U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

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ADVISORY BOARD ON RADIATION AND WORKER HEALTH

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SUBCOMMITTEE ON DOSE RECONSTRUCTION REVIEWS

WEDNESDAY

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AUGUST 7, 2013

The Subcommittee convened via teleconference at 10:00 a.m., Eastern Daylight Time, David Kotelchuck, Chairman, presiding.

PRESENT:

DAVID KOTELCHUCK, Chairman BRADLEY P. CLAWSON, Member WANDA I. MUNN, Member JOHN W. POSTON, SR., Member DAVID B. RICHARDSON, Member

ALSO PRESENT:

TED KATZ, Designated Federal Official KATHY BEHLING, SC&A
RON BUCHANAN, SC&A
GRADY CALHOUN, DCAS
DOUGLAS FARVER, SC&A
JENNY LIN, HHS
STEPHEN MARSCHKE, SC&A
JOHN MAURO, SC&A
DAN McKEEL
BETH ROLFES, DCAS
MUTTY SHARFI, ORAU Team
SCOTT SIEBERT, ORAU Team
MATTHEW SMITH, ORAU Team
JOHN STIVER, SC&A
TOM TOMES, DCAS

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A-G-E-N-D-A

WELCOME AND ROLL CALL4
SELECTION OF CASES FOR SET 17 SC&A REVIEWS5
CASE REVIEWS ISSUE RESOLUTION

ADJOURN

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

(10:01 a.m.)

MR. KATZ: So, let's get started with roll call.

(Roll Call.)

MR. KATZ: Okay, a few notes. They're limited. There's the agenda. It's posted on the website and Dave will be speaking to that because we'll probably be making a change to the agenda.

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: And, please, everyone, when you're not speaking to the group, mute your phones. If you don't have mute, press *6 to mute your phone, press *6 again to come off of mute. And please nobody put their call on hold at any point. And, Dave, it's your agenda.

CHAIRMAN KOTELCHUCK: Okay, very good. The one change in the agenda is that when we go to going over individual cases, Grady has noted that we have a few items left

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over from Set 9. As far as I can see from what John Stiver sent me, Set 8 is completed. Set 9 has five. I'd like to do those before we get into Sets 10 through 13.

Also, if I may comment, looking at the number of findings that we have to resolve in 10 through 13, there are over 200, so -and we are way behind. I mean, we're trying to finish through 13, and we're 10 already reviewing Set 8 -- we're going to make selections for Set 18. cases, bit more really hope we can move along a rapidly now, and I will try to expedite If I move things along too rapidly, things. please, anyone on the Committee or staff who's on the line, just say whoa, whoa, hold it, and I will slow down.

So, with that, I think that we need to now talk about the selection of cases for Set 18. And perhaps somebody will put the Set 18 list on the line, the Set 18 cases on the line, the 58 cases listed.

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1	MR. STIVER: Okay. This is John.
2	I'll go ahead and pull that up.
3	CHAIRMAN KOTELCHUCK: Okay.
4	MEMBER CLAWSON: This is Brad
5	speaking. I need the access code for the Live
6	Meeting.
7	MR. KATZ: Okay, let me Zaida
8	should have sent that to you through your
9	calendar, but let me forward it to you. You're
10	on the CDC email. Right, Brad?
11	MEMBER CLAWSON: Yeah, I can be
12	into that one in just a minute.
13	MR. KATZ: Okay, because that's
14	where the invite is.
15	MEMBER CLAWSON: Okay.
16	MR. KATZ: If you go into calendar
17	on there, it should be in your calendar. And
18	you just click on the link.
19	MEMBER CLAWSON: Okay. I'll get
20	into that. Go ahead, Dave. I'm sorry.
21	MR. KATZ: No problem. Just speak
22	up. I'll forward it to you again.

1	MEMBER CLAWSON: Okay.
2	CHAIRMAN KOTELCHUCK: Okay. Let's
3	wait until we're loaded up.
4	MEMBER MUNN: I have one question
5	about that, Dave.
6	CHAIRMAN KOTELCHUCK: Yes.
7	MEMBER MUNN: The copy that I have
8	has lots of sensitive information on it. I
9	printed it out hard copy so that I could look
10	at while we were doing this.
11	CHAIRMAN KOTELCHUCK: Yes.
12	MEMBER MUNN: And I am questioning
13	whether it's wise for us to have that on
14	screen.
15	MR. KATZ: Wanda, Live Meeting is
16	internal only.
17	MEMBER MUNN: Alright.
18	MR. KATZ: So, it's only it's
19	like any other intranet function that we have.
20	It's not available to the public, which is
21	so there's no concern about revealing private
22	information. You just have to be careful if

1	your speech, everybody, just to remind you,
2	about how much information you reveal about a
3	particular case because for that same
4	reason.
5	CHAIRMAN KOTELCHUCK: Right.
6	MR. STIVER: Okay. This is John.
7	I'm getting off to a great start here. I'm
8	not seeing the option here to share like I
9	should at the top of the bar here. I've got
10	content, attendees, voice and video meeting.
11	MR. KATZ: Under content you
12	should have a share option. You click on
13	content to get the share option.
14	MR. STIVER: Okay. Hang on just a
15	second. Alright. Okay. Here we go.
16	MR. KATZ: There you go. Is
17	everybody
18	CHAIRMAN KOTELCHUCK: Alright, yes.
19	MR. KATZ: Excellent. Well done.
20	CHAIRMAN KOTELCHUCK: Thank you.
21	MR. STIVER: Yes, this is the file
22	this is the one that Bud sent over and I

had included a Column A because recall at the last meeting there was some discussion about whether we should be looking at some partial dose reconstructions. The Subcommittee decided they didn't want to modify the case selection criteria, but there was some indication that we might want to at least take a look, maybe include one or two.

So, we went through, had Rose Gogliotti go into NOCTS and pull out the information for each of these cases, see which ones had an SEC for which there was a partial dose reconstruction.

It turns out there's 38 out of the 58 have partials.

CHAIRMAN KOTELCHUCK: Right.

MR. STIVER: That's what this Column A is. The blue shading shows those cases that have a partial and a little bit of information about the SEC and the purpose of it.

CHAIRMAN KOTELCHUCK: Well, thank

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you for sending in that column -- adding that Column A. When I first saw the set I looked at 58 cases and we have to make a selection of a dozen. And I thought, oh, how are we going to do this? But once we realized that, in fact, there are only 20 full-time -- 20 full reviews and the rest were partials, that made the choice a lot easier so that if we chose a dozen then we may have a couple of partials.

I don't know how the other -- I did not send in any sets of choices, or ask for them, because we just got this Column A a little late, and I had a hard time coming up with things.

I've made some choices that, to me, seem to balance out, but I don't know quite how to proceed. I could simply list my choices; others have other choices. How would folks like to do that?

MEMBER MUNN: Well, Dave, I have a question before we begin.

CHAIRMAN KOTELCHUCK: Okay.

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MEMBER MUNN: And that is, are we going to base our decision primarily on a complete rework rather than a partial? If that's the case, then we can throw out a large number of the choices that I made.

One of the criteria -- I used slightly different criteria when I was looking at my selections, and used pretty much the that ones we had used prior, but was especially watchful for unusual sites unusual cancers. But you also, at our last meeting, I think, we had some discussion about whether or to deliberately try not incorporate some of the very, very few female cases that we had.

CHAIRMAN KOTELCHUCK: Well, that's certainly true, and I made a list of a dozen that includes two partials and also -- so, ten out of the 12 were full reviews and then dose reconstructions, and two were partial. And then, in my group, I have ten males and two females, and it was important. And that is

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1	about the percentage of females in the entire
2	set.
3	MEMBER MUNN: Oh, yes, but not in
4	our entire case load.
5	CHAIRMAN KOTELCHUCK: Yes.
6	MEMBER MUNN: It's much, much
7	higher.
8	CHAIRMAN KOTELCHUCK: Right.
9	MEMBER MUNN: It would be
LO	surprising to find one in 10 in the
L1	CHAIRMAN KOTELCHUCK: Okay. Well
L2	C so, you're saying that most of yours are
L3	unusual cancers or partials?
L4	MEMBER MUNN: Well, not really.
L5	I'm just questioning the criteria that you
L6	want to use, because
L7	CHAIRMAN KOTELCHUCK: Right.
L8	MEMBER MUNN: the one that I
L9	used was not based primarily on the partial or
20	complete.
21	CHAIRMAN KOTELCHUCK: Right. I
22	had understood that we were going to choose

only a couple of partials from the last meeting. And I will say that since the last meeting I've done a little bit of reading that Mark gave me, some things about selection criteria, and I this time have leaned more heavily in my choices on facility and occupation.

I did look at the cancer types, and so I did not -- I would say my choices, I think, were more dominated by facility and occupation. And Brad emphasized that at the last meeting, too, that as he was reviewing what I had suggested, he noted that, you know, we needed to pay more attention to occupation and perhaps facility.

What do other people think? I mean, those are -- you're looking at all of the -- our larger sample of all of the reviews that we've done, and I don't personally have as good a handle on that as a relatively new Board Member.

MEMBER MUNN: No, well, that's

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alright. This is not exactly the type of -we've already discussed the fact this isn't
the direct type of selection that we've made
before. So, it seems to me that starting with
your list would be as good a way to begin as
any other --

CHAIRMAN KOTELCHUCK: Okay.

MEMBER MUNN: -- unless other

Members of the Subcommittee have made very

specific choices for very different reasons.

CHAIRMAN KOTELCHUCK: Okay. Well, how about it, folks, other folks? Have you made choices, or would you just like me to start by giving mine and move from there?

MEMBER CLAWSON: This is Brad speaking. You know, it's -- this is kind of a little bit, as Wanda has already said, this is a little bit different approach from what we've done. I guess what my suggestion would be, we're going to have to get some extra ones anyway, so if we get a few extras that's alright.

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CHAIRMAN KOTELCHUCK: Sure.

MEMBER CLAWSON: But I think we ought to start with you, Dave, and go through what you felt. And if there's any that we have that really stick out for us, I guess I would just say that for certain reasons, you know, and everybody's got a different reason why this one is interesting to them, and whatever.

CHAIRMAN KOTELCHUCK: Right.

MEMBER CLAWSON: Just kind of air that a little bit and go from there, would be my suggestion.

CHAIRMAN KOTELCHUCK: Okay, that sounds good. I see the table back on the screen. Let us talk about things in terms of selection ID. The green column --

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: -- that's in front of us, and that way we will not reveal - certainly not reveal names, but additionally we -- and I think I feel more comfortable

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16 talking about sites. When we start to talk about occupations, there some of them are so distinctive that occupation at an unusual occupation or uncommon occupation at a big -- at a site may well denote implicitly the person. So, I'll try to be careful in this discussion. 7 And my suggestions, the first 12, and I figure we'll get a few more.

planning for it, hoping for it, was number one, which is colon cancer and other ill-defined sites.

Let's see if I can -- I'm having trouble moving my -- learning how to move my cursor. Well, let me just read them. One, 14. I see, 14 -- okay, I can't use my -some of my -- one -- oh, good, 14, 21.

MR. STIVER: Dave, you're not able to use that because I'm currently sharing right now so I'll just go ahead and move --

CHAIRMAN KOTELCHUCK: Oh, wonderful. Okay, thank you. Twenty-one,

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1	which is Oak Ridge. One was just we don't
2	one was I should have mentioned
3	MEMBER MUNN: We can
4	CHAIRMAN KOTELCHUCK: You'll see
5	it. Okay.
6	MEMBER MUNN: Yes.
7	CHAIRMAN KOTELCHUCK: One, 14, 21.
8	Fourteen is Ventron; 21, which is Oak Ridge;
9	24 which is Baker Brothers. Twenty-seven I
10	chose as one of the two partials in my groups
11	from Brookhaven. And 30, number 30 which is -
12	-
13	MR. STIVER: Okay, here we are.
14	CHAIRMAN KOTELCHUCK: There we go,
15	Savannah River. Thirty-one, Oak Ridge. Fifty-
16	one, Portsmouth.
17	MR. STIVER: 51?
18	CHAIRMAN KOTELCHUCK: 51, five-one.
19	MR. STIVER: Okay.
20	CHAIRMAN KOTELCHUCK: Portsmouth
21	Gas Diffusion. Fifty-two, Electro Metallurgy -
22	_

1	MR. STIVER: Electro Metallurgical
2	Company.
3	CHAIRMAN KOTELCHUCK: Electro
4	Metallurgical, yes, good. Thank you.
5	The next one is my second partial,
6	55, thanks, Hanford. And 58, Westinghouse
7	Nuclear Fuel Division. And 73, which is a
8	uranium mill in Monticello, New York.
9	So, those are mine. Those include
10	ten males, two females, they have a number of
11	different occupations. If I may, I'll read the
12	occupations not in any particular order. I
13	have them as a note here, and that will avoid
14	identifying implicitly individuals. One was
15	C-
16	MR. STIVER: Dave, before you do
17	that can you go over the numbers again?
18	CHAIRMAN KOTELCHUCK: Yes, I
19	certainly can. And I will read them this
20	time, John. You don't maybe need to go over -
21	- 1, 14, 21, 24, 27P, 30, 31, 51, 52, 55
22	partial, 58, 73. And that's a dozen. And I'm.

of course, expecting to add several more.

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And they -- I would say they -- I could, for some of them -- you know, there is clerical person, a chemical operator. There's health and safety engineering, the sheet metal worker, a pipefitter, a furnace operator -- which, you know, is slightly unusual -and one person is general а You'll see those as we scroll secretary. over.

So, as I say, two females, ten I think a fair array of different males. occupations, and also the three cancers that were most common: all-male genitalia, melanoma skin basal, non-melanoma skin Those -- there is one case of each squamous. of those, and then there are additional cases from the facilities and occupations, nine of them. Three of them are from large sites: Hanford, Brookhaven, Livermore. And remaining ones, six ones, are from smaller sites which is Ventron, Electro Metallurgical,

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1	the uranium mill. So, there I tried to
2	make a pretty general mix.
3	Comments and additions, and
4	corrections?
5	MEMBER MUNN: I have a suggestion
6	
7	CHAIRMAN KOTELCHUCK: Good.
8	MEMBER MUNN: as to how to
9	proceed.
LO	CHAIRMAN KOTELCHUCK: Good.
11	MEMBER MUNN: Since several of the
L2	ones that you chose were on my chosen list, as
L3	well
L4	CHAIRMAN KOTELCHUCK: Good.
L5	MEMBER MUNN: Perhaps you might
L6	like to hear what mine were and why I chose
L7	them.
L8	CHAIRMAN KOTELCHUCK: Yes.
L9	MEMBER MUNN: If the other Members
20	of the Subcommittee are agreeable, at least
21	the ones that we agreed on might be checked
22	off to begin with, if that's okay with

CHAIRMAN KOTELCHUCK: That, to me, sounds very good. Any other -- good, let's do that.

Alright. MEMBER MUNN: My first selection was 7, and the reason I chose it was facility more than anything else. And before I go further than that, I might comment that I didn't -- this is fairly unusual because that particular cancer was one that is our most common one and we see it all the time. And in your comments, Dave, you indicated that you had specifically chosen some of those that we see all the time. And for the most part I tried to avoid those we see all the time, especially having seen SC&A's figures on how many we --

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: And they're so heavily weighted towards those that are so common that I generally tried to avoid those.

But this is --

CHAIRMAN KOTELCHUCK: Well, that's

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	good. That is a good point.
2	MEMBER MUNN: But this one is one
3	of those that falls into that.
4	CHAIRMAN KOTELCHUCK: Okay. Good.
5	MEMBER MUNN: Just the facility
6	was unusual. Number 13, both the cancer model
7	and gender.
8	CHAIRMAN KOTELCHUCK: Good.
9	MEMBER MUNN: And I had
10	CHAIRMAN KOTELCHUCK: Is that a
11	partial, by the way? Or we'll go back to
12	that.
13	MEMBER MUNN: 13
14	MR. STIVER: Actually, yes, it is.
15	MEMBER MUNN: It is a partial,
16	yes. And I chose 14 because of the facility.
17	I chose
18	CHAIRMAN KOTELCHUCK: And we agree
19	on that.
20	MEMBER MUNN: 17. Yes, 14 is
21	one of those on which we agree.
22	Seventeen was my next one, site.

1	And 20, again the site. Twenty-one for the
2	cancer model.
3	CHAIRMAN KOTELCHUCK: Good, and we
4	both selected that one.
5	MEMBER MUNN: I chose 24, site, and
6	so did you.
7	CHAIRMAN KOTELCHUCK: Good.
8	MEMBER MUNN: I chose 27 for the
9	site and the percent PoC.
10	CHAIRMAN KOTELCHUCK: Good.
11	MEMBER MUNN: And also the years
12	worked were very interesting on that one.
13	I chose 30. Sorry, sorry, that's
14	I chose 30 because of the site and the
15	number of years worked. And it looks like
16	that's one you chose, as well.
17	CHAIRMAN KOTELCHUCK: Yes.
18	MEMBER MUNN: I chose 35 because
19	of the site and gender. I chose next page,
20	sorry, 44 because of the site. I chose 49,
21	again the site, and also the occupation. And I
22	chose 52, as you did.

1	CHAIRMAN KOTELCHUCK: Yes.
2	MEMBER MUNN: Because of the PoC
3	and site, and years beginning of employment
4	year as well as the occupation. And so we
5	agreed on that one.
6	I chose 61, again because of the
7	PoC and locale.
8	I chose 58 because of the locale
9	and the occupation, so we agreed on 58.
10	CHAIRMAN KOTELCHUCK: I don't think
11	oh, yes, yes, that's right. Yes.
12	MEMBER MUNN: And I chose 64,
13	again site and occupation. And I chose 73.
14	CHAIRMAN KOTELCHUCK: Which we
15	MEMBER MUNN: Which you did, as
16	well.
17	CHAIRMAN KOTELCHUCK: Yes.
18	MEMBER MUNN: PoC, the cancer model
19	and the location, as well as time worked.
20	CHAIRMAN KOTELCHUCK: Well, good.
21	That's 64 was your last one, or 73 was your
22	last?

1 MEMBER MUNN: Seventy-three was my 2 last one, yes. 3 CHAIRMAN KOTELCHUCK: Good. Well, 4 we --5 MEMBER MUNN: So, have we 6 two, three, four, five, six, seven, eight that 7 you and I both chose. CHAIRMAN KOTELCHUCK: Eight out of 8 12 is, I must say, is an impressive overlap, 9 10 given that there were so many cases to choose So, that, I think, starts us out well 11 if we agree on those -- if we pick those eight 12 13 and then try to supplement it with another five of six. 14 15 Your choices and reasons, I could 16 give reasons for mine, but yours were clear and good. 17 And how should we -- maybe others 18 19 would suggest how do we proceed to pick our 20 next probably six or so, get 14 figures? being used for 21 may end up not

administrative reasons or I gather that there

1	are some that people will look into and find
2	out that they were really not should not
3	have been on the list or not appropriate in
4	some fashion.
5	So, what do others think besides
6	Wanda and myself? How would John, or Dave,
7	or anybody, Brad?
8	MEMBER CLAWSON: How many more do
9	we need?
10	CHAIRMAN KOTELCHUCK: Well, we
11	have eight. We want to have a dozen, so I
12	thought we would pick perhaps fourteen.
13	MEMBER CLAWSON: Okay.
14	MR. KATZ: Yeah, I think actually
15	SC&A's ballpark for what they're able to
16	accomplish is ten, I think is what John Stiver
17	said.
18	CHAIRMAN KOTELCHUCK: Oh, really?
19	MR. KATZ: So, like you said, we
20	want some additional ones in case for one
21	reason or another when DCAS pulls the case
22	they find issues where we can't take it up.

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1	CHAIRMAN KOTELCHUCK: Right.
2	MR. KATZ: But we do want some
3	extras and, you know, four extras would be
4	good, I think.
5	CHAIRMAN KOTELCHUCK: Okay. I'm
6	most open I think let me take three
7	cases that I selected for being the common
8	cancers. And I agree and I understand Wanda's
9	point, and I would those happen to be 24
10	well, 31 I chose for type of cancer, and 51,
11	so if I let's I think I would drop those
12	two, 31 and 51, from my list and add two more
13	from Wanda's.
14	It's hard to see a balance without
15	really going over sort of looking at them
16	as a whole, but let's try to do it. I will
17	appreciate input from anyone.
18	MEMBER MUNN: Well, this is Wanda.
19	I still think 13 is interesting from the
20	cancer type point of view.
21	CHAIRMAN KOTELCHUCK: Okay. My

screen is down temporarily but that's -- one

1	second. I would just say let's do it. I'm
2	open to that. So, let's take 13 which, is
3	another partial. So, so far we have three
4	partials two partials. So, yeah, two
5	partials. So, add 13. Okay.
6	So, we now have, if you want to
7	if you've circled the ones that we have in
8	common, add 13 to that, it would start with
9	13, 14, 21, 24, 27, 30, 52, 58, 73. Let's
10	pick Wanda do you want to make a
11	suggestion, maybe another where you noted
12	gender?
13	MEMBER MUNN: Well, yeah, there's
14	we're already kind of we're good, I
15	think, in that respect.
16	CHAIRMAN KOTELCHUCK: Okay.
17	MEMBER MUNN: But I'm looking at C
18	CHAIRMAN KOTELCHUCK: I didn't
19	look at the PoC. You used a number, I think
20	it was was it 61?
21	MEMBER MUNN: Well, one that I did
22	use PoC and that I didn't even mention when I

1	was going through them is 30.
2	CHAIRMAN KOTELCHUCK: Thirty.
3	MEMBER MUNN: Both the PoC and the
4	years worked, from that point of view, that's
5	an interesting one.
6	CHAIRMAN KOTELCHUCK: Well, I think
7	that sounds good to me.
8	MEMBER MUNN: But we've had 30 on
9	our
10	CHAIRMAN KOTELCHUCK: Let's add
11	30.
12	MEMBER MUNN: Well, actually, we
13	already have 30.
14	MR. KATZ: You already have that.
15	MEMBER MUNN: Yes.
16	MR. KATZ: This is Ted.
17	CHAIRMAN KOTELCHUCK: Oh, yes. I'm
18	sorry.
19	MR. KATZ: Can I suggest something
20	else to think about at least?
21	CHAIRMAN KOTELCHUCK: Yes.
22	MR. KATZ: And I think John Stiver
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1	or Kathy Behling can probably help on this,
2	but looking at the cases available, are there
3	some sites that are especially under-sampled
4	relative to the others? That might be a
5	helpful leg up on some choices.
6	CHAIRMAN KOTELCHUCK: Yes.
7	MEMBER MUNN: Well, yeah. For
8	example, there's it wasn't on my list, but
9	there's 33.
10	CHAIRMAN KOTELCHUCK: Joslyn.
11	Could I ask on 33
12	MEMBER MUNN: That's reserved.
13	CHAIRMAN KOTELCHUCK: I'm sorry.
14	What does I did not understand I didn't
15	know what "reserved for NIOSH" means for
16	occupation in 33. What does reserved for
17	NIOSH mean in that context?
18	MR. SIEBERT: This is Scott. I
19	can answer that for you. The issue is we put
20	that information together for NIOSH and screen
21	these for them. But the ones that are

reserved for NIOSH that NIOSH does in-house,

1	we don't specifically have the information for
2	those, so we have we put reserved for
3	NIOSH. NIOSH usually had the chance to walk
4	through and give that additional information.
5	I'm not sure if we didn't get that finished
6	this time or not.
7	CHAIRMAN KOTELCHUCK: Well, we
8	have that is a smaller facility, Joslyn.
9	There are two Joslyns, 33 and 38; 33 is
10	reserved for NIOSH. Maybe we should just I
11	would assume that the smaller plants tend to
12	be under-represented. Is that would that be
13	a correct statement?
14	MEMBER MUNN: That's true. That's
15	true, yeah.
16	CHAIRMAN KOTELCHUCK: So
17	MR. STIVER: This is Stiver. Joslyn
18	is one that is somewhat under-represented.
19	CHAIRMAN KOTELCHUCK: Okay. So,
20	either 33 or 38, which the 38 we have that the
21	person is an operator.

MEMBER MUNN: And in both cases

1	the PoC is very similar.
2	CHAIRMAN KOTELCHUCK: Yes.
3	MEMBER MUNN: We have
4	CHAIRMAN KOTELCHUCK: I think I
5	would choose 38 simply because the information
6	on the occupation is available.
7	MEMBER MUNN: That's true.
8	CHAIRMAN KOTELCHUCK: So, it's not
9	it would not be a repeat. It's a good
10	general occupation: operator.
11	MEMBER MUNN: Yes, I agree.
12	CHAIRMAN KOTELCHUCK: Let's do 38.
13	Okay, 38 is added. So we now have two, four,
14	six, eight, ten. We have a total of ten.
15	MEMBER CLAWSON: Dave, this is
16	Brad. I'm having a hard time going between
17	back and forth.
18	CHAIRMAN KOTELCHUCK: Yeah, I
19	admit
20	MEMBER CLAWSON: And I can't
21	remember if this one was put on there or not,
22	but I was looking at number 29. Have we

2	what mine was and trying to check what
3	CHAIRMAN KOTELCHUCK: Good. John,
4	could you put us on to 29?
5	MR. STIVER: Okay, we're there.
6	CHAIRMAN KOTELCHUCK: Sandia. Yes,
7	and many different types of cancers.
8	MEMBER CLAWSON: Well, actually,
9	too, it's because it's two different sites
10	from one thing. The era that it was at, it was
11	
12	CHAIRMAN KOTELCHUCK: Yes.
13	MEMBER CLAWSON: Plus, both these
14	are coming both these sites, I guess one of
15	the reasons I want to see you know,
16	there have been questions of how some of these
17	would be done and so forth, and I just wanted
18	to
19	CHAIRMAN KOTELCHUCK: And that's a
20	partial.
21	MEMBER CLAWSON: Yes.
22	CHAIRMAN KOTELCHUCK: That sounds
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already selected that one? I'm just going off

1	good. So, I would be open to that, 29, which
2	is a partial again.
3	MEMBER MUNN: Twenty-nine looks
4	good to me.
5	MR. KATZ: This is Ted. Let me
6	just raise a question about the which I
7	think the NIOSH folks can answer about the
8	Joslyn case, was where this case falls, the
9	employment period in relation to the SEC?
LO	MR. CALHOUN: I'll have to look
11	and see this is Grady. I'll have to look
L2	and compare those dates.
L3	MR. KATZ: Okay. I just think
L4	that the Subcommittee might want to know
L5	whether this is one that falls in the SEC or
L6	not.
L7	MR. CALHOUN: Alright.
L8	CHAIRMAN KOTELCHUCK: Well, we
L9	have eleven, so we could does anybody have
20	a suggestion for one more? Or we could call
21	it a day on this.
22	MR. SIEBERT: John Mauro, are you

on the line?
DR. MAURO: Yes, I am.
MR. SIEBERT: Could you do you
know the dates of the Joslyn SEC off the top
of your head?
DR. MAURO: No, I don't. I'd have
to
MS. LIN: I do. This is Jenny.
It's March 1 st , 1943 through December 31 st ,
1947.
MR. KATZ: Okay. So, this is
outside the range then.
CHAIRMAN KOTELCHUCK: Okay, fine.
MR. KATZ: Okay, good. That makes
it easier to hang on to that one then.
CHAIRMAN KOTELCHUCK: Right. So,
I
MEMBER CLAWSON: Dave, this is
Brad. I just had one more that I've been
looking at that was on my hit list.
CHAIRMAN KOTELCHUCK: Yes.
MEMBER CLAWSON: And I apologize,

1	I'm trying to go between my stuff and this
2	stuff, and I really can't remember which ones
3	have been added and which ones have not. But
4	has 38 been looked at?
5	CHAIRMAN KOTELCHUCK: Yes, we just
6	chose 38 from Joslyn.
7	MEMBER CLAWSON: No, 38 is not
8	Joslyn. It's
9	CHAIRMAN KOTELCHUCK: Let's go
10	down to 38. I'm going under Selection ID, the
11	green column.
12	MR. STIVER: 38 is Joslyn.
12 13	MR. STIVER: 38 is Joslyn. MEMBER CLAWSON: Oh, is it?
13	MEMBER CLAWSON: Oh, is it?
13 14	MEMBER CLAWSON: Oh, is it? MEMBER MUNN: Yeah, it is.
13 14 15	MEMBER CLAWSON: Oh, is it? MEMBER MUNN: Yeah, it is. CHAIRMAN KOTELCHUCK: Yeah, it is.
13 14 15 16	MEMBER CLAWSON: Oh, is it? MEMBER MUNN: Yeah, it is. CHAIRMAN KOTELCHUCK: Yeah, it is. By the way, it's confusing. All the way over
13 14 15 16	MEMBER CLAWSON: Oh, is it? MEMBER MUNN: Yeah, it is. CHAIRMAN KOTELCHUCK: Yeah, it is. By the way, it's confusing. All the way over on the left is the number of the Excel, and
13 14 15 16 17	MEMBER CLAWSON: Oh, is it? MEMBER MUNN: Yeah, it is. CHAIRMAN KOTELCHUCK: Yeah, it is. By the way, it's confusing. All the way over on the left is the number of the Excel, and that's we're using the Selection ID, the
13 14 15 16 17 18 19	MEMBER CLAWSON: Oh, is it? MEMBER MUNN: Yeah, it is. CHAIRMAN KOTELCHUCK: Yeah, it is. By the way, it's confusing. All the way over on the left is the number of the Excel, and that's we're using the Selection ID, the colored one, if you will, the one that's green

1	that I was going off, and I think we might be
2	off a little bit because I've gotthe one I
3	was looking at is a little bit different.
4	CHAIRMAN KOTELCHUCK: Okay.
5	MEMBER CLAWSON: But I had General
6	Electric Company, Oak Ridge, BWXT
7	Technologies.
8	CHAIRMAN KOTELCHUCK: General
9	Electric? I don't think we have
10	MEMBER CLAWSON: It's actually the
11	one right before Joslyn Manufacturing.
12	CHAIRMAN KOTELCHUCK: Okay. Oh,
13	yes, that 37.
14	MEMBER CLAWSON: Okay. Mine is
14 15	MEMBER CLAWSON: Okay. Mine is off one set somewhere.
15	off one set somewhere.
15 16	off one set somewhere. CHAIRMAN KOTELCHUCK: Yes, okay,
15 16 17	off one set somewhere. CHAIRMAN KOTELCHUCK: Yes, okay, 37. And, John, will you scroll through? So,
15 16 17 18	off one set somewhere. CHAIRMAN KOTELCHUCK: Yes, okay, 37. And, John, will you scroll through? So, that's squamous and basal cell skin, but the
15 16 17 18 19	off one set somewhere. CHAIRMAN KOTELCHUCK: Yes, okay, 37. And, John, will you scroll through? So, that's squamous and basal cell skin, but the person has been at GE, Oak Ridge, BWX. Yes,

1	CHAIRMAN KOTELCHUCK: Yes.
2	MEMBER CLAWSON: Alright. This
3	was merely because I wanted to be able to see
4	how these things crossed over.
5	CHAIRMAN KOTELCHUCK: Yes, and I
6	think that's an excellent criterion for
7	choice. So, I'm let's go with that, the
8	37.
9	And that is twelve, and I think
LO	that should finish it. And I'll read off
11	I've been doing my clerical work and I'll read
L2	off the list as I have it now, okay? In order
L3	of Selection ID.
L4	Thirteen. Ted, you're getting this
L5	or someone? Yes, all the folks are. Thirteen,
L6	14, 21, 24, 27, 29, 30, 37, 38, 52, 58, 73.
L7	MEMBER MUNN: That's what I have.
L8	CHAIRMAN KOTELCHUCK: Great. Okay.
L9	So, any other further thoughts, or I think
20	we're ready to close.
21	MR. STIVER: This is John Stiver. I
22	think we've got a pretty good representation

1	here for this.
2	CHAIRMAN KOTELCHUCK: Good. Good.
3	Okay, folks. And we did that in 45 minutes,
4	so, excellent.
5	MEMBER MUNN: Fantastic.
6	CHAIRMAN KOTELCHUCK: Okay. And
7	really, I mean, we have an awful lot of
8	agreement which was very nice, really starting
9	us off.
10	Okay. We are ready to go to the
11	case reviews, and we want to start with
12	Grady, we want to start with 9. Right? Set
13	9.
14	MR. CALHOUN: Actually, I wanted
15	to hit Set 8 because
16	CHAIRMAN KOTELCHUCK: You said
17	that. Yeah, you said Set 8. Go ahead, I'm
18	sorry. Excuse me for interrupting you.
19	MR. CALHOUN: Alright. Basically,
20	what I would like to do, if possible, and I
21	don't know if anybody's had time to look at
22	this, but we sent some responses a week ago, a

1	few days ago, whatever, relative to Huntington
2	Pilotthere you go, perfect, I see it up
3	there.
4	CHAIRMAN KOTELCHUCK: Yes.
5	MR. CALHOUN: Are you doing that?
6	I'm not doing that, am I?
7	MR. STIVER: I'm doing it. This is
8	John.
9	MR. CALHOUN: Okay, John.
10	CHAIRMAN KOTELCHUCK: Okay, thank
11	you.
12	MR. CALHOUN: I have the same
13	thing on another one of my screens here and I
14	thought, wow, I've been doing that on
15	accident. Okay.
16	So, basically, that is our
17	response to that. And if any of you guys have
18	some questions on it. Tom Tomes is on the
19	phone with us right now, and that's the reason
20	he's here. He's very familiar with the
21	Huntington Pilot Plant, but I was kind of
22	hoping that we could just because they're

so old, you know, get some resolution.

