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 FOR DOSE RECONSTRUCTION REVIEWS

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MONDAY JANUARY 30, 2017

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The Subcommittee convened via teleconference at 10:30 a.m. Eastern Time, David Kotelchuck, Chair, presiding.

PRESENT:

DAVID KOTELCHUCK, Chair JOSIE BEACH, Member BRADLEY P. CLAWSON, Member WANDA I. MUNN, Member JOHN W. POSTON, Member ALSO PRESENT:

TED KATZ, Designated Federal Official NANCY ADAMS, NIOSH Contractor BOB BARTON, SC&A KATHY BEHLING, SC&A ELIZABETH BRACKETT, ORAU Team RON BUCHANAN, SC&A GRADY CALHOUN, DCAS DOUG FARVER, SC&A JOSH FESTER ROSE GOGLIOTTI, SC&A JENNY LIN, HHS JOHN MAURO, SC&A KEITH McCARTNEY, ORAU Team MUTTY SHARFI, ORAU Team SCOTT SIEBERT, ORAU Team MATTHEW SMITH, ORAU Team JOHN STIVER, SC&A ELYSE THOMAS, ORAU Team

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2		10:33	a.m.

3	Welcome and Roll Call
4	MR. KATZ: This is the Advisory Board on
5	Radiation and Worker Health. It is the Dose
6	Reconstruction Review Subcommittee. And I didn't
7	say the name correctly, but good enough.
8	The agenda for today's meeting is on the
9	NIOSH website under this program's part of the
10	website, scheduled meetings, today's date. You
11	can see the agenda there. I don't believe there
12	are any documents there for folks from the public
13	to follow along but everybody who is associated
14	with the Subcommittee should have the documents
15	they need.
16	(Roll call.)
17	MR. KATZ: Okay. Now let me just ask
18	everyone, members of the public and others, when
19	you are not speaking to the group, please mute your
20	phones, because I can already hear some background
21	noise from folks' phones. If you don't have a mute

22 button, press * and then 6 to mute your phone and

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 please keep your phones on mute.

Also, please do not ever put this call on hold. Hang up and dial back in. If you put it on hold, you will cause problems for everyone else on the call while you are on hold. So please don't do that.

8 And I think with that, it's your 9 meeting, Dave.

10 CHAIR KOTELCHUCK: Okay, very good. 11 Welcome, folks. First, let me just say that I, for 12 a variety of personal reasons, I got the agenda out And Ted had informed me that we 13 fairly late. really have a backlog on issues resolution. 14 And 15 so I did not add the blinds cases this time, and my own feeling, and I'll talk about it later, is 16 that we should add them, some of them next time. 17 But I, therefore, also did not send out 18

19 a note to everybody on the proposed agenda, I know 20 the NIOSH and ORAU people. And I will make sure 21 that I will do that and try and do it in a more timely 22 fashion next time.

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1	Meanwhile, we can go now to the Category
2	2 issues that we have on the DOE sites. So, Rose,
3	do you want to lead off?
4	Review of Outstanding Category 2
5	Issues from Sets 14-18 DOE Sites Matrix
6	MS. GOGLIOTTI: Certainly. Let me
7	just get it pulled up there on the screen.
8	The first issue we have remaining on
9	this in the Type 2 findings
10	CHAIR KOTELCHUCK: A little louder,
11	please.
12	MS. GOGLIOTTI: Okay.
13	CHAIR KOTELCHUCK: Sorry.
14	MS. GOGLIOTTI: Set 418, Observation
15	1. And this is an Albuquerque Operations Office,
16	LANL, NTS and SNL case. Oh, I'm sorry. This is
17	not the first one, but we can do that one first.
18	And on the observation states that we
19	believe drawing a distinction between two entities
20	that are that are co-located for the purposes of
21	distinguishing examination records for EEOICPA
22	goes beyond the intended interpretation of offsite

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1 examinations.

2	What happened with this case was the EE
3	worked at Sandia and had some examinations done at
4	the Sandia Base and the USA hospital of Sandia Base.
5	Now, technically, those are Army facilities. At
6	the time, Sandia was co-located with the Sandia
7	Base, which has since been renamed Kirtland Air
8	Force Base.
9	NIOSH came back and said that they don't
10	believe that those X-rays should be counted,
11	because they were done offsite. And they said that
12	DOL has confirmed that Sandia Base Army Hospital
13	and the Kirtland Air Force Base essentially were
14	not part of covered facilities. However, we think
15	the Board might need to reconsider this issue.
16	CHAIR KOTELCHUCK: Well, it seems to me
17	that if it was checked with DOL and there is a legal
18	opinion that it is not part of covered facilities,
19	then I don't see what choice we have. That is a
20	legal determination about what the law says, not
21	whether the law makes sense or that we agree with
22	it.

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1		MEMBER CLAWSON:	Well,	let's	talk
2	about this	for a second.			
3		CHAIR KOTELCHUCK:	Sure.		

4 MEMBER CLAWSON: These types of things, because this is a problem that we have 5 gotten into at a lot of these sites where they are 6 7 tied in with the military part of it. And in the very beginning of this, the only medical services 8 9 that they had there were through the Army system. Now, if DOL says that's not their --10

11 then where were they getting medical services from?
12 They had to be able to get them from somebody. So
13 I don't see why it wouldn't be counted.

Brad, it's not contesting 14 MR. KATZ: 15 that the medical services -- I mean, in none of these cases, even unrelated to these sites here, 16 when they get their X-rays elsewhere, in none of 17 these cases is it contesting the fact that they need 18 19 them, that they are a good thing, or anything like 20 The point is just the law only covers that. covered facilities and you cannot count radiation 21 2.2 exposures incurred off of a facility at another

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1 location.

2	MS. GOGLIOTTI: Well, and I think that
3	we drew this distinction here because Sandia and
4	Kirtland are co-located. They are on the same
5	site. You don't go you only go through security
6	once when you enter the facility.
7	CHAIR KOTELCHUCK: Ted, let me ask you
8	this. Ted, it says the DOL has confirmed. I
9	assume the DOL has confirmed after discussing it
10	with their legal counsel, right, that this is a
11	legal opinion, not a staff opinion of non-lawyers.
12	MR. KATZ: Dave, I mean, and I don't
13	mean to be speaking for Grady or whoever made the
14	contact, but we don't go to DOL's legal staff to
15	get resolution about covered facilities. We just
16	go to our normal program contacts at DOL and they
17	are perfectly reliable. They know what's a
18	covered facility and what's not.
19	When there are issues related to
20	whether something should be a covered facility or
21	not, we raise those and DOL raises those then with
22	their legal staff and so on. I don't know whether

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there's a review here, but in any event, when DOL 1 responds that this is not a covered facility, it 2 3 makes no difference. It makes no difference whether the premises, there's a larger premises on 4 which both facilities exist. The facility has to 5 be a covered facility for us to count the radiation 6 7 exposure.

I mean, Grady, again, I have not been involved in this but I'm assuming that's what happened, because if it's not a covered facility, that is an easy thing to determine. And there is really no taking it any further, other than raising issues where there's, you know, maybe an issue to be raised and we do that.

MR. CALHOUN: That's correct, Ted. I mean, it's one of those times that we have kind of got to go with what they tell us.

18 CHAIR KOTELCHUCK: Well, then I think 19 there's, honestly, I believe there's nothing more 20 to consider. And I'd ask the other Members of the 21 Subcommittee if they agree. Are there objections 22 or comments from other Subcommittee Members,

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1 besides Brad?

2	MEMBER BEACH: The only thing I would
3	say is I agree with the conversation. However, if
4	a covered facility is sending their people to an
5	uncovered facility, that's another issue. But I
б	don't think this
7	CHAIR KOTELCHUCK: Yeah, yeah. Okay,
8	then I think we should any others? I think we
9	should go on to the next Category 2.
10	MS. GOGLIOTTI: Okay. The next one
11	here is 359.3. This one, the finding, we have
12	actually talked about this at several meetings
13	previously. The finding was there was no evidence
14	of raffinate removal.
15	And the last meeting that we discussed
16	this at was June 16th and NIOSH provided us a
17	reference justifying using raffinate. And at the
18	meeting we decided that if the reference was in fact
19	cited in dose reconstruction, then we would
20	withdraw the finding. And SC&A has confirmed that
21	it was cited in the reference. And so on that
22	basis, we agree that the finding can be withdrawn.

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Okay, very good.

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2 Any comments from Subcommittee Members, any 3 further comments? Otherwise, I think that that is That, essentially, has become a 4 settled. Right? Category 1. 5 MS. GOGLIOTTI: 6 Yes. With these, I 7 haven't gone back and reclassified. CHAIR KOTELCHUCK: Oh, no, and there's 8 9 There's no need to. This is an no need to. 10 administrative categorization that just allows us 11 -- so, no, no, you don't need to. 12 MS. GOGLIOTTI: Ι initially When 13 classified them, if something has changed since it's still reflected in 14 then, the original classification. 15 16 CHAIR KOTELCHUCK: Sure, absolutely. Alright, let's go ahead. 17 MS. GOGLIOTTI: Okay, the next one is 18 19 435, Observation 1. And this is a Brookhaven National Lab case. 20 And for this case, the 21 observation states that we tried to replicate the

CHAIR KOTELCHUCK:

22 dose results for the 1985 technetium-99m

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However, version 4.09 of IMBA does 1 inhalation. not have that radionuclide available and we could 2 3 not, therefore, confirm the results. And we have still not been provided this 4 And actually we requested it some time 5 software. I believe it was over a year ago now. 6 aqo. 7 MR. CALHOUN: I'll check on that. Т had let that completely fall off my radar and that 8 9 has been a long time ago. I'll find out what the 10 status of that is. 11 MS. GOGLIOTTI: Okay, that would be 12 great. 13 CHAIR KOTELCHUCK: Okay, so this will 14 remain open. Okay. 15 MS. GOGLIOTTI: Okay. And the next one is 436.2. And this is also a Brookhaven 16 National Lab case. 17 18 Right. CHAIR KOTELCHUCK: 19 MS. GOGLIOTTI: And the finding states that the assignment of shallow dose is not clear. 20 There was no shallow dose reported in the dosimetry 21 2.2 files. And here NIOSH only assigned a half a

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period of shallow dose for the year 1968, and we
 really couldn't figure out what was going on.

3 And NIOSH did respond. They say that the reporting practices at BNL show photon and 4 neutron doses, and if there were shallow doses 5 greater than the photon doses, those would be 6 reported on the table. Shallow doses are reported 7 only for guarters with positive values, and for 8 9 this claim there were no shallow dose values shown in the table. 10

11 They interpret that to mean that there 12 is no shallow dose readings greater than the photon 13 doses. And, therefore, no reported shallow dose 14 should be assigned, according to them.

And to us, it appears that there is a certain degree of judgment there and it might be beneficial to discuss it.

18 CHAIR KOTELCHUCK: A little louder,19 please.

20 MS. GOGLIOTTI: To us, we believe that 21 there's a certain degree of professional judgment 22 involved that might not have been

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claimant-favorable in this case and we recommend
 discussion.

3 CHAIR KOTELCHUCK: Okay. Rose, this is Bob. 4 MR. BARTON: Ι think this one was one of my cases from a while back. 5 And I was just curious because, like you said, 6 7 shallow dose has been assigned for, I think, one-half of one badging cycle and then nothing was 8 assigned. And based on the response it sounds like 9 at least a missed dose should be assigned or a 10 11 shallow dose should be assigned equal to whatever 12 the photon is. Because saying that failure to report it if the shallow dose is greater than the 13 photon dose, that's fine, but I think in this 14 15 particular case, except for that one-half of one badging cycle, no shallow dose was assigned at all. 16 I mean, just based on the response from 17 18 NIOSH, it sounds like what they are saying is, yes, 19 there's no reported accrued shallow dose because they wouldn't put that in the record unless it was 20 greater than the photon dose, not that there was 21 2.2 no shallow dose that was exposed to the actual

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worker. That's where we were confused.

And the fact that there was that one small badging period assigned, it really had us kind of scratching our heads. So I think originally we thought that maybe it was just an omission and that it should have been assigned and it didn't make it in there.

And I'm not sure if NIOSH can kind of 8 9 clarify their response, but it looks like for this case there should have been some shallow dose 10 11 assigned, either equal to whatever the photon dose 12 was or missed dose or something. Because as they 13 say, the lack of the record there doesn't mean they weren't monitored. And if they were monitored, 14 15 there should at the very least be a missed dose, I would think. 16

17 CHAIR KOTELCHUCK: Other comments,18 Subcommittee Members?

MR. CALHOUN: Anything from Scott out
there?
MR. SIEBERT: Sorry, it's a site that

22 I have an issue with. So I'm working with somebody

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1 to try to come up with this. Since we started this really early in the meeting, they are trying to find 2 3 the files at the moment. I apologize. CHAIR KOTELCHUCK: Would it make sense 4 Well, let's just wait a to come back to this? 5 minute or two or would you suggest that we come back 6 7 to this a little later in the discussion? MR. SIEBERT: Just a second, I'm trying 8 9 to get an answer to that. 10 CHAIR KOTELCHUCK: Sure. I interpret 11 that to mean that they're actively looking right 12 now. 13 MR. SIEBERT: Exactly. During the interim, I 14 MR. CALHOUN: 15 went back and looked at that offsite X-ray, the 16 actual reference. And that was posed to DOL in May of 2015 and they clarified that the X-ray facility 17 18 was offsite. So, just a little extra piece of 19 information there. CHAIR KOTELCHUCK: Okay, thank you. 20 MR. SIEBERT: Yeah, can we either come 21 2.2

back to this a little bit later today -- we're

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1 trying to -- the site expert is not on at the moment. 2 CHAIR KOTELCHUCK: That's fine. 3 That's no problem. And I'll let you know as 4 MR. SIEBERT: soon as we either get him on or if we have to wait 5 until the next meeting. I apologize for that. 6 7 CHAIR KOTELCHUCK: No, not at all. Not at all. That's fine. 8 9 Okay, so 436.2, we'll try to come back 10 to, and go on to the next Category 2 case. 11 MS. GOGLIOTTI: Okay, the next one is 12 421.2. 13 CHAIR KOTELCHUCK: Pardon? 421.2, a BWXT case. 14 MS. GOGLIOTTI: 15 And we have also discussed this one previously. 16 Here, the finding states that the EE reported the examination frequency was not considered. 17 And initially NIOSH provided us with a 18 19 response in a document. And when we reviewed that document, we found that it did not provide us enough 20 evidence to deny the CATI's claim. And so based 21 2.2 on that, NIOSH went back to the table and looked

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back into this. And they did a study on past cases 1 for BWXT and were unable to find any evidence that 2 3 there was X-rays done onsite. So, based on that study, we agree that 4 it was unlikely that X-rays were done onsite. 5 And it can be closed, provided we get a commitment to 6 7 update OTIB-79 to reflect that. CHAIR KOTELCHUCK: Okay. Another 8 9 issue about onsite and offsite. That makes sense, 10 then. 11 Is there anybody on the Subcommittee 12 that wants to comment? Otherwise, we will just 13 accept it as a Subcommittee. 14 MS. GOGLIOTTI: If we could get a 15 commitment, also, to include that in OTIB-79. CHAIR KOTELCHUCK: 16 Pardon? MR. SIEBERT: That is our plan. 17 That 18 is correct. 19 MS. GOGLIOTTI: Okay, great. Thanks. 20 CHAIR KOTELCHUCK: Alright, hearing no 21 further comment, that's fine and approved. Let's 2.2 go on.

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MS. GOGLIOTTI: Okay, the next one is 421.3. And that states that there was thorium dose assessed during the operational years.

And here, NIOSH responded saying that 4 DR was performed in accordance with the the 5 available information provided in the SEC Petition 6 7 169. According to the report, it was determined that unmonitored internal dose at NNSE during 1959 8 9 and 1968 through 1972 operational periods cannot be reconstructed. Therefore, no internal thorium 10 11 exposure could be assigned during the operational 12 period.

And we do understand the limitations of 13 14 the SEC. However, NIOSH's response does not 15 address the constant amounts of residual thorium 16 contamination that were seen to be present before and after the operational periods. And assigning 17 implies that there was 18 dose in that manner 19 spontaneously no risk of exposure because the site was performing work for the AEC and the risk 20 reappeared when work ceased. 21 And that's not 2.2 really a realistic dose assessment.

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1 CHAIR KOTELCHUCK: And what was the 2 response? 3 MS. GOGLIOTTI: NIOSH has not responded to that. 4 MR. CALHOUN: This is Grady. If it was 5 actually during the residual period -- or not the 6 7 residual period -- during the SEC period that was established and don't have dosimetry 8 we 9 information for those individuals and the reason the SEC was established is because of internal 10 11 dose, we can't assign it. 12 MS. GOGLIOTTI: Even a minimal dose to 13 show that there was some risk of exposure? 14 MR. CALHOUN: No, that's the 15 double-edged sword of an SEC. You can't do it. Because if we had come through and said, well, we 16 think we can do this dose based on this minimal 17 18 approach, that certainly would have been shot down. 19 So, the determination of an SEC was 20 because we couldn't do internal dose. Therefore, unless there's actually dose assigned to that 21 2.2 individual, dosimetry, internal dosimetry, we

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1 don't do it. That's a very standard practice. 2 CHAIR KOTELCHUCK: Yeah. Ts this a 3 partial dose reconstruction? MS. GOGLIOTTI: Well, if it was -- then 4 it has to be a partial, correct. 5 6 CHAIR KOTELCHUCK: Yeah. 7 John Mauro, are you on MS. GOGLIOTTI: the line? 8 9 DR. MAURO: Yes, I'm here. 10 MS. GOGLIOTTI: This is one of your 11 findings. Did you have anything else to add to 12 that? 13 DR. MAURO: Yeah, the point being made, I recollect raising these issues. It may have been 14 15 for lack of knowledge regarding the SEC covered period and the reasons for the SEC and what was 16 covered and what wasn't. 17 So, what I'm hearing, I guess I'd just 18 19 like confirmation, that during this time period, However, it was not 20 yes, there was thorium. feasible to reconstruct internal doses and that's 21 2.2 the reason -- I just want to make sure I'm getting

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1 it right -- and that's why an SEC was in fact granted at that time. 2 If that in fact is the case, then I agree 3 with Scott. 4 KOTELCHUCK: Yeah, it's 5 CHAIR regrettable that we can't, but that was the basis 6 of the SEC. So it seems as if we have to go along 7 with that. 8 9 Other Members of the Subcommittee, 10 comments or concerns? 11 MEMBER CLAWSON: This is Brad. Ι 12 don't have any concerns. That is the way we have 13 to do it. It's like Grady said, it's а double-edged sword, but that's what it is. 14 15 CHAIR KOTELCHUCK: Yeah. Okay, other 16 comments? Then, that is what it is, I agree. 17 And we then consider this closed. 18 19 MR. SIEBERT: This is Scott. I had a question, then. Since there is nothing that was 20 wrong with it, should this be changed to an 21 2.2 observation?

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1 MR. KATZ: Well, Scott, it's not an observation. It's just wrong. It's just opining 2 3 it's wrong, but it's not an observation. I guess my that's my 4 MR. SIEBERT: question. We did nothing wrong. 5 No, no, I'm saying -- no, 6 MR. KATZ: 7 right. You did nothing wrong but it was a wrong There's nothing wrong with the dose 8 finding. 9 reconstruction. 10 CHAIR KOTELCHUCK: That is why he is 11 saying move to an observation. 12 MR. KATZ: No, it's not an observation. It's a withdrawn finding like the other withdrawn 13 findings. 14 15 MR. SIEBERT: Oh, okay. I'm sorry. Ι guess I should have clarified one or the other. 16 Ι apologize. 17 MR. KATZ: Yeah, so the finding needs 18 19 to be withdrawn. DR. MAURO: 20 Just to answer my question, so, it is correct that these time periods are 21 2.2 covered by an SEC. There is no language in here

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-- let's see -- and the reason was inability to
 reconstruct internal doses to thorium and other
 internal emitters. Is that -- I just want that
 kind of confirmation.

5 MR. SIEBERT: Yes, that is the reason 6 that the SEC exists, and yes, it's for the whole 7 operational time period.

8 DR. MAURO: Okay. Alright, thank you. 9 CHAIR KOTELCHUCK: Okay, so that's 10 withdrawn. Alright, let's go on to the next.

11 MS. GOGLIOTTI: The next one is 434.1, 12 and this is a Westinghouse case. And here it states that there was an unsupported method used 13 for determining photon dose during a residual 14 15 period. And NIOSH does agree that there was insufficient data, and information was provided in 16 the DR report to help us verify and audit the 17 external photon exposure rates during the residual 18 19 period.

The assumptions and model parameters that NIOSH used for deriving annual ambient dose, though, remain unknown to us. So we would like

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1 additional information here.

2 CHAIR KOTELCHUCK: The last thing, I 3 missed the last thing you said. MS. GOGLIOTTI: So we would like some 4 additional information. 5 6 (Pause.) 7 MR. SIEBERT: Just a second, I'm looking at that. I had seen the original one that 8 9 said correspondingly SC&A recommends closure of this finding, so I didn't look any further at this 10 11 point. So, just a second here. 12 (Pause.) 13 MEMBER CLAWSON: While Scott's doing 14 that, Wanda, I got right on to this Skype stuff and it is working great. I just thought I'd let you 15 know that. 16 But Rose, that disc that was sent to me 17 ended up corrupted somehow. 18 19 MS. GOGLIOTTI: Oh, no. 20 MEMBER CLAWSON: It's what it is. Luckily, I could get my other computer today but 21 2.2 the files didn't -- they came in corrupted.

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1 MS. GOGLIOTTI: Oh, I apologize. Ι will let Judy know and we'll see if we can check 2 3 those files in advance. I don't know what happened. 4 Okay, I appreciate 5 MEMBER CLAWSON: that. Thanks. 6 7 CHAIR KOTELCHUCK: Also, the discussion here appears to be about an observation, 8 9 not a finding: that insufficient data was provided 10 for SC&A to verify. 11 MS. GOGLIOTTI: Well, the method that 12 they used was unsupported, which would make it a finding. 13 CHAIR KOTELCHUCK: Ah. So where are 14 15 we at, folks? SC&A and NIOSH? MS. GOGLIOTTI: It sounded like Scott 16 was looking for additional information. 17 Yeah, we're looking to 18 MR. SIEBERT: 19 find the background calculations and methodology 20 for this. Should we come back 21 CHAIR KOTELCHUCK: 2.2 to this one, as well, later? Or would you like --

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do you think you might find it in a few moments?
 It's up to you.

3 MR. SIEBERT: Yeah, let's do this. Ι believe we are going to have the documentation that 4 she is looking for, but they are going to want to 5 take a look at it anyway. So why don't we plan on 6 7 we will send that over to the Subcommittee and then SC&A can look at it. And then you'll probably 8 9 close it at the next meeting. 10 CHAIR KOTELCHUCK: Okay, so this is 11 open to next meeting. Okay. It's not a question 12 of coming back to it. The 436.2 we are coming back to later today, hopefully. But this one we'll 13 leave open to the next meeting. 14 15 Alright, then let's go on. The next finding is 16 MS. GOGLIOTTI: from the same case, Finding Number 2. 17 The method 18 for determining occupational external dose 19 inconsistent with the information provided by the EE in the CATI report. 20 And NIOSH believes that the monitoring 21

22 program at the facility was comprehensive. The

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fact that no dosimetry records exist for the operational period of '71 to '72, which is the covered period, is only an indication that during the covered period the employee likely did not work around radioactive materials, and, therefore, did not need to be monitored.

7 NIOSH believes that the assignment of 8 the ambient dose during the covered period is 9 correct and consistent with other claims where the 10 employee had no monitoring data at a facility that 11 had comprehensive monitoring programs.

12 And we disagree with that statement, based on the reasons explained in our DR review. 13 Most significantly, the EE's firm recall, 14 as 15 documented in the CATI report, that he, along with 16 coworkers, consistently wore dosimeters and conducted work with fuel rods in an area that 17 18 required a special work permit.

19 In the absence of dosimeter data, a 20 claimant-favorable default approach would be to 21 assign the WNSD coworker external doses. Relevant 22 to this recommendation is the fact that the absence

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of external dose in the DR is treated differently than the absence of internal dose for which the EE was assigned coworker dose. And this is really an inconsistency in the approach used between internal and external.

6 CHAIR KOTELCHUCK: Yes. Comments? 7 Not the dog, please. Do I hear any?

8 MR. SIEBERT: I'm waiting for the 9 person who can answer this to find -- we're having 10 issues with --

11 CHAIR KOTELCHUCK: Ah, yes, because 12 it's the same case we were just talking about. 13 Right.

14 MR. SIEBERT: Yeah, this is --

15 CHAIR KOTELCHUCK: It does seem to be 16 that SC&A's objections seem to me to be 17 well-founded, but until you get the data --

18 MR. SIEBERT: Just a second here. The
19 person who is looking at it --

20 CHAIR KOTELCHUCK: Okay.

21 MR. SIEBERT: -- I think is on the cusp 22 of pulling it up. I apologize.

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1	CHAIR KOTELCHUCK: Good.
2	(Pause.)
3	MS. GOGLIOTTI: And we actually have
4	two more findings on this case that are open.
5	CHAIR KOTELCHUCK: Right, but these
6	are different in the different findings. So
7	MR. SIEBERT: Well, I can give you a
8	flavor of the answer of what's going on here.
9	CHAIR KOTELCHUCK: Okay.
10	MR. SIEBERT: The individual, who's
11	working so hard, went back into the SRDB and looked
12	and searched for any listing in the EE and any
13	exposure reports, the annual, the Landauer, all
14	that kind of stuff. And there is absolutely no
15	indication this person was ever monitored.
16	And that said, we have not run across
17	issues. There is just a lot of external monitoring
18	for other employees. So, I understand that the
19	individual is stating that they wore dosimeters,
20	but there's absolutely no records of it. And we
21	didn't seem to have an indication when we'd gone
22	through the records for individuals that there are

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records missing. So I really don't know where else
 to go with that.

