATZ: Okay. So, we have a public  
22 comment session this afternoon at 5:00 after the  
23 INL presentations and discussion.

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1           But I received public comments from  
2 Donna Hand, who has been mentioned before for the  
3 Pinellas Site. It is quite long. It would take  
4 a lot of time during the public comment session.  
5 I would rather not take away from the INL focus for  
6 that.

7           So, I will just read that into the  
8 record now, and for transcription, if you would  
9 just add it, when you transcribe it, though, add  
10 it to the public comment session. So, it will be  
11 out of order chronologically, but is that okay?  
12 But that is where it belongs, with the rest of the  
13 public comments.

14           (Whereupon, per the above request of  
15 Mr. Katz, the letters from the public which he read  
16 at this point in the meeting can be found in the  
17 public comment session of this transcript.)

18           CHAIRMAN MELIUS: So, we will now take  
19 a break and reconvene at 3:30, as scheduled for the  
20 Idaho National Lab/Argonne West presentations,  
21 followed by the public comment period.

22           (Whereupon, the above-entitled matter  
23 went off the record at 2:49 p.m. and resumed at 3:32

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1 p.m.)

2 **Idaho National Laboratory SEC Petition and Argonne**  
3 **National Laboratory West SEC Petition**

4 MR. KATZ: Welcome back. We are about  
5 to do the INL/ANL-West session.

6 Let me just check on the line and see  
7 that I have my Board Members. Paul, are you on?  
8 Dr. Ziemer?

9 MEMBER ZIEMER: Yes, I'm here.

10 MR. KATZ: Super, and Loretta Valerio?  
11 Are you there, Loretta?

12 (No response.)

13 MR. KATZ: And John Poston? Are you  
14 on, John?

15 MEMBER POSTON: I'm here.

16 MR. KATZ: Super.

17 MEMBER POSTON: Ted, did you hear me?

18 MR. KATZ: Yes. Thanks, John. I  
19 heard you. Thank you.

20 MEMBER POSTON: Okay. Just to be  
21 sure.

22 MR. KATZ: Loretta, are you on?

23 (No response.)

24 MR. KATZ: Okay.

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1                   CHAIRMAN MELIUS:    Okay.    And we are  
2                   going to be spending some time talking about INL  
3                   and ANL-West, Argonne West.    We will start with  
4                   John Stiver.

5                   MR. STIVER:    Okay.    Thank you, Dr.  
6                   Melius.    Good afternoon, everybody.

7                   Before we get started, I would kind of  
8                   like to set the stage here.    You all have realized,  
9                   especially the Board Members, over the last month  
10                  or so, you have received, I believe, no less than  
11                  10 White Papers from SC&A regarding follow-on work  
12                  to INL and, also, any work that was tasked at Tampa  
13                  to do some preliminary investigations of ANL-West.  
14                  And I am sure the thought going through your head  
15                  -- and it has been discussed at the last Work Group  
16                  meeting -- was, my gosh, how are we going to  
17                  prioritize the work going forward?

18                  And so, before your eyes glaze over at  
19                  slide 35 or so, I would just like to kind of let  
20                  you know that, at least from SC&A's perspective,  
21                  probably the most important thing to do is to follow  
22                  on the SEC for CPT at INL for the portion that is  
23                  in reserve.    I believe Tim is working on an 83.14

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1 on that, if I am not mistaken.

2 Along with that, I believe we have done  
3 some investigations into the pre-'63 period and,  
4 also, some work on burial grounds.

5 And then, as far as the INL follow-up  
6 work, we feel that the indicator radionuclide work,  
7 you know, doing some analysis of some of the unique  
8 reactors and, also, maybe some more investigations  
9 into using general air sampling to assess intakes,  
10 inhalation intakes, of actinides in the absence of  
11 fission and activation products.

12 I am going to be talking about all those  
13 things. Also, as kind of a lead-in, the first  
14 thing we are going to really talk about is the SEC  
15 Class Definition, kind of an update of where we  
16 stand on that and, then, get into the INL and  
17 ANL-West work that we have already discussed on the  
18 Board.

19 This slide here is just basically an  
20 acknowledgment of the Board Members who were  
21 involved in INL and ANL-West. Also, I thought I  
22 would give some thanks to my team. These people  
23 have all done the heavy lifting on both of these

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1 sites: Bob Barton, Hans Behling, Ron Buchanan,  
2 Doug Farver, Joe Fitzgerald, John Mauro, Amy  
3 Meldrum, and Steve Ostrow. You can see their names  
4 are in alphabetical order, so I'm not playing  
5 favorites with anybody here.

6 As far as the Class Definition, this  
7 kind of bears repeating. This has been brought  
8 before the Board on three separate occasions, July  
9 and November of 2015 and, again, in March of 2016.  
10 Basically, the Definition hasn't really changed  
11 much. I will just go ahead and read it into the  
12 record and for completeness.

13 "All employees of the Department of  
14 Energy, its predecessor agencies, and the  
15 contractors and subcontractors who worked at the  
16 Idaho National Laboratory in Scoville, Idaho, and  
17 (a) who were monitored for external radiation at  
18 the Idaho Chemical Processing Plant (CPP) with at  
19 least one film badge or TLD dosimeter from CPP,  
20 between January 1st, 1963 and February 28th, 1970;  
21 or (b) who were monitored for external radiation  
22 at INL, at least one film badge or TLD dosimeter,  
23 between March 1st, 1970 and December 31st, 1974,

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1 for the number of workdays aggregating at least 250  
2 workdays occurring either solely under this  
3 employment or in combination with workdays within  
4 the parameters established for one or more other  
5 Classes of employees in the Special Exposure  
6 Cohort."

7 So, as you can see, it is -- and most  
8 of us already know -- it is really the Class is  
9 defined and restricted on the basis of external  
10 dosimetry records. And we will get into that, a  
11 bit of an analysis, on what has gone on elsewhere  
12 in the last year or so regarding that.

13 This is just kind of a summary of the  
14 different activities that have gone on since the  
15 last Board meeting in November of 2015, when we went  
16 through and kind of tried to cover the waterfront  
17 on where we stood at that point. I am not going  
18 to spend a lot of time going through that.

19 Part B was accepted in March 23rd, 2016  
20 at the Tampa meeting, but Part A was held in reserve  
21 based on the Board's concerns regarding a couple  
22 of different issues. One being the completeness  
23 and adequacy of the INL visitor cards and temporary

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1 film badge reports and the monthly Dosimetry Branch  
2 Activity Reports from 1963 to 1970.

3 NIOSH has done some extensive research  
4 on this and has really run it to ground for just  
5 about, I'm pretty sure, every participant,  
6 including the last 32 or so who had filed claims  
7 since, I believe, the spring of last year.

8 At the August meeting, basically last  
9 week, last Tuesday -- I will just give you a little  
10 update here. In March 2016, NIOSH captured the  
11 monthly -- what I am calling DBARs -- Dosimetry  
12 Branch Activity Reports from '65 through '74.  
13 These were the missing reports that are going to  
14 enable NIOSH to evaluate the completeness of  
15 visitor cards and temporary badge reports.

16 Recall, before, there was a period  
17 where you just have the temporary badge report or  
18 visitor card, and you got a name, but there is no  
19 way to corroborate that with some other record.  
20 And so now, NIOSH has a full set of records  
21 available in order to evaluate the completeness of  
22 that Definition.

23 INL has begun indexing and coding the

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1 visitor cards in June. This is what Greg Lewis  
2 talked about this morning, and I believe they are  
3 projected to have that finished in September, but  
4 those temporary badge reports are going to take  
5 quite a bit longer. So, it is probably going to  
6 be sometime -- what was it -- like early in the  
7 spring, I believe it was.

8 As a temporary tasking or tasking to  
9 SC&A to kind of tee-up for that completion, we were  
10 asked to try to develop some sort of a validation  
11 or verification plan. So, once all that  
12 information is available electronically, well, we  
13 can go through and do sampling and try to determine  
14 what the error rate might have been, if any at all.

15 Again, as you all know, NIOSH indicates  
16 that only one CPP badge, annual or visitor, and  
17 documented 250 days onsite, is adequate for SEC  
18 inclusion. So, even if you miss one temporary  
19 badge, which were evidently worn for periods of not  
20 more than a month, you would probably have to have  
21 12 for 250 days' inclusion. Of course, the  
22 converse of that is if a claimant only had one  
23 temporary badge and was missed, they could possibly

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1 -- or would be excluded from the Class.

2 Now the second issue that the Work Group  
3 was concerned with was, when definitive location  
4 records are lacking, the reliance on professional  
5 judgment based on the weight of evidence to reject  
6 inclusion in the SEC. The Work Group remains  
7 concerned how such criteria would be implemented  
8 by DOL, and I believe that has only been used at  
9 Mound in the past. So, there is only precedent out  
10 there for doing that.

11 That said, NIOSH has indicated that 911  
12 out of 913 claims that have been filed and  
13 evaluated -- I believe this is all of them with the  
14 exception of maybe a few that have recently been  
15 filed -- they can be clearly adjudicated on both  
16 Parts A and B in the Class Definition.

17 There is a bit of uncertainty left  
18 regarding emergency responders, firefighters.  
19 Say if firefighters came in, there was something  
20 going on, and they had to go into CPP, would they  
21 have time to stop and pick up a badge to go in or  
22 were their badges, temporary badges, have been  
23 issued in a different way? And so, we felt that

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1 is worth looking into some more. NIOSH proposed  
2 interviewing at least one person, and possibly some  
3 more, probably in the November 2016 timeframe.

4 Okay. Now, moving on, looking at the  
5 ongoing evaluations of areas and activities for  
6 which NIOSH believes that they can reconstruct  
7 doses with sufficient accuracy. And this is what  
8 has taken place since November of last year.

9 To give a little bit of a background,  
10 about I believe it was back in this time last year,  
11 we proposed kind of a preliminary analysis where  
12 we would look at some cross-cutting issues that  
13 kind of were common to the entire site and, also,  
14 some vertical issues for areas that were kind of  
15 unique in their exposure potential and activity  
16 scenarios.

17 Six areas of investigation were:  
18 reactor modeling. This is basically are all the  
19 reactors -- or does OTIB-54 really encompass all  
20 the reactors that are out there that could be  
21 potential issues for us?

22 Taking a look at Test Area North. That  
23 was kind of a unique facility, a lot of activities

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1 going on there. We were going vertical on the  
2 external dosimetry mostly in that one.

3 We took a look at central facilities  
4 because they processed all sorts of materials  
5 coming in from all over the site. So, that kind  
6 of raised issues about whether OTIB-54 would be  
7 applicable.

8 The fission and activation product  
9 bioassay indicator radionuclides, which is kind of  
10 a cornerstone of OTIB-54. You know, instead of  
11 just looking at the reactor modeling and what you  
12 might generate using an ORIGEN code, we thought we  
13 would kind of take a look at the actual data and  
14 see where the rubber meets the road and see what  
15 do the actual ratios look like, and are they  
16 adequately bounded by OTIB-54?

17 Two issues that were pended at the time  
18 were the burial grounds and the CPP pre-1963.

19 Let's see. I don't want to spend too  
20 much time on this. Yes, we submitted progress  
21 reports and White Papers. They are available on  
22 the website at that link.

23 We presented the preliminary results at

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1 the November 18 Board session. Since the Board  
2 meeting in November, we were tasked to go ahead and  
3 look a little more closely at four areas: reactor  
4 modeling, the indicator bioassay radionuclides,  
5 burial grounds, and CPP pre-'63.

6 In March of 2016, in conjunction with  
7 DCAS, we did worker interviews and data capture,  
8 focusing principally on the burial grounds and CPP  
9 in the early years. And those documents should be  
10 cleared and available to SC&A and DCAS by the end  
11 of the month. So, we will be able to proceed with  
12 those two investigations.

13 Follow-on White Papers on reactor  
14 prioritization and indicator radionuclides were  
15 also discussed last week. Those are available on  
16 the website at those locations.

17 Let me just kind of move ahead here and  
18 start talking a little bit about the SEC-224 for  
19 ANL-West. This kind of lays out the sequence of  
20 events that led to the SEC and all the activities  
21 that took place.

22 Their Class Definition is basically all  
23 the employees who were at Argonne West between

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1 April 10th, 1951 and December 31st, 1957; the usual  
2 restrictions.

3 More importantly is the feasibility  
4 assessment. This is based on, up until '58, the  
5 West Side, which is the Experimental Breeder  
6 Reactor I Complex, it was determined to be  
7 infeasible due to limited bioassay and potentially  
8 incomplete external dosimetry records. That all,  
9 apparently, changed around the 1958 timeframe.  
10 And so, they believe that dose reconstruction is  
11 feasible for the East Side, the EBR-II complex,  
12 because there is a large amount of mixed-fission  
13 product bioassay and air sampling data indicating  
14 that the alpha exposures were controlled to less  
15 than 10 percent of the maximum permissible  
16 concentration.

17 Similar to what we did with INL, we kind  
18 of cast the net broadly. I came up with seven areas  
19 of inquiry, kind of sub-tasks, that we thought  
20 would yield some interesting and useful  
21 information.

22 The first was just to review the OTIBs  
23 and OTIBs referenced as the basis for the SEC ER,

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1 see if there are outstanding issues that could  
2 impinge on the ability to reconstruct and the Class  
3 Definition.

4 A second was to take a look at the INL  
5 Site Profile and the issues matrices and kind of  
6 crosswalk those with ANL-West, identify  
7 commonalities and any other outstanding issues  
8 that might kind of have SEC potential.

9 Three was kind of a follow-on of the  
10 reactor studies for OTIB-54 applicability, just  
11 focusing on those ANL-West reactors.

12 And four, which we never really got  
13 around to discussing in the Work Group environment,  
14 except at a very superficial level, was kind of  
15 taking a look at the changes and the completeness  
16 and adequacy of the dosimetry and air sampling data  
17 at the breakpoint for the SEC, basically up to '57  
18 and going forward.

19 We looked at dosimetry, personnel  
20 dosimetry completeness and adequacy, as well as  
21 area monitoring data, air sampling, swipe survey  
22 reports, and so forth, in case that data were  
23 to -- we thought there might be kind of parity

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1       between the two that would kind of show that there  
2       was a change -- kind of a sea change -- yes, it would  
3       have been a sea change in monitoring practices at  
4       the time.

