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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PROCEDURES REVIEW SUBCOMMITTEE

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TUESDAY JULY 31, 2012

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The Work Group convened in the Zurich Room of the Cincinnati Airport Marriott, 2395 Progress Drive, Hebron, Kentucky, at 9:00 a.m., Wanda I. Munn, Chair, presiding.

PRESENT:

WANDA I. MUNN, Chair JOSIE BEACH, Member RICHARD LEMEN, Member* PAUL L. ZIEMER, Member

ALSO PRESENT:

(202) 234-4433

TED KATZ, Designated Federal Official BOB ANIGSTEIN, SC&A* HANS BEHLING, SC&A* KATHY BEHLING, SC&A* STU HINNEFELD, DCAS LORI MARION-MOSS, DCAS STEPHEN MARSCHKE, SC&A MICHAEL RAFKY, HHS* MUTTY SHARFI, ORAU Team* SCOTT SIEBERT, ORAU Team* MATTHEW SMITH, ORAU Team* JOHN STIVER, SC&A ELYSE THOMAS, ORAU Team*

*Participating via telephone

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T-A-B-L-E O-F C-O-N-T-E-N-T-S Welcome and Roll Call by Mr. Ted Katz 4 Database Issues 7 (including overarching issues) OTIB-70 Review of New Revision by Mr. Steve Marschke 47 Break Review of PER-12 Report by Mr. John Stiver 90 OTIB-52 - Rev. 1, Finding 14, Response to SC&A Analysis Request by Mr. Steve Marschke 132 Review of PER-14, Response to Review by Mr. John Stiver 141 211 PER-17 by Mr. John Stiver PER-18 by Mr. Hinnefeld 224 PER-20 228 Subcommittee selection of PER review assignments by John Stiver 278 OTIB-37 by Elyse Thomas 341 OTIB-54 by Elyse Thomas 345 IG-1 by Mr. Marschke 355

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4 1 P-R-O-C-E-E-D-I-N-G-S 2 (9:02 a.m.) MR. KATZ: Good morning, everyone. 3 4 This is the Advisory Board on Radiation and Worker Health, Procedures Review Subcommittee 5 6 and we're going to get started with roll call. 7 Beginning with the Board Members we have to address conflict of interest as well at 8 the outset of the meeting and I think I'll just 9 10 address this as we go through. (Roll call.) 11 Okay, then there's an 12 MR. KATZ: 13 agenda that's posted on the web page and I think any other documents we're discussing should have 14 been posted as well, that were PA-cleared at 15 16 least. And, Wanda, it's your agenda. CHAIR MUNN: All right, before we 17 undertake the agenda, there is one item that 18 19 perhaps we should address. In reviewing the transcript from 20 last time, I noticed not one or two, as was in 21 22 my memory, or a half dozen that I thought I **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com recalled, but an astonishing 25 instances where
 what our transcript says is simultaneous
 speaking.

Those of us who were here remember that there was a great deal of Tower of Babel activity last time, and it's disconcerting for us to have that on our permanent record because we don't remember what we said three months later.

10 There ought to be some easy way for 11 us to address that to make sure that we don't 12 continue to do that.

Our transcribers and our recorders have been very innocuous for quite some time now and don't intrude in any way on our proceedings. I'm wondering if perhaps we have

I'm wondering if perhaps we have been a little too lax in that regard and have not specifically asked that our recorders let us know when they're not getting what we say.

I personally would like to see a cleaner transcript, and if we all agree to that, then I guess we could ask our current recorder

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if there's any objection to putting up a hand or in some way letting us know when we're talking over each other.

Sometimes the people who are doing that are not even aware of the fact that they're all talking at once. Is there any objection from anyone to having our recorder do that, and do you mind doing it?

9 COURT REPORTER: I don't mind doing 10 that. Often the discussion is moving fast, but 11 would you like me to just put up a hand?

12 CHAIR MUNN: Yes, if you would just 13 put up a hand when you're getting swamped, when 14 you know that you can't get all of the voices in, 15 so that I'll know to stop and ask what's the last 16 thing you got and we can take up the discussion 17 from there. That would be preferable for me if 18 no one objects to that.

MR. KATZ: I agree and I also think I should and the Chair should also sort of keep a mind to this because that's part of our keeping an orderly meeting. So it's not all on the backs

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7 1 of the transcriber to --2 No, I don't CHAIR MUNN: No. anticipate that. 3 4 MR. KATZ: -- call attention. And I'm a transgressor, I have to admit. I know I 5 6 am, but I should do better too. MEMBER BEACH: Well, and it really 7 falls to somebody because she may raise her hand 8 and in that heat of the moment nobody's paying 9 10 attention there either so. MR. KATZ: We can all pull towards 11 this goal. 12 13 CHAIR MUNN: Well, our enthusiasm for addressing the issues is laudable but we'll 14 need to curb our enthusiasm a little if we can 15 16 get a little help in doing that. And we'll try our best to be much 17 more aware. And unfortunately I don't have a 18 19 gavel but I can yell, so thank you, Kayla. I think both the agency and the 20 contractor have been busy populating our list 21 where we had openings that had been identified. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 And to the best of my knowledge, everything that we anticipated has been. 2 We're populated now, aren't we, so far as we know? 3 4 We're pretty well up to speed in terms of what we know that needs to be on the database that we 5 б didn't have last time. I think most of the 7 MR. MARSCHKE: information that we needed to enter has been 8 PER-14 has been. 9 entered. 10 CHAIR MUNN: I noticed that. The findings from MR. MARSCHKE: 11 that have been entered and Lori mentioned that 12 NIOSH has been entering information and I've 13 been entering some information. 14 Still, you know, as we work with the 15 16 system, we are finding things that need to be cleaned up here and there and so on and so forth 17 and we're working on those. 18 19 As a matter of fact, I was having some trouble getting the PER-14 findings in and 20 Lori took care of that. Computer IT people take 21 care of that for us and so we were able to do that. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

	9
1	And so we are going in the right
2	direction and I would say we're, you know, 90
3	percent there.
4	There are a few things that still are
5	frustrating. The PDF file print thing here
б	doesn't seem to be operating at this point.
7	CHAIR MUNN: I noticed that.
8	MR. MARSCHKE: There is an
9	alternative way to get printouts, is to go up
10	here to the file and get a printout here and
11	direct it to a PDF file.
12	But that tends to generate a very
13	fuzzy file which is difficult to read because
14	it's not clear. Because of all the nice, fancy
15	formatting we have on the screen, when you use
16	the print option up here, you get an exact image
17	of what's on the screen.
18	CHAIR MUNN: Oh, really?
19	MR. MARSCHKE: And because it is
20	highlighted and stuff, you'll get some fuzzy
21	results and it's difficult to read some of the
22	stuff.
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1 So I think, you know, I don't want to speak for Lori, but I think NIOSH is still 2 working on making sure that the printing 3 4 individual findings button will be implemented at some point and that'll take care of that 5 б problem. I didn't even find that 7 CHAIR MUNN: back door and so I didn't know that was there. 8 9 MR. MARSCHKE: Well, we've got a few 10 secrets in our pocket, Wanda. CHAIR MUNN: Very good, very good. 11 Very clever of you. 12 13 I guess maybe the MR. MARSCHKE: 14 people to speak is Josie and Lori because they've been new to the BRS system and were they able to 15 16 use it and was it useful to them more so than, you know, myself. 17 That would be really a test of the 18 19 system, whether or not new people coming into the 20 organization, you know, found it useful. CHAIR MUNN: In the final analysis, 21 that's what we have to look at. I just wanted 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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to make sure that we were pretty well up to speed,
 pretty well current, with our population of the
 BRS.

4 MR. MARSCHKE: Well, right now,
5 excuse me Wanda, but right now I was trying to
6 enter some stuff on TIB-10.

7 I'm having some trouble trying to 8 get attachments attached, but I noticed that 9 other people at NIOSH have been attaching 10 attachments.

And so maybe it's just operator ignorance on my part and I just have to find out how to do that, but so that's what I'm working on right now.

CHAIR MUNN: Well, that's good. 15 Ιf 16 we have most of the notations in that we were talking about last time and in prior meetings, 17 then that's half the battle won. That's good. 18 19 And I just checked. One of the things we'd had trouble with last time was 20 It looks to me that all the active OTIB-54. 21 22 findings are working now but we'll find that out

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1 when we get there I suppose.