3 CHAIR KOTELCHUCK: Comments? This is Kathy Behling. 4 MS. BEHLING: But the external dose was assigned, even though 5 there was no external monitoring records available 6 7 for this individual. Is that correct? I believe it is the other MR. SIEBERT: 8 9 way around, internal was -- yes. That would be 10 because -- and anybody on my side feel free to 11 correct me if I state this incorrectly -- but we 12 have information that says that there's a chance that we could be missing internal data, but we are 13 very -- we are comfortable that we have external 14 15 data for the individuals that were actually monitored at this site. 16 So they wouldn't necessarily be treated 17 18 equally if we are not sure of one and we are pretty 19 sure of the other.

20 CHAIR KOTELCHUCK: Can I ask whether 21 the CATI report was given by the worker, by a person 22 who filed the claim? Or was it by family?

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1 MS. GOGLIOTTI: This was done by the 2 EE. 3 CHAIR KOTELCHUCK: Okay, which gives it, of course, greater weight. 4 This is John. DR. MAURO: I just have 5 a question in reading the Hans' response in front 6 Apparently, there was some internal dose 7 of me. assigned using a coworker model. 8 9 MS. GOGLIOTTI: Yes. 10 DR. MAURO: Let's just make sure we got 11 it clear. So the rationale was, the nature of the person's job was such that it is likely he received 12 13 some exposure. It was agreed that, yes, we should 14 assign some internal dose using а coworker 15 approach. However, there's also some evidence that, given it was agreed he received some internal 16 dose, my experience is usually you also assume he 17 probably experienced some external dose. 18 19 And since you do have lots of data from other workers, wouldn't it be normal procedure to 20 assign some coworker external dose to this person? 21 2.2 It seems to be a logical extension, certainly

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something that we have done before.

2 MR. SHARFI: This is Mutty Sharfi. 3 There was no coworker assigned, it was -- it is my understanding that using that they had to use air 4 monitoring data and you calculated an upper level 5 monitoring approach 6 air and then you used 7 Battelle-6000 to get the other worker categories. All based off, unmonitored the internal is 8 9 internal, is based off airborne data.

DR. MAURO: Okay. And I think that is fine. So rather than coworker, you used air data. But I think the argument still holds.

Then, 13 MR. SHARFI: of course, 14 monitoring external doses based on the 15 contamination levels and calculated ambient dose based on those or contamination levels associated 16 So it's just shallow and contamination 17 with that. 18 submersion dose rates that are applied from the 19 contamination levels associated with those internal intakes. 20

21 DR. MAURO: Oh, okay, this is good. So 22 you're saying the approach that was taken here is

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that, rather than using measured external dose from other workers as a means to build a coworker model that could be assigned to this worker, you're saying the approach taken was simply to assign what I guess we would call ambient doses consistent with the airborne -- with the internal exposures that were assigned from airborne monitoring levels.

8 MR. SH

MR. SHARFI: Correct.

9 DR. MAURO: I just want to make sure I 10 understand what was done here. And the rationale 11 being that, if that's the case, that it was more 12 appropriate to do it, what I would call your ambient 13 approach, as opposed to what I would call a coworker 14 dose where you do --

15 MR. SHARFI: Correct. Yes, post-'72 you're in a residual period. So they're still 16 doing non-covered work post-'72, which is why we 17 continue to add our own dosimetry, then it wouldn't 18 19 be for covered work. The residual would only cover 20 the contamination associated with the residual from the operational work. 21

22 DR. MAURO: Okay. Again, so you're

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saying that the worker here and the exposure that we're discussing, the external exposures,

3 external exposures that occurred during the residual period. 4 MR. SHARFI: For some. 5 MS. GOGLIOTTI: We're talking about 6 7 during the operational period, the covered period. MR. SHARFI: Oh, we're talking about 8 9 the '71-'72 period? 10 MS. GOGLIOTTI: And I do want to also 11 want to point out that the PoC in this case was very 12 close to 50 percent. Well, it said he was 13 MEMBER BEACH: working with fuel rods. 14 That's during the 15 operational period, correct? 16 MS. GOGLIOTTI: Yes.

MR. SHARFI: I'll have to look a bit 17 more into the external --18

19 CHAIR KOTELCHUCK: Speak just a little louder, please. 20

I'm going to have to pull 21 MR. SHARFI: 22 up what we did for the '71-'72 period because the

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contamination basis is only for the residual 1 I will have to look and see if I can find 2 period. 3 the actual during the operational period. MS. GOGLIOTTI: Can I recommend that we 4 move forward and come back to this, either at the 5 next meeting or later? 6 7 CHAIR KOTELCHUCK: Yes, I agree. Ι feel uncomfortable with this, as it stands, where 8 9 we have a disagreement directly between an employee that as firm recall and the data that we have. 10 So 11 if you would look into it, let's leave it open. 12 MR. SHARFI: I actually did find the basis of the covered period, where they calculated 13 The people who did not have badging what we 14 dose. 15 found within dosimetry records, there were control badges that we used throughout the facility and 16 those were all around 30 millirems. 17 So, the detection limit was used to calculate an ambient 18 19 dose based on 2500 hours in the area using control badges that were used throughout the site for 20

'71-'72. 21

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CHAIR KOTELCHUCK: And how did the

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control badges compare with the badges where there
 were badges?

MR. SHARFI: We're looking at a dose of, I believe 137 millirem per year. Obviously, I mean, every individual worker will be different. So I don't have a comparison to use of coworkers. We don't really have an analysis of the badge data that was run for monitored workers.

9 CHATR KOTELCHUCK: Well, as an 10 industrial hygienist, it sounds to me as if with 11 the control badges, it is the equivalent of 12 comparing personal and area monitoring. And we know that those two are not well-linked and that 13 the area monitoring is a less acceptable way of 14 15 finding out what persons were exposed to.

16 So, if you would, unless you feel like 17 you are satisfied that you found what is necessary, 18 I would be open to you folks discussing it more and 19 coming back to the next meeting.

20 MR. SHARFI: Okay.

21 CHAIR KOTELCHUCK: Do other 22 Subcommittee Members feel is that okay?

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1	MEMBER BEACH: I agree with that.
2	DR. MAURO: Yes, that is fine.
3	CHAIR KOTELCHUCK: Okay. So, let's do
4	that.
5	MS. GOGLIOTTI: Okay.
6	CHAIR KOTELCHUCK: Now .4?
7	MS. GOGLIOTTI: Yes, .4 is the next one
8	of the same case, Westinghouse.
9	And the finding states that activity
10	ratios used for plutonium in Table 4, which is
11	actually cited in the DR report, require
12	clarification/revision.
13	MEMBER POSTON: Kathy, this is John
14	Poston. I'm having a real hard time hearing you.
15	MS. GOGLIOTTI: This is Rose,
16	actually, but I do apologize.
17	MEMBER POSTON: Oh, Rose, sorry.
18	CHAIR KOTELCHUCK: I think, Rose,
19	what's happening is you probably start off if
20	I may suggest, you start off with your public voice
21	and then, as you talk, you go back into your more
22	natural voice and so you kind of fade out. At least

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I find, at the end of some of the discussions, the
 first sentences, to me, are fine. I hear them
 fine.

4 MS. GOGLIOTTI: I apologize. I will 5 try to do better.

6 CHAIR KOTELCHUCK: Alright. There's 7 no need for an apology but I'm only pointing it out 8 in hopes that it may help you.

9 Okay, you go ahead.

10 MS. GOGLIOTTI: Okay. NIOSH did 11 respond and they gave several reasons why they 12 disagreed with our findings. But we do still find that Table 4 is ambiguous and incomplete and we do 13 suggest a few changes, suggest such as deleting the 14 15 word "alpha" on behalf of Pu-241 in row 4 of the table; acknowledging that the activity ratio shown 16 in row 3 represents combined activities of Pu-239 17 And if NIOSH were to make those 18 and Pu-240. 19 changes, we would recommend closing the finding. 20 Okay, this is Scott. MR. SIEBERT: The removal of the alpha actually would not make 21 2.2 sense because what that is showing is -- it's got

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the colon, it's showing the ratio to the total alpha. It is not stating that plutonium-241 is an alpha-emitter. It is only showing the ratio of the 241 activity to the total alpha activity, which is consistent with how we do that pretty much anytime we've given those ratios.

Now, looking at the other portion of it
real quick, which is the 239/240 issue. Yeah, that
is what I thought. We have updated the template
since that timeframe and we actually made it
239/240 to respond to this portion of the finding.
CHAIR KOTELCHUCK: And that's probably
a minor change.

MR. SIEBERT: That's already been changed. Yeah, it's just a minor change in the table, for clarification, to show that 240 is also considered in that ratio of the 239 and 240 to the total alpha.

19 CHAIR KOTELCHUCK: Yeah. So, SC&A, I 20 mean, does that -- you said you believe the activity 21 ratios are in error and Scott is saying they are 22 not.

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1 MS. GOGLIOTTI: I would have to look 2 back at the table. I don't have the complete --3 CHAIR KOTELCHUCK: Okay. Well, that's fair enough. So we'll keep that open to the 4 Okay. 5 next meeting. MEMBER CLAWSON: Hey, Dave, I have got 6 7 one question. You know the one that we just stepped by where they were using ambient for their 8 9 external doses and stuff? 10 CHAIR KOTELCHUCK: Mm-hm. 11 MEMBER CLAWSON: We're going to come 12 back to that at the next meeting. I would just like to know if they have been using this standard in 13 -- if this is an isolated case or if this is a common 14 15 practice that they've used on this site. 16 And I just throw that out, Scott, because I just want to get a flavor for if this was 17 an isolated instance or if this is something has 18 19 been going on for guite a while. Just a thought, if you would, please. 20 21 CHAIR KOTELCHUCK: I'm not quite sure 2.2 of the case. Which case are we talking about?

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1	MEMBER CLAWSON: The one just before
2	this.
3	CHAIR KOTELCHUCK: The 434.2?
4	MR. KATZ: Yeah, it's the Westinghouse
5	case, Dave.
6	CHAIR KOTELCHUCK: Okay.
7	MEMBER CLAWSON: The Westinghouse
8	case. And I just wanted to know if this is a common
9	practice in how they did it with these. It didn't
10	have beta and stuff, but I'd just like to kind of
11	catch that before we come back to it and see if this
12	is just isolated or if this is more of a common
13	practice in the dose reconstructions.
14	CHAIR KOTELCHUCK: Okay. Scott,
15	could you folks take a look at that before we come
16	back to it at the next meeting?
17	MR. SIEBERT: Just give me I'm
18	scribbling frivolously not frivolously, but
19	furiously. That is .2, and I just want to make sure
20	we don't miss that.
21	CHAIR KOTELCHUCK: Sure.
22	MR. SIEBERT: I've got that.

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Okay, 1 CHAIR KOTELCHUCK: Good. 2 excellent. Thank you, Brad. 3 So where we do go after .4, the Westinghouse facility .4? 4 MS. GOGLIOTTI: .5 is next. 5 6 CHAIR KOTELCHUCK: Okay. 7 I'm sorry, I'm still MR. SIEBERT: did we move writing. What number Ι 8 to? 9 apologize. 10 CHAIR KOTELCHUCK: We're moving to 11 434.5. 12 MR. SIEBERT: That should have been 13 obvious. Sorry about that. 14 MS. GOGLIOTTI: That's alright. 15 Okay, the next finding states that the Westinghouse methodology guidance 16 dose document contains questionable data for determining PoC. 17 And NIOSH responded saying that the 18 19 methodology document is intended as an interim 20 device for DCAS to approve the general methodology. The actual calculation methods that are applicable 21 2.2 to the individual claim are then transferred into

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1 the actual dose reconstruction report or 2 supporting files. The methodology is not intended 3 to be an attachment to the dose reconstruction or additional quidance for 4 even as the dose reconstruction. Rather, it is only an efficiency 5 document to maintain consistency for reproducing 6 7 similar calculations and text between claims.

8 And here we responded that, with the 9 modest changes to the template that we suggested 10 earlier, we would suggest closing it.

11 CHAIR KOTELCHUCK: Right. Would it 12 properly be closed as an observation?

13 MS. GOGLIOTTI: We could accept that. I think it should. 14 CHAIR KOTELCHUCK: 15 It seems to me it is an observation. Okay, good. 16 MS. GOGLIOTTI: Okay, and the next one is 369, Observation 1. And this is a W.R. Grace 17 And the observation states that SC&A found 18 case. 19 that NIOSH used a chest thickness of 24 centimeters and a filtration rate of 2.5 millimeters 20 of aluminum for a resulting attenuation factor of 21 2.2 50.95. However, in another case that we reviewed

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in 2009, they used a chest thickness of 23
 centimeters and a filtration of 0.4 millimeters of
 aluminum, resulting in an attenuation factor of
 28.8. And both cases utilize the same PROC-61.

5 And if you were to apply a different 6 attenuation factor, it would decrease the dose by 7 approximately 60 percent. And NIOSH responded 8 saying that the claim was done with OTIB-6 Rev. 3, 9 and the other claim that we previously reviewed was 10 done with Rev. 0 of the K-25 TBD.

Based on site-specific information, the correct half value layer and CTWs were used for each of these claims, because the difference in kVp or different total filtration is used on one machine versus another.

16 And here, we feel that there is a degree of judgment that was used for determining the most 17 18 appropriate assumptions in the case. And we 19 believe that the more claimant-favorable assumption could be justified. And we recommend 20 additional discussion. 21

CHAIR KOTELCHUCK: I missed the last

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1 sentences.

2 MS. GOGLIOTTI: And we recommend 3 additional discussion.

CHAIR KOTELCHUCK: Additional? 4 MS. GOGLIOTTI: Discussion. 5 CHAIR KOTELCHUCK: Yeah. 6 Comments? 7 MS. THOMAS: Yeah, this is Elyse Thomas with the ORAU Team. And I'm not sure where you 8 9 think the judgment part comes in. They are two different cases from two different sites: W.R. 10 11 Grace and then K-25/Y-12.

12 And for one site, the W.R. Grace, we don't have any site-specific technique information 13 for the X-ray machine, so we used, the dose 14 15 reconstructor used the default doses in OTIB-6, in the 16 which are based on values medical literature, et cetera. 17

For K-25, we did have specific X-ray machine settings or technique factor information. And so the half value layer between the two machines is different based on the different technique factors. I'm not sure where you think there was

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judgment involved.

2 MS. GOGLIOTTI: John, are you still on 3 the line?

4 DR. MAURO: Are you asking for me? I'm 5 not familiar --

6 MS. GOGLIOTTI: Yes, this is one of 7 your findings I would ask you to look into.

DR. MAURO: Yes, I do not recall this 8 9 at all, this particular issue, I'm sorry to say. 10 So, I cannot -- I am not in a position to respond. CHAIR KOTELCHUCK: 11 Is that something 12 you might look at later and we could come back to 13 it or should we just leave it open for the next? DR. MAURO: Yes, let's leave it open 14 15 for the next one because I am trying to stay tracked with the meeting. And I would have to break away 16 and I would rather not do that. 17

18 CHAIR KOTELCHUCK: Okay, that's fine.
 19 DR. MAURO: And let me write that
 20 number down again that we are on.

21 CHAIR KOTELCHUCK: 369 Observation 1.22 DR. MAURO: Okay.

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1 MS. GOGLIOTTI: Okay and then there is one more finding here, 369.3, the same case with 2 3 the W.R. Grace. The finding states that NIOSH did not consider plutonium intakes for '69 through '70. 4 And NIOSH responded saying that based on the 5 guidance in the TBD for W.R. Grace, Section 3.2.1, 6 7 no attempts should be made to estimate Pu dose for unmonitored workers during the operational years. 8 9 The first chest count for americium was in 1987 and 10 there were no Pu urinalysis results for the 11 dosimetry records. Therefore, no Pu dose was 12 assigned.

13 And we responded saying that inspections of our DR review and SRDB report 14 indicate that coworker models should be used when 15 16 the Pu exposures are possible and there is no Pu data available for the given work indicate that Pu 17 exposures were likely from '67 through '73 and it 18 19 appears that NIOSH did not give the worker the 20 benefit of the doubt in this case.

21 There appear to be Pu exposures during 22 these operational years and, therefore, we

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1 recommend additional discussions.

Yes, this is Scott. 2 MR. SIEBERT: The 3 discussion at this point is the TBD is prescriptive as to what could be done at the time the claim was 4 done. We are presently looking into whether it is 5 going to be appropriate to do a plutonium coworker 6 7 for W.R. Grace, whether there is enough information and things like that at the moment. However, I am 8 9 not aware that we have come to a decision on that 10 yet.

11 CHAIR KOTELCHUCK: Okay. Alright, 12 clear, it within now just to be is the 13 Subcommittee's purview to suggest that SC&A is prescription 14 right and that the should be 15 overruled? I think it is, if we so choose. I'm 16 not saying we will.

17 But then you would have to go over all 18 the other W.R. Grace cases, right?

19 MR. SIEBERT: Well, if it is determined 20 that we can and we have enough data to create a 21 plutonium coworker study, then that would update 22 the Technical Basis Document and PER would be

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1 applicable at that point as well.

2 CHAIR KOTELCHUCK: Got it. 3 DR. MAURO: This is John. I have got a question now regarding the site. Is there an SEC 4 here for W.R. Grace? I'm trying to find maybe a 5 quick answer to this. 6 7 See the situation is this. If it is not an SEC and you are trying to build a coworker model 8 9 but you can't and there is no SEC, doesn't that mean 10 you have an SEC issue? 11 MS. GOGLIOTTI: Well, John I think that 12 they are still looking into cases where there was a coworker model. 13 I just wanted to know 14 DR. MAURO: 15 whether there was an SEC for this time period or not. 16 MR. SIEBERT: There is an SEC through 17 the end of 1970. 18 19 DR. MAURO: Oh. 20 Which is we did not MR. SIEBERT: assign any plutonium during '69 to '70, based on 21 2.2 that reasoning, that there is no information. We

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don't have a coworker during the SEC time period
 so the direction was to not assign any coworker at
 the time.

DR. MAURO: Yes, I am trying to help close this. Because if there was an SEC for the time period of interest here and there is no reason why you could construct a coworker model, if that is the reason for the SEC. So I'm sort of on your side here, trying to find a reason why.

10 CHAIR KOTELCHUCK: Right. It sounds11 like what we were talking about earlier.

12 DR. MAURO: Exactly. And by the way of 13 clarification, that might be the answer. I'm not 14 saying it is. But you know having a worker where 15 you need to build a coworker model you claim that maybe you can, or by definition that may just be 16 an SEC. From what I have just heard is that you 17 18 do have an SEC. So if that is the case, it may be 19 that NIOSH is correct.

20 CHAIR KOTELCHUCK: Right. That makes 21 sense.

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DR. MAURO: It is probably worth just

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confirming all that before we walk away.

And I just looked and I 2 MR. CALHOUN: 3 think Scott might have said this -- this is Grady -- but there is an SEC established from '58 through 4 the end of 1970. 5 SIEBERT: That is the full 6 MR. 7 operational period as well. However -- this is Kathy MS. BEHLING: 8 9 -- I believe that SEC indicates that you are able 10 to reconstruct components of the internal dose, 11 including uranium or plutonium isotopes. 12 MR. SIEBERT: That would be as long as there is monitoring by the individual. 13 If the individual does not have bioassay, then during the 14 15 SEC time period, there is no coworker to assign. It is only if they have bioassay during the SEC time 16 frame, which this individual does not. 17 This is Bob Barton. 18 MR. BARTON: What 19 was the exact reason for the SEC? You know a lot of times it is for something like you can't 20 reconstruct thorium. 21 2.2 MS. BEHLING: Exactly.

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1 MR. CALHOUN: Exactly. That is the 2 question.

3 MS. BEHLING: And why would NIOSH be looking into developing a coworker model? 4 I don't I am questioning this issue. 5 know. MR. SIEBERT: The SEC is based on the 6 And Grady, feel free to correct me if I 7 thorium. am wrong, but historically we have not committed 8 9 resources to creating coworker studies during SEC timeframes, as long as individuals do not have 10 11 monitoring. We have looked into -- that is not to 12 say we can't, if it is determined there is enough data to do so and it has been the priority that NIOSH 13 sets for us to do so but that has historically been 14 15 the case. And Grady, did that sound fair? 16

MR. CALHOUN: Yes, that's exactly right. If there is -- I can't think of a single case except the statutory SECs where we have used a coworker model during operational period or during the SEC period I will say.

22 MR. BARTON: I have to disagree with

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1 that. This is Bob again.

2	I mean Fernald, the SEC was based on
3	thorium and there is a very extensive uranium
4	coworker model. So, I don't think the two are
5	mutually exclusive.
6	CHAIR KOTELCHUCK: Right.
7	MR. CALHOUN: The only thing we can do
8	is go back and look at that and see if there is
9	something about this specific case and there was
10	or was not a likelihood for plutonium exposure.
11	CHAIR KOTELCHUCK: That sounds like it
12	should be done.
13	What you are saying I understand. For
14	efficiency you wouldn't have bothered looking for
15	a coworker, unless, as you have in this case, I
16	assume, a partial dose reconstruction. And then
17	you should look at it.
18	So do we agree that we should leave it
19	open and that you folks, Grady, you folks will look
20	and ORAU look at the coworker a possibility of
21	a coworker dose?
22	MR. CALHOUN: Yes, well I think we just

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need to look at this case specifically and see where
 we go from here.

3 CHAIR KOTELCHUCK: That sounds good. So we will leave it open to the next meeting, right? 4 MS. GOGLIOTTI: 5 Okay. Okay, good. 6 CHAIR KOTELCHUCK: 7 MS. GOGLIOTTI: Now that ends this particular matrix and we will move into the AWE 8 9 cases for 14 through the 18th set. 10 CHAIR KOTELCHUCK: Okay. 11 MS. GOGLIOTTI: Would you like to do 12 the type 1 or the type 2 cases -- or findings first? 13 CHAIR KOTELCHUCK: We did type 1 first and I think folks preferred first. 14 So let's do 15 Category 1. Let me ask other Subcommittee Members 16 if they would like to weigh in on this, on possibly 17 _ _ fine. 18 CLAWSON: That's MEMBER 19 However we approach it, it is fine. 20 MS. GOGLIOTTI: I believe that we will 21 have time to go through both of them. So, it 2.2 doesn't --

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1 CHAIR KOTELCHUCK: Okay, let's do one first, then. 2 3 MS. GOGLIOTTI: Okay. Let me just get 4 this set up on my computer. MR. SIEBERT: Just to be clear, which 5 set are we working to now? I'm still writing on 6 7 what we were planning on doing for the last one. I apologize. 8 9 MR. KATZ: It is AWE cases 14 through 10 18, type 1. 11 MR. SIEBERT: Got you. Thank you. 12 CHAIR KOTELCHUCK: Let me ask this just as a matter of curiosity. Why is this in this 13 matrix format and not in the BRS? 14 I mean sometimes 15 we use BRS. As a reminder, when we 16 MS. GOGLIOTTI: do the type 1 findings, instead of going through 17 18 the full BRS, we only -- these are cases or issues 19 that we believe are already resolved. And so we only go through a summary of the resolution. 20 21 CHAIR KOTELCHUCK: Very good. So what 2.2 this is, is you have taken the BRS and put this into

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1 a matrix so that we can go over it quickly. 2 MS. GOGLIOTTI: Correct. 3 CHAIR KOTELCHUCK: Good. MS. GOGLIOTTI: And this is exactly 4 what is in the BRS for that. 5 CHAIR KOTELCHUCK: Very good. 6 Okay, 7 fine. Thank you. And that is an effective --MS. GOGLIOTTI: All the responses are 8 9 copied and pasted when it fits. When I need to summarize it more, I do that. 10 11 CHAIR KOTELCHUCK: Very good. Okay, 12 great. Let's go to Bliss & Laughlin 335.1 or is 13 that --Yes, that is the first 14 MS. GOGLIOTTI: 15 one here. And the finding states that NIOSH did not obtain the CATI information for the Bliss & 16 Laughlin employment period. 17 And NIOSH basically said that it wasn't 18 19 necessary to receive it because this case was 20 compensated. We believe that the EE was not aware 21 2.2 that this was a covered facility when the CATI was

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performed in 2003. In 2004, the EE submitted an 1 amended work history that included this employment 2 3 period. NIOSH never went back to them and confirmed or tried to get additional information 4 It is simply factual and we believe in the CATI. 5 that it would be reasonable to go back to them when 6 7 an additional facility was added to their covered employment. 8

9 It does not impact compensation. The 10 case was already compensated and so we recommend 11 closing that finding.

12 CHAIR KOTELCHUCK: Okay. Comments?13 Okay, next.

Okay, the next one is 14 MS. GOGLIOTTI: 15 336, Observation 1 for General Steel and Dow Chemical Madison site. 16 from the And this observation states that the 1967 dose from 30 to 17 18 50 keV photons was assigned for the entire year, 19 even though the employee left GSI in 1967 earlier 20 than that and that dose was assigned for 30 to 50 keV and was correctly calculated for that year. 21 2.2 And NIOSH did agree the full year is an

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1 overestimate for efficiency. However, the 2 prorated dose was actually done and simply not 3 copied and pasted correctly. And as such, the dose was slightly overestimated but the claim was below 4 50 percent so it didn't impact compensation. 5 That is why we recommend closure. 6

7 CHAIR KOTELCHUCK: Okay, good.8 Alright, comments from anyone?

9 Let's go on.

10 MS. GOGLIOTTI: Okay, same case, 11 Observation 2 is from OTIB-6, page 29 and we quoted 12 it here. It says for further consideration it 13 might be appropriate to assume that errors are all positive and only plus 30 percent should be 14 15 assumed, since the objective here appears to be a maximizing case in order to justify denial. 16 And we thought that the higher estimation should have 17 been used. 18

And actually, OTIB-6 has since been revised and what was done in this dose reconstruction is consistent with what the revised approach recommends. So we do recommend closing

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1 this case. Alright. 2 CHAIR KOTELCHUCK: This is 3 an observation, right? MS. GOGLIOTTI: 4 Correct. CHAIR KOTELCHUCK: Okay, sounds good. 5 Comments, anybody? 6 7 MEMBER CLAWSON: None here, Dave. CHAIR KOTELCHUCK: Okay. Alright, 8 9 let's qo ahead. MS. GOGLIOTTI: 10 Okay, the next one is 11 for Tab 360, Finding 1. And this is a BONUS Reactor 12 Plant and the Puerto Rico Nuclear Center case. And the finding states that the method 13 used to assign dose is inconsistent with other 14 15 facilities. And NIOSH's response explained that 16 a 1 rem per year dose is a missed dose. And given that the annual summary level data is in fact the 17 18 reported exposure for reel workers, at least for 19 few years, where summary level records are а available, it is inappropriate to define the actual 20 recorded exposure as a missed dose. However, SC&A 21 2.2 does accept the assumption, given that the data is

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Even if it is possible to assign missed 1 available. dose and added the missed dose, it is unlikely that 2 3 the worker experienced more than 1 rem per year. And so on that basis, we recommend closure. 4 CHAIR KOTELCHUCK: 5 Okay. Sorry. I'm just having a little trouble with my computer. 6 7 Everybody, any comments? MEMBER CLAWSON: No. 8

9 CHAIR KOTELCHUCK: Okay, then let's go 10 on.

11 MS. GOGLIOTTI: Okay. The next one 12 here is a C.H. Schnoor. I'm not sure if I am 13 pronouncing that correctly. I apologize. And that is Tab 361, Observation 1. And it states that 14 15 it appears that the external doses of metal have been overestimated, perhaps by a factor of 1.32, 16 due to the use of an inappropriate dose correction 17 18 factor. And NIOSH did acknowledge that an 19 overestimate may have occurred resulting in selecting a larger than credible factor. 20 But it 21 did not impact compensation. The case was already 2.2 compensated but it didn't have an overall impact

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1 on compensation.