5               No. 5 was to investigate this whole  
6       notion of using general air sampling data for  
7       actinide intakes in the absence of fission and  
8       activation products.

9               Six was to look at an ongoing  
10      investigation, kind of in parallel with INL, on the  
11      indicator radionuclides.

12              Finally, seven was kind of to talk about  
13      the companion investigation along with issue five,  
14      to really take a look at the strategy of using 10  
15      percent of the maximum permissible concentrate and  
16      whether the Health Physics Program was strong  
17      enough to really justify using that approach at the  
18      time that it was proposed.

19              Item 1 -- I am not going to spend a lot  
20      of time on these. There basically were three OTIBs  
21      that have outstanding issues that could impact the  
22      SEC determination. The first being OTIB-18,  
23      internal dose overestimates for facilities with

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1 air sampling programs. That is not surprising.  
2 OTIB-49, estimating doses for plutonium strongly  
3 retained in the lung. And last, but not least,  
4 OTIB-54. I believe there is one part of Revision  
5 2 that we thought might be important for this SEC  
6 that needed to be addressed. However, that said,  
7 these findings and unreviewed documents are going  
8 to be reviewed under the purview of the  
9 Subcommittee on Procedure Reviews.

10 Crosswalking the combined matrices.  
11 There are three issues that were all related to our  
12 investigations of Test Area North that had to do  
13 with the adequacy of the external dosimetry data.  
14 At the time we didn't know that that data was just  
15 a sampling.

16 And so, we took it at face value, and  
17 then, looked at the completeness and adequacy.  
18 And we were a little bit concerned that, if this  
19 data ever was needed to be used in the coworker  
20 modeling, there might not be enough granularity to  
21 assign workers to particular areas, given the  
22 vastly different types of exposure potential that  
23 existed on the site.

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1           That said, in the November meeting,  
2           NIOSH did indicate that that data was just a  
3           sampling. They are collecting more data, but that  
4           at this point they don't really intend to build  
5           coworker models. Now the Work Group felt that this  
6           was really more of a secondary priority, that the  
7           bigger SEC issues would really be where we wanted  
8           to expend the resources.

9           Reactor prioritization. This kind of  
10          just lays out all the reasons why we feel this is  
11          important. Basically, this comes down to, as I  
12          said, are there reactors for which the OTIB-54  
13          protocols might break down and would not be able  
14          to adequately define the exposure potential to  
15          workers at those facilities?

16          Different types of things that would  
17          impact the nuclear reactors: fuel types,  
18          blankets, moderators, coolants, operating  
19          scenarios, whether there was steady-state  
20          intermediate pulsed within design limits, outside  
21          of design limits, and so forth, and burnup. How  
22          long were the decay products allowed to build at?  
23          All those things come into play.

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1           A little bit on OTIB-54. We have been  
2 through this many times. They use ratios of  
3 strontium-90 and cesium-137 and inventories of  
4 other fission activation products that would be  
5 generated during those reactor operations, and  
6 using those indicated bioassay nuclides, they can  
7 do ratios to determine what the other intakes of  
8 these other radionuclides might have been.

9           And also, the Technical Basis Document,  
10 I believe Tables 5-22 and 5-23, basically apply the  
11 same approach to determine actinide intakes in the  
12 presence of fission and activation products.

13           Here is a list of things that it is not  
14 good for. Obviously, alpha-emitting  
15 radionuclides without corresponding FAP intakes.  
16 Anything that is generated outside the fuel  
17 operation involving short decay times, and  
18 radionuclides that have been extracted and  
19 concentrated.

20           Okay. This just illustrates the nine  
21 representative cases that were based on the four  
22 types of reactors, and for OTIB-54 development,  
23 these were all based on ORIGEN2 runs.

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1           As far as the site reactors, there is  
2           52 in total. We have determined, as far as  
3           INL -- we didn't look at the ANL-West at that time;  
4           there were 12 reactors there. Obviously, the Navy  
5           reactors are off limits. Two were never operated,  
6           leaving 34. Six of those we had reviewed in our  
7           initial preliminary analysis. So, that left 28.  
8           And so, we screened those based on those factors  
9           that I just listed earlier to see if OTIB-54 might  
10          result in an unrealistic over- or underestimate of  
11          internal doses.

12                 In addition to those OTIB-54 related  
13          criteria, we were asked to take a look at these four  
14          factors that might reflect the scope of the  
15          population that was potentially at risk for  
16          uncontrolled exposure. Basically, the duration  
17          the reactor was in operation, the frequency and  
18          intensity of operation, the approximate number of  
19          workers potentially exposed. This was,  
20          unfortunately, infeasible during our first pass  
21          because we just didn't have that kind of  
22          information available. Incidents or other  
23          factors with the potential to contribute to the

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1 risk of unintended or unprotected exposures.

2 Based on this, we came up with kind of  
3 a revised list of priorities, prioritized  
4 reactors, seven being considered high:  
5 Loss-of-Fluid Test, the OMRI,  
6 Organically-Moderated Reactor Experiment, Pulse  
7 Burst Facility, and some of the SPERT tests.

8 Let's see. As far as the ANL reactors,  
9 we felt that the BORAX and EBR-I and II were  
10 probably unique enough that they deserved to be  
11 analyzed separately.

12 NIOSH took a look at our  
13 recommendations in our paper and responded with a  
14 paper of their own, and a response paper at the very  
15 end of the month of July. They proposed merging  
16 some of those reactors into categories because this  
17 is not a trivial process doing these analyses, and  
18 you don't want to expend resources needlessly.

19 So, they came up with kind of a well  
20 thought out methodology for kind of bounding or  
21 selecting those that they felt were of a higher  
22 priority. This is really the sum total of what  
23 they came up with. They felt that these six

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1 reactors were worthy of review.

2 And at the meeting, papers were  
3 discussed. SC&A agreed, essentially, that  
4 NIOSH's proposed list was probably what we should  
5 work for on further evaluation.

6 We were also tasked to evaluate in  
7 greater depth the approximate number of workers  
8 that could have been affected. Like I said before,  
9 we didn't have data that we could use to reasonably  
10 get a handle on this. We would have had to have  
11 gone through claimant files, and just it would have  
12 been extremely resource-intensive.

13 However, NIOSH indicated that these  
14 monthly dosimeter reports are now available for all  
15 the facilities of concern and they are fairly easy  
16 to access. So, I know we can look at the number  
17 of badged workers that were for the years of  
18 operation at each of the facilities.

19 Given that tasking, we expect to have  
20 a revised report in time for a late September or  
21 early October teleconference, in time to tee-up for  
22 the next Board meeting in November.

23 Item 4, this evaluation of the

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1 breakpoint. We didn't get a chance to discuss this  
2 at the meeting. So, I am just going to go ahead  
3 and we are going to tee this up at the next Board  
4 meeting after we have a chance to discuss it in the  
5 Work Group setting.

6 We are going to move right along to ANL  
7 Item 5. Now this was an interesting one. This is  
8 the use air sampling data for dose reconstruction  
9 and actinide intakes in the absence of fission  
10 activation products. It is limited to uranium,  
11 thorium, and plutonium for exposure conditions  
12 which are actually quite rare or limited in the  
13 scope -- I wouldn't say rare -- by means of air  
14 sampling data.

15 This comes right out of the Evaluation  
16 Report. It actually explains the role of air  
17 monitoring for protecting workers in the SEC period  
18 with these two statements, which I am not going to  
19 read, but they are there for anybody who is  
20 interested in digging into that a little bit  
21 farther.

22 NIOSH, basically, believes that the air  
23 sampling data assessed for gross alpha activity are

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1 sufficient for bounding internal radiation doses  
2 to uranium, thorium, and plutonium by means of the  
3 following criteria: if uranium without mixed  
4 fission products, they are going to be bounded  
5 using 10 percent of the MPC air for available air  
6 monitoring data.

7           However, at the fuel cycle facility  
8 where there were exposures in some cases well above  
9 the MPC, they are going to use -- for August '67  
10 to June '83, they are going to be using the gross  
11 alpha radioactivity of air samples.

12           Thorium in room 25 of the FCF, there is  
13 some exposure potential there from '63 to '67.  
14 NIOSH is going to use 10 percent of the ANL-West  
15 MPC air for that particular assessment.

16           And then, for plutonium, they are going  
17 to basically take the high-sighted assumption that  
18 100 percent of the gross alpha activity represents  
19 plutonium exposure.

20           Some limitations of this approach:  
21 most of the recording sampling data typically show  
22 results below 10 percent of the MPC air. We agree  
23 with that. However, we question whether the

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1 fixed-air sampling data accurately represents the  
2 levels of air contamination that were actually  
3 breathed by workers. The assumption that general  
4 air sampling represents air concentrations  
5 respired by workers during facility operations we  
6 feel is questionable on two levels. One being the  
7 long air-sampling times and, two, limitations and  
8 uncertainties with the general air sampling for  
9 assessing worker intakes.

10 On the basis of recorded available GA  
11 air sampling data, NIOSH concluded that an air  
12 concentration of 10 percent MPC defined for a  
13 40-hour work week provides a bounding value for  
14 potential intakes of these three actinides at the  
15 FCF and possibly other work locations.

16 It is an important to mention, for the  
17 use of the 10-percent MPC values rely on what we  
18 feel to be an unconfirmed assumption that GA air  
19 concentrations closely correspond to operational  
20 air concentrations.

21 Our review of the FCF air data, typical  
22 daily operations, and assessment of the proposed  
23 use identified two issues of concern: the first

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1 being low airflow rates. Sampling times could  
2 vary up to four days. Often, when facility  
3 operations were inactive, there was one -- I think  
4 the longest sample was taken over Labor Day  
5 Weekend, when there probably weren't too many  
6 people there during normal operational activities.

7 The second, and what we believe is more  
8 serious, concern is lack of parity between general  
9 area and breathing zone air concentration  
10 measurements. And we looked at a couple of  
11 different studies, one in Great Britain and another  
12 at NUMEC, which is one of the EEOICPA sites.

13 We believe that, given the high degree  
14 of uncertainty surrounding GA sampling data at FCF,  
15 that the proposed value of 10-percent MPC as a  
16 bounding value for internal doses probably lacks  
17 credibility.

18 Where to go from here? Our report was  
19 discussed last week at the combined INL and  
20 ANL-West Work Group meeting. The Work Group  
21 considers those to be a high-priority issue with  
22 potential SEC implications, and NIOSH was tasked  
23 to provide a response paper for further

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1 discussions.

2 Moving on to fission activation, FAP  
3 bioassay indicator radionuclides. These  
4 assumptions, which we have discussed before: are  
5 sufficient fission activation product bioassay  
6 records available to assign strontium-90 and  
7 cesium-137 intakes? That was pretty fundamental.  
8 Are the ratios of strontium-90 and cesium-137 and  
9 their relationship to other fission activation  
10 products and actinides, are they known with  
11 sufficient accuracy for INL and ANL-West to allow  
12 assignment of consistent radionuclide intakes?

13 NIOSH's ER recommends using  
14 strontium-90 and/or cesium-137 in conjunction with  
15 ratios in OTIB-54 to assign FAP intakes. We are  
16 all aware of that, and TBD-5, which we already  
17 discussed.

18 As I have said earlier, the NIOSH ratio  
19 values were derived mostly by computer simulation.  
20 And so, we looked for actual measurement data that  
21 might corroborate or confirm those computer runs.  
22 We looked at NOCTS, the SRDB, and the Electronic  
23 Bioassay Database, which we acknowledged is

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1 probably not complete or at that much use at the  
2 time that we were taking a look at it.

3 Also, the top five we already discussed  
4 in our first paper for INL. We found nasal swipes,  
5 urinalysis, fuel element scale, storage  
6 contamination swipes, and air filter samples, but  
7 there weren't very many of them. However, Ron  
8 Buchanan was lucky enough to find in the ANL waste  
9 records -- and from INL -- liquids, solids, soil,  
10 and air sampling records.

11 However, we found that the majority of  
12 the cesium and strontium ratios were not centered  
13 on unity. In fact, only 33 percent of 251 data  
14 points from 1957 to 1993 in INL waste were within  
15 a range of .5 to 2.0. And we realize they are not  
16 going to be exactly one, but we thought like a  
17 factor two on either side was probably a reasonable  
18 test at least, a preliminary test to see whether  
19 these data might actually be usable. That said,  
20 some of the ratio values were orders of magnitude  
21 above and below unity.

22 As far as ANL-West, they seemed to be  
23 a little closer in terms of what we expected.

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1       However, we only had 16 pairs of data. So, there  
2       is really not much we can draw on the way of  
3       conclusions based on only 16 data pairs.

4               So, in the summary, the  
5       cesium/strontium ratios are not always one-to-one,  
6       as assumed in OTIB-54 and TBD-5. Large variations  
7       exist. So, that brings into question the validity  
8       of using the indicator of radionuclides. Because,  
9       you know, you might have one guy who has got a cesium  
10      value that is 10 times higher than another guy who  
11      got a strontium value in terms of their relative  
12      impact on the other radionuclides.

13              So, we thought this was kind of a  
14      consistency issue that needed to be addressed  
15      further. As I say here in this slide, it is really  
16      one of the cornerstones, the use of the ratio method  
17      at both sites.

18              This is basically just kind of a  
19      restatement of that. Fission activation product  
20      to cesium and strontium ratios may not be  
21      sufficiently conserved enough for assigning  
22      intakes, even in situations where it can be assumed  
23      that the fission activation product is tied to an

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1       indicating radionuclide.     And the same thing  
2       applies for the actinide assessments using Table  
3       5-22 and 5-23.

4                 So, we have three recommendations,  
5       basically. This one is kind of a continuation on  
6       from what we had asked for back in November.  
7       Basically, we need to determine if records of  
8       analysis of INL contents are available for a  
9       variety of INL reactor fuel elements and from  
10      offsite reactors.

11                Our data capture efforts to date have  
12      really not turned up anything along these lines.  
13      That said, we only have that one data capture where  
14      we looked into this in any detail. That was in  
15      March.

16                Recommendation 2, because the ANL-West  
17      data are quite sparse, we would like to do more  
18      research to evaluate those values, especially for  
19      actinides and cesium and strontium ratios,  
20      preferably with quantitative radionuclide  
21      analysis.