MR. STIVER: I know John Mauro and Steve Marschke on our side have been looking into this pretty heavily. So, John, if you'd like to --

DR. MAURO: Yeah, I could kick it off and then, Steve, you could help me out a little bit because you dug a little deeper than I did. I'll set the table.

We have closed -- we went through a process where we managed to close out a lot of these issues that we had. But there are two -- in fact, they're really one -- and they have to do with the airborne dust loading of nickel.

Just so everybody is on the same page, basically Huntington Pilot Plant was working with diffusion barriers. You folks may be -- just sort of a refresher. And they're made of nickel, and they were processed at Huntington Pilot Plant because they contained some enriched uranium. And they

would basically go there for refurbishment, and the enriched uranium and the nickel would be separated so that they would recover the nickel and the uranium and, Ι presume, refabricate barriers made of nice clean nickel.

And what happens is in the process airborne enriched uranium generated thev associated with the nickel. They sort intermingled. And the way in which inhalation doses are derived, according to the protocol, is to estimate what the airborne dust loading of nickel in milligrams per cubic meter is, based on measurements and also based on knowledge on the specific activity of the uranium in the nickel and its associated level of enrichment.

The area where we were struggling is the amount of nickel, milligrams of nickel per cubic meter. Our original concern was we look at the table of nickel concentrations that are in the TBD originally, and there's a

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whole array of values for different locations within the facility. And there are a lot of numbers, maybe 30 or so airborne dust loading measurements expressed in milligrams of nickel per cubic meter.

And NIOSH used all those values and picked off the upper 95th percentile of those values and said we're going to use that nickel dust loading, which came to some value.

Our original comment was, well, we've got a bit of a problem with that because when you look at the 30 numbers or so, I don't recall the exact numbers, you see that they're really broken up into two categories. There were numbers that were taken many, many years ago, and then there were numbers that are much more current.

And we felt that since the dose reconstructions are being done for workers that worked at the facility many, many years ago, they should have used a subset of nickel concentrations that represented the older

data. And if you look at that subset, which represents perhaps 10 of the full set of numbers, and picked off the upper 95th percentile from that subset, you get a much higher 95th percentile, maybe a factor of 10 higher.

So, our position at the time was don't you think that's the better way to do it? Because that time period is more representative of the time period of interest to the DR.

However, it was also recognized that that subset -- again I'll use the 10 numbers as an example of these older numbers. The upper 95th percentile was driven by a single outlier. That is, the reason the upper 95th percentile was so high is there was a single measurement of 5 milligrams per cubic meter which was easily 10 times higher than the next highest one.

So, the Subcommittee discussed, well, what do you do in a circumstance like

that? And there was agreement that, gee, when you have an outlier like that, you know, you let it go. And we talked -- if you remember, we talked a little bit about the use of statistical methods to deal with outliers, do you really take them seriously? So, we were sort of on the verge of letting that go and say, okay, I think we're okay, except for one fact that emerged during the process.

And I'll ask Steve to describe that new twist that, unfortunately, really puts us back where we do have an issue. And, Steve, because you looked more deeply into the source documents that stood behind all this, could you give a summary of what you found?

MR. MARSCHKE: Yes, I looked into the -- most of these on the nickel concentration data came from a document that was prepared by Enterline and Marsh -- and I don't know what the date of it is, but it was a while back. I think it was in the 1980s. And there's a Table 8 in there, which basically

that's what John is referring to with all these different nickel concentrations and different departments on the Huntington site.

I would make one correction to what John said. He mentioned that there's one outlier number. It's an outlier number but it's not really a single measurement. It's an outlier number for one department, what they called the refinery at the Huntington site. It's not -- and I don't know how many -- if more than one measurement is in there or what, but it's -- you know, with this Table 8, which has the different nickel concentrations in it, or reported on it, are for different areas of the site.

So, it could be that this refinery area is just one area where it has the higher concentration. And it may be -- it's definitely an outlier in that it's larger than all the other measurements by almost an order of magnitude. But, again, it may not be a single value. It may be -- you know, we don't

know how many values -- how many samples went into calculating that number. So, that was one thing I wanted to point out.

The other thing I wanted to point out is if you, again, go back to this original document by Enterline and Marsh, right at the beginning of the document on the first page they talk about concentrations of nickel around the -- what do they call it?

DR. MAURO: Calciners.

MR. MARSCHKE: Yes, which range from 20 to 250 milligrams per meter cubed and from 5 to 15 around what they call the areas where the crushers are. So, there are areas which are, you know, at or above the highest number that are reported in this Table 8, which was the only value that NIOSH used in the TBD.

So, you know, one of our concerns is, you know, how do these higher numbers, which were reported back in 1976, how do they impact the distribution? They seem to have

been left out of the discussion in the TBD and, you know, I guess the question is what would -- if they were included in the discussion what would -- how would that change the discussion?

So, that's, basically, the concerns we have with what's going on. - you know, as John mentioned, on the Table 8 numbers or the whole series of numbers, think that you'd be better off using just the historical numbers because Enterline and Marsh, they note in the report, the discussion of the Table 8, they note that they tried to adjust the modern day samples back to historical exposures, but they admit that it's probably an imperfect process and maybe they have underestimated the exposures when they have done that process.

So, the numbers in there, the modern day numbers that are reported in that Table 8, may be underestimates, according to the notes that are in -- you know, according

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to the discussion on Table 8.

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DR. MAURO: So, I guess, you know, where we are operates at really two levels. The most fundamental level is there are all these other data, some of which are extremely high in milligrams per cubic meter. And we also recognize that at some point it gets so high that it's really not breathable. know, we've been through this before. But certainly the 5 milligram per cubic meter number is no longer now an outlier, unless someone could explain, you know, why all these other numbers that we uncovered for different operations may not be appropriate as a basis for dose reconstruction.

But right now it appears that that 5 milligram per cubic meter high-end number is really -- does not appear to be much of an outlier. And there really is no basis, as it stands now from the discussions and the writing and the documentation we have so far, we don't have a basis for rejecting those

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higher numbers and going with NIOSH's exposure matrix for Huntington.

And I think if we could resolve that issue one way or the other, either say NIOSH provided a good reason why those higher numbers could be excluded, fine. But we don't see that. Or, second, NIOSH says, well, you know, you're right, it looks like we should have included some of those higher numbers and rethink what the distribution should be for the dust loading for nickel. And, really, that's where we are.

MR. MARSCHKE: And one other thing I'd -- this is Steve, again. One other thing I'd just point out is, in the Enterline and Marsh report where they talk about these higher numbers, they refer to a report that was submitted by International Nickel to NIOSH back in October 1976.

I went looking for that report but

I was unable to find it in the open literature

on the web or anywhere, so I don't know, you

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know -- I don't have any more information than what is presented in the Enterline and Marsh report as to how that data was collected or what is it. But it's just presented here at, again, the beginning of their report and it's very high numbers.

MR. TOMES: This is Tom Tomes. I think I can add a little bit more on the numbers that's in the TBD and how they came out of that article.

The Table 8 values -- which, I think, 37 pieces of data -- those were results that were put together to be average worker exposures. And they were not based on single measurements.

I'll read from the article here, it explains it better than I can. "These estimates are intended to represent average airborne concentrations of nickel in all forms over an 8-hour shift." So, the Table 8 values are actually not air sample results, they are estimates of average worker exposures in the

various departments.

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did focus And Ι on the higher results in reviewing this. The 5 milligrams per cubic meter is for the refinery, and the refinery exposures was one of the focuses of this epidemiological study. And they had refineries operated in the `40s, specifically the high concentrations from the calcining operation which operated from 1922 to 1947. They tore out the calciners in 1947 and the grinding associated with crushing and the operations created very high dust. And these numbers are represented in these high numbers for the refinery.

So, these numbers would not be appropriate to assume for exposures to the Huntington Reduction Pilot Plant because the plant was not built until the `50s, early `50s is when they built the plant.

But these data were admittedly difficult to separate out into specific values that I could use for distinguishing the

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Reduction Pilot Plant, and that is basically why we choose the entire data set without discriminating it, and just chose the upper 95th percentile which we thought would be bounding for the Reduction Pilot Plant.

The Reduction Pilot Plant does have a value represented in that table, which is a very low number, but we don't have -- we don't know much information about how that number is determined. It could have come from the operations of the Reduction Pilot Plant or it could have come during the idle period of Reduction Pilot Plant.

This article was published in 1982, and as Steve mentioned, there was some data sent to NIOSH in 1976. I don't have a copy of that either, but the Reduction Pilot Plant was in the standby status at that particular time.

So, that low number represented by the Reduction Pilot Plant may not be an accurate representative of the operations in

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the late `50s and early `60s when they were handling recycled nickel contaminated with uranium. So, didn't really have we confidence that we could say that .02 value for the Reduction Pilot Plant. was exposures representative of worker during operations. But we did include it in the set of data.

And I would like to point out one other thing that I believe was in one of the writeups I saw from SC&A concerning another table in this Enterline and Marsh article. There was a Table 4 in that article, had exposures to four -- average nickel exposures to four different workers. And the highest one of those was a guy who started work there in 1941 and he worked at the refinery from 1941 to 1944. And this average nickel exposure over his career there was .94 milligrams per cubic meter. But this article points out that he was in the calcining department from 1941 to 1944. And that particular department was

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the focus of these exposures for the cancer risk they had from exposure to nickel. So, that would account for part of his higher exposures than the other three.

And the estimated exposure to the other three workers is below the value we have estimated in TBD. I'm trying to put the numbers into perspective here of what we have in the TBD.

CHAIRMAN KOTELCHUCK: Well, how do we move to resolution? It's a complex argument. It's a little hard to follow given that we're -- at least for me, because the screen is fixed, and I can't look at all of the, if you will, the green box. But first, according to SC&A, they have indicated that all the findings are resolved for Set 8. I'm not quite sure what -- it's the question of whether to reconsider based on that --

MR. FARVER: David, this is Doug Farver. Can I --

CHAIRMAN KOTELCHUCK: Please.

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1	MR. FARVER: Can I go ahead and
2	explain?
3	CHAIRMAN KOTELCHUCK: Yes, yes,
4	please do.
5	MR. FARVER: There are two open
6	issues from the attachments of Set 8. They
7	weren't included in our stats on findings
8	because there's no official finding numbers
9	for them as with the other findings where we
10	have a
11	CHAIRMAN KOTELCHUCK: Ah.
12	MR. FARVER: case number, and a
13	Table 2 Identifier, and then a finding number.
14	But these don't follow the normal protocol so
15	they were not included in those stats. But
16	
	there's only those two open issues on the
17	Huntington Pilot Plant with Attachment 3.
17	Huntington Pilot Plant with Attachment 3.
17 18	Huntington Pilot Plant with Attachment 3. CHAIRMAN KOTELCHUCK: Okay, thank
17 18 19	Huntington Pilot Plant with Attachment 3. CHAIRMAN KOTELCHUCK: Okay, thank you.

1 Huntington Pilot Plant cases that we reviewed, 2 and those findings have numbers and those are 3 counted as real findings. CHAIRMAN KOTELCHUCK: Got it. 4 5 MR. FARVER: Okay. 6 CHAIRMAN KOTELCHUCK: So, getting back to 8 -- thank you for the clarifications 7 -- getting back to 8, what is the -- how do we 8 move to closure on this complex --9 10 MEMBER POSTON: It doesn't like we're getting a whole lot of agreement 11 12 right now but, you know, I don't know if we could take some time, if we need time. I mean, 13 I'd like to get these closed out, but if we 14 15 need time, maybe we could just try to deal 16 with it in one of these technical calls we've done in the past. 17 this is 18 DR. MAURO: Tom, John 19 Mauro. 20 MEMBER POSTON: Because these might need a little bit more time. 21 22 DR. this is John MAURO: Tom,

like this -- perhaps I Mauro. Ιt sounds didn't fully appreciate or understand. Ιt sounds like that you've looked at the data, the same data that we looked at and, you know, we have all these numbers for different work areas. But for some reason there are certain work areas and time periods that you feel are For example, I quess, the 5 discounted. number and the bigger -- the 5 milligrams per cubic meter, and some of those other bigger numbers really should not be explicitly part of the distribution.

mean, if you could give us the reason why -and I didn't really understand your rationale.

That is, you pointed out that, yes, those
numbers are there and they represent the
refinery or the calciner. And, yes, they are
big numbers, and they represent a number -but for some reason, and you may have a good
reason, you don't feel that they are really
applicable to this particular --well, there

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are really two issues. One is applicable to the Site Profile. Because, remember, we're talking about two different things now. talking about, I guess it's Attachment 3, the Huntington Pilot Plant which is Profile review. And simultaneously talking about а real case or real person that's part of the 9th set.

You remember this is one of those places where we did one of these focused Site Profile reviews and included it at the back of the set of 8. So, to help clarify, when you say your -- what I understand, when you say you're comfortable not including the 5 number those bigger numbers that and Steve summarized, are you saying that because they don't apply to this particular worker that's part of the set of 9 and therefore can be dismissed? Or are you saying, no, this can be dismissed across the board, including the Site Profile that's addressed as Attachment 3 in the back of this thing?

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And, if so, if you could just -- I didn't quite understand -- that was what my reading was, that you felt that you could dismiss them. And I'm fine with that, but I didn't hear the rationale.

MR. TOMES: John, I may have said it wrong. I didn't mean that we could dismiss the 5 milligram per cubic meter value, because we included that in the distribution. It is the outlier in the distribution that was included. So, you know, if you look -- it may have the line in TBD, but if you look at the 5th line, that value is there.

DR. MAURO: And I recall that, but I also recall that that was part of a group of maybe ten out of the 37 numbers that seemed to be the ones that should have been used, and that the newer measurements, the ones that were made in recent times, relatively recent times, which are really not the time periods of interest here, at least not for this particular case, I believe.

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By using the full suite of all 37 numbers to get you your distribution, it seems that you're biasing. In other words, the real distribution that applies here is not the full suite of all numbers in Table 8, but the subset of it that represents the time period of interest. And I guess if could sort of grind -- I think we're close to resolution because I see you feel strongly about, no, your numbers are okay. But then we still raise these questions, as Steve articulated.

And Ι don't know, maybe people followed it, but I still don't see the rationale for, let's say, dismissing the big numbers that Steve mentioned in this other report -- and let's say you can. Okay. just assume for a second you can do that Then you're left with, okay, the 37 somehow. numbers that are in your table. I guess it's called Table 8. And why is that you use the full set of 37 numbers and not go only to the numbers that represent the real time period of

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1	interest? You know, I'm just looking for
2	something that the rationale that rings
3	true for me, and I'd be fine. But right now,
4	I really haven't heard that.
5	MR. MARSCHKE: Well, what I
6	John, this is Steve. What I heard him say was
7	that the calciners and the crushers were taken
8	out before the Pilot Plant was operated.
9	DR. MAURO: Before the uranium was
10	on site?
11	MR. TOMES: About 15 years before
12	that.
13	DR. MAURO: Oh, okay, you see, I
14	missed that.
15	MR. MARSCHKE: So, that was taken
16	out, so those big numbers that I was talking -
17	- and that was missing from my part of the
18	story.
19	DR. MAURO: Ah, very good.
20	MR. MARSCHKE: So, now I have that
21	part of the story. I think the big numbers
22	that I'm talking about, basically, I would

1	have no problem in taking those out.
2	Now, the other part of the story I
3	heard was that the you know, by leaving
4	that 5 number in, you know, basically it adds
5	conservatism or claimant-favorable-ism to the
6	distribution that they come up with. And, you
7	know, I don't know. Again, now we're talking
8	about a factor of four if you use the only
9	the historical numbers, the numbers which are
10	identified by Footnote C versus the full set
11	of 37 numbers. So, really we're back to a
12	factor of four
13	DR. MAURO: Right.
14	MR. MARSCHKE: in the
15	difference.
16	DR. MAURO: We're halfway home. I
17	think that
18	MR. TOMES: But one of the results
19	you're proposing we take out is an actual
20	result of the Reduction Pilot Plant itself.
21	And that's one of the lower numbers, also.

DR. MAURO: I'm going by time. In

other words, my recollection when I worked on this is that I looked at the table and there was a little Footnote C next to each of those 37 numbers that represented a certain time period. And at the time I did the work, and I think Steve did the follow-up work, that C was -- the real question was, gee, shouldn't you have just used the numbers that had little C next to them, the footnote? Because those are the numbers that represent the time period of interest.

And all the others really are not relevant to the time period of interest. if that, with you do you come up distribution that gives you a 95th percentile that I believe was about ten times higher. And I guess that's where we -- so, I'm okay with the first part. Get rid of all those other big numbers. I did not realize that they really weren't applicable.

So now we've sort of simplified the question, is should you use the full

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1	distribution of all 37 numbers and pick off
2	the upper 95 th percentile, and thereby get the
3	numbers you guys got? Or should you go with,
4	no, we're only going to pick the numbers with
5	the little letter C next to them which
6	represent the older measurements of nickel,
7	because that's a more appropriate number to
8	use when doing DRs for this facility and for
9	this particular work?
10	MR. MARSCHKE: But, John, what
11	NIOSH is saying, if you look in the table
12	there is a Reduction Pilot Plant is listed
13	as one of the departments that has a nickel
14	concentration associated with it.
15	DR. MAURO: Okay.
16	MR. MARSCHKE: And that department
17	does not that number does not have a C
18	associated with it.
19	DR. MAURO: Okay.
20	MR. MARSCHKE: So, what they're
21	saying is the historical data, I guess the
22	historical C data, the data that's identified

with a C as being historical --1 2 DR. MAURO: Yeah. 3 MR. MARSCHKE: -- comes before the Pilot Plant went into operation. 4 It was data 5 that was collected -- it's really historical 6 data. It's data that was collected before the 7 Pilot Plant went into operation. Is that 8 correct? It's clear that some 9 TOMES: 10 of it is. What is not clear is how much of it is and how of it isn't. 11 Oh, okay. I think we 12 DR. MAURO: 13 got to the nub of the matter, and this is very good because we cleared away a lot of the fog 14 15 in my head. And what we're really zeroing in 16 on is whether or not, you know, the Cs -- this little model I have in my head is that the 17 18 right number to use are the ones with the 19 little C next to them. And I'm hearing that 20 maybe that's not the right way to do it. it's not apparent -- right 21 And

now, I guess we're at a place where I haven't

1	heard the argument that those numbers with the
2	little Cs next to them are really not
3	appropriate, or you're not sure. I guess, if
4	you could help me with that part, we might be
5	able to close this out.
6	MR. TOMES: Well, I'm not
7	following why we think we should only use
8	those for being historical for the era of
9	interest.
10	CHAIRMAN KOTELCHUCK: Okay. May
11	I, as Chair, we spent half an hour on this. Is
12	it appropriate that this continue with a
13	technical call?
14	MR. KATZ: Dave, it sounds like
15	they're right at the end of this.
16	CHAIRMAN KOTELCHUCK: Okay.
17	MR. KATZ: And a technical call
18	takes a lot of arranging and so on. If they
19	C-
20	CHAIRMAN KOTELCHUCK: Alright.
21	Okay. We'll continue for another few minutes,
22	I hope.

1 MEMBER CLAWSON: Hey, Dave, this is 2 Brad. 3 CHAIRMAN KOTELCHUCK: Yes. 4 MEMBER CLAWSON: You know, one of the things in this is, you know, granted, I 5 6 know we've got a big agenda on here, but one 7 of the problems with this that we have is that we don't kind of finish this out. 8 So, I'm just starting to follow where they're at and 9 10 I'd really like to be able to kind of stay on track with --11 12 CHAIRMAN KOTELCHUCK: Very 13 Okay, fine. Very good. Okay, let's continue. MEMBER RICHARDSON: 14 Can you hear 15 me? This is David Richardson. 16 CHAIRMAN KOTELCHUCK: Yes. MEMBER RICHARDSON: Yes? 17 Yeah, Ι 18 agree that I think we're making headway. 19 wanted to raise one other question or other point and pose it as a question, I guess. 20 There's a lot that seems to be 21 22 hinging on one table in an epidemiologic study

was -- so it wasn't a study that focused on exposure assessment, it was a study that was basically focused on standardized mortality ratios. And it was --it's a study that done by contract by --between was Huntington and а university, so it's an industry-funded study reconstructing exposures for workers who, you know, there's a concern about an excess of cancer in that facility.

And the numbers that are I think in Table 8 are not well described. I mean, they're saying that they're taking -- your data -- converting them to modern graph metric expression whenever possible using knowledge of change they've extrapolated back from recent measurements, but they're not really saying how that is except to say that it's imperfect, but we can assume that exposures were greater in the past.

I don't have a good sense of, you know, just kind of the basis for a lot of these numbers. I mean, some of them are based

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on modern exposures but they're described as being the average concentration over the entire period, for example, of operation of one of the departments that makes up a row of this table.

So, I mean, how people are thinking about that, like one of these numbers where they're saying it's big or small? that on average over the entire period it was big or small, or is it that there was variation? They've done of some sort implying extrapolation over time that exposures were higher, of higher magnitude in the past.

And then we're going to look at the variation in the values, either values with superscript c or not, between different departments here and say that that's going to represent the variation over time, for example, in the intensity of exposure in the Reduction Pilot Plant, so that's one of the rows.

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We're taking a variation in the column of the values and saying that that represents a variation over time within one of the rows? And we're taking the numbers at face value from a paper that wasn't really designed to investigate this.

I mean, I'm fine with if you want to say we're taking a big value and we're thinking it's plausible bounding and everybody agrees that it's an upper bound. But we seem to be doing a lot of talking about how we're going to derive a distribution. I'm not sure it's the distribution at all that we're really concerned about.

MEMBER CLAWSON: Dave, this is Brad. This is one of my questions that I was going to get into after they got into this, is my understanding of this information, we're taking it -- we don't even know how it was derived, how it was put into place, but we're taking this. And I understand, you know, we've to go with the available information that we

do have, but it gets to also credibility of it.

Here we're seeing in other areas we've got such high dust loadings or whatever, nickel. I'm questioning, as you are, the papers that were used for this. It's just really -- but it may be the best we have, but if it's something that we can really use this for, I don't think this was set up to be able to be used for dose reconstruction. It's just my personal opinion, but that's what I was kind of hoping we were going to get to up here.

MR. MARSCHKE: Yeah, this is Steve Marschke again. And if I can just -- a little bit more information. The way Enterline and Marsh used these numbers in their Table 8 was they didn't come up with a distribution to represent anything. What they did was, when to calculate individual they wanted an worker's exposure, they figured out how much time he of these spent in each one

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departments. And then they used the exposure associated with that department and summed it up over that way so that they could calculate his total exposure over the time that he spent on site. Which is a little bit different than the approach which -- is quite а bit different, I quess, than the approach which was being taken here where we're coming up with this, you know, distribution of these exposures that is supposed be representative of the whole site.

And of DR. MAURO: one the dilemmas you have is if you have a real worker and you want to reconstruct his inhalation doses, and you do have data regarding where he worked and when he worked, and you do have data on airborne dust loading in those rooms at that time, well, certainly, then the idea of a distribution you don't need any more, because you could say, well, listen, we have some good data for what the building -- the the distribution of he worked in or room

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values or the room he worked in.

But, I guess, my sense was that they didn't have that information and so they used this full distribution. And that's why you picked the upper 95th percentile, saying, listen, not knowing — not having any more information we will simply just assign to everyone that worked there the upper 95th percentile value. And that's been done in the past as a way to deal with the fact that don't have the granularity of information that we'd like to have.

MEMBER RICHARDSON: So, this is -but when you say upper 95th, you mean the -you're looking at the distribution of values,
some set or all of the values that are in
Table 8, and it's the 95th percentile of the
departmental averages.

MR. TOMES: Yes, it's the 95th percentile of the departmental averages. That's correct.

CHAIRMAN KOTELCHUCK: Right. And my

position was --

COURT REPORTER: This is the court reporter. Was that just Tom Tomes and Steve Marschke?

MR. TOMES: Yes, this is Tom Tomes.

MR. MARSCHKE: This is Steve Marschke, yes.

DR. MAURO: Yes, this is John. And the only -- I guess I'm still stuck in the mud here having to do with these little Footnote Cs. And my only position was, well, if you're going to do the distribution approach and pick the 95th percentile, shouldn't you only use the numbers in that report in Table 8 that have the Footnote C because of the time period? It zeroes you into the time period of interest.

And if there's a reason why that's not appropriate, well, I think we've solved our problem. But if there is a reason -- I mean, this is my perspective. But if it makes sense that, well, you know, we really should

only use the old numbers because that's the 1 2 numbers that are applicable. 3 MR. MARSCHKE: Well, John, this is 4 Steve again. 5 DR. MAURO: Yes. 6 MR. MARSCHKE: This is a question, 7 how do you know what -- I mean, as I read it, they talk about Footnote C as 8 being historical numbers. 9 10 DR. MAURO: Yes. MARSCHKE: And the ones which 11 12 are not Footnote C are being the more recent 13 numbers. DR. MAURO: Right. 14 MARSCHKE: But I don't know 15 MR. 16 that they define anywhere what they mean by historic, what time periods they're talking 17 about when they talk about historic. 18 19 could be argued because the -- if you look at the Table 8 there and the Pilot Plant does not 20 have a Footnote C associated with it, so it 21

argued that anything that

could be

1	Footnote C basically came prior to the Pilot
2	Plant, and therefore the Footnote C should be
3	eliminated from the distribution.
4	DR. MAURO: Well, if that's the
5	case and the argument is being made then by
6	NIOSH that
7	MR. MARSCHKE: Well, I don't think
8	that NIOSH is not making that argument.
9	DR. MAURO: Oh, okay. So, that
LO	means that
L1	MR. MARSCHKE: They're basically -
L2	- NIOSH is saying let's take everything and
L3	use everything.
L4	DR. MAURO: Yes, that's fine.
L5	MR. MARSCHKE: I just said that's
L6	an alternative argument that could be put
L7	forth.
L8	DR. MAURO: If that was the case, I
L9	think we're done. But I guess I didn't now
20	that I don't know that to be the case.
21	Because, if I recall, the actual case we did
22	was for a person that worked in the early

year, and therefore these numbers that are in the table, some of them might apply to him but some of them would not. So, therefore --and I think there's about a 20-year time period difference, that's my recollection, between the old measurements and the newer measurements.

And that was important to me at the time that I looked at it, but like I said, you know -- NIOSH, if you folks could make a case why we shouldn't segregate, I'd be fine with it, but I haven't heard the answer yet.

Steve, you started to answer and say, well, maybe, you know, I'm giving a reality to something that doesn't really have play here, the old versus new. But at the time I looked at it, it did have meaning to me. I'd like to hear a little bit more about that.

MR. TOMES: This is Tom again. I don't believe I have enough information in that article to say that some of these values does not include old data and new data. For

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example, the refinery at the outlier, 5 milligrams per cubic meter, they used this data for the 1940s era when they had very high dust loading before they tore out the calciners in 1947.

But as someone pointed out a while ago, these data appear to have been used over a period of years for average worker exposure over a period of years, which would mean that the earlier year exposures were higher, but they put these numbers together for the purpose of the study.

DR. MAURO: Alright. Let's say we have a real case, let's go -- I heard what you just said, very good. We have a real case. We have a guy that worked there in the 1940s. Wouldn't you want to use then the high number And if you find that for the calciner? another person was there after that period ended and that calciner or whatever was generating the high dust loadings longer in play, and then I could see going

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with some of the newer numbers.

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Right now, that level of -- that breakdown isn't there, and that story isn't told. But, I mean, if that's the way you might come out, that seems to be a reasonable, what I'd say, compromise.

MR. TOMES: But it wasn't a covered facility then.

DR. MAURO: Pardon me?

MR. TOMES: It wasn't a covered facility then.

DR. MAURO: Okay. So, you're saying that the -- you're helping me because I haven't looked at this in quite a So, you're saying that the time period while. when the high nickel concentration, the 5 milligram number was observed, was not a time when there was uranium on site and people -when there was any uranium on site. It was when they were just doing their nickel thing without any uranium?