2	CHAIR KOTELCHUCK: Okay.
3	MS. GOGLIOTTI: The next one is a
4	Combustion Engineering case, Tab 362, Observation
5	1. And it states that TBD-6001 was withdrawn
6	subsequent to the performance of this DR. The TBD
7	was found to be inadequate for reasons including
8	insufficiencies and a generic approach of
9	reconstructing internal doses.
10	Since this worker was compensated,
11	obviously they can't be penalized because NIOSH
12	used TBD-6001, however, estimated strategy might
13	be not fair to workers that had doses reconstructed
14	after the protocol was withdrawn.
15	And this was merely an observation. We
16	understand that NIOSH does the best that they can
17	and when they find errors like this, we expect them
18	to do exactly that. So, it was just an observation
19	that we were pointing out.
20	CHAIR KOTELCHUCK: Yes, it certainly
21	is. I am sure among if there are cases among
22	colleagues of that person, similar cases, they

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would wonder why one person was compensated and
another was not. But all we can do is, I assume,
the counselors and the people called would just say
that there was an error but that a decision was made
that was proper at the time.

6 And we certainly can't compensate 7 another one in error if we now know that there was 8 an error.

9 MR. KATZ: So this is Ted. I just have 10 a question as to why this is an observation and not 11 a finding.

12 I know it doesn't change it. It would 13 change the compensation decision in reality. So we wouldn't change it. Obviously, we don't go in 14 15 the other direction but why is this not a finding? I believe just because 16 MS. GOGLIOTTI: they used the information that was available at the 17 time and we don't normally penalize NIOSH for using 18 19 _ _ 20 CHAIR KOTELCHUCK: That is correct. 21 MS. GOGLIOTTI: We can certainly make

22 it a finding if --

No. CHAIR KOTELCHUCK: 1 T mean if the information --2 MR. KATZ: 3 if at the time it was done, it was done correctly, I don't mean by our methods but that our methods 4 were correct based on the information that was 5 available at the time, that is fine. 6 That is an 7 observation. But if we were in error, even at the time 8 9 we just didn't realize it and we corrected our methods after, then that would be a finding. 10 11 I don't know which of the cases is this 12 one but --13 CHAIR KOTELCHUCK: I'm not quite sure of the latter, your latter remark. 14 15 MR. KATZ: What I am saying is --I mean if we update 16 CHAIR KOTELCHUCK: the TBD --17 18 MR. KATZ: No, but we update the TBD for 19 many reasons. If the TBD was incorrect by our fault and not just because we learned new things 20 but by our fault, then it is a finding. 21 2.2 If the TBD was incorrect simply because

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new data was gained, nobody knew anything before, 1 that would be then an observation. 2 Right? 3 DR. MAURO: I might be able to help a little bit. This deals with TBD-6001? 4 MS. GOGLIOTTI: 5 Yes. Yes, TBD-6001 goes way back 6 DR. MAURO: and there were lots and lots of problems with it 7 when we reviewed it. It wasn't that it was 8 9 It was incorrect. There were errors correct. And when we finally did get to the point 10 with it. 11 where we did discuss it, it took some time, as per 12 usual, it was determined that yes, you are right, 13 this is a problem. And it was withdrawn, which left a situation where cases that were -- doses were 14 reconstructed using that TBD were sort of orphan 15 16 cases.

And so I am not sure how you would like to deal with this but I just want to let you know that TBD-6001 was one of those procedures, generic procedures that applied for a number of sites that when we did get to it, it was found to be problematic and had to be withdrawn. It wasn't replaced.

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1 That is an important point.

2 MR. KATZ: It was replaced by 3 site-specific.

Exactly. DR. MAURO: It was replaced 4 later by site-specific. And here we have a case 5 that sort of got caught up. It was done at a time 6 7 when TBD-6001 was in play and only later did we determine that it was problematic. And here we 8 9 have a person that was compensated and, you know 10 _ _

11 MR. KATZ: Right. So I understand. 12 And I was actually there for the long haul for all But so that is why I asked the question, 13 of that. Because it seems to me we withdrew the 14 I quess. 15 methodology because the methodology wasn't right at the time for a number of the sites. 16 I mean we didn't even sort out all the details. But there 17 were a number of problems with it. 18

And that is why I raised the question
because that seems more like a finding. It seems
like it was more a problem with our methodology.
CHAIR KOTELCHUCK: That sounds like it

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is consistent with what you said, Ted, that there
 were errors in it. And therefore, this would be
 a finding.

people 4 What do other on the Subcommittee think? 5 MEMBER CLAWSON: Well, you know I 6 7 understand both sides but I am sitting here trying to think. We knew a problem, we found a problem 8 9 back then but we have corrected it since. Well, 10 I don't know. It is immaterial to me which way we 11 go. 12 CHAIR KOTELCHUCK: Then let's go ahead with the finding. 13 14 MS. GOGLIOTTI: Okay. 15 CHAIR KOTELCHUCK: Any objection? 16 MEMBER BEACH: None here, Dave. CHAIR KOTELCHUCK: Fine, let's 17 qo

18 ahead.

MS. GOGLIOTTI: Okay, the next one here is an Electro Met case and it is Tab 363, Finding 1. And the finding stated that Appendix C data was used by NIOSH and may not be adequate for the PoC

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determination. And NIOSH came back and said that
 they were aware of the error that we presented and
 this case would be covered under the PER-68.

4 CHAIR KOTELCHUCK: Good.

5 MS. GOGLIOTTI: So on that basis, we 6 recommend closure.

7 CHAIR KOTELCHUCK: That is clear 8 enough. Okay, go ahead.

9 MS. GOGLIOTTI: The next one is a Heald Machine Co., Tab 366, Finding 2. And here the 10 11 finding states that the reviewer had difficulty 12 reproducing the dose associated with external 13 exposure to metal. And NIOSH acknowledged that there was an inconsistency in assumptions used for 14 15 the DR, which stated in the DR report, which resulted in a lower calculated dose. 16

As was stated in the finding, the dose reconstruction review was done without using the site-specific TBD. When a comparison was done between the model used and the TBD guidance, the model used was actually claimant-favorable. So based on that, we recommended closure.

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1	CHAIR KOTELCHUCK: Good.
2	MS. GOGLIOTTI: Okay.
3	CHAIR KOTELCHUCK: Okay. By the way,
4	let's think. It is getting near lunchtime here and
5	breakfast time on the coast, or coffee break time.
6	How many do we have further?
7	MS. GOGLIOTTI: I believe we have five
8	or six more type 1 findings.
9	CHAIR KOTELCHUCK: That sounds good.
10	MS. GOGLIOTTI: We could do those and
11	then we will break.
12	CHAIR KOTELCHUCK: Yes, that sounds
13	good. So we will probably go until around 12:15
14	p.m. East Coast Time. Is that okay with folks on
15	the line?
16	MEMBER BEACH: That works for me, Dave.
17	MEMBER CLAWSON: That's fine with me,
18	Dave.
19	CHAIR KOTELCHUCK: Okay, good. Let's
20	do it. Let's finish this up, then.
20 21	do it. Let's finish this up, then. MS. GOGLIOTTI: Okay, the next one is

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1 Observation 1. And the observation states that we 2 note the IREP entries in number 62 and 34 of the 3 Appendices are listed as acute when the proper 4 designation should have been chronic.

5 And NIOSH does agree that those should 6 have been entered as chronic exposures. However, 7 the effect of the dose and dose rate effectiveness 8 factor are identical for the doses entered and so 9 there is no impact.

10 And based on that, we recommend 11 closure.

12 CHAIR KOTELCHUCK: Okay, agreement?13 Unless there are comments, let's go on.

MS. GOGLIOTTI: Okay. The same case, Finding 1 states that NIOSH incorrectly determined the electron dose during the thorium residual period for '61 through '80. And we note that the residual exposures incorrectly begin in '57 instead of '61.

20 And here, NIOSH explained that it 21 wasn't an entry -- the entry was made correctly but 22 it was not reported correctly in the dose

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reconstruction report and we do accept NIOSH's
 explanation that the doses were correct. The only
 error that was made was the date in which the doses
 were assigned. And it is a QA error and has a
 negligible impact on the PoC of this case.

6 CHAIR KOTELCHUCK: Okay, that sounds 7 reasonable, QA error. Unless I hear further 8 comments, let's go on.

9 MS. GOGLIOTTI: Okay, the next is the 10 same case, Finding 2. And we were unable to 11 determine how NIOSH calculated the thorium doses. 12 And NIOSH directed us to some hidden intakes that 13 we were unaware of in some of the worksheets.

And when we opened up that data and viewed it, we were able to verify the intakes that were used. So, we recommend closure.

17 CHAIR KOTELCHUCK: There is agreement,18 but isn't this an observation?

MS. GOGLIOTTI: Yes, we did -- that is
an observation.

21 CHAIR KOTELCHUCK: Okay, that will be 22 an observation and closed.

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1 MS. GOGLIOTTI: Okay. The next one is a Bethlehem Steel case, Tab 409, Observation 1. 2 And it states that subsequent to the preparation 3 of this DR, at about the same time the DR was 4 performed by SC&A, the Dose Reconstruction and 5 Procedures Review Subcommittees discussed whether 6 7 it was appropriate to consider chronic direct deposition of fine particles of uranium oxide on 8 9 the skin and closing for early AWE facilities, such as Bethlehem Steel. 10

11 We believe that there is a general 12 agreement among the parties that such exposure explicitly considered 13 should be under the We acknowledge that 14 appropriate circumstances. 15 the DR includes exposures associated with residual contamination of work clothing. 16 However, SC&A believes that the consideration should be also be 17 18 given to exposures associated with chronic direct 19 deposition of fine particles of uranium oxide on the face, adding the skin exposure to this worker. 20 And as is stated in the finding, this 21 2.2 concern has been raised previously. It was

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1 eventually made an overarching issue and added to There is a history of this already on the 2 the BRS. 3 BRS under Procedures Subcommittee Overarching Issue 9. And that issue was eventually closed. 4 CHAIR KOTELCHUCK: ultimately, 5 So there was skin exposure to the face that was 6 7 considered to the skin. I believe that is MS. GOGLIOTTI: 8 9 correct. 10 CHAIR KOTELCHUCK: Okay, is that true, 11 NIOSH, ORAU? 12 MR. CALHOUN: I will have to look the 13 actual claim up here. Well, you folks 14 CHAIR KOTELCHUCK: 15 have gone over it and have agreed, right? 16 MS. GOGLIOTTI: We have agreed. Ι 17 would have to go back and review the history. 18 CHAIR KOTELCHUCK: No, I will tell you, 19 you folks have gone over it and agreed. 20 MS. GOGLIOTTI: And the issue has since been closed. 21 2.2 CHAIR KOTELCHUCK: Then we should -- I

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1 am open to closing it.

2	Any other comment, folks?
3	DR. MAURO: This is John. Just to
4	point out, this sounds like a classic OTIB-17 issue
5	that was at play for quite some time on how to deal
6	with direct deposition on skin and when all of those
7	issue were resolved this may very well have been
8	resolved because it fell within the purview of
9	OTIB-17 and that is, I guess, the underpinning why
10	it is appropriate to be closed.
11	MR. CALHOUN: Okay. It is also a
12	compensated case, FYI.
13	CHAIR KOTELCHUCK: Okay. Alright.
14	MS. GOGLIOTTI: No, it has since been
15	compensated. When we reviewed it, it was not
16	compensated.
17	MR. CALHOUN: Correct.
18	MS. GOGLIOTTI: Okay.
19	CHAIR KOTELCHUCK: I missed something
20	in there. Scott, you say it was compensated?
21	MR. CALHOUN: That was Grady. And it
22	wasn't when they reviewed it but it has been since.

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1 CHAIR KOTELCHUCK: Got it. Okay. Alright, let's go on to 430.1. 2 3 MS. GOGLIOTTI: Okay, this is an Electro Mat case and the finding states that there 4 was a failure to consider occupational medical dose 5 from PFGs. 6 7 And NIOSH responded that since PFG was an X-ray technique suitable for screening large 8 9 groups of people, they don't believe that it would 10 have been appropriate to assume for smaller sites 11 such as Electro Met. 12 These people would have been sent to a local clinic or hospital. 13 A little louder, 14 CHAIR KOTELCHUCK: 15 please. People at this site 16 MS. GOGLIOTTI: would have been sent to a local clinic or hospital 17 and we confirmed NIOSH's statements were correct 18 19 and found no evidence in NOCTS that PFGs were performed on-site at Electro Met. 20 So, we recommend reducing this finding 21 2.2 to an observation.

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CHAIR KOTELCHUCK: Okay. Comments? 1 Yes, this is Ted. 2 MR. KATZ: It is a 3 withdrawn finding. Ιt shouldn't be an observation. This is standard business about 4 where we include these doses from that technology 5 and where we don't. And it has been in place for 6 7 a decade or more now. So it is just that I think it is a 8 9 withdrawn finding. It is not an observation. 10 CHAIR KOTELCHUCK: Okay. Alright, any further comments from anyone? 11 12 MEMBER CLAWSON: None here. 13 CHAIR KOTELCHUCK: Okay, withdrawn. 14 Let's go on to Joslyn. 15 MS. GOGLIOTTI: I apologize, there might be a few more than five. 16 I miscounted. KOTELCHUCK: 17 CHAIR Okav. Well, that's alright. We will go to 12:15 and we will 18 19 cut it off if we are not finished. 20 MS. GOGLIOTTI: Okay. This is the Joslyn Manufacturing case, 431 Observation 1. 21 2.2 The DR report should state which

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nonmetabolic organ was used for surrogate for the
 prostate. The DR report indicates the highest
 nonmetabolic organ was used, which is specified
 surrogate organ in OTIB-5.

NIOSH felt that enough information was 5 put in the supporting files to identify the organ 6 7 used and they said that past experience has indicated describing the exact surrogate organ, 8 9 instead of the highest nonmetabolic organ causes a great deal of confusion, since the surrogate 10 11 organ can change with different isotopes and many 12 DR reports estimate internal dose from the various 13 isotopes.

And we accept NIOSH's explanation andrecommend closure.

16 CHAIR KOTELCHUCK: Okay. Comments?
17 MEMBER CLAWSON: None here, Dave.
18 CHAIR KOTELCHUCK: Okay, go on.

MS. GOGLIOTTI: Okay, the same case, Finding 1. The finding states that NIOSH should reconstruct external exposures during the residual period using the default values recommended in

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1 Table 6.4 of TBD-6000.

2	And at the time the DR was completed,
3	the information indicated uranium rolling was the
4	primary constant at the site and machining was
5	secondary. Assuming the EE worked 100 percent of
б	the time rolling uranium was favorable to assuming
7	any less of a fraction of the time machining.
8	Since that time, a detailed accounting
9	of rolling and machining has been assembled and the
10	residual contamination between uranium work and
11	days accounted for. The overall dose estimate is
12	documented in Appendix for Joslyn.
13	This case has been subsequently
14	returned to DOL and reworked, using the
15	site-specific Appendix.
16	Because the original dose estimate
17	assumed uranium work was 100 percent of the time
18	and the intermittent nature of the uranium work
19	accounted for in the Appendix, the dose was,
20	ultimately, reduced.
21	CHAIR KOTELCHUCK: Alright, sounds
22	good, unless again, unless there is a comment,

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1 let's go on.

2	MS. GOGLIOTTI: Same case, Finding 2
3	states that the external DR should have assumed
4	that the EE was a grinder/machinist as opposed to
5	a rolling operator.
6	The resolution was that the Appendix
7	for Joslyn accounts for machining days and rolling
8	days separately and uses a more claimant-favorable
9	one on days when both occurred.
10	Again, since the time of review, a
11	site-specific Appendix has been issued and the case
12	was reworked.
13	CHAIR KOTELCHUCK: Okay.
14	MS. GOGLIOTTI: The same case, Finding
15	3. It says the DR report should address uranium
16	intakes during the post-AWE period. And the same
17	response, again. Since the time of our review, a
18	site-specific Appendix was issued.
19	CHAIR KOTELCHUCK: Okay. And I see
20	that four and five are going to be similar.
21	MS. GOGLIOTTI: Yes, I will read the
22	findings for you.

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1	CHAIR KOTELCHUCK: Do.
2	MS. GOGLIOTTI: The internal DR should
3	have assumed that the worker was a
4	grinder/machinist as opposed to a rolling
5	operator. And 5 is information provided in the
6	CATI is inconsistent with the data used for dose
7	CHAIR KOTELCHUCK: Okay.
8	MS. GOGLIOTTI: Let me get to the next
9	one here, which is the uranium mill in Monticello
10	case, Tab 432, Observation 1. And the observation
11	states that the dose to the brain from a radon
12	progeny was likely overestimated. SC&A noticed
13	that the DR assigned a dose associated with the
14	exposure to radon, as opposed to using WLM per year.
15	Since IREP requires input expressed in units per
16	year, it is not clear why there is dose assigned
17	to this EE.
18	Further investigation into the matter
19	revealed that NIOSH published Report 2, which is
20	titled Dose Reconstruction Exposure Matrix for
21	Radiation Exposure Compensation Act Section 5

22 Claims. And a review of that report revealed that

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the Mill A and the HASL-40 is the Monticello Mill
 and that Table 4-5 of Report 2 provides dose
 correction factors for exposure to radon progeny.

We found that the other tissue category 4 has a dose correction factor of 8.2. 5 Hence, we were able to determine the basis for the dose used 6 7 in the DR for exposure of the EE to radon and its SC&A unable 8 progeny. However, was to 9 independently match NIOSH's dose correction value for the brain and duodenum. 10

11 And the resolution was that IREP 12 contains a risk model for lung cancer based on the 13 working level months per year. There was no risk model for other organs that exists in IREP. 14 Thus, the exposure must be calculated in dose and entered 15 16 into IREP normally.

17 CHAIR KOTELCHUCK: Alright. That is18 an observation. Good.

19 MS. GOGLIOTTI: Yes.

20 CHAIR KOTELCHUCK: Again, comments?
21 Otherwise, let's go on to Observation 2.

22 MS. GOGLIOTTI: Okay, the CATI would

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have benefitted from a follow-up question in
 response to the interviewee's claim that cobalt and
 technetium were present on-site.

And NIOSH responded that since fission and activation products could not be present in uranium ore, NIOSH assumed that there were isotopes referred as small sub-sources commonly used to source check the measurements.

9 This case was compensated. So we 10 recommend closure.

Okay.

11 CHAIR KOTELCHUCK:

12 MS. GOGLIOTTI: Okay, the same case, Finding 2. Doses to the brain from medical X-ray 13 14 examinations appear to be overestimated. And 15 NIOSH did agree the DR used a remainder dose as described in OTIB-5 but that was not intended for 16 the use of medical X-rays. The medical dose should 17 18 have been based on eye/brain dose, as we described 19 in our findings. However, the difference in dose is small and would not affect the outcome of this 20 21 So, we recommend closure. case.

22 CHAIR KOTELCHUCK: Alright. Any

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1 comments? Then, let's go on.

Okay and this is a 2 MS. GOGLIOTTI: 3 Ventron Corporation case, Tab 433 Finding 1. And the finding states that SC&A questions whether AWE 4 activities continued after 1948. 5 Based on NIOSH's response, it appears 6 7 that the AWE period was expanded in November 2012, several months after the DR was completed in May 8 9 2012. The AWE period was expanded to begin January 30, 1950. However, the EE did not begin work until 10 11 1951. Therefore, the case is not impacted by the 12 change. So, SC&A does question if a PER was 13 necessary to accommodate the extended AWE period. 14 15 CHAIR KOTELCHUCK: I don't understand the relationship between the question, did AWE 16 activity continue after '41. And of course, it 17 continued --18 19 MS. GOGLIOTTI: So the AWE period was 20 expanded after this case done. However, the case would not be included in the expanded period, based 21 2.2 on the dates that he began employment.

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However, we do question whether a PER
 was necessary to accommodate the change in the AWE
 period.

MR. CALHOUN: This is Grady. I don't know if one is in the works yet or not for this but I would say that if we got covered employment into this new period, yes. But I will have to check on that.

9 CHAIR KOTELCHUCK: The person began 10 work in '51. Would there not be residual? Is 11 there any residual exposure after the operational 12 period?

MR. CALHOUN: I don't know that off thetop of my head. I will have to look.

15 CHAIR KOTELCHUCK: Okay. I mean let's 16 exclude the question was a PER necessary. That is 17 an administrative question. I'm just wanting to 18 make sure the case was properly -- the dose was 19 properly reconstructed.

20 Do you want to leave this -- Grady, you 21 want to leave this open until later or are you 22 looking --

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1 MR. CALHOUN: It depends on whether or 2 not you guys want an answer for that issue. 3 CHAIR KOTELCHUCK: Alright. Well, I have the question. On the other hand, again, you 4 folks did talk, looked at the materials and talked 5 I guess it just seems to me difficult. 6 it over. 7 Did it continue after '48? Yes. MR. CALHOUN: Yes, there is a residual 8 9 period associated with that, as best as I can see 10 here. 11 CHAIR KOTELCHUCK: Yes. 12 DR. MAURO: This is John. Maybe I can 13 help because I am listening and trying to follow 14 the argument. 15 The extension of the time period that it was an AWE, that extended to earlier years. 16 In other words, it wasn't -- am I correct that the 17 extension was that the beginning of the AWE was 18 19 earlier than originally believed or did I miss 20 that? This extended the 21 MS. GOGLIOTTI: 2.2 period later, I believe.

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1	DR. MAURO: Oh, at the back end?
2	CHAIR KOTELCHUCK: At the back end,
3	yes.
4	DR. MAURO: Oh, at the back end. Okay,
5	so therefore, I guess but you are saying that
6	even though they extended the period at the back
7	end, in theory it should now if the worker was
8	there, it should affect him.
9	CHAIR KOTELCHUCK: Yes, and that is
10	what Grady is saying.
11	I would be satisfied if a Subcommittee
12	Member, Grady, if you approve it, subject to your
13	checking back and just making sure that was done.
14	Just double check it. Would that be okay?
15	MR. CALHOUN: I'm checking to see if
16	there was a is a PERs underway or what am I
17	checking?
18	CHAIR KOTELCHUCK: Checking whether
19	there was a residual period of exposure.
20	MS. GOGLIOTTI: The EE started work
21	after this period, no matter what. So they already
22	would have been covered under the residual period.