22                And finally, the third, considering the  
23      results of this preliminary study and the numerous

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1 source terms at INL and ANL-West, the validity of  
2 using the present radionuclide indicator method,  
3 OTIB-54 and TBD-5, for assigning FAP and actinide  
4 intakes needs to be addressed further. So,  
5 basically, we feel that there needs to be a little  
6 more discussion and data capture involved in this.

7 Where to go from here? We discussed  
8 this, again, last week. NIOSH had requested that  
9 we make some changes to our report, which we agreed  
10 to do. We thought that was a good idea, and so did  
11 the Work Group.

12 One was to break down the waste data  
13 ratios by month, instead of by year, when those data  
14 are available. And NIOSH also indicated there  
15 were 60 new SRDBs that are pertinent to this  
16 investigation which we will analyze. And SC&A  
17 believes we can have a report ready for a Work Group  
18 meeting or teleconference before the November  
19 Board meeting.

20 Also, one thing NIOSH brought up was  
21 that, you know, regardless of whether the ratios  
22 might be off, are we talking about significant  
23 doses? At the end of the day, what kind of doses

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1 are we looking at?

2 And we had done some preliminary  
3 investigations into this last fall, back in  
4 November. And so, that is going to be included as  
5 part of our revised report.

6 And that is pretty much a sum of where  
7 we stand at this point. So, do you have any  
8 questions and comments? I would be glad to try to  
9 take those for you.

10 CHAIRMAN MELIUS: Comments or  
11 questions from Board Members?

12 MEMBER ZIEMER: This is Ziemer. I  
13 have a question. Sort of a general question, but  
14 I will use the last line as the -- for making the  
15 point.

16 It says that SC&A was tasked to analyze  
17 60 new SRDB documents that NIOSH will provide. I  
18 assume this is a tasking by the Board, but I guess  
19 my question is, why wouldn't ORAU be doing that kind  
20 of work or NIOSH first?

21 MR. STIVER: Well, Dr. Ziemer, I can't  
22 really hear you very well.

23 MR. KATZ: Dr. Ziemer just said --

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1           MEMBER ZIEMER:   Okay.  Let me say it  
2           again.  Where SC&A was asked to task -- or was  
3           tasked to have our 60 new SRDB documents that NIOSH  
4           will provide, I am asking why is SC&A doing that  
5           rather than ORAU?

6           MR. STIVER:   I believe Tim could maybe  
7           weigh-in on the availability and the timeframe for  
8           that.

9           DR. TAULBEE:   I guess, first, let me  
10          make a few clarifications.  This is Tim Taulbee,  
11          by the way.

12          It wasn't 60 new SRDB documents.  Those  
13          were 60 new data points that I pointed out to the  
14          Work Group.  So, it is a slight error there, but  
15          I did provide to Ron Buchanan the SRDB numbers for  
16          15 additional documents that I had found and gave  
17          him some tips on finding additional ones.

18          Within the SRDB, the data sources that  
19          were being used -- and you have kind of got this  
20          there in the second bullet -- that Ron was using,  
21          in certain time periods it was easier to just grab  
22          the annual data.  But buried within the  
23          report -- there may be three or four hundred

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1 pages -- is all this monthly data within there.  
2 And so, that is part of what Ron is breaking out  
3 at this time.

4 MR. STIVER: All right. Thanks, Tim.

5 CHAIRMAN MELIUS: And I think it is  
6 fair to say that the Work Group did the tasking,  
7 in a sense, saying SC&A should revise their  
8 evaluation based on additional information that  
9 Tim brought forward.

10 Again, this is something I think we  
11 typically do in an ongoing evaluation, especially  
12 of a large site like this where there is so much  
13 data out there, and do that. So, does that clarify  
14 it for you, Paul?

15 MEMBER ZIEMER: Yes, yes. And I think  
16 some of this -- a lot of this looked a little bit  
17 like they were tasks that should have been done  
18 prior to getting to SC&A, but it is certainly a  
19 challenge, I understand.

20 CHAIRMAN MELIUS: Yes, and on the  
21 reactors we have gone back and forth in doing that.  
22 Again, one of the reasons we want to hold another  
23 Work Group meeting in September is to sort of

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1 clarify the issues on trying to prioritize all  
2 those reactors. It is a lot of work and a lot of  
3 effort. We need to try to get it as right as we  
4 can at the start.

5 Again, this sort of issue of competing  
6 resource needs at this large site with lots of  
7 technical issues to --

8 MEMBER ZIEMER: Right.

9 CHAIRMAN MELIUS: -- deal with; plus,  
10 the ongoing SEC issues.

11 MEMBER ZIEMER: Thank you.

12 CHAIRMAN MELIUS: Yes. Thank you,  
13 Paul. Anybody else? Yes, Dave?

14 MEMBER KOTELCHUCK: I assume on Number  
15 37 -- when I read this, I had a hard time. MFPS,  
16 is that metal fraction particulates?

17 MR. STIVER: Mixed fission products.

18 MEMBER KOTELCHUCK: Mixed fission  
19 products? Okay. Mixed fission --

20 MR. STIVER: We probably should have  
21 defined that in the slide.

22 MEMBER KOTELCHUCK: Yes. I just  
23 couldn't figure out from what went -- mixed fission

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1 products? Okay, I see. All right. Thank you.

2 MR. STIVER: You're welcome.

3 CHAIRMAN MELIUS: Phil, you have  
4 anything to add? Or Josie? Or Gen?

5 MEMBER SCHOFIELD: I have just got a  
6 brief comment to make. Between SC&A, NIOSH, and  
7 Dr. Roessler and Josie Beach, there has been  
8 numerous document searches up there. They are  
9 going back to search for more. Plus, there has  
10 been a lot of interviews with personnel who are  
11 either still working at the site or have worked at  
12 the site. So, there has been a great deal of effort  
13 put into this.

14 CHAIRMAN MELIUS: Josie, anything?

15 MEMBER BEACH: No, I don't have  
16 anything to add.

17 CHAIRMAN MELIUS: Gen? No? Okay.  
18 John did a large job to try to summarize a  
19 seven-hour -- or whatever it was -- Work Group  
20 meeting that jumped around a lot.

21 So, it is hard, and this is sort of a  
22 work in progress, and the SEC, as he mentioned, we  
23 really are held up now mainly trying to get all the

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1 data into a database that can be evaluated, and  
2 then, obviously, used in implementation of dose  
3 reconstruction for everybody around the site. So,  
4 it is an effort, and I think we are getting closer  
5 to getting DOE pinned down.

6 So, we will keep you surrounded in the  
7 back there, Greg. We have got your ticket home.  
8 So, if you want it back, you are going to have to  
9 give us a hard-and-fast date to do that.

10 Anybody else? Anybody else on the  
11 phone with questions?

12 (No response.)

13 CHAIRMAN MELIUS: Okay. Thank you,  
14 John.

15 MR. STIVER: You're welcome.

16 CHAIRMAN MELIUS: Do we have  
17 petitioners who want to speak?

18 MR. KATZ: Yes, yes. So, we should  
19 have two petitioners who would be -- I don't know  
20 if they are here or on the line.

21 CHAIRMAN MELIUS: Here's one.

22 MR. KATZ: Yes.

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1       **Public Comments**

2       **Brian Zink**

3                   MR. ZINK:    I'm Brian Zink.    I'm an  
4       authorized   representative   for   [identifying  
5       information redacted].   He cannot make it here  
6       today.   He wanted to make a short presentation.  
7       He's feeling very poorly, and that illness is  
8       related to his accepted condition.

9                   But I think his message, basically,  
10       was, and what we would request, is that the analysis  
11       continue.   He would love it if the -- obviously,  
12       if the information, the data, is assessed and  
13       expanded upon.

14                   I think the Board knows that, with the  
15       approved   SECs   now,   [identifying   information  
16       redacted] was actually excluded in the timeframes  
17       that were accepted.   He has provided at least one,  
18       maybe two, interviews with Tim and his group, I  
19       believe, about all the information that he can  
20       provide.

21                   I don't have anything specifically to  
22       add to what he has included in his conversations  
23       with the group, but we are requesting that the SEC  
24       be expanded and approved.

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1                   CHAIRMAN MELIUS: Thank you. Our plan  
2                   is we will take a short five-minute break. We  
3                   believe there is some -- we can start the public  
4                   comment period when Ted gets the list and we get  
5                   the group back, at least for people that are already  
6                   here.

7                   But we obviously will continue past  
8                   5:00 for people that may be on the line that aren't  
9                   here who we don't get to by that time or who may  
10                  come in at a later point in time.

11                  So, take a quick five-minute stretch  
12                  break, and then, we will get started.

13                  (Whereupon, the above-entitled matter  
14                  went off the record at 4:15 p.m. resumed at 4:44  
15                  p.m.)

16                  MR. KATZ: So, as Dr. Melius said  
17                  earlier, we are going to start earlier than the  
18                  public comment session's stated starting point,  
19                  but we will continue on to the beginning, so that  
20                  those that join us afterwards can come in then.

21                  And we will be starting with people who  
22                  have comments related to INL and ANL-West. I think  
23                  that is the tradition, sort of the folks that are

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1 here in the room first.

2 For people who haven't been to Board  
3 public comment sessions, this is really for your  
4 information. If you are giving comment, all of  
5 these Board meetings are transcribed verbatim.  
6 So, everything you say will be transcribed, and  
7 then, they are published on the NIOSH website. So,  
8 they are open to the public.

9 If you have personal things you say  
10 about yourself, those will all get published, just  
11 to know that. They won't be redacted, but if you  
12 have personal comments about other parties, those  
13 will be redacted for what gets published on the  
14 NIOSH website to protect the privacy of those other  
15 individuals. So, you just need to understand that  
16 we will cut out, omit portions of what you say to  
17 protect their privacy. And that's all you need to  
18 know there.

19 CHAIRMAN MELIUS: Okay. So, we will  
20 start. Anybody that wishes to speak about INL or  
21 ANL-West here?

22 Okay. Introduce yourself, please.

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1       **Tami Thatcher**

2                   MS. THATCHER:    Tami Thatcher, Idaho  
3 Falls.  I would like to say it is thrilling that  
4 INL finally has some Special Exposure Cohorts.  It  
5 is about time.

6                   And I know that INL is extremely complex  
7 and NIOSH has made attempts, but basically, your  
8 Technical Basis Documents, and so on, for the last  
9 16 years have not cut it.  I have heard statements  
10 from NIOSH people like: "Don't worry about the  
11 plutonium.  It's all bound up in the fuel."  
12 "Don't worry about hot particles."  "Don't worry"  
13 -- and it just hasn't really been backed up by  
14 anything solid.

15                   So, thrilled to have some cohorts.  I  
16 think it could be appropriate to say, "Anything  
17 before 1974, there's your cohort.  Now we are going  
18 to spend time on the years '94 and into the future."  
19 I hope this doesn't become a 10-year research  
20 project for people who were exposed 20, 30, 40, or  
21 50 years ago.

22                   I would like to comment I appreciated  
23 the presentation by Stiver today.  I appreciated  
24 SC&A's list of recommended reactors to look at and

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1 review, and I was disheartened to see NIOSH's  
2 kiboshing of that list.

3 During the SNAPTRAN test, you had more  
4 INL workers getting greater than 5-rem doses. You  
5 had the AEC Director 20 years later saying, "Gee,  
6 I have no idea why so many workers got such high  
7 doses."

8 I think there's things to look at about  
9 what was going on in the '60s as well as the '50s  
10 at Test Area North and SNAPTRAN and some of the  
11 other reactors that you are crossing off the list.

12 And when it comes to looking at waste  
13 data records and waste data ratios, you need to be  
14 aware that, after 20 years of CERCLA cleanup, the  
15 test reactor area never found wastewater disposal  
16 records. I mean, they did find some in later years  
17 and said, well, we don't have any of the '50s or  
18 most of the '60s records. We'll just assume that  
19 it was the same -- it was consistent through all  
20 the period.

21 Not true. You had times when you were  
22 cleaning out hot cells, cleaning out the alpha cave  
23 and flushing it out to the pond, and CERCLA cleanup

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1 never came up -- never coughed up the records, never  
2 did a process review to explain all the  
3 contaminants they were finding in shallow perched  
4 water, which the U.S. Geological Survey had never  
5 mentioned as being disposed of, still doesn't  
6 acknowledge it, and still doesn't talk about alpha  
7 emitters at the test reactor area, even though the  
8 shallow perched water had 100 times the MCL for  
9 americium-241, et cetera.

10 So, if you go about looking for  
11 information at U.S. Geological Survey, you need to  
12 be a little careful. Again, the concentrations of  
13 sampling results are found with the CERCLA  
14 investigations of the test reactor area, but not  
15 the real picture end-to-end of what was disposed  
16 of.

17 So, waste records are important.  
18 Understand there are some deliberate gaps, and the  
19 test reactor area was doing such a wide variety of  
20 things in the '50s and '60s; you ought to call it  
21 a day and make it a Special Exposure Cohort.

22 I want to say something about Freedom  
23 of Information Act requests. One of the documents

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1 that NIOSH used as a reference in their technical  
2 baseline I tried to get, was told they didn't have  
3 it. After a year of trying, finally, they have  
4 acknowledged they have the document; it takes a  
5 FOIA, but I have to basically -- even though  
6 requesting fees be waived, and so on -- acknowledge  
7 and accept a form letter that says: we can charge  
8 you anything, unspecified, unlimited charges for  
9 searching and copying.

10 I can't afford that. So, it is a very  
11 threatening Freedom of Information Act process  
12 that NIOSH is embracing, and I will leave it at  
13 that. Thank you.

14 CHAIRMAN MELIUS: Thank you. Just one  
15 clarification. The various lists of trying to  
16 prioritize the reactor list, the various proposals  
17 that were in John Stiver's slides, that is a  
18 prioritization. It doesn't mean those are the  
19 only reactors that would be looked at.

20 And a prioritization is based on a  
21 number of factors, but mostly, which would yield  
22 the information that would sort of lead to the next  
23 prioritization of that list. So, it is not saying

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1 those are the only reactors that would ever be  
2 looked at. It is which reactors would be first in  
3 order to yield the most information going forward.  
4 They all can't be done at one time, but thank you  
5 for your comments.