MR. TOMES: That's right. The

1	Reduction Pilot that was built I forgot,
2	I'd have to read my writeup I had on that
3	but it was built in the early `50s, and they
4	actually operated using uncontaminated nickel
5	for several years. Then they expanded it and
6	started putting recycled nickel back through
7	there. I believe the first contaminated nickel
8	went in there in 1956.
9	DR. MAURO: Okay. So, what you're
10	arguing is that it's really the data that
11	covers the time 1956 forward when they were
12	doing the handling these barriers. You're
13	saying prior to that they were not handling
14	the barriers.
15	MR. TOMES: Right, the facility
16	would not have been contaminated at that
17	point.
18	DR. MAURO: I got you. Okay. I've
19	got to tell you that sounded like a pretty
20	good argument to me.
21	MR. STIVER: Tom, this is John

further point, hopefully to

Stiver.

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1	clarify but maybe just to muddy things up even
2	more. From what I'm gathering in this
3	conversation is that we really don't know if
4	there are data, historic data that might
5	actually span into the operational period of
6	the Pilot Plant. And because of that, just to
7	err on the side of claimant-favorability,
8	you've gone ahead and included some of the
9	older data because there just isn't the
10	granularity, the clarity as to what those
11	particular measurements that went into
12	creating these averages were actually taken.
13	Is that a true statement?
14	MR. TOMES: That was my
15	understanding of the data, yes.
16	MR. STIVER: Okay. So, there's no
17	way you could really separate out the
18	applicable data from non-applicable in the
19	historic data set itself.
20	MR. TOMES: No, we don't have
21	those details.

That's

STIVER:

MR.

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why you're

stuck in this position.

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DR. MAURO: Okay. So, my -- now, I'm okay. My premise that the data that really was applicable here in Table 8 was the data with the little C next to them. That was a false assumption, and the reality is because that was the position I took. you're making a good argument here why, no, that's not -- that may be very -- I mean, in theory, one could say if you do that it might be unrealistic because a lot of that data with the little C next to it actually was collected at a time before there were these barriers processed. It was at a time when, yeah, they were doing nickel work, but they weren't processing contaminated barriers. So, for that reason -- I'm sort of like saying if I was NIOSH, what would I -- I'm trying to answer the question. So, what you're saying is that -- and that's the reason why the full set of data probably is the right balance to strike, because the other would way be

implausible if that -- you wouldn't have -- in other words, there would be no worker there that was there working with uranium at the time when the 5 milligram per cubic meter number was there. You know, that was before any uranium was being handled.

If that's the case, I mean, if you could say that, you could say, no, that 5 milligram number with the so called outlier, which is really not an outlier, but the real problem with it is not that it's an outlier, it's that it was collected at a time when there was no uranium onsite. Now, if that's the position, I'm ready to let this go.

MR. TOMES: Well, that was my interpretation exactly, John. You know, he summed it up pretty well for me.

DR. MAURO: Well, I tell you, just based on what you just said, if that, in fact, is the case and, you know, I'm not misunderstanding, and you're not misunderstanding the records, as far as I'm

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concerned this issue has been resolved.

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CHAIRMAN KOTELCHUCK: Comments by others?

MEMBER CLAWSON: Yes, this is Brad. I just have one question. I'm sorry, I'm a little bit muddy here. What you're telling me, and Tom and John, help me understand in layman's terms here. What you're saying is the information that we are using is from the earlier years when there was no contamination, but it's giving us a baseline for what we feel the people could have been associated nickel-wise when the uranium in came contaminated that. Because we have no data for that time period in there, we don't have any information on that, is that why we're using that?

MR. TOMES: No, we have no data on airborne exposures during the operations with uranium contaminated nickel. No, we have no data on that.

MEMBER CLAWSON: Okay, so -- I'm

sorry, go ahead.

MR. TOMES: And the reason that we are using this other data that includes older data that would not normally be applicable is that it is all thrown into one basket, if you would, that includes older data and current data both. Current as to the study that was done in the late `70s, assuming that's when most of the -- mid to late `70s when this data was accumulated, I'm assuming.

MEMBER CLAWSON: Okay. Refresh my memory on this site, because what's -- how many years are we looking at using this data for? What is the year spread that we're -- when did they -- when did the uranium come on and when do we stop?

MR. TOMES: Just a second, I can give you a more precise -- hold on.

MEMBER CLAWSON: I'm just trying to figure out how long of a time that we were using this for.

MR. TOMES: Well, the covered

1	period is listed as 1951 through 1963, and
2	then remediation `78 to `79. But the period
3	1951 through sometime in `56 was processing
4	uncontaminated nickel, so the worker exposures
5	to uranium that we need to calculate or
6	estimate is from 1956 to `63 and `78 to `79.
7	MEMBER CLAWSON: Okay.
8	DR. MAURO: And that 5 number is
9	applicable to what time period?
10	MR. TOMES: That's for the
11	refinery, which includes those earlier 1940s
12	era high exposures.
13	DR. MAURO: And that was not a
14	time period when there was uranium because
15	it's pre-`56.
16	MR. TOMES: Right, so that biases
17	the results high, but I don't know how to
18	separate that number any further than that.
19	DR. MAURO: I got you. So, by
20	including okay, now I'm good. So, what
21	you're saying is even though that 5 number is
22	a number that was measured in the earlier

1	years, you're leaving it in your distribution,
2	but you're not going to just focus in on the
3	Cs because the okay, good. I'm good now.
4	Because the little letter Cs, really if you
5	were to collect and only work with those, all
6	of those would only be associated with times
7	before 1956 when there was any uranium onsite.
8	MR. TOMES: It would be very high,
9	I believe, if we did that.
10	DR. MAURO: Yeah, and then you
11	come in with a high number, as I did, and it
12	would not necessarily apply because it wasn't
13	at a time when the uranium was there.
14	MEMBER MUNN: Yes, it's not
15	appropriate.
16	DR. MAURO: And I'm with you, I'm
17	okay.
18	MR. TOMES: Okay.
19	DR. MAURO: I think I got it. And
20	I think that it gee, it's a shame it took
21	me so long to get through my thick head, but I
22	understand now, and this is very helpful.

1	Thank you.
2	MEMBER CLAWSON: John, this is
3	Brad. I appreciate your discussion with it
4	because this brought clarity to my
5	understanding of what was going on, because
6	I'll be right honest with you, I didn't
7	understand why we were using what we were
8	using for what. And I would agree with you as
9	well as SC&A at this time that this issue
10	should be closed, but that's my personal
11	DR. MAURO: Yes.
12	CHAIRMAN KOTELCHUCK: Okay. Well,
13	it sounds like there's an agreement and
14	closure.
15	DR. MAURO: And one comment, Tom.
16	CHAIRMAN KOTELCHUCK: Hopefully
17	DR. MAURO: You've got to tell
18	your story a little better next time.
19	CHAIRMAN KOTELCHUCK: Okay.
20	Alright. Do we is there another there
21	is another item in 8. It's 11:30. Let's keep

going on to 12. We started at 10, so I'm

1	hoping that we can take our break at noon to
2	eat lunch, as well as comfort, if you will.
3	MEMBER CLAWSON: Man, I'm going
4	for breakfast.
5	CHAIRMAN KOTELCHUCK: Oh, I'm so
6	sorry. Of course, my apologies to several of
7	you.
8	MEMBER MUNN: Yes, there are
9	several of us out here that
10	CHAIRMAN KOTELCHUCK: Please
11	excuse us East Coast Daylight Savings Time
12	people. I'll remember that for the future. Do
13	we have one more item in Set 8?
14	MR. TOMES: I believe that this
15	closes out Items 3 and 5. And I think that
16	might be all.
17	CHAIRMAN KOTELCHUCK: Great.
18	DR. MAURO: Yeah, I agree with
19	that.
20	CHAIRMAN KOTELCHUCK: Wonderful.
21	Great. So 8 is now concluded.
22	MR. STIVER: Eight is closed.

1	CHAIRMAN KOTELCHUCK: Alright,
2	folks.
3	MEMBER MUNN: Thank goodness.
4	CHAIRMAN KOTELCHUCK: Okay. So,
5	how do we want to proceed? Although it's a
6	little early here in the East Coast, we could
7	take a break now and start on 9, which I hope
8	will move more quickly, but right after lunch.
9	We could take an hour break, or would you like
LO	to go on for another half an hour?
11	MR. SIEBERT: Well, let me ask.
L2	Grady, did you want to talk about it's more
L3	Huntington Pilot Plant issues on Set 9?
L4	MR. CALHOUN: Well, I think,
L5	though, on Set 9, I believe that these are
L6	going to revolve around the new review, and I
L7	don't think that we're prepared to comment on
L8	those yet because we haven't reviewed that.
L9	MR. SIEBERT: I understand, I just
20	wanted to make sure if we needed our
21	Huntington Pilot Plant people around, but you
22	understand that those I think there's two

1	findings there, and it has to do with Steve's
2	report?
3	MR. CALHOUN: Right, and that's
4	the newest one. Right?
5	MR. SIEBERT: Yes.
6	MR. CALHOUN: Right. And unless
7	those are I'm just not smart enough on that
8	new report to say that those are directly
9	related. If Steve says they're directly
10	related and it's closed, we're good. But I
11	don't know that off the top of my head.
12	MR. SIEBERT: Are there other
12 13	MR. SIEBERT: Are there other issues on the $9^{\rm th}$ Set you want to talk about?
13	issues on the 9 th Set you want to talk about?
13 14	issues on the 9 th Set you want to talk about? MR. CALHOUN: I don't know. Scott,
13 14 15	issues on the 9 th Set you want to talk about? MR. CALHOUN: I don't know. Scott, there were some things on there, do you want
13 14 15 16	issues on the 9 th Set you want to talk about? MR. CALHOUN: I don't know. Scott, there were some things on there, do you want to try to knock those out? Oh, yeah, there's
13 14 15 16 17	issues on the 9 th Set you want to talk about? MR. CALHOUN: I don't know. Scott, there were some things on there, do you want to try to knock those out? Oh, yeah, there's something on Ashland Oil we can talk about,
13 14 15 16 17	issues on the 9 th Set you want to talk about? MR. CALHOUN: I don't know. Scott, there were some things on there, do you want to try to knock those out? Oh, yeah, there's something on Ashland Oil we can talk about, yes.
13 14 15 16 17 18 19	issues on the 9 th Set you want to talk about? MR. CALHOUN: I don't know. Scott, there were some things on there, do you want to try to knock those out? Oh, yeah, there's something on Ashland Oil we can talk about, yes. CHAIRMAN KOTELCHUCK: Okay. Do we

1	CHAIRMAN KOTELCHUCK: Yes.
2	MEMBER CLAWSON: I would like to
3	just continue on up until at least lunch or
4	so.
5	CHAIRMAN KOTELCHUCK: Right.
6	MEMBER CLAWSON: That's my vote.
7	CHAIRMAN KOTELCHUCK: Your lunch
8	or our lunch?
9	MEMBER MUNN: Your lunch, our
10	breakfast.
11	(Laughter.)
12	CHAIRMAN KOTELCHUCK: Okay.
13	MEMBER MUNN: Yes, let's go for
14	it.
15	CHAIRMAN KOTELCHUCK: Good,
16	excellent. Let's go to 9, folks.
17	MR. STIVER: Eight-nine is loading,
18	be patient.
19	CHAIRMAN KOTELCHUCK: Good, we are.
20	MR. SIEBERT: And I think it's the
21	first finding, 179.1.
22	MEMBER MUNN: Oh, I've got 179.4.

1	How did I miss 1?
2	MR. CALHOUN: Yes, and I believe
3	that's it. I'm seeing if I've got the right C-
4	MR. STIVER: 79.4?
5	MR. SIEBERT: One I had open.
6	MR. CALHOUN: 179.1.
7	MEMBER MUNN: NIOSH was to review
8	SC&A response.
9	MR. STIVER: Everybody see that?
10	CHAIRMAN KOTELCHUCK: Yes.
11	MR. CALHOUN: This one might be
12	kind of quick because I'm not sure it'll close
13	anything out. But we discovered something
14	here. It's case-specific, not TBD or anything
15	like that specific. This individual had are
16	we ready? Can I talk?
17	CHAIRMAN KOTELCHUCK: Yes, please.
18	MR. CALHOUN: Okay. This
19	individual had some verified employment
20	through the Department of Labor I believe back
21	to 1947-ish. If you look at the Department of
22	Labor website I'm going to try to call this

up while we're talking here -- you'll see that the covered period for Ashland Oil is listed as -- and let me find it real quick before I speak.

Okay. The covered period starts 1944 to 1960, and then it goes all the way through 2006 when you consider the residual contamination periods, two of them which are mixed in.

The site is called out as Ashland Oil. That is a problem. This individual worked for Ashland Oil given verified and was employment through -- or beginning in 1947. And in fact he did work for Ashland Oil. The problem is, Ashland Oil had nothing to do with this facility until 1960. So, the argument here about us looking at earlier data to get the dose to this individual is irrelevant because we used data based on 1957 levels, I And his covered employment is, in believe. fact, wrong.

We've just addressed this recently

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with Department of Labor, and they're actually looking at -- now, looking at, they didn't say they're going to do it -- they're looking at changing the name of the site from Ashland Oil. Because when you read Ashland Oil, you believe that Ashland Oil was involved since 1944, but that is not true. They didn't gain control of that facility per a DOE Legacy Management document until 1960.

So, the DR, this individual DR is because it's based dose correct on measurements that were taken after 1957. I don't know if we'll have to come back to I just wanted to let you guys know that. what's going on with that. There may be a somewhat significant change to the name of that site. And then people who were employed Ashland Oil wouldn't automatically be assumed to have worked at this facility prior to 1960 when they took ownership of that land.

CHAIRMAN KOTELCHUCK: And how would it affect that individual that we're

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talking about here, 179.1?

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MR. CALHOUN: The dose is right. The argument, I believe, is that we didn't use previous -- we didn't use older -- he had covered employment from 1947, and we used -- let me see if I can find it. We used dose measurements that were taken, I believe, in 1957.

CHAIRMAN KOTELCHUCK: Right, `58.

MR. CALHOUN: `58. And the argument was that we should have used earlier -- is that really representative of earlier dose rates that may have been at that site? For this individual it doesn't matter, because he worked for Ashland Oil, he wasn't at the site. Ashland Oil, as we all know, is a very big facility. Big company, I mean. So, we have actually informed DOL of that, as well as of the individual case telling them that that we believe it's an employment verification issue.

This is a very, very old dose

1	deconstruction, and from talking to the people
2	back then, rather than argue with Department
3	of Labor, we decided just to maximize the
4	dose. And we kind of thought there might be
5	an issue with the employment, but we just gave
6	him the dose for the entire period even when
7	it appears now that he was very unlikely to
8	have been involved at that site prior to 1960.
9	DR. MAURO: This is John. Let me
10	say it, because then it helps me solidify in
11	my head. This place, as I recall, was
12	receiving slag from Linde just for storage. It
13	was just piling up there.
14	MR. CALHOUN: Correct.
15	DR. MAURO: And there were
16	measurements made, radiation fields, the
17	walkover surveys made when they were doing
18	that.
19	MR. CALHOUN: Yes.
20	DR. MAURO: And there were certain
21	levels that were observed.

MR. CALHOUN: Yes.

DR. MAURO: Then when -- now, here we have this guy who works there, and I seem to recall that my concern had to do with, well, you used his radiation field information that was collected in the 1950s. Why didn't you use the numbers that were there for the 1940s, because wasn't he there then?

MR. CALHOUN: Correct.

DR. MAURO: And you're saying he wasn't there then.

MR. CALHOUN: Exactly.

DR. MAURO: That's the end of the story. I understand it. That being the case, taking it on, you know, what you described, the right way to do this is to base it on the radiation measurements that were made when he was there, which was, I guess, a later time period when for whatever reason the radiation fields were not as a high. I don't know the reasons why they would go down. It was still a dumping site, but apparently they made measurements in the `50s and those are the

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measurements that really should apply to this
guy. If that's your position, I mean, again,
I, for one, it sounds like that's a reasonable
position to take.

MR. CALHOUN: Alright. And I
didn't know that either until maybe two days

didn't know that either until maybe two days ago. And it looks like that we had not even notified DOL about that until just yesterday when we found this out. I don't believe that they will actually change this guy's covered employment. If they do, we're not going to change his dose reconstruction unless, course, he comes through -- well, he's deceased. But if there was another cancer identified somehow we would revise the dose reconstruction, but that would certainly just make this dose go down because he wouldn't get any dose applied for the years prior to 1960.

DR. MAURO: Right, because he wasn't there.

MR. CALHOUN: Right. He worked at Ashland Oil, but Ashland Oil didn't own that

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1	site until 1960.
2	CHAIRMAN KOTELCHUCK: Right.
3	Sounds like resolution.
4	MR. STIVER: Okay. Just so I have
5	this correct for the matrix, it's not that he
6	wasn't there in `47 or in the `40s. It's that
7	he was employed by Ashland Oil and Ashland Oil
8	was not the operator at that time. Is that
9	correct?
10	MR. CALHOUN: No, he wasn't there
11	because Ashland Oil wasn't there.
12	DR. MAURO: I've got to say that -
13	- my recollection was the when you go back
14	to the old Linde records and the Ashland Oil
15	records, why I'm of the belief, and I might
16	be wrong, that they were dumping material at
17	Ashland Oil.
18	MR. CALHOUN: They absolutely
19	were. Here's what happened, and I'm trying to
20	call up the other site here. If you bear with
21	me for just a second.
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DR. MAURO: Sure.

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The Haist?

MR. CALHOUN: Yes, that's what it was previously known as, and I -- and if you'll -- Ashland Oil site. Okay. I don't want that. Okay. If you indulge me for just a moment I'm going to actually read from this, okay? And I can email this out.

This is from the Department of Energy Legacy Management site. Let's see, I want to get to the -- "1944 to 1946 uranium" ore processing wastes were transported from Linde to a 10-acre area known as the Haist called property, H-A-I-S-T, now Tonawanda North Unit 1 (Ashland Oil 1 site). These materials consisted of about 8,000 tons of low-grade uranium ore tailings. In 1960, the property was transferred to Ashland Oil for use in the company's oil refining activities."

Now, what the problem was there is that Ashland then used that for disposal of general plant waste but they were digging around in it. So, that's how the exposure to Ashland Oil people would have come about,

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1	because they were using the same site that was
2	previously used as a low-level radioactive
3	material dump that dumped general plant
4	refuse. So when they were digging around in
5	that, that was causing exposure to their
6	people, but that would have been after 1960,
7	or beginning of 1960.
8	DR. MAURO: So, this guy then was
9	not there before in the `40s
10	MR. CALHOUN: Correct.
11	DR. MAURO: when Ashland Oil
12	was receiving this junk from
13	MR. CALHOUN: Correct. He worked
14	for Ashland Oil, but Ashland Oil wasn't there.
15	DR. MAURO: Well, he wasn't there.
16	I mean, that's my main concern.
17	MR. CALHOUN: Yes.
18	DR. MAURO: Was he there in the
19	1940s when Linde dumped the stuff? If the
20	answer is no, he was not; therefore, any
21	measurements made in the 1940s would not apply
22	to him, only the measurements made when he was

1	physically there. The fact that these names
2	changed and that causes some confusion is of
3	less interest to me than the fact that we have
4	evidence that this guy was not there in the
5	`40s. He was there in the `50s, and it's the
6	data that was collected in the `50s regarding
7	the radiation field that he might have been
8	exposed to that's applicable to this work.
9	MR. CALHOUN: Yes.
10	DR. MAURO: Bingo.
11	CHAIRMAN KOTELCHUCK: Okay, good.
12	Resolution, yes?
13	MR. CALHOUN: Did the matrix just
14	pop off or did I am I not can I not get
15	that?
16	CHAIRMAN KOTELCHUCK: My screen
17	went down.
18	MR. CALHOUN: I've still got my
19	okay, there it is.
20	CHAIRMAN KOTELCHUCK: There we go.
21	DR. MAURO: John Mauro, quick
22	question. Like the Procedures Subcommittee,

1	do we close these issues or do we hold them in
2	abeyance until you make revisions to your Site
3	Profile that explains all this?
4	MR. CALHOUN: We don't have a Site
5	Profile for Ashland Oil.
6	DR. MAURO: Oh, this is not I'm
7	trying to think of how this all came this
8	is just a dose reconstruction
9	MR. CALHOUN: Right.
10	DR. MAURO: based on whatever
11	records we have.
12	MR. CALHOUN: Right.
13	DR. MAURO: Okay, I got you.
14	Alright. So, therefore, there really is
15	nothing to revise. This record, in effect,
16	revises the information relevant to the whole
17	process.
18	By the way, as an aside, when
19	there is a Site Profile and let's say this
20	was a Site Profile where the story was told,
21	but this aspect of it was not well developed,
22	and there would be if that was the case,

1	and there would be a need to clarify the Site
2	Profile just for this reason, would this issue
3	we're talking about be closed or would it be
4	put in abeyance as a matter of process?
5	MR. KATZ: Well, this is Ted here.
6	I would suggest it would be closed. This is a
7	case we're trying to close. We're trying to
8	close the whole set of cases.
9	DR. MAURO: Okay.
10	MR. KATZ: And the abeyance
11	wouldn't help us there at all.
12	DR. MAURO: I got you, okay.
13	MR. KATZ: That's my suggestion.
14	DR. MAURO: You know, I keep
15	tripping back and forth between these mini
16	Site Profile reviews and the cases. I
17	understand. Thank you for helping me out.
18	MR. STIVER: This is John Stiver.
19	That kind of brought up an interesting point
20	that we've talked about before, which is, you
21	know, when we come up we do a particular
22	reconstruction that identifies a problem,

1	whether it be a Site Profile, or a site, or
2	what not. In this case there really isn't a
3	Site Profile, but that would then go into the
4	Case Set Summary Document, and also into Table
5	3 to identify things that came up during the
6	review of the case.
7	DR. MAURO: Yes, yes.
8	MR. STIVER: This would be kind of
9	an example of that type of a situation.
10	DR. MAURO: Under the new
11	protocol.
12	MR. STIVER: Yeah, when a new a
13	dose reconstruction uncovered a problem and it
14	was previously unknown or unrecognized.
15	DR. MAURO: Okay. So, the vehicle
16	that would be used to, I guess, have a record
17	of this conversation would actually find its
18	way I guess, I'm just trying to think of
19	I'm now thinking more of an administrator, how
20	do we make keep track? Certainly, we have
21	this transcript. I guess that would be it,

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maintain these kinds of matters. I guess it's
in the transcript, but you're saying there's
other places where we would somehow capture
this?

MR. STIVER: John, remember at our
last meeting we discussed this very issue

DR. MAURO: Right.

about how do you prevent the stovepiping.

MR. STIVER: And how do you address these issues that -- I guess, it's really twofold. One being if a particular reconstruction were to uncover a previously unknown problem with a Site Profile or a site in general, then that would be captured in the summary document that would accompany the set of dose reconstructions.

DR. MAURO: Yes.

MR. STIVER: And there was also the discussion of modifying or adding to Table 2, and actually creating another Table 3 that really talks about the issues related to PERs, TBDs, TIBs and so forth that impinge on that

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1	particular case. The whole idea being to try
2	to link all these different aspects together.
3	We're kind of straying afield here. I just
4	wanted to
5	CHAIRMAN KOTELCHUCK: Yes, okay.
6	DR. MAURO: It's good, at least
7	for me, to be reminded that we have a way to
8	track all this for the future, for posterity,
9	so to speak.
10	CHAIRMAN KOTELCHUCK: Is there
11	another item we want to by the way, I do
12	not have Set 9 up on my screen at this point.
13	MR. STIVER: That's because you
14	took control away from me.
15	CHAIRMAN KOTELCHUCK: Oh.
16	MR. STIVER: I can request it back
17	here right now.
18	CHAIRMAN KOTELCHUCK: Okay.
19	MR. CALHOUN: It looks like the
20	next thing on the matrix is 185, 6 and 7. And
21	like I said before, this had to do with the
22	new report in dust loading and what not. And I

1	don't know if those have been answered based
2	on our previous discussions or not, because I
3	cannot say that I am well-versed in that new
4	report at this time.
5	DR. MAURO: Are we back at
6	Huntington now, the Site Profile?
7	MR. CALHOUN: Yeah, that's what
8	185, 6 and 7 are.
9	DR. MAURO: Yes, and that's your -
10	- Steve Marschke's June report?
11	MR. CALHOUN: Yes.
12	DR. MAURO: Steve, did we close
13	out the issues that were of interest to you
14	also in the June report?
15	MR. MARSCHKE: I think we've
16	closed out the major technical issues which
17	were, you know, finding 5 and 6 of the June
18	report, which talks about the similar things
19	that John talked about in the Enterline and
20	Marsh and the table there, and so on and so
21	forth. So, I think finding 5 and 6 we could

probably definitely close those out.

There's a number of other findings in there which are kind of small findings more or less related to certain things that are in the TBD, some typos, some numerical errors maybe that I think I have identified which, you know, NIOSH may want to take a look at.

So, I think, you know, some of those are still going to be open, but I don't think there would be anything that, you know, this group of people have to really be involved in. I think it's something that NIOSH would just have to sit down and agree — either agree with the findings or point out why the finding is in error.

MR. CALHOUN: Okay. Well, just from a process standpoint then, do we close out 185.6 and 185.7 and respond to the report? Or do we leave these open and revisit them next time?

MR. FARVER: This is Doug, and I suggest we just keep these open until you just look at the report and you'll have some kind

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1	of response.
2	MR. CALHOUN: Okay.
3	MR. FARVER: For now, let's just
4	keep these there's just two of them, just
5	keep those two open.
6	CHAIRMAN KOTELCHUCK: Okay.
7	MR. CALHOUN: The next one is
8	195.1, and I don't know if Scott, were you
9	going to say something on that?
10	MR. SIEBERT: Well, this is the
11	this is Scott. This is the rotational
12	isotropic AP DCF discussion we've had many
13	times. And, Grady, we talked about this the
14	other day, do you want me to kind of
15	MR. CALHOUN: Yeah, go ahead.
16	Basically, I think, in a nutshell, is that
17	because of the new ICRP document that came
18	out, the huge number of DCFs are changing.
19	Some are going up, some are going down. And
20	this is going to require a very, very large
21	what am I looking for?

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MR. SIEBERT: PER.

1	MR. CALHOUN: Program Evaluation
2	Report to address any DRs in which DCF used
3	those up, not down. So, it's something that's
4	going to ultimately be addressed, but it's not
5	going to be any time probably within the next
6	year.
7	DR. MAURO: Is this an overarching
8	issue that cuts across virtually all the dose
9	reconstructions that are done?
10	MR. CALHOUN: Absolutely, it's
11	giant.
12	DR. MAURO: Yeah, so it almost
13	sounds like something that needs to be
14	transferred to the Procedures Subcommittee.
15	MR. CALHOUN: It does.
16	DR. MAURO: If I should be so
17	bold.
18	CHAIRMAN KOTELCHUCK: You should
19	be.
20	MEMBER MUNN: Thank you ever so
21	much, John. But could we have, perhaps, the
22	30,000 foot view of what these changes

1	actually are that we're having to deal with?
2	MR. CALHOUN: I can just give you
3	a couple of generalities, because I don't know
4	off the top of my head the details. Tim
5	Taulbee is our guy working on this, but
6	MEMBER MUNN: If you would,
7	because I am not aware of having been briefed
8	at all on this change.
9	MR. CALHOUN: Okay. What's
10	happened is, and I don't know what data came
11	out, but there was a new ICRP publication that
12	came out with new dose conversion factors. And
13	that's where we derive our dose conversion
14	factors to begin with. And they've changed.
15	MEMBER MUNN: Is this a major
16	change in ICRP?
17	MR. CALHOUN: Yes.
18	MR. SMITH: Hey, Grady, it's Matt
19	Smith on the line. I can help out, if you
20	want.
21	MR. CALHOUN: Oh, good. Thank
22	you, Matt, you've got it.

MEMBER MUNN: That would be great. Thanks, Matt.

MR. SMITH: As Grady said, this was the new ICRP report. Let me back up. Implementation Guide Number 1 is the document that contains the external dose DCF values. And those values are based on ICRP Report 74. I believe that one was from 1996.

In the interim, the Committee has updated reference man, and they've also updated weighting factors. We don't have to worry about the weighting factors because we're dealing with organ dose.

The update to reference man I believe is Report 110. And when that was completed they realized, hey, we actually have more realistic phantoms now to use both for male and female subjects. So, the Committee went to work and produced ICRP 116, and that is the replacement for Report 74. It's a basic top to bottom re-do of 74 using the new more anatomically correct phantoms, and also for

male and female.

And because, obviously, geometry has evolved and updated especially for female subjects, as Grady indicated, a lot of changes, both upward and downward on DCF values. No particular trend. It is really a mix and match.

MEMBER MUNN: Alright, fine. Thank you, Matt. That helps clarify my big question mark in my head, and it certainly throws the cat out with the dishwater, doesn't it? I can see that that would be really an overwhelming task for us. Alright, fine. As much as I hate to say it, you're probably right. It sounds as though it needs to go into the overarching issues.

MR. FARVER: Well, I have a real concern with this specific issue of the rotational geometry, because it has been in IG-001, and I have never seen it applied. And it says you are supposed to use or consider these geometries for lung cancers and bone

I think there's three cancers. And we've never seen it applied, and we always write it up as a finding, and it doesn't get closed out. And this is going to come up more on Savannah River cases. And it can happen, it can increase your external doses by maybe 50 percent, so if you have people that are teetering at 48-49 percent, a significant impact. So, I think since it is still a part IG-001, they their current should implementing it, and not just ignoring it and saying, well, things will change later on. DR. MAURO: Doug, this is John. Ι

DR. MAURO: Doug, this is John. I know that they've been using AP because of the problems with rotational and AP -- PA, and they've been using AP because, it was my understanding, that that was the fix until they made the permanent fix.

MR. FARVER: That's the old Rev.