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We were just curious if the AWE covered 1 period should have been extended several more 2 3 And it did end up getting extended but not years. enough to cover this employee. 4 CHAIR KOTELCHUCK: Got it. Okay, well 5 then the issue really is resolved. 6 And Ι 7 understand the point of your question. So, I am happy to close it. Any other 8 9 comments by other Members? Okay. Now, that is 10 good. 11 So it is now almost 12:15. So let's 12 take a break and come back at 1:15. 13 MR. KATZ: Sounds good. CHAIR KOTELCHUCK: Okay, folks, have a 14 15 good lunch or breakfast. (Whereupon, the above-entitled matter 16 went off the record at 12:15 p.m. and resumed at 17 1:18 p.m.) 18 19 MR. SIEBERT: Dr. Kotelchuck, this is 20 Scott Siebert. 21 CHAIR KOTELCHUCK: Yes. 2.2 MR. SIEBERT: I didn't know if you

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1 wanted to but I believe I have the people on the line that if we want to go back to the 14 through 2 3 18 DOE sets that 436, the BNL external shallow question, we can probably discuss that at this 4 point, if that is acceptable or whatever you want 5 to do. 6 7 CHAIR KOTELCHUCK: I think that would work. Is that a problem, Rose? Can you do that 8

9 436.2? Yes, we might as well do that first if we10 have the people here.

- 11 Can you do that Rose?
- 12 MS. GOGLIOTTI: I'm working on it.
- 13 CHAIR KOTELCHUCK: Good.
- 14 MS. GOGLIOTTI: And that is in the DCAS
- 15 cases?
- 16 CHAIR KOTELCHUCK: Uh-huh.
- 17 MR. KATZ: That is a BNL case.
- 18 MS. GOGLIOTTI: Okay.
- 19 CHAIR KOTELCHUCK: There we go.
- 20 Alright, Scott, go ahead.
- 21 MR. SIEBERT: Okay and I think we have 22 broken it into two separate questions. Is Dennis

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or Steve on to handle the first one? 1 Steve. 2 MR. MARSCHKE: I was waiting for Dennis 3 to answer but this is Steve. I'm here. Okay, can you handle the 4 MR. SIEBERT: first one, then? 5 Yes, and the question 6 MR. MARSCHKE: was -- let me look back here. I guess the question 7 was why was there no electron dose assigned. 8 Is 9 that the question? 10 MR. SIEBERT: During the time frame 11 where we didn't assign it. I believe that is the 12 question, yes. 13 CHAIR KOTELCHUCK: Yes. 14 MR. SIEBERT: And just so everybody 15 knows, then the second question would be why was 16 there electron assigned during one of the years. MR. MARSCHKE: Okay, for the first 17 18 part, why electron dose wasn't assigned is because 19 in the time period of this claim, if you look in the Site Profile for Brookhaven, under Section 6.9, 20 Table 6-6, during this time they had a reporting 21 2.2 method of the skin dose was equal to the open window

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plus the deep dose or photon dose. If there was no beta doses or electron doses reported to the side of the table in the dosimetry record, then that meant there were no electron doses to assign.

5 So, that was the reason we didn't assign 6 any electron dose because if you look in the 7 dosimetry record on page 6 of 9 under the DOE 8 response, there is no beta doses reported. So we 9 would assume that there was only photon dose and 10 neutron dose.

11 MEMBER MUNN: Good answer.

MR. BARTON: This is Bob Barton. We sort of discussed this before. What about missed shallow dose?

MR. MARSCHKE: Yes, that is going to be answered in the second half of this question. Is Keith on here?

18 MR. McCARTNEY: Yes, I am.
19 MR. SIEBERT: I will let Keith handle
20 that one, Bob.

21 MR. McCARTNEY: So if my understanding 22 of the question is correct --

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1 MR. SIEBERT: Keith, I'm sorry. Can 2 you state who you are for the reporter, please? 3 MR. McCARTNEY: Yes, this is Keith McCartney from the ORAU Team. And I am the manager 4 of the tools. 5 CHAIR KOTELCHUCK: 6 Okay. 7 MR. McCARTNEY: And if I understand the question correctly, the question is why do we have 8 9 shallow missed skin dose assigned in 1968. Is that 10 correct? 11 MS. GOGLIOTTI: For half a period. 12 MR. BARTON: Yes, for one-half of a badging cycle. 13 MR. McCARTNEY: Yes, and I understand 14 15 that seems a little odd. And this is based on the Procedure 6 methodology, where we assigned missed 16 dose based on reporting that is rolled up. 17 In this 18 case, we have multiple badge readings but quarterly 19 reporting. So, we used Procedure 6 to estimate the number of missed dose for photons and shallow dose. 20 21 And what happened in 1968, fourth 2.2 quarter, what the tool dose is it estimates the

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number of missed badges for deep dose and the number
 of missed doses for shallow dose and then compares
 those.

If there are more badges assigned for 4 shallow under a given calculation, then it will 5 assign missed shallow instead of deep. 6 So as an 7 example, if we found out that there was three potential missed badges under shallow, 8 two 9 potential missed badges under deep, we would 10 subtract those and assign one potential missed 11 under the shallow dose. And this is а 12 claimant-favorable approach.

And the reason we did half a badge is 13 because under Procedure 6, we look at the number 14 15 of potential missed badges in two ways. We look at the doses compared to LOD over two and compared 16 to site limits. And we do that analysis for both 17 18 cases and then we take an average of those results. 19 So in this particular case, we found out there was no difference between LOD but there was a one-badge 20 difference between site limits. And you add zero 21 2.2 and one together, I assume you get half.

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1	I know that is a little skewed, maybe,
2	but that is what is happening within the tool.
3	CHAIR KOTELCHUCK: Okay, comments
4	anybody? Concerns?
5	MR. BARTON: This is Bob. I am a
6	little confused by the explanation. I think I
7	would really like to see, I guess, that in writing
8	because I am having trouble following the rationale
9	there for not assigning a missed shallow dose.
10	But I can understand saying that there
11	is no recorded shallow dose based on the procedures
12	of the site but I'm confused by why you wouldn't
13	have a missed dose for shallow assigned to each
14	badging cycle. If I saw it in writing, it would
15	be a little easier to follow maybe.
16	MR. McCARTNEY: Yes, I mean we can
17	certainly do that and give you an example from the
18	spreadsheet of how the calculation flows.
19	CHAIR KOTELCHUCK: How about the other
20	Committee Members? Are Subcommittee Members
21	MEMBER CLAWSON: This is Brad. I
22	would like to see something in writing. I'm going

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to be honest. I had a hard time understanding why
 it was what it was.

3 CHAIR KOTELCHUCK: Okay. MEMBER MUNN: This is Wanda. I'm not 4 particularly with happy with that but if people 5 want to see more detail and think about it a little 6 7 longer, there is urgency for us to close this now. CHAIR KOTELCHUCK: Right. 8 9 I'm in agreement with MEMBER BEACH: 10 Brad. I would like to see it in writing also. 11 CHAIR KOTELCHUCK: Alright, very good. 12 So, let's task that to be done for the next meeting. 13 And then go back to --I quess if they could 14 MS. GOGLIOTTI: 15 send that also to the Board Members that are interested in seeing that, that would be --16 Well, it will go to the whole 17 MR. KATZ: Subcommittee. 18 19 MS. GOGLIOTTI: Because sometimes it gets entered in the BRS. 20 It will be placed in the 21 MR. SIEBERT: 2.2 BRS.

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1 MR. KATZ: Yes, but anyway, send me an 2 email when you have the response and I will 3 circulate it as an email to all -- because a number of the Board Member don't go to the BRS. 4 CHAIR KOTELCHUCK: Right. That would 5 be appreciated. 6 7 MR. KATZ: Thanks. CHAIR KOTELCHUCK: Okay, then we go 8 9 back to the Bethlehem Steel. 10 MS. GOGLIOTTI: Okay. 11 CHAIR KOTELCHUCK: Thank you, Scott, 12 and thank you folks for weighing in. 13 MR. SIEBERT: Thank you. Okay, the first one, 14 MS. GOGLIOTTI: 15 finding, we are chasing down all the Bethlehem And we do have two observations and 16 Steel cases. I believe nine findings associated with it. 17 And in response to almost all of them, NIOSH had a 18 19 standardized response, saying that the Bethlehem Steel TBD was heavily and repeatedly reviewed by 20 external stakeholders, NIOSH, and the Work Group 21 22 established specifically for this site. On

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October -- sorry on January 8th of 2006, the Board
 voted during a teleconference to accept the Work
 Group's recommendations to close the findings.
 And NIOSH considered all comments regarding the TBD
 closed.

And we are not satisfied with that response. In our opinion, historical issue resolution does not preclude new issue resolution, especially since the TBD has been revised and has not reviewed the recent version of the TBD.

11 So I would recommend that we hold off 12 on all of the 409 findings and observations until 13 we get a response to --

This is Grady. I would 14 MR. CALHOUN: 15 say the best case scenario is this goes to -- I hate to say it, Wanda -- but to the Procedures Group. 16 I mean these are not issues of whether or not we 17 implemented what was in the procedure. 18 This is 19 they don't like the procedure. So that is a TBD 20 issue.

21 MR. KATZ: Well, I'm trying to remember 22 if we had a Bethlehem Steel Work Group or not. I

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1 don't recall. Because if we did, then it would go 2 to that. 3 MS. GOGLIOTTI: According to NIOSH's 4 response, there was one.

5 MR. KATZ: Okay. Yes, it has been a 6 long time since we have done Bethlehem Steel.

7 DR. MAURO: It was the first one.

8 MR. KATZ: Yes, ancient, as a matter of 9 fact.

DR. MAURO: It was the very first one and there was a group and there was quite a bit of discussion regarding it as an SEC. And you know a lot has occurred. But the last version, I guess, of the Site Profile was not reviewed --

MR. KATZ: Well, now here is what I think is necessary. It depends on the facts here. There was a time when the Board voted and approved the Site Profile for this, as the SEC actually in this case weirdly came up after that.

20 So I think the question is whether the 21 revisions to the Site Profile extended beyond the 22 SEC actions in changing the way other things that

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were done that were hence then never reviewed by
 SC&A.

3 The Site Profile was updated simply to, in effect, effectuate the SEC actions. Otherwise, 4 the Site Profile was approved by the Board and is 5 not up for review. But if it included changes 6 7 unrelated to the SEC action that, in effect, make it a different Site Profile now than it was when 8 9 the Board approved it, not for reasons of the SEC, then the question is does the Board want SC&A to 10 11 re-review the Site Profile. And that would be 12 taken up by the Board and if assigned, then it would go to that Work Group to consider SC&A's review of 13 the new Site Profile. 14 So I need some information, I guess, 15

16 from NIOSH, and I'm not saying you have that 17 information at your fingertips, but as to whether 18 the Site Profile was revised beyond sort of 19 implementing what had to be implemented to take 20 into account the SEC that was added.

21 MEMBER BEACH: Well, it sounds like 22 there was a new revision and it was not reviewed

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1 by SC&A and --

2	MR. KATZ: Well, but Josie, I
3	understand it wasn't reviewed. The question is
4	why the updates were made. If they were made to
5	implement the SEC, it doesn't really matter because
6	that was also a Board action. But if it was other
7	methodological changes that the Board never
8	considered, then I totally agree. Then it need to
9	be considered for the Board for tasking and the Work
10	Group will then take it up after SC&A has reviewed
11	the new Site Profile.
12	MR. CALHOUN: Okay, here is what the
13	record of revision says.
14	MR. KATZ: Okay.
15	MR. CALHOUN: Revision initiated to
16	incorporate SEC designation information.
17	Additional changes include deletion of unnecessary
18	information throughout, document affected by SEC,
19	added information regarding recycled uranium at
20	Bethlehem Steel Corp. and additional rolling data,
21	that Table 1 corrected minor typographical errors
22	and included NIOSH internal comments.

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1	MR. KATZ: So from what you just said
2	Grady, it sounds like the only thing that might be
3	new is the RU information.
4	MR. CALHOUN: Right.
5	MR. KATZ: And if that is the case, and
6	then I don't know what SC&A's findings are, but
7	those, the RU we can go to the Board and say do you
8	want SC&A to review the handling of RU, which is
9	new to the Bethlehem Steel.
10	CHAIR KOTELCHUCK: RU?
11	MR. KATZ: Meaning recycled uranium.
12	CHAIR KOTELCHUCK: Recycled uranium,
13	okay.
14	MR. KATZ: But everything else is in
15	accordance with the SEC and that is not really an
16	issue.
17	And then everything else in that that
18	hasn't been changed was approved by the Board and
19	is really beyond SC&A's scope.
20	So anyway, I think, Dave, then the thing
21	to do is to take this to the Board and say do you
22	want SC&A to review the new RU section of Beth

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1 Steel.

2	CHAIR KOTELCHUCK: Yes, I am troubled
3	by this. If these are all observations are we, if
4	you will, fishing for problems versus do we
5	perceive problems that need to be looked at?
б	MR. KATZ: Let me ask, the observations
7	or whatever, are they on RU, on recycled uranium?
8	MS. GOGLIOTTI: These two observations
9	are not but there are nine findings on there.
10	MR. KATZ: And the findings are
11	actually more
12	CHAIR KOTELCHUCK: Yes, the findings
13	we let's go to them.
14	DR. MAURO: Yes, this is John. I was
15	there. And if we could go through the findings,
16	I might be able to say oh, yes, I remember we dealt
17	with that or we didn't.
18	MS. GOGLIOTTI: But John, these are all
19	your findings.
20	DR. MAURO: Well, there you go. Could
21	you just I'm not linked into your system. I am
22	just following from the email you sent me, Rose.

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Could you just go quickly through them, give me a
 quick summary of them? And I will help out to the
 extent I can.

And the other person that was there was Jim. I don't know if Jim is in the room -- on the phone, I mean. But the two of us I think go back that far on Bethlehem Steel.

8 CHAIR KOTELCHUCK: That sounds good. 9 MS. GOGLIOTTI: Okay, I can certainly 10 read off the observations.

11 CHAIR KOTELCHUCK: Good.

MS. GOGLIOTTI: Observation 1 says updated guidance on chronic direct deposition of fine particles since the completion of the DR may significantly impact this case.

DR. MAURO: Direct depositions issues have been fully resolved subsequent to this under OTIB-17. So, in principle, this issue has been closed in other venues.

20 Keep in mind that that issue is one that 21 applies across the Board and OTIB-17 deals with it. 22 So, in principle, that issue should be resolved.

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1 If in fact the TBD -- here is the 2 question: Does the current version of the TBD 3 cross-reference OTIB-17?

MS. GOGLIOTTI: I would assume not,
since it was revised before that time period.

And that would be the only 6 DR. MAURO: 7 thing else that came out of that. It would probably be a good idea to put that in the next time 8 9 if and when it is revised. It is important that -- we run into this a lot where something has come 10 11 up and then subsequently it is dealt with on some 12 other venue, whether it is a Site Profile or a 13 procedure. We have seen that with Mound on so many occasions and this would be a perfect example. 14 15 And the only comment we ever have is,

16 to the extent that the Work Group and the Board 17 feels it is necessary, is that that guidance simply 18 point the reader in that direction.

MEMBER BEACH: John, this is Josie.
Observation 1, SC&A recommends closure on this one.
MS. GOGLIOTTI: Yes, I believe that is
the only one.

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MEMBER BEACH: Okay. 1 2 MS. GOGLIOTTI: But I was under the 3 assumption that it would be easier if we closed out all of 409 together when we had this conference but 4 it doesn't sound like that is --5 Yes, that could be --6 DR. MAURO: 7 certainly, I can say that I know that the issues on direct deposition have been resolved in another 8 9 venue. 10 CHAIR KOTELCHUCK: Okay. 11 MS. GOGLIOTTI: Okay. 12 MEMBER MUNN: Yes, they have. MS. GOGLIOTTI: And then Observation 2 13 14 states that transparency in the Site Profile would 15 be enhanced if the results of air sampling were 16 included in an Appendix. All air sampling issues 17 DR. MAURO: were resolved and they were the key, the subsequent 18 19 heart of the SEC and the data that was there. So, all this is is an editorial comment 20 and has no technical substance, other than having 21 2.2 a complete and understandable document that would

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But all the data that stands behind 1 stand alone. 2 a decision regarding the SEC, et cetera. But you 3 know what was made available was reviewed. This may just be an editorial comment where the Site 4 Profile might benefit by including that data. 5 GOGLIOTTI: 6 MS. And it was an 7 observation. So, that would be the intent, generally. 8 9 CHAIR KOTELCHUCK: Okav. 10 MS. GOGLIOTTI: Finding --11 CHAIR KOTELCHUCK: Finding 1. 12 MS. GOGLIOTTI: Finding 1, the photon dose rate to the skin one foot from the source was 13 14 understated by a factor of about 1.9 if а 15 claimant-favorable large source is used as а 16 reference. That might be important. 17 DR. MAURO: I do not believe that -- I do not recall that issue 18 19 ever being resolved and I know that that issue has

21 are derived.

20

2.2

I would recommend that that sounds like

come up on many, many occasions on how the doses

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something that does 1 need to be looked at. specifically on how it is dealt with in the latest 2 3 version of -- in other words, if you want to keep it really focused, I can't say sitting here that 4 that issue has, in fact, been adequately addressed. 5 It was not, at the time, unless I forgot. 6 I mean I was so intimately involved with it that I do not 7 believe it was resolved. But it would probably be 8 9 a good idea to take a look at what is in the Site Profile right now in this current version with 10 11 respect to this issue.

12 And I could say within 15 minutes, we 13 would be able to look at it and see what was done 14 because this issue has come up in so many different 15 venues and it will get quickly determined whether 16 or not the way in which the dealt with external dose 17 from a solid source is dealt with.

MS. GOGLIOTTI: Actually, this one Grady did respond to. It was one of the few that were responded to.

21 CHAIR KOTELCHUCK: Okay.

22 MS. GOGLIOTTI: And if you would like,

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1 I can read that.

2	CHAIR KOTELCHUCK: Please.
3	MS. GOGLIOTTI: There was no change in
4	the photon dose rates assigned to workers from Rev.
5	0 to Rev. 1. That said, SC&A's rationale for the
6	TBD understanding, the photon dose relied on MCNP
7	calculation that used a large new slab with
8	dimensions of 300 centimeters by 100 centimeters
9	by 10.16 centimeters, which is
10	CHAIR KOTELCHUCK: Something got cut
11	off.
12	MS. GOGLIOTTI: I'm sorry?
13	CHAIR KOTELCHUCK: I can't hear you.
14	MR. KATZ: You can't hear Rose? We can
15	hear you.
16	CHAIR KOTELCHUCK: Now, okay, fine.
17	Go ahead, I'm back.
18	MS. GOGLIOTTI: Okay, which equates to
19	an object that is 118 by 79 by 4.
20	Given the BSC received billets and
21	rolled them into rods, I don't see this scenario
22	as applicable. In Appendix C of their review, SC&A

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also milled billets and rods. Both of these shapes
 had total dose rates less than 2 millirem per hour
 values used in the TBD.

Well, I mean the only thing 4 DR. MAURO: I could say is that at the time, when we were looking 5 at these issues, the area of disagreement, which 6 7 was agreed to be a Site Profile issue, was the deal with the exposure to the rods and if they were 8 9 single individual rods or were they arrayed and stacked in a way that substantively changed the 10 11 geometry, whereby it is not just a single rod you 12 are being exposed to but there were locations where there could be multiple rods stacked, stored, where 13 14 the geometry changes. And that was an issue that 15 has come up.

Whether the degree to which that now -it sounds like we have an answer here and it may very well solve the issue but I just can't say off the top of my head whether that calculation addressed the issue that was at play at the time. CHAIR KOTELCHUCK: Is this something that -- I would like to do whatever we can without

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going to the Board to decide whether we should go
 to the Board. Can we leave this open so folks can
 take a look at it?

4 MEMBER BEACH: And don't forget, that 5 is Doug Farver just responded to Grady on January 6 17th. So there is more information that Doug 7 Farver put in on Grady's comments.

8 CHAIR KOTELCHUCK: Right.

9 MR. CALHOUN: Yes, we will formulate a 10 response to that.

11 MS. GOGLIOTTI: Okay.

12 CHAIR KOTELCHUCK: That sounds good.13 So we will leave it open and go on.

MS. GOGLIOTTI: Okay, Finding 2 says the photon dose rate is understated by about 15 percent in 1952.

MAURO: That sounds like 17 DR. а 18 difference between the calculation performed by Bob Anigstein using MCNP and by NIOSH calculations. 19 20 I can't speak to whether or not that _ _ you know to the technical merits of that. 21

MS. GOGLIOTTI: So tentatively, let's

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1 leave that open, then.

2 CHAIR KOTELCHUCK: Okav. 3 MS. GOGLIOTTI: Finding 3, NIOSH had verified that U.S. Army 1989 is the correct source 4 for a dose of 90 millirad per hour and provide a 5 reference for the cited electron dose of 150 6 7 millirad per hour. DR. MAURO: And we have no response to 8 9 That may very well resolve the issue but I that. 10 can't speak to that. 11 MS. GOGLIOTTI: You want me to just 12 keep going down the list? I think --13 CHAIR KOTELCHUCK: DR. MAURO: This is John. 14 I'm sorry to 15 interrupt. I'm just trying to help to really move It sounds like there 16 these things expeditiously. are a handful of responses that are provided here 17 18 that go toward very specific issues. And rather 19 than -- this may be a good, I guess compromise in 20 how to deal with this in an effective and efficient 21 is identify those issues, findings way and 2.2 observations where there is a response here that

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is something that reflects the latest version of 1 the Site Profile and it becomes a focused review 2 3 just to confirm that yes, in fact, that response does two things. 4

One, we agree technically that it does 5 address the issue and that, in fact, the Site 6 7 Profile does in fact contain that information, as opposed to raising the concern over having to do 8 9 a Site Profile review, which would be large.

Right.

10 CHAIR KOTELCHUCK:

11 DR. MAURO: So if we could just zero in 12 and focus in on those issues, and you have already mentioned two, I guess I would feel a little better 13 about saying something intelligent about it either 14 15 myself or get my hands, get a hold of Bob Anigstein and say let's take a look at this. 16 One, do we And two, is it in the current version of 17 agree? the Site Profile and, therefore, can be closed? 18 19 CHAIR KOTELCHUCK: Okay, that would be 20 You could be looking at it anyway. okay. 21 So, shall we keep it open? 2.2

MR. CALHOUN: This is Grady. I mean

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that's okay. Do Doug's comments appear anywhere other than the BRS or do those come over as a memo or something like that? MS. GOGLIOTTI: They are only in the MR. CALHOUN: Okay. CHAIR KOTELCHUCK: Alright. MS. GOGLIOTTI: Let me see if there are

9 any more responses in here. I think that might 10 have been the only one.

11 MEMBER BEACH: Yes, I am looking at 12 That is the only one that I can see. them, Rose. 13 MS. GOGLIOTTI: Okay.

14 CHAIR KOTELCHUCK: Oh, okay.

15 MS. GOGLIOTTI: So, tentatively, let's leave all of these open, except for Observation 1, 16 which we discussed. 17

18 CHAIR KOTELCHUCK: Right.

19 MS. GOGLIOTTI: Okay.

20 CHAIR KOTELCHUCK: Okay.

MS. GOGLIOTTI: And should we make that 21

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2.2 a NIOSH action item to look into them?

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BRS.

1 CHAIR KOTELCHUCK: Yes, I would say fairly high bar 2 that there is а for this 3 Subcommittee to go back to the Board to reopen but we will have to consider that if, in fact, you find 4 out that there was information that was not 5 examined. 6 7 So with that, let's go to the next one. MS. GOGLIOTTI: Okay. So we will skip 8 9 all of the remaining 409. 10 CHAIR KOTELCHUCK: Okay. 11 MS. GOGLIOTTI: And I think the next 12 one is 360.2. 13 CHAIR KOTELCHUCK: Now we are doing Category 2, right? 14 15 MS. GOGLIOTTI: Correct. 16 CHAIR KOTELCHUCK: Okay. MS. GOGLIOTTI: Okay and this is the 17 BONUS Reactor Plant and Puerto Rico Nuclear Center 18 19 case. And it reads the failure to discuss neutron exposure potential. 20 For some reason this is a little bit strange here in the BRS. 21 2.2

MEMBER BEACH: Rose, could you do Bliss

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& Laughlin, that 335.1?

1

2 MS. GOGLIOTTI: I'm sorry. What was 3 that? 4 MEMBER BEACH: I was just wondering if

5 you were skipping Bliss & Laughlin, the 335.1, 6 which is just ahead of the BONUS Reactor.

MS. GOGLIOTTI: I believe we discussed
that one previously as part of a Type 1 category.
CHAIR KOTELCHUCK: Uh, 335.1, yes, we

10 did close it earlier.

MEMBER BEACH: Okay, it's listed as open, though.

MS. GOGLIOTTI: Only because I haven'tgone back in and changed them all.

15 MEMBER BEACH: Okay, sorry.

16 CHAIR KOTELCHUCK: That's okay.

17 306.2.

18 MS. GOGLIOTTI: 360.2. Okay and with 19 this particular case, the summary records were reported on a form called The Summary of Whole Body 20 21 Radiation Exposure to External Penetrating 2.2 Radiation Accumulated During the Year. And it was

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not apparent to us that those exposures included
 neutron exposures.

3 NIOSH came back and said that it was 4 their understanding that no other penetrating 5 radiation was reported on this one, including 6 neutron dose.

And if that is the case, we would just
ask NIOSH for a reference or a citation that would
justify that.