6 Anybody else wish to speak regarding  
7 the INL or ANL-West Site?

8 (No response.)

9 CHAIRMAN MELIUS: Okay. If anybody  
10 who is here changes their mind, you are welcome to  
11 later on, and I will start with the list. I believe  
12 a number of these people, some are on the phone.  
13 I am not sure on others.

14 Is John Pace here? Okay. You're  
15 relative to Santa Susana? Oh, okay. Okay. You  
16 might as well, yes.

17 MR. PACE: I was kind of hoping I would  
18 be a little bit later on in this deal, but I'm right  
19 here right now.

20 CHAIRMAN MELIUS: Good.

21 **John Pace**

22 MR. PACE: I'm John Pace. I live up  
23 here in Rexburg, Idaho. And I'm an employee at the

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1 SRE reactor in Santa Susana, and I have talked with  
2 you once before a year or so back. You may remember  
3 me, but what I was wanting to -- I have been turned  
4 down again one more time. And it really  
5 disappoints me, after six times being turned down.

6 I know I'm not the only person this has  
7 happened to, but they keep coming up with the same  
8 thing each time, that I had never gotten around any  
9 radiation, any large amounts of radiation. And  
10 that's kind of peculiar to me, that they come up  
11 with that kind of answer, when I was part of one  
12 of the worst nuclear reactors in the United States  
13 -- accidents. I was in Santa Susana. I'm sure all  
14 of you are familiar with it because Santa Susana  
15 is a ticklish one for all of NIOSH.

16 But, when it comes back with the report  
17 on my dose reconstruction, it never says anything,  
18 basically, about the accident I was involved with.  
19 It's always has a laser on something else, but  
20 generally, all the information that is gathered to  
21 kind of prove my dose reconstruction is in  
22 different years, different reactors.

23 And I don't think that's fair to come

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1 up with my dose reconstruction in that fashion. If  
2 you're going to compare me with any reactor, get  
3 with Chernobyl or Japan or one of those that had  
4 an accident, and also, an accident that was  
5 experimental or a test reactor, like I worked on.

6 I didn't work in a reactor that was a  
7 normal reactor. We was continually doing testing,  
8 each day something different, and it was under all  
9 new -- each test would be something that would be  
10 new. It had never been done before. You can't  
11 compare me with the reactor that runs every day on  
12 a schedule and you check the charts, and this and  
13 that, in a normal situation. It was every day it  
14 was a different thing.

15 And then when the accident happened, it  
16 even changed things around worse. Then on top of  
17 all that, I helped tear a reactor apart that never  
18 had been done before. Nobody had ever taken and  
19 dismantled a reactor like we did to try to repair  
20 it in the fashion and the lengths that we went to.

21 Now where is all that evidence, the  
22 things that I went through and the radiation I went  
23 through and exposed to? Where is it on my report

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1 on my dose reconstruction? Everybody ignores it.  
2 They try to hide from it. And it really bothers  
3 me that I see this happening, and it's not fair.

4 So, I would like to bring it to all your  
5 attention. I mean, we've talked -- I've talked  
6 with him, too, and he's aware, all of you, but I  
7 keep coming up with the same thing, a big old zero.

8 And I was in -- when you're taking a  
9 reactor apart and pulling broken fuel rods out, and  
10 being exposed by that radiation, pulling -- there's  
11 81 uranium fuel slugs that were left in the bottom  
12 of that reactor after the accident, and I was one  
13 of those people that helped dig those fuel -- those  
14 fuel slugs out of that reactor.

15 And I was on top of that reactor, and  
16 the reactor leaked on the top and I was exposed to  
17 radiation. I also helped cut the seal on the  
18 reactor, and we rotated the reactor around so we  
19 could pull those fuel slugs out. And that  
20 radiation is in the building. It got so hot in that  
21 building, we had to take and open the back door on  
22 the reactor to let that radiation out of the  
23 building because the filters in the building would

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1 not handle it.

2 And the person I worked with on it, was  
3 overseeing me, was [identifying information  
4 redacted]. He was overseeing it, and he was the  
5 one that actually helped invent the A-bomb. He was  
6 over us, and he's the one that asked us to do all  
7 these things.

8 And I've been through all this.  
9 Where's my help at? You've got a program here  
10 that's supposed to help us in this type of situation  
11 and give us some restitution, and I haven't got 10  
12 cents. I've been through 16 years now, since 2001.  
13 I think it's about 16 years, and everybody keeps  
14 saying no.

15 I've been through things -- I shouldn't  
16 even be standing here talking with you right now.  
17 Everybody else is dead and gone. I'm the last one  
18 that's able to talk to you from that era of time  
19 and actually stood in that building, the SRE  
20 reactor, at the time of [identifying information  
21 redacted] coming to me and the other men, and the  
22 accident happened. He says, you will not say a  
23 word.

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1           He told all these guys, and the tears  
2           was coming down their eyes, out of their eyes,  
3           because they couldn't go home because the radiation  
4           that come out of that reactor at the time of the  
5           accident went over their homes and their family,  
6           and they couldn't even go home and tell their wife  
7           about it because of security.

8           Then, he come up to me, right in my face  
9           and nose-to-nose -- I like feel the spit out of his  
10          mouth in my face -- says, you will not say a word,  
11          not a damned word -- and I don't use that kind of  
12          word; excuse me, but that's what he told me -- to  
13          anything or anybody.

14          So, 20 years, I went without saying a  
15          word. I kept my word that I would not say it until  
16          it was brought out in the open on what the accident  
17          occurred. Then, I could start talking about it  
18          like I'm talking about it now.

19          I've been through a lot. Me and my wife  
20          [identifying information redacted] wasn't able to  
21          have -- we lost five children because of the  
22          radiation I got around. This is the first time  
23          I've put it public, and I hope my wife will be able

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1 to forgive me, but I'm to that point. That's where  
2 we was at, five children we lost in miscarriages  
3 because of the radiation I got around. Finally,  
4 after seven years, I finally had a son come along,  
5 and I do have three children now, but can't you  
6 figure out something on me at all? Can't you take  
7 and find this information, something that would  
8 give me, help me out a little bit here?

9 I mean, you do a lot of study. I see  
10 on the screens all the things that goes on.  
11 Everybody is very scientific because that's what  
12 you do. There's not one accident in the world  
13 that's happened so far, nuclear accident, that  
14 didn't have a lot of radiation around them as part  
15 of it, right? Japan, Chernobyl, all them had, and  
16 the people got sick and died and various things.  
17 But, somehow, I'm still here talking to you.

18 Please help me. Okay? Give me a  
19 break. Help me out a little bit here. Do  
20 something. Be on my side a little bit. I went  
21 through a lot. Okay?

22 I've been through a lot on this thing.  
23 Now please help me. Thank you

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1                   CHAIRMAN MELIUS: Thank you for your  
2                   comments. D'Lanie Blaze is here, I believe.

3                   **D'Lanie Blaze**

4                   MS. BLAZE: Yes. Have all of you on  
5                   the Advisory Board gotten a copy of what I'm  
6                   submitting today, the 2016 Site Description for  
7                   Santa Susana Field Lab, the proposed corrections  
8                   and revisions? Okay.

9                   I'm D'Lanie Blaze of CORE Advocacy for  
10                  Nuclear and Aerospace Workers. CORE Advocacy  
11                  represents personnel of Santa Susana Field Lab and  
12                  its associated sites. I would like to thank the  
13                  Advisory Board, NIOSH, and everyone here for coming  
14                  to Idaho Falls, and I appreciate the opportunity  
15                  to speak to you about the Santa Susana Site Profile.

16                  NIOSH indicates that an effective Site  
17                  Profile should provide an accurate depiction of  
18                  site operations, processes, potential sources of  
19                  radiation, worker and environmental monitoring  
20                  practices, and other relevant information. In  
21                  addition, NIOSH indicates that the Site Profile is  
22                  based on working documents and that updates or  
23                  revisions will occur when additional information

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1 has been obtained.

2 The current Santa Susana Site Profile  
3 lacks citations to historical facility  
4 documentation. This is very important because  
5 Boeing did not take over site operations until  
6 1996, nearly 50 years after the site's inception  
7 as an experimental nuclear and rocketry field  
8 laboratory.

9 I was concerned to discover that the  
10 Site Profile appears to have been based  
11 predominantly on summary data authored by Boeing  
12 and its contractors after 1996, which not only  
13 conflicts with historical facility documentation,  
14 employment records, and Boeing's own incident  
15 database, but which provides a  
16 dramatically-downplayed perception of Department  
17 of Energy operations and worker exposures at Santa  
18 Susana Field Laboratory.

19 In my effort to learn more about the  
20 site and to provide additional information in  
21 support of a more comprehensive Site Profile and  
22 the expansion of the 1965 SEC, I have identified  
23 so far at least 50 additional radiological

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1 facilities and associated processes,  
2 environmental and worker exposure data that have  
3 been excluded from the current Site Profile.

4 Some of the excluded facilities were  
5 known sources of radioactivity, and they include  
6 another nuclear reactor, another hot laboratory,  
7 another particle accelerator, and the low-level  
8 radioactive waste incinerator that functioned for  
9 nearly 25 years as a main source of airborne  
10 radioactivity.

11 In addition, Boeing's incident  
12 database references at least 381 additional  
13 incidents that involved releases of radioactivity,  
14 worker exposure, and a serious nuclear incident  
15 that unfolded over the course of a year, and all  
16 of them were excluded from the Site Profile.

17 Moreover, if NIOSH is in possession of  
18 the incident database, it does not appear to have  
19 been used to correct the issues with the Site  
20 Profile and incident reports that are specific to  
21 workers involved in exposure incidents, like Mr.  
22 Pace, have not been adequately applied in the  
23 individual's dose reconstruction.

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1 I also identified numerous non-nuclear  
2 facilities never intended for radiological use  
3 that adopted job processes involving radioactive  
4 substances over various years of site operations.  
5 These locations lacked radiological use  
6 authorizations or licenses and likely failed to  
7 meet criteria for safe handling and disposal of  
8 radioactive substances.

9 Most importantly, the facilities and  
10 the workers assigned to work in them were never  
11 redesignated to reflect their involvement in  
12 radioactive processes. The facilities remain  
13 designated non-nuclear facilities, and the workers  
14 remain designated non-nuclear workers without  
15 radiation data in their records.

16 This prevents us from making any  
17 assumptions about a worker's risk that is based on  
18 work location designation, job title, or a lack of  
19 exposure data contained in an employment file.  
20 However, this issue may provide a plausible  
21 explanation for Boeing's 2014 commentary to the  
22 Advisory Board wherein Boeing addressed what it  
23 called, "a phenomenon of blank radiation records,"

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1 contained in the employment files of 8,400  
2 non-nuclear Santa Susana employees.

3 Problems with worker rotation between  
4 areas and inability to determine monitored or  
5 unmonitored worker locations, and now inaccurate  
6 facility and worker designations, are prevalent  
7 throughout employee records and site history from  
8 the 1950s through the site remediation period,  
9 during which Rockwell International indicated a  
10 40-percent increase in worker exposure and onsite  
11 radiation levels due to site remediation.

12 Additionally, Boeing has indicated  
13 that changes in company policy prohibits them from  
14 reliably determining any worker's actual location,  
15 and the contractor consistently reinterprets and  
16 summarizes worker records rather than providing  
17 complete, authentic employment data for review by  
18 the Department of Labor.

19 It has been established that the  
20 contractor's summary data provided for individual  
21 employees is unreliable and it routinely obscures  
22 covered employment and worker exposures. Even  
23 Boeing admitted that its employment summaries are

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1 unreliable in determining worker location.

2 It appears the Department of Energy has  
3 taken a very assertive role in correcting some of  
4 these problems. However, EEOICPA has functioned  
5 for 15 years based on vague, incomplete, and often  
6 erroneous summary data provided by the contractor  
7 that has resulted in overlooked covered employment  
8 for an unknown number of workers.

9 All we know for sure is that every  
10 employee of North American Aviation was employed  
11 by a Department of Energy contractor. As the  
12 Department of Labor acknowledged in 2005, the  
13 original contract permitted North American  
14 Aviation to utilize all of its facilities at its  
15 discretion or those leased by the Atomic Energy  
16 Commission to fulfill their government contracts.  
17 That contract did not specify that the Atomic  
18 Energy Commission should remain confined to Area  
19 4.

20 Interdivisional collaboration is  
21 clearly evidenced and has never been contested at  
22 Santa Susana's associated sites, where expansive  
23 and all-inclusive SECs are in place for all North

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1 American Aviation, Atomics International, and  
2 Rocketdyne employees.

3 In the spirit of arriving to Work Group  
4 meetings prepared to work hard together on behalf  
5 of the workers this program is intended to serve,  
6 I respectfully submit a new 2016 site description  
7 that can be immediately implemented to the Site  
8 Profile. It contains additional information  
9 provided by the Department of Energy and Boeing in  
10 the form of 1.4 million historical facility  
11 documents, which the Environmental Protection  
12 Agency reviewed during the 2009 Area 4 Radiological  
13 Study and Historical Site Assessment.

14 I would like to thank EPA for their  
15 exemplary research during the historical site  
16 component, as well as the Department of Energy and  
17 Boeing for preserving and providing abundant  
18 historical documentation that can now ensure  
19 EEOICPA fulfills its intended purpose.

20 In addition, I respectfully submit a  
21 Special Exposure Cohort petition for your  
22 consideration which applies to all Santa Susana  
23 employees of North American Aviation and Rockwell

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1 International, pursuant to the original facility  
2 contract, well-documented site history verified by  
3 the Department of Energy and Boeing, and supportive  
4 of the spirit and the letter of EEOICPA.

5 Thank you for the opportunity to submit  
6 this information.

7 CHAIRMAN MELIUS: Okay. Thank you.  
8 The next person I have who signed up who is here  
9 is Knut Ringen.

10 No, the others are on the phone. We  
11 usually do people in the room first. Don't be so  
12 modest.

13 **Knut Ringen**

14 DR. RINGEN: Good afternoon. I'm Knut  
15 Ringen. I think most of you know me. I represent  
16 the National Building Trades, and also, the Augusta  
17 Building Trades Council, which is the umbrella for  
18 the unions. They represent workers at the  
19 Savannah River Site. I think you know all of my  
20 disclosures.