2 And I know Elyse was going to be doing a lot of the NIOSH work to make sure that 3 4 as much as we had was up to date. Do you have anything to add, Elyse? 5 6 MS. THOMAS: No, Wanda, thank you. 7 CHAIR MUNN: All right, thanks very much, appreciate it. And Steve's suggestion is 8 well taken. Josie, are you feeling comfortable 9 10 as a newcomer to the system? MEMBER BEACH: I actually found it 11 very easy to navigate through the system. 12 However, there's probably way more to this 13 system than I was even able to discover. 14 I was able to get on, find the 15 16 documents, look at the findings. I guess I was looking for some of the backup documents and I 17 don't know if those are there. 18 19 Like OTIB-70, I can see the findings but if I wanted to see the actual document, could 20 I see it within this system? 21 22 CHAIR MUNN: Yes. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 MEMBER BEACH: I just wasn't sure how to do that at this point, so that was one 2 thing that it wasn't 100 percent clear to me. 3 4 CHAIR MUNN: It depends on what the link is, but we do have a significant number of 5 6 links if we know where to look for them. 7 MEMBER BEACH: That's the key, is knowing where. 8 9 MR. KATZ: I guess the thing to do 10 is just if someone from DCAS could just get on the phone with Josie and walk her through 11 different functions --12 13 MEMBER BEACH: Yes, or just give 14 like a tutorial of where things are. MR. KATZ: -- or a little tutorial 15 16 of different things. Josie, to answer 17 MR. MARSCHKE: your first question, to find the document itself 18 19 all's you have to do is go up here and click on 20 the name. See, basically it becomes underlined. 21 22 Yes, oh, I see. MEMBER BEACH: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701

13

	14
-	
1	Okay.
2	MR. MARSCHKE: If you click on that,
3	it'll pull up the document so the document itself
4	can be accessed in that manner.
5	MEMBER BEACH: Very good. I
б	figured there was an easy way to do it so there
7	we go, so I don't have to switch back and forth.
8	CHAIR MUNN: No.
9	MEMBER BEACH: Excellent.
10	MR. MARSCHKE: And then obviously
11	to get the history of any particular finding, you
12	go over and click on the little plus arrow or plus
13	box over here and
14	MEMBER BEACH: Yes, I did find that.
15	Okay, perfect.
16	MR. MARSCHKE: The intent is to
17	attach standalone files with this feature down
18	here. There aren't too many presently
19	attached. There are only maybe a handful in all
20	the findings.
21	CHAIR MUNN: But we have a number of
22	findings where White Papers have been issued
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debating a technical issue back and forth 1 2 between the agency and the contractor and it's our goal to eventually have the bulk of those 3 4 White Papers --MEMBER BEACH: And those would be 5 6 under attachments? 7 CHAIR MUNN: -- attached, yes. MEMBER BEACH: Excellent, okay. 8 Yes, I think that was my biggest one, Steve, 9 10 because I kept thinking I should be able to get to those documents much easier, and thanks for 11 clearing that up. 12 13 MR. MARSCHKE: Yes. 14 CHAIR MUNN: That's what we're aiming for. Anything else, Josie? 15 16 MEMBER BEACH: So far, no. CHAIR MUNN: Lori, how about you? 17 How we doing? 18 19 MS. MARION-MOSS: Well, with the 20 system itself, I had fun. Yes, I had fun. I was trying to make sure I could find any problems 21 22 with it, and I agree with Steve. We're working **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 on the issue with the PDF icon.

2 Right now our IT team is planning to disable that for now until they can get that 3 4 functioning properly. 5 One of the problems that we've б discovered is that when the findings are entered 7 a lot of them are being entered from either a website or a Word document and the differences 8 in the fonts, the system is not recognizing so 9 10 it's causing these errors. The goal was to actually be able to 11 click on the PDF and you can actually see a PDF 12 13 listing of all your findings collectively, which I think is very useful. 14 CHAIR MUNN: Yes, that was our 15 16 intent. Right. 17 MS. MARION-MOSS: CHAIR MUNN: It was going to be very 18 19 useful for us in transferring between the Work 20 Groups. MS. MARION-MOSS: So I took it upon 21 myself to assume that the Committee wanted to 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

17 have that function. 1 2 So we're in the process of actually getting a software tool that will scrub the 3 4 symbols that come from a website or Word document 5 to actually clean it up so we can keep that б ability. 7 CHAIR MUNN: Your assumption is 8 correct. 9 MS. MARION-MOSS: Okay, yes, all 10 right. So other than that, I think it's a pretty 11 good system. CHAIR MUNN: Good. 12 13 MS. MARION-MOSS: And we can keep 14 working to get it functioning to the ability you 15 want. 16 CHAIR MUNN: We're increasingly happy with it. It's been a long haul, but there 17 is a plethora of information in here and it's 18 19 taken a long time to get it in the format and as accessible as we wanted it to be, so I'm glad that 20 two new people at least find it workable. 21 That's good. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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	18
1	Anybody else have anything to
2	contribute with respect to the BRS and what we're
3	doing with it?
4	As a kind of side note, I just lapsed
5	into three-letter acronyms there which we use
6	here all the time.
7	But for the sake of anyone who might
8	encounter this later and not be familiar with our
9	acronyms, BRS stands for Board Review System
10	which is what we're calling the database
11	although I am an outlander and I have a tendency
12	to call it the database, and I'm corrected
13	regularly by our IT folks, but I think of it as
14	our database.
15	We were going to have it reviewed for
16	accuracy and pertinence during the interim from
17	our last meeting and I am working on the
18	assumption that that has occurred.
19	Stu, do you know for a fact? I'm
20	assuming you or Elyse would have been the folks
21	who were looking at that.
22	MR. HINNEFELD: At the data that's
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	19
1	in it?
2	CHAIR MUNN: Yes, for accuracy and
3	pertinence.
4	MR. HINNEFELD: I believe that, you
5	know, we agree that what's in there is what
6	should be there.
7	There may be instances where, you
8	know, we have an answer or two that we haven't
9	quite said okay to that hasn't been put in there
10	yet, but we believe what's in there is what
11	should be there.
12	CHAIR MUNN: Well, we wanted to make
13	sure that the findings were listed where the
14	findings should be and that they reasonably
15	reflect it.
16	There was I know a lot of effort that
17	went on verifying the verbiage from the system
18	with reports from transcripts covering this same
19	material to make sure that we actually had
20	captured the thought correctly.
21	And we had some discussion on that
22	and it was going to be checked and I think it was
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checked. 1 2 MR. HINNEFELD: I remember there was one issue of a particular document that's 3 4 entered with an extra zero or it's kind of in there twice. 5 б And when you're trying to find it, you're liable to pull up the one that doesn't 7 have the findings when almost the same document 8 title brings up the findings and I can't recall 9 10 which one it is now but --MS. MARION-MOSS: I believe that's 11 OCAS-0013 and DCAS-0013. 12 13 CHAIR MUNN: It's 13, yes. 14 MR. HINNEFELD: And I'm not sure that's sorted out. 15 16 CHAIR MUNN: Do we have one zero or 17 two zeroes? MS. MARION-MOSS: We took care of 18 19 that. 20 MR. HINNEFELD: Is that taken care of? 21 22 MS. MARION-MOSS: We have NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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two

zeroes for the DCAS document.

1

2 CHAIR MUNN: Yes, that's good, which is what we needed. Okay, thanks to all. 3 4 MR. MARSCHKE: Wanda. 5 CHAIR MUNN: Yes. б MR. MARSCHKE: I notice on the 7 agenda you have "including overarching issues" there next to the database issues. 8 Are you referring to overarching database issues or are 9 10 you referring to overarching technical issues? What was the intent, because I know 11 at one point we talked about putting in I guess 12 a dummy document to track the overarching 13 technical issues and I don't know if that was the 14 intent of this, you know, here or not so. 15 16 CHAIR MUNN: Yes, it was. At our last meeting, we said that we were going to 17 pursue the concept of adding that list here since 18 19 Jim Neton had been the keeper of that data and 20 we did not have any means of tracking it. We discussed the possibility of 21 doing exactly that, setting it up in this Board 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 Review System, so that we would not only have a 2 clear and easily accessible listing of what those issues were but also whether any change 3 occurred over time. We could track that. 4 And I don't recall whether it was 5 б actually assigned. We discussed it. But I 7 thought it was assigned for NIOSH to do. MS. MARION-MOSS: Well --8 I don't recall 9 MR. MARSCHKE: 10 either, Wanda, whether or not we actually came 11 to that far into the process, to actually assigning. 12 13 MR. KATZ: Lori was going to respond to that. 14 MS. MARION-MOSS: Yes, we do have a 15 16 little something --CHAIR MUNN: Good. 17 MS. MARION-MOSS: -- that we'd like 18 19 to share. Steve, if I can use your computer? 20 MR. MARSCHKE: Sure, go ahead. MR. HINNEFELD: Could you pull up 21 the BRS for us? 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

	23
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1	MS. MARION-MOSS: Yes.
2	MR. MARSCHKE: Set up is in seven.
3	Do you want to go to the main screen?
4	MS. MARION-MOSS: Yes, let's go to
5	the main screen. What we did is set up a little
6	skeleton, not knowing exactly where you want to
7	go with the overarching issues and all, so we've
8	done a little test for you to see.
9	If you could go to the Document Type
10	Filter, the center menu drop-down, and then you
11	have a listing of overarching issues for an
12	option, I'm sorry.
13	And what we've done here is listed
14	the name of the overarching issues that we
15	received from Jim Neton.
16	CHAIR MUNN: Wait, now back up. At
17	the original screen
18	MS. MARION-MOSS: Yes, the center
19	drop-down menu.
20	MR. MARSCHKE: Document Type
21	Filter.
22	CHAIR MUNN: the Document Type
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Filter is included. Oh, I see. 1 You've 2 included it in the list, okay. Now, got it. Go ahead. 3 4 MS. MARION-MOSS: Okay. According 5 to Jim, we have at least eight categories, if you б will, of overarching issues and we've listed 7 those as document titles. We just arbitrarily just picked a 8 document number. I chose NIOSH over, one would 9 10 be your oronasal breathing, okay? We can make changes as we start to build upon the overarching 11 12 issue concept, okay? 13 And what we've done, I actually went through the database and found some of those that 14 were designated in the findings as --15 16 CHAIR MUNN: Good for you. Thank 17 you, Lori. MS. MARION-MOSS: oronasal 18 ___ 19 breathing and we assigned it to this overarching document number. 20 CHAIR MUNN: Very good, good start. 21 Now, going back 22 MS. MARION-MOSS: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