10 CHAIR KOTELCHUCK: Right. That would 11 -- as it stands, it seems to me that this was an 12 observation that you are asking them for --

MS. GOGLIOTTI: Well, the dose
reconstruction report did not discuss neutron
exposure potential.

16 CHAIR KOTELCHUCK: It did not discuss 17 what?

18 MS. GOGLIOTTI: Neutron exposure19 potential.

20 CHAIR KOTELCHUCK: Okay and the issue 21 is whether it is incorporated?

MS. GOGLIOTTI: NIOSH believes that it

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1 should have been incorporated in measured 2 penetrating radiation that was reported on the 3 form, although we don't have a reference that 4 justifies that.

5 So if they can provide us with a 6 reference, we would advising to close it out.

7 CHAIR KOTELCHUCK: Okay. And that is 8 fine. And I see. So that would really, 9 essentially, have to be left open until you get that 10 information.

11 MS. GOGLIOTTI: Correct.

DR. MAURO: This is John again. Sorry to interrupt but it was not uncommon for the records, those old handwritten records, to be just like you described, the whole body dose were expressed in terms of the sum of neutron and photon.

17 CHAIR KOTELCHUCK: Right.

DR. MAURO: The only question I raise DR. MAURO: The only question I raise is that very often the way in which you refer to a neutron, when the neutron doses are reported there are very often lots of adjustment factors that are -- when NIOSH does a neutron dose

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reconstruction where there is a track etch or some 1 2 type of a way in which the neutron dose is 3 determined, very often there are associated adjustment factors, the implications being if this 4 is, in fact, combined with reported dose at that 5 time from the old records, is there a need to 6 7 separate the two and then apply appropriate adjustment factors to the neutron dose? 8

9 I hate to bring up something that 10 nuanced but if we were just to accept that and say 11 here is the total dose, it would not be, in my mind, 12 compatible, necessarily with the way in which we 13 deal with neutron doses in more recent dose 14 reconstructions.

15 Did you follow that?

16 CHAIR KOTELCHUCK: Yes. I'm trying to 17 think. Do other Subcommittee Members have 18 thoughts on that? I'm trying to think of what is 19 an appropriate response.

20 MEMBER MUNN: I'd have to break my vow 21 of silence.

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22 CHAIR KOTELCHUCK: Okay.

1	MEMBER MUNN: Sorry.
2	CHAIR KOTELCHUCK: Go right ahead,
3	Wanda.
4	MEMBER MUNN: No, that is quite
5	alright. I am wondering if we might not be just
6	creating more problems for ourselves than is really
7	evidenced by the facts. I don't see
8	MS. GOGLIOTTI: Well, I think the case
9	here is we were questioning whether or not there
10	should have been neutron exposures. NIOSH seems
11	to be arguing that if there were neutron exposures,
12	it would have been included on this form and that
13	is why it was omitted from the dose reconstruction.
14	MR. CALHOUN: So we just need to come
15	up with something that makes you feel comfortable
16	
17	MS. GOGLIOTTI: They should have been
18	included on that form if they were
19	MR. CALHOUN: Okay, good enough. I
20	have got it written down.
21	CHAIR KOTELCHUCK: Okay.
22	MEMBER MUNN: Yes, if it needs to be

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1 asked, ask it. One cannot imagine that anyone 2 working with a reactor system of any kind, 3 regardless of what size, shape, or category, would not consider neutron exposure as a potential. 4 That just seems so unlikely. 5 6 CHAIR KOTELCHUCK: Right. 7 MEMBER MUNN: I can't imagine such a thing but I suppose in some cartoon it could happen. 8 9 The Simpsons do it all the time. 10 CHAIR KOTELCHUCK: Okay, so we are 11 going to leave it open until people can -- Grady 12 you can satisfy us with information. 13 Let's go on to the next one. 14 MS. GOGLIOTTI: Okay, same case. The 15 finding states that there was insufficient 16 evidence to support the opined internal dose. And NIOSH responded by saying that the BONUS Reactor 17 18 was a boiling water reactor, while the PRNC 19 included a one megawatt MPR reactor. Both types of reactors, along with other types, existed at 20 INL, therefore, INL appeared to be a reasonable 21 2.2 surrogate.

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1 And our responses states that NIOSH explained that the BONUS Reactor was a boiling 2 3 water reactor while the PRNC was blah, blah, blah. We just talked about that. On that basis, NIOSH 4 believes that the internal environmental doses at 5 INL can serve as a reasonable surrogate. 6 This may 7 be appropriate for environmental doses but it is questionable because such an assumption does not 8 9 appear to satisfy the Board's biased surrogate data However, of one immediate concern is 10 criteria. 11 that the internal doses at INL facilities employ 12 OTIB-54 gross beta/gamma urine analysis data for dose reconstruction. If the workers at PRNC 13 reactors had gross beta/gamma urine analysis data, 14 15 consideration should be given to using OTIB-54, if 16 not some other approach to reconstructing internal exposures, if needed, which draws upon either 17 appropriate surrogate data for OTIB-33/18 or 18 19 NIOSH's procedure for building a worker model. 20 DR. MAURO: Yes, that one is mine, by

20 DR. MAURO: Yes, that one is mine, by 21 the way. I could help out if you have any 22 questions.

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1	CHAIR KOTELCHUCK: Was there a
2	response? Their response was just above, right?
3	MS. GOGLIOTTI: Yes.
4	MEMBER BEACH: So that one begs for a
5	response, I think, answering those SC&A comments.
6	CHAIR KOTELCHUCK: I missed what the
7	last person said.
8	MEMBER BEACH: This is Josie. I think
9	that NIOSH needs to comment on the last paragraph
10	that SC&A put out there.
11	DR. MAURO: See, this is a circumstance
12	where so much has occurred of importance that it
13	leaves this particular dose reconstruction,
14	unfortunately, in an uncomfortable place because
15	it didn't have the benefit of having all of that
16	surrogate data experience, et cetera, available at
17	the time. And it leaves you in the uncomfortable
18	position to say well, could that be important. Not
19	that we are saying it is but it is just the nature
20	of the beast that we are going to run into
21	situations where old dose reconstructions, well I
22	guess relatively old are now subject to questions

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1	that emerge because so much has occurred subsequent
2	to that time.
3	CHAIR KOTELCHUCK: Yes.
4	MR. CALHOUN: I'll just need to come up
5	with another answer for that one.
6	CHAIR KOTELCHUCK: Okay.
7	MEMBER MUNN: And a closed
8	parenthesis.
0	

9 CHAIR KOTELCHUCK: Yes. Alright, 10 let's go on.

MS. GOGLIOTTI: Okay and actually this one, I believe, relates to that as well. It states failure to address monitoring described in the CATI report in Finding 4 for the same case.

15 And NIOSH agrees that the DR report should have addressed these 16 issues more completely. However, the estimate itself fits 17 based on the summary data of monitored workers as 18 19 described in Finding 360.1 and that doesn't depend 20 on the worker being unmonitored.

21 So we still have concerns regarding how 22 internal exposures are to be reconstructed for the

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reasons described in the last finding.

2 CHAIR KOTELCHUCK: Regarding how 3 internal exposure are to be reconstructed.

This is John again. 4 DR. MAURO: Ιt to the fact that one of the important 5 qoes developments relatively 6 that have occurred 7 recently is OTIB-54 on internal dose, especially where the approach now being used which has been 8 9 found to be satisfactory is this gross beta/gamma and then converting that to intake. 10 This may be 11 a case that we are on right now that was done prior 12 to that protocol.

13 So I think I am trying to just get 14 context. So the question becomes was the protocol 15 used at that time compatible, consistent, and 16 appropriate, if not claimant favorable, when 17 compared to the newer protocols that are being used 18 now.

19 CHAIR KOTELCHUCK: Right. Well, I'm20 not sure how to proceed.

21 MR. CALHOUN: I just have to respond to 22 all of these.

1 MEMBER BEACH: That's what I was going 2 to suggest. 3 MEMBER MUNN: Yes, it looks like it. CHAIR KOTELCHUCK: It just keeps going 4 It is the same, similar kinds of issues. 5 on and on. How many findings -- I don't have it in 6 7 front of me. How many findings do we --MS. GOGLIOTTI: There is one more 8 9 additional findings on this one. CHAIR KOTELCHUCK: Just five? 10 Five is 11 the last one? 12 MS. GOGLIOTTI: And it is identical to 13 Finding 4 actually. It is just on a different 14 aspect. 15 CHAIR KOTELCHUCK: Then we will leave it all open, right? 16 17 MS. GOGLIOTTI: Okay. CHAIR KOTELCHUCK: And let's try and 18 19 get this resolved at the next meeting. MS. GOGLIOTTI: Okay and the next one 20 We actually consider this fairly 21 is 366.1. significant. 2.2 It is a Heald Machine Co. case. And

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this dose reconstruction was done without using the 1 2 approved Site Profile. The DR was completed in 3 July of 2010 and the Site Profile for this site was Julv of 2007. And the 4 approved in dose reconstruction does not reference the Site Profile 5 and doesn't provide any explanation on why it 6 7 wasn't used. NIOSH did respond, saying the claim completed with TBD-6000 rather than the 8 was 9 site-specific Appendix. They did discover this oversight after the claim was submitted to DOL and 10 11 they found that the method that they used was 12 actually claimant-favorable but, despite the error actually not affecting the case, we think it is a 13 very serious oversight. And the question is are 14 there any other cases this occurred with. 15 16 CHAIR KOTELCHUCK: Okay.

17 DR. MAURO: Rose, this is H-E-A-L-D,

18 Heald?

19 CHAIR KOTELCHUCK: Yes.

20 DR. MAURO: Yes, and so the issue being 21 that the methods used in the Heald dose 22 reconstruction at the time resulted in doses that

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were higher than if you were to -- I just want to 1 make sure I understand -- than if you were to use 2 3 the latest version of TBD-6000 -- or no. Maybe I am misunderstanding. 4 I'm sorry I am asking questions because I want it to make sense to me. 5 So you are saying that there was a dose 6 7 reconstruction -- a Site Profile for Heald but it wasn't followed. 8 9 MS. GOGLIOTTI: Correct, they didn't 10 use it or reference it in any way. 11 DR. MAURO: I see but it turned out that 12 what was done was conservative as compared to what would have been done if they followed the Site 13 Profile for Heald. 14 15 MR. CALHOUN: Yes, but that is still 16 not okay. DR. MAURO: Yes, I just want to make 17 18 sure I understand the problem. 19 MR. CALHOUN: I'm going to go back. There is only 17 claims. I'm going to go back and 20 check. 21 2.2 DR. MAURO: Okay.

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1	CHAIR KOTELCHUCK: Good.
2	MS. GOGLIOTTI: Well, is there a method
3	in place that would ensure that for these smaller
4	sites that the dose reconstructor is actually using
5	these procedures?
б	MR. CALHOUN: I don't know what would
7	be in place, other than they should know it but we
8	are going to check.
9	MS. GOGLIOTTI: Okay.
10	CHAIR KOTELCHUCK: Good.
11	MR. KATZ: Well, I mean there is peer
12	review and all that that occurs. It is not just
13	a dose reconstructor.
14	DR. MAURO: That's correct.
15	CHAIR KOTELCHUCK: Sure.
16	MR. KATZ: It is a QA problem and Grady
17	said he would follow up to see if it occurred
18	elsewhere.
19	MS. GOGLIOTTI: According to Scott's
20	response here, the same did occur for other cases
21	at the site.
22	CHAIR KOTELCHUCK: At this site, at

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1 Heald Machine.

2	MR. KATZ: Right.
3	CHAIR KOTELCHUCK: Yes.
4	MR. KATZ: So it sounds like you can
5	close it and then Grady can let us know. I just
б	I mean those folks will take whatever measures are
7	needed with respect to the QA problem.
8	CHAIR KOTELCHUCK: Right. Let's have
9	them report back. That's fine. And if they do,
10	that's fine.
11	MR. KATZ: I mean they are agreeing
12	that it is an error. So you can close it, actually.
13	MEMBER BEACH: Well, it didn't sound
14	like they were agreeing. He was going to look at
15	it and find out.
16	CHAIR KOTELCHUCK: That's right.
17	MR. KATZ: I thought they said very
18	clearly that
19	MR. CALHOUN: We should have done the
20	DR to the Heald requirements. There is no doubt
21	about that. I'm just going to go back and see if
22	we need to do anything on any other ones.

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1	MR. KATZ: Right.
Ţ	MR. RAIZ. RIGHL.
2	CHAIR KOTELCHUCK: Right. Oh, okay.
3	I see what you are saying. You are just simply
4	saying that all we have to do is affirm that that
5	was a problem, that it was a mistake, and the
6	resolution will follow.
7	MR. KATZ: Yes, I mean they will
8	follow-up on whether it was done for other cases
9	but we can close it.
10	CHAIR KOTELCHUCK: Yes, I understand.
11	I think that makes sense.
12	Subcommittee Members, we are closing
13	it?
14	MS. GOGLIOTTI: Something that it is
15	really important is preventing it from happening
16	
ΤŪ	again.
17	again. CHAIR KOTELCHUCK: Right. Well, they
17	CHAIR KOTELCHUCK: Right. Well, they
17 18	CHAIR KOTELCHUCK: Right. Well, they are going to check for the other. If it is
17 18 19	CHAIR KOTELCHUCK: Right. Well, they are going to check for the other. If it is consistent when there was an error, they will look

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I mean they will take whatever action 1 this is Ted. I mean it may be that no other action 2 is needed. 3 is needed. If all these were done and end up being claimant-favorable, then no case was adversely 4 impacted. It is a problem; they will fix it but 5 they don't have to issue a PER or whatever because 6 7 they are all claimant favorable. But I mean who knows what the case is. 8 9 Grady can let us know what he finds out but we don't have to hold this up. That's all. 10 11 CHAIR KOTELCHUCK: Okay, so we will

12 close it. Again, any final comments from Board
13 people -- from Subcommittee people. Excuse me.

MEMBER BEACH: This is just showing that our process works. So good job, SC&A. And I agree with closing it.

17 CHAIR KOTELCHUCK: Okay. Alright,
18 let's go on to the next one.

MS. GOGLIOTTI: Okay, the next one is 432.1. And the finding states that the DR report appeared to have employed an overestimating approach for deriving the external dose to the

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brain, which is inappropriate when the worker was
 compensated.

3 And NIOSH responded saying that the comment appears to be based on using a dose 4 conversion factor for a surrogate organ to the 5 brain dose calculation. OTIB-5 designates that 6 external organ as thyroid/remainder, despite the 7 use of a remainder for estimates other 8 than Remainder was used in the dose 9 maximizing. 10 estimate.

11 And John Mauro, are you on?

12 DR. MAURO: Yes, sure, yes, that was a concern that I raised. Bear with me. What we did 13 14 was a -- okay, so as a surrogate organ to determine 15 the dose to the brain, the dose was performed to 16 some other organ. We went through just an exercise to say okay, let's take one of the remainder or 17 18 residual organs. I'm not sure that it is the right 19 term. And we picked the liver. Said well, we will do dose to the liver. 20

21 And what happens then is the dose to the 22 liver you get a higher dose than if you were

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actually to do the dose to the brain because of the
 shielding afforded by the skull. So you would say
 oh, we overestimated; well, that is
 claimant-favorable.

in this case, the worker 5 But was compensated and we found it unusual or incompatible 6 7 with some of the philosophy where you use what appeared to us to be guite a claimant-favorable 8 9 assumption, a factor of 1.5 and compensated the That seems to be incompatible with the 10 person. 11 fundamental philosophy. And that was our concern, 12 notwithstanding the fact that followed you 13 procedure. Don't get me wrong. I think you have a procedure that says to do this. 14

But in this case, when it comes to the brain and it comes to compensation, that procedure -- may really be an issue relating to the procedure that they should follow. There are certain cases when maybe you don't want to follow that procedure. CHAIR KOTELCHUCK: So the procedure was overestimating.

DR. MAURO: As applied to this case.

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CHAIR KOTELCHUCK: Yes. 1 It is a little difficult 2 MEMBER MUNN: 3 for us to make any kind of judgment without going through the procedure blow by blow, it seems to me. 4 DR. MAURO: You can see, Wanda, during 5 the Procedures meeting, and we probably addressed 6 7 this issue, we would walk away, oh, that's fine. You see? 8 9 MEMBER MUNN: Yes. 10 DR. MAURO: And then all of a sudden you 11 find a real world circumstance that we hadn't 12 anticipated where it is not okay to be that conservative and this seems to be one of those 13 14 because he was compensated. 15 MEMBER MUNN: Yes, the individual dose compensation is an entirely different thing than 16 the overall procedure here. 17 18 No question you can't second guess 19 individual circumstances. Has NIOSH responded to this? 20 MR. KATZ: Is there a less conservative approach that they 21 2.2 didn't use that they should have used?

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1 MEMBER MUNN: Well, a more realistic 2 approach. 3 MR. KATZ: Well, that is what I am just asking. I didn't hear whether NIOSH had actually 4 responded. 5 MS. GOGLIOTTI: We do not have our 6 7 formalized response in the BRS for this one. MR. KATZ: Oh, okay. So why don't wait 8 9 and hear what NIOSH has to say? MEMBER MUNN: It would be wise. 10 11 CHAIR KOTELCHUCK: Okay. So, Scott, 12 What we are saying is Scott's I'm not sure. 13 response is inadequate? MS. GOGLIOTTI: Well, Scott came back 14 15 and said we followed our procedure. 16 CHAIR KOTELCHUCK: Right. And they did. 17 MEMBER MUNN: And the truth of the 18 19 matter is, even if it turns some compensable to noncompensable, we wouldn't do anything about 20 that. 21 2.2 CHAIR KOTELCHUCK: Correct. Oh,

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1 absolutely correct.

2	MEMBER MUNN: So since there is no
3	action to be taken, as long as we incorporate that
4	statement and rationale into our closing
5	statement, it seems to me that we can close the
6	issue without any further exercise of everybody's
7	time and effort. But we have called attention to
8	the fact that there is a philosophical difficulty
9	here.
10	CHAIR KOTELCHUCK: Right.
11	MR. KATZ: This is Ted. I'm sorry but
12	Wanda, if the procedure if there is a problem
13	with the procedure we can't close it because that
14	is what these DR cases are supposed to address, in
15	part. I mean we need to know that there is a
16	resolution to the problem, the procedure, if there
17	is, in fact, a problem with the procedure.
18	It seems like we need more response from
19	NIOSH first, whether they agree that the procedure
20	is wrong for cases like this. They may not agree,
21	in which case that has to be resolved but I don't
22	think you can close this one now. It doesn't

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matter that this case was compensated or whatever. 1 2 CHAIR KOTELCHUCK: Correct. MS. GOGLIOTTI: How about I proposed 3 that we will get our formalized response entered 4 in the BRS and NIOSH can respond to that? 5 6 MR. KATZ: Yes. 7 CHAIR KOTELCHUCK: Good. MS. GOGLIOTTI: 8 Great. 9 CHAIR KOTELCHUCK: Okay. 10 MS. GOGLIOTTI: Okay, the next finding 11 is 432.3. And the finding states that a comparison 12 of an earlier version of the CADW tool and the current version resulted in a difference 13 in internal dose. 14 15 And NIOSH asked us to supply our files 16 so they could investigate and we did provide those files in December and we haven't heard back yet. 17 So I would recommend leaving that one 18 19 open. CHAIR KOTELCHUCK: Right. So we have 20 21 to keep that open. 2.2 MS. GOGLIOTTI: Yes.

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1 CHAIR KOTELCHUCK: We have lots of 2 opens today. 3 MS. GOGLIOTTI: But we have also talked about a lot of type 2 findings. So, that is 4 somewhat to be expected. 5 CHAIR KOTELCHUCK: 6 Yes. 7 Definitely. MR. KATZ: CHAIR KOTELCHUCK: That's true. 8 9 MS. GOGLIOTTI: Okay, 432.4, the next 10 one. And our finding states that SC&A was unable 11 to match those correction factor values for 12 exposure to radon. And we asked to NIOSH to better explain the basis for the approach used to derive 13 dose to the brain and duodenum for the EE due to 14 15 exposure to radon. 16 And NIOSH agrees but doesn't feel lengthy technical deliberation would 17 be 18 appropriate to include in the TIB. And they intend 19 to document the derivation in the technical information --20 If you could, speak 21 CHAIR KOTELCHUCK: 2.2 just a little louder.

1 MS. GOGLIOTTI: Sorry. NIOSH is going to document the derivation in the TIB and the TIB 2 3 will either be a stand-alone or added to DCAS 11. And to date, TIB-11 has not been revised but we 4 suggest leaving the finding in progress until that 5 is issued and we can review that document. 6 7 CHAIR KOTELCHUCK: Okay. So, requesting this be 8 in progress. That seems 9 reasonable. comments by Subcommittee Any 10 Members? 11 MEMBER BEACH: I agree that seems 12 appropriate. 13 CHAIR KOTELCHUCK: Okay. 14 MS. GOGLIOTTI: Okay. 15 CHAIR KOTELCHUCK: Alright. The next one is 433.2. 16 MS. GOGLIOTTI: And this is a Ventron Corporation case. 17 18 CHAIR KOTELCHUCK: Yes. 19 MS. GOGLIOTTI: And the finding states 20 SC&A questions whether NIOSH used that the appropriate procedure/method for reconstructing 21 2.2 internal dose on half of the case.

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1 And NIOSH responded saying SC&A points out that the conclusion is likely correct but the 2 3 basis for the conclusion is not. NIOSH agrees that the basis should have been comparing TBD-6000 4 values to Ventron's samples shown in Table 6-1 of 5 the SEC Evaluation Report. That table shows 6 7 airborne bubbles near or below the 10 MAC level for Those that are higher, tend to be most tasks. 8 9 short duration tasks. Samples were taken in '43 10 and '44.

11 CHAIR KOTELCHUCK: And your response? 12 MS. GOGLIOTTI: Saying since Ventron 13 was a uranium metal processing facility, it is questionable 14 whether NIOSH's approach to 15 reconstructing the internal doses for this worker 16 is compliant with the Board's surrogate data criteria and we recommend additional discussion. 17 18 Okay. CHAIR KOTELCHUCK: So --19 DR. MAURO: I'm sorry to interrupt.

I'm trying to help out. In this case, TBD-6000 was used as the way to reconstruct internal doses for a facility that was doing uranium processing and

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1 not metal working?

2 MS. GOGLIOTTI: Ventron was a uranium 3 metal processing facility.

4 DR. MAURO: Okay, so let me help out a 5 little bit here.

6 TBD-6000, if that was what used as the 7 way to come up with the doses, is meant for metal 8 handling facilities, where you are not doing any 9 processing.

Processing is a lot different for many, 10 11 many reasons. And to use some default values in 12 TBD-6000, whether it is external or internal, 13 raises questions of whether or not you really can apply TBD-6000 to a uranium processing facility. 14 15 Now normally, when you used TBD-6000 for a uranium metal handling facility, that is not 16 considered a surrogate data issue. I want to bring 17 this up because it is important to perspective. 18 19 TBD-6000 has been widely accepted as a surrogate facility, surrogate process for just 20 about any metal handling facility but it has never 21 2.2 been really evaluated and accepted as a generic

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surrogate approach for processing facilities. 1 So this is an unusual circumstance 2 3 where TBD-6000 would be used for a processing facility. And it might be fine but you do have to 4 go through the five-step surrogate data review 5 process to determine if in fact that can be done, 6 7 if that helps clarify the issue. CHAIR KOTELCHUCK: 8 Does that help 9 clarify folks in NIOSH? 10 MR. CALHOUN: It does. I have just got 11 to go back and look at it. 12 DR. MAURO: The five steps, it is 13 probably a good idea to have it next to you, the five criteria for surrogate data and just test it. 14 15 CHAIR KOTELCHUCK: It sounds like that 16 should be done. You will agree to do that, Grady, 17 right? MR. CALHOUN: 18 Yes. 19 CHAIR KOTELCHUCK: Okay. I think that finishes that matrix, does it not? 20 There is one more. 21 MS. GOGLIOTTI: 2.2 CHAIR KOTELCHUCK: Oh, yes, .3.

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1 MS. GOGLIOTTI: And actually, the 2 response was to see the previous response. So it 3 might make sense --CHAIR KOTELCHUCK: Yes, right. 4 Okav, it will remain open. 5 MS. GOGLIOTTI: б Okay. 7 Review Category 1 and 2 Issues from 8 Sets 19 and 21 SRS and Hanford Matrix 9 CHAIR KOTELCHUCK: Are we now talking 10 about sets 19 and 21? MS. GOGLIOTTI: That is correct. 11 We 12 are moving on. CHAIR KOTELCHUCK: 13 That's where we 14 should go. Okay, let's do so. 15 And I am -- since John, you have to leave 16 at 2:45, I will -- let's keep going until that time 17 and then we may want to take a break afterwards. 18 MS. GOGLIOTTI: Okay, with this one will be like type 1 first again. 19 20 CHAIR KOTELCHUCK: Pardon? Category 21 1 first, yes. Category 1 first. 22 MS. GOGLIOTTI:

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1 Okay, let's just pull that up here.