DR. MAURO: Exactly. And that being -- now, what I hear you saying, though, is that, no, the AP approach, which is the way

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1	to get around this problem and be claimant-
2	favorable may not very well be claimant-
3	favorable?
4	MR. FARVER: Correct.
5	DR. MAURO: Okay.
6	MR. FARVER: It states it
7	specifically in Table 4-1A, of which there are
8	two tables with the same number. We've brought
9	that up before.
10	MEMBER MUNN: Yes, we've addressed
11	that.
12	MR. FARVER: And what it says, if
13	they're wearing it on their chest, for certain
14	types of cancer, the AP may not be the most
15	claimant-favorable, the most applicable. So,
16	you have to go through this process and look
17	at these others and use these other
18	geometries, and it's not being done. I've not
19	seen it being done.
20	MR. SMITH: There is also a
21	sentence in that same section that does
22	indicate if AP is, in fact, the proper

	geometry to be assuming, that it is okay to go
2	ahead and use AP.
3	MR. FARVER: I understand that,
4	but you can't just assume that by default and
5	then try and defend it later. I mean, what
6	we're seeing is there's nothing in the dose
7	reconstructions in the files that say we
8	looked at these other geometries, or we looked
9	at this person's work location, or their job,
10	and we've determined that AP is appropriate.
11	There's nothing in there about the rotational.
12	It's just completely absent. So you can't tell
13	me you're looking at it and then you decide
14	it's AP, because it's not being done. There's
15	no evidence of that being done.
16	MEMBER MUNN: Do we have any
17	workbook instruction or anything of that sort
18	that would
19	MR. SMITH: The information on
20	that was shared as the IG was revised.
21	MEMBER MUNN: Yeah.
22	MR. SMITH: You know, Scott and I

1	have discussed this. You know, in some cases
2	it's probably a situation where the DR should
3	have added another sentence that said, you
4	know, that the geometry was looked at
5	explicitly. I believe some of the claims that
6	have come through that we've reviewed for
7	this, you know, it turns out AP is a valid
8	assumption.
9	MEMBER MUNN: Yeah, that doesn't -
10	- I guess doesn't really satisfy the question
11	that SC&A has.
12	MR. SMITH: Okay.
13	MR. FARVER: I don't know that
14	there's anything in any of the workbooks that
15	gives you the option to use the rotational. I
16	don't know the I have not seen any
17	indication where this section is being
18	implemented.
19	MR. SMITH: The workbooks always
20	have the option to use the other DCFs. All
21	the DCF values are built in.

 $\label{eq:member_poston:} \mbox{MEMBER POSTON:} \quad \mbox{I've got to put my}$

two cents in here. This is John.

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MEMBER MUNN: Yes. Speak, John.

MEMBER POSTON: Т think the problem is that you're interested in dose to specific organs. If you go back and look at the paper George Xu, Reece and some guy by the name of Poston, you'll see that the best place to wear your badge is in the front in the middle of the chest, second best place is to wear it in the middle of your back. you move the -- if you rotate in the radiation field, and we're talking about photons now, if you rotate in the radiation field it turns out that the extremities and parts of your body shield the organs of interest and the effective dose equivalent actually goes down.

There are some three-dimensional graphs in that paper in Health Physics. It takes a bottle of wine and you have to really sit and ponder those graphs, but any situation except for head-on, what I would call PA -- actually AP, not PA -- PA in the AP situation,

1	the best place for your badge is right in
2	front, in a rotational field it's still right
3	in front. And I think this may not be a
4	problem, but it's worth a look at those
5	papers.
6	MEMBER MUNN: Well, it sounds to
7	me as though the concern here is that SC&A
8	does not see that there is any instruction
9	anywhere either in the IG or elsewhere that
10	would help the dose reconstuctor know that
11	what you just said is correct, John.
12	MEMBER POSTON: No argument there.
13	MEMBER MUNN: Yeah. I think
14	that's the issue, isn't it?
15	MEMBER POSTON: But it's as I
16	understood what maybe I missed a statement
17	or two here, but I was trying to keep up, but
18	Doug says that they haven't used rotational at
19	all.
20	MEMBER MUNN: Well, I think what
21	he's saying is not that they haven't used
22	rotational, but that there isn't any

indication for the dose reconstructor that they can find that it's okay to use AP. I think that's -- isn't that the issue?

MR. FARVER: No, it's more like I can't see where the dose reconstructor is even following this part of IG-001. They're not following the instructions.

MEMBER MUNN: Yeah.

MEMBER POSTON: I can't comment on that, but I can comment that using AP is, according to the data that we obtained, it took the NRC about five years to figure it out and finally issue a Regulatory Guide on the issue. But AP, the badge in the front is the best place, all other situations the dose goes down.

MR. FARVER: I mean, I can read you the exact paragraph out of IG-001. It says, "The AP DCF values in Appendix A are not the most claimant-favorable for bone surface, bone red marrow, esophagus, and lung when the dosimeter is worn on the chest."

MEMBER POSTON: That's absolutely wrong. Absolutely wrong.

MR. FARVER: Okay, that could be. I'm just reading it from their own Guide. goes on, "For these organs, if the dosimeter is worn on the chest, multiply the Appendix A value of the ROT and ISO by the factors in Table 4 of 1A instead of using the AP value. the rotational the In these cases, and isogeometries are more claimant-favorable than the AP value in Appendix A. However, the correction factors need not be applied if it is determined that the most representative 100 geometry is percent APor other compensating claimant-favorable determinations have been made in the dose reconstruction."

What we're not seeing is we're not seeing that process. In other words, they're just going directly to AP and there's no indication that they even considered the other geometries.

MEMBER MUNN: So, if I understand

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the conversation we just had directly, we know 1 2 have two issues instead of one. 3 MEMBER POSTON: Yes. We started with the 4 MEMBER MUNN: 5 issue that IG-001 being followed not was 6 correctly, or it's not being followed. And 7 number two, we now have Dr. Poston's assertion that the information as presented in IG-001 is 8 not correct. 9 MAURO: Right, and we have a 10 third layer. The whole thing is being trashed 11 because of the new ICRP 116 guidelines that 12 13 eventually will replace all this. MEMBER MUNN: Right. 14 15 MEMBER POSTON: Yeah. But, John, 16 remember all models are wrong, including the phantoms, and some of them are -- as George 17 18 Box said, all models are wrong, but some are 19 useful. 20 Right. DR. MAURO: MEMBER POSTON: I wouldn't hang, 21 22 know, just because we have new

1	conversion factors doesn't make it clear that
2	they're any better than
3	DR. MAURO: Right.
4	MEMBER POSTON: I'm not proposing
5	that SC&A undertake such a big project.
6	DR. MAURO: Oh, no, no. I only
7	mentioned it as it's a layered problem, that
8	is I think that Wanda clearly articulated
9	that we have our simple concern. You know,
10	ours is, when you think about it, pretty
11	straightforward. Did they use the procedures
12	that they were instructed to use? And the
13	answer is not always.
14	Now, the other layer, which is
15	really a
16	MEMBER MUNN: Or that we don't see
17	it.
18	DR. MAURO: Yeah. But the other
19	layer is the point, like Wanda said, that the
20	procedures themselves under certain
21	circumstances, according to John's work, may
22	very well be problematic, which then all of a

sudden becomes more of an overarching issue. You see, the first one is very much a dose reconstruction issue. Did you do it the right way for this guy? And did you provide the proper documentation that follows your own instructions?

The next level -- if it turns out the instructions, they are or are not doing that -- the next level is, well, are the instructions correct? And the answer is perhaps not, based on the work Dr. Poston just described. So, I think that those are matters that need to be tended to.

This business of the ICRP report,
I understand what you're saying, John. You
know, that's another matter all together. The
day comes when NIOSH engages that issue and
makes some, you know, does some I guess what
you would call science-based judgments on
whether they want to move into that world or
not. That's really outside the framework of
any of the matters I think we're discussing.

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1	That would be a judgment that will be made by
2	NIOSH some time in the future.
3	CHAIRMAN KOTELCHUCK: Right. So,
4	this
5	MEMBER POSTON: I want to avoid
6	that. See, we could just say we can't do
7	anything because the ICRP is going to come up
8	with new dose conversion factors in five
9	years. And I'm not suggesting that we wait,
LO	and I'm not suggesting that we go back.
L1	DR. MAURO: I agree with you
L2	completely. I mean, I'm with you.
L3	MEMBER POSTON: I suggest that it's
L4	we shouldn't have to worry about it. We
L5	have to take the best data or the best
L6	approach that we have and use it in the time
L7	in which we're being used. We can't go
L8	DR. MAURO: Bingo, I agree with
L9	that. Yes, we should not no way should
20	these issues, the first two we just mentioned,
21	be put on ice. They have to be dealt with.
22	MR. STIVER: This is John Stiver.

1	If I could jump in for just a minute. Dr.
2	Poston, what was the reference number for that
3	Health Physics article that we're talking
4	about here?
5	MEMBER POSTON: I don't have it in
6	front of me, John, but it was in Health
7	Physics. The first author was George Xu,
8	second author was Dan Reece and I was the
9	third author. I can get it for you. I can look
10	it up on my resume, but I don't have my resume
11	in front of me.
12	CHAIRMAN KOTELCHUCK: George
13	MR. STIVER: Just email me the
14	reference to it and I can get it off the HP
15	site.
16	CHAIRMAN KOTELCHUCK: George Xu,
17	X-U?
18	MEMBER POSTON: X-U.
19	CHAIRMAN KOTELCHUCK: Okay, fine.
20	But in terms of this Subcommittee, this is an
21	overarching issue that's going to go over to
22	the Procedures Review Committee. Right?

1	MEMBER POSTON: You're welcome,
2	Wanda.
3	MEMBER MUNN: Oh, thanks ever so,
4	again. Sure.
5	CHAIRMAN KOTELCHUCK: Okay.
6	MEMBER MUNN: We'll look at it
7	there.
8	CHAIRMAN KOTELCHUCK: Okay, very
9	good. So, we have that moving to the other
LO	Committee. Where do we go now? It's 10 after
11	12 on the East Coast.
L2	MR. FARVER: David, could I ask a
L3	question?
L4	CHAIRMAN KOTELCHUCK: Yes.
L5	MR. FARVER: If we're going to
L6	transfer this to procedures, does that mean
L7	well, they're going to look at it for, number
L8	one, correctness?
L9	CHAIRMAN KOTELCHUCK: Yes.
20	MR. FARVER: But are they going to
21	look to see if they're implementing this?
22	MR. KATZ: Yeah, that no.

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1	Thanks, Doug, this is Ted. That stays with
2	this so I think that issue still needs to
3	be closed out here: did they follow the
4	procedures they should have? Because the
5	discussion so far didn't make that crystal
6	clear, and that needs to be closed out for you
7	to be able to close out these cases.
8	The science issue of what is
9	actually right to do is again, that's
10	correctly transferred, I think, to Procedures,
11	but
12	DR. MAURO: Ted, this is John. I
13	agree. I think I see exactly the line of
14	thought there. Yes.
15	MEMBER MUNN: And, David, if you
16	will be good enough to make sure that we get a
17	memo to the Procedures Subcommittee so that we
18	remember to
19	CHAIRMAN KOTELCHUCK: Okay.
20	MEMBER MUNN: get it onto our
21	agenda next time.
22	MR. FARVER: I believe that NIOSH

should be able to go back and look at previous lung cancers and bone cancer cases that are approaching the 50 percent mark and see how many of those they actually used these two other geometries.

MEMBER MUNN: That's true, although in my mind we still have not -- NIOSH has not put to bed the question of how it -- if the dose reconstructor has any instruction elsewhere. I still haven't heard anything about that one way or the other.

MR. CALHOUN: This is Grady, and we'll check into that. I certainly am not going to commit to going back to every case and look for the DCFs. I think, first of all, we need to see what the instructions are and maybe we're just not documenting it appropriately.

MR. KATZ: Right. So, anyway, the findings relevant to Dose Reconstruction Subcommittee, I think they're just -- "in progress" is the term we use with Procedures.

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1 DR. MAURO: Okay. 2 MR. KATZ: NIOSH will get back to 3 us on that. And to make things easy for the 4 transfer, I can -- David, you don't really 5 need to do anything. When get we 6 transcript for this Work Group meeting, I 7 mean, for the Subcommittee meeting, I'11 excerpt the discussion related to the science 8 issue that Dr. Poston raised. 9 CHAIRMAN KOTELCHUCK: Excellent. 10 And I will then send 11 MR. KATZ: Wanda with indications this 12 is 13 issue that needs to be taken up. CHAIRMAN KOTELCHUCK: Very good. 14 15 MR. KATZ: Okay. 16 CHAIRMAN KOTELCHUCK: Thank you. MEMBER MUNN: That's good, Ted. 17 18 MR. KATZ: Okay. 19 CHAIRMAN KOTELCHUCK: Okay. Where 20 This, by the way, being our do we go now? first Live Meeting that least 21 at

attended, the issue of time and what

1	people stop for lunch/breakfast, comfort, et
2	cetera is open. So, where do people want to
3	go right now?
4	There seems to be perhaps only two
5	more items on this Set 9. Is that correct?
6	MEMBER MUNN: I wasn't even sure
7	there were two more.
8	MR. SIEBERT: This is Scott. I
9	believe there's only one more.
10	CHAIRMAN KOTELCHUCK: Can we go
11	with it?
12	MR. SIEBERT: I believe it's a
13	relatively straightforward one.
14	CHAIRMAN KOTELCHUCK: Good, let's
15	try it.
16	MR. SIEBERT: 215, Observation 4.
17	CHAIRMAN KOTELCHUCK: Good.
18	MR. SIEBERT: Wait for that to get
19	there.
20	MEMBER MUNN: And remember this is
21	an observation.
22	CHAIRMAN KOTELCHUCK: Right.

MR. SIEBERT: As it gets there, I'll kind of outline it really quickly.

CHAIRMAN KOTELCHUCK: Sure.

MR. SIEBERT: This was an issue where there were differing values that were coming out of the CAD program, the dose calculation program we used for polonium, when it was done -- when the claim was originally done and then when SC&A did the review.

And the reasoning for that is CAD had been updated to reflect different organs for the highest non-metabolic organ. So, the issue itself has already been resolved. We all agree that there was a change. It actually ended up -- the doses went down in the case of polonium, so that the issue itself, this observation is closed, or at least resolved.

The last issue we have discussed a couple of times is the fact that we have never done a PER for any of the CAD updates, the tool updates that may have resulted in increased dose. And I believe -- Grady, feel

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free to correct me if I'm wrong -- but I believe we've agreed to put this on our list of PERs to be considered -- well, not just to be considered. We will end up doing one at some point reflecting any of the changes in the tool over time, and how they've affected claims that have already been previously completed.

MR. CALHOUN: That is true, and we have -- as you probably all know, we've got quite a number of PERs that are in the pipeline, and they're being actively worked, but there is a backlog, so I can't give a time when that's scheduled.

CHAIRMAN KOTELCHUCK: Okay.

MR. SIEBERT: Right. So, I believe we're just -- what would close this out, in my mind, it's up to you guys, obviously, but the fact that we have committed to it and put it on the list and we will be conducting at some point I think would close out the issue.

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CHAIRMAN KOTELCHUCK: Okay. Is
that agreed?
MEMBER MUNN: As long as we say so
on the matrix, yes.
CHAIRMAN KOTELCHUCK: Okay.
MR. FARVER: Just so I have the
wording correct, you're going to you're
reviewing the need for a PER, or you're going
to issue a PER at some point?
MR. SIEBERT: I believe we're
agreed there is a need for one. We just have
to determine the scope. So it's going to be
placed on the PER list to be conducted.
MR. FARVER: Okay, thanks.
CHAIRMAN KOTELCHUCK: Good.
MR. SIEBERT: Grady, correct me if
I'm wrong.
CHAIRMAN KOTELCHUCK: Okay. So,
this
MR. CALHOUN: You're correct.
CHAIRMAN KOTELCHUCK: Good. Does
this finish what we can do on 9? We're not

1	closing it out, but we have a few items to
2	come back to now.
3	MEMBER MUNN: We have everything
4	that's marked, I think.
5	CHAIRMAN KOTELCHUCK: Yes. I
6	can't since I'm on Live Meeting I can't
7	see that because I can't scroll through. I'm
8	not complaining, but
9	MR. SIEBERT: I believe that is
10	the last one that was on the 9 th Set that we
11	could
12	CHAIRMAN KOTELCHUCK: Good. Then
12 13	CHAIRMAN KOTELCHUCK: Good. Then this is an appropriate time, I think, to
13	this is an appropriate time, I think, to
13 14	this is an appropriate time, I think, to break. Yes?
13 14 15	this is an appropriate time, I think, to break. Yes? MEMBER MUNN: For an hour. Right?
13 14 15 16	this is an appropriate time, I think, to break. Yes? MEMBER MUNN: For an hour. Right? CHAIRMAN KOTELCHUCK: Yes, for an
13 14 15 16 17	this is an appropriate time, I think, to break. Yes? MEMBER MUNN: For an hour. Right? CHAIRMAN KOTELCHUCK: Yes, for an hour. It's 12:20 on the East Coast. Is it
13 14 15 16 17	this is an appropriate time, I think, to break. Yes? MEMBER MUNN: For an hour. Right? CHAIRMAN KOTELCHUCK: Yes, for an hour. It's 12:20 on the East Coast. Is it possible we want to get started back at 2:00 -
13 14 15 16 17 18 19	this is an appropriate time, I think, to break. Yes? MEMBER MUNN: For an hour. Right? CHAIRMAN KOTELCHUCK: Yes, for an hour. It's 12:20 on the East Coast. Is it possible we want to get started back at 2:00 - excuse me, at 1:00, in 40 minutes, or should

1	CHAIRMAN KOTELCHUCK: Okay. How
2	do others feel? Full hour it is then. So we
3	will get back at 1:20 Eastern Daylight Time,
4	and have a good lunch, folks.
5	MEMBER MUNN: Good, thank you.
6	CHAIRMAN KOTELCHUCK: And we will
7	start back on Set 10.
8	MEMBER MUNN: Great.
9	MR. KATZ: Great. Thanks,
10	everyone.
11	CHAIRMAN KOTELCHUCK: Bye-bye.
12	MEMBER MUNN: Bye-bye.
13	(Whereupon, the proceedings went
14	off the record at 12:21 p.m., and went back on
15	the record at 1:28 p.m.)
16	MR. KATZ: Okay. I think we can
17	carry on then.
18	CHAIRMAN KOTELCHUCK: Okay. John,
19	do you want to is it 10 through 13 is on
20	the screen?
21	MR. STIVER: This is 10 through 13,
22	Savannah River Site.

1	CHAIRMAN KOTELCHUCK: Right.
2	MR. STIVER: And I believe I'm at
3	the first one that needs to be
4	CHAIRMAN KOTELCHUCK: Right, 276.1.
5	MR. STIVER: Doug, are you on?
6	MR. FARVER: Yes, I just wanted to
7	see what you were going to say.
8	MR. STIVER: Okay. I'm going to
9	turn the mic over to you.
10	MR. FARVER: I thought you were
11	going to try and handle it, John.
12	(Laughter.)
13	MR. KATZ: And let me just remind
14	everyone, the court reporter reminded me, make
15	sure you identify yourself before you speak so
16	that he can keep track of who's speaking.
17	Thanks.
18	MR. FARVER: Okay, this is Doug
19	Farver. We're going to talk about Finding
20	276.1. These are all Savannah River cases, and
21	this has to do with assigning a neutron dose.
22	And for this particular finding there were two

issues; one, the table that was in the Dose Reconstruction Report contained incorrect dose conversion factors. They're just wrong. It's not the ones to use, so that's a quality error.

The second issue we had was with how they were calculated, and after going through -- it's a very lengthy explanation, and then if you go back to -- they sent a document in May for May's meeting, and what it all comes down to is the number of zeroes counted for missed dose, how that was determined.

There is a single dose for a year, an annual dose, say like 30 millirem neutron dose for 1976. They don't break it down into exchange periods, so you have to come up with: how do you determine missed dose? Do you assume that is a one exchange period and there are 11 more zeroes so that you have a monthly exchange frequency, that's one method, which was the method that our dose reviewer used.

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After reviewing the NIOSH what they did is they did the mean value. In other words, you have one value, you could have gotten all the dose in one exchange could period, it have been evenly or distributed through 12 exchange periods. So, what you do is you take the mean value in which this case would be 5 2, and I think they rounded it down to 5. So, now we're looking at a difference between 11 zeroes and 5 zeroes. it And that's what down to the came differences.

There's nothing wrong with what they did. It's something we don't see very often, but they used a little phrase in IG-001 that talks about if you don't know the number of missed dose periods, number of zeroes, you can use a mean value. So, I don't have any concerns with their explanation. It was correct, they provided a good explanation, and I suggest we just close this.

CHAIRMAN KOTELCHUCK: Alright.

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MEMBER MUNN: I'm for the recommendation, let's do it.

CHAIRMAN KOTELCHUCK: Okay, sounds good. Let's go on.

MR. FARVER: 276.2 is very similar. Actually, it's about exactly the same thing. I will mention that this case was a little confusing. There was a Savannah River workbook, there was an EDCW workbook, there was a final IREP table, and the EDCW tool had some values that were in the final IREP table, but there were some, such as the medical dose, that were not contained in either the Savannah River tool or the EDCW tool, in It's not that they did them calculations. wrong, it's just there was nothing -- there was no tool that documented what they did.

It's not a big deal and it's, like I say, they did the calculations correctly. They didn't show their work. That was the only -- that was an unusual thing about these

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1	files. But, basically, this one can get closed
2	out along with the other one for the same
3	basic reasons.
4	CHAIRMAN KOTELCHUCK: Okay. I think
5	enough said.
6	MR. FARVER: And give me a second
7	here to get these updated.
8	CHAIRMAN KOTELCHUCK: Surely.
9	MR. FARVER: Then I believe we go
10	down to 329.1. And I'll be there in a second.
11	MEMBER MUNN: Unmonitored photon
12	dose.
13	MR. FARVER: Okay, I'm almost with
14	you. I'm going to call up this case so I have
15	it in front of me. I thought I was.
16	329, okay. This is a Savannah
17	River case. It is thyroid cancer, PoC of about
18	47 percent. It looks like the person was an
19	administrative clerk typist, so there's some
20	background.
21	The finding has to do that we
22	contend that they should have assigned an

1	unmonitored photon dose for the years `62 and
2	`66. NIOSH contends that they did correctly by
3	assigning ambient dose.
4	The person worked [identifying
5	information redacted] from `62 to `66, and
6	that's really the time period we're concerned
7	with. But there was no dosimetry data for `62,
8	and no dosimetry data for `66, but there was
9	for the three years in between. So, our
10	contention is well, the job assignment didn't
11	change, the location didn't change, therefore,
12	that should be unmonitored dose, and not just
13	ambient dose.
14	CHAIRMAN KOTELCHUCK: Which would
15	result in what in terms of exposure?
16	MR. FARVER: Probably about 700
17	millirem more.
18	CHAIRMAN KOTELCHUCK: About how
19	much more?
20	MR. FARVER: 700 millirem. And let
21	me go back to if you read through NIOSH's
22	explanation, really, if you get down to the

bottom of it, what they're saying is they assigned the ambient dose because the ambient dose for `62 and `66 was more comparable with the individual's dosimeter dose for those years. Okay?

Now, the catch is that is correct, but they didn't assign just the dosimeter dose, there's a missed dose. Like for 1963, they assigned 5 millirem, because a lot of that was missed dose. So, `63 was 505, `64 was 533, `65 was 283, so these doses are more in line with what you would get with unmonitored dose. So, if you want consistent we think you should go ahead and do the unmonitored dose, and not just cut them back by a factor of 10 and issue an ambient dose. Now, granted a lot of that is missed dose being accounted for. And that's pretty much what it comes down to, two different points of view.

MEMBER MUNN: Yes, it looks like you're right. It's a question of philosophical

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approach, and it's -- I guess one of the questions that we may have gone over in prior discussions, but I don't remember, is whether we have any kind of information from Savannah River Site that would lead us to have any information about why those three intervening years are unmonitored.

many of these sites, by the `60s there were administrative procedures with respect to when, especially non-technical employees, were monitored and when they were not. And although you say there was no change in either the place where this individual worked, the work that or was done, the question that arises for someone who wasn't involved with that particular issue is whether any indication at all have that the assumption that change occurred is no supported.

MR. FARVER: Well, let's just say there's no indication that a change occurred.

MEMBER MUNN: And there's no

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1 indication why the status changed 2 monitored to unmonitored and then back to 3 monitored again. One could make a very good case for assuming that administrative controls 4 concerned 5 everyone over what was 6 involved with badging; there were significant 7 cost and personnel issues. It wasn't necessary -- one would logically not provide badges. At 8 that time, I don't know whether all the badges 9 10 were duplicate badges involving identification as well as dosimetry or not. Do we even know 11 that? 12 13 MEMBER CLAWSON: With Savannah River, they went through several -- this is 14 15 Brad, I'm sorry. They went through different

generations.

MEMBER MUNN: Yes, I know they did. That's why I was asking the question.

MEMBER CLAWSON: But one of my questions on this is: they didn't do it for this time period but then all of a sudden come back to it, is it because they evaluated this

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1	and seeing that yes, it was necessary. You
2	know, it comes back to, you know, we're
3	surmising what they were trying to think back
4	then. I guess my question is: is what is the
5	difference between the two approaches dose-
6	wise? Is there much, or is there substantial?
7	MEMBER MUNN: I thought I heard 700
8	millirem, didn't I?
9	CHAIRMAN KOTELCHUCK: 700 millirem
10	was the answer.
11	MR. FARVER: 700 millirem,
12	something on that ballpark.
13	CHAIRMAN KOTELCHUCK: Yes.
14	MEMBER MUNN: Less than a rem.
15	MR. FARVER: See, according to our
16	report, they only reported annual dose for
17	`63, `64, and `65. That was it, we just got
18	three numbers. So, what do you do for `62 and
19	`66? I mean, is it well, we just assumed that
20	they didn't need it that year, in which case
21	we'd assign ambient.

MEMBER MUNN: Which seems like a

logical assumption.

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MR. FARVER: Does it fall under unmonitored?

MR. CALHOUN: This is Grady, and I don't know, Scott might jump in. And I'm looking at this individually. case [Identifying information redacted]. They were a clerk, didn't -- just always worked in the typing department. So, you know, sometimes you certainly do see that somebody was not in a monitoring program right away when they started their job, and they kind of slacked off at the end between each one. There's not a full year on each end of that period, that's certainly part of it. And it seems odd to me that they would have, you know, not been monitored on both sides of that employment unless there was a reason.

CHAIRMAN KOTELCHUCK: Ιt seems reasonable, but if it's a matter of -- seems reasonable, if but it's matter of professional judgment and neither has the evidence to confirm what was done or what should have been done, seems to me one has to go with claimant-favorability.

SIEBERT: Well, this is Scott, again. We're kind of getting off -- what the actual issue here is: there are only annual reports for this individual. We could not get any badge-specific, any monitoring cycle data for this individual. They only gave us the annual reports. And there are no reports for `62 and for `66. They're left off the report, `63, `64, and `65 are numbers.

We honestly did not know how much the individual was monitored during those years where there are numbers in the report, so we make the assumption that they were monitored the full time frame and assessed missed dose as well as what was on the annual report. So, the fact that there is no reporting for `62 and `66 on this report, we treated it the same as we treat an HPAREH

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report, where, if a year is not mentioned, that is an indication there is no monitoring, whereas, if a year is mentioned and there's a blank space, that is an indication there was monitoring but it was a zero. The same thought process was placed on -- was used for this annual report.

Once again, the fact that we assumed the individual was fully monitored all three of those years where we did assign it is likely claimant-favorable because they're relatively low doses.

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: And we're talking about a clerk typist.

CHAIRMAN KOTELCHUCK: The other is, though, the clerical -- I mean, Wanda indicated the clerical position itself is -- there's been, apparently, a long-term set of issues about whether people like that should be monitored, and how much, how often. So, the clerical -- I mean, the concern is that the

clerical might not have a large exposure but the fact is that they -- well, I'm sorry. This is not leading anywhere.

Well, MEMBER CLAWSON: Ι don't think -- this is Brad. I don't think that we can judge it just on our clerical part of it because I can tell you right now that we have a lot of clerical people that are out in the bases with us as we speak, and they're we've gone around and around about doing monitored and not monitored. They're within 10 feet of us, but they're taking care of the paperwork to be able to process the fuels that dealing with. really we're But Ι worry sometimes about using job titles and stuff like that because they've changed so many times over the years. I know in the labs, to be able to do a lot of these processes, they had a lot of clerical people in there helping with the process. Able to just document, just be able to document the stuff.

MR. FARVER: And for this

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particular case, there's a note in the file about, this person had a damaged dosimeter when they were out in M area distributing some kind of cards, you know, so it was just an administrative task but it was not just located in an admin area.

CHAIRMAN KOTELCHUCK: Right.

MEMBER CLAWSON: And this is my point that I'm trying to get to, is I don't think we can go into that. But I guess what I'm looking for is recommendations from either side, or does this fall onto the Board to make the decision of which way to go?

MEMBER MUNN: I think probably since it's here in front of us, it's more than likely up to us. And we all have different experiences with situations of this sort. My experience with this type of personnel is that even though they might go into other areas, they do not work there as a routine. So, the fact that they're beside me for a couple of days out of 30 doesn't really and truly mean

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1	that their likelihood of exposure is increased
2	by any significant amount.
3	Now, it still returns again, given
4	the information we have, back to the
5	philosophy that you want to take. And it seems
6	to me that the philosophy that's been taken is
7	a perfectly reasonable one.
8	MR. FARVER: I think NIOSH could
9	have chosen a better approach, and let me
10	suggest, based on what we just talked about
11	with IG-001 and using the mean value when you
12	don't know the number of exchange periods like
13	we had in the other finding, if they would go
14	back if they would have done that to begin
15	with, instead of assuming the 11 zeroes a year
16	for those three years, it would essentially
17	cut those doses in half.
18	MEMBER MUNN: Yes.
19	MR. FARVER: Which is probably more
20	reasonable.
21	MEMBER MUNN: Probably is.
22	MR. FARVER: And then add on the
	1

`66 using the same method, 1 `62 and 2 claimant-favorable, probably have а 3 reasonable dose. Now, overall what that's going to do, it would probably lower the dose. 4 MEMBER MUNN: Yes, probably would. 5 6 MR. FARVER: But it's more about 7 method than numbers. And you can see that this is a judgment call. I understand that. 8 Well, 9 MEMBER MUNN: there's an 10 argument to be made in favor of following the 11 procedure that's already established 12 HPAREH, so yes. 13 MR. FARVER: But it's just something, you know, Scott and Grady might 14 15 want to consider. If this comes up again, go 16 back to your mean number of zeroes. I don't know if that's just an efficiency method just 17 to do 11 and call it quits or what, but it 18 19 seemed like you used one method on one case, 20 and another method on another. Probably depends on 21 MEMBER MUNN:

the dose reconstructor and the professional

judgment.

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MR. SIEBERT: This is Scott. I will point out the mean dose value method that's in OCAS-IG-01, that is specifically called out as the best estimate method if it's needed. This case came out, it was 46.99 percent, so these days it would be in the process where we -- we would use probably would the estimate method and would use the median. Back when this was done in 2009, I'm not sure if we were at the time where we switched over to doing best estimate methods starting at percent. There was a time frame we started those at 47 percent, so it's not horrendously surprising to me that they may have used some overestimating assumptions for the years where they assigned them. That does make sense to me.

MR. FARVER: I don't think we can really resolve this. I mean, I'm not sure there's anything this Subcommittee can do. I think it just comes down to judgment.