21 What I am going to say deals strictly  
22 with construction workers, which is where my  
23 competence is limited.

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1           Next year, the Savannah River Petition  
2           Evaluation will reach its 10th anniversary, 10  
3           years of evaluating the situation. There's been  
4           two-and-a-half years since that Working Group met  
5           last. Who knows what's been going on in those  
6           two-and-a-half years? But what has happened is an  
7           absolute outrage.

8           In 2008, Tim Taulbee said that he would  
9           be finished with the evaluation of the petition by  
10          the end of that summer. He said that in May, I  
11          think, in 2008. Instead, it was finished in 2010  
12          and was a recommendation to reject the petition.

13          This Board did not accept the findings  
14          of NIOSH, and instead, NIOSH had to go back and do  
15          more work, which resulted again in a re-evaluation  
16          by the Board in 2012, when the initial SEC was  
17          accepted.

18          Part of the reason that the SEC was  
19          accepted in 2012 was that NIOSH was unable to place  
20          people on the site, because it was relying on  
21          dosimeter records that were not valid and dosimeter  
22          numbers that could not be valid in all cases.

23          Since then, NIOSH has spent a lot of

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1 time trying to figure out how to dose  
2 reconstruction for various kinds of things. And  
3 the most recent document it has produced is  
4 OTIB-81. It is the internal coworker dosimetry  
5 data for the Savannah River Site, which is now going  
6 through the development of its fourth edition, Stu?  
7 Several years of work with no results to show for  
8 it.

9 It is proposed as an alternative,  
10 again, to the SEC and uses two databases. One is  
11 the NOCTS database, which is an internal NIOSH  
12 claimant database for the years before 1990, which  
13 has very, very few cases per year, about 300 or so  
14 per year that it uses to do an estimate of the  
15 adequacy of the coworker modeling. And after  
16 that, it uses the HPRED database that is developed  
17 within Savannah River that we have shown before has  
18 lots of deficiencies in it.

19 Nevertheless, it is very hard for us to  
20 evaluate the validity of the document that NIOSH  
21 is producing. If you read OTIB-81, it is really  
22 hard to understand what is being said. There are  
23 assumptions that are not justified for just about

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1 every model.

2 For instance, it says in one case, "The  
3 calculation of doses to individuals from bioassay  
4 data, a minimum of GSD" -- geometric standard  
5 deviation -- "of 3 has been used to account for  
6 biological variation." It was considered  
7 inappropriate to assign a value of less than 3 for  
8 the coworker data. Therefore, a GSD of at least  
9 3 was assigned. That is the whole rationale for  
10 the use of that. Why isn't it 3? Why isn't it 2?  
11 Why isn't it 5? Why is it 3? There is no  
12 explanation of that, and it is impossible to tell  
13 from the document.

14 It says also in the document that  
15 false-positive results were excluded from the  
16 bioassay data without explaining what is meant by  
17 a false-positive. These are just examples of why  
18 it makes it very hard to comment on or even know  
19 exactly what is in these documents.

20 But, beyond that, most fundamentally,  
21 there are two really serious flaws that NIOSH can't  
22 overcome no matter how much modeling it does. The  
23 first is that it is going to continue to rely on

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1 dose, dosimeter numbers or characters, to place a  
2 worker within the site. It has to be able to place  
3 the worker within the site in order to determine  
4 the source term that the worker has been exposed  
5 to and in order to do an appropriate coworker  
6 extrapolation for those exposures that could have  
7 taken place.

8 But we have shown previously -- and  
9 NIOSH agrees -- that the dosimeter records are  
10 deficient. This time it says it is going to make  
11 up for that through interviews with the workers and  
12 other documents that he can find here and there,  
13 and therefore, this will be an appropriate  
14 approach. Well, we know that that is not possible.  
15 That is not and acceptable -- that is not a  
16 sufficiently accurate way of doing this.

17 We have a ton of worker history  
18 interviews at the Savannah River Site, and we know  
19 how difficult it is for workers, particularly in  
20 the construction trades and who worked out of the  
21 central shops, to remember where they worked over  
22 a period of a lifetime on that site, and that you  
23 cannot rely on what the worker believes his or her

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1 history to have been to establish their exposure  
2 history.

3 This is even more true for the survivors  
4 who are claimants. They have no way of supplying  
5 supplemental data where the dosimeter records may  
6 be inadequate to establish where workers have been  
7 employed. So, therefore, NIOSH, as near as I can  
8 tell in this document, has not overcome the problem  
9 of the dosimeter issue that you dealt with in 2012.

10 Secondly, it acknowledges that it has  
11 problems dealing with the workers who have been in  
12 radiation incidents on the sites. In its own use  
13 of the bioassay data, it says it has had to exclude  
14 those individuals who have gone through those kinds  
15 of incidents because they have such a high amount  
16 of radiation in their dosimeter records that they  
17 skew the overall cumulative dose for the site for  
18 that period of time. So, therefore, you cannot  
19 actually include in the extrapolation model those  
20 data.

21 So, what about those workers, then, who  
22 have been in an incident? How do you deal with  
23 those if you don't have a statistically-valid way

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1 to do it? I don't see how NIOSH can overcome those  
2 two questions, and I don't know why they should  
3 spend much more time dealing with this when these  
4 seem to be fatal flaws in the model.

5 Now NIOSH says it has not tested the  
6 model it has developed in OTIB-81 and will not test  
7 it until -- this was at the Work Group meeting you  
8 had in 2014, according to the transcript -- and will  
9 not test it until this Board denies the SEC and it  
10 implements OTIB-81.

11 So, what NIOSH is asking you to do --  
12 this Board to do, I think, is that it wants the Board  
13 to reject the SEC in favor of a reconstruction model  
14 that has fundamental flaws and that has not been  
15 fully evaluated.

16 I just want to mention a little bit  
17 about the consequences of these delays and the  
18 period that this has taken. I don't know the exact  
19 case mix of cancers in the claimant population  
20 here, but in the U.S. the 10-year survival rate for  
21 cancer in this population -- it is easy to exclude  
22 things like prostate among men -- is probably  
23 around 30 percent.

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1           An awful lot of the claimants that would  
2           have benefitted from an expedited review of this  
3           SEC have died in the process, in the period of this  
4           taking place, in the period of this evaluation  
5           taking place. An awful lot of people will not get  
6           paid because there are no survivors left, either,  
7           to get paid. So, in short, you have done these  
8           people a huge disservice by the delay in the process  
9           that you have taken on.

10           The cost of this is roughly that at  
11           Savannah River -- Hanford, K-25, and Savannah River  
12           are almost exactly the same size. They have almost  
13           exactly the same Part B claim -- number of claims  
14           applications. For K-25 and Hanford, the  
15           acceptance rate is 50 percent higher than for  
16           Savannah River. That is one way of looking at it.

17           The other way of looking at it is that  
18           in South Carolina about half to a third of the  
19           amount of benefits paid out in Tennessee and  
20           Washington is the case. So, that the State of  
21           South Carolina has lost out tremendously. The  
22           claimants who come from the Savannah River Site  
23           have lost out tremendously. But, above all, this

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1 is a humanitarian disgrace of holding out like  
2 this. Now I have said this several times, and I  
3 know it is not going to have an impact on anybody  
4 here, but it really should. Thank you.

5 CHAIRMAN MELIUS: Thank you. Now I am  
6 going to go and I believe there are some people on  
7 the phone that wish to do public comments.

8 Deb Jerison?

9 **Deb Jerison**

10 MS. JERISON: Hi. This is Deb. Thank  
11 you, Dr. Melius and Members of the Board, for the  
12 time spent and thank you for all the work you are  
13 doing on behalf of the sick workers.

14 I have been looking into the  
15 remediation period for the nuclear explosion test  
16 facilities, and for some reason, several of these  
17 facilities don't seem to be covered. It appears  
18 that the cleanup was done.

19 In some cases, tests covered under the  
20 same operation, recovered for remediation in one  
21 location but not in another. Operation Greenhouse  
22 in 1951 had shops at both the Nevada Test Site and  
23 the Pacific Proving Grounds. The NTS jobs were

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1 covered for remediation, but the PPG shops were  
2 not. All were sponsored by the same lab, Los  
3 Alamos.

4 It also appears that some of the DOE  
5 facilities, including sites with SECs, had  
6 remediation done, but that remediation is not  
7 currently covered under EEOICPA. I just wanted to  
8 say that I will continue looking into this, and I  
9 will provide a report when I know more. Thank you.

10 CHAIRMAN MELIUS: Thank you. I  
11 believe they are familiar with all the examples,  
12 but I think there are explanations for some of those  
13 differences to that, based on the law and what  
14 facilities are covered, and so forth.

15 The next person I have signed up is  
16 Terrie Barrie. Terrie, are you on the line?

17 MS. BARRIE: Yes, I am, Doctor.

18 CHAIRMAN MELIUS: Okay. Welcome.

19 **Terrie Barrie**

20 MS. BARRIE: Okay, great. Good  
21 evening, Dr. Melius and Members of the Board. This  
22 is Terrie Barrie of the Alliance of Nuclear Worker  
23 Advocacy Groups and Rocky Flats SEC co-petitioner.

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1 Thank you for allowing me to call and make comments  
2 tonight.

3 I want to commend Ms. D'Lanie Blaze on  
4 her dedication to the workers and their survivors  
5 of the Santa Susana Field Lab. I am in awe of her  
6 research capabilities and her tireless efforts on  
7 their behalf. I am appalled, though, by what she  
8 found which is not included in the NIOSH's Site  
9 Profile. Ms. Blaze shared a few of her findings  
10 with me.

11 NIOSH asserts that the Site Profiles  
12 are living documents. While that may be true, it  
13 is simply not acceptable that hundreds of  
14 thousands, if not millions, of taxpayer dollars are  
15 spent on these Site Profiles, only to have  
16 advocates who do not have access to classified  
17 documents locate information that has the  
18 potential to disprove NIOSH's position.

19 I am reminded of the Rocky Flats Site  
20 and how the Board was originally told that there  
21 were no criticalities at Rocky, only to find out  
22 that there was an entire building that was  
23 dedicated to criticality experiments.

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1           And do you remember when NIOSH/ORAU  
2           claimed that there was no neptunium production at  
3           Rocky Flats, only to have the petitioners submit  
4           a DOE document, which was available online,  
5           detailing the neptunium production there?

6           When it comes to the White Paper on the  
7           critical mass lab, Building 886, NIOSH recently  
8           informed the Work Group that they did request air  
9           monitoring data from LANL for that building past  
10          1990 because, and I quote, "The facility was not  
11          operational after that time." End quote.

12          However, according to HAER, the nuclear  
13          materials remained in that building until 1997.  
14          Plus, there was a flood in 1995 where the potential  
15          for exposure existed. This spring flooding not  
16          only affected Building 886, but possibly every  
17          other building on the site.

18          I have serious concerns that NIOSH is  
19          illogically limiting exposure at the Rocky Flats  
20          Plant to only the times of production. Shouldn't  
21          NIOSH consider residual contamination after  
22          production stopped for Rocky Flats claimants?  
23          Shouldn't they review the air monitoring data after

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1 1990 to determine if the level of the radiation  
2 actually did decrease after that time?

3 I respectfully disagree with Dr.  
4 Kotelchuck's report today on the status of the  
5 Rocky Flats SEC decision. There are a number of  
6 serious outstanding issues besides the one of  
7 Building 886. I recently learned that tritium was  
8 stored at Rocky Flats, possibly in the form of metal  
9 tritide. I have shared this information with the  
10 Work Group, NIOSH, and SC&A.

11 Then, there is the issue of the huge  
12 cobalt source, the issue of NIOSH using plutonium  
13 bioassays for reconstructive for neptunium after  
14 1983. You may remember that LANL's SEC petitioner  
15 submitted a DOE document which says that you cannot  
16 use plutonium bioassays to reconstruct dose for  
17 neptunium. LANL was granted an SEC based on this.  
18 And yet, Rocky Flats isn't? There is also a  
19 question that I just recently found about neutron  
20 radiation in Building 444.

21 Additionally, I must remind the Board  
22 that neither the petitioner nor I were permitted  
23 to offer our positions on a couple of the White

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1 Papers before the Work Group voted to accept them.  
2 I think that we weren't allowed to offer our  
3 opinions before that vote.

4 The last issue I want to bring to the  
5 Board's attention is the interpretation of the  
6 legislative term proprietary interest. As you  
7 know, that interpretation is vital in determining  
8 if a site performed work for DOE, and therefore,  
9 is covered under the program. This affects not  
10 Santa Susana, and obviously, Pacific Proving  
11 Grounds, but many other sites as well.

12 Ms. Blaze shared emails from the  
13 Department of Labor she received through a FOIA  
14 request. One email referenced a 2002, and I quote,  
15 "Solicitor of Labor's decision on what is meant by  
16 DOE operations and proprietary interest". End  
17 quote.

18 On March 18th, 2015, I filed a FOIA  
19 request for the Solicitor's decision. I have yet  
20 to receive it. I filed an appeal, but it seems  
21 unlikely that I will receive this document without  
22 going to federal court. I am hoping that this  
23 would fall under the Board's responsibility and

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1 respectfully ask that you request a copy of this  
2 document from the Department of Labor. The  
3 stakeholders deserve to fully understand how the  
4 Department of Labor determines whether a site is  
5 a covered facility.

6 Thank you again for your time and  
7 consideration.

8 CHAIRMAN MELIUS: Okay. Thank you.  
9 Anybody else on the phone that wishes to make public  
10 comments?

11 MS. COLLEY: Yes.

12 CHAIRMAN MELIUS: Please identify  
13 yourself.

14 **Vina Colley**

15 MS. COLLEY: My name is Vina Colley.  
16 I'm a sick worker from the Portsmouth Gaseous  
17 Diffusion Plant in Piketon, Ohio, and I am also  
18 co-founder of National Nuclear Workers for  
19 Justice. I would like to thank everyone for giving  
20 me this opportunity to speak.

21 We filed, [identifying information  
22 redacted] and I filed a petition back in  
23 2000-something. It was given the tracking number

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1 of 00011. I don't know what happened to the  
2 petition. I know she brought it up again in 2007,  
3 I believe, in Richland, Washington. The petition  
4 was filed, and we have never heard back. We don't  
5 know where the petition is. It is nowhere on any  
6 of the DOE/DOL web pages.