2	The first one is a Hanford case.
3	CHAIR KOTELCHUCK: Pardon?
4	MS. GOGLIOTTI: Hanford. And this is
5	Tab 447, Observation 1. And there are actually
6	several of these. So it might just make sense to
7	close them all out at once.
8	CHAIR KOTELCHUCK: Okay.
9	MS. GOGLIOTTI: This was our first
10	exposure to the Weibull distribution that was used.
11	I know that the Board has talked about it
12	extensively and we have seen some documentation on
13	that but at the time, it had not fully been resolved
14	and it was very important to Dr. Melius that we left
15	all of these as observations. So there are several
16	that will appear throughout the case set.
17	We have seen new documentation
18	regarding Weibull distribution and so we felt that
19	this could be closed with no problem.
20	CHAIR KOTELCHUCK: Okay, good. So
21	this was I'm not even sure why this was an
22	observation. It was

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1 MS. GOGLIOTTI: Previously, we had not 2 seen any use of the Weibull distribution. 3 CHAIR KOTELCHUCK: Okay. 4 MS. GOGLIOTTI: Ιt was а new distribution that was incorporated into IREP. 5 6 CHAIR KOTELCHUCK: Got it. 7 MS. GOGLIOTTI: I want to say it was done in 2014. 8 9 CHAIR KOTELCHUCK: Okay, that's fine. 10 And now --11 MS. GOGLIOTTI: Ιt simply was 12 something we had never seen before and it was 13 important to get it documented on the record that 14 we were seeing these and it hadn't been seen by the 15 Board. 16 CHAIR KOTELCHUCK: Yes, okay. Any comments from Board Members 17 -- I mean from Subcommittee Members? This is an observation. 18 19 MEMBER CLAWSON: These just are 20 observations, right? I have not been able to --I haven't even heard of some of this. Being on this 21 2.2 Work Group, I was just kind of curious about it.

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So what are we wanting -- we are doing
 these as observations. Has SC&A been able to get
 into this information?

4 MS. GOGLIOTTI: Yes, we actually have had several discussions. I'm not sure if it 5 happened in this Committee or it happened in the 6 7 Procedures Subcommittee but it has been discussed with the Board on the line and NIOSH presented their 8 9 basis for using this. And it is not that we had 10 any problem that they were using this distribution 11 or questions with distribution but we had simply 12 never seen it before.

MR. KATZ: Right. Yes, so this is put
to bed as an issue.

15 CHAIR KOTELCHUCK: So there is really 16 nothing for us to say. That was a decision that 17 was made a while ago for using it in IREP.

18 MR. KATZ: Right and these 19 observations are just artifact of having predated 20 all that Board discussion

21 CHAIR KOTELCHUCK: Exactly.

MR. KATZ: But in general, it can just

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be closed.

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CHAIR KOTELCHUCK: I mean 479 is the 2 3 same. MS. GOGLIOTTI: 4 It is. CHAIR KOTELCHUCK: So close it. 5 MS. GOGLIOTTI: Yes. 6 7 CHAIR KOTELCHUCK: 479 is the same issue and I think the same results. 8 9 MS. GOGLIOTTI: Okay. 10 CHAIR KOTELCHUCK: Close it. 11 MS. GOGLIOTTI: 479 Observation 2 12 would be the next one. It is also a Hanford case. 13 The finding text stated that the 1970 cesium-137 results of 0.94 nanocuries is below the mean body 14 15 burden of cesium from the fallout of 2.7 nanocuries 16 from Table 220 -- Table 5-24, I'm sorry -- of TBD-6-5. 17 And here we have some confusion on how 18 19 Hanford used the term decision level, which seems to be different than other sites that have used 20

used the decision level to mean roughly half of the

decision level in the past. Hanford apparently

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1 MDA values. And based on that, we recommend 2 closing as well this observation.

3 CHAIR KOTELCHUCK: I don't understand the resolution. The decision level, it was 4 appropriate to use, even though it was half the MDA? 5 GOGLIOTTI: 6 MS. We were not 7 understanding that they were using the term decision level to mean half the MDA. 8

9 CHAIR KOTELCHUCK: Ah, okay. And when 10 you realized that, then what they did was 11 appropriate.

12 MS. GOGLIOTTI: Correct.

13 CHAIR KOTELCHUCK: Okay, any comments
14 from anyone else on the Subcommittee? Then I think
15 we should close it.

16 MS. GOGLIOTTI: Okay. Okay, 479 Finding 1, NIOSH used the incorrect dates to 17 calculate PUREX doses. And the resolution states 18 19 that it appears that coworker intake is to be applied only through 1992. However, this is not 20 21 obvious in the TBD. It was Table 531, page 36 for 2.2 plutonium for the period of September 1, 1946 to

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present. We do have some question, though, of was there a potential for Pu exposure at the PUREX facility after 1992 or was it removed at the end of 1992.

5 MR. SIEBERT: And we will have to get 6 back to you with specific responses that were just 7 entered in BRS.

8 MS. GOGLIOTTI: Okay.

9 CHAIR KOTELCHUCK: Alright.

10 MS. GOGLIOTTI: And actually, we have 11 the same for Finding 3. And I believe that one has 12 to do with -- oh, it seems like it is identical. 13 We would have to look into that further.

14 CHAIR KOTELCHUCK: Can I ask Grady? I 15 mean these were just posted, do you have responses 16 to any of them or have you not had a chance to look 17 at them?

18 MR. CALHOUN: I do not. I think Scott
19 might be able to speak to some of them but I'm not
20 sure.

21 MR. SIEBERT: We may be able to some but 22 this is still relatively recently so, we will

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answer what we can.

CHAIR KOTELCHUCK: Okay, that will be 2 3 fine. Alright. Then we will move along quickly, if you haven't had a chance to go over it, we will 4 just quickly --5 MS. GOGLIOTTI: Yes, all of these 6 7 responses are very new. NIOSH gave us responses during the middle of December and so we have had 8 9 only had a month to respond and then for them to 10 get back. 11 CHAIR KOTELCHUCK: Yes. 12 MS. GOGLIOTTI: So everything is still relatively new in the history of this set. 13 Okay, I would recommend leaving these 14 15 two open. The next one is a Hanford case, Tab 480, 16 Observation 1. 17 18 MR. SIEBERT: Can I go back a second? 19 When you say leave these two open, I'm sorry, which 20 ones are you talking about? MS. GOGLIOTTI: 479.2 and 3. 21 2.2 MR. SIEBERT: Two and three. Okav,

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1 thank you.

This is Ron Buchanan. 2 DR. BUCHANAN: 3 I think in fact 479.3 should read uranium. Isn't that right, Rose? 4 MS. GOGLIOTTI: I think so. Something 5 was wrong about that. 6 7 DR. BUCHANAN: Alright. The other 8 one, 479.2 was plutonium. But the same question 9 then in 479.3 was for uranium. 10 CHAIR KOTELCHUCK: Thank you, yes. 11 MS. GOGLIOTTI: Thank you, Ron, for 12 pointing that out. Okay and 480 again is Hanford. 13 And this is an identical the Weibull. We just point 14 15 that out. CHAIR KOTELCHUCK: 16 That's right. Ι thought it was Weibull. 17 MS. GOGLIOTTI: It is Weibull. 18 I'm 19 sorry. I always say it wrong. 20 CHAIR KOTELCHUCK: It was misspelled. I was listening carefully. The way we pronounce 21 2.2 in English I-E and E-I sometimes varies not

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1 literally.

2 So, anyhow, this one should be closed. 3 It is just the usual Weibull.

4 MS. GOGLIOTTI: Okay.

5 MR. KATZ: Yes, it is German. That's 6 why.

7 CHAIR KOTELCHUCK: Right.

MS. BEHLING: Excuse me for one second. 8 9 This is Kathy Behling. And for Brad's clarification, I believe that was introduced as a 10 11 particular distribution was introduced when we 12 started to look at the CLL cases, the chronic 13 lymphocytic leukemia cases, if that helps you to clarify the earlier question. 14

15 CHAIR KOTELCHUCK: Oh, that is 16 interesting.

MEMBER CLAWSON: That does. I
appreciate that and now it is starting to ring a
bell with me again. Thank you, Kathy.

20 CHAIR KOTELCHUCK: Good.

21 MEMBER MUNN: Yes, Kathy, as always, is

22 accurate.

1 MS. GOGLIOTTI: Okay, the next is a Hanford and PNL case and Tab 484, Finding 1. 2 And 3 the finding states that SC&A questions the methodology used by NIOSH to derive on-site ambient 4 doses for the year 1968. 5

And here, NIOSH agrees with the SC&A 6 7 reviewer that the average ambient dose for the 100 Area adjusted to 2500 work hours per year was 8 9 assigned 268. The dose reconstruction should have used a specific location ambient doses for 100k 10 11 instead of the best estimate claims, though a small 12 change in ambient dose does not affect the compensation decision of the claim. 13

14 CHAIR KOTELCHUCK: Okay. I'm not 15 quite sure what -- they used the wrong ambient dose? 16 MS. GOGLIOTTI: I believe they didn't 17 adjust it correctly.

18 CHAIR KOTELCHUCK: Aha. You mean for 19 hours?

20 MR. SIEBERT: No, the issue is there 21 are average values for the 100 Area that if we don't 22 know where they were specifically would be used for

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Got it.

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1 the 100 Area. This case, we specifically knew they 2 were in the 100K.

CHAIR KOTELCHUCK: So we should have used 4 MR. SIEBERT: that specifically. 5 CHAIR KOTELCHUCK: Got it. 6 Okay, 7 So, that looks like it should close. qood. And is there question from the 8 any comment or 9 Subcommittee? 10 Then let's go on. 11 MS. GOGLIOTTI: Okay, the next one is 12 an RFP Hanford case, Tab 496, Observation 1. And the observation states SC&A and NIOSH's derived 13 doses matched reasonably well, however, the less 14 15 than 30 keV photons for [identifying information redacted], those correction factors do not always 16 This does not impact the assigned doses 17 coincide. 18 significantly because the less than 30 keV proton 19 doses generally are only a small part of the total [identifying information 20 assigned redacted]

photon dose. 21

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And this goes back to another finding

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we had earlier that deals with interpretation of 1 the term decision level, which at Hanford was used 2 3 differently than at other sites. 4 CHAIR KOTELCHUCK: Very good. MS. GOGLIOTTI: And so we recommend 5 closing this also. 6 7 CHAIR KOTELCHUCK: Okay, fine. That is the same issue. Let's close it. 8 9 MS. GOGLIOTTI: Okay. CHAIR KOTELCHUCK: Observation 2. 10 11 MS. GOGLIOTTI: The same case. The 12 [identifying information redacted], the correction factor of 10 to 100 keV neutrons was 13 listed as 0.176 in Table 4, page 9 of Report 4; 14 15 however, in the Rocky Flats calculation workbook, the dose correction factor is 1.19. 16 NIOSH responded saying the value given 17 18 in Table 4 of Report 4 for a log-normal 2 19 distribution cannot be taken as direct values. I believe this is one of our first cases 20 21 that looked at that was [identifying we а 2.2 information redacted case. For hand

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calculations that are being conducted, a geometric 1 mean of the distribution should be used. 2 And that 3 is explained in Table 5 of Report 4. And we accept NIOSH's explanation and 4 recommend closure. 5 fine. 6 CHAIR KOTELCHUCK: Okay, 7 Comments? Then let's close it. 8 9 MS. GOGLIOTTI: Okay. This is Tab It is the Hanford-Amchitka Island case. 10 448.1. 11 And the finding states that conflicting X-ray facial skin doses in Table 3-8 and 3-11 of TBD. 12 13 NIOSH agrees. And mean calculations with the lower 14 15 facial X-ray dose yielded a combined PoC of 51 at 30 iterations. 16 NIOSH has updated the medical TBD to 17 reflect the correct value. And this update is 18 19 presently worked upon. 20 MR. SIEBERT: Actually, this has been It just hadn't been completed when 21 completed. 2.2 sent in the response.

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1 MS. GOGLIOTTI: Okay. But and there 2 is no need for a PER. MR. SIEBERT: Correct. 3 4 MS. GOGLIOTTI: Okay, great. CHAIR KOTELCHUCK: 5 Okay. MR. KATZ: Rose, this is 488.1, right? 6 7 MS. GOGLIOTTI: Correct. CHAIR KOTELCHUCK: 448.1. 8 9 Thanks. MR. KATZ: Alright. I just 10 lost my place there. 11 CHAIR KOTELCHUCK: Okay. Then this is 12 agreed upon it should be closed. 13 MS. GOGLIOTTI: Okay and the next one is 481 Observation 2 and it is a Hanford-Grand 14 15 Junction case. And the observation states that no evidence was identified to indicate that the EE was 16 offsite during the periods with no monthly badging 17 18 records. 19 And the response is that Hanford 20 dosimetry records do not have a clear indicator, sufficient code label of the assigned badging 21 2.2 exchange frequency. The table on the attachment

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indicates that the dates in which the EE exchanged
 a monitoring badge was based on a four-week
 exchange period.

feels that 4 SC&A there is some uncertainty about actual badge 5 the exchange frequency for the EE. However, the assessments 6 7 are ultimately judgement calls. We believe NIOSH's assessment of the totality of evidence is 8 9 reasonable and defensible. And therefore, we 10 recommend closing the observation.

11 CHAIR KOTELCHUCK: Okay. Folks
12 agree?

13 MEMBER CLAWSON: Yes.

14 CHAIR KOTELCHUCK: Okay, let's go on to15 the observation 3.

MS. GOGLIOTTI: Okay. It states that the footnotes contained in the dose reconstruction methodology section of the DR report, which describe how administrative and supervisor doses were derived, appear to only apply to doses prior to 1990 but not for doses for all relevant employment years for the EE.

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And here NIOSH clarified the intended 1 meaning of the footnote in their response. 2 As 3 noted in the original observation, SC&A had verified that the listed doses were correctly input 4 into IREP. So the observation had no bearing on 5 the individual dose reconstruction. 6 7 We understand NIOSH's clarification and recommend closure. 8 9 CHAIR KOTELCHUCK: Okay, let's close 10 it, absent any comment or objection. Okay. 11 MS. GOGLIOTTI: Okay in case 12 Observation 4, dose reconstruction procedures, 13 mainly OTIB-60 mandate that direct claimant 14 monitoring should always be used unless 15 demonstrated to be erroneous. 16 In this case, the internal dose was assigned based on the 50th percentile coworker 17 intake due to a large difference in magnitude when 18 19 it is the actual missed dose from the bioassay. It is not clear to SC&A whether this is 20 21 a standard procedure for dose reconstruction in 2.2 cases where the assessed missed dose is

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significantly higher than the applicable coworker
 doses.

3 And NIOSH clarified the dose reconstructors, at the time, were aware of the 4 option to substitute coworker intakes if the 5 claimant's actual data did not be appear to be 6 7 representative of the EE's exposure. This decision is presumably based on professional 8 9 dose judqment of the reconstructor. That. 10 professional judgment was made and coworker 11 intakes were more representative in this case. 12 Therefore, we recommend closing this observation. 13 14 CHAIR KOTELCHUCK: Alright. 15 MS. GOGLIOTTI: Okay, Observation 5 of Given the EE's description of work 16 the same case. duties, radiation monitoring and controls in the 17 18 work area, as well as the various types of radiation 19 inspection equipment, the more appropriate job 20 title of supervisor should have been applied, which would result in a factor of 10 increase in the 21 2.2 assigned dose.

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resolution is 1 The that amonq conflicting information contained in the CATI as 2 3 used as a basis for job categorization. And while SC&A feels that in such a situation it would be 4 preferable to apply the more claimant-favorable 5 assignment, which would be supervisor in this case. 6 7 The choice of the administration reasonable defensible. category is and 8 9 Therefore, we recommend closing the observation. 10 CHAIR KOTELCHUCK: Alright. 11 MS. GOGLIOTTI: Okay, same case, 12 Finding 1. The correction factor of 0.6 applied 13 to the overresponse of low energy photons may not be appropriate for valid doses assigned after the 14 15 year 1967. 16 And NIOSH and SC&A are in agreement that

the correction factor of 0.6 to account for the 17 18 overresponse of low photons energy were 19 inappropriate after 1957. This was an error that was found in the workbook used at the time for 20 Hanford and it has since been corrected. 21

22 This error has also been identified and

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discussed previously for other cases in the
 Subcommittee.

3 CHAIR KOTELCHUCK: Right. Good.
4 Okay.

5 MS. GOGLIOTTI: Okay.

6 CHAIR KOTELCHUCK: Alright.

MS. GOGLIOTTI: Finding 2, the same
case. Classification as a glove box worker would
require a slightly higher set of N/P ratios than
non-glove box worker, which is a 1.7 versus a 1.1.

11 And NIOSH agrees that the use of the 12 glove box correction factor and N/P ratios would 13 be reasonable in this case. The dose reconstruction was revised after revision and the 14 15 later revision did not assign the higher N/P ratio factors. 16

17 CHAIR KOTELCHUCK: Okay.

MS. GOGLIOTTI: Alright. The next case is a Hanford-Lawrence Livermore, Tab 42, Observation 2. And it states that it is apparent based on the reported total of 169 missed dose cycles that any positive dosimeter readings that

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were less than 20 millirem were considered to be
 missed dose, as well as dosimeter cycles with a zero
 listed in the monitoring records.

4 NIOSH came back and explained how that 5 they interpret the dose records and notes that the 6 radiation exposure estimate cards supplied by DOE 7 are not the dose of record and that actually the 8 existence of such cards does not indicate the EE 9 was actually monitored during the cycle.

SC&A understands that the workbooks are 10 11 sometimes limited and cannot always parse out the 12 individual changes in ghost assumptions during Given this limitation, NIOSH assigned 13 that year. 40 millirem for the entire year, which SC&A agrees 14 15 is claimant favorable. Therefore, we accept NIOSH's clarification on Hanford dosimetry records 16 and how they are interpreted and thus, recommend 17 closing this observation. 18

19CHAIR KOTELCHUCK: Okay.20MS. GOGLIOTTI: Alright, same case,

21 Observation 3. Application of the correction 22 factor of 0.6 for the overresponse of low energy

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photons appears to be assigned for the years '57 1 through '71, which is inconsistent with the 2 3 procedures in monitoring effective after 1957. And we have previously discussed this 4 issue and NIOSH agrees that there was an error in 5 the workbook. It has since been corrected and we 6 7 recommend closing this observation. KOTELCHUCK: Good, that's 8 CHAIR 9 closed. 10 MS. GOGLIOTTI: Okay, 482.1. Ιt 11 appears that the missed shallow dose to the 12 prostate may have been omitted from the DR for the 13 years '67 through '91. NIOSH provided a response --14 15 MR. KATZ: I'm sorry, we are getting a lot of feedback. 16 CHAIR KOTELCHUCK: Hello? 17 18 MS. GOGLIOTTI: Can you hear me? 19 MR. KATZ: We couldn't. Nobody could 20 but now we can. 21 MS. GOGLIOTTI: Okay, great. I had a

22 fuzzy noise. I wasn't sure if it was everybody or

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1 just me.

2 MR. KATZ: That was more than a fuzzy 3 noise.

MS. GOGLIOTTI: Okay, so for this case, NIOSH provided us an attachment. When I wrote this, we were unable to view the attachment. We have since been able to review it. The finding had to do with a coding problem in the workbook that has since been fixed.

We assume that cases impacted by this We assume that cases impacted by this workbook error have been evaluated under a PER or will be evaluated in the future if it affects compensation. And based on that, we recommend closure.

Can I interrupt? 15 MR. SIEBERT: As much as I love closure, we did not agree that there 16 was a problem with the coding in the workbook. 17 The attachment actually clarifies what the workbook is 18 19 doing. All we pointed out is that the appearance of not assigning shallow dose for certain years has 20 been discussed before and we gave that further 21 2.2 explanation as to exactly how it is calculated but

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1 that is the way it has been calculated for a long, long time. It was not a coding issue. 2 3 MS. GOGLIOTTI: We might need to take a second look at this one, then. 4 CHAIR KOTELCHUCK: Hi, I was off the 5 phone for a few moments while my line was off. 6 You 7 are still on 482.1? MR. KATZ: That's correct. 8 9 CHAIR KOTELCHUCK: Okay and I heard the 10 end of your response, Scott. 11 MR. KATZ: Right. So Scott -- you 12 understood it, Dave? 13 CHAIR KOTELCHUCK: I think so. 14 MR. KATZ: Okay. 15 CHAIR KOTELCHUCK: Maybe -- would you 16 remind repeating, Scott? I just came in on the tail end. 17 MR. SIEBERT: 18 That's fine. Yes, no 19 problem. 20 CHAIR KOTELCHUCK: Okay. 21 MR. SIEBERT: We were not agreeing that 2.2 there was a coding error. All we were doing in the

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attachment was clearly defining. Because I agree in the workbook, it is not necessarily easy to understand what is going on because this is the time frame where the X-ray chip on the badge and so on and so forth.

6 So we gave a further explanation of 7 exactly how the calculation is done within the 8 tool. And basically just clarification of the way 9 we do it, not accepting that there was an error in 10 the tool.

11 MS. GOGLIOTTI: And we are going to 12 take a second look at that. I think we 13 misunderstood.

14 CHAIR KOTELCHUCK: Hello?

15 MS. GOGLIOTTI: Yes.

16 CHAIR KOTELCHUCK: Okay, then we 17 should leave this open, right?

MR. BARTON: Rose, this is Bob Barton. Scott, if I could ask if you could turn for a minute to that attachment again, to what they said. I wasn't able to open it on the BRS. So I actually had no idea of what was in the attachment. If you

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1	guys don't agree that there is a coding error, I		
2	certainly won't have to take a second look at it.		
3	MS. GOGLIOTTI: They did actually		
4	provide it this week. So, I can send that to you,		
5	Bob.		
б	MR. BARTON: Okay, great.		
7	CHAIR KOTELCHUCK: So we are leaving		
8	that open.		
9	And it is 2:44 so, John, you have to be		
10	going now, I gather.		
11	MR. KATZ: John, are you on, Dr.		
12	Poston?		
13	MEMBER POSTON: I was on. Yes, I have		
14	got to leave in a couple of minutes.		
15	CHAIR KOTELCHUCK: Okay, maybe this is		
16	the right time to take a 15-minute break and then		
17	do we have we do have a quorum.		
18	MR. KATZ: Well, we will check when we		
19	come back at 3:00.		
20	CHAIR KOTELCHUCK: Okay, back at 3:00,		
21	folks, Eastern Time. Okay, bye-bye.		
22	(Whereupon, the above-entitled matter		

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1 went off the record at 2:45 p.m. and resumed at 3:01 2 p.m.) 3 CHAIR KOTELCHUCK: Alright, folks, 4 well, we are ready to move on. MS. GOGLIOTTI: Okay, I believe we left 5 off on 449.2. 6 7 CHAIR KOTELCHUCK: Yes. MS. GOGLIOTTI: This is a Hanford and 8 9 And the finding states that NIOSH did PNL case. 10 not include intakes from all plutonium isotopes. 11 Did we skip one here? We might have. 12 Yes, we did skip one. In the case Finding 1, methods for 13 assignment of shallow dose as low energy photons 14 15 were not clear. And NIOSH agreed that the response factor was erroneously applied to shallow dose 16 Correction of the dose 1972. 17 prior to in 18 conjunction with the next finding results in a PoC 19 of 41, which is a decrease slightly from 41.41. And we have actually already addressed this issue 20 and the hand tool has been corrected. 21

CHAIR KOTELCHUCK: Okay, that's fine.

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1 MS. GOGLIOTTI: Okay and then Finding 2, NIOSH did not include intakes from all the 2 3 plutonium isotopes. As noted by SC&A, there was specific quidance for the radionuclides 4 no associated with Pu-239 time of at the 5 the And it does appear that Pu-238 should 6 assessment. 7 have been calculated. This specific circumstance was added to the DR quidance document for clarity 8 9 and again, it actually reduced the PoC when that 10 was included. 11 CHAIR KOTELCHUCK: That was done and 12 that is the important thing. Okay. 13 MS. GOGLIOTTI: Great. The next one here is a Hanford-Rocky Flats Plant case, 451 14 this 15 Observation 1 and is another Weibull We merely pointed out that it was 16 distribution. So I would recommend closing that. 17 used. 18 CHAIR KOTELCHUCK: Okay. The next one 19 is 452 Observation 1 and this is a Hanford-SRS case. And there were some text in dose reconstruction 20 21 inconsistencies. NIOSH agreed the text in the

22 report did not accurately reflect the calculations

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that were done in the dose reconstruction, however, the dose reconstruction was done correctly. It was just no reported correctly in the report. We recommend closure.

CHAIR KOTELCHUCK: 5 Okay. MS. GOGLIOTTI: The next one is a 6 7 Savannah River Site case, 465 Observation 1, almost the identical last to The text is 8 one. 9 inconsistent in the dose reconstruction. NTOSH agreed but it didn't affect the overall --10

11 CHAIR KOTELCHUCK: That's fine, next 12 one.

13 MS. GOGLIOTTI: Okay. The next one here is a Savannah River Case, 466, Observation 1. 14 15 And we questioned if all the X-ray records for this 16 particular case were received in the CATI report. The EE claims he had been subjected to annual chest 17 18 X-rays as part of the annual physical and the EE 19 was employed for 37 years. And we believe it is 20 unlikely that the EE would confuse the three exams that were present in our records with an annual 21 2.2 event.

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Basically NIOSH said that they followed their recommendations in the TBD. NIOSH indicated that the job title does not qualify as a radiation and that thev don't believe he worker is cancer-likely. It is essentially considered a professional judgment call. And so we recommend closure. CHAIR KOTELCHUCK: So you are saying although the person, the employee was there for 37 years and said he or she was having annual exam and the judgment is that there were only three because this was not a radiation worker. Well, there were three MS. GOGLIOTTI:

14 X-ray records found in the EE's file. However, the 15 EE reported he was examined every year, so 16 annually.

17 CHAIR KOTELCHUCK: Pardon?

MS. GOGLIOTTI: The EE reported anannual examination.