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1	MEMBER MUNN: Well, it would make
2	sense to me to indicate that existing protocol
3	at the time, IG-001, should be followed. Isn't
4	that rational? Isn't that essentially what we
5	were talking about in our prior cases we were
6	discussing?
7	MR. FARVER: As Scott points out,
8	that's for best estimate cases, and this is
9	not really a best estimate case, and it is we
10	call it a hybrid case. So, they were very
11	generous on the missed dose.
12	MEMBER MUNN: I don't understand
13	that.
14	MR. SIEBERT: I agree if we did
15	this claim today we would use the median
16	method most likely.
17	CHAIRMAN KOTELCHUCK: But we're
18	reviewing it today.
19	MEMBER MUNN: To find it acceptable
20	as is, or suggest that it be reworked.
21	MR. SIEBERT: Well, once again, if
22	we reworked it based the way we do things

today, the dose would actually go down.

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MEMBER MUNN: Yes, I suspect that's the case. It seems rational to me to accept it as is with a comment that today's methods would reduce the dose rather than increase it, and so it's accepted as is.

MR. SIEBERT: Okay.

CHAIRMAN KOTELCHUCK: That seems to capture it.

MR. FARVER: Okay. Let me put something in there.

Scott, this MEMBER CLAWSON: is Brad. I've just got a question. You know, I guess I looked at what this group is kind of here to do and, you know, set up I know there's a difficulty between older cases and how we do them now, but I guess I want to walk away from this one understanding that we've got a different process in line now that's going to make this more rigorous and so forth, because I feel like that what this group is set up to do is to make sure that

we're doing these processes right. So, we have got -- I guess my question, Scott, is do we have a more defined process now in place?

MR. SIEBERT: Yes, we presently have -- if we turn in a claim between 45 and 52 percent it will use fully best estimate methods. That is clearly defined how we work these days, so this issue would not come up in this because case these days the reconstructor would have used best estimate methodologies which would have been the OCAS-IG-01 median.

MEMBER CLAWSON: Okay. Well, I just want to make sure that when we walk away from this case that we have -- you know, that we were doing what we were tasked, and that was to make sure that the process is working the best we can. And I know there's generations of things that we have done through the years, we have gotten better, and better, and better, and I just want to make sure that when we walk away from this one, that we have done that.

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1	CHAIRMAN KOTELCHUCK: Okay. Should
2	we go on?
3	MEMBER CLAWSON: Yes.
4	MR. FARVER: 330.1, I believe.
5	MEMBER MUNN: Say that again, 3
6	what?
7	CHAIRMAN KOTELCHUCK: 329.2 I
8	thought you have here.
9	MEMBER MUNN: 329.2 is where we
10	stopped, I think.
11	MR. SIEBERT: I believe this is
12	closed out. Doug, I didn't hear you very well.
13	What's the next one?
14	MR. FARVER: I'm sorry, I was
15	looking down at my keyboard.
16	MEMBER MUNN: That's where we
17	stopped.
18	MR. FARVER: 329.2, looks like we
19	closed it at the last meeting.
20	CHAIRMAN KOTELCHUCK: Yes, that's
21	right.
22	MR. FARVER: We ended. So, we're

1	back to 330.1.
2	MEMBER MUNN: Dose conversion
3	factors
4	MR. FARVER: 330.1, let me go down.
5	MR. SIEBERT: This issue this is
6	Scott. This issue is identical to 195.1 we did
7	in the last set. It's the rotational isotropic
8	AP geometry issue for DCFs, for the lung,
9	esophagus, red bone marrow and bone surface.
10	MR. FARVER: Exactly.
11	MEMBER MUNN: Looks familiar.
12	MR. FARVER: Only for this case we
13	have a PoC where it's 48 percent, so adding an
14	extra 50 percent to the external could have an
15	impact on this case. The previous case was a
16	compensated case so it really would not have
17	an impact.
18	MR. SIEBERT: Right.
19	MR. FARVER: That's two big
20	differences in these cases.
21	MR. CALHOUN: What step are we on?
22	I'm sorry.

1	MEMBER MUNN: 330.1.
2	MR. CALHOUN: 330.1? Thank you.
3	MEMBER MUNN: Yes. Just one notch
4	down from our ending spot last time.
5	MR. FARVER: And, once again, I
6	didn't find any indication in the file where
7	it was even considered to use the rotational
8	or the isotropic.
9	MEMBER MUNN: So, the real question
LO	here is the same one that we had, really,
11	which is: was the procedure that was followed
L2	the proper one even though there's no workbook
L3	or other tool indication that that is the
L4	judgment that was made. Correct?
L5	MR. FARVER: Correct.
L6	MEMBER MUNN: And I think I've
L7	heard did I not hear reassurance from NIOSH
L8	that this is, essentially, an established
L9	procedure? It's just not defined anywhere that
20	we could find in print. Is that correct?
21	MR. KATZ: Well, what NIOSH said on
22	the previous case was that they were going to

1	follow up and get back to us, so we didn't get
2	any resolution to that one.
3	MEMBER MUNN: Well, it seems the
4	same thing applies here, does it not?
5	MR. KATZ: Yes, I would think so. I
6	mean, Grady, speak up, if it's different.
7	MR. CALHOUN: Well, it's got to be
8	the same, it's the same issue.
9	MEMBER MUNN: That's what I
10	thought.
11	MR. FARVER: Right. And what it's
12	going to come down to, where do you think the
13	person wore the dosimeter? Was it appropriate
14	for the job that the person was doing, because
15	that helps you determine if it was which
16	geometry to use and so forth.
17	MEMBER MUNN: Right.
18	MR. FARVER: But it just comes down
19	to following that section in IG-001. Okay, so
20	we'll just keep this open and I'll put down
21	the same verbiage I had for the last one,
22	which I'll go look up.

1	MEMBER MUNN: It looks like that's
2	appropriate, since we'll be tracking the
3	technical issue elsewhere.
4	MR. FARVER: And since we can only
5	transfer this to Wanda once
6	MEMBER MUNN: One time, yes. You're
7	right, you don't get a second chance on that.
8	MR. KATZ: The transfer didn't
9	relate to this question.
LO	MEMBER MUNN: No, it didn't, it was
11	a technical issue.
L2	MR. FARVER: Now, 330.3, I believe,
L3	is the next one.
L4	MEMBER MUNN: I take that's a
L5	closed?
L6	MR. FARVER: Let me find it, 330.3.
L7	No, we do not consider this closed.
L8	MEMBER MUNN: Because?
L9	MR. FARVER: Because there's an
20	attachment to this matrix. If you go down to
21	the very bottom you'll see that I reprinted
22	OCAS-TIB-007, which talks about how you

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1	determine neutron exposures at Savannah River
2	Site. And the part we're concerned with for
3	this person is Section 3.1, because he was a
4	non-routine worker and this was after 1971.
5	That's the criteria that I was looking at to
6	determine whether or not neutron exposure
7	should be applied.
8	MEMBER MUNN: Okay. So seeing that,
9	then I guess I'm misreading then the response
10	from last time. It says, reviewed NIOSH's
11	response and believe that meets criteria for
12	Section 2. I misunderstood, I guess, the
13	notation.
14	MR. FARVER: We contend that the
15	person should be assigned neutron exposure
16	for, I believe it's `81 through `88, and I
17	have to call up that case, if I can find it.
18	MEMBER MUNN: Well, actually, the
19	response says `82 through `88, and I read the
20	response.
21	MR. FARVER: Okay.
22	MEMBER MUNN: Yes, that doesn't

I guess I was misinterpreting what's there.

MR. FARVER: Okay.

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MEMBER MUNN: You see why I'm confused?

MR. FARVER: No, the response says SC&A reviewed NIOSH's response and believe the EE meets the criteria in Section 3.2 of nonroutine for years `82 through `88. Okay, that is -- those are the correct years. And the `82, I believe that starts when the person went to M area. So, what we look at is -- if you look at the criteria at the very bottom is work location. Is the work location any of the noted in Section 2.1? Yes, then a areas exposure should considered, neutron be providing the other criteria are met. Okay? So, we look at that, and that's the one area there, Section 2.1 talks about areas, particularly 321 M which is what employee mentions Ι believe in -- or spouse mentions in the CATI report.

MEMBER MUNN: Okay. So, it appears

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1	to me then that what we need now is NIOSH's
2	response to this position. Right?
3	MR. FARVER: Okay. I mean, we look
4	to the
5	CHAIRMAN KOTELCHUCK: By the way,
6	the last sentence in the SC&A comment
7	considers this reasonable and claimant-
8	favorable, not but. I'm not quite sure what a
9	"but" means there. It's reasonable "but".
10	MR. FARVER: I believe that's the
11	wording that's in the TIB, because if you look
12	at the very last sentence on the page.
13	CHAIRMAN KOTELCHUCK: If it's "but"
14	reason but not that English is
15	MR. FARVER: Understood.
16	CHAIRMAN KOTELCHUCK: It's not
17	logical.
18	MR. FARVER: I know I all I did
19	was I copied the sentence from the original
20	and put it in there.
21	CHAIRMAN KOTELCHUCK: Okay. Well C-
22	MR. FARVER: I understand.

1	CHAIRMAN KOTELCHUCK: Okay. Yes,
2	yes.
3	MR. FARVER: Basically, we're
4	looking at the work location, we're looking at
5	the job description.
6	CHAIRMAN KOTELCHUCK: Oh, yes, I
7	see. I see, yes.
8	MR. FARVER: Does the employee have
9	a measured proton dose?
10	CHAIRMAN KOTELCHUCK: You're right.
11	I see what you're saying and in that in the
12	text itself it makes sense. Okay.
13	MR. FARVER: At least three
14	criteria were met, so we thought they should
15	have had a neutron dose assigned. I mean,
16	that's
17	CHAIRMAN KOTELCHUCK: Okay. So,
18	NIOSH is going to report back on that?
19	MR. FARVER: They already put out a
20	document. I don't know if they want to discuss
21	that or not. They talk about other things like
22	bioassay and shallow to deep ratio, things

that aren't included in the TIB. And it's not that I'm disagreeing with what they did, I'm disagreeing that if that's what you want your criteria to be, then you should put that in your TIB.

SIEBERT: Well, this is Scott. Once again, this is the fact that the OTIB may not be as prescriptive as it could be, I would agree, but there are discussions in the TIB about bioassay and shallow to deep ratios. They're just not specifically in this portion of the OTIB -- sorry, not the OTIB, it's the TIB, because this is an OCAS TIB, OCAS TIB-7. But once again, this individual did not have any plutonium bioassay during the time frame which if he was working with the plutoniumaluminum targets which were the reason that there could be neutron exposure in the area he would have been monitored for plutonium. Looking at the shallow to deep ratios for the time frame we're talking about in the `80s when he was in M area, the ratios are never in

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range that you would expect. I'm looking at the previous document that we sent in May. His ratios generally hover between 1.4 looked and almost 2. We at some other individuals that we know were in those areas and the ratios were more like 4.3, 4.1, and 2.6, so the shallow to deep ratio does not indicate that.

That's all the information that we had at the time that we gave this to the Subcommittee in May. As some of you probably well know, the Savannah River Working Group has been working tirelessly to work on the TBD on the various other sundry things. As part of that investigation, we've been looking into the use of coworker at Savannah River for various internal components. And as part of that, we've also done a lot of investigation as to what is going on in different areas. And in the last couple of months we have been looking at M area, especially 321 where the were manufactured, there targets does

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appear to have been any of that work after approximately 1980 based on the more recent information and digging into the reports and so on that we've had.

The reason we had it in OCAS TIB-7 all the way through I believe `92, there was still some plutonium in those areas at that time, but our further investigation has found that that seems to be tied in with neptunium work, not the target work. And it's the target work that would be giving any sort of neutron exposure.

So, logically based on the individual's monitoring, lack of plutonium monitoring and what we've significantly found out since then on that specific area, it all backs up how the case was done originally.

Now, I'm not saying that we had the additional information about the plutonium at the time we did the claim. I'm just saying that it appears it was done appropriately based on all the information that we have now.

Even looking back at the time it was done, we knew the individual did not have plutonium monitoring and a shallow to deep ratio just does not bear out to any type of neutron exposures based on that target work. And this individual was fully monitored for photons during the time frame he was working in that area. Clearly, he was working in the area on the uranium fuels that were being made at the time, and it just does not appear that he worked with any plutonium-aluminum targets.

MEMBER MUNN: And is it logical for us to close this item with a note that recent, more recent work by NIOSH and the Site Subcommittee support the assumptions that were made by NIOSH in the original claim approach? Can we do that, or is that presumptuous?

MR. FARVER: I think they need to modify their TIB-7. I mean, if that's the criteria that they want to use, that is clearly not in TIB-7.

MEMBER MUNN: True.

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1	MR. CALHOUN: It is not in that
2	Section of TIB-7.
3	MR. FARVER: It is not under the
4	criteria to determine whether you assign
5	neutron dose or not.
6	MR. SIEBERT: Post-1971, I agree.
7	MR. FARVER: Okay.
8	MR. SIEBERT: It's in the pre-`71
9	direction.
10	MR. FARVER: Okay.
11	MR. SIEBERT: I agree it is not
12	clearly written, and I believe, and Grady can
13	correct me if I'm wrong, but I believe we are
14	present I know we're working on the
15	Savannah River TBD, as we all well know that.
16	I believe we're rolling the information from
17	OCAS TIB-7 into the new TBD, as well, which
18	would negate the OCAS TIB-7, and I'll talk to
19	the TBD owner to ensure that we're clarifying
20	the information in that section.
21	MR. FARVER: Okay. So, you're
22	either going to modify the TBD or TIB-7.

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1	MR. SIEBERT: Yes.
2	MR. CALHOUN: This is Grady, and I
3	think the bottom line is that we wouldn't
4	change our approach. It'll just be more
5	prescriptive.
6	MR. FARVER: Right, and I'm not
7	saying to change your approach, just document
8	your approach. How is that?
9	MEMBER RICHARDSON: This is David
10	Richardson. I've got a question. Is there
11	when you first described this, I thought that
12	actually there was a prescription for an
13	approach and it was a different approach to
14	making the judgment about neutron dose
15	reconstruction. It had to do with work area.
16	Is that correct?
17	MR. FARVER: Yes.
18	MEMBER RICHARDSON: So, that is a
19	problem. It's not that it was vague and not
20	prescriptive, it was prescriptive but

prescribing something which wasn't the action

that was taken.

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1	MR. FARVER: And they used a
2	different prescription.
3	MEMBER RICHARDSON: Yes, so that is
4	to me that's like a quality issue and
5	everything, wasn't following what was
6	prescribed. I mean, whether it was logical and
7	there should have been something else done is,
8	I think, a bigger and important issue, and I'm
9	glad it's going to be addressed. But that
10	distinction needs to be made.
11	MR. FARVER: That was our point,
12	that they didn't follow what was written, but
13	now how to fix that, all I know is that if you
14	don't want that criteria to change your
15	documentation to reflect a criteria you want.
16	Any suggestions on how to close this?
17	MEMBER RICHARDSON: Does this get
18	kicked to Procedures?
19	MR. FARVER: I'm sorry, David, I
20	didn't hear you.
21	MEMBER RICHARDSON: I mean, does it
22	go to Procedures? Is that the place for

1	MEMBER MUNN: I was hoping you were
2	being facetious, David. I don't really think
3	so in this case. I really think we wouldn't
4	have any more to add than what this
5	Subcommittee is debating here. It's going to
6	have to come down to a Subcommittee's finding,
7	I think, one way or the other.
8	CHAIRMAN KOTELCHUCK: I think
9	you're right, Dave.
10	MEMBER MUNN: I've made my
11	suggestion.
12	CHAIRMAN KOTELCHUCK: Your
13	suggestion again, Wanda?
	MEMBED MINN: Mr. G. GOOG T. GOOG
14	MEMBER MONN. My suggestion was
15	MEMBER MUNN: My suggestion was that we close this based on the information
15	that we close this based on the information
15 16	that we close this based on the information that NIOSH has given us with respect to the
15 16 17	that we close this based on the information that NIOSH has given us with respect to the fact that later information about the site and
15 16 17 18	that we close this based on the information that NIOSH has given us with respect to the fact that later information about the site and the activities there have support the

they felt that the information as we read in

the attached note did not -- 007 was not followed in this case. And NIOSH gave us the reasons why they felt that it was not because it wasn't applicable. They were using a different time period, and the instruction was there.

CHAIRMAN KOTELCHUCK: Yes. Wanda, in side you, that we to procedures. Clearly, they were not followed, but based on professional judgment and that the procedures are, in fact, in the process of being changed to reflect what was, in fact, done. As long as the scientific work done by NIOSH was correct as best NIOSH and SC&A can tell, then I don't see anything wrong. support putting a statement in saying that this is reasonable. The most important thing is that the science is sound to the best of our determination and both sides agree, both groups agree.

MR. STIVER: This is John Stiver. Would we want to include a note in the matrix

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to the effect that, you know, the guidance documents are being revised to improve clarity in this, so that we can kind of close the loop at some future date and it doesn't come up again?

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: Someone probably needs to work on the verbiage to make sure that it's agreeable to everyone. Perhaps we could request that NIOSH or SC&A, I'm not sure who's the appropriate individual to be working on that particular wording, but it seems to me that we need to have words in front of us before everyone can agree to it. It's a little too nebulous right now, as we just speak of it verbally.

CHAIRMAN KOTELCHUCK: Well, why don't we leave this open for that verbiage and task somebody for the next meeting to put that verbiage in, and I don't know who is appropriate.

MR. STIVER: This is John, again. I

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believe Mark Griffon wanted SC&A to basically be the keepers of the matrices, so Doug could do it, and certainly we could through email or what not make sure that it's acceptable to Grady and his crew.

CHAIRMAN KOTELCHUCK: Why don't you do that, and then you'll just report back at the next meeting. We'll close it real fast.

MR. STIVER: Okay, we'll do that.

CHAIRMAN KOTELCHUCK: Because we're nearly -- we're essentially resolved, it's just a matter of getting the wording to be acceptable.

CLAWSON: Well, MEMBER Ι have question on this. So, what we're saying is that in -- because I have the same issue that Doug does here. We've got OTIB-7 that's not moved out there, but they're not using it so I guess I would kind of like to see the process that is now in place that is going to correct this, which what are we -- I guess my question SC&A, they've is to have we seen that

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corrected this down the road in the next OTIB, or the next --

MR. SIEBERT: This is Scott. I want to correct a perception here. I'm not going to agree that we did not follow OCAS TIB-7. I will agree that OCAS TIB-7 is written in a somewhat convoluted manner so that t.he 100 application may not be percent straightforward. However, the section where we're talking about post-`71 clearly sends you back to the section where you do talk about pre-`71. And that section does send you to the discussion on plutonium and the discussion of the facility 321 M. It's just not necessarily the easiest to follow, so I just wanted to say that, you know, I think the OTIB or the OCAS TIB does give direction. It's not necessarily written well, but I'm not going to -- I really don't want to agree that we did not follow OCAS TIB-7.

MEMBER CLAWSON: Okay, Scott, I apologize. That was my misconception. I'm not

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1	saying that
2	MR. STIVER: This is Stiver. I
3	think we're in agreement that they followed it
4	appropriately, but that the verbiage is going
5	to be improved in a new iteration of a
6	guidance document. And that's really
7	MR. SIEBERT: We wholeheartedly
8	thank you.
9	MR. FARVER: This is Doug, and I
10	don't agree that they followed it because that
11	takes them right back to Section 2.1, which
12	clearly does not talk about bioassay. I mean,
13	you've done it. There's no word bioassay in
14	Section 2.1, which is what you get referred
15	back to. That strictly talks about work area.
16	They didn't follow the post-`71 guidance.
17	MR. SIEBERT: Section 2.1 bottom
18	under fuel fabrication 300 area, fuel
19	fabrication facility 321 M only during certain
20	time periods, see Section 2.2 for further

CHAIRMAN KOTELCHUCK: Who was that

guidance.

21

1	just speaking?
2	MR. SIEBERT: I'm sorry, that was
3	Scott Siebert.
4	CHAIRMAN KOTELCHUCK: Pardon?
5	MR. SIEBERT: That's Scott Siebert.
6	CHAIRMAN KOTELCHUCK: Okay.
7	MR. SIEBERT: Just quoting the
8	person that
9	MEMBER MUNN: The OTIB.
10	MR. SIEBERT: OCAS TIB-7. It
11	clearly it does send you to Section 2.2.
12	MR. FARVER: This is Doug, I stand
13	corrected. It does for the 300 area. It does
14	send you down there. Correct.
15	MR. SIEBERT: Thank you.
16	MEMBER MUNN: This is why the
17	verbiage is so important.
18	MR. KATZ: Okay, so this is Ted.
19	So, it sounds like you can close it now, and
20	with the recommendation that the verbiage be
21	clarified. There's nothing more to it. Right?
22	CHAIRMAN KOTELCHIICK: That's right

but I think it has to come back to the Committee to approve so that all parties agree.

MR. KATZ: No. Ι mean, you talked through it. I mean, there's nothing more in terms of verbiage. I mean, they don't have to -- this Committee does not have to approve the verbiage in their TIB or whatever it is that we're referring to, the verbiage for instructions. That doesn't need to be done here. I mean, again, you're trying to close out a case. You've determined that the science is fine, and now you've determined that there confusion has been because the some instructions aren't crystal clear. And that's been resolved, and you've determined that they should clarify the language, and you could make that recommendation. But then it seems to me the Dose Reconstruction Subcommittee is done with this issue completely.

CHAIRMAN KOTELCHUCK: Well, who -- they're going to talk to each other, SC&A

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1	folks and NIOSH, and ORAU, I guess.
2	MR. KATZ: No, I mean, there's
3	nothing more to talk about. They've just
4	resolved it.
5	MEMBER MUNN: We've talked it
6	through.
7	MR. SIEBERT: I think we're
8	confusing the verbiage that we're going to put
9	into the matrix with the verbiage that's going
10	to go into the TBD.
11	MEMBER MUNN: Exactly.
12	CHAIRMAN KOTELCHUCK: Right. Okay.
13	MEMBER MUNN: And what we have just
14	said is what needs to be said in the matrix.
15	CHAIRMAN KOTELCHUCK: Okay, fine.
16	MR. KATZ: So, you can close it.
17	CHAIRMAN KOTELCHUCK: Okay.
18	MR. KATZ: They'll follow up with
19	the TBD but that doesn't need to hold the
20	Subcommittee hostage.
21	MEMBER MUNN: Well, we do need to
22	make sure that both the Agency and our

1 contractor agree that the words that 2 putting in the matrix cover the issue. That's 3 my concern. Well, 4 MR. KATZ: I know but you 5 just discussed it. 6 MEMBER MUNN: I know. 7 MR. KATZ: Everyone agrees that the verbiage isn't as clear as possible, and I 8 think I heard Scott say that it's not as clear 9 10 as possible, and they can clarify it. So, that finding is clear and can be written in the 11 12 matrix. 13 MR. SIEBERT: And let's not forget the that transcript of this 14 we have 15 discussion, too. 16 MR. KATZ: Right. I mean, it's -like everything that 17 so, it seems the Subcommittee needs to do is now crystal clear 18 19 in terms of what its findings were. I think 20 you're done with it. There's nothing left for

change

and

the Subcommittee to do. NIOSH can go in in the

its

TBD

future

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but

language,

1	there's nothing more here.
2	MEMBER MUNN: Well, I'm not ever
3	worried about the language in the TBD.
4	MR. KATZ: Right. I mean
5	MEMBER MUNN: My only concern is
6	that if I come back to this finding a year and
7	a half from now and look at the way it was
8	closed, if we don't have something that
9	indicates that at least the Subcommittee
LO	discussed it and everyone agreed that the TBD
11	the TIB was difficult to follow
L2	MR. KATZ: Right.
L3	MEMBER MUNN: but that this
L4	case was done appropriately, then that's what
L5	I think would make everybody happy.
L6	MR. KATZ: Right, Wanda. That's all
L7	I'm saying, is that you just said exactly what
L8	the Subcommittee found, and that's all the
L9	Subcommittee needed to do here.
20	MEMBER MUNN: Yes.
21	MR. KATZ: Yes, okay.
22	MEMBER MUNN: But as long as people

1	agree that that's what we're going to do.
2	CHAIRMAN KOTELCHUCK: Well, we
3	agree we're going to do it. It's just a
4	question of whether the statement ever comes
5	back before the Committee. To my mind, it
6	would take just a couple of minutes to have it
7	come back before the Committee. I think we
8	have resolved the issue, and whether we call
9	it closed or not, we are coming back to this
10	matrix next time, and we can do it very
11	quickly.
12	MR. KATZ: Okay.
13	CHAIRMAN KOTELCHUCK: Let's do it.
14	Let's do it that way. Okay? The statement
15	comes back before the Committee next time.
16	Let's go on.
17	MR. FARVER: Okay. Unless you want
18	me to read it real quick, what I wrote.
19	CHAIRMAN KOTELCHUCK: Okay. You
20	have the statement?
21	MR. FARVER: I have something
22	that's short and sweet, I hope.

1	MEMBER MUNN: Good.
2	CHAIRMAN KOTELCHUCK: Then, if we
3	can resolve it, let's do it. Go ahead.
4	MR. FARVER: The Dose
5	Reconstruction Subcommittee discussed this
6	issue and agreed that the guidance in TIB-007
7	is not clear, but the dose calculations were
8	done appropriately. I could add something
9	about the TIB being revised in the future. No
10	further action from the Committee. Closed.
11	MEMBER MUNN: Well, I don't think
12	you even have to do that. Just, it's closed.
13	MR. FARVER: Closed. The dose
14	calculations were appropriate. No further
15	action.
16	MEMBER MUNN: Yes. Correct.
17	CHAIRMAN KOTELCHUCK: Right. Good.
18	MR. FARVER: Okay.
19	CHAIRMAN KOTELCHUCK: That is
20	closed now. Is that okay, folks? Everybody
21	participating?
22	MEMBER CLAWSON: Yes, this is Brad.

1	MR. SIEBERT: Good with me.
2	CHAIRMAN KOTELCHUCK: Okay, then
3	let's go on.
4	MEMBER MUNN: I have 334?
5	MR. FARVER: 334.
6	CHAIRMAN KOTELCHUCK: Okay.
7	MEMBER MUNN: Looks like it's
8	NIOSH's ball. Incomplete missed photons.
9	MR. SIEBERT: This is Scott. Grady,
10	you want me to this one?
11	MR. CALHOUN: Yes, I always want
12	you to take this one, Scott.
13	MR. SIEBERT: I guess that is a
14	silly question. What we had discussed at the
15	last one, we all believe okay, let's go
16	back. This was an interpretation of when we
17	should be assigning missed dose and when we
18	should be assigning ambient dose for the
19	record for a Savannah River worker.
20	We all agreed that the way this
21	was done, there was an error made and it could
22	have it should have been more clearly

assessed with missed dose as opposed to ambient during certain time frames, and we all agree on that. The only outstanding question was whether this type of issue was going to affect additional claims.

Grady and I talked about this a little bit earlier this week, and it appears that this is a very claim-specific issue in this case because this case had documentation in it where there was visitor badges, routine badges, documentation as to when the dose -actually when the monitoring was during a few years. There was a lot of very case-specific monitoring data in this claim, so it seemed that this issue was affecting this claim and how we dealt with this claim, as opposed to a global how we deal with missed and ambient at Savannah River Site with the records.

MEMBER MUNN: Well, that appears to answer the question that was asked to determine whether other cases were handled in

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1	a similar manner. What I'm hearing is it's
2	case-specific and, therefore, the question is
3	resolved. I assume SC&A has no problem with
4	that.
5	CHAIRMAN KOTELCHUCK: SC&A?
6	MR. STIVER: This is John. I have
7	no trouble with it at all.
8	MR. FARVER: I'm just typing,
9	"NIOSH determined that this is a case-specific
10	issue, no further action is needed, closed."
11	MEMBER MUNN: Correct.
12	CHAIRMAN KOTELCHUCK: Fine. Moving
13	right along., 334.5.
14	MEMBER MUNN: Correct.
15	MR. FARVER: Okay, 334.5 has to do
16	with how they calculate the missed to measured
17	plutonium, the internal plutonium doses. Okay.
18	What the finding is based on is: there were
19	two dose reconstructions done, one in an
20	earlier one, it was a couple of years earlier,
21	and then this one we reviewed. When our

reviewer was looking at it they went back to

the first one and looked at what was done, then looked at the second one that was done, and there were some questions about the MDAs and some of the values used. But what it comes down to in this one, and I'm trying to find a PoC on this --

MR. SIEBERT: About 32 percent, Doug. This is Scott.

MR. FARVER: This is a very low one, so when NIOSH came back did the second dose reconstruction, they used what we'll call efficiency methods, which they calculate the plutonium dose based on the samples, actual samples, and then based on the assumed missed dose, go back and compare the doses for each year and use the highest dose. It's part of their efficiency method. That kind of confused our reviewer, but really, I mean, they give an excellent explanation. It's a little tedious to go through, but actually you go through the whole thing, and it's a very good explanation, and I'm glad they did it because it helps out

1	tremendously. And as we say in our initial
2	response, you know, "Appreciate the detailed
3	explanation and recommend closing the
4	finding." We really don't have anything to
5	add. There's nothing they did anything wrong.
6	CHAIRMAN KOTELCHUCK: Okay.
7	MR. FARVER: They just they
8	overestimated.
9	CHAIRMAN KOTELCHUCK: That sounds
10	good.
11	MEMBER MUNN: So, we're ready to
12	close it.
13	CHAIRMAN KOTELCHUCK: Good, close
14	it.
15	MEMBER MUNN: Subcommittee agrees.
16	Closed.
17	CHAIRMAN KOTELCHUCK: Good.
18	MEMBER CLAWSON: This is Brad, yes.
19	CHAIRMAN KOTELCHUCK: Dave, yes?
20	MEMBER RICHARDSON: Dave, yes.
21	MEMBER MUNN: 334.8. And SC&A
22	should have the CATI.

MR. FARVER: I don't believe we received that.

MR. SIEBERT: This is Scott. I think that getting the updated matrix didn't happen the last couple of days. This is the only one we updated for this matrix. I can address this just verbally, if you so desire.

There is no other CATI. We had a misprint in the first response, so SC&A was looking for a CATI that did not exist, and I apologize for that.