1 to what Steve showed you early, Josie, there is actually no document. If you clicked on 2 oronasal breathing, there's no document there. 3 4 Based on the design of the database, we had to name it something and present it as if 5 6 it was an actual document. 7 MR. KATZ: This is perfect. CHAIR MUNN: That's perfect. 8 9 MR. KATZ: This is just we talked 10 about, Lori, so. Exactly what 11 CHAIR MUNN: we 12 wanted. MS. MARION-MOSS: Now, if you will 13 14 go back, one other thing I'd like to show you. If you will actually go back to TIB-4 -- let me 15 16 clarify that. That's OCAS, I'm sorry, ORAU TIB-4. 17 MR. HINNEFELD: It'd be useful if we 18 19 called it OTIB, wouldn't it? Okay, go ahead. 20 MR. MARSCHKE: How many zeroes, four? 21 MS. MARION-MOSS: No, three. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

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1	MR. MARSCHKE: Three zeroes?
2	MS. MARION-MOSS: Now, we're still
3	in the process of building this, designing it and
4	all, but if you will go down, I believe that
5	overarching issue is Finding number 12.
6	If you scroll down to 12, you will
7	see go back to 11 for me, Steve. You see
8	there's a gap, it goes from 11 to 14?
9	CHAIR MUNN: Yes, yes.
10	MS. MARION-MOSS: Currently IT has
11	moved it down to the bottom of the list in this
12	particular document.
13	CHAIR MUNN: Because?
14	MS. MARION-MOSS: Well, they're
15	still working on it. Okay, but I would like it
16	for it to remain in order, chronological order.
17	CHAIR MUNN: Yes, so would I.
18	MS. MARION-MOSS: Okay, so we're
19	working on that. But what they've done is added
20	a little message once you get to that finding and
21	12 is one of those findings. It's an
22	overarching issue and it says "Finding has been
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1	

27 transferred here." 1 2 CHAIR MUNN: Excellent. If you were to MS. MARION-MOSS: 3 4 click on here, --5 CHAIR MUNN: I just did. б MS. MARION-MOSS: -- it should take 7 you to the actual overarching category. CHAIR MUNN: Well done. 8 9 MR. MARSCHKE: One question. Ι 10 notice the status is transferred in both. Does the status have to be the same in both screens? 11 I mean, because basically if you go 12 13 back to the OTIB-4, it should say transferred, which is correct because it's been transferred 14 out of here and it's been transferred over to the 15 16 overarching. But over here probably the status 17 should be whatever the status is, open, in 18 19 progress or, you know, in abeyance or whatever the status is over on this screen so. 20 MS. MARION-MOSS: Whatever the 21 Committee would like to do, we can do it. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

28 1 CHAIR MUNN: It should be open on 2 the screen. MEMBER ZIEMER: Or whatever it is 3 4 for that finding. 5 CHAIR MUNN: Yes. MS. MARION-MOSS: For that finding, б 7 yes. MR. MARSCHKE: Whatever it was 8 before they transferred it, it should be. 9 On 10 this screen, it should show whatever that status, the working status. 11 CHAIR MUNN: Well, in the previous 12 13 screen it probably showed in abeyance before it showed transferred. 14 And that brings up the issue whether 15 16 we are going to address these on a regular, scheduled basis the way we do others or whether 17 these stand separately. 18 19 I guess what I'm trying to say is are 20 we going to address these while we're addressing OTIB-4 or will we be handling overarching issues 21 22 separately? I guess that's really what I'm NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1 trying to say, and I don't think we've even 2 talked about that.

3 MR. KATZ: Well, I think the whole
4 concept was when we identify overarching issues
5 is we say we're not going to deal with this here.
6 This affects many other --

CHAIR MUNN: Exactly.

So I don't think you MR. KATZ: 8 would address it when you're addressing that 9 10 document because that's the whole point of putting it in this bucket, is because it affects 11 more than one document or TBD, whatever it might 12 be, and so it's going to be this generally. 13 14 CHAIR MUNN: Yes, Paul. MEMBER ZIEMER: Let me ask it in a 15 16 somewhat different way. So let's suppose at Savannah River you have an oronasal breathing 17 finding and you push it over to here. 18 19 Now at, you know, Los Alamos you have an oronasal breathing finding which is sort of 20 similar, maybe slightly worded different. 21 You push it into here. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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	30
1	And so now these things show up as
2	what? Both that identified number and then as
3	little subsets of them?
4	CHAIR MUNN: Yes.
5	MEMBER ZIEMER: Okay. So then when
6	you look at oronasal breathing, you have this
7	collection of where the findings showed up, and
8	then whoever is reviewing it can review it sort
9	of in a generic way and I think the specific site
10	may still have to apply it to their site so
11	MR. KATZ: But then when it all gets
12	addressed generally and whatever the general
13	matters are resolved, then you can send them
14	back.
15	MEMBER ZIEMER: You can send them
16	back.
17	MR. KATZ: Transfer it back to the
18	specifics and either be applied directly or if
19	it needs to be adjusted for the conditions of the
20	site or what have you, or the procedure, then
21	that can be addressed by the group that's
22	responsible for that site or procedure.
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1	CHAIR MUNN: Yes, this is
2	MEMBER ZIEMER: Presumably you'll
3	find this multiple times. If it's an
4	overarching issue, you're going to find it.
5	Now, as I understand it, Lori, so did
6	you go through or partially through the database
7	and say, okay, here's oronasal breathing so put
8	it there?
9	MS. MARION-MOSS: Yes.
10	MEMBER ZIEMER: Based on Jim
11	Neton's list?
12	MS. MARION-MOSS: Correct.
13	MEMBER ZIEMER: Good.
14	CHAIR MUNN: And I'm delighted to
15	see that you transferred the entire thing
16	including its identification in OTIB-4 because
17	as Paul just pointed out
18	MEMBER ZIEMER: You can still track
19	it back if you need to.
20	CHAIR MUNN: Yes, you can still
21	track it back, and no matter how many sites we
22	add to this heading we'll know exactly where they
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came from. Great, thank you.

1

MR. HINNEFELD: If I can, I think 2 what you did was you looked at anything with a 3 4 transferred status, is that what you looked at? 5 MS. MARION-MOSS: Right, correct. б MR. HINNEFELD: Because we thought 7 that we had put the status as transferred for everything we'd identified in the database as an 8 overarching issue. 9 10 So she looked at everything that was transferred and looked for things that said 11 transferred to overarching or whatever. 12 There was another term that was used sometimes. 13 But that's how she arrived at the ones that were in 14 the database in order to link up with those. 15 16 CHAIR MUNN: Great. Now, I'm not sure 17 MR. HINNEFELD: that every one of those overarching issues on 18 19 that list will link to anything that's currently in the database. 20 Probably not always. 21 CHAIR MUNN: 22 MR. Did you find HINNEFELD: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

1 something for all of them, Lori, do you remember? MS. MARION-MOSS: No, I did not. 2 MR. HINNEFELD: Yes, because there 3 4 were those that came, I mean, those have come up 5 elsewhere, rather than from the Subcommittee. 6 MS. MARION-MOSS: That's true. 7 MEMBER ZIEMER: I was looking on the overarching list for resuspension factors, 8 which is one of our categories, and I didn't see 9 10 that. Now, it may be a subset of workplace 11 ingestion or something. MS. MARION-MOSS: It will be added. 12 13 MEMBER ZIEMER: Oh, okay. MS. MARION-MOSS: Jim made me aware 14 15 that --16 MEMBER ZIEMER: You don't necessarily have them all --17 MS. MARION-MOSS: -- TIB-70 is one 18 19 of them. 20 MEMBER ZIEMER: Got you. MS. MARION-MOSS: And that will be 21 added. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 MEMBER ZIEMER: Some of these I 2 think there already a document being was 3 developed. There document may be а on Is that right or 4 resuspension factors per se. 5 is it part of a bigger document? I don't б remember. There have been 7 MR. HINNEFELD: documents prepared for some of these I know. 8 I believe there's been a document prepared for 9 10 oronasal breathing a while ago and it's never really been discussed in a Subcommittee or Work 11 Group, I don't believe. 12 13 something But there has been 14 prepared on oronasal and I suspect there has been 15 maybe than thing prepared more one on 16 resuspension, so it'll be a matter of getting, you know, collecting those --17 MEMBER ZIEMER: Collecting those 18 19 into this. 20 MR. HINNEFELD: -- and getting them into here. 21 22 MR. KATZ: So I guess one suggestion NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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I have is, I mean, I think maybe SC&A wants to
 look at these too as they're in there, including
 all their links.

And once sort of DCAS and SC&A sort of agree that they think that they're complete to the extent that you can identify them, we may stumble across others that have been somehow left out somewhere but I don't mean issues but elements of a particular overarching issue.

But once we think they're complete, I think then the Subcommittee can just start addressing them one at a time. We decide at this meeting we're going to address this one.