7 And we want to put this on record to have  
8 someone find us this petition because it had over  
9 7,000 workers, over 7,000 people, workers and  
10 community people who had signed this petition.  
11 And it was to help a lot of sites, the Hanford Site,  
12 the Piketon Site, all workers. So, that was one  
13 of the things I wanted to say.

14 And the other thing I wanted to say is  
15 that at Portsmouth we did highly-enriched uranium.  
16 This is uranium hexafluoride. So, these fluorides  
17 become contaminated with plutonium and beryllium,  
18 and it was airborne, and the workers worked in the  
19 building. One thing they don't recognize is this  
20 uranium hexafluoride, that every worker at that  
21 plant site, plus offsite people, were exposed to  
22 almost on a daily base.

23 The other thing is I have been fighting

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1       this thing here now since about 1985-86, trying to  
2       get help for the community and trying to get help  
3       for the workers.       It is this clear dose  
4       reconstructions cannot be accomplished; you cannot  
5       reconstruct a dose from something that doesn't  
6       exist.   You do not have all the facts -- and the  
7       facts, when present, will speak for them self, and  
8       they will prove us right -- continuing on the road  
9       of a dose reconstruction would be ill-advised at  
10      least and criminal at most.

11               We expect the Department of Labor and  
12      NIOSH to do the right thing and halt dose  
13      reconstruction.   What you are doing is continuing  
14      to study us.   And ever since I have been in this,  
15      all the studies that have ever been done have been  
16      inconclusive by design.   They don't even ask the  
17      worker what they were exposed to, and they don't  
18      calculate the doses and the neutron exposures when  
19      the NIOSH came to type us.   Not everyone got to hear  
20      about the neutron exposures, just a handful of  
21      probably a few union people.   So, many of us didn't  
22      know about this neutron exposure.

23               In 1999, my organization broke the

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1 story about the plutonium in the gaseous diffusion  
2 plant, which started this compensation bill. We  
3 broke it the same day as Paducah.

4 Then, we got downplayed. They said  
5 that we got diluted plutonium from Paducah, but  
6 that is not true. Today I'm telling you we got  
7 plutonium straight from West Valley, New York. It  
8 came to this whole system.

9 And we did the highly enriched uranium  
10 material. We worked in open buildings where they  
11 had machine shops, welding shops, motor shops,  
12 everything in this building that was open to the  
13 atmosphere. So, you tell me how you can do a redose  
14 construction on me and these other workers.

15 You're waiting -- and this has been  
16 going on for 16 years now -- you're waiting for  
17 these workers to die, so you don't have to  
18 compensate them. Maybe the widows will get  
19 \$125,000. And you keep studying us and studying  
20 us, and you've studied us to death.

21 I found out, there are directions that  
22 I have here where there was an epidemiology study  
23 way back in the seventies, and whatever. How long

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1 are you going to continue to study us? This is a  
2 criminal act, what you are doing to all these  
3 workers that are dying. They're losing their  
4 homes. They're losing everything. They are sick  
5 and they need help.

6 All these meetings are fine, but as long  
7 as they continue, we're not going to get help. I  
8 think 16 years into this program is long enough.

9 And I remember Senator Jeff Bingaman of  
10 New Mexico made a suggestion that DOL should rely  
11 more heavily on the word of the applicants when the  
12 DOE's paperwork is not available for dose  
13 reconstruction.

14 I was downgraded and harassed and I'm  
15 a whistleblower. People were told not to pay any  
16 attention to me because, way back then when they  
17 were up there in Congress testifying, I didn't want  
18 to be studied anymore. I had already been studied  
19 by the State of Ohio. I had my own doctor, and I  
20 didn't need to be studied anymore.

21 So, as long as you have studied us, then  
22 you don't have to compensate us. And I got  
23 compensated for two illnesses when the physician

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1 panel was here. My case worker told me that I  
2 enough proof that they were going to go ahead and  
3 compensate me for all the illnesses. He FedEx'ed  
4 me a paper, and that week he got fired. My records  
5 have been lost twice. Not only just me, this is  
6 at every site in the United States. I'm not just  
7 talking about Piketon on this. I'm talking they  
8 have harassed all of these workers.

9 I lost my pension. I lost everything  
10 fighting for what I think is right. And I will  
11 continue to fight for the health of these workers  
12 until you do the right thing.

13 CHAIRMAN MELIUS: Okay. Thank you for  
14 your comments.

15 MR. KATZ: Ma'am, can I ask, the  
16 comments you just gave, do you have them written  
17 down?

18 MS. COLLEY: No, no, not all of them,  
19 but I can write this one down. But the petition  
20 number is very, very important. I want to put it  
21 on the record.

22 MR. KATZ: Yes, and I'm just worried  
23 about the audibility of some of -- mostly, we could

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1 understand you, but there are times when it was hard  
2 to pick up exactly what you were saying. It would  
3 great if you would be willing to send in whatever  
4 you do have on the comments you just gave.

5 MS. COLLEY: Okay. Do you want just  
6 for me to email it?

7 MR. KATZ: Yes. Why don't I  
8 just -- Stu, why don't you just give her the right  
9 email address to send it to? Thanks.

10 MR. HINNEFELD: You can submit them to  
11 our email. That's DCAS, D-C-A-S, @cdc.gov.

12 MS. COLLEY: You see, you've had really  
13 bad reception all day. I have not been able to hear  
14 hardly anything that anybody has said except the  
15 last two or three speakers. It would be easier if  
16 you would send it to me at [identifying information  
17 redacted].

18 MR. KATZ: It's hard to understand the  
19 email that you're giving me.

20 MS. COLLEY: Can you hear it now?

21 MR. KATZ: Okay. That's better. Why  
22 don't you try that?

23 MS. COLLEY: Okay. It's [identifying

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1 information redacted].

2 MR. KATZ: I'm sorry, [identifying  
3 information redacted]?

4 MS. COLLEY: "V". "V" as Victor.

5 MR. KATZ: Wait. Do you folks know  
6 this? Oh, okay. All right. You've got it.

7 MR. HINNEFELD: I believe we have her  
8 contact information.

9 MR. KATZ: Okay. So, we'll contact  
10 you and send you the right email address, so that  
11 you can send those comments in. And if you would  
12 just put on the comments, also, "Attention: Ted  
13 Katz" on them, too, so I'll make sure that this  
14 comes to the Board and the transcriber.

15 MS. COLLEY: Attention who?

16 MR. KATZ: Ted Katz, Ted, T-E-D,  
17 K-A-T-Z.

18 MS. COLLEY: Yes, I can't understand.  
19 I lost you when --

20 MR. KATZ: Ted, Ted, T-E-D, Ted.

21 MS. COLLEY: Ted?

22 MR. KATZ: Yes.

23 MS. COLLEY: Katz?

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1 MR. KATZ: Katz.

2 CHAIRMAN MELIUS: They can give it.

3 MR. KATZ: Okay.

4 CHAIRMAN MELIUS: When they contact  
5 her, they can, Ted.

6 Thank you very much.

7 MS. COLLEY: Just send me the  
8 information in an email, and I'll send it back to  
9 you in an email.

10 CHAIRMAN MELIUS: That's what we'll  
11 do. Thank you.

12 MR. FROWISS: Dr. Melius?

13 CHAIRMAN MELIUS: Yes?

14 MR. FROWISS: Yes, Al Frowiss. I  
15 would like to speak.

16 CHAIRMAN MELIUS: Okay.

17 **Albert Frowiss, Sr.**

18 MR. FROWISS: This is Albert B.  
19 Frowiss, Sr., in California. I'm an advocate and  
20 co-petitioner on the Lawrence Livermore petition  
21 that was recently approved for '74 to '89, and it  
22 is pending for later years, through '95.

23 On the Lawrence Livermore issue, in

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1 1950 to '53, which is part of the original SEC,  
2 there was a company called California Research,  
3 part of Standard Oil, that had a prime contract with  
4 the AEC for building the Materials Test Accelerator  
5 onsite at Lawrence Livermore. It was a fenced-off  
6 area from the part that the University of  
7 California dealt with, but it was part of the  
8 Lawrence Livermore footprint. We acquired key  
9 parts for the accelerator from a facility in Weldon  
10 Spring, according to various articles on the  
11 internet.

12 In about 1953, the prime contract  
13 through California Research was cancelled and  
14 switched to the University of California.  
15 However, there is no record of any California  
16 Research employees in the DOE. So, all the people  
17 that worked there, the physicists, chemists, et  
18 cetera, are not covered because nobody can find  
19 proof of employment at the site.

20 So, I have tried the DOE point of  
21 contact. I have tried Greg Lewis' office. Nobody  
22 can seem to find anything. Yet, the information  
23 about California Research building the MTA at

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1 Lawrence Livermore is well-documented and it even  
2 includes a picture of it from 1950 on the Lawrence  
3 Livermore website.

4 So, I don't know where to go to find this  
5 proof, but I have claimants that worked for CRC,  
6 California Research, and they can't get paid or  
7 their survivors can't get paid because nobody can  
8 prove that they were ever there.

9 It seems to me that, if it is a prime  
10 contract with the Atomic Energy Commission,  
11 somebody has got to be able to find that, evidence  
12 of that contract. Anyway, that is Item 1.

13 Item 2, Lawrence Berkeley National Lab,  
14 I was wondering whether the Board, or perhaps Dr.  
15 Ziemer, know whether there is any movement at all  
16 on a new SEC extending beyond 1961, and why the  
17 original SEC stopped at 1961.

18 The third point on SLAC, Stanford  
19 Linear Accelerator. There was a Tiger Team review  
20 in the 1980s, '86 I think, of SLAC, with many  
21 deficiencies found, but nothing was ever done, it  
22 appears, towards initiating an SEC. And I'm  
23 wondering why that is.

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1                   And that's it. Thank you for your  
2 work.

3                   MR. FESTER: Dr. Melius?

4                   CHAIRMAN MELIUS: Yes? Yes?

5                   **Josh Fester**

6                   MR. FESTER: This is attorney Josh  
7 Fester. I'm calling on behalf of attorney Bob  
8 Warren, authorized representative for  
9 [identifying information redacted] on the original  
10 SEC petition. Due to medical issues, I am speaking  
11 on behalf of him this evening. I just wanted to  
12 read into the record his public comment.

13                   CHAIRMAN MELIUS: Okay.

14                   MR. FESTER: "Having read the SRS  
15 status update PowerPoint presentation prepared by  
16 NIOSH in response to my letter to the Board on March  
17 23rd, 2016, and to be given to the Board tomorrow,  
18 I think the presentation is analogous to someone  
19 asked to respond to a letter by ignoring the letter.  
20 Or, similar to the situation of someone finding a  
21 key to a complicated puzzle and then deciding that  
22 a good plan of action would be to spend time  
23 locating personnel who might know something about

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1 the lock which the key fits, all the while ignoring  
2 the key which could unlock the puzzle.

3 "Four-and-one-half years, that has  
4 been the time that NIOSH has had the key SRS  
5 documents concerning thorium. The petitioners  
6 got copies of 1300-plus documents last September  
7 in response to a FOIA request, which request NIOSH  
8 refused to expedite after being asked by the  
9 petitioners to do so.

10 "During the four-and-a-half years, how  
11 many Board Members were told by NIOSH of the  
12 presence of thousands of kilograms of thorium at  
13 SRS from 1976, '77, '78, and of the disappearance  
14 in January and February of 1978, more than 7,872  
15 kilograms of thorium? How many Board Members were  
16 told by NIOSH that somewhere in the over 1300  
17 documents there were documents that showed  
18 problems at SRS in reducing inventories of thorium  
19 in 1982? How many Board Members were aware that  
20 these 1300-plus documents were not chronologically  
21 numbered and some pages had the same number but list  
22 different data?

23 "How do Board Members evaluate data

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1 after September 30th, 1972 that shows 8,730  
2 kilograms of thorium in storage at SRS and April  
3 of 1998 when the word 'missing' is entered, and when  
4 NIOSH had said there were negligible amounts of  
5 thorium onsite after September 1972, when the first  
6 SEC was granted?

7 "NIOSH said they could use thorium  
8 bioassays to reconstruct radiation doses, but,  
9 then, switched to air monitoring after we submitted  
10 part of a deposition of the head of the Radiation  
11 Safety Program at SRS, who stated that a bioassay  
12 program to detect thorium for SRS employees did not  
13 exist until early or mid-2000s.

14 "With questionable data sheets from the  
15 1300-plus documents providing the basis for  
16 NIOSH's datasets, what use are error rates for  
17 compromised data on workers? When NIOSH  
18 recognized that more faulty or missing SRS data  
19 will render any further analysis blocked, why would  
20 the Board grant NIOSH additional time to perform  
21 useless diversionary reports, when the law is clear  
22 that, if the data on workers is not available, then  
23 the SEC is the remedy?

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1                   "Four-and-a-half   years,   how   many  
2   workers and their survivors have died during that  
3   time?   How many more will die in the time that it  
4   takes NIOSH to put together additional systems for  
5   considering thorium at SRS?

6                   "Thank you."

7                   CHAIRMAN MELIUS:   Thank you.

8                   Is there anybody else on the phone that  
9   wishes to make public comments?

10                  MS. HAND:   Yes.   This is Donna Hand.

11                  CHAIRMAN MELIUS:   Okay.   Go ahead.

12                  **Donna Hand Reading Bob Warren's Statement**

13                  MS. HAND:   There are two letters that  
14   were sent for the Board to be passed around as well  
15   as to be read into the record and to put onto the  
16   docket.

17                  First of all, the law requires NIOSH to  
18   include all radiation exposures --

19                  CHAIRMAN MELIUS:   Excuse me.   Those,  
20   the letter was already read into the record.

21                  MS. HAND:   And it's going to be on the  
22   docket?   Okay, then fine.

23                  But what I would like to also point out

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1 is that there are several issues. The Technical  
2 Basis Document was -- the eight primaries,  
3 secondary, other issues was on the 2006 Technical  
4 Basis Document and it was not on the 2011.

5 There's also some concern because the  
6 classified interview, that information from the  
7 classified was never added to any Technical Basis  
8 Document, Site Profile, or whatever, and it was  
9 completely ignored.