The actual CATI is S4248, rather than S4247, which is at the beginning of the response in the summary. That 4247 really should be a 4248, and look at that CATI which is actually dated in November of 2003 instead of 8, so we had two misprints there. It is on page 8 of that original CATI where incidents that they're asking about described. So, I apologize, I thought that had gotten over to you so you could look at it before this meeting. I don't know if you

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1	honestly may want to be able to just grab it
2	during the break and take a look at it real
3	quick, or how you want to handle that, but
4	that's what the issue was.
5	MEMBER MUNN: It doesn't sound as
6	though there's really anything to handle. It's
7	typographical error, sent people off in the
8	wrong direction, looking for something that
9	wasn't there.
10	MR. FARVER: This is Doug. Beth
11	sent that to me the first thing this morning,
12	that response, so I'll include it in the
13	matrix. And if we take a break, I will try to
14	find it.
15	CHAIRMAN KOTELCHUCK: Okay.
16	MEMBER MUNN: Good.
17	CHAIRMAN KOTELCHUCK: Good.
18	MEMBER MUNN: Great.
19	CHAIRMAN KOTELCHUCK: We've been
20	going a little over an hour since lunch break,
21	or breakfast break, so
22	MEMBER MUNN: Good time to do it.

1	CHAIRMAN KOTELCHUCK: Is this an
2	appropriate time to take a break?
3	MEMBER MUNN: Let's do.
4	CHAIRMAN KOTELCHUCK: Okay, very
5	good. It is 2:37. We will get together at ten
6	minutes of three, our time. Okay?
7	MEMBER MUNN: Yes, great.
8	CHAIRMAN KOTELCHUCK: Okay, see you
9	all at ten minutes of three, Eastern Daylight
10	Time.
11	(Whereupon, the proceedings went
12	off the record at 2:38 p.m. and resumed at
13	2:53 p.m.)
14	MEMBER MUNN: Who was doing the
15	wording for us?
16	MR. KATZ: I think Stiver.
17	MR. STIVER: I pulled up RFP. This
18	is a continuation of Rocky Flats and Los
19	Alamos.
20	CHAIRMAN KOTELCHUCK: So, we just
21	finished SRS. Oh, great.
22	MR. STIVER: A real milestone here.

1	CHAIRMAN KOTELCHUCK: Yes, okay.
2	MEMBER MUNN: We were just going to
3	close 334.8.
4	MR. STIVER: Do we have Mr. Farver
5	back?
6	MR. FARVER: Yes.
7	MR. STIVER: Lead on, my man.
8	CHAIRMAN KOTELCHUCK: Okay, very
9	good.
LO	MR. FARVER: Is Scott on the line?
L1	MR. SIEBERT: I am.
L2	MR. FARVER: Okay. Scott, I went
L3	back and looked at the documents you said, the
L4	summary CATI summary draft document.
L5	MR. SIEBERT: Yes.
L6	MR. FARVER: That does contain
L7	information about the 1979 incident. However,
L8	if you go to the final CATI report, it's not
L9	in there.
20	MR. SIEBERT: Well, wait a minute.
21	MR. FARVER: Somehow it got when
22	it made it to the final CATI report, that
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1	information did not make it.
2	MR. SIEBERT: Give me a second to
3	look at the right sheet. Oh, I already closed
4	dang it. I already closed that to go to
5	Rocky Flats. Give me a second here.
6	MR. FARVER: Sure.
7	MR. SIEBERT: I can't blurt out the
8	NIOSH ID number. Oh, there it is. I believe
9	the CATI summary draft is when they send it
10	out to the person who did the interview and
11	they say, you know, look over this. This is
12	what we believe you told us.
13	MR. FARVER: That was done by three
14	different survivors.
15	MR. SIEBERT: Right. There were
16	three different CATIs, or final CATI reports.
17	MR. SIEBERT: Right.
18	MR. FARVER: Right. But in any of
19	the final ones, I did not find that indication
20	of the 1979 incident. It is in the draft
21	summary, as Scott stated.
22	MR. SIEBERT: I'm just making sure

I see which survivor did that. Okay, I will
agree that it does not appear to be in the
final version.
MR. FARVER: I just thought that
was odd.
MR. SIEBERT: I agree
wholeheartedly that is odd. But, of course, it
is the draft that we used for the claim.
MR. FARVER: Why don't you use the
final?
MR. SIEBERT: The final is not
generated until
MR. CALHOUN: It's not generated
until we send the information to Labor.
MR. SIEBERT: Correct.
MR. CALHOUN: Generate what we call
the ALR.
MR. FARVER: Okay. I did not know
that.
MR. CALHOUN: What usually happens,
and I don't know, maybe we don't need to talk
a whole about it. I don't know what the

1	incident was, but if you know what I'm saying.
2	MR. FARVER: Yes. That explains how
3	we had the misunderstanding. We were looking
4	in the final report because we thought that
5	was the final, and you looked in another
6	report. Okay, now I
7	MR. CALHOUN: The final doesn't
8	exist.
9	MR. FARVER: I understand. I didn't
10	understand that at the time. I understand that
11	now.
12	MR. CALHOUN: But I'm as perplexed
13	as you there, Doug, so
14	MR. FARVER: I would say this is
15	probably a unique case and not something
16	that's going to happen all the time. All I can
17	suggest is for the matrix I'll just put in
18	that it is contained in the one report, but
19	not contained in the other. No further action.
20	I don't know what to do. I don't think there
21	is any action we can take.

CHAIRMAN KOTELCHUCK: Okay.

1	MR. FARVER: Unless anyone has some
2	suggestions?
3	CHAIRMAN KOTELCHUCK: No.
4	MEMBER MUNN: I would suggest we do
5	what we did earlier; namely, identify this as
6	a misunderstanding because of terminology.
7	There was no real problem that existed, and
8	it's closed. The Subcommittee agrees it's
9	closed. It's a single case not likely to
10	affect any other cases, and closed.
11	CHAIRMAN KOTELCHUCK: Okay. Any
12	comments? Okay. Then SRS is closed, the SRS
13	cases are closed. Let's go on to Rocky Flats.
14	MR. FARVER: Okay. Do we have the
15	Rocky Flats on the screen?
16	CHAIRMAN KOTELCHUCK: We do have
17	Rocky Flats on the screen. We haven't gotten
18	to one where
19	MR. FARVER: Okay.
20	CHAIRMAN KOTELCHUCK: there is
21	an issue.
22	MR. FARVER: The last time we

1	talked about this was the November of 2012
2	meeting, in which case, we ended at 253.2.
3	Okay, so here we go. I don't believe we
4	discussed any of this beyond that. I think
5	that's the only time we've talked about this
6	matrix.
7	CHAIRMAN KOTELCHUCK: There we are,
8	yes. So, we simply proceed to the next one?
9	MR. FARVER: We can go through
10	these because we're basically starting from
11	scratch on these others. We haven't discussed
12	them before.
13	CHAIRMAN KOTELCHUCK: Yes.
14	MR. STIVER: Do you want to talk
15	about the observations at all, or just go
16	through the findings?
17	CHAIRMAN KOTELCHUCK: I'm not sure.
18	MEMBER MUNN: Well, let's do
19	findings. For the most part we know that
20	observations are not true findings, they're
21	just comments from our contractor about things
22	that are observations, not real concerns that

must be addressed.

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MEMBER CLAWSON: But define observations, what they are.

Okay. MEMBER MUNN: Define. Observations are something that the contractor has observed and would like to comment on in the process of doing their review. A finding the is something that contractor identified as being an item which could be an which needs to be changed. observation could be positive or negative. It might want -- the Subcommittee might want to follow up on it in some way or not, depending on the magnitude of the considered impact on this and other cases.

Just an observation. You could have done better on this paragraph. That's an observation which could be taken into consideration the next time that particular document or case is looked at, but it doesn't say go back and redo something or you did this wrong. It's an entirely different kind of --

1	entirely different level of concern.
2	CHAIRMAN KOTELCHUCK: So, our
3	screen puts us into the 12th Set 274.1 with a
4	close. So, let's go on to the next finding.
5	MR. STIVER: None of these have
6	been discussed yet, so it might this is a
7	recommendation to close it.
8	CHAIRMAN KOTELCHUCK: I'm not sure
9	if NIOSH and SC&A
10	MR. FARVER: Boy, this is going to
11	be a difficult one, 274.1, and it has to do
12	with the NDRP Data Manipulation. And I
13	personally don't even understand how all that
14	works.
15	CHAIRMAN KOTELCHUCK: What is
16	could you tell me what the letters stand for?
17	MR. FARVER: What does that stand
18	for? Grady, Scott, do you know off hand?
19	MR. SIEBERT: Neutron Dose
20	Reconstruction Project. Rocky Flats went back
21	and recalculated some of their neutron doses
22	to reflect better information.

1	CHAIRMAN KOTELCHUCK: Better
2	information regarding the individual?
3	MR. SIEBERT: I believe it was the
4	process. Mutty, do you happen to have the
5	specifics on that, or Matt?
6	MR. SMITH: Yes, this is Matt
7	Smith. NDRP was an overall effort done
8	separately from this project to reassess the
9	MTA film results for neutron dosimetry at
LO	Rocky Flats. They were fortunate enough to
L1	have actually all of the film in the vaults
L2	from the early years all the way up through to
L3	the transfer to TLD technology. So, they
L4	underwent a project where they got out and
L5	reread the tracks on those films and
L6	reassessed neutron dose for everyone involved.
L7	It is not a simple methodology to
L8	follow. There's a whole separate report or
L9	what they did by itself, and then the Rocky
20	Flats TBD goes ahead and describes how we use
21	that data, as well.

CHAIRMAN KOTELCHUCK: Okay. Then is

1	there any what is the issue, then?
2	MR. FARVER: Okay, let me try to
3	explain it.
4	MR. STIVER: This is John Stiver.
5	I'd just step in for a second. Ron Buchanan is
6	pretty close to Rocky Flats. I'm going to call
7	him and see if I can get him to join in.
8	CHAIRMAN KOTELCHUCK: Okay, good.
9	Thank you.
10	MR. FARVER: Normally, these are
11	the ones I hand off to Ron and then he'll
12	respond back to me in an email saying whether
13	he agrees with NIOSH or not, so I suspect
14	that's what happened in this case.
15	As you can see there was recorded
16	photon doses about 5 2 rem for these years but
17	NIOSH did not assign any recorded deep dose
18	for those years. Now, if you go through what
19	NIOSH their response is, I mean, I can
20	follow that. And that's what I say it comes to
21	it's a result of the NDRP data manipulation.

CHAIRMAN KOTELCHUCK: So, he had C-

the person had recorded 5 rem of photon
radiation, high-energy photon radiation, and
NIOSH did not assign oh, I don't understand
that.
MR. FARVER: Okay.
CHAIRMAN KOTELCHUCK: Somebody had
a recorded dose. NIOSH didn't assign any
recorded dose because of NDRP?
MR. KATZ: We could just skip this
until we can get Ron Buchanan to explain it.
CHAIRMAN KOTELCHUCK: Yes, why
don't we do that? Although we're going into
Rocky Flats now. Right?
MR. KATZ: Yes.
CHAIRMAN KOTELCHUCK: So, they're
all
MEMBER POSTON: Before Dave,
this is John.
CHAIRMAN KOTELCHUCK: Yes.
MEMBER POSTON: Before we leave, I
had a couple of questions. We're talking about
using track film for the neutrons. Is that

1	correct in this situation?
2	MR. SMITH: Yes, it was NTA film.
3	MEMBER POSTON: Yes. Okay. And they
4	went back and reread them. Is that what I
5	understand?
6	MR. SMITH: That's also correct,
7	yes. It was quite a massive effort.
8	MEMBER POSTON: I would have
9	anticipated the doses would have been less
10	than the record originally. Did you see that?
11	MR. SMITH: In many cases the dose
12	went up. They also attempted to deal with what
13	I'll call unmonitored neutron dose. I won't
14	call it missed dose.
15	MEMBER POSTON: Yes, the dose
16	actually went up after when you read the
17	track the next time?
18	MR. SMITH: Well, the overall dose
19	for an individual would tend to go up. As they
20	went through the process and, Mutty, if you
21	want to weigh in, please do. They would
22	attempt to interpolate what kind of neutron

1 dose a person had received for periods where 2 they weren't finding film results for 3 individual. COURT REPORTER: This is the court 4 5 reporter. Who is answering Dr. Poston's 6 questions? 7 MR. SMITH: I'm sorry, it's Matt Smith with ORAU. 8 COURT REPORTER: Thanks. 9 10 MEMBER POSTON: Hey, Matt, how are you? 11 MR. SMITH: Doing okay. 12 MEMBER POSTON: Typically, when you 13 read those films after they've been stored for 14 15 a long time, they actually shrink so the --16 some of the holes may actually disappear. But the other thing that can happen is because 17 they shrink you get more tracks per unit area, 18 19 so -- and I'm trying to figure out -- and 20 then, of course, the gamma dose is simply a blackening that's laid on top of that, or at 21

least it can be. So, if you have enough photon

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1	dose you can actually blacken the NTA film,
2	too. I'm just trying to figure out what you
3	did.
4	MR. SMITH: Yes, just for
5	everyone's reference, I know it's not
6	something we can open up and get into right
7	now, but as these claims continue to be under
8	review that separate report done on this
9	project is available in the database. I'm sure
10	it's referenced multiple times in the Rocky
11	Flats tech basis document, and from there with
12	the reference number you can get into the
13	database and see it.

MEMBER POSTON: Okay.

MR. SMITH: It was quite an undertaking, to say the least.

MR. SIEBERT: This is Scott Siebert. I believe all these -- the methodology for applying the NDRP data and so on was all discussed in the Rocky Flats Working Group ad nauseam. And the process we are using is the approved process from that

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1	discussion, so I just want to point out that
2	this has been discussed a lot in the past in a
3	different Work Group.
4	MEMBER POSTON: I probably
5	shouldn't be commenting, because I'm
6	conflicted with Rocky, so I wasn't on the
7	Working Group and don't know what they
8	discussed.
9	CHAIRMAN KOTELCHUCK: Mark was the
10	Chair, and he's not with us today.
11	MR. STIVER: This is John. I did
12	call Ron and he's going to call in, so he
13	should be online soon.
14	CHAIRMAN KOTELCHUCK: Okay.
15	DR. BUCHANAN: Yes, I'm on line.
16	MR. STIVER: Okay, great. We're
17	still on 274.1?
18	CHAIRMAN KOTELCHUCK: Yes, we are.
19	Somewhat waiting. Can we is there any value
20	in moving on to another case until your
21	colleague gets on?
22	MR. STIVER: He's already on.

1	CHAIRMAN KOTELCHUCK: Oh, okay.
2	Alright. We'll wait.
3	MR. STIVER: I'll send him the
4	matrix so he can be online with us. He's not
5	on Live Meeting, so I'll have to actually send
6	it to him.
7	CHAIRMAN KOTELCHUCK: Okay.
8	DR. BUCHANAN: Okay, yes. This is
9	Ron Buchanan with SC&A. And I'm online
10	CHAIRMAN KOTELCHUCK: Welcome.
11	MR. STIVER: Ron, I'm going to send
12	you an email with the matrix for the Set 10
13	Rocky Flats and Los Alamos. It should be
14	DR. BUCHANAN: Okay.
15	MR. STIVER: there in just a
16	minute.
17	MR. FARVER: And once again, we're
18	not contending that they did anything
19	incorrect. What we found is when we reviewed
20	their answer, they did it correctly. It is
21	just an artifact of the NDRP process. Okay?
22	But it was just odd that you could have a

recorded dose and still not have any assignment of photon dose.

MR. SIEBERT: This is Scott. I would like to point out there was less than 30 KeV photon dose that was assigned in this case as well as the neutron dose. It's just there was no 30 to 250 KeV dose.

MR. FARVER: That's correct. But what prompted the finding is when we looked at this we saw that there was recorded dose data from dosimeters, and then we go to look at the calculations and there is no -- we'll say 30 to 250 KeV dose assigned. Then we are a little concerned, and that's what prompted the finding.

MEMBER POSTON: This is John Poston again. Doug, when you do these can you tell what the source of the low-energy photons is, or do you have to have the whole thing in front of you in order to answer those kinds of questions?

MR. FARVER: When we do our reviews

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1	you mean?
2	MEMBER POSTON: Yes.
3	MR. FARVER: Typically what I do is
4	I start from the dosimeter data and try to
5	replicate their numbers, using the method that
6	I'm aware of. Rocky Flats is different because
7	they do some different things, you know, as
8	you can see under the NIOSH response, so I try
9	and go through the calculations and match
10	their numbers, and that's how I approach it.
11	MEMBER POSTON: Yes.
12	DR. BUCHANAN: Okay. This is Ron
13	Buchanan. I just received your matrix here.
14	MR. STIVER: Ron, we're on page 7
15	of 38, 12 th Set, 274.1.
16	DR. BUCHANAN: 274.1, 12 th Set,
17	Rocky Flats, incomplete assignment of recorded
18	photon dose. Okay. Again, you brought me up to
19	speed. What is it that we what is it we
20	need to be answering here?
21	MR. FARVER: Well, Ron, what you
22	know, the initial findings about the

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1	incomplete assignment of recorded photon dose
2	because the employee had a recorded photon
3	dose in the records for years `63 through `67,
4	but there was no 30 to 250 KeV photon dose
5	assigned by NIOSH.
6	DR. BUCHANAN: Right.
7	MR. FARVER: Now, I believe that's
8	what prompted the finding to begin with.

DR. BUCHANAN: Correct.

MR. FARVER: And when you work through NIOSH's response it comes down to it's just the way that the data was manipulated through the NDRP process. And I know you understand that better than I do.

DR. BUCHANAN: Yes. The NDRP process, the way I understand it, it's been a number of years since I went through that in great detail. However, the NDRP process can add photon dose if they reread the film. They reread all the NTA film and some of the gamma film, and if the gamma film they read results in a greater recorded dose than the original

records, then they add that in. However, and I think I'm probably the one that brought up this finding because I worked on quite a few of these Rocky Flats cases, and there was several of them where there was no 30 to 250 KeV photon dose assigned, and I did not know why when they had a recorded dose.

Now, they did have some -- if they worked in a plutonium facility they did have less than 30 KeV photons assigned, and if I recall right in several cases they had less than 30 KeV photons, and also some greater than 250, but none 30 to 250. And according to the TBD, I believe that it gives a certain percent that should be 30 to 50 KeV.

So, the NDRP process, if the workbook is removing the photon dose for some reason, then that's a problem, that's an issue that we need to address.

MR. SHARFI: This is Mutty Sharfi.

I had to go back to the raw claim to look at this, the response. I think I figured out why

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in this particular claim you see what you're seeing. I think we're confusing the reported 10 dose which includes the neutron and gamma dose. It's a sum dose versus the NDRP dose which has them broken out. So, what happens is when you remove the neutron dose from the pen dose you actually -- outside a couple of places you get some very small gamma doses. Most of it's missed dose so what you see is in the assignment almost all the 30 to 50 KeV photon dose is assigned as missed, and then the actual -- most of the recorded pen dose is actually neutron dose.

DR. BUCHANAN: So, does that explain -- I don't know if this case had it, but some cases would have a greater than 250 and a less than 30.

MR. SHARFI: Sure, you could have some gamma dose, but in this case all the -- in those early years, the individual gamma dose was all basically reported as zeroes with positive NDRP dose. And when you sum them up

1	you get the pen dose, so really in the early
2	years what you have is a lot of missed dose
3	for gamma and assigned neutron dose. That's, I
4	would say, pretty rare in NDRP in a Rocky
5	Flats claim, but that just happens to be
6	what's in this, that they had the cycle data
7	for the gamma. The pen dose is just quarterly
8	summary dose, so what you end up having is a
9	lot of gamma missed dose and positive ND or
10	neutron dose for these early years for this
11	particular claim.
12	CHAIRMAN KOTELCHUCK: So, the SC&A
13	response which really am I correct that the
14	employee had recorded photon deep dose and
15	neutron dose totaling 5.5 rem in the matrix?
16	It says photon deep dose.
17	MR. STIVER: Yes, I think they're
18	summing up the quarterly pen dose.
19	CHAIRMAN KOTELCHUCK: Yes, which is
20	neutrons and photons.
21	MR. STIVER: Correct.
22	CHAIRMAN KOTELCHUCK: Okay. It just

1	doesn't say it in the matrix. But in the SC&A
2	part of the response
3	MR. STIVER: And it may have not
4	been intuitively obvious to them. I don't
5	know.
6	CHAIRMAN KOTELCHUCK: Okay. No, I'm
7	comfortable with what you say. I just it
8	says something different in the matrix.
9	MEMBER MUNN: But the suggested
10	action is to close it and certainly from the
11	Subcommittee's point of view, I can't see any
12	reason why not to.
13	CHAIRMAN KOTELCHUCK: Absolutely. I
14	just I asked the SC&A people. You may want
15	to change that. It's unclear what you wrote,
16	in my opinion. But there's no issue about
17	closing it because it's
18	MEMBER MUNN: It's been recommended
19	by the contractor.
20	CHAIRMAN KOTELCHUCK: Yes. No, no,
21	that's fine. Okay. Let's go on, folks.
22	DR. BUCHANAN: Can I ask just one

1	clarifying question for future audits? So,
2	what you're saying is that the that you can
3	have positive penetrating dose and part of
4	that assigned as missed photon dose in 30 to
5	50 KeV, but you can have assigned greater than
6	to 50 KeV measured dose in the same instance.
7	MR. SHARFI: I'm saying that the
8	pen dose column that they report as quarterly
9	values could be positive, and depending on how
10	the neutron and photon break down, you could
11	have no 30 to 50 KeV, or the dose that you
12	would calculate would be less than the LOD,
13	therefore, we define it as missed.
14	DR. BUCHANAN: Okay, thank you.
15	MR. SHARFI: Does that answer your
16	question?
17	DR. BUCHANAN: Yes.
18	CHAIRMAN KOTELCHUCK: Okay, closed.
19	We'll go on.
20	MR. FARVER: Okay. And I'll work on
21	the wording at the
22	CHAIRMAN KOTELCHUCK: Which is?

1	MR. FARVER: In the workbook it has
2	that listed as final dose. In other words, if
3	you go to the yearly tabs you'll see original
4	dose, you'll see NDRP dose, and then you'll
5	see final dose. And the final dose numbers are
6	the ones that I tabulated to come up with that
7	5.538, I believe.
8	CHAIRMAN KOTELCHUCK: Okay.
9	MR. FARVER: I will make those
10	changes.
11	CHAIRMAN KOTELCHUCK: Appreciate
12	it. Alright, scrolling down, 274.2.
13	MR. FARVER: I'm trying to update.
14	MEMBER MUNN: It looks like it's
15	been adequately answered.
16	CHAIRMAN KOTELCHUCK: I think it
17	has been. In fact, I'm not sure why we're even
18	talking about this
19	MEMBER MUNN: Because we have to
20	look at it as all as a Subcommittee need to
21	agree that SC&A's closure is acceptable.
22	CHAIRMAN KOTELCHUCK: Got it. Okay.

So, good.
MR. FARVER: Right. This is where
that the findings went to NIOSH. NIOSH
responded. We read their responses. If we have
questions about it we would either go back and
ask them, or we would put our recommendation.
You know, this is our streamline process.
CHAIRMAN KOTELCHUCK: Okay.
MR. FARVER: I don't see a lot of
these where we recommend closing it because we
went through and reviewed their responses in
detail, and we understand what they did now.
MEMBER MUNN: Yes, we know
CHAIRMAN KOTELCHUCK: Good, good,
okay. And it's the Committee's response
Subcommittee's responsibility to approve
MEMBER MUNN: We need to fill in
the final column saying we agree with the
recommendation
CHAIRMAN KOTELCHUCK: Yes.
MR. FARVER: There may be some

findings where we don't agree with what they

1	said, and we probably are never going to agree
2	with them. And that's when we'll come back to
3	the Subcommittee and say well, this is what we
4	think, this is what NIOSH thinks.
5	CHAIRMAN KOTELCHUCK: Right.
6	MR. FARVER: We disagree.
7	MEMBER MUNN: Okay.
8	CHAIRMAN KOTELCHUCK: 274.2, close?
9	MEMBER MUNN: Correct.
10	MR. STIVER: Does the Board agree
11	then that this can be closed out?
12	MEMBER MUNN: Yes.
13	CHAIRMAN KOTELCHUCK: Yes.
14	MR. FARVER: Two is closed,
15	observation.
16	CHAIRMAN KOTELCHUCK: While we
17	MEMBER MUNN: We don't need to do
18	that.
19	CHAIRMAN KOTELCHUCK: Right.
20	MEMBER MUNN: No action is
21	necessary. Takes us down to 275.1.
22	Recommendation from the contractor to close it
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1	based on NIOSH response to the finding.
2	MR. FARVER: Correct. This was a QA
3	issue. Basically, they did not use the correct
4	revision of the document of the environmental
5	dose.
6	MEMBER MUNN: The Subcommittee
7	accepts the SC&A recommendation to close.
8	CHAIRMAN KOTELCHUCK: Yes.
9	MR. KATZ: Yes.
10	MR. FARVER: And the same for
11	275.2, part of the environmental dose
12	calculation.
13	MEMBER MUNN: For plutonium 39 and
14	40, and americium. Yes, agree with SC&A
15	recommendation to close.
16	CHAIRMAN KOTELCHUCK: Okay, 300.1.
17	MEMBER MUNN: My word, what luck.
18	I'm certain he's not included in the list of
19	30 KeV photon doses. They agreed with the
20	response from NIOSH, so it appears that the
21	Subcommittee can accept SC&A's recommendation
22	to close.

1	CHAIRMAN KOTELCHUCK: Okay.
2	MEMBER MUNN: Another QA issue.
3	CHAIRMAN KOTELCHUCK: .2?
4	MEMBER MUNN: .2, another
5	recommendation from the contractor. They
6	accept the addition of the photon dose and
7	NIOSH's response is, therefore, correct. Can
8	the Subcommittee accept and close?
9	CHAIRMAN KOTELCHUCK: 301.1.
10	MEMBER MUNN: Same situation.
11	CHAIRMAN KOTELCHUCK: Right.
12	MEMBER MUNN: Subcommittee can
13	recommend can accept and close.
14	CHAIRMAN KOTELCHUCK: Sounds good.
15	Okay, 327.1, let's see what's happening.
16	MEMBER MUNN: Photon energies.
17	CHAIRMAN KOTELCHUCK: 327.1. Let's
18	read that.
19	MR. FARVER: Okay. Are we at
20	this is Doug. We're at 327.1?
21	CHAIRMAN KOTELCHUCK: Yes.
22	MR. FARVER: Okay. Now, I'm not
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1	sure what matrix you're looking at. NIOSH did
2	give a response to this.
3	MR. SIEBERT: Doug, this is the
4	MEMBER MUNN: That's the one I'm
5	looking at but I haven't really
6	MR. SIEBERT: That is NIOSH's
7	response.
8	MR. FARVER: It is?
9	MR. SIEBERT: Yes.
10	MR. FARVER: Okay, so you can see
11	their response with the fractions in Table 6-
12	10. Okay. Basically, the finding came from the
13	fact that Table 6-10 of the Rocky Flats TBD
14	says, "For plutonium facilities you assign, I
15	believe it's 25 percent to less than 30 KeV,
16	and 75 percent to the 30 to 250 KeV.
17	Okay. But that's not what they
18	did. They said they assigned 100 percent to
19	the less than 30 KeV, and 100 percent to the
20	30 to 250 KeV photons. Okay. So, that's the
21	differences that we're talking about here.
22	After rereading their response

several times and going back to the workbooks 1 2 and the TBD, I think I understand what they 3 did, although it's -- I don't think it's very clear in the TBD. I don't know. Scott, Grady, 4 any input on that? Do you feel the TBD is 5 6 clear? I mean, you could understand how we would see where it's 25/75 because that's what 7 the table says in the TBD. Any thoughts on 8 that, Scott? 9 SIEBERT: Well, this is Scott. 10 I'm talking to Mutty. He is going to talk on 11 12 this. I think he's having a difficulty being 13 heard. MR. SHARFI: Can you hear me now? 14 15 CHAIRMAN KOTELCHUCK: Yes, Ι 16 hear you. SHARFI: Alright. I guess if 17 MR. the question is [is] it clear for us, I would 18 19 say yes, but I guess that doesn't really help The problem is the two sections are 20 really covering -- one is covering generic

fields and the other one is covering how you

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assess Rocky Flats. And I think maybe some of the confusion is that Rocky Flats is very unique in the sense of the algorithms they have for their dosimeters is how most sites were just straight up gamma dose is dose, or they have these algorithms that break up their 30 to 50, greater than 250, and their shallow dose. There are all these convoluted algorithms that you use, so the 25/75 split is true if you're talking about generic fields, but when you get to the dosimetry you have to apply it in a different way. So, if you do a lot of the Rocky Flats dosimetry, then I think it makes sense to you, but if you're probably looking from the outside then it's probably more confusing.

MR. FARVER: Well, I agree with you, Mutty, because after rereading this and rereading the documents, that's what I came up with, that it's not a Savannah River where you can just take it and multiply 25, 75, and go with your dose like that.

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1	MR. SHARFI: Correct.
2	MR. FARVER: And I understand what
3	you're saying, but I'm trying to figure out a
4	way to make it a little bit more clear.
5	MR. SHARFI: That's hard given the
6	intricacies of Rocky Flats.
7	MR. FARVER: I'm trying to pull up
8	the TBD real quick and see I thought that
9	maybe if you just named that table different,
10	6-10, to make it clear that it's not like a
11	Savannah River. I mean, you know how they do
12	things at the Savannah River where you have
13	the table of the energy distributions.
14	MR. SHARFI: Correct.
15	MR. FARVER: Right. And Rocky Flats
16	is not like that, I agree. But how do
17	MR. SHARFI: It's I mean, we
18	could look at it the next time we revise the
19	section to try to add some wording. I don't
20	know exactly what I'd tell you right now that
21	I'd add, but
I	

MR. FARVER: I don't know either,

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1	but that is the best I came up with, was
2	trying to add some wording around the table to
3	make it clear that it's not where you can just
4	multiply it by 25 and 75, or 100 percent for
5	the uranium, or so forth. It's different.
6	MR. SHARFI: Yes, then maybe we can
7	add some wording like generic gamma field
8	distributions.
9	MR. FARVER: Right, because right
10	now it says default photon energy
11	distributions, and I read that and I think
12	back to like Savannah River tables.
13	MR. SHARFI: And it's accurate
14	because they are photon energy distributions
15	but you think of photons in the sense of
16	dosimeters.
17	MR. FARVER: Yes, and that's not
18	what this is.
19	MR. SHARFI: It's more generic.
20	MR. FARVER: Right.
21	DR. BUCHANAN: This is Ron. So, you
22	would not use that in dose reconstruction?