There may be an overarching issue that you think belongs elsewhere but otherwise this is a reasonable place to start at least and look at these and one by one you can start addressing them.

And we can then arrange to have Jim Neton or anyone else here for that meeting, including the right people from SC&A here for that meeting, and try to knock these off and so

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that they'll no longer be hovering as they have
 for these years.

A legitimate method 3 CHAIR MUNN: 4 for approaching I think. For the time being, 5 the immediate action, it appears, would be that б NIOSH would continue to populate this list and 7 devise some method for searching base documents to add as components of populating this part of 8 the system. 9 10 MR. HINNEFELD: What base documents? 11 Well, as you just 12 CHAIR MUNN: 13 mentioned, you thought that there may be some procedures, some documents already written to 14 address some of these, and if those documents 15 16 exist, then we need to populate this database with them. 17 MR. HINNEFELD: So response sort of 18 19 actions. 20 CHAIR MUNN: Exactly. MR. HINNEFELD: So just like we 21 22 would enter responses on any other issue. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	CHAIR MUNN: Exactly.
2	MR. HINNEFELD: Okay.
3	MR. KATZ: Yes, and then if SC&A
4	would just, as part of this, in the next month
5	or whatever have a look at this and see if you
6	can identify other instances where that
7	overarching issue may have been addressed that
8	might somehow not be captured.
9	MR. MARSCHKE: Right. We'll go
10	through and look. Now that we have a way to
11	track the overarching issues, we can go through.
12	And if we can find something, I'll
13	let Lori know, you know, we think this should be
14	moved over into the overarching issue or we want
15	to add this or whatever, so I'll work with Lori
16	on that.
17	But I did have one question or maybe
18	a database how we want to do this is now we're
19	going to have these overarching issues and
20	they're going to have basically two statuses
21	associated with them.
22	In the initiating document, like in
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1 OTIB-4, they're going to have the status of 2 transferred. the In overarching issue category, they're going to have a status of 3 4 whatever it is. 5 And so when we go and generate this б summary table, you know, we don't want to double 7 count that particular issue. We want to make sure that we don't double count it, I guess, is 8 9 my caution here. 10 MEMBER ZIEMER: Well, any issue that you transfer is going to show up again 11 somewhere else, right? 12 So don't all the 13 transferred ones, in a sense, get double 14 counted? 15 MR. MARSCHKE: No, not necessarily 16 because, for example, Battelle-TBD-6000, all 13 of these are transferred and they're transferred 17 out of this Subcommittee into your Work Group, 18 19 Paul. 20 MEMBER ZIEMER: Right. MR. MARSCHKE: And so they don't 21 22 really show up as double counting. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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39 1 MEMBER ZIEMER: Well, they'd show up as 13 here. 2 MR. MARSCHKE: They show up as 13 3 issues that have been transferred. 4 5 MEMBER ZIEMER: Right, right. б MR. MARSCHKE: And where they were 7 transferred to, it doesn't show up. You know, the fact that they were transferred into your, 8 9 and the status that they are in your Work Group 10 is --MEMBER ZIEMER: Or there's not 13 11 added to our Work Group then? 12 13 MR. KATZ: But we don't track it. 14 MEMBER ZIEMER: I got you. I got 15 you. 16 MR. KATZ: We don't track it. But I don't think it's that important really, Steve, 17 the double counting or what have you. When you 18 19 put them to bed, it'll all go away. And so, yes, it inflates the numbers but that's not our 20 tracking them. 21 22 Okay. MR. MARSCHKE: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. KATZ: I don't think it's that
2	important that it's worth struggling over
3	really. I mean, we're going to address them,
4	yes.
5	MR. MARSCHKE: Okay, I just want to,
6	yes.
7	MR. KATZ: No, I understand. I
8	think you're correct. I just think it just
9	MEMBER ZIEMER: Well, let me ask
10	this. Once it's closed by whoever it was
11	transferred to, where does it show up as closed?
12	CHAIR MUNN: Here.
13	MEMBER ZIEMER: Where is it
14	counted?
15	MR. MARSCHKE: It would probably
16	show, well, again, however we decide to operate
17	this database.
18	MEMBER ZIEMER: Yes, but ultimately
19	you want to close everything that started, one
20	way or the other.
21	MR. MARSCHKE: One way or the other,
22	yes.
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	41
1	CHAIR MUNN: Yes.
2	MEMBER ZIEMER: So you don't want
3	those transferred ones dangling out there as
4	MR. KATZ: I think I can answer that
5	because you're going to close them as
6	overarching issues first because that's where
7	you're going to deal with them as overarching
8	issues.
9	And then you're going to go back to
10	the specific cases. And if you can close them
11	automatically, because that settles the issue
12	for that specific case, then it'll be closed
13	immediately there.
14	But if there's something
15	particular, for example it's site specific at a
16	number of sites and there's some sites for which
17	it has to be applied differently, you'll close
18	it at those sites as you can wrestle down the
19	site-specific issues for that overarching
20	issue. Does that make sense for that? I think
21	that's how that would get done.
22	MEMBER ZIEMER: So they're going to
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42 1 go back and show up at the original starting 2 point as closed? 3 CHAIR MUNN: Yes. 4 MR. KATZ: Yes, as closed or still 5 open until they can be closed, right, but the 6 overarching matter will have been closed, yes. 7 CHAIR MUNN: As I see it, that's roughly the plan I see falling into place. 8 MS. 9 MARION-MOSS: Т have а 10 question. If they're transferred to Paul's 11 Committee or Work Group --12 MR. KATZ: Sure. 13 MS. MARION-MOSS: they're 14 addressed in the Work Group? 15 CHAIR MUNN: Yes. 16 MS. MARION-MOSS: They do not come back to the database? 17 CHAIR MUNN: Yes, they do come back. 18 19 MS. MARION-MOSS: They do? 20 CHAIR MUNN: Yes. When they close it --21 When they close 22 MS. MARION-MOSS: **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

43 1 it, okay. 2 CHAIR MUNN: -- they're requested to notify us, yes. 3 4 MS. MARION-MOSS: And then we close? 5 6 CHAIR MUNN: Yes. Yes, those are the not 7 MR. KATZ: 8 overarching but other matters you're talking about, right? 9 10 MS. MARION-MOSS: No, overarching. Either 11 MEMBER ZIEMER: way. Either way you want to know. 12 13 MR. KATZ: Okay, but generally overarching, yes, I mean, we don't send to a Work 14 Group an overarching issue because it's coming 15 16 from a Work Group to --MR. HINNEFELD: Most of the 17 overarching are probably going to be --18 19 MR. KATZ: Coming here, right, 20 exactly. MS. MARION-MOSS: So it would never 21 22 have to go, maybe. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

44 1 CHAIR MUNN: Yes. 2 MS. MARION-MOSS: Okay. 3 MR. HINNEFELD: Yes, I hate to say 4 never. 5 MS. MARION-MOSS: Yes. Yes, there's one Work б MR. KATZ: 7 Group where I can imagine we might send an overarching issue. That would be the Science 8 9 Issues Work Group because that's sort of 10 constituted in a way that can deal with broad 11 issues as well as procedures. That's a possibility. 12 CHAIR MUNN: 13 MR. KATZ: Yes. 14 CHAIR MUNN: And I think a part of the thinking when that Work Group was organized. 15 16 MR. KATZ: Sure. CHAIR MUNN: Good, that's excellent 17 18 progress. 19 MR. KATZ: It is, thank you. 20 CHAIR MUNN: Thank you very much, Lori. 21 MS. MARION-MOSS: You're welcome. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 CHAIR MUNN: Didn't know that had 2 Anything else with That's great. qone on. If not, then let's 3 respect to the BRS? 4 undertake the agenda. Are there any additions 5 or corrections to the rest of the agenda as you 6 have received it? I have only one thing that I'd like 7 to mention and that is that Lori and her office 8 have populated a part of OTIB-37 that wasn't 9 10 there before and have added a couple that needed to be there and has one new one I believe. 11 So I would suggest that when we start 12 13 looking at the OTIBs right after lunch that we include OTIB-37 and devote a little bit of time 14 to it so that Lori can report that to us. 15 Other 16 than that, I don't have any additions. Does anyone else? 17 All right. Let's start with 18 19 OTIB-70, which is going to be a handful, and who 20 is going to carry the water on this one? Well, I can start. MR. MARSCHKE: 21 22 What we did was I guess NIOSH had made -- wait NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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	40
1	a minute. Let me first bring it up, get it here.
2	NIOSH had made some responses to
3	some of the comments or maybe they reissued
4	OTIB-70 as a new issue, and what we did was we
5	looked at that and we went through and made some
6	recommendations to the Subcommittee as to status
7	changes.
8	And back in May we sent to Wanda and
9	the Subcommittee an email, which is basically
10	shown here on the screen which is a summary of
11	those recommendations.
12	And, in essence, we are recommending
13	that most of the open issues or the in abeyance
14	issues associated with OTIB-70 should be closed.
15	And so if we want to walk through I
16	guess the OTIB-70 issues and if the Subcommittee
17	would like to, you know, act on our
18	recommendations I guess, then
19	CHAIR MUNN: Let's do that, Steve.
20	MR. MARSCHKE: we can do that.
21	CHAIR MUNN: I think for the record
22	the best thing we can do is take them one at a
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1 time. Number 1.