20 CHAIR KOTELCHUCK: This is such a21 disjunction between the two there.

22 MS. GOGLIOTTI: I agree. This is why

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we brought it to the Board's attention as observation. 2 CHAIR KOTELCHUCK: Good. 3 But NIOSH did follow 4 MS. GOGLIOTTI: their guidance. 5 CHAIR KOTELCHUCK: And their guidance 6 7 MS. GOGLIOTTI: It was just more of a 8 9 professional judgment. I'm uncomfortable 10 CHAIR KOTELCHUCK: 11 with that professional judgment. 12 MR. SIEBERT: Well, this is Scott. 13 The judgment really comes down to it is not a dose reconstructor's professional judgment. We have 14 15 not found that Savannah River's X-ray records are 16 in error, that they are missing X-ray records. We specifically request for 17 did records this 18 individual. We got the fact that they had three 19 exams during their employment. really argue that 20 Ι can't it is inconsistent between the two, however, we have had 21

no indication that Savannah River's records on

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1 X-rays is incorrect or incomplete. CHAIR KOTELCHUCK: And that is based on 2 3 looking at lots of other people who worked there 4 over many years. MR. SIEBERT: Correct. 5 CHAIR KOTELCHUCK: And that they kept 6 7 qood records. MEMBER BEACH: Hey, Scott. 8 Dave, can 9 I ask a question? This is Josie. 10 CHAIR KOTELCHUCK: Sure. 11 MEMBER BEACH: Hey, Scott, do you by 12 any chance know the dates of those X-rays? Were 13 they consistently spread out, or were they all at the same time, or do you have that information? 14 15 MR. SIEBERT: I can probably find that relatively quickly for you. 16 Awesome, thanks. MEMBER BEACH: 17 18 Do, please. CHAIR KOTELCHUCK: Same 19 question I had. 20 Somebody has maybe their MR. KATZ: 21 speaker phone on and we are getting a huge amount 2.2 of reverb with each person speaking.

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1 CHAIR KOTELCHUCK: Are you getting reverb with me? 2 MR. KATZ: Not just now you didn't. 3 KOTELCHUCK: Good. 4 CHAIR Okav because when I am chairing, I generally leave it 5 on all the time, unless somebody is speaking for 6 7 an extended period. So, I'm glad we don't have a problem with me right now. 8 9 And while we are waiting, I have been blessed with the fact that very few fire engines 10 11 or police cars have passed by my window as we are 12 talking today. So that has made life easier. For which we are thankful 13 MEMBER MUNN: 14 to the emergency responders. 15 CHAIR KOTELCHUCK: Right. 16 MR. SIEBERT: They were in '61, '62, So, they were somewhat spread out, not 17 and '67. 18 across the whole time frame but they were not back 19 to back years. 20 CHAIR KOTELCHUCK: They weren't. And 21 the period, the 37 years, what covers what span,

22 what is the case?

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1	MR.	SIEBERT:	[Identifying	
2	information redacted].			
3	CHAIR	KOTELCHUCK:	[Identifying	
4	information redacted], so the person was within the			

5 first -- they had three within the first decade of 6 their employment and then for the next 27 years 7 didn't have any, according to this.

8 MEMBER BEACH: Sorry, Dave. If you 9 are done, did he changes jobs at all, do you know? 10 I know that he was a [identifying information 11 redacted] but I was curious if he did something 12 earlier different.

MS. LIN: Maybe let's take some of thedetail of this worker offline.

15 MEMBER BEACH: Oh, thank you.

16 CHAIR KOTELCHUCK: Yes, ma'am, thank
17 you very much.

Could we -- the question is who would call -- I want to pursue this further. To call this a disjuncture is so great a difference than I would like to resolve more. Should a couple of us give a buzz, at some point? Or does one person want to

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1 pursue that one Board person -- excuse me, one 2 Subcommittee person?

3 MR. KATZ: Excuse me, Dave. Will it resolve things, possibly, if Scott -- I mean 4 someone can put it up on -- his job title details, 5 they can put that up on -- I don't know if they are 6 7 handy to put up now but if they could, I mean it sounds like from that last comment, that might 8 9 resolve the issue completely.

10 CHAIR KOTELCHUCK: Yes, it might. How 11 about we put that up on our CDC website so that we 12 can look at it. Let's see -- thank you very much. 13 Somebody is putting up a document. Thank you very 14 much.

DR. MAURO: This is John Mauro. I have got a policy type question because we run into these things every so often.

18 CHAIR KOTELCHUCK: John, could I --

19 DR. MAURO: I'm sorry.

20 CHAIR KOTELCHUCK: -- perhaps give us 21 one moment? We just got something put up, which 22 you see, which answers some of the questions. Let

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us just read that for a second and then I do welcome
 your input. One moment, please.

3 Well, it answers some of my questions. 4 MEMBER MUNN: Ιt was а generous overestimate to begin with. 5 CHAIR KOTELCHUCK: Yes, right. 6 7 John, you wanted to say something. Yes, it has been normal DR. MAURO: 8 9 procedure that at all DOE facilities -- and this is more of a generic question not specific to 10 11 Savannah River because I am conflicted on Savannah 12 So, I am going to couch this more in terms River. 13 of a generic question that came to mind, as we discuss this. 14 15 The standard procedure for DOE 16 facilities, not AWE, is to presume the person received annual examinations and assigned the 17

appropriate doses. In circumstances where you have, let's say, a partial set of exposures without any other -- and you have some records, but there is a lot of records that may be missing or may not be missing, in other words you are put in an

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uncomfortable position to make a judgment call, my 1 question I guess would be for future reference, 2 3 would it be appropriate to assume that listen, we are going to assign annual examinations, unless --4 MS. GOGLIOTTI: John. for this 5 particular case, at Savannah River, NIOSH's policy 6 is to assume an annual X-ray for every individual 7 unless they specifically request the X-ray records 8 9 for the employee. NIOSH did specifically request, in this 10 11 instance, and they got three records back.

12 DR. MAURO: I see. Thank you Okay. 13 for clearing that up for me. I needed to know that. 14 CHATR KOTELCHUCK: Okav, thanks. 15 Let's go back to the case. Thank you very much for 16 putting up the data. There appears to be a reasonable -- it seems to me it is reasonable to 17 18 think that the person was not engaged in work that 19 would involve exposure and, therefore, quality the person for medical exams in the latter part of his 20 21 career.

So, it explains, at this juncture, to

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me, and I am comfortable with that. How do other people feel on the Subcommittee?

MEMBER MUNN: Well, this is Wanda. Ι 3 can only speak from my own personal experience. 4 Ι know that in later years, as the progress of the 5 entire program went forward, there was a concerted 6 7 effort to do two things. One is to be doubly concerned with the welfare of the worker and the 8 second was to be as astute as possible in managing 9 10 the costs that were rising every year in the entire 11 Therefore, there was an effort to reduce program. 12 costs when at all possible but the primary driving 13 factor was always the safety of the worker involved. 14

However, to require annual medical facilities see every single worker, regardless of what their activities were on a daily basis was, indeed, a poor prospect for the public purse.

19 CHAIR KOTELCHUCK: Yes.

20 MEMBER MUNN: And it would be an unwise 21 administrative choice to have chosen to continue 22 that practice when many people did not even enter

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the site on a regular basis, much less be involved
 in the activities there.

CHAIR KOTELCHUCK: And my concern is 3 not that the person should have been getting X-ray 4 exams but that simply so many were missing. 5 The material that was put up shows me that it was a 6 7 reasonable judgment that the person's job title did not warrant that exam and that is why there is such 8 9 a discrepancy.

10Josie, you also had raised some11questions before. How do you feel?

12 MEMBER BEACH: Yes, Dave, looking at 13 his job title didn't change that we know of, based on what was put up, and the fact that he had three 14 15 and he remembered having them every year, I think we should go the claimant-favorable method in this 16 And not knowing what Savannah River does, 17 case. 18 it is a judgment call.

19CHAIR KOTELCHUCK: You would like to20ask that they assume that there was such and let21them --

MEMBER BEACH: That is his knowledge.

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And if his last one was in '67, I find it hard to believe in the '90s that he still said he was getting them every year when the last one was in

5 CHAIR KOTELCHUCK: Yes. It would not 6 hurt, although I am satisfied that there were --7 that the lack of the X-rays was a decision based 8 on the person's job title, and as Wanda said, there 9 were lots more medical exams.

So, that is just my take.

10 What do other Board people think? 11 MEMBER CLAWSON: This is Brad. One of 12 the issues that I have and I have always had this 13 issue because we have seen it throughout the 14 program that when the Department of Labor gets 15 their job title, it is the last job they did.

I have seen numerous situations where 16 they call them one thing and one place of work and 17 they don't -- all the other work that they did 18 19 doesn't come into it. So that is why I am kind of sensitive about his job title. If this was his 20 last job, and this is what he did, that is all well 21 2.2 and fine but are we sure that that is what he did

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for the last 35 years or whatever.

2 CHAIR KOTELCHUCK: Yes. 3 MEMBER CLAWSON: We see this so many And I hate to stagger somebody just because 4 times. of their job title. You know and I understand 5 computer and everything else like that but it is 6 7 like some of our accountability people. You know there is accounting for the budgets or is this 8 9 other? 10 CHAIR KOTELCHUCK: Right. 11 MEMBER CLAWSON: They get lumped into 12 these and some of them it is a little bit different. 13 CHAIR KOTELCHUCK: Yes. So I assume, 14 Scott, that this person was not compensated. 15 Right? MS. GOGLIOTTI: Well, this is the PoC 16 right here. It has it highlighted on the screen. 17 The PoC is shown. 18 MEMBER MUNN: 19 CHAIR KOTELCHUCK: Yes. 20 And it was an extreme MEMBER MUNN: overestimate. 21 2.2 CHAIR KOTELCHUCK: It would not hurt to

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1 do this. It may not be urgently necessary but if this were done, I really think it is unlikely to 2 3 change the PoC to be compensated. But given the questions that have been raised, I think it would 4 be worthwhile to just be doubly sure and have folks 5 at NIOSH and ORAU take a look at it again, assuming 6 7 that the medical exams were done the whole period. And I suspect it would not be compensated and then 8 9 there would be -- I don't feel it is urgently 10 necessary. If it wasn't a major task, it might be 11 helpful.

12 MR. KATZ: But that is not -- John --13 I mean Dave, that is not within, sort of, the purview to just go ahead and change methods. 14 So, 15 I mean you can ask NIOSH to go back and look at records to see how long he has held this current 16 job title and so on, if that will give you more. 17 But to ask them to just do a calculation on a 18 19 supposition when it is not indicated by their 20 methods --

CHAIR KOTELCHUCK: Then we could -- you
 are right. It is not within our purview to tell

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1 folks to do a dose reconstruction. It is to assess 2 the dose reconstruction that is presented to us. 3 MR. CALHOUN: This is Grady. Let me -one thing I think -- and Scott you can jump in. 4 But I think one thing that we might be missing here is 5 we are focusing an awful lot on his job category 6 7 and that certainly is part of it but I would say an even bigger part of it is the knowledge that we 8 have gained in understanding what the completeness 9 of the records are that we are receiving. 10 11 Now, if we have not -- if we didn't have 12 some reasonable assurance that the records that we 13 got when requested are not comprehensive, then it 14 would make more sense to default to an annual X-ray as a dose assignment. But in this case, based on 15 16 the records that we have received in the past, regardless of this individual's job category, we 17 18 know that generally speaking for this site we do 19 get good X-ray records for this period. And that is something that we are not thinking about here 20 but that is something that plays a huge part in how 21 2.2 we make our determination on when to and when not

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1 to assign that dose.

2 CHAIR KOTELCHUCK: Right. I think 3 that is absolutely a part of the evidence to suggest that this is -- that using the three is appropriate. 4 MEMBER MUNN: There is one other 5 factor, as well, that has been mentioned. 6 Aqain, 7 speaking solely from my personal experience, I have no concept of what may have transpired at Savannah 8 9 River but I have had several physical exams on an annual basis that did not include a chest X-ray 10 11 simply because there was nothing in other portions 12 of my record that would indicate that it was called for. 13 14 DR. MAURO: I have one more thought, at 15 the risk of tripping over my feet again. I think 16 the reason for these X-rays had to do with concerns

17 regarding tuberculosis as being a problem, when you 18 go back.

MEMBER MUNN: In the '50s that is true. And so the job title issue, the nature of the job I think is almost secondary. The concern was just as part of a normal examination, blood pressure,

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whatever they did, I think it is important to keep in mind that I believe the main motivation of the annual X-rays, especially in the very early years, was tuberculosis. And of course that ended, eventually, because they got the worst of the exposure.

So I think Grady's argument, I think it
was Grady who made the argument, is the one that
is very compelling.

10 CHAIR KOTELCHUCK: Well, John, I think 11 what you are saying is entirely speculative in my 12 judgment. I mean I don't see a basis for it. But 13 there is a basis in the job title and the 14 completeness of the records.

15 And I don't feel that strongly on the 16 other hand, it is likely -- the question is should 17 we block it or not.

18 MR. SIEBERT: Can I point out -- this19 is Scott.

20 CHAIR KOTELCHUCK: Yes.

21 MR. SIEBERT: I am looking at the case 22 a little further and just want to point out the

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individual had very little external monitoring 1 2 throughout his employment period as well. 3 CHAIR KOTELCHUCK: Good. Good. MR. SIEBERT: So another indicator. 4 CHAIR KOTELCHUCK: Aha. Okav. 5 And is that external monitoring done in the '60s? 6 MR. SIEBERT: Actually, there is like 7 one in '73, one in '74, one in '86, '87, '88. 8 And 9 then nothing else for the rest of his employment. 10 CHAIR KOTELCHUCK: Okay. 11 MR. SIEBERT: It doesn't seem to tie 12 into any specific work he was doing. 13 CHAIR KOTELCHUCK: Right. That would 14 be reasonable for а person working in an 15 administrative role in that period. Well, Brad and Josie, you have raised, 16 and you would feel -- what are you thinking? 17 MEMBER CLAWSON: Well, you know what? 18 19 Looking at all the pieces of this, I don't have a problem with this. It is showing that he wasn't 20 21 into a lot of these areas. So myself, personally, 2.2 and I am just speaking for me, I can understand

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where we are at. I just get tied up when we start saying well, we are not going to do it because of his job classification and we have what is a full thing.

But you know with Scott bringing up what
he has, I don't have a problem with it.

7 CHAIR KOTELCHUCK: Yes, I think we have pieces of evidence that backs up three 8 the 9 professional judgment: job title, which is in itself not completely reliable, as has been pointed 10 11 out; the fact that there as not external monitoring 12 for much of the period except a couple of years, which should be done for anybody who comes on-site 13 at all once in a while; and the third is the -- what 14 15 was the third one?

16 MR. SIEBERT: No indication that 17 Savannah River has problems with their X-ray 18 records.

19 CHAIR KOTELCHUCK: That's right.
20 That's right. Yes, the X-ray record is good.
21 So I think I am okay. Josie, what do

22 you think?

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1 MEMBER BEACH: You know with the 2 explanation and the further discussion, I am 3 satisfied.

4 CHAIR KOTELCHUCK: Okay and I think I 5 am, too. So, with that, I think that we are 6 satisfied with the observation. We can close it. 7 MS. GOGLIOTTI: Okay, great.

8 CHAIR KOTELCHUCK: Good. It is about 9 as lengthy an observation discussion as we have had 10 in a long time. And that's fine.

11 Okay, good. Closed.

MS. GOGLIOTTI: Great. Okay, the next one is SRS case 467, Observation 1, a repeat of the Weibull distribution application. We would recommend closure.

16 CHAIR KOTELCHUCK: Yes, we have been17 through that before. Agreed.

MS. GOGLIOTTI: 467 Finding 1 states that the environmental doses calculated using incorrect ICD-9 codes, NIOSH does agree that the prostate dose was calculated using the skin.

CHAIR KOTELCHUCK: Hold it. Hold it.

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Sorry, my machine is -- you know this machine, this
 CDC computer keeps giving me -- keeps going off
 because I am not touching the dial as we are
 talking. Hold it. Let me -- oh, goodness.

5 Could you just wait one second, as I 6 come back? I'm terribly sorry but it will help. 7 Oh, for goodness sake.

8 Okay, I'm back. Thank you very much 9 for waiting. I appreciate that. We are on 467, 10 Observation 1. No, we finished that. That was 11 the Weibull.

12 MR. KATZ: Finding 1.

13 CHAIR KOTELCHUCK: Okay, go ahead.

MS. GOGLIOTTI: NIOSH agrees they used -- the prostate was calculated using the skin. In the workbook, the prostate dose is approximately one millirem greater than the skin dose, which wouldn't affect the outcome of this case. So, we recommend closure. It's a QA error.

20 CHAIR KOTELCHUCK: Okay, sounds 21 reasonable.

MS. GOGLIOTTI: And the next one is SRS

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1 case 498, Observation 2. That states that the 2 procedure OTIB-18 does not use OTIB-49 adjustment 3 for Pu solubility sites. Therefore, including a section in the DR report addressing that, it didn't 4 really make sense and was irrelevant. And NIOSH 5 agreed they shouldn't have included the paragraph 6 7 in the dose reconstruction report. CHAIR KOTELCHUCK: Okay, so that takes 8

9 care of our Category 1 cases, does it not?

10 MS. GOGLIOTTI: It does.

11 CHAIR KOTELCHUCK: And the Category 2, 12 have you folks had a chance to talk about those? 13 MS. GOGLIOTTI: Our response is in the 14 BRS. Keep in mind that these are very new. NIOSH 15 just gave us responses to them in the middle of December and so we have responded to them but they 16 might not have got a chance to look at each of these 17 18 responses.

CHAIR KOTELCHUCK: Well, if you want
to, let's take a look at the ones where there have
been responses.

MS. GOGLIOTTI: Okay.

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1 CHAIR KOTELCHUCK: Hello? 2 MS. GOGLIOTTI: Yes. Sorry, I'm 3 trying to find them here. CHAIR KOTELCHUCK: 4 Okav. Sure, no problem. You have to make a changeover now. 5 MS. GOGLIOTTI: It is 479.2 6 CHAIR KOTELCHUCK: 7 Okay, 479.2. MS. GOGLIOTTI: It is a Hanford case. 8 9 KOTELCHUCK: CHAIR Are there 10 responses? MS. GOGLIOTTI: Yes. 11 12 CHAIR KOTELCHUCK: Okay, then let's qo ahead with it. 13 The finding 14 MS. GOGLIOTTI: Okay. 15 states that there was a positive whole body count included in the 16 not assessment. And NIOSH responded saying Table 523 of the Hanford Internal 17 Dose TBD lists decision levels -- again back to 18 that 19 these decision levels we weren't understanding at the time -- these decision levels 20 assumed to be half the MDA. All of the cesium and 21 2.2 protium counts are less than the MDA, which

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essentially is twice the decision level. Zinc-65
 is above the MDA.

3 As a result, 3.3 nanocuries compared to the presumed MDA is 3.2 nanocuries. The fitted 4 dose from positive bioassays would be 5 0.12millirems for both the skin and the kidney. 6 7 And we did respond saying that our view indicates that 1970 whole body count results were 8 9 less than the MDA values. If the MDA values are indeed twice the decision level values and that the 10 11 1969 protium values are below the MDA also. 12 The NIOSH response indicates that the zinc was above the MDA value and, although small 13 should have been considered. We do, however, find 14 15 that the 1969 cesium whole body count results is greater than the MDA value of one nanocurie. 16 Ιt was also above the fallout level as stated in the 17 Therefore, however, small, we believe it 18 table. 19 should have been considered in the internal dose

21 CHAIR KOTELCHUCK: Now you have put a 22 lot of numbers in front of us and I'm finding it

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analysis.

20

a little hard to wrap my mind around these. 1 2 You don't agree with Scott's response. 3 MS. GOGLIOTTI: In some aspects but not the entire response. 4 CHAIR KOTELCHUCK: 5 Yes. 6 MS. GOGLIOTTI: Ron, are you on the 7 line? Yes, I'm on the line. DR. BUCHANAN: 8 9 Yes, we agree with their response, once we discuss this cesium level MDA issue. But it looks like to 10 11 us that the 1969 cesium-137 whole body count was 12 slightly -- well, was three times the MDA level and above the cesium-137 fallout. So, even if it is 13 above MDA but if it was below the fallout, then it 14 15 wouldn't be included. But in this case, it was 3.6 and the 16 fallout was 2.7 nanocuries, according to Table 524. 17 Therefore, it looks like that the 1969 cesium-137 18 19 whole body count should have been included as a bioassay dose assignment. Although it would have 20

22 considered. And if it wasn't, we would like to

amount,

it

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been

1 know why it shouldn't have been. 2 CHAIR KOTELCHUCK: Okay. 3 MR. SIEBERT: And as I said, this is a relatively new response and we have not had a chance 4 to look at it yet. 5 CHAIR KOTELCHUCK: 6 Okay so but the difference is small between you. 7 Then, let's leave it open, shall we? 8 9 MR. SIEBERT: Yes, we will come back 10 with a response. 11 CHAIR KOTELCHUCK: Sure. I don't 12 think it is going to be difficult. Let me -- 479.2, 13 let me just take that down -- Hanford. Okay, that 14 will be open. 15 MS. GOGLIOTTI: Alright and the next one is 481 Observation 1. 16 17 CHAIR KOTELCHUCK: Okav. 18 MS. GOGLIOTTI: And here, the 19 observation essentially states that NIOSH 20 the application of recommended a rotational geometry or an isotropic dose correction factor for 21 2.2 photon exposures along with the correction factor

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listed in Table 4.1-A of that document. These
 correction factors were not --

3 CHAIR KOTELCHUCK: Excuse me, Rose.4 If you could, speak just a little louder.

5 MS. GOGLIOTTI: Yes, these correction 6 factors were not applied in the dose calculations 7 to the organ of cancer interest in this case.

And here, NIOSH responded saying that 8 9 observation. The thev noted the dose reconstruction has since then been revised to 10 11 address an additional cancer and the later revision 12 did use the rotational geometry, as they pointed 13 out.

Our question that we have remaining 14 15 from that is should the rotational geometry have 16 been applied in the original dose reconstruction. This is Scott. SIEBERT: 17 MR. The answer is yes. We have discussed this before that 18 19 the wording in IG-001 in the application of rotational and isotropic was inconsistent in the 20 And once we updated that issue, we have been 21 past. 2.2 running it that way. And a PER, based on that, will

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be rolled into the ICRP-116 PER. So, that is where
 we are.

3 CHAIR KOTELCHUCK: Good. So that
4 seems to me you have accepted that that needs to
5 be changed and I think, in terms of policy, that
6 should close it.
7 MR. KATZ: Yes, except that I thought

MR. KAIZ: Yes, except that I thought
8 this was an observation -- this was stated as an
9 observation but it sounds like it is a finding.

10 MS. GOGLIOTTI: I agree.

11 CHAIR KOTELCHUCK: Yes, okay.

12 MR. BARTON: Yes, this is Bob Barton. 13 That one was one of mine. The reason that I put it as an observation, the first time around is there 14 15 could have been plausible circumstances that 16 wasn't exactly apparent to me that would sort of preclude you in that rotational geometry but it 17 18 sounds like, based on NIOSH's response, they 19 probably should have used that originally.

20 So, I agree.

21 CHAIR KOTELCHUCK: Okay, that's fine.
22 Yes. Whatever you call it, whether observation or

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finding, it means that we will go over it in
 Subcommittee and that's fine.

3 Okay, let's go to the next one. MS. GOGLIOTTI: Okay, the next one is 4 482, Observation 1. 5 CHAIR KOTELCHUCK: 482, Observation 1. 6 7 And it says the glove box adjustment factor was applied only to years where the ratio of shallow 8 9 to deep doses was 2.19. And SC&A was unable to locate or identify the source that was assumed to 10 11 be included in that criteria.

12 And NIOSH did provide us a response and 13 they say that the source of the guidance is a DR 14 draft template and they quote a section of that. 15 But the NIOSH quote doesn't give us an indication 16 of where that 2.19 comes from and we would like some 17 additional information on that.

18 MR. SIEBERT: I will have to get back19 to you on that.

20 CHAIR KOTELCHUCK: Okay.

21 MR. BARTON: Yes, this is Bob again. 22 Again, it was one of those situations where we saw

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it and we are not saying necessarily that it is not correct or not technically correct, we just didn't know where that was sort of laid out and the exact rationale behind using that as sort of the inclusion to add a glove box factor in there.

6 So that is why it is an observation. We 7 are really just looking for clarification on it. 8 CHAIR KOTELCHUCK: Okay, so we are 9 leaving that open, right?

10 MS. GOGLIOTTI: Yes.

11 CHAIR KOTELCHUCK: Good.

12 Alright.

MS. GOGLIOTTI: Okay, the next one is from the same case, which is a Hanford-Lawrence Livermore case and that is Observation 4.

And the finding essentially states that the chosen end date for Pu intake evaluations likely underestimates the EE's actual variation of exposure to Pu.

20 And NIOSH did respond and they stated 21 that the statement in the DR report that the EE did 22 not work with Pu after 1966 was a typo. They

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actually meant it to be '67. And the last routine
 bioassay sample done for the EE was in '66 and there
 was also an additional sample in '72.