1 This is just -- you would not use a generic 2 gamma 25/75 in dose reconstruction? 3 MR. SHARFI: If we're basing it off your actual dosimetry, no, because they have 4 special algorithms to devise the high energy 5 low energy gamma, 6 and so you have to go 7 through that process for the dosimeters. If I was actually using field monitoring data then, 8 yes, I would use the 25/75 split. 9 10 DR. BUCHANAN: Okay. MR. SHARFI: So, I'm not saying you 11 wouldn't use it, just in most cases we're 12 13 using dosimetry data so you wouldn't -- so you don't need it. But if there arose a situation 14 15 that we would be using generic gamma data 16 then, yes, we would apply that kind of split. BUCHANAN: Like radiation 17 DR. а survey instrument kind of thing? 18 19 MR. SHARFI: Yes, exactly. DR. BUCHANAN: Something to that C-20 I know I brought this -- this is 21 because probably my finding. So, yes, if it was worded 22

1	that survey field energy distribution or
2	something as opposed to dosimetry data, then
3	that would be help clarify it.
4	MR. FARVER: I don't think we can
5	fix this but how about if we put down that
6	NIOSH will consider adding
7	MR. SHARFI: Maybe we can clarify
8	that table.
9	MR. FARVER: Yes, adding
LO	clarification to the section containing Table
L1	6.10, I believe, or 6-10. Would that be
L2	acceptable? We're just going to you're
L3	going to consider adding wording to clarify
L4	that Table 6-10 applies to for generic
L5	radiation
L6	MR. SHARFI: Survey data would be -
L7	MR. FARVER: Survey data. It's
L8	applicable to survey data.
L9	MR. SHARFI: I don't have a problem
20	with the next revision. I don't I can't
21	tell you when we plan on revising
22	CHAIRMAN KOTELCHUCK: Sounds okay.

234 1 MEMBER MUNN: But that's probably 2 the best we can do under the circumstances. It 3 looks like you have a technical Catch 22 4 there. 5 FARVER: I mean, when I first 6 read that, I was thinking back to the Savannah

River table where you just take the deep dose and then you multiply it by 25 percent to get the shallow dose and so forth. And that's not

10 the case here, that's a different table.

> MEMBER MUNN: Yes, different application at this site. But as far as I'm concerned, I can't see any other solution other than to accept what's been proposed, that NIOSH will consider attempting clarifying language in the next revision of the document. I can't see what else can be done. It simply needs clarification. It isn't good or bad, it just requires clarification if it can be done. Anyone else have any better ideas?

> KOTELCHUCK: No, CHAIRMAN that's fine.

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1	MEMBER MUNN: It seems the
2	appropriate solution.
3	CHAIRMAN KOTELCHUCK: Others?
4	MEMBER CLAWSON: Well, I was just
5	wondering where this is kind of in NIOSH, is
6	this is that okay for them? I think I heard
7	Mutty say okay, but I just wanted to make
8	sure.
9	MR. CALHOUN: This is Grady. I
10	mean, you know, the fact of the matter is we
11	certainly will consider, you know, any change
12	when we revise the TBD. That's an easy one to
13	commit to because it's just considering
14	MEMBER CLAWSON: And I understand
15	that. I just didn't want us to end up putting
16	words in your mouth, we didn't understand the
17	if it would be hard or not.
18	MR. CALHOUN: No, it's something
19	we'll consider, and it sounds like a
20	reasonable idea.
21	CHAIRMAN KOTELCHUCK: Okay. Then
22	let's go on.

1	MEMBER MUNN: Can we close it?
2	CHAIRMAN KOTELCHUCK: Sounds like
3	it.
4	MEMBER MUNN: Alright.
5	MR. FARVER: Yes, we'll close this.
6	I'm just working on some words.
7	CHAIRMAN KOTELCHUCK: Okay. We'll
8	take a moment, that's fine.
9	MR. FARVER: Okay.
10	CHAIRMAN KOTELCHUCK: 327.2.
11	MEMBER MUNN: We have a
12	recommendation from SC&A.
12 13	recommendation from SC&A. CHAIRMAN KOTELCHUCK: I'd like to
13	CHAIRMAN KOTELCHUCK: I'd like to
13 14	CHAIRMAN KOTELCHUCK: I'd like to read that SC&A response. I'm finding it a
13 14 15	CHAIRMAN KOTELCHUCK: I'd like to read that SC&A response. I'm finding it a little confusing.
13 14 15 16	CHAIRMAN KOTELCHUCK: I'd like to read that SC&A response. I'm finding it a little confusing. MEMBER MUNN: Okay.
13 14 15 16 17	CHAIRMAN KOTELCHUCK: I'd like to read that SC&A response. I'm finding it a little confusing. MEMBER MUNN: Okay. CHAIRMAN KOTELCHUCK: It says there
13 14 15 16 17	CHAIRMAN KOTELCHUCK: I'd like to read that SC&A response. I'm finding it a little confusing. MEMBER MUNN: Okay. CHAIRMAN KOTELCHUCK: It says there was this was this assignment of photon -
13 14 15 16 17 18 19	CHAIRMAN KOTELCHUCK: I'd like to read that SC&A response. I'm finding it a little confusing. MEMBER MUNN: Okay. CHAIRMAN KOTELCHUCK: It says there was this was this assignment of photon coworker photon was done incorrectly and

	NIOSH say that it is it has corrected or is
2	correcting SC&A is correct I'm sorry. I
3	see what it is. SC&A is correct and that is
4	being changed. There's no other so, if it's
5	changed, then there's no other cases where
6	this problem has recurred.
7	MR. FARVER: We have not seen it.
8	CHAIRMAN KOTELCHUCK: Okay, that's
9	fine. I'm ready to close.
10	MEMBER MUNN: Okay, then the
11	Subcommittee
12	CHAIRMAN KOTELCHUCK: Any other
13	Subcommittee Members? We're moving along
14	rapidly, and people should feel free to state
15	their views or concerns, if there are any.
16	Okay, 327.3. Alright.
17	MR. FARVER: Okay, give me a minute
18	until I call up this case.
19	CHAIRMAN KOTELCHUCK: Sure.
20	MR. FARVER: 327.
21	MEMBER MUNN: You put it in our
22	laps. So, the contractor is asking the
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1 Subcommittee have NIOSH -- request that NIOSH 2 formalize practice in their policy statement. 3 FARVER: Okay. For this case, MR. 4 they used the frequency for medical x-rays that is in the TBD. They did not apply actual 5 6 x-ray. 7 MEMBER MUNN: Their response says they do one or the other, but not both. 8 MR. FARVER: Right. 9 10 MR. SIEBERT: Doug, I have a little more information if you'd like. 11 MR. FARVER: Yes, please. 12 13 MR. SIEBERT: This is Scott. Actually, a response to this and 14 we sent another -- for 327.1, as well, back in March. 15 16 Since we didn't discuss this matrix I'm guessing you just didn't transfer those over. 17 18 It's not a huge deal. We have a response that 19 we put in in March that addresses this. First of all, this is an older case and once again, 20 now the present process is we will use actual 21

x-rays when they are available. We will not do

the overestimating assumptions for x-rays any more, and that is policy. So, we already have addressed that, and I believe we've talked about that in this Subcommittee before.

Another portion of this is Rocky Flats has begun, I believe in 2009, they started giving us all the film badge -- not film badge, I'm sorry, film -- the x-ray films in their responses. They were not doing that previous to 2009 which is why we had to do some overestimating in the previous cases.

Now that we are getting actual x-rays from Rocky Flats, we always use the actual x-ray data that we have in the claims. And one last portion to go with that is that is written in the current Rocky Flats dose reconstructor guidance document, so it is documented that we do it that way, as well.

MEMBER MUNN: Which, essentially, closes the issue, but we just don't have it in the matrix yet. Can we make sure that that response --

1	MR. FARVER: Yes, and I'm just
2	MEMBER MUNN: from March gets
3	in there?
4	MR. FARVER: I didn't find it, but
5	I imagine it's on the O: drive. I usually try
6	to get everything downloaded so I have that,
7	but I didn't see it from my March meeting.
8	MR. SIEBERT: It was sent March
9	20 th , but we can send it to you again. That's
LO	not a problem.
11	MR. FARVER: Well, is it something
L2	that was on the that you put on the O:
L3	drive and or was it an email?
L4	MR. SIEBERT: Grady sent it out, so
L5	I believe it was an email.
L6	MR. FARVER: Okay. Yes, if you
L7	would resend that, and then I will add it to
L8	this matrix. Do we want to close it now or
L9	wait for the response to be added?
20	MEMBER MUNN: I think it would be
21	nice for us to get a chance to read the
	lifee for up to get a chance to read the

1	sounds fine to me, but in terms of what goes
2	on the matrix, it's probably a good idea to
3	see it before we
4	MR. FARVER: I agree. We will keep
5	this open pending addition of a previous
6	response.
7	MEMBER MUNN: Yes. I think that's
8	the only thing to do.
9	CHAIRMAN KOTELCHUCK: Okay.
10	MEMBER MUNN: Just to read the
11	response and get it inserted properly.
12	CHAIRMAN KOTELCHUCK: That's 327.3,
13	are we on now?
14	MEMBER MUNN: Correct.
15	CHAIRMAN KOTELCHUCK: Okay. Open
16	for response. Okay, good. Let's go to number
17	what, 327.4?
18	MEMBER MUNN: 4, yes.
19	CHAIRMAN KOTELCHUCK: Uranium.
20	MEMBER MUNN: Another QA finding to
21	which SC&A accepts the NIOSH explanation and
22	recommends closing.

1	MR. FARVER: Yes. I mean, it was a
2	boo-boo.
3	MEMBER MUNN: Yes.
4	CHAIRMAN KOTELCHUCK: Okay.
5	MEMBER MUNN: Can the Subcommittee
6	accept that recommendation and close the
7	finding?
8	CHAIRMAN KOTELCHUCK: Sounds like
9	it.
10	MEMBER MUNN: Good.
11	MEMBER CLAWSON: Yes. This is Brad.
12	MEMBER MUNN: Oh, dear. Let's not
13	get into crystal ball on observation one.
14	CHAIRMAN KOTELCHUCK: Are we
15	talking about LANL? Have we finished Rocky
16	Flats?
17	MEMBER MUNN: Well, it looks as
18	though we're starting out with 245.1, the 11 th
19	Set, and we're into LANL.
20	CHAIRMAN KOTELCHUCK: Wow, fine.
21	We're at LANL, fine. Really what's happening
22	is and this was not the case in recent

1	meetings, was that you folks have talked
2	together, SC&A and NIOSH, and pretty well
3	MEMBER MUNN: Well, that's a part
4	of it. And the other large portion of it,
5	also, is that many of the responses to the
6	matrix just have not been able to get to the
7	surface. We haven't had enough time during the
8	meetings to get this far
9	CHAIRMAN KOTELCHUCK: Right.
10	MEMBER MUNN: into this
11	particular set.
12	CHAIRMAN KOTELCHUCK: That's good,
13	because I read that we had 200 findings to go
14	over according to the tables.
15	MEMBER MUNN: Well, yes.
16	CHAIRMAN KOTELCHUCK: But we're
17	moving right along, so this is fine.
18	MEMBER MUNN: Well, many of them
19	have been looked at and there are responses.
20	We just have been time constrained to how many
21	we can handle each
22	CHAIRMAN KOTELCHUCK: Fine, all is

1	well. Let's now, as we start LANL, it's
2	3:51. We did have a break before until a
3	quarter of 3:00 Eastern Time, so should we
4	continue on, folks?
5	MEMBER MUNN: I think we're good to
6	keep going, unless somebody has a need.
7	CHAIRMAN KOTELCHUCK: Let's go.
8	Okay, very good. 245.1.
9	MR. FARVER: Okay, 245.1.
10	MEMBER MUNN: A QA issue.
11	MR. FARVER: It is, and ambient
12	doses. Let me find it.
13	MEMBER MUNN: Can the Subcommittee
14	accept the SC&A recommendation that this is a
15	quality concern and can close this finding?
16	CHAIRMAN KOTELCHUCK: I can't see
17	the bottom. Okay, fine, thank you. Just
18	finishing up the NIOSH.
19	MR. FARVER: This is Doug. One of
20	the good things I like about when we have a
21	chance to get responses from NIOSH and then
22	look at them is that both parties can take

1	their time and go through the case, and look
2	at things in detail because I know I went and
3	I looked at this case in detail, and I can't
4	remember it right now.
5	MEMBER MUNN: Well, so much time
6	has passed.
7	CHAIRMAN KOTELCHUCK: Right.
8	MEMBER MUNN: We've had most of
9	this matrix filled in for
10	MR. FARVER: Yes.
11	MEMBER MUNN: a number of
12	months.
13	CHAIRMAN KOTELCHUCK: Long time.
14	MR. FARVER: And, as you can see,
15	these explanations get rather complicated.
16	MEMBER MUNN: Yes, they are.
17	CHAIRMAN KOTELCHUCK: Yes. And it's
18	not easy to for us on the Subcommittee, we
19	really can't get into any depth on them for
20	ourselves. On the other hand, we can do a
21	brief look at what you said, and I feel
22	comfortable with it. And I feel like we can

close this.

MEMBER MUNN: I certainly do, I agree.

MR. FARVER: Okay.

MEMBER MUNN: Any argument to the contrary?

CHAIRMAN KOTELCHUCK: Okay.

MEMBER MUNN: Good, closed.

MR. FARVER: 245.2.

MEMBER MUNN: Oh, this brings us back to -- yes, we had quite a discussion at our last meeting about the tools. And we -- I had assumed that we might revisit that again this time, but I don't know what's transpired in the wings in the meantime, whether that discussion has continued off line with respect to the verification and validation process for the tools, or not. Has any of that taken place, or is that an item which we need to specifically put on our agenda as a discrete action for the Subcommittee? I don't know the answer to that.

1	MR. FARVER: Well, it looks like
2	the workbook they used had incorrect values.
3	It appears as though that's been corrected in
4	a revision to the workbook, so that error has
5	been corrected.
6	MEMBER MUNN: But that doesn't meet
7	the standard of concern that was the topic of
8	our discussions earlier.
9	MR. FARVER: Then why wasn't it
10	caught the first time before the workbook was
11	released?
12	MEMBER MUNN: Yes, as in are the
13	tools and validation process really up to
14	snuff? Are they the quality that we
15	MR. FARVER: I think that
16	commission is still out there. I don't think
17	that this answers that question.
18	MR. STIVER: This is John. I can
19	second that. It's one of the things we
20	discussed in one of the Subcommittee meetings,
21	and it's something that should probably be
22	looked at. And to the best of my knowledge, I

1	don't think it has been at this point.
2	MEMBER MUNN: I'm not at all sure
3	that
4	MR. STIVER: Maybe Scott or Grady
5	could weigh in on that.
6	MEMBER MUNN: Yes, I'm not sure we
7	were clear in terms of our direction. I
8	remember we did talk about it, but I'm not
9	sure whether definite action was outlined. If
LO	not, then the Subcommittee certainly needs to
11	do that now, I think.
L2	MR. FARVER: Yes, I don't recall
L3	direct actions being given to or requested of
L4	anyone. I just remember there being a general
L5	discussion.
L6	MR. SIEBERT: I think it was more a
L7	matter of resources, availability. There was
L8	just so much else going on at the time that I
L9	believe I don't want to put words into
20	Stu's mouth, but as I recall it, it just
21	they were going to try to get to it when they

were able to.

MR. CALHOUN: I don't -- this is Grady, and I don't remember taking home a go do.

I don't think MEMBER MUNN: Yes, there was one. That was my concern, that if this is an issue that's of significant magnitude that the Subcommittee really should be pondering it, or giving directions, then we need to address it in a more specific manner than we have so far. But if it's one of those we'll get to it when we get to it kind of point for things, then there's no continue to revisit it. I guess I'm at a loss to know exactly what our action needs to be.

CHAIRMAN KOTELCHUCK: Are you suggesting a report to the Committee to be read by Committee Members and then come back for discussion next time?

MEMBER MUNN: Well, I think it's incumbent on us to try to identify whether we -- I, for one, would like to re-review it. I very quickly went over our transcript from

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last time, but we spent the first few minutes of our meeting last time were devoted to some discussion of the tools, but I don't remember that we went away with any feeling about how that should be addressed, or was going to be addressed. It seemed --

CHAIRMAN KOTELCHUCK: Right.

MR. SIEBERT: Wanda, I'm sorry, this is Scott. I just want to point out, remember this finding and the response are old. They're basically from -- I think we did this first back and forth in the beginning of 2012.

MEMBER MUNN: Yes.

MR. SIEBERT: And since that time, if you remember back in, I believe it was July or August of 2012, we did have that presentation that I gave you guys on our whole quality process and how we work through the various portions of our quality process.

MEMBER MUNN: I do remember that.

CHAIRMAN KOTELCHUCK: Yes.

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MEMBER MUNN: I don't remember applying that to this issue.

MR. SIEBERT: Well, I believe --

MEMBER MUNN: My brain was in two different directions at the time.

MR. SIEBERT: I believe we included in your discussion of tools along with the rest of the quality issue, because I believe Keith also covered some of the processes we use, and the procedures that we use for V&V of the tools, and the tracking of them in our databases on when they get updated and things like that.

We did discuss all that stuff about -- gosh, about a year ago, so I can -- I'm not surprised it's not uppermost in everybody's mind, but at that point I'm not going to say everybody was happy with what the finishing product was, but I know -- as far as I know, there were no additional go dos out of that after the information was presented to the Subcommittee --

1	MEMBER MUNN: No.
2	CHAIRMAN KOTELCHUCK: No, but I
3	don't think it was presented to us. It was
4	presented as informational, and it seemed
5	okay, but I don't recall that we were asked to
6	make a decision. If we are asked to make a
7	decision, then we need to revisit it and think
8	about it. I can't make a decision based or
9	this matrix, it seems to me.
10	MEMBER MUNN: Agreed. And I agree,
11	also, that Scott's presentation was very well
12	received. Yes, I remember.
13	CHAIRMAN KOTELCHUCK: Yes. No, it
14	was I learned a lot.
15	MEMBER MUNN: Yes, it was and I
16	recall that I think your memory is correct,
17	that everyone was pleased with what was there.
18	CHAIRMAN KOTELCHUCK: Yes.
19	MEMBER MUNN: But, certainly, as
20	David says, I wasn't in any way applying it
21	specifically to a finding.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: And perhaps I'll let the Chair decide which way to go with this.

CHAIRMAN KOTELCHUCK: Right. I think -- in fact, what we were pleased with was the overall report.

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: But we weren't asked to think about should we change some of the details, are some of the details problematic. But now at least one of them is, and I feel that somebody has to write a -- has to join the issue, and that suggests a report by somebody, a brief report, maybe, but a report on the issue.

MR. STIVER: This is John Stiver, if I could weigh in for just a minute. It's all coming back to me now. We all were pleased with the -- with what Scott put together. I think one of the things that was still left out there was that well, could we possibly see the results of maybe an audit trail for one of these workbooks. I think the question was if

this is going on and we have this V&V process, why do we keep seeing these errors of the type that were coming up in our DRIs. So, I guess as a follow on maybe something along those lines, maybe --

CHAIRMAN KOTELCHUCK: Yes.

MR. STIVER: What is the actual process, and the record keeping, and so forth, and document control goes into it. Scott's report covered some of that but we never saw any actual examples of it.

CHAIRMAN KOTELCHUCK: Let me ask, which -- for which group is it appropriate to report about this? Maybe Wanda, or you might suggest, or other Members of the Subcommittee. I'm not sure who to ask, if you will.

MEMBER MUNN: Well, it looks as though it's going to have to be a job that at some point NIOSH will need to undertake if we're going to respond to this particular kind of concern. And if we're going to try to resolve it in a Subcommittee then you're

right, we will have to have some additional report probably incorporating, or at least starting from the point of what we've already been presented with, but which I doubt is foremost in any of our minds.

CHAIRMAN KOTELCHUCK: Right.

MEMBER MUNN: So, I hope if the presentation still -- is it available to us in hard copy, I guess, so that we can refresh our memories, and what kind of additional information should be incorporated in a report that might --

MR. KATZ: Well, what Ι could suggest, why don't -- if someone can point me to -- I can go digging, but it would be helpful if someone knows, Scott maybe, when that presentation was given. Why don't I just excerpt the presentation about the workbooks. The Subcommittee can look at that presentation, what was actually said, and then you guys can decide what it is more you want about V&V process with respect to to know

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1	workbooks.
2	MEMBER MUNN: That would be
3	helpful.
4	CHAIRMAN KOTELCHUCK: That sounds
5	good. That's in other words, you're going
6	to look in, for example, the transcript.
7	MR. KATZ: So, we'll just pull the
8	I'll pull the transcript. I'll send it to
9	the Subcommittee. You can see exactly what
LO	discussion you already had on V&V of
11	workbooks, and what was presented to you. And
L2	then you can decide if there's more you want
L3	to know.
L4	MEMBER MUNN: That would be very
L5	helpful to refresh
L6	CHAIRMAN KOTELCHUCK: That's fine.
L7	MR. KATZ: Okay.
L8	MEMBER MUNN: our memories.
L9	CHAIRMAN KOTELCHUCK: And how do we
20	we're going to get it, we're going to read
21	it.

MR. KATZ: Right.

1	CHAIRMAN KOTELCHUCK: Then are we -
2	- and then we'll have a discussion at the next
3	meeting?
4	MEMBER MUNN: Yes.
5	MR. KATZ: Right, right. I mean,
6	you can email each other in between before you
7	get to the meeting about ideas about what you
8	might like to know that you don't know from
9	the transcript, so as far as what you might
10	want to be asking NIOSH to explain more fully.
11	CHAIRMAN KOTELCHUCK: Okay. So,
12	people will get emails from me, Wanda,
13	whomever
14	MR. KATZ: Yes.
15	CHAIRMAN KOTELCHUCK: after we
16	read the transcript, and we'll have a little
17	Committee discussion on the internet.
18	MR. KATZ: Sure. So, Scott, if you
19	have in your records somewhere an easy way of
20	figuring out what date it is when you guys
21	made that presentation, I'll go searching
22	otherwise, but

1	CHAIRMAN KOTELCHUCK: We didn't
2	have that many meetings last year.
3	MR. KATZ: We had a few.
4	CHAIRMAN KOTELCHUCK: Well, we had
5	a few, no, no. But it was in the spring time.
6	Right?
7	MR. SIEBERT: August 6 th , 2012.
8	MR. KATZ: Okay, good.
9	CHAIRMAN KOTELCHUCK: Thank you.
10	MR. KATZ: August 6 th , 2012. I'll
11	excerpt the relevant portion and send it to
12	all of you.
13	CHAIRMAN KOTELCHUCK: Excellent.
14	MR. STIVER: Actually, this is John
15	Stiver. I just found a document from August
16	6 th , 2012.
17	MEMBER MUNN: Very good.
18	MR. STIVER: ORAU team dose
19	reconstruction quality assurance/quality
20	control program.
21	MEMBER MUNN: Excellent, yes.
22	MR. STIVER: This isn't the
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1	presentation, but it's got the overall
2	CHAIRMAN KOTELCHUCK: Good, let's
3	have that, as well.
4	MR. KATZ: Yes. John, go ahead and
5	send that to me, as well. I'll get the
6	transcript, you send me that, I'll send it
7	around to everybody.
8	CHAIRMAN KOTELCHUCK: That sounds
9	fine.
10	MEMBER MUNN: Thanks.
11	MR. KATZ: Okay.
12	CHAIRMAN KOTELCHUCK: Good.
13	MEMBER MUNN: That'll give us a
14	basis for a meaningful discussion next time.
15	CHAIRMAN KOTELCHUCK: Okay. And
16	that with that, I think we can move on,
17	give the people a moment to put their notes
18	together on what we've just decided.
19	MR. FARVER: This is Doug. Now, do
20	you want to close this finding and then put in
21	there that the Committee Subcommittee will
22	have a discussion on the work

1	CHAIRMAN KOTELCHUCK: No, I don't
2	think this is a closure.
3	MEMBER MUNN: No.
4	MEMBER CLAWSON: No, this is not.
5	MR. KATZ: Well, I mean, just
6	but I think what Doug is saying is, I mean,
7	the specific workbook for this case, it was
8	closed. Right? I mean, the workbook was
9	corrected?
LO	CHAIRMAN KOTELCHUCK: Yes.
11	MR. KATZ: Yes, so, I mean, this is
L2	a generic issue now the Subcommittee is
L3	looking at, but the case is closed.
L4	CHAIRMAN KOTELCHUCK: Got it.
L5	MR. KATZ: You've remedied it.
L6	CHAIRMAN KOTELCHUCK: Okay. I see
L7	what you're seeing.
L8	MEMBER CLAWSON: So, what you're
L9	saying, Doug, is for this one it's closed, but
20	the issue is not.
21	MR. FARVER: Correct.
22	MEMBER CLAWSON: Okay, I'm sorry.

1	MEMBER MUNN: Break it out as a
2	broader administrative issue in our next
3	agenda.
4	CHAIRMAN KOTELCHUCK: So, that will
5	be on the upcoming the next agenda, that
6	will be an item on the agenda, specific item.
7	MEMBER MUNN: Right.
8	CHAIRMAN KOTELCHUCK: A discussion
9	of the accounting of medical x-ray doses.
10	MEMBER MUNN: No, actually of
11	MR. KATZ: No, V&V of workbooks.
12	MEMBER MUNN: Verification of
13	review tools
14	CHAIRMAN KOTELCHUCK: Oh, yes.
15	Right, right, V&V workbooks. Okay, moving
16	along, we are about an hour short of
17	finishing. Can we let's just figure
18	folks, can we just go on for the next hour,
19	or actually 50 minutes?
20	MEMBER MUNN: It's okay with me.
21	CHAIRMAN KOTELCHUCK: Very good.
22	Nobody has to catch

1	MR. FARVER: I would like to take a
2	5-minute break, if I could.
3	CHAIRMAN KOTELCHUCK: Fine. Let's
4	take literally a 5-minute break. It's 4:09,
5	get back together at 4:15.
6	MR. KATZ: Yes. Dave, I had an
7	email from John. I don't know if he's still on
8	the line, saying that at 4:00 he had to go.
9	CHAIRMAN KOTELCHUCK: No, I
10	understood that implicitly, but
11	MR. KATZ: Okay.
12	CHAIRMAN KOTELCHUCK: Fine.
13	MR. KATZ: As long as we don't lose
14	another Board Member, because then we don't
15	have a quorum.
16	CHAIRMAN KOTELCHUCK: Okay. Five
17	minutes, folks, at 4:15, six minutes,
18	actually, 4:15.
19	MEMBER MUNN: Very good.
20	CHAIRMAN KOTELCHUCK: Okay, bye-
21	bye.
22	MEMBER MUNN: Do it.

1	(Whereupon, the proceedings went
2	off the record at 4:10 p.m., and went back on
3	the record at 4:18 p.m.)
4	MR. SIEBERT: This is Scott. Can I
5	just throw one thing on our discussion about
6	V&V before we go on?
7	CHAIRMAN KOTELCHUCK: Yes.
8	MR. SIEBERT: As I was digging
9	through the break because I'm a contractor,
10	I don't take breaks I found we also did a
11	follow on presentation about V&V, and other
12	quality concerns as well, in November of 2012,
13	on November 27 th . So that's another date for
14	Ted that he may want to go back and look at,
15	as well.
16	MEMBER MUNN: Good.
17	MR. KATZ: Thank you, Scott.
18	MR. SIEBERT: Sure thing. August
19	6 th and November 27 th .
20	CHAIRMAN KOTELCHUCK: Okay.
21	MR. KATZ: Okay, very good.
22	MEMBER MUNN: So, we're back to

245.3. Right?

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: Okay. Try to take it off mute, that works better.

We're at 245.3. Okay. NIOSH used an incorrect U-234 value for their internal dose. It was off by factor of 100. This is one of those values that's contained in the DR guide. It's not in the TBD, it's in the DR guide. And the value that's in the guide was a factor of 100 times low compared to Table 4-30 of the Technical Basis document.

So, now this comes down to how do you verify that the information in your DR guides is correct if people are going to follow them instead of follow what they're supposed to follow in the TBD? It's another quality issue, but that's how it came about. It was factor 100 lower than what it was listed in the TBD.

MEMBER MUNN: It appears in many ways that this is related to our D&D question

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4	already broken that issue out as a separate
5	one for administrative decision next time, can
6	the Subcommittee accept the SC&A
7	recommendation that this particular item can
8	be closed?
9	CHAIRMAN KOTELCHUCK: Right. NIOSH
10	has made the correction pointed out by SC&A.
11	Right?
12	MR. SIEBERT: This is Scott. Yeah,
13	that's correct, because it's now covered under
14	the LANL SEC during that time frame and no
15	environmental at all is assigned.
16	CHAIRMAN KOTELCHUCK: Okay, then
17	let's close it.
18	MEMBER MUNN: Yes.
19	CHAIRMAN KOTELCHUCK: Comments,
20	folks? Okay.
21	MR. FARVER: 245.4, germanium-68
22	was not included in the dose calculations. And
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with respect to the quality of the tools that

Subcommittee's point of view, since we've

However,

used.

being

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are

there were a few other issues, three issues, I believe. The first one was the Ge-68 was omitted. The second one has to do with the basis for the environmental doses.

Apparently, and I don't know if this is still the same now, but at the time LANL's environmental was based on ORNL's environmental dose. So, that was the second concern.

And the third concern was there were no calculations showing that the cesium137 was the most claimant-favorable as opposed to cesium, or strontium, or both. And I know there's been a new TBD issued in, I believe,
2013. I do not know if these changes have been made from the DR guideline to the TBD.