2 MR. MARSCHKE: Okay, first finding. Basically in Revision 1 of OTIB-70, our response 3 states that in Revision 1 of OTIB-70 the source 4 5 term depletion rate has been changed from 0.01 б per day to 0.00067 per day. And this change was consistent with 7 resuspension factor 1E-6 per meter, and based 8 upon this revision, SC&A recommends that the 9 10 finding be closed. 11 CHAIR MUNN: We are aware the revision has been made and we have discussed this 12 13 particular item at length in this forum. Is there any additional comment to make or may we 14 accept this as closed? Any objection to closing 15 16 it, Paul? 17 MEMBER ZIEMER: No, I'm just absorbing what they said here, source term 18 19 depletion rate. This is the resuspension factor issue. 20 Yes, it is, exactly. 21 CHAIR MUNN: MEMBER ZIEMER: Is this the case of 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	a cleaned-up facility again? I'm just trying to
2	remember. Is this the category where there's
3	been prior clean-up such as in the residual
4	period?
5	MR. MARSCHKE: Yes. OTIB-70 is
6	dose reconstruction during the residual
7	radioactivity period.
8	MEMBER ZIEMER: Right. I think we
9	had been moving toward that final 10 to the minus
10	6 value, both SC&A and for previously cleaned-up
11	sites.
12	MR. MARSCHKE: Right. If you look
13	at the history that's been going on, basically
14	that's the argument that has been being debated.
15	You can go back to December of 2010.
16	You can see there's a whole rather large SC&A
17	reply that discusses all this thing.
18	And then in January of 2012, we got
19	a NIOSH response which indicates that they, I
20	guess, had kind of agreed with the SC&A approach
21	or they were going to accept the SC&A approach
22	and the TIB was being revised to reflect this.
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1	And, again, in January then we had
2	discussed this in the Subcommittee and the
3	Subcommittee agreed with the approach being
4	taken by NIOSH.
5	And at that point they changed the
6	status. The status was changed to in abeyance
7	and so basically what NIOSH is saying here now
8	is that the agreed-upon approach has been
9	implemented in the OTIB to SC&A's satisfaction.
10	MR. KATZ: For a cleaned-up
11	facility.
12	MEMBER ZIEMER: Right.
13	MR. MARSCHKE: For a cleaned-up.
14	MEMBER ZIEMER: I just wanted to
15	clarify.
16	CHAIR MUNN: You're okay with
17	closing it?
18	MEMBER ZIEMER: Yes, I agree with
19	that.
20	CHAIR MUNN: Josie, okay?
21	MEMBER BEACH: Yes.
22	CHAIR MUNN: Dick, are you okay with
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50 1 closing this? Are you on mute, Dick? We're not 2 getting a response from Dr. Lemen. MR. KATZ: That's okay because you 3 4 have a quorum. 5 CHAIR MUNN: Let's close it as 6 recommended. Next item, Steve. MR. HINNEFELD: Careful you don't 7 8 get too far ahead of Steve. 9 CHAIR MUNN: No, we won't. 10 MR. HINNEFELD: He's doing this live-time updating. 11 CHAIR MUNN: We'll let Steve close 12 13 it. MEMBER LEMEN: Hello. 14 MR. KATZ: Oh, there you are. 15 16 CHAIR MUNN: Yes, Dick. I am sorry. Yes, I 17 MEMBER LEMEN: agree with you. 18 19 CHAIR MUNN: All right, thank you. 20 MR. KATZ: Thanks, Dick. MEMBER LEMEN: My fingers are just 21 22 (Laughter.) **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. KATZ: I knew you'd find this
2	tricky.
3	CHAIR MUNN: Warm water works.
4	MEMBER LEMEN: Does it? Okay, I'll
5	stick my fingers in warm water.
б	MR. KATZ: While Steve's catching
7	up, I just thought I'd mention that I think it
8	would be good as important documents like this
9	get completely closed, the issues, it would
10	probably be good for the Procedures Subcommittee
11	to present to the Board its closure of that
12	because there's really right now not a feedback
13	mechanism for the full Board on these.
14	It would be good to bring the Board
15	up to date, certainly on major documents like
16	this which, you know, many Work Groups have
17	wrestled with.
18	MEMBER ZIEMER: Right, and this is
19	an overarching issue basically.
20	MR. KATZ: Yes.
21	MR. MARSCHKE: Sorry, I did the
22	wrong button. I have to do it all again. Okay,
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1 closed.

2 Issue 2 is kind of the same situation. Again, going back to January of this 3 4 year, NIOSH presented what they intended to do with the revision. 5 6 The Subcommittee agreed with the 7 NIOSH approach and in May the revision was SC&A looked at it and we recommend 8 issued. again that the finding be closed. 9 10 MR. KATZ: Do you want to say for the record and for Dick who's on the line about Issue 11 2, what we're speaking of? 12 13 MR. MARSCHKE: 2, Issue we're talking about -- what are we talking about? 14 Misinterpretation of 15 CHAIR MUNN: 16 references, just using them properly, pertaining to outdoor soil contamination. 17 MR. MARSCHKE: Right. 18 19 CHAIR MUNN: Which is different than building surfaces, building uses, room 20 rights, ventilation rates. Yes, Paul. 21 22 ZIEMER: At last MEMBER our **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	meeting, I think we'd already agreed to the
2	finding. I think the only thing we had to do was
3	confirm that it showed up in the revision, isn't
4	that correct?
5	MR. MARSCHKE: Yes.
6	MEMBER ZIEMER: That you were going
7	to go back and confirm that it actually showed
8	up.
9	MR. MARSCHKE: That's correct, yes.
10	MEMBER ZIEMER: But the approach
11	we'd already agreed to.
12	CHAIR MUNN: Yes, we had agreed to
13	that a year or so ago.
14	MR. MARSCHKE: The in abeyance
15	status of the issue, that's implied by the, you
16	know, the in abeyance status so without, you
17	know, going back and looking at the January
18	transcript.
19	MEMBER ZIEMER: January says the
20	Subcommittee agrees with the approach.
21	MR. MARSCHKE: Right.
22	MEMBER ZIEMER: And changed to
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1 abeyance until OTIB-70 is changed. Well, it has 2 been revised and I guess Bill Thurber confirmed that. 3 4 MR. MARSCHKE: Yes. 5 CHAIR MUNN: And the decay rate is б now based on estimates from specific sites 7 rather than literature sources and that's, I believe, what the history of the finding led us 8 to request of the revision, which is now a fait 9 10 accompli. 11 MEMBER ZIEMER: Do we need a recommendation? 12 13 CHAIR MUNN: Yes, please. MEMBER ZIEMER: 14 I recommend we close the issue. 15 16 CHAIR MUNN: Any objections? Not from Lori. You're all right with that, Dick? 17 MEMBER LEMEN: 18 Yes. 19 CHAIR MUNN: Good, the hot water 20 worked, good. MEMBER LEMEN: Well, the warm water 21 is good water. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	CHAIR MUNN: That's great. Thank
2	you.
3	MEMBER ZIEMER: We're all in hot
4	water, Dick.
5	MEMBER LEMEN: Yes, I know.
б	CHAIR MUNN: The finding is closed.
7	Number 3, Steve.
8	MR. MARSCHKE: Closed.
9	CHAIR MUNN: Got to catch up.
10	MR. MARSCHKE: The first two are
11	closed. Finding 3 is currently in abeyance. The
12	finding is talking about uniformly distributed,
13	well let's see, inappropriate assumption
14	regarding the impact of ventilation on source
15	term depletion.
16	And, again, it has to do, I think,
17	with the 1 percent per day being changed to
18	0.00067 per day.
19	Well, going back to January meeting,
20	the Subcommittee agreed with the approach being
21	taken by NIOSH and they changed the status to in
22	abeyance.
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1	Bill Thurber reviewed the depletion
2	factor in Revision 1 and it was based upon the
3	average observed depletions at four AWE sites.
4	We believe the new approach eliminates prior
5	SC&A concerns and, therefore, we recommend that
6	the finding be closed.
7	CHAIR MUNN: Any objection to
8	closing Number 3?
9	MEMBER ZIEMER: No objection.
10	CHAIR MUNN: This relates to the
11	same material we were discussing earlier with
12	the depletion rates.
13	MEMBER LEMEN: I agree.
14	CHAIR MUNN: Thank you, Dick. No
15	objection here. We will record Finding 3 as
16	closed.
17	MR. MARSCHKE: Finding 4 is already
18	being shown as closed, so let's skip that one.
19	CHAIR MUNN: Yes.
20	MR. MARSCHKE: Finding 5 is being in
21	abeyance and basically it's the Attachment B,
22	survey data from three separate thorium
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facilities. There is no guidance for the dose 1 reconstructor regarding their use. That was 2 the summary of the comments. 3 4 And the January NIOSH response was 5 the TIB is currently being revised to remove б Attachment B. It was never used for dose 7 reconstruction purposes and therefore had been deemed unnecessary. 8 Also in January the Subcommittee 9 10 agreed with the approach, I guess the removal of the Attachment. 11 And when Bill Thurber reviewed 12 13 Revision 1, he confirmed that Attachment B has been deleted, and we recommend that the Finding 14 5 be closed. 15 16 CHAIR MUNN: Any objection to closing Finding 5? 17 MEMBER ZIEMER: No, that was really 18 19 just a confusion factor. In the original 20 document, they had a table which wasn't used --CHAIR MUNN: Wasn't being used. 21 MEMBER ZIEMER: -- for anything and 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1 confused people as to why it was there. I think 2 it just removed it from the revisions. It makes In a sense, it's not a change in 3 sense. 4 procedure, just removal of a confusion factor. 5 CHAIR MUNN: All right with closing б it, Dick? 7 MEMBER LEMEN: Yes. CHAIR MUNN: Very good. 8 9 MR. KATZ: Closed. 10 MEMBER BEACH: Looks like this one deals with the same. 11 Almost a duplicate. 12 CHAIR MUNN: Finding number 6. 13 Finding number 6, 14 MR. MARSCHKE: use of Horizon summary survey data as default for 15 16 operational air concentrations was inappropriate and not claimant favorable. 17 That is the summary of the finding. Again, I guess 18 19 this is the same thing about Attachment B. It is. 20 CHAIR MUNN: MR. MARSCHKE: And never been used 21 and it's been removed, and so if the Subcommittee 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