10 You also have documentation where they  
11 are listing like 107, 108, 175. They are not  
12 separate buildings. That is in one big building.  
13 There is no documentation about Building/Area 300,  
14 which had the classified HEATHER project which did  
15 have radiation.

16 There was also the neutron tube and  
17 neutron generator that we tried to find different  
18 metal tritides, and one of them is classified. And  
19 those went through all of Building 100 and 300, and  
20 it was the site of testing in 200. And then, in  
21 400, you have dismissed plutonium. However,  
22 plutonium quantity was classified, and the air  
23 monitoring shows that there was plutonium in there

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1 because of the americium, the monitoring system  
2 that they had, as well as on the guard's desk and  
3 from the control desk.

4 So, they also, in the 2006 Technical  
5 Basis Document, they recorded for the employees,  
6 informed them that whenever it was below the dpm,  
7 they would open this up and redo the leaking of --

8 CHAIRMAN MELIUS: Yes, excuse me.  
9 Excuse me a second.

10 I think you submitted two letters. One  
11 has been read into the record. The other is far  
12 too long and was not asked to be read in the record,  
13 but both letters have also been provided to all of  
14 the Board Members. So, I don't think there is a  
15 need to repeat all of this, and we have already --

16 MS. HAND: I am not repeating all of it  
17 if some of this is in the record, sir, and I want  
18 to make sure that it is in public on the docket.  
19 This issue is so --

20 CHAIRMAN MELIUS: Well, we have a  
21 10-minute limit.

22 MS. HAND: Sir? Sir?

23 CHAIRMAN MELIUS: Excuse me. We have

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1 a 10-minute limit on comments. Your original  
2 letter took over 10 minutes. And you're welcome  
3 to submit supplemental information.

4 MS. HAND: And okay, then, I will send  
5 in some of --

6 CHAIRMAN MELIUS: But that is not  
7 the --

8 MS. HAND: -- the missed information  
9 because they're still not addressing that it is one  
10 big building. You saw him not address the  
11 classified --

12 CHAIRMAN MELIUS: Okay. That's --

13 MS. HAND: -- radiation dose --

14 CHAIRMAN MELIUS: Ma'am --

15 MS. HAND: And they've ignored the  
16 metal tritide dose --

17 CHAIRMAN MELIUS: Ms. Hand, please,  
18 you've been -- your public comment period is over.

19 MS. HAND: Thank you.

20 CHAIRMAN MELIUS: You're welcome.  
21 Thank you.

22 Anybody else wish to make public  
23 comment?

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1 (No response.)

2 Anybody here in the room like to make  
3 comments?

4 **Max Vigil**

5 MR. VIGIL: My name is Max Vigil, and  
6 I worked at the Nevada Test Site.

7 And what I gather here is that, you  
8 know, a lot of these people have given this Board  
9 information, and I do not see where it has really  
10 established a precedent for this kind of a thing.

11 I have a letter here that was sent to  
12 me by a Board Member or a member that worked at a  
13 lab where my records were submitted for radiation  
14 reconstruction. And I heard here where a lot of  
15 people don't know where to write to, to get some  
16 of their records. You know, some of these records  
17 had to have been kept someplace.

18 When I first started this thing with the  
19 AEC people, they told me that I had to write the  
20 Social Security Board and get my records. So, I  
21 called them, and they said, "Well, you have to call  
22 this other number," and another number, and so on.

23 Come to find out I didn't have to do

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1 that. The American General Contractors Board in  
2 Las Vegas, Nevada had all my records. It didn't  
3 cost me nothing. It started out it was going to  
4 cost me like \$175.

5 So, couldn't we please set up a board  
6 or some kind of a system that will let you know where  
7 you can get your records at? I finally got my  
8 records, and then, I submitted my claim. Then it  
9 went to an agency in Seattle, Washington; part of  
10 them went there. The other part went to Kentucky  
11 for dose reconstruction.

12 I don't know if I'll ever make it to hear  
13 the end of this thing or not. I have a daughter,  
14 my youngest daughter passed away with pulmonary  
15 fibrosis on the 9th of this month. They told her  
16 she couldn't file a complaint because she didn't  
17 work at one of these test sites. And I don't know;  
18 I am in the process of trying to find out if this  
19 Board or some other board could hear that girl's  
20 story.

21 This little girl sitting by me here is  
22 her granddaughter. She was supposed to have raise  
23 her, but she passed away from this horrible

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1 disease. You can sit there and watch them gasp  
2 their last breath and, then, they're gone.

3 But she tried to get some compensation  
4 for her illness, and I'm sure there's a lot of other  
5 people walking around, too, with illnesses that  
6 were caused by radiation exposure.

7 When I started this thing, they say,  
8 "Well, didn't you have some kind of a safety issue  
9 there?" We didn't have OSHA or anybody to watch  
10 what we were doing.

11 I tell you that my story is that I went  
12 to work. At that time I was young and my family  
13 was growing, and I had to have some means of  
14 supporting them. So, I went to work at the Nevada  
15 Test Site.

16 We was drilling a hole, and they set a  
17 bomb off at 3500 feet. It picked the ground up and  
18 set it back down. It was 4-foot lower than the rest  
19 of the valley floor.

20 Then we pulled this rig back in and we  
21 could see the color. I don't know if you're  
22 familiar with beryllium processes, but the color  
23 is the stem that is left in the ground, where you

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1 start the initial hole. It was like from here to  
2 these people away from the rig. We drilled back  
3 down another 3500 feet.

4 Well, every once in a while, the AEC  
5 people would want to take pictures of this ground  
6 formation. Being young and ignorant at that time,  
7 I thought, boy, those pictures really show a lot,  
8 and they did. But I didn't know what it was doing  
9 to me.

10 When you were drilling, it was a piece  
11 of cake. All you had to worry about then was the  
12 fumes that you were breathing in, or what have you.  
13 But now, when they wanted to take a picture, you  
14 had to pull all these rods out. And if you was down  
15 in the ground 1500 feet, you're drilling with  
16 beryllium gel and water and mud. Now you're  
17 pulling these rods up out of the ground and they're  
18 heavily radiated.

19 Well, the only thing they give you there  
20 for safety issues was a pair of treated coveralls,  
21 a pair of gloves, and a pair of rubber boots.

22 Now you're pulling these rods up, and  
23 they are plum nasty. You pick them up and you set

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1       them over here and stack them. The guy up in the  
2       crow's nest ties the rope over.

3                It didn't take very long, and they had  
4       three or four of these AEC people with their Geiger  
5       counters running up and down you. Pretty soon,  
6       they would say, "Hey, you're getting too much  
7       radiation on you. You have to go down and change."

8                So, you would go down and they would  
9       take these nasty coveralls off and your gloves and  
10      throw them in a plastic bag and these booties; put  
11      on new ones. Back out to work.

12              This was all the safety issue that we  
13      had on that field or out on that project. Nobody  
14      knew what they was dealing with, and if they did,  
15      nobody said anything.

16              But I hope I live long enough to get some  
17      kind of restitution on the claim that I have  
18      submitted. I'm not blaming you guys because you  
19      guys probably, some of you were around then, I'm  
20      sure; some of you weren't.

21              But it's frustrating to -- like this  
22      lady that just ended on the phone, I can feel her  
23      frustrations.

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1 And that's all I have to say.

2 CHAIRMAN MELIUS: Okay.

3 MR. VIGIL: Thank you.

4 CHAIRMAN MELIUS: Thank you.

5 You can talk to some people from NIOSH,  
6 Stu Hinnefeld or Jim Neton behind you, that might  
7 be able to help you a little bit, at least give you  
8 some information about your claim. We don't have  
9 the details, but at least it could help track  
10 down --

11 MR. VIGIL: I've got a claim number  
12 here.

13 CHAIRMAN MELIUS: Yes. We have done a  
14 lot of work on Nevada Test Site already.

15 MR. VIGIL: Okay. Well, thank you.

16 CHAIRMAN MELIUS: Yes. Thank you.

17 And sorry about your daughter. That's  
18 difficult.

19 Anybody else wish to make public  
20 comment?

21 (No response.)

22 (Whereupon, per the request of Mr. Katz  
23 earlier in this meeting, the letters read into the

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1 record by Mr. Katz for public comment at that time  
2 are inserted in the transcript as follows:)

3 **Letter Read into the Record by Ted Katz on Behalf of**  
4 **Pinellas Plant Claimants**

5 MR. KATZ: So, August 8th, addressed to  
6 the Board, and this is fairly lengthy. Jim, if  
7 this goes on too long, pull the gaff on me.

8 "The Board was sent a letter that proved  
9 in detail that Pinellas Plant claimants have been  
10 treated fairly and not according to the statute 42  
11 USC 7384, the regulations" -- and she cites  
12 those -- "and the Administrative Procedure Act.  
13 The law requires NIOSH to include all radiation  
14 exposures, the classified radiation exposures, the  
15 temporary plant exposures, the insignificant  
16 exposures, the radiation-generating devices  
17 exposure, the Naval Nuclear Propulsion exposures,  
18 the electron exposures, the alpha exposures, the  
19 neutron exposures, the accelerator exposures," et  
20 cetera.

21 "The law requires that all  
22 uncertainties, the dose reconstruction  
23 procedures, the SEC rule, to be determined in a  
24 compassionate, fair, and timely manner which will

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1 give the benefit of the doubt to the claimants  
2 specifically in cases of scientific or factual  
3 uncertainty or unknowns.

4 "Peter Darnell, Brian Gleckler, Grady  
5 Calhoun have willfully omitted material facts from  
6 the Pinellas Plant Site Profile. The omission of  
7 the testimony of the workers, even the classified  
8 interviews, were not used in consideration of the  
9 new Site Profile. Peter Darnell stated several  
10 times that the workers do not know what they were  
11 exposed to, that the non-classified statements  
12 cannot be accepted, and that the only information  
13 that is adequate is the information from the health  
14 physicist that was found to be in violation of the  
15 dosimetry program in 1990 by the Tiger Team.

16 "Pinellas Plant made both the neutron  
17 tube and the neutron generator, which was sent to  
18 Sandia and Los Alamos between 1991 and 1994.  
19 Sandia and Los Alamos have been granted an SEC for  
20 the workers at their facility that worked on the  
21 neutron generators. Pinellas Plant workers do not  
22 even qualify for a full evaluation, much less for  
23 an SEC member. This is a violation of being

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1 uniform, fair, and scientific consideration in a  
2 timely manner.

3 "As stated in the slide presentation,  
4 the Pinellas Plant Site Profile was first reviewed  
5 by SC&A in 2006 with eleven primary issues and eight  
6 secondary issues. The Advisory Board assigned a  
7 Work Group to review the Pinellas Plant Site  
8 Profile in April of 2008. The Advisory Board  
9 Working Group had six meetings," and she gives  
10 dates.

11 "Only one worker interview which  
12 addressed the classified issues was held on January  
13 24th through 25th, 2012, and the workers did not  
14 receive a copy of that interview until 2016. The  
15 Pinellas Plant workers are being deprived of timely  
16 and uniform decisions since it has taken over eight  
17 years for the report to be filed with the whole  
18 Board.

19 "Peter Darnell was asked by the Working  
20 Group if NIOSH can do internal dose reconstruction  
21 for the Pinellas Plant workers. Peter Darnell did  
22 not answer the question, but issued a new Site  
23 Profile for the Pinellas Plant in 2011 through

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1 '12." And then, she cites dates for different  
2 parts of the TBD to be issued which I won't repeat  
3 because it is hard to follow.

4 Okay. "Sandia neutron generator  
5 workers received the SEC because NIOSH could not  
6 calculate the internal dose up to December 1994."

7 And then, it seems to be a quote here:  
8 "NIOSH incurred internal monitoring data retrieval  
9 problems while processing individual claims and  
10 performing data capture work. Data retrieval  
11 issues appeared to affect much of the time period  
12 within the petition-requested Class Definition.  
13 It impacted all types of workers."

14 "Considering this information, NIOSH  
15 expanded the petitioner-requested Class to include  
16 all personnel. NIOSH evaluated the following  
17 Class: all personnel that worked in any area of  
18 Sandia National Laboratories in Albuquerque, New  
19 Mexico, for the period from January 1st, 1963  
20 through December 31st, 1994 was included,  
21 primarily due to the lack of internal monitoring  
22 program documentation, compounded by the lack of  
23 internal monitoring data and process information

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1 applicable to this period.

2 "For the purposes of timeliness, NIOSH  
3 is issuing this report covering available data  
4 sufficiency and feasibility conclusions now, but  
5 will continue to review and evaluate internal  
6 exposure reconstruction feasibility for the  
7 1995-through-2011 period, when applicable  
8 databases become available. If NIOSH finds this  
9 information indicating that doses cannot be bound  
10 for generating the first 1995 through May 21st,  
11 2011 period, NIOSH will proceed with an 83.14  
12 report recommending an additional Class E period  
13 from January 1st, 1963 through May 21st, 2011."

14 Okay, I am going to excerpt something  
15 else again because it is hard to follow. Some of  
16 this material I think we will just print it for the  
17 record, but I'm not going to read it because, quite  
18 honestly, it will just be very difficult, I think,  
19 for listeners to follow what is being said here.  
20 There are quotations from NIOSH material.

21 Let me just see if I can get to --

22 (Pause.)

23 MR. KATZ: Okay, back to -- it seems to

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1 be directly on Pinellas again.

2 "Pinellas Plant workers were subjected  
3 to a variety of radionuclides that do not have  
4 monitoring data specifically, but not limited to  
5 the internal dose data."

6 And then, there is a quote here:  
7 "Workers were potentially exposed to external  
8 photon, beta, and/or neutron radiation from a  
9 variety of sources. Potential sources include  
10 numerous radioactive materials, nuclear reactors,  
11 particle accelerators, and miscellaneous  
12 X-ray-generating equipment. Beta radiation over  
13 a broad range of energies could have been  
14 encountered from certain plutonium isotopes,  
15 uranium progeny, thorium progeny, tritium  
16 activation, and fission products from reactor and  
17 accelerator operations, and other radionuclides  
18 such as those used as calibration sources.

19 "Whether a beta source is considered an  
20 internal hazard or both an internal and external  
21 hazard depends on the maximum energy of the beta  
22 emission continuum" -- dot, dot, dot, so I am not  
23 sure where that quote comes from.