MR. SIEBERT: I can address them one by one. The germanium dose, that was a dose reconstructor mistake leaving it out. And that is in there and should have been applied and was not, so that was a mistake in this case. So, that is case-specific and we agree

1	that that was an issue.
2	CHAIRMAN KOTELCHUCK: And is this
3	corrected?
4	MR. SIEBERT: Well, it was correct
5	at the time. It's just the dose reconstructor
6	made a mistake.
7	MEMBER MUNN: Okay.
8	CHAIRMAN KOTELCHUCK: And you
9	corrected the dose reconstructor's mistake.
10	MR. SIEBERT: Well, yeah, we
11	looked at what effect it would have on the
12	claim, and there was no effect on
13	compensability.
14	CHAIRMAN KOTELCHUCK: Okay, fine.
15	You put it in. Fine, okay.
16	MR. SIEBERT: The second one being
17	the ORNL environmental values. We agree that
18	that's not appropriate, which is why there was
19	a LANL SEC and we do not assign environmental
20	at LANL pre-`71, which is this time frame
21	that's addressed. So, that has been corrected
22	as well, because there is no environmental at

1	LANL during that time frame per the SEC and
2	the TBD.
3	And the third one, give me a
4	second here. This is one where we're talking
5	cesium-137 versus strontium-90. And I believe
6	it's one of those cases where the dose
7	reconstructor just did not include the
8	additional documentation to prove that they
9	looked at both of them, and they assigned
10	cesium because it was more claimant-favorable.
11	I believe that's the case in this one.
12	CHAIRMAN KOTELCHUCK: Yes.
13	MR. SIEBERT: Which we agree these
14	days we would include that type of comparison
15	to verify.
16	CHAIRMAN KOTELCHUCK: Later you
17	checked it out?
18	MR. SIEBERT: And compared, yeah.
19	CHAIRMAN KOTELCHUCK: Okay. So,
20	what's the recommendation?
21	MR. FARVER: And, Scott, if I read
22	this correctly, under your response to the

1	first item, it says, "After the case was
2	reworked and additional covered conditions
3	were certified, the compensability changed."
4	MR. SIEBERT: Correct.
5	MR. FARVER: So, it went from
6	being non-compensable to compensable?
7	MR. SIEBERT: Not based on this
8	issue, based on the fact that there were
9	additional cancers applied.
10	MR. FARVER: Based on there were
11	additional cancers, yes, I understand that.
12	MR. SIEBERT: Yes, so it's
13	compensable now. There would be no reworking
14	this claim.
15	MR. FARVER: Okay.
16	CHAIRMAN KOTELCHUCK: Okay.
17	MR. SIEBERT: Thank you, Doug,
18	good point.
19	CHAIRMAN KOTELCHUCK: So, that's
20	what needs to be said. Right?
21	MEMBER MUNN: Pretty much.
22	CHAIRMAN KOTELCHUCK: And the

1	so, that would close it.
2	MEMBER MUNN: It would, as long as
3	the statements are incorporated correctly.
4	CHAIRMAN KOTELCHUCK: Right. Do
5	we need to see those statements?
6	MEMBER MUNN: I don't think so.
7	CHAIRMAN KOTELCHUCK: I don't
8	think so either. Others?
9	MEMBER MUNN: We've done a good
10	job so far with closing statements.
11	CHAIRMAN KOTELCHUCK: Yes.
12	MEMBER MUNN: Perhaps this is
13	another one of those that can be compiled.
14	CHAIRMAN KOTELCHUCK: Okay. Do
15	others on the line, do you agree?
16	MEMBER CLAWSON: That would be
17	fine with me. This is Brad.
18	CHAIRMAN KOTELCHUCK: Fine. David?
19	MEMBER RICHARDSON: I believe
20	that's fine.
21	CHAIRMAN KOTELCHUCK: Okay, then
22	we're closed. Now, we will it's close to

1	4:30. At a quarter of 5:00, we'll start
2	talking about schedule for the next meeting.
3	MEMBER MUNN: Yes.
4	CHAIRMAN KOTELCHUCK: But let's go
5	ahead, 245.5, recommendation for closure by
6	SC&A.
7	MEMBER MUNN: Can the Subcommittee
8	accept recommendation of SC&A and close this
9	today?
10	CHAIRMAN KOTELCHUCK: I think we
11	can.
12	MR. SIEBERT: Yeah, the short
12 13	MR. SIEBERT: Yeah, the short answer was there are a couple of extra cancers
13	answer was there are a couple of extra cancers
13 14	answer was there are a couple of extra cancers mentioned in the CATI that we did not apply
13 14 15	answer was there are a couple of extra cancers mentioned in the CATI that we did not apply because we did not DOL did not refer them
13 14 15 16	answer was there are a couple of extra cancers mentioned in the CATI that we did not apply because we did not DOL did not refer them to us until after this claim was done.
13 14 15 16 17	answer was there are a couple of extra cancers mentioned in the CATI that we did not apply because we did not DOL did not refer them to us until after this claim was done. MEMBER MUNN: That's fine.
13 14 15 16 17 18	answer was there are a couple of extra cancers mentioned in the CATI that we did not apply because we did not DOL did not refer them to us until after this claim was done. MEMBER MUNN: That's fine. CHAIRMAN KOTELCHUCK: Was this a
13 14 15 16 17 18 19	answer was there are a couple of extra cancers mentioned in the CATI that we did not apply because we did not DOL did not refer them to us until after this claim was done. MEMBER MUNN: That's fine. CHAIRMAN KOTELCHUCK: Was this a compensated claim?

1	CHAIRMAN KOTELCHUCK: Okay. Then
2	I think we can close it.
3	MEMBER MUNN: Yes.
4	CHAIRMAN KOTELCHUCK: Alright,
5	let's go to the next one.
6	MEMBER MUNN: That's the last of
7	the 245 findings.
8	CHAIRMAN KOTELCHUCK: Whoa, how
9	nice.
LO	MEMBER MUNN: Takes us down to the
11	13 th Set.
L2	CHAIRMAN KOTELCHUCK: Boy, this
L3	may be a nice place to close if we
L4	MEMBER MUNN: It might be, yeah.
L5	CHAIRMAN KOTELCHUCK: Last LANL,
L6	320.1.
L7	MEMBER MUNN: We have
L8	recommendations for closure all the way down
L9	on 320, but I haven't read the
20	CHAIRMAN KOTELCHUCK: Let's look
21	at them. Okay, 320.1, let's take a look at
22	it.

1	MR. FARVER: 320.1, method used for
2	less than 30 KeV photon dose is not apparent.
3	You can read through their description.
4	Basically, it's an uh-oh, it's a QA error. The
5	shallow dose was incorrectly calculated. Not a
6	big dose value, it's not going to change
7	anything. It's just a QA issue.
8	CHAIRMAN KOTELCHUCK: Right, and
9	the status of the case? It won't change much,
10	but
11	MR. SIEBERT: This is Scott. It
12	would actually reduce the dose.
13	MR. FARVER: Yeah. And you're
14	looking at just over 30 percent PoC.
15	CHAIRMAN KOTELCHUCK: Okay. It's
16	not going to change anything. Fine. Should
17	we accept closure?
18	MEMBER MUNN: Yes.
19	CHAIRMAN KOTELCHUCK: Okay. 320.2.
20	MR. FARVER: Consistency in
21	assigning unmonitored coworker doses during
22	different years. NIOSH agrees with the

1	finding. The dose reconstruction assumed the
2	claimant had potential for unmonitored
3	external dose during periods with no reported
4	dosimetry results. Then they go on to talk
5	about modifying the DR guidelines, which the
6	bottom line is when you read through all that,
7	it looks like that those changes should help
8	improve the consistency when they assign
9	unmonitored doses.
10	CHAIRMAN KOTELCHUCK: Okay. I'm
11	getting some the tables there we go. Okay.
12	You ask for closure?
13	MR. FARVER: I don't have an
14	alternative. I mean, I'm not sure what else
15	to do. They've made changes, that should
16	help. I don't know that there's anything else
17	this Subcommittee can do.
18	CHAIRMAN KOTELCHUCK: Alright.
19	Well, if we put in the current modifications
20	then I think we have done what we could do.
21	And we should accept the closure.

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MEMBER MUNN: Agreed.

1	CHAIRMAN KOTELCHUCK: 320.3.
2	MR. FARVER: 321.3 or 320.3.
3	CHAIRMAN KOTELCHUCK: 320.3.
4	MR. FARVER: Number of missed
5	doses for `62 and `67 is incorrect. They
6	forgot a couple of zeroes.
7	MEMBER MUNN: Common human error.
8	CHAIRMAN KOTELCHUCK: Yes,
9	certainly wouldn't affect it.
10	MR. FARVER: No, this would not
11	affect it, but kind of what bothers me about
12	this case is now we're on our third finding
13	for this case, and they look like they're uh-
14	ohs.
15	CHAIRMAN KOTELCHUCK: Yeah, you
16	have been QA you've raised QA issues.
17	MEMBER MUNN: For more than one
18	MEMBER CLAWSON: There's more QA
19	issues on this one dose reconstruction.
20	CHAIRMAN KOTELCHUCK: Yes. That
21	suggests that folks should, on NIOSH's end,
22	should be taking a look at what was done.

1	MEMBER CLAWSON: Doug, this is
2	Brad. When was this one done? Or Scott,
3	whichever?
4	MR. FARVER: 2008, December of
5	2008.
6	MEMBER CLAWSON: We should have
7	been far enough along with what we've been
8	doing.
9	MEMBER MUNN: Oh, I don't know.
LO	Things that were done before 2009 where we
L1	didn't have a lot of formulation in place
L2	but that doesn't change the fact that these
L3	are outright errors.
L4	MR. FARVER: I would have thought
L5	that the peer review would have caught some of
L6	this.
L7	MEMBER MUNN: One would think,
L8	wouldn't you? Yes. This seems like an
L9	unusual number of uh-ohs.
20	MEMBER CLAWSON: Individually
21	these findings are not that significant,
22	especially dose-wise, but they're just kind of

1	you add them all up and it just kind of
2	points you in the wrong direction.
3	MEMBER MUNN: Yes, tolerances are
4	always a bugaboo when there's more than one or
5	two involved.
6	CHAIRMAN KOTELCHUCK: Right. Maybe
7	we close this with a suggestion that to take a
8	look back at that when it was done, where it
9	was done, who was doing it, make sure that
10	things are okay now. I think they are. I
11	mean, I think we've been doing blind dose
12	reconstructions. They have been consistent.
13	MEMBER MUNN: Yes.
14	CHAIRMAN KOTELCHUCK: Nevertheless
15	but this should be closed. From the point
16	of view of our Committee, this should be
17	closed.
18	MEMBER MUNN: Agreed.
19	CHAIRMAN KOTELCHUCK: And I
20	suggest we close it. And we are let's see.
21	Did we get to the point that we could finish
22	up LANL? How far are we from the end?

1	MEMBER MUNN: I think we're almost
2	at the end of 320, anyway, and that's
3	CHAIRMAN KOTELCHUCK: Yes.
4	MEMBER MUNN: We just have two more
5	of 320.
6	MR. FARVER: 320.4.
7	CHAIRMAN KOTELCHUCK: Okay.
8	MR. FARVER: NIOSH used an MDA
9	value instead of one-half of the MDA value.
10	Okay. This is another uh-oh.
11	CHAIRMAN KOTELCHUCK: Yes, it is
12	an overestimate and therefore claimant-
13	favorable, but we don't want to have mistakes.
14	MEMBER MUNN: One more reason to
15	request NIOSH review this again.
16	CHAIRMAN KOTELCHUCK: Yes.
17	MEMBER MUNN: This particular
18	claim.
19	CHAIRMAN KOTELCHUCK: Well, if
20	it's an overestimate, it's not going to change
21	the outcome.
22	MEMBER MUNN: No, but it's still-

1	CHAIRMAN KOTELCHUCK: But it
2	should be reviewed for QA.
3	MEMBER MUNN: Yes.
4	CHAIRMAN KOTELCHUCK: Okay.
5	MR. KATZ: Just to be clear, so
6	would you like I mean, I gather, because
7	NIOSH is on the line, I gather they don't have
8	a response right now. Do you want them to
9	follow-up and see what was going on with this
10	case, with all these QA?
11	CHAIRMAN KOTELCHUCK: I don't have
12	a suggestion that they report to the
13	Committee. I think the Committee just simply
14	suggests to them that they look at this, and
15	if they deem it that they wish to make a
16	report at a future meeting, that's fine.
17	MR. KATZ: Okay.
18	CHAIRMAN KOTELCHUCK: Because
19	these were without negative consequence in all
20	cases that we've just looked at.
21	MR. KATZ: Right.
22	CHAIRMAN KOTELCHUCK: Okay, 320.5.

1	MEMBER MUNN: It's more of the
2	same with respect to the uranium bioassay.
3	MR. FARVER: I believe this one is
4	a little
5	MEMBER MUNN: This one is a little
6	different, yes. This isn't an uh-oh. Yeah,
7	the explanation is a reasonable one.
8	MR. FARVER: They give a good
9	explanation, and really I believe our finding
LO	was based on information in the CATI report.
L1	MEMBER MUNN: They're always
L2	helpful.
L3	MR. FARVER: We've talked about
L4	that before, information in the CATI report.
L5	But they do, they give a good
L6	explanation. And this is a good example of a
L7	case where once they come back with a good
L8	explanation, you can look at that and then go
L9	back and look at the CATI report and look at
20	the other documents and say, well, gee, that
21	makes sense

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MEMBER MUNN: It makes sense.

1	MR. FARVER: And that's what we
2	did, and after doing that we suggest closing
3	it.
4	CHAIRMAN KOTELCHUCK: So be it.
5	MEMBER MUNN: I suggest the
6	Subcommittee accept the recommendation.
7	CHAIRMAN KOTELCHUCK: I do.
8	MEMBER MUNN: Yes.
9	MEMBER CLAWSON: This is Brad, I
10	accept it.
11	CHAIRMAN KOTELCHUCK: Okay.
12	MEMBER MUNN: That brings us to a
13	good closing point, the end of that particular
14	claim.
15	CHAIRMAN KOTELCHUCK: Right.
16	Incorrectly assigned, 321.1.
17	MR. FARVER: Are we going to try
18	and make it all the way through?
19	CHAIRMAN KOTELCHUCK: Let's try
20	to, folks. Can we?
21	MEMBER MUNN: I don't know. I
22	don't think you're going to make it.

1	CHAIRMAN KOTELCHUCK: Okay. Well,
2	nice as it would have been, I don't
3	MEMBER MUNN: Even though
4	CHAIRMAN KOTELCHUCK: We don't
5	want to short shrift any case because we're in
6	a hurry to get ourselves to some arbitrary
7	goal. Should we it is 4:40. We should
8	talk about the next meeting. Where have we
9	ended? We were at 321.1.
LO	MEMBER MUNN: Correct.
L1	CHAIRMAN KOTELCHUCK: Okay, ended
L2	at 321.1. Right? LANL.
L3	MEMBER MUNN: Yes.
L4	CHAIRMAN KOTELCHUCK: Okay, so
L5	we'll finish LANL next time, and we'll
L6	MEMBER MUNN: Yes, we will.
L7	CHAIRMAN KOTELCHUCK: get on to
L8	the last one, which is we did Rocky Flats.
L9	Oh, then we go to other sets. Right? We're
20	on Set 11 LANL.
21	MEMBER MUNN: Correct.
22	CHAIRMAN KOTELCHUCK: We'll go to

1	Set 12, and then to 13. I don't know, next
2	time.
3	Okay. Ted, do you have a
4	suggestion about when we next meet, or do
5	other Subcommittee Members?
6	MEMBER MUNN: Well, that all
7	depends on when we can get together. I think
8	we seem to have
9	MR. KATZ: Well, I guess the first
10	thing to talk about let me just be clear,
11	because I'm not clear, but I gather you are,
12	Dave. So, are we just saying we still have
13	more SRS, all three sites, beyond set I
14	mean, this is Sets 10 through 13. Right?
15	MEMBER MUNN: Yes.
16	CHAIRMAN KOTELCHUCK: Right.
17	MR. KATZ: So, am I understanding
18	correctly, are we about finished with all
19	three sites for all these sets, 10 through 13?
20	CHAIRMAN KOTELCHUCK: I am not
21	clear.
22	MEMBER MUNN: I haven't

1	MR. STIVER: Yes, this is John.
2	For Sets 10 to 13, we've taken these off the
3	books.
4	MR. KATZ: Okay. So, then, I
5	mean, one thing you want to do which will, I
6	think, affect may affect when you schedule
7	your next meeting, the date for that, is
8	you're going to have to pick some more sites
9	so that SC&A and NIOSH will be ready for those
10	sites for the Subcommittee meeting.
11	CHAIRMAN KOTELCHUCK: Right.
12	MR. KATZ: From Sets 10 through
13	13.
14	CHAIRMAN KOTELCHUCK: Yes, that is
15	we finished, let's see, Savannah River.
16	MR. KATZ: So you will have
17	actually finished Savannah
18	CHAIRMAN KOTELCHUCK: Los Alamos,
19	Rocky Flats.
20	MR. KATZ: Los Alamos and Rocky.
21	CHAIRMAN KOTELCHUCK: So, we have
22	Hanford.

1	MR. KATZ: You have a number of
2	other sites and you need to select an adequate
3	sort of bolus of work to take you through at
4	least the next meeting.
5	CHAIRMAN KOTELCHUCK: The sites
6	with more than why well, according to
7	Table 2 that John sent out, we have a number
8	of sites with more than two cases.
9	MR. KATZ: Right.
10	CHAIRMAN KOTELCHUCK: So, starting
11	with Hanford, we have Hanford down to cases
12	with multiple sites. That's quite a large
13	one.
14	MEMBER MUNN: Too big, probably.
15	CHAIRMAN KOTELCHUCK: Right, but
16	let's just go by number. That is, by number
17	of cases we have.
18	MR. SIEBERT: Can I interject
19	something? This is Scott.
20	MR. KATZ: Yes.
21	CHAIRMAN KOTELCHUCK: Yes.
22	MR. SIEBERT: I'm sorry to

	200
1	interrupt but since we are running out of ones
2	that we already have responses to, I just want
3	to put this on the table. I tried to work on
4	the side on some other sites so that we didn't
5	run into this situation.
6	CHAIRMAN KOTELCHUCK: Good.
7	MR. SIEBERT: And just based on
8	the assets that I had available and the dose
9	reconstructors and which sites they were
10	available for, I am personally about halfway
11	already done with Portsmouth and Paducah.
12	CHAIRMAN KOTELCHUCK: Good.
13	MR. SIEBERT: I know they're a
14	little further down the list, but we may want
15	to put those for the next meeting because that
16	is going to be the quickest one for me to turn
17	things around to you, because I'm already
18	about halfway through it.
19	CHAIRMAN KOTELCHUCK: Well, that's
20	good. Okay.
21	MR. KATZ: Scott, I mean, there is

a maximum number of cases. There are six for

1	Paducah, anyway, so that would rise to the top
2	anyway.
3	MR. STIVER: And keep in mind
4	there's only six findings
5	CHAIRMAN KOTELCHUCK: For Hanford.
6	MR. KATZ: Yes. I mean, I think
7	the number of cases I don't know whether
8	you prioritize by cases or number of findings,
9	but so anyway, that seems good.
10	CHAIRMAN KOTELCHUCK: Yes. Right,
11	by number of findings we have well, they
12	run parallel to each other. So you have
13	Paducah and Portsmouth. I would just continue
14	down the table by cases or findings with
15	Fernald.
16	MR. KATZ: So, let's get a sense
17	from Scott then since he's the one
18	CHAIRMAN KOTELCHUCK: What he can
19	do, right.
20	MR. KATZ: We have the findings
21	from SC&A. It's really the work of NIOSH to
22	respond to them. So give us a sense for how

many other sites you can get to for --assuming that we have another meeting -- we can't have one sooner than about a month and a half because we have to do a Federal Register notice.

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: But we could have one as soon as that. So with that in mind, Scott, why don't you just give us a sense. I know you can't commit resources per se, but --

MR. SIEBERT: Ι mean, realistically, Paducah and Portsmouth going to be the first ones that I can get in your hands. I guess those are the only ones we'll really be able to discuss by the next meeting because we'll have to turn them around, give them to Grady, and then I know it'll have to go to SC&A, and they'll want to look at it beforehand. So, that's really pretty much all I can see for the next one.

MR. KATZ: Okay.

MR. SIEBERT: It would be very

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1	helpful to me, however, if the Subcommittee
2	would select which of the next sites you would
3	like, because then I can work on those while
4	they're over at DCAS and SC&A.
5	CHAIRMAN KOTELCHUCK: I know.
6	MR. KATZ: Okay.
7	CHAIRMAN KOTELCHUCK: My feeling
8	is
9	MR. STIVER: Going down the line
10	go for Hanford and Fernald, another 24
11	findings there.
12	MR. KATZ: Yes, and plus, I mean,
13	Fernald is a pretty fresh site in a sense, in
14	terms of I know you folks at ORAU had lots
15	of staff working on Fernald.
16	CHAIRMAN KOTELCHUCK: I mean, to
17	me, it's just we should go in order of number
18	of cases and findings, so that would be
19	Fernald. I mean, I would just go down the
20	list, and if I may suggest Fernald, General
21	Steel, Nevada, X-10.

KATZ:

MR.

22

Well, you've got

Hanford with --

CHAIRMAN KOTELCHUCK: I know we can't get to them all, and I'm not suggesting that you can. You will get to what you can get to. But that just seems to me to be a reasonable sequence, and then we go down to Table 3.

MEMBER MUNN: Well, in light of the comments that have been made, it seems that for next time specifically, since significant progress has already been made on both Paducah and Portsmouth, we should save those for a certainty --

CHAIRMAN KOTELCHUCK: Yes, for sure. Let's do that.

MEMBER MUNN: The comment with respect to Fernald is certainly well taken. It seems to me this would be a good time for us to begin to do that, although I'm conflicted and can't address that. It's a shame to put Hanford off that much longer because there are claims --

1	MR. KATZ: You can't skip Hanford,
2	and shouldn't. But, anyway, it's very clear,
3	the numbers are clear, we know the number of
4	cases. So, Scott, with Dave's direction, I
5	mean, you know the priority order and you will
6	let us know how far you get for agenda
7	setting.
8	CHAIRMAN KOTELCHUCK: Right. And
9	we accept what you will present to us, of
10	course. And I'm sure you're working as hard
11	as you can to get these out. So, we're open -
12	- so, Paducah, Portsmouth, and then we'll go
13	through others if you have others done. Those
14	are the order to work on.
15	MR. KATZ: Right. So, let's if
16	people want to pull their calendars, we can
17	pin down our next
18	CHAIRMAN KOTELCHUCK: Now, our
19	next Board meeting is when?
20	MR. KATZ: The next Board meeting
21	is in September.

CHAIRMAN KOTELCHUCK: In Denver?

22

1	MR. STIVER: That's October, isn't
2	it?
3	MEMBER MUNN: It's October in
4	Denver.
5	MR. KATZ: Okay. No, no, no. I'm
6	talking about a teleconference.
7	MEMBER MUNN: We have a telecom in
8	September.
9	MR. KATZ: Yes.
10	CHAIRMAN KOTELCHUCK: Oh, wait a
11	second. Okay. Go to September
12	MR. KATZ: Right. Don't worry
13	about the next Board meeting. Let's I mean,
14	we just
15	CHAIRMAN KOTELCHUCK: Yes, we have
16	a teleconference in September. Right. And a
17	Board meeting in October.
18	MR. KATZ: Right. But let's just
19	go out again, I need at least so, let's
20	just give us at least six weeks would be the
21	soonest.
22	CHAIRMAN KOTELCHUCK: Okay. Today

1	is the 7 th , so it would be late September at
2	best.
3	MR. KATZ: Let me just
4	CHAIRMAN KOTELCHUCK: And I know
5	there are
6	MR. SIEBERT: The only thing I'm
7	going to point out and I apologize for this
8	I am the resource doing this and I'm also
9	going to be preparing for the Dose
LO	Reconstruction Chair coming out on September
L1	11 th and getting that presentation together
L2	for you, as well.
L3	MR. KATZ: Yes. So, anyway, the
L4	soonest, getting back to this, is September
L5	18 th . So, we plan out from there forward as
L6	to what date
L7	CHAIRMAN KOTELCHUCK: Okay,
L8	September 18 th .
L9	MEMBER MUNN: Is the 25 th a good
20	time?
21	MR. KATZ: The 25 th is fine. It's
22	wide open on me.

1	CHAIRMAN KOTELCHUCK: Let's see.
2	There are always, if you'll excuse, Jewish
3	holidays
4	MR. KATZ: Oh, yes. Right.
5	CHAIRMAN KOTELCHUCK: in that
6	period. I'm not sure we talked about this,
7	so I think I have them down. And the 25 th
8	looks good to me.
9	MEMBER MUNN: Yes.
LO	MR. KATZ: I'll need to check with
L1	Poston and Griffon anyway, because
L2	CHAIRMAN KOTELCHUCK: Wednesday,
L3	the 25 th .
L4	MR. KATZ: But let's pencil in the
L5	25 th . I'll send that out as a suggestion. Why
L6	don't you give me a second date as a backup?
L7	MR. CALHOUN: Right now the 25 th
L8	doesn't look [good] for Beth.
L9	MR. KATZ: Okay.
20	CHAIRMAN KOTELCHUCK: Okay.
21	MEMBER MUNN: On either side of it?
22	MR. CALHOUN: I am gone in

1	Livermore until, let's see, September, let's
2	see, August, September, I am gone until the
3	$18^{\rm th}$, I'm back the $19^{\rm th}$ and $20^{\rm th}$ of September.
4	CHAIRMAN KOTELCHUCK: How about
5	the 24 th ?
6	MEMBER MUNN: Or 26 th ?
7	MR. CALHOUN: Well, Beth is out
8	September 23 rd through October 3 rd .
9	MR. KATZ: Oh, wow.
10	CHAIRMAN KOTELCHUCK: Wow.
11	MEMBER MUNN: Then it sounds like
12	it's either the following week or the 19 th or
13	20 th , huh?
14	MR. CALHOUN: Yes.
15	MR. KATZ: Yes, the 20 th isn't good
16	for me. The 19 th is okay.
17	CHAIRMAN KOTELCHUCK: Let me just
18	see, the 19^{th} not good for me.
19	MR. KATZ: Okay.
20	
	MEMBER MUNN: Okay.
21	MEMBER MUNN: Okay. CHAIRMAN KOTELCHUCK: And the 20 th

1	MEMBER MUNN: Well, but that's not
2	good for Ted, so that means
3	CHAIRMAN KOTELCHUCK: Oh, yes,
4	Ted, you said 20 th is not good. Excuse me, I
5	missed that.
6	MEMBER MUNN: September the 30 th ,
7	or October the 1 st ?
8	CHAIRMAN KOTELCHUCK: Okay, let's
9	see, October
10	MR. KATZ: The 30^{th} is fine for me.
11	CHAIRMAN KOTELCHUCK: It's fine
12	for me, too.
13	MR. CALHOUN: Beth is going to be
14	gone until the 3 rd of October.
15	MEMBER MUNN: Yes, she's going to
16	be gone until the 3 rd .
17	CHAIRMAN KOTELCHUCK: Okay.
18	MR. KATZ: Grady, is she
19	MR. CALHOUN: Yes, she if it's
20	the only way to do it, we can do it without
21	her. We'll just pay for it later.
22	CHAIRMAN KOTELCHUCK: Okay.

1	MEMBER MUNN: For sure.
2	MR. KATZ: Then you make up a
3	backup then to the 25 th . I mean, if she's
4	going to do if she helps with the prep
5	stuff at least, then you would have that
6	before, anyway.
7	CHAIRMAN KOTELCHUCK: September
8	25 th , reconsider?
9	MR. KATZ: Yeah, you want to go
10	back to that?
11	MEMBER MUNN: I think that's
12	CHAIRMAN KOTELCHUCK: I'd be happy
13	to.
14	MEMBER MUNN: ideal timing for
15	us, as long as we're not going to foul up
16	personal preferences.
17	CHAIRMAN KOTELCHUCK: And the
18	backup date you want to make the 24 th ?
19	MR. KATZ: Yeah, whatever is good
20	for you is fine.
21	CHAIRMAN KOTELCHUCK: The 26 th is
22	not good.

1	MR. KATZ: Okay, the 24 th is okay,
2	or the
3	CHAIRMAN KOTELCHUCK: The 24 th or
4	25 th , 25 th or 24 th .
5	MR. KATZ: Okay, the 25 th is the
6	first choice. The $24^{\rm th}$ is the second. And I
7	guess 30 th is third if John and
8	CHAIRMAN KOTELCHUCK: Yes.
9	MR. KATZ: Mark have problems.
10	CHAIRMAN KOTELCHUCK: That's right.
11	MR. KATZ: Okay, I'll do that,
12	25 th , 24 th , 30 th .
13	CHAIRMAN KOTELCHUCK: Okay, and
14	I'll put a tentative 25 th in my book. Will we
15	do it again by Live Meeting?
16	MR. KATZ: Absolutely.
17	CHAIRMAN KOTELCHUCK: Okay. The
18	Subcommittee Members okay with that?
19	MR. KATZ: If that's what we're
20	doing.
21	MEMBER MUNN: That's what we're
22	doing.

1	MR. KATZ: Not really putting it
2	up for vote. I'm not putting it up to vote.
3	CHAIRMAN KOTELCHUCK: Okay. I
4	assume we're talking budget.
5	MR. KATZ: Yes, we're talking
6	budget.
7	CHAIRMAN KOTELCHUCK: Okay, we are
8	talking budget, and that's what it is.
9	MR. KATZ: Actually, we're talking
LO	more than budget because it's actually no
11	we're beyond we're just about beyond the
L2	travel date when
L3	CHAIRMAN KOTELCHUCK: Yes.
L4	MR. KATZ: we don't have any
L5	more travel, anyway.
L6	CHAIRMAN KOTELCHUCK: Yes.
L7	MR. KATZ: Can't book more travel
L8	any more come this Friday.
L9	CHAIRMAN KOTELCHUCK: Yes.
20	MR. KATZ: For the rest of the
21	fiscal year, which ends, you know, October
22	1 st .

1	CHAIRMAN KOTELCHUCK: Okay.
2	MR. CALHOUN: How about Scott? I
3	didn't hear from you. Does that work for you,
4	Scott, because you're very important to me now
5	that Beth is gone.
6	MR. SIEBERT: I am always happy to
7	support you in any manner required, Grady. I
8	will be there.
9	MR. KATZ: Yes, and you're
10	important to all of us, Scott.
11	MR. SIEBERT: Thanks, Ted.
12	MEMBER MUNN: Isn't that a
12 13	MEMBER MUNN: Isn't that a wonderful attitude, gosh.
13	wonderful attitude, gosh.
13 14	wonderful attitude, gosh. MR. KATZ: Okay.
13 14 15	wonderful attitude, gosh. MR. KATZ: Okay. CHAIRMAN KOTELCHUCK: Very good.
13 14 15 16	wonderful attitude, gosh. MR. KATZ: Okay. CHAIRMAN KOTELCHUCK: Very good. Live Meeting it is.
13 14 15 16	wonderful attitude, gosh. MR. KATZ: Okay. CHAIRMAN KOTELCHUCK: Very good. Live Meeting it is. MEMBER MUNN: Alright.
13 14 15 16 17	wonderful attitude, gosh. MR. KATZ: Okay. CHAIRMAN KOTELCHUCK: Very good. Live Meeting it is. MEMBER MUNN: Alright. CHAIRMAN KOTELCHUCK: Starting up
13 14 15 16 17 18 19	wonderful attitude, gosh. MR. KATZ: Okay. CHAIRMAN KOTELCHUCK: Very good. Live Meeting it is. MEMBER MUNN: Alright. CHAIRMAN KOTELCHUCK: Starting up with the 25 th as our

1	CHAIRMAN KOTELCHUCK: Right. I'm
2	C it was a little awesome having closure on
3	so many things.
4	MR. KATZ: It's shocking.
5	CHAIRMAN KOTELCHUCK: It kind of
6	scares me. I hope we did everything right. We
7	certainly tried to.
8	MR. KATZ: I think you did great.
9	MEMBER MUNN: I think so, too.
10	CHAIRMAN KOTELCHUCK: Okay. Folks,
11	you have a very good rest of the week.
12	MR. KATZ: Yes, same to all of
13	you. Take care. We're adjourned.
14	(Whereupon, the proceedings were
15	adjourned at 4:55 p.m.)
16	
17	