59 1 agrees, we can close it. 2 CHAIR MUNN: Any objection? Dick? LEMEN: I 3 MEMBER have no objections. 4 5 CHAIR MUNN: Thank you. You may б close it, Steve. 7 MR. MARSCHKE: Thank you, Wanda. CHAIR MUNN: And 7 is already 8 closed. Eight is closed. 9 10 MEMBER BEACH: And 9 is the same thing, Attachment B. 11 MR. STIVER: It's another example 12 13 of Attachment B. 14 MEMBER BEACH: Yes. MR. MARSCHKE: We're up to 8 is 15 16 closed, 9 Attachment B. 17 CHAIR MUNN: Another Attachment B, which has been removed. 18 19 MR. MARSCHKE: Which has been removed so we closed it. 20 CHAIR MUNN: Closed. 21 22 MEMBER ZIEMER: Closed. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	CHAIR MUNN: Closed, closed.
2	Dick?
3	MR. MARSCHKE: Okay, where are we?
4	CHAIR MUNN: Now we're down to 10.
5	MR. MARSCHKE: Ten was basically
б	again the recommended resuspension factor of
7	1E-6 per meter is inappropriate.
8	Indoor resuspension factors sited
9	in the scientific literature involve
10	substantial industrial activities should be a
11	resuspension factor of 10 to the minus 4 to 10
12	to the minus 3 per meter. That was the summary
13	of the concern.
14	NIOSH feels that 10 to the minus 6
15	isn't appropriate. In addition, it does not
16	limit resuspension. Therefore, if a situation
17	arises where a higher resuspension factor is
18	deemed necessary, it could be applied to that
19	specific situation. This is the NIOSH January
20	response.
21	NIOSH has committed to the finding.
22	The Subcommittee's January response to NIOSH was
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61 NIOSH has committed to check whether OTIB-70 has 1 the appropriate caveat for the use of 10 to the 2 minus 6 resuspension factor. 3 4 If not, an appropriate caveat will be inserted. Based upon this, the Subcommittee 5 б has changed the status to inappropriate. 7 MR. KATZ: To what? MR. MARSCHKE: To in abeyance. 8 9 (Laughter.) 10 MEMBER BEACH: So the correction here is, therefore, if a situation arises where 11 higher suspension 12 the factor is deemed necessary, it could be applied. 13 Does OTIB-70 give you the option or 14 does it just say it would apply? Because it 15 16 doesn't really change anything, that answer. The table says it's 17 CHAIR MUNN: going to be a site-by-site analysis. 18 19 MR. STIVER: Yes, if you go down to 20 Bill Thurber's response --If you go to Bill 21 MR. MARSCHKE: 22 Thurber, yes. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. STIVER: The caveat is in Table
2	5.1, where basically they default to a
3	site-specific situation.
4	MEMBER BEACH: Okay, so it will go
5	to site, okay. I wanted to clear that up, thank
6	you.
7	MR. MARSCHKE: Yes, basically a
8	footnote has been added to Table 5-1 which
9	states, "In cases where the contaminated area is
10	still involved in operations, a site-by-site
11	analysis of the appropriateness of 1 times 10 to
12	the minus 6 per meter squared resuspension
13	factor should be done."
14	And basically since the table
15	indicates a site-by-site analysis, SC&A
16	recommends the finding be closed.
17	MEMBER BEACH: And have we reviewed
18	the Table 5.1?
19	MR. MARSCHKE: Well, we can go up
20	and
21	CHAIR MUNN: Yes.
22	MR. MARSCHKE: look at it right
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63 1 now. We can go --2 CHAIR MUNN: SC&A has reviewed it. MEMBER BEACH: Have they? Okay. 3 4 CHAIR MUNN: Yes. 5 MR. KATZ: Yes. б CHAIR MUNN: This is their 7 response. MEMBER BEACH: They found 8 it appropriate? 9 10 CHAIR MUNN: Yes. MEMBER BEACH: Okay, that's fine 11 then. 12 13 MEMBER ZIEMER: Of course, Bill Thurber has confirmed that the footnote is 14 My concern is, and I'll maybe ask Stu, 15 there. 16 if the dose reconstructor is using this document, is a footnote going to be easily 17 missed? 18 19 If they see a table of resuspension 20 factors, is there some way that really red flags it so they say if this is an active site, it 21 hasn't been cleaned up, I should not use this 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

64 table? 1 2 That's what it's really saying, to qo back and see if these are -- I'm a little 3 4 concerned about footnotes because they easily get overlooked. 5 6 I mean, this meets the letter of the 7 law in terms of changing the procedure. Are we comfortable that all those dose reconstructors 8 out there catch the footnotes? 9 10 MR. HINNEFELD: Scott Siebert, are 11 you on the phone? CHAIR MUNN: You shouldn't be using 12 13 OTIB-70 anyway if you're --14 MR. SIEBERT: I am. MR. SHARFI: This is Mutty again. 15 16 MR. HINNEFELD: Okay, Mutty. MR. Really DRs don't 17 SHARFI: directly use this document. 18 19 MEMBER ZIEMER: All right. This is more for TBD 20 MR. SHARFI: authors. 21 22 MEMBER Got you, okay. ZIEMER: **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 Thank you, that answers it then, and a TBD author 2 presumably will be looking at the details critically of the document. 3 4 I was just concerned of a dose reconstructor somehow using this, but it's 5 б already a document for cleaned-up facilities 7 anyway. CHAIR MUNN: Yes, correct. 8 9 MEMBER ZIEMER: Right? Okay. 10 MR. HINNEFELD: And beyond that, 11 sort of a technique has to be approved for dose reconstruction. 12 13 MEMBER ZIEMER: Got you. once that 14 MR. HINNEFELD: And 15 technique gets approved would be incorporated. 16 That's like a --MEMBER ZIEMER: It's based on this 17 but it wouldn't be in there. Okay, I'm good with 18 19 that. 20 MR. HINNEFELD: Yes, so it's not individual dose reconstructors who are making 21 22 the judgement. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

66 MEMBER ZIEMER: Right, right, got 1 2 Thank you, that answered it. you. I'm comfortable with that. 3 4 CHAIR MUNN: All right, onto Item 5 number -б MR. MARSCHKE: What was status, closed? 7 8 CHAIR MUNN: Yes, the status is closed, yes. 9 10 MR. MARSCHKE: That was 8. Nine is 11 CHAIR MUNN: No, that was 10. 12 13 MR. MARSCHKE: That was 10? Oh, I'm way behind. 14 MEMBER BEACH: Eight, 9 and 10 are 15 16 all closed. MR. MARSCHKE: Finding 11 was 17 concerned with the use of NUREG-1400. 18 19 CHAIR MUNN: And Thurber says 20 NUREG-1400 has been deleted from Rev. 1 of the OTIB and that SC&A recommends the finding be 21 closed. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

67 1 MR. MARSCHKE: Yes, back in 2 January, that's what NIOSH said that they were 3 going to do, was we advise remove the NUREG-1400 4 source term approach. 5 CHAIR MUNN: Yes, although I like б NUREG-1400 myself. So any objection to closing 7 this? 8 MEMBER BEACH: No. CHAIR MUNN: None here at the table. 9 10 Dick? MEMBER LEMEN: No, I'm fine. 11 CHAIR MUNN: All right, thank you. 12 13 You may close it, Steve. 14 MR. MARSCHKE: Thank you. 15 CHAIR MUNN: Thank you. 16 MEMBER BEACH: So addressed in finding? Is that something we deal with or is 17 it --18 19 CHAIR MUNN: Yes. No, it means 20 this has already been taken care of in a preceding finding, and if you look at the comment 21 itself, it should tell us which finding meets 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