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1           But then, it goes on: "Pinellas Plant  
2 workers were potentially exposed and definitely  
3 exposed to accelerators, X-ray-generating  
4 equipment, neutron tube, neutron generators,  
5 radioactive-generating devices."

6           And then, there is another quote here:  
7 "The principal sources of external radiation  
8 exposure for members of the Class under evaluation  
9 were beta, photon, X-ray, and gamma, and neutron  
10 radiation associated with nuclear weapon  
11 development, reactor and accelerator operations,  
12 criticality experimentation, handling of  
13 radioactive materials in production and research  
14 activities, radiation-producing devices, or  
15 radioactive waste facilities or handling  
16 operations. The principal sources of neutron dose  
17 over the time period under evaluation were  
18 accelerator and plutonium-handling operations.

19           "The Tiger Team Assessment Report  
20 submitted by the petitioner had a number of  
21 observations about the LANL Site" -- so, this is  
22 a quote about the LANL Site -- "that are pertinent  
23 to the potential for unmonitored intakes. None of

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1 the numerous Tiger Team findings and observations  
2 pertain to the adequacy of the internal and  
3 external personnel monitoring programs.  
4 Therefore, they do not compromise NIOSH's ability  
5 to conduct dose reconstruction with sufficient  
6 accuracy. Dose reconstructions for LANL  
7 employees are based upon internal and external  
8 monitoring data."

9 And then: "Pinellas Plant dose  
10 reconstruction should be based on the monitoring  
11 data which has been established by the DOE LAP, not  
12 accurate. NIOSH can demonstrate that lack of data  
13 can bound the intakes for coworker dose with the  
14 Pinellas Plant workers. NIOSH should be able to  
15 do the same for the LANL coworker dose.

16 "Internal dose not feasible until after  
17 1995 for tritium" -- that's a quote from  
18 somewhere. "The internal dose for tritium,  
19 organic-bound tritium, and five different metal  
20 tritides is feasible for the Pinellas Plant workers  
21 from 1957 through 1997 without data. NIOSH should  
22 be able to do the internal dose for tritium for the  
23 LANL workers before 1995 without data." I can't

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1 understand that point.

2 Okay, here is another quote: "NIOSH  
3 has carefully reviewed all the materials sent in  
4 by the petitioner, including the specific  
5 assertions stated in the petition, and has  
6 responded herein. NIOSH has also reviewed  
7 available technical resources and many other  
8 references, including the Site Research Database,  
9 for information relevant to SEC 109. In addition,  
10 NIOSH has reviewed its NOCTS Dose Reconstruction  
11 Database to identify EEOICPA-related dose  
12 reconstructions that might provide information  
13 relevant to the Petition Evaluation.

14 "Since NIOSH has reviewed all of the  
15 material for LANL" -- that was a quote; now it is  
16 her again. "Since NIOSH has reviewed all the  
17 material for LANL and still cannot do the internal  
18 dose" -- "NIOSH cannot do the internal dose for  
19 Pinellas Plant workers, which is a smaller facility  
20 with less data."

21 So, I am close to the end here. Okay.  
22 So, here's a quote and, then, she is going to make  
23 a comment about it after.

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1            "These actions are based on existing  
2 approved NIOSH processes using NIOSH dose  
3 reconstruction for claims under EEOICPA. NIOSH's  
4 guiding principle in conducting these dose  
5 reconstructions is to ensure that the assumptions  
6 used are fair, consistent, and well-grounded in the  
7 best-available science.

8            "Simultaneously, uncertainties in the  
9 science and data must be handled to the advantage,  
10 rather than to the detriment, of the petitioners.  
11 When adequate personal dose information is not  
12 available or is very limited, NIOSH may use the  
13 highest reasonably-possible radiation dose based  
14 on reliable science, documented experience, and  
15 relevant data to determine the feasibility of  
16 reconstructing the dose of an SEC petition Class.  
17 NIOSH contends that it has complied with these  
18 standards of performance in determining the  
19 feasibility or infeasibility of reconstructing  
20 dose for the Class under evaluation." That was a  
21 quote.

22            Now she says: "Again, NIOSH uses one  
23 criteria for one of the largest well-documented

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1 sites and another for every other site. NIOSH must  
2 be consistent or give reasons why they deviate.  
3 NIOSH must use the same standard for all sites.

4 "SC&A agreed that the primary issues  
5 have been resolved, but the primary issues were  
6 from a 2006 review of a 2006 Site Profile. The new  
7 Site Profile has still a variety of issues and  
8 concerns dealing with metal tritides, the uranium,  
9 the plutonium, the coworker dose of 100 millirem  
10 versus 500 millirem, the arbitrary, ambiguous  
11 statements not based on the facts or lack of data,  
12 the quality of the data, holding an issue until  
13 later instead of issuing an SEC because the  
14 information or data is not available," et cetera.

15 "The Pinellas Plant Site Profile and  
16 the template used for the Pinellas Plant employee  
17 dose reconstruction is void since it is not based  
18 on relevant scientific validation, the data, or the  
19 law. Respectfully submitted, Donna Hand."

20 Okay. So, we will put this in the  
21 public comment session and print it verbatim as  
22 opposed to how I read it, because some of it was  
23 a little bit of a struggle to read straightforward.

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1 CHAIRMAN MELIUS: Okay. Anything  
2 else?

3 MR. KATZ: No, I think --

4 CHAIRMAN MELIUS: Okay.

5 MR. KATZ: Let me just check. I think  
6 that is it. Well, I have a very short -- but I can  
7 wait until later, if you want -- a Rocky Flats  
8 letter.

9 CHAIRMAN MELIUS: Why don't you go  
10 ahead?

11 **Letter Read into the Record by Ted Katz on Behalf of**  
12 **Rocky Flats Petitioner**

13 MR. KATZ: Do you want me to go ahead  
14 and do that? Okay.

15 So, I received a short letter from one  
16 of the Rocky Flats petitioners dated August 15th,  
17 2016.

18 "Dear Advisory Board Members, NIOSH:  
19 Would you please read this brief message into the  
20 August 9th-10th, 2016 meeting?

21 "Because Rocky Flats, Colorado, is the  
22 only nuclear facility in the United States of  
23 America to be, one, rated by the FBI for criminal  
24 activity; two, indicted for multiple illegal

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1 violations, and, three, tried in a federal court  
2 of law and found guilty by a grand jury, the former  
3 Rocky Flats nuclear workers with job-induced  
4 cancers appeal to the Presidential Advisory Board  
5 to consider extending our SEC from 1983 to 1992.

6 "Because America's values are based on  
7 her Constitution and judicial system, we  
8 respectfully request that the Advisory Board/NIOSH  
9 carefully consider the grand jury findings of 1992.  
10 If you agree that our constitutional rights have,  
11 indeed, been violated, please indicate by voting  
12 to extend the SEC. Thank you."

13 **Letter Read into the Record by Ted Katz on Behalf of**  
14 **Daniel McKeel**

15 Oh, and I have another. I don't know  
16 how we are on time here. But Dr. McKeel's comment,  
17 do you want that, too?

18 CHAIRMAN MELIUS: Yes.

19 MR. KATZ: Okay. So, Dr. McKeel, who  
20 was the GSI petitioner -- is still the GSI  
21 petitioner -- that petition is still under review  
22 by HHS, not the petition, but the appeal of the  
23 decision -- has written in, dated August 9th.

24 "Good afternoon. I am Daniel McKeel,

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1 the SEC co-petitioner for the General Steel  
2 Industries site in Illinois. I wish to place on  
3 the record my strenuous objections to the manner  
4 in which the GSI SEC-105, SEC administrative review  
5 appeal, and the GSI PER-57 are being handled at HHS  
6 and DOL. The processes are taking an unreasonably  
7 long time, and the results of the PER-057 are  
8 falling below the expected outcome put forth by  
9 DCAS and NIOSH."

10           Bullet 1: "The GSI SEC-105 denial  
11 appeal has taken more than three years. The full  
12 Board, by close 9-yes-to-8-no vote on December  
13 11th, 2012, recommended supporting NIOSH and  
14 denying the GSI SEC-105. The HHS Secretary issued  
15 her denial letter on March 3rd, 2013. The GSI  
16 petitioners submitted their 185-page SEC-105  
17 Administrative Review Application to HHS Secretary  
18 Sebelius on April 17th, 2013, and it was approved  
19 by the Assistant Secretary of Health Howard Koh one  
20 month later.

21           "As of August 6th, 2016, there  
22 apparently has been no recommendation by the  
23 three-member independent panel of senior HHS

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1 scientific reviewers whether they believe the  
2 decision to deny SEC-105 should be reversed based  
3 on the 44 errors the petitioner identified in their  
4 original application. Since that time, the  
5 petitioners submitted to HHS Secretary Burwell on  
6 April 22nd, 2015, an expanded list of 95 more  
7 procedural and scientific NIOSH errors of omission  
8 and commission that have been sanctioned by the  
9 Board.

10 "The GSI SEC-105 petitioners again  
11 assert the complete secrecy mandated by the 83.18  
12 section of the Code, AR statutory process, is  
13 unnecessary, is unfair to the potential SEC-105  
14 Class members, and is carried out in direct  
15 defiance of the principles of openness and  
16 transparency that are espoused by the current and  
17 past administrations.

18 "We assert the AR process must be  
19 reformed, so that the SEC petitioners and potential  
20 Class members can know the names and titles of the  
21 independent HHS reviewers, be informed when the  
22 review panel meets, and read transcripts of what  
23 was discussed at the meetings. We believe the

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1 rationale for utmost secrecy is totally invalid as  
2 it now stands under 83.18."

3 The second bullet point: "Only 75 of  
4 100 GSI PER-57 cases with PER PoCs greater than 50  
5 percent have been paid by DOL since March 11th, 2015  
6 issue date. Some claims may have been filed after  
7 March 11th, 2015.

8 "In response to GSI Appendix BB Rev 1  
9 being issued in June 2014, NIOSH recalculated  
10 previously-assigned external and internal  
11 radiation doses in 196 GSI-denied cases and issued  
12 its two-page PER-57 report on March 11th, 2015.  
13 That document identified 100 GSI-denied cases of  
14 persons with established cancers, the Probability  
15 of Causation of which on recalculation equaled or  
16 exceeded 50 percent, the EEOICPA Part B  
17 compensation limit. The remaining 96 cases did  
18 not meet the compensation criteria. The list was  
19 sent to DOL the day of issuance for further  
20 processing. DOL was supposed to return the 100  
21 cases to NIOSH for rework, new dose  
22 reconstructions, based on Appendix BB, Rev 1.

23 "Dan McKeel has been closely tracking

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1 the statistics on the numbers of claims and cases  
2 processed for dose reconstruction and compensated  
3 by DOL on a weekly basis. Through August 6th,  
4 2016, another 75 Part B cases have been paid by DOL  
5 to the GSI Site since March 11, 2015. DOL has  
6 informed the petitioners that 96 percent of the  
7 cases referred to the final adjudication board are  
8 handled within 30 days. DOL, through their  
9 Cleveland District Officer, further informs us  
10 that 12 of the persons of the GSI PER-57 list of  
11 100 cases with PoCs exceeding 50 percent are  
12 deceased with no known survivors.

13 "Our question as to whether or not any  
14 of these persons died prior to March 11, 2015 was  
15 not answered. Another 15 cases were found by DOL  
16 to have the wrong employment. That is, they were  
17 never employed at the covered GSI, 1417 State  
18 Street in Granite City, Illinois location. See  
19 DOL Final Bulletin 8202.

20 "Not explained in a satisfactory manner  
21 by NIOSH or DOL is how these errors occurred.  
22 Perhaps 27 persons on the PER-57 list of 100 with  
23 PER PoCs greater than 50 percent may not be paid

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1 as a result of the errors. DCAS/NIOSH, when asked  
2 why they included persons on the PER-57 shortlist  
3 that allegedly never worked at the covered GSI  
4 location, also called the South Plant, responded  
5 DCAS never questions employment status, which DCAS  
6 asserts is purely a DOL function.

7 "It is true, in contradiction to that  
8 statement, that the DCAS Division of NIOSH  
9 interviews all DR applicants about their job  
10 functions. If a reported GSI person indicated no  
11 knowledge of GSI unique radiation sources, such as  
12 the two betatrons, for example, or about GSI  
13 workplace rules and employment practices, the GSI  
14 petitioner believed those disclosures should be  
15 red flags to possible wrongful employment  
16 designations by DOL. We believe employment status  
17 accuracy is both a DOL and a DCAS shared  
18 responsibility under EEOICPA 2000, Parts B and E.

19 "I am further concerned" -- we are  
20 almost finished here -- "I am further concerned  
21 that the basic Site Profile issues in the original  
22 June 2007 Rev 0 version of the Battelle Appendix  
23 BB to TBD-6000 remain unresolved today, more than

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1 nine years later. Rev 1 was issued on June 6th,  
2 2014, and Rev 2 was issued on June 10th, 2016.

3 "SC&A's review of Rev 2 of Appendix BB  
4 is still pending, and a meeting of the TBD-6000 Work  
5 Group to resolve the SC&A's findings has not been  
6 scheduled. Both must take place before a new PER  
7 related to Rev 2 can be issued by NIOSH.  
8 Resolution of GSI Site Profile issues will, thus,  
9 have occupied by the ABRWH and NIOSH for at least  
10 10 years, a really absurdly prolonged interval.

11 "Finally, I wish to register my strong  
12 objections to including the four GSI cases in the  
13 second report with the HHS Secretary on the Board's  
14 dose reconstruction reviews from the 334  
15 additional completed DRs. My White Paper  
16 detailing those objections has been posted on the  
17 DCAS website under Docket 140. Thank you. Dan  
18 McKeel".

19 That's it.

20 **Adjourn**

21 CHAIRMAN MELIUS: Okay.

22 Now that ends our session then.

23 Thank you.

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1                   And we will reconvene tomorrow morning  
2           at sometime.

3                   (Laughter.)

4                   MR. KATZ: 8:30 we really get going.

5                   CHAIRMAN MELIUS: Okay.

6                   (Whereupon, the above-entitled matter  
7           went off the record at 5:55 p.m.)

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