The reported Pu intake estimates using a routine bioassay sample in '66 overestimated the intake and dose compared when the bioassay results were assessed as a best estimate using the additional bioassay sample from '72.

An assessment of the Pu intake and dose 9 with the best estimate methods through the date of 10 11 the Pu exposure ended in '67, using IMBA that 12 results in a dose of 0.191 rem to one organ and 0.208 to the other organ. And using the reported doses, 13 it changed the dose to 0.261 rem and 0.284 rem. 14 15 We are taking that into account and have some question regarding how the dose was worked 16 Specifically, we need an explanation on why 17 out. making -- assuming a longer Pu dose results in a 18 19 lower dose.

20 MR. SIEBERT: And we will have to get 21 back with you on that one.

22 CHAIR KOTELCHUCK: Okay.

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1 MS. GOGLIOTTI: Okay, the next one is Finding 451.1, which is a Hanford-Rocky Flats case. 2 3 Okay and the finding states that the procedure for assigning Pu dose from test count data is not clear. 4 And actually, we have not had a chance 5 to thoroughly evaluate NIOSH's response. 6 So, I 7 would recommend leaving this one open. CHAIR KOTELCHUCK: Okay, so we will 8 leave that open until you have a chance. 9 That's We have moved along fairly far. 10 fine. So, I 11 understand that we are catching up. 12 MS. GOGLIOTTI: Okay, the next one is 465.1 and this is an SRS case. 13 It states that new 14 photon dose was assigned instead of coworker dose. 15 And here, NIOSH responded saying that 16 they essentially believe the missed photon dose, as assigned, was appropriate. They reviewed the 17 history and CATI information 18 EE's work and 19 considered that this person missed external dose for the period prior to the first reported measured 20 dose in 1986 and used to assign the zeros for all 21 2.2 unrecorded cycles through '88, in accordance with

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1 OTIB-6.

2 Here, it says the EE was monitored 3 internally before '86 and, in addition, his CATI indicates that the EE worked on numerous sites, 4 however, [identifying information 5 he was а redacted] -- oh, I'm sorry -- during his entire 6 7 employment period SRS performed at and corresponding duties. 8

9 So here, the root of the problem is we are concerned that coworker dose should have been 10 11 assigned instead of а missed dose. And 12 heightening that is the EE's classification as a construction trade worker, which would increase 13 the dose. 14

15 This particular case had a PoC in the 16 low 30s. So, ultimately, it might not affect 17 compensation decisions.

18 CHAIR KOTELCHUCK: Let me see.

MS. GOGLIOTTI: I believe we also have a similar finding that is still open in the preceding set during the same issue. And it was kicked back to the SRS Work Group. And that Work

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Group has not met since that issue was forwarded, 1 if I am recalling the issues correctly. 2 3 MR. SIEBERT: I'm also working on -this is Scott. I think that was actually the 4 issue of unmonitored tritium and whole body dose 5 and so on and so forth. 6 7 MS. GOGLIOTTI: Oh, so it is not the same issue. 8 I'm sorry. 9 Yes, it is not this MR. SIEBERT: 10 issue, I don't think. 11 CHAIR KOTELCHUCK: I'm having a bit of 12 a problem myself, just following this. 13 MR. SIEBERT: Well maybe I can clarify a little bit. This is Scott. 14 15 CHAIR KOTELCHUCK: Okay. This is during that time 16 MR. SIEBERT: frame at Savannah River where their monitoring 17 18 records, if I remember it is like '73 through '88. 19 They did not record zeros. They left them blank. 20 So, it is difficult during that time to tell whether the person was -- it would really be -- it is blank 21 2.2 because they didn't have any monitoring or if they

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had all their badges were left in zero and just were
 not recorded in zeros because they only recorded
 blanks during that time frame.

4 CHAIR KOTELCHUCK: Got it. Okay,
5 thank you.

so that is the 6 MR. SIEBERT: Yes, 7 problem with the time frame. And what we looked at in this case is the fact that the individual was 8 9 actually monitored most of the time, with only a 10 couple time frames even in that period where there 11 is blanks, which could denote either they were 12 unmonitored or monitored with zeroes. The 13 individual said they were consistently badged and considering the type of work that they were doing, 14 15 that actually would make sense. There wouldn't be 16 a reason for them to badge them and not badge them and badge them again. 17

18 CHAIR KOTELCHUCK: Right.

MR. SIEBERT: So, let me see if therewere other thought processes.

That is the general through process that went into why we assumed that the individual

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actually was monitored and it reflected a zero. So
 we assigned missed dose.

3 CHAIR KOTELCHUCK: Right. Okay. And Rose, what did you do -- I don't see your response. 4 MS. GOGLIOTTI: Our response simply 5 recommending additional 6 says that we were 7 discussion.

8 CHAIR KOTELCHUCK: Right but does that 9 mean you --

10 MS. GOGLIOTTI: Well it comes down to 11 whether or not the zeroes were real zeroes or were 12 missing from the file.

13 CHAIR KOTELCHUCK: So basically you 14 are telling us that Scott -- that you don't 15 necessarily agree with what Scott said and that you 16 would like more time to think about it.

Or have you thought about it and you really want the Subcommittee to decide? And if there is an open --

20 MS. GOGLIOTTI: This is a professional 21 judgment call, honestly.

22 CHAIR KOTELCHUCK: Well part of the

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1 reason I was saying I was having a problem is one of the issues technically with having thrashing the 2 materials before, this is at the end of the review. 3 I don't -- I was not able, personally, to, even 4 though you gave me the information, to guite get 5 down to this level. I certainly reviewed 19 and 6 21 and looked them over but not so carefully and 7 there is a lot of tests coming. And this screen 8 9 has been flashing in my face since early morning. And so it is a little bit hard for me 10 11 at least to feel that I fully evaluated what you 12 And that is partially personal. And I said. don't know that other Members of the Subcommittee 13 find that. 14 15 So --Dave, this is Brad. 16 MEMBER CLAWSON: CHAIR KOTELCHUCK: 17 Yes. What Scott said about 18 MEMBER CLAWSON: 19 being zeroes or not, I believe, and Scott, correct me if I am wrong, without having zeroes there, that 20 is kind of like saying that they weren't monitored 21 2.2 but if there was zeroes in there, then they were

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monitored and it was below the detectable limit, 1 which affects other processes coming into it. 2 3 Isn't that correct? Well it is, somewhat, but 4 MR. SIEBERT: it is slightly different because the problem is 5 during that time frame -- and this is what TIB-6 6 7 During that time frame, Savannah River if covers. an individual had a monitored value of zero, they 8 ran the badge and they got no detect, they didn't 9 They just left it blank. 10 record a zero. 11 So if you have a whole year where the 12 individual was monitored but all of them were zeroes during that time frame, you will have a blank 13 during that year, rather than a zero during that 14 15 year. And we need to make the determination. And Rose is correct, this is a really 16 a professional judgment based on which we think is 17 18 accurate. kind of make We need to our 19 determination as to whether the individual is likely monitored, which means it reflects zeroes 20 and we assign missed dose. Or if there is a reason 21 2.2 to believe they were unmonitored, such as changing

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jobs or some sort of reason we believe they would have been unmonitored for a year, and then monitored for a year, and going back and forth.

In a case like this, like I said, we 4 looked at the type of work the individual is doing, 5 the fact that they were monitored -- at least we 6 7 can tell prior to that time frame and after that time frame they actually were monitored and there 8 9 is some positive results, as well as the individual did say that they wore a badge. They didn't point 10 11 out that they were badged periodically. They did 12 say they were badged the whole time frame.

13 Kind of taking those altogether is 14 where we made the decision that it seems likely they 15 were actually monitored, those were zeroes that 16 were recorded as blanks, and we assigned missed 17 dose accordingly.

MEMBER CLAWSON: So you already have assigned missed dose, according to that. Because being on the SRS Work Group, I understand exactly what you are talking about and we found several problems with that.

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1 MR. SIEBERT: Right and missed dose was 2 assigned in this case. 3 MEMBER CLAWSON: Okay. 4 CHAIR KOTELCHUCK: Good. MEMBER MUNN: Which is what you would 5 6 want. 7 CHAIR KOTELCHUCK: Yes. MS. GOGLIOTTI: Well, coworker dose 8 9 would be more beneficial. 10 MEMBER MUNN: Yes, that is 11 claimant-friendly. 12 CHAIR KOTELCHUCK: Yes, it is. 13 MEMBER MUNN: It fits the paradigm that 14 you have lined up for this particular type of job 15 assignment. It fits. 16 MEMBER BEACH: Is that coworker dose, Wanda or is that a missed dose? 17 18 MEMBER MUNN: Missed dose. 19 CHAIR KOTELCHUCK: Missed dose. 20 MEMBER CLAWSON: Though that is part of 21 the problem is that I see -- I would suggest 2.2 coworker is because we have positive ones before

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1 and then afterwards.

2 MEMBER BEACH: Yes, that seems to make 3 better sense to me, too. I'm sorry I don't agree 4 with you, Rose.

MR. positives 5 SIEBERT: The were relatively low positives. So probably we are 6 7 talking about an individual who had say 10 or 11 badges that were zeroes and then he pops up slightly 8 9 positive during the year. And it is that positive 10 that gives us an indication he was monitoring 11 during that year.

12 So just because some years there are 13 positive dose, doesn't mean that other years it 14 wouldn't be reasonable he was having zeroes during 15 the time frame.

MEMBER CLAWSON: Well, I guess I can't get into that. I just -- if there was coworker, what is the difference between coworker dose and this dose? We have people in the same job title or whatever else, don't we?

I'm just sitting here because yes,
Savannah River has fair records but not the best

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1 ever.

2	CHAIR KOTELCHUCK: Let me ask is this
3	something that Committee Members would like to
4	think about and come back to? Not SC&A. I see
5	their position and their professional judgment. I
6	wouldn't mind that, coming back to it next time and
7	seeking a little bit more. Scott's discussion
8	sounds more reasonable to me but I would be open
9	to that.
10	MEMBER BEACH: I'm okay with that, too.
11	MS. GOGLIOTTI: I will point out, just
12	for the Board Members oh, it is not on here.
13	They can revote it. Most of the cases, if it should
14	be voted, you can click on right here where it says
15	attachment and the case should be attached.
16	MEMBER BEACH: Right, right.
17	MS. GOGLIOTTI: So you can review the
18	case file.
19	CHAIR KOTELCHUCK: Good.
20	MEMBER CLAWSON: Yes, that will be
21	great. Thanks, Rose.
22	CHAIR KOTELCHUCK: Okay, well then,

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1	let's leave it open but for the Board to think
2	about. And thank you for noting that.
3	Okay, next.
4	Next Steps
5	MR. KATZ: Can I just say one thing that
6	might help the Board Members in thinking about
7	this?
8	CHAIR KOTELCHUCK: Yes.
9	MR. KATZ: Hello?
10	CHAIR KOTELCHUCK: Yes, I hear you.
11	MR. KATZ: Oh, okay. So, I think what
12	the Board Members need to consider is whether the
13	NIOSH approach is reasonable, considering the
14	evidence, not whether another approach would be
15	more or less claimant-favorable because
16	claimant-favorable comes into play when you are
17	lacking information and you are then having to
18	choose between two equal alternatives.
19	But whether this is that or whether this
20	is a case where there is a weight of evidence in
21	one direction or another, you have to consider that
22	when you give your recommendations.

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1 MEMBER CLAWSON: And Ted, I understand what you are saying and I agree a lot with Scott 2 3 on that. It is just that in dealing with SRS, especially in this time frame, there was -- how can 4 I put it politically correct -- there were some 5 questions in how things were done there. 6 7 And I understand what Scott is saying and I probably agree a little bit more. 8 I just, 9 personally for me, I just want to look into this 10 just a little bit deeper. 11 MR. KATZ: Yes, that is absolutely 12 fine. That is fine and I 13 CHAIR KOTELCHUCK: am respecting that it toward the end of the day and 14 15 we have been over a lot of cases. And as I noted before, it is a little bit more difficult to deal 16 with difficult cases at the end of the day. 17 And 18 we are nearing the end. 19 MS. GOGLIOTTI: One more. 20 CHAIR KOTELCHUCK: Pardon?

21 MS. GOGLIOTTI: Just one more.

22 CHAIR KOTELCHUCK: Good. Okay.

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1 MR. SIEBERT: I'm sorry, this is Scott. Can I just point one more little thing out on that 2 3 one that you guys can keep in mind? CHAIR KOTELCHUCK: 4 Yes. I did put this in the 5 MR. SIEBERT: response but I forgot to mention, I apologize. 6 7 The EE was monitored before the time During the time frame that these blanks frame. 8 9 were in the external record, he was internally monitored during that time frame as well. 10 11 I forgot to mention that. Sorry. 12 CHAIR KOTELCHUCK: Okay, good. 13 Alright, thank you. Last one. MS. GOGLIOTTI: Okay, 498, Observation 14 15 1. And this one is an SRS case also. And here with this Observation, 16 we questioned the applicability of OTIB-18 to this 17 The procedure specifically states it is 18 case. 19 only applicable for overestimating cases for thyroid exposures at sites where there is no chance 20 of exposure to radioiodines. 21 And SRS employees 2.2 were at risk to radioiodines exposure during the

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1 EE's employment period.

2	NIOSH did model environmental iodine
3	dose at the 50th percentile but ended up not
4	including it because it was less than the millirem,
5	which is fine. But we question if that alone
б	sufficiently addressed the iodine exposure, given
7	that the procedure can specifically be interpreted
8	to not be applicable to this case.
9	That may be I could let you explain
10	your response here.
11	MR. SIEBERT: Well, basically let me
12	look at this and make sure. Yes, there was a
13	further discussion from SC&A at the beginning of
14	this month, which I understand what the question
15	becomes is OTIB-18, it can be a little confusing
16	the way it is worded. It indicates that it doesn't
17	apply unless there is no iodine exposure.
18	And later in the document it actually
19	does explain that it can be applied, as long as you
20	take the iodine into account.
21	So I can see how the inconsistency could
22	be a little vexing, if you read it that way.

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However, what happened in this case is we applied OTIB-18 as well as addressing the radioiodine separately from it. So the limitations of OTIB-18, there are not limitations for using it in a case like this.

6 MS. GOGLIOTTI: And that comes from the 7 wording of the scope in the OTIB-18. Our 8 interpretation of it was that it was outside of 9 scope at that point and the procedure no longer 10 applied. And NIOSH's interpretation is that was 11 not the case.

MR. SIEBERT: Right because if you look in the later section, Section 3.2 and Section 6 and as is pointed out in the SC&A response, it is stating that it has to be accounted for separately. So, 18 applied.

17 MS. GOGLIOTTI: Well, if that is the 18 case, we believe we can close those findings.

19 CHAIR KOTELCHUCK: I think so. Okay.
20 MS. GOGLIOTTI: And so that would take
21 us to the end of all of the finding issues response
22 that we have prepared. We do have three matrices

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1 that are in the BRS waiting for NIOSH responses. 2 CHAIR KOTELCHUCK: Which three are 3 they? And this is in sets 19 through 21? MS. GOGLIOTTI: Correct, the Oak Ridge 4 sites and Gaseous Diffusion Plant are one and then 5 there is a DOE site and an AWE site. 6 7 CHAIR KOTELCHUCK: Okay. So we will come back a number that were left open from Sets 8 9 14 through 18, both Category 1 and Category 2. And 10 then -- well, lots of cases are left open. And then 11 we will come back to the three matrices 19 through 12 21. And the next time, I would like to also 13 cover the three blinds in Set 23 was it? 14 15 MS. GOGLIOTTI: Yes. 16 CHAIR KOTELCHUCK: Okay and that will finish the blinds for Set 23, right? 17 18 Well, no. MS. GOGLIOTTI: Yes. 19 CHAIR KOTELCHUCK: Did we not -- we didn't do the first three? 20 21 MS. GOGLIOTTI: No. 2.2 CHAIR KOTELCHUCK: I thought I was back

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1 _ _ MR. KATZ: No, this would be the first 2 3 three, Dave. CHAIR KOTELCHUCK: Okay, that's fine. 4 MR. KATZ: We did the -- we finished the 5 ones from Set 21 or whatever. 6 7 CHAIR KOTELCHUCK: Oh, okay, that's it. That's it. Okay. Well, let's --8 9 MS. GOGLIOTTI: Well, is it reasonable 10 to ask NIOSH for responses to the remaining three? 11 I don't know if that is too much to ask for. 12 MR. SIEBERT: I mean I can tell you that 13 we are working on the Oak Ridge grouping at the moment and I would hope to have responses in the 14 15 BRS within the next -- then I will just have to put 16 the next ones as soon as we are working through 17 those. We just have to work sequentially. 18 CHAIR KOTELCHUCK: Okay. 19 MR. KATZ: Rose, can I just ask you a 20 quick question? Why do we have a separate matrix for Oak Ridge than other DOE sites? 21 2.2 MS. GOGLIOTTI: For the remaining DOE

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2	MR. KATZ: Yes, why is it there is an
3	Oak Ridge matrix and then other DOE sites?
4	MS. GOGLIOTTI: That is kind of we have
5	always used the same categories. It is just
6	everything that wasn't included in Oak Ridge
7	Gaseous Diffusion Plants, SRS, and Hanford.
8	MR. KATZ: Okay. Alright.
9	CHAIR KOTELCHUCK: So, let's think
10	about when the next meeting should be.
11	MEMBER BEACH: Dave, before you move
12	on, can someone let us know are we going to cover
13	all blinds for the 23rd or just three of them? And
14	if it is just three, could you let us which ones
15	to prepare for?
16	MS. GOGLIOTTI: We did pick three. I
17	don't have them pulled up on my screen.
18	MR. KATZ: Yes, it's okay, we have them
19	picked and we will get that out to you guys so you
20	can have them in advance.
21	CHAIR KOTELCHUCK: Okay, good. Good,
22	thank you.

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1	MEMBER BEACH: As far in advance
2	possible.
3	MR. KATZ: Yes.
4	CHAIR KOTELCHUCK: Alright.
5	MEMBER BEACH: Okay, thanks.
6	MR. KATZ: They are already picked.
7	So after this meeting, Rose can send out a note and
8	let you know.
9	CHAIR KOTELCHUCK: Good. We could
10	probably we could possibly I think meet a week
11	or so before our Board meeting that is in March.
12	This is the beginning of February or
13	MR. KATZ: No, we can't.
14	CHAIR KOTELCHUCK: No, we can't.
15	Okay. For notice we have to give six weeks for
16	MR. KATZ: Well no, now we have
17	actually it has gotten worse because now we have
18	a longer requirement for even asking to a Federal
19	Register notice under the new administration.
20	CHAIR KOTELCHUCK: Aha.
21	MR. KATZ: So right now we are under
22	this edict that it be that we need two months

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1 advance.

2	CHAIR KOTELCHUCK: Okay, so February
3	and March. So we are into April.
4	MR. KATZ: It's been pushed further
5	out.
6	MEMBER BEACH: Dave, I have a question.
7	CHAIR KOTELCHUCK: Sure.
8	MEMBER BEACH: Is it appropriate to try
9	to meet face to face at least once a year or is it
10	working out just fine on the phone.
11	MR. KATZ: Josie, this is Ted. That
12	is, I think on my plate.
13	MEMBER BEACH: Okay.
14	MR. KATZ: And it does work out well.
15	You know unless we are going to do something
16	special, I can't justify it. I can't pay for it.
17	MEMBER BEACH: Okay, that's fine.
18	CHAIR KOTELCHUCK: Okay.
19	MR. KATZ: If we had, for example, a
20	bolus of exceptionally difficult cases where a face
21	to face would somehow help, that would be an example
22	of why we would need face to face. But I can't do

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it just because -- I know it is nice to see each
 other, I know but I can't do it for sort of comfort's
 sake.

MEMBER BEACH: That's fine. 4 CHAIR KOTELCHUCK: 5 Okay. MEMBER CLAWSON: You know I agree with 6 7 Josie and I understand your point, Ted. It just kind of seems like we are disjointed in this a 8 9 little bit. I don't know sometimes when it is easy 10 it is nice to be able to talk to Scott or somebody. 11 It is sometimes nice to meet in person. I always 12 love to see everybody, too but I understand. 13 MR. KATZ: No, Ι am 100 percent 14 onboard. I would much rather see that but I just, 15 it is just fairly stringent as to when I can 16 justify.

17 CHAIR KOTELCHUCK: Right, which is to18 say it is a fiscal matter.

19 MR. KATZ: Yes.

20 CHAIR KOTELCHUCK: Okay.

21 MEMBER MUNN: You know it always feels

22 like a bolus to us.

1 CHAIR KOTELCHUCK: Right. Well, I 2 will again cast my vote for yes, it would be lovely 3 to get together once in a while. That being said, let's schedule the 4 next conference call. 5 There is always Chicago. 6 MEMBER MUNN: 7 So if you guys want to pull MR. KATZ: out your calendars, we can start that now. 8 I still 9 have to -- I have both Dave and John to check with. 10 CHAIR KOTELCHUCK: That's right. How 11 about the week of the 10th of April, Monday, Tuesday 12 Wednesday, or the last Wednesday, Thursday of --13 MR. KATZ: Let me get my calendar out. 14 CHAIR KOTELCHUCK: Surely. 15 MR. KATZ: Hold on. I would certainly prefer 16 MEMBER MUNN: the previous week. 17 18 CHAIR KOTELCHUCK: Okay. 19 MR. KATZ: Early April is too soon. Like I said, right now I am under an edict that I 20 can't -- they want to see my Federal Register notice 21 2.2 -- I need 60 days just to send it in.

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1 CHAIR KOTELCHUCK: Okay. 2 MR. KATZ: Once I send it in, the 3 Department wants 60 days. CHAIR KOTELCHUCK: Oh, my goodness. 4 So it is just -- hopefully 5 MR. KATZ: this 6 is а temporary thing with the new 7 administration. MEMBER MUNN: Oh, I am sure so. 8 9 MR. KATZ: But that is the case right 10 now. 11 CHAIR KOTELCHUCK: So why don't you 12 tell us what is the earliest date that we can 13 reasonably schedule a meeting, a conference call? Yes, so I wouldn't do it 14 MR. KATZ: 15 before --16 CHAIR KOTELCHUCK: May? Maybe I misunderstood what 17 MR. KATZ: you said. What date did you throw out? 18 19 CHAIR KOTELCHUCK: I threw out April It's two months. 20 10th. MR. KATZ: Alright, I realize it is not 21 22 quite February yet. So that is okay. I think that

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1 is okay the week of April 10th. 2 CHATR KOTELCHUCK: Actually, 3 in-between, Wanda suggested the earlier week, the week of the 3rd. 4 MR. KATZ: I would start with the week 5 of the 10th. 6 CHAIR KOTELCHUCK: You would like to 7 start with the 10th? 8 Okay. 9 MR. KATZ: Because I just think --10 again, I don't -- they said 60 days. That is from 11 when they receive the Federal Register notice at 12 the Department. 13 CHAIR KOTELCHUCK: Sure. So, let's --14 Wanda, was the 10th a matter that you can't come 15 that week or is it just preferable in terms of your schedule? 16 MEMBER MUNN: It is just preferable in 17 terms of my schedule but that's alright. I will 18 19 be there, as always. Alright, that's 20 CHAIR KOTELCHUCK: Well, folks, what about --21 great. 2.2 MEMBER CLAWSON: I can work around but

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if we can do it on the 11th it would work best for 1 2 me. I may just have to leave. On Mondays and 3 Wednesdays I have meetings that I have to attend. CHAIR KOTELCHUCK: 4 Okav. Well, the 11th or 13th both work well for me. 5 MEMBER BEACH: They both work for me, 6 7 too, Dave. CHAIR KOTELCHUCK: Okay. Wanda? 8 9 MEMBER MUNN: That's fine. Whatever 10 everybody wants to do, that's fine. 11 MR. KATZ: Okay, principals from NIOSH 12 and SC&A? MS. GOGLIOTTI: I am available both 13 those dates. 14 15 MR. KATZ: Grady? MR. CALHOUN: That works for me. 16 CHAIR KOTELCHUCK: 17 Okay. Well, we have a date and an alternate date. Then it is just 18 19 a question of which one we prefer. MR. KATZ: I will send those out to John 20 and David. 21 2.2 CHAIR KOTELCHUCK: Right. So, those

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are the two alternate dates and we will move ahead
 with that.

3 Okay, folks, thanks very much for a long4 but productive meeting.

Well and let me just, before 5 MR. KATZ: 6 you adjourn, just let me note for the 7 Subcommittee's sake because you guys don't know it, except for you Dave, I think I copied you, but I 8 9 have asked NIOSH getting started on that to pull up nominee cases for another blind set. So, that 10 11 is in the works.

12 CHAIR KOTELCHUCK: Okay. That sounds 13 good.

And also just another administrative thing before we end. Ted, there was at least one case where we have started to verge on territory of moving close to personal information. And you will -- I trust you will make sure that that is PA cleared.

20 MR. KATZ: Is this a document you are 21 talking about or are you --

22 CHAIR KOTELCHUCK: No, no, one of the

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cases. One of the earlier cases. 1 MR. KATZ: The conversation today, you 2 3 mean? CHAIR KOTELCHUCK: Yes. 4 MR. KATZ: Yes. 5 CHAIR KOTELCHUCK: Okay, very good, б 7 the 11th or 13th and thank you all. KATZ: Yes, thanks everybody, 8 MR. 9 really. Have a good day. 10 Adjourn (Whereupon, the above-entitled matter 11 12 went off the record at 4:10 p.m.)