68 1 this. 2 MEMBER BEACH: So is that technically closed then --3 4 MR. MARSCHKE: No. 5 MEMBER BEACH: -- since it's been 6 addressed? 7 CHAIR MUNN: No, it says this finding should be closed when the documentation 8 from the TBD-6000 Work Group is received. 9 We 10 have to wait for feedback. I guess basically 11 MR. MARSCHKE: this is the one that had been transferred to 12 13 TBD-6000 Work Group and so --CHAIR MUNN: If Paul ever gets his 14 email back, he may send us closure. 15 16 MR. MARSCHKE: So there's no change in that status at this point in time? 17 CHAIR MUNN: Right. We will 18 19 continue it until we hear from the TBD-6000 Work 20 Group. MR. MARSCHKE: Issue 13 --21 22 MR. KATZ: Can you just remind us, NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

what is that finding? 1

2	MR. MARSCHKE: Use of TBD-6000 for
3	
3	assigning operational air concentration values
4	may not be claimant favorable.
5	SC&A previously conducted a
6	separate review of TBD-6000 and submitted a
7	working draft report to the Board in September
8	2007 and identified in the draft report was the
9	following finding.
10	Default airborne dust loadings used
11	in the TBD to derive external exposures and
12	inhalation exposures are based upon data
13	provided in Harris and Kingsley.
14	The TBD would benefit from including
15	a review of the time-weighted daily average
16	uranium dust loading reported in Adley et al.
17	And I think it was a study of
18	atmospheric contaminations in the Metal Melt
19	Building, that was a 1952 ABC report, and in the
20	Site Profile of Simonds Saw and Steel. That was
21	in Site Profile TKBS-0032.
22	SC&A's review of these documents
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70 reveals that the bounding default time-weighted 1 2 average airborne uranium dust concentrations recommended in the TBD may not be claimant 3 favorable. 4 So basically I think the thing is, 5 б yes, we looked at the TBD-6000 and thought that 7 the dust loadings were not favorable and I think OTIB-70 referred to the TBD-6000 on that. 8 9 CHAIR MUNN: Yes. 10 MEMBER ZIEMER: So I just realized 11 you're waiting for an email, a copy of that email. 12 13 MR. KATZ: Right. CHAIR MUNN: Yes, that's true. 14 So 15 it's action item Ziemer. 16 MEMBER ZIEMER: Right, for me. CHAIR MUNN: Yes. 17 MR. KATZ: Yes, that's why I asked 18 19 about --20 (Laughter.) MEMBER ZIEMER: That's why I'm 21 writing here. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	MR. KATZ: On paper.
2	MEMBER ZIEMER: Right. Well, it's
3	so easy for these things to get lost. That's why
4	we have the tracking system.
5	CHAIR MUNN: Yes, it is. Yes, easy
6	to slip through. All right, we'll leave that
7	one as is and no action for us at this time. We
8	will go on to Action Item 13.
9	MR. MARSCHKE: Finding 13 was
10	involving the use of TBD-6001. I'm not sure if
11	you want to go through what the exact issue was
12	but.
13	CHAIR MUNN: No, I think just
14	picking up Thurber's last comment will satisfy
15	our need.
16	MR. MARSCHKE: Yes, in January of
17	this year, NIOSH's response was that the TIB is
18	currently being revised to remove all references
19	to TBD-6001 and any data from it. Back in
20	January, the Subcommittee agreed with that
21	approach.
22	And Bill Thurber, on behalf of SC&A,
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reviewed 6001 and confirmed that all references 1 2 to TBD-6001 and data therefrom have been removed from Revision 1 of OTIB-70 and, therefore, we 3 4 recommend that the finding be closed. CHAIR MUNN: Any objection? 5 6 MEMBER BEACH: No. 7 MEMBER ZIEMER: No. CHAIR MUNN: Dick? 8 9 (No response.) 10 CHAIR MUNN: You may close it, 11 Steve. Thank you. 12 MR. MARSCHKE: 13 CHAIR MUNN: Thank you. Did you hear me? 14 MEMBER LEMEN: 15 No. 16 CHAIR MUNN: No. Thank you. MEMBER LEMEN: I need to heat the 17 water up I guess. I'm getting a little slow. 18 19 CHAIR MUNN: Yes. Microwaves are 20 good for that. This is the voice of experience speaking. 21 22 MEMBER LEMEN: You stick your **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

73 1 fingers in the microwave, Wanda? 2 CHAIR MUNN: No, in the warm water. MEMBER LEMEN: Oh, okay. 3 4 CHAIR MUNN: This is for water only. Your suggestion didn't work. 5 б MR. MARSCHKE: Okay, Finding 14. 7 Again, this has to do with TBD-6001 and, again, same thing. Everything associated with 6001 8 has been removed from OTIB-70 and, therefore, we 9 10 recommend that the finding be closed. Since it had been CHAIR MUNN: 11 previously identified as being covered in the 12 13 preceding finding, there's no reason why this shouldn't be closed also since we just closed 13 14 so, so directed. 15 16 MR. MARSCHKE: And Ed McMahon used to say on Johnny Carson we come to the last 17 finding. 18 19 And that finding has to do with many 20 of the fundamental assumptions that form the technical basis of OCAS-TIB-9. Ingestion model 21 22 are too restrictive and may yield too low values NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1 under Task 3.

2 NIOSH ingestion model as described in TIB-9 was previously reviewed by SC&A and a 3 4 draft issued May 30, 2006. In that review, SC&A concluded that the NIOSH model is simplistic and 5 б likely to yield intakes that are too low for 7 multiple reasons. However, Issue TIB-9, Batch 1, has 8 not been formally finalized and, thus, regard it 9 10 here as a conditional issue. CHAIR MUNN: Ι summarize 11 can Thurber's findings. It appears the position is 12 13 that issues relating to TIB-9 haven't been formally resolved and the 2004 version of that 14 document is still current. 15 16 So SC&A is recommending that this finding remain in abeyance until concerns 17 regarding TIB-9 are resolved. 18 19 We believe the ingestion exposures during the residual period will be small, 20 assuming that some clean up has occurred at the 21 end of operations, for example see Table 2.5 in 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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	75
1	TBD-6000.
2	So the recommendation from SC&A is
3	that this remain in abeyance until TIB-9 has been
4	closed.
5	MR. MARSCHKE: Yes, so the
6	recommendation is no change in the current
7	status of the
8	CHAIR MUNN: Does anyone wish to
9	take issue with that recommendation? Stu, does
10	that make sense to you?
11	MEMBER ZIEMER: Who is reviewing
12	TIB-9? Are we?
13	CHAIR MUNN: It's not on my list of
14	hot topics.
15	MEMBER ZIEMER: Where is TIB-9?
16	It's eight years.
17	MR. HINNEFELD: I don't know. I'll
18	have to do a little research on that question.
19	I don't see that we have an agreed-upon
20	resolution here yet.
21	MEMBER ZIEMER: Yes, that's why I
22	was wondering. Is
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76 1 MR. HINNEFELD: It sounds to me like 2 this -being 3 MEMBER ZIEMER: it ___ 4 addressed or is it sitting somewhere? 5 MR. HINNEFELD: You know, from this б reading here, I don't know that we have an 7 agreed-upon resolution. 8 Ιf don't have agreed-upon we resolution, then I think we should be in 9 10 progress, not in abeyance, but let me do a little checking on this OCAS-TIB-9. 11 MR. STIVER: Yes, this is Stiver. 12 13 From my recollections, Stu's correct and I know this TIB-9 issue has come up in several different 14 Work Groups as well. 15 16 And it's the same kind of а situation. There hasn't been a revision since 17 2004 that would address these problems. 18 19 CHAIR MUNN: What is TIB-9? What's it about? 20 It's about assigning MR. STIVER: 21 ingestion doses from situations like this where 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

77 1 you have resuspended material and what fraction 2 of that deposits on surfaces and is available for ingestion, intakes. 3 4 CHAIR MUNN: Operational periods as 5 well as -б MEMBER BEACH: Is it being used? 7 Are dose reconstructors using OTIB-9? I don't know. MR. HINNEFELD: 8 TIB-9 basically is 9 MR. MARSCHKE: 10 shown on the screen. TIB-9, Issue 1, there's just basically no guidance. 11 If you go back and forth, you can see 12 13 basically on November of 2007 ingestion is being addressed as a global issue and then it got cut 14 off. 15 16 Overarching. Well, yes, so basically this should be one of the ones that 17 should go into the overarching issue category. 18 19 MR. STIVER: Is there a bin for ingestion issues in BRS? 20 MR. KATZ: 21 Yes. MR. MARSCHKE: So this would be one 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

1 of the things that would populate the 2 overarching, and global is the key word. There's a few of them that have, I don't know if 3 4 you've looked for that. 5 MS. MARION-MOSS: Yes, I looked. MR. HINNEFELD: What she looked on б was statuses of transferred. 7 CHAIR MUNN: Transferred. 8 Right. This 9 MR. HINNEFELD: 10 status shows open, so she wouldn't have picked it off. 11 CHAIR MUNN: Yes. 12 13 MR. MARSCHKE: So back to the 14 OTIB-70 finding, I mean, we have kind of a 15 disconnect. I mean, we have the OTIB-70 16 finding, as Stu says, in abeyance, whereas the underlying TIB-9, Finding 1, is open so. 17 CHAIR MUNN: Open. This means we 18 19 haven't addressed it at all. 20 MR. MARSCHKE: It means we haven't even talked about it --21 CHAIR MUNN: No, we haven't. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

79 1 MR. MARSCHKE: ___ in this 2 Subcommittee. CHAIR So the 3 MUNN: question 4 probably arises, should we ask NIOSH to look at 5 TIB-9 for our upcoming meetings, next or 6 otherwise? MEMBER BEACH: Well, shouldn't they 7 8 answer the findings from SC&A? Wouldn't that, 9 I mean, --10 CHAIR MUNN: Well, SC&A is saying until you address TIB-9. 11 MEMBER BEACH: Right, but they're 12 13 reason OTIB-9 should be giving you the addressed. I mean, if you look back through all 14 findings, there's nothing that 15 the even 16 addresses SC&A's problem with OTIB-9 so it gets to the same thing. 17 STIVER: That's a secondary 18 MR. 19 finding. It relates back to the --20 MEMBER BEACH: It's secondary, yes. MR. STIVER: -- original problem. 21 22 MR. HINNEFELD: Okay, we've got a **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

80 1 couple things to sort out here because, first of all, I believe you guys had reviewed TIB-9, is 2 that right? 3 4 MR. MARSCHKE: I'm looking. 5 August 2007 we issued, this is Revision 1 to the 6 second set of reviews, and you can see here was 7 TIB-9 being reviewed. Actually it was reviewed by John Mauro. 8 CHAIR MUNN: John and Hans. 9 10 MR. MARSCHKE: And Hans did approve the review. And so if you want to look at the 11 details of the SC&A review of TIB-9, this is 12 13 where to go. 14 MR. HINNEFELD: Okay. So then from that, there would be findings in that review. 15 16 MR. MARSCHKE: From that, there should be findings. 17 Which should be MR. HINNEFELD: 18 19 entered in the BRS, right? 20 MR. MARSCHKE: According to the BRS, basically there's only one finding now for 21 22 TIB-9. And if we go to that, that's the NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

81 estimation of the ingestion intakes. 1 2 CHAIR MUNN: So this is TIB-9. Why does it not come up for me? 3 MR. HINNEFELD: TIB hyphen 0009. 4 CHAIR MUNN: Three zeroes. 5 6 MR. HINNEFELD: Three zeroes. 7 MS. THOMAS: Yes, this is Elyse and, Stu, I think this is one of the issues that we 8 had with the migration. I'm not sure all the 9 10 findings and responses migrated from the old access database into the BRS for this particular 11 item. 12 13 CHAIR MUNN: That's another one of 14 those accuracy issues. 15 MS. THOMAS: Yes. 16 MS. MARION-MOSS: Yes. This is Actually, I put those in myself 17 Lori. yesterday. Apparently Steve is not seeing what 18 19 I see, okay? So that's something else I'll make note of. 20 CHAIR MUNN: Thank you, Lori. 21 22 MS. MARION-MOSS: You're welcome. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

82 1 CHAIR MUNN: Regardless of how we look at it, it appears that --2 3 MR. KATZ: So, Lori, do you have 4 responses then from DCAS on --5 MS. MARION-MOSS: Not for TIB-9. б MR. KATZ: Not for TIB-9. 7 MS. MARION-MOSS: I just got the finding in. 8 MR. KATZ: Just the findings. 9 10 MS. MARION-MOSS: There was а problem with populating it from the old database 11 so we're trying to get the finding in. 12 13 CHAIR MUNN: Ιt appears it's receiving attention right now just purely from 14 a clerical point of view, and the question arises 15 16 is it time for us to request that it be looked at from a technical point of view? Can we put 17 that on your to-do list? 18 19 All right. 20 MR. KATZ: Yes, and that's on the DCAS to-do list? 21 22 CHAIR MUNN: Yes. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	MR. KATZ: And I think I recall
2	addressing this in some meeting. I don't know
3	what the forum was, at least in part this issue,
4	but we'll see.
5	CHAIR MUNN: All right.
6	MR. MARSCHKE: Wanda?
7	MR. HINNEFELD: So we have two
8	things. One, is to make sure we get the findings
9	because they don't appear online. Make sure we
10	get the findings in TIB-9 into the BRS from the
11	old system and also for us to prepare responses
12	to the finding.
13	MR. MARSCHKE: On the screen, I'm
14	showing basically a printout from the old system
15	which shows TIB-9, Finding 1, and TIB-9 only had
16	the one finding in the old system.
17	CHAIR MUNN: Very good. That's
18	encouraging, all right.
19	MR. MARSCHKE: And you can see what
20	the finding is. The fundamental scientific
21	approach to reconstruction ingestion exposures
22	has flaws and it could lead to an underestimated
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ingestion doses under certain circumstances. 1 2 That was cut off too. This is cut off as well. However, NIOSH has agreed to 3 4 revise its approach to deriving radionuclide ingestion rates. And then this is showing the 5 6 status as being transferred to global issues. 7 CHAIR MUNN: Well, global issues is where we are. That's overarching. 8 It's now called 9 MR. MARSCHKE: 10 overarching issues. CHAIR MUNN: Correct, so that's on 11 the burner for NIOSH next time and we will, 12 13 therefore, accept the SC&A recommendation. Any objection to that? 14 will 15 Then accept the we 16 recommendation for the finding. MR. HINNEFELD: Well, no. 17 Wait a minute because the recommendation was for in 18 19 abeyance, right? 20 CHAIR MUNN: That's correct so --MR. KATZ: Yes, it's in progress. 21 MR. HINNEFELD: It should be in 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

85 1 progress. 2 MR. STIVER: Should be in progress. MR. KATZ: 3 In progress. 4 MR. STIVER: Because there isn't a solution published. 5 б MR. HINNEFELD: In abeyance means 7 we have an agreed-upon solution. We just haven't revised the document yet. 8 9 MR. KATZ: Right. 10 CHAIR MUNN: Well, yes, I guess it 11 does. In my mind I'm thinking, okay, it's going to be in progress for NIOSH. All right, very 12 We'll change it to in progress and 13 good. indicate that NIOSH is undertaking a response to 14 the TIB-9 outstanding issue. 15 16 MR. KATZ: And this would be a good time for a comfort break. 17 CHAIR MUNN: It is a good time for 18 19 a comfort break. We're a little bit early but 20 we're going to take it anyway because we need to. We'll be back in 15 minutes. 21 Thanks, everyone on the 22 MR. KATZ: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

86 line. So we'll be back about 10:45. 1 2 (Whereupon, the foregoing matter went off the record at 10:29 a.m. and went back 3 on the record at 10:47 a.m.) 4 5 MR. KATZ: Okay, we are back, б Advisory Board on Radiation and Worker Health, Subcommittee on Procedures Review. Dick, are 7 you back with us? 8 MEMBER LEMEN: I am here. 9 10 MR. KATZ: Great. CHAIR MUNN: We have completed our 11 work on OTIB-70 I believe. 12 13 MR. MARSCHKE: Yes. CHAIR MUNN: And did you get that 14 last agreement that we were discussing, Steve? 15 16 MR. MARSCHKE: Yes, I --CHAIR MUNN: We had said it's in 17 18 progress. 19 MR. KATZ: Yes, he's got it, in 20 progress. CHAIR MUNN: Very good, all right, 21 Then let's move on to the status of the 22 great. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com PERs that we have been visiting in the past and
 we'll start with 012.

Kathy gave us a review last time of 3 one of the cases that SC&A had looked at and had 4 said she was going to provide the other eight for 5 б us and I believe that's now been done, and would 7 you like to take us through that, John? MR. STIVER: Okay, as you may know, 8 Hans and Kathy just moved and they are still in 9 10 the process of unpacking their boxes and don't have an office set up or anything. 11 So I went and ahead and volunteered 12 to cover PER-12 and -14 for Hans and Kathy. 13 They do have cell phones, so they will be able to call 14 in at some point if they're not already on the 15 16 line. They were on before. 17 CHAIR MUNN: 18 MEMBER ZIEMER: They were on 19 earlier. 20 MR. STIVER: Yes. So with that, if you all have the formal document that was 21 22 transmitted on the 20th of July, it's a PDF file NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

entitled Transmit Draft-SCA-TR-PR2012-0012,
 not PA-cleared.

This is the document that I'm going 3 4 to be going through, which has kind of a brief introductory summary of the PER and then the nine 5 б case reviews that were the subject of that PER 7 investigation as part of Subtask 4, and then there's a brief summary conclusion section 8 there. 9 10 But what I'd like to do, considering 11 that we have two new Members of the Subcommittee, 12 I'd like you, when you get that file, to go to Page 9. 13 This is in Section 1 that's entitled 14 Relevant Background Information and this is kind 15 16 of a cameo summary, if you will, of the PER review that we did back in 2010. 17 And if everybody has that up or we 18 19 can wait a few minutes. Well, I can just go 20 through it. You don't necessarily have -MR. MARSCHKE: July 20? 21 CHAIR MUNN: The 20th, July 20. 22

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1	MR. STIVER: Yes, July 20. It was
2	actually addressed to the full Board and I sent
3	out a reminder too.
4	MEMBER BEACH: Mine says it's on
5	oh, it is Page 9, okay, got it.
6	MR. STIVER: Yes. Okay, I think
7	Steve has it pulled up here so we can go ahead
8	and get started.
9	MEMBER ZIEMER: What was the date?
10	MR. STIVER: The date is
11	CHAIR MUNN: July 20.
12	MEMBER ZIEMER: The 20th.
13	MR. STIVER: It was the 20th.
14	MEMBER ZIEMER: Got you, okay.
15	Thank you, go ahead.
16	MR.STIVER: All right. All right,
17	I'll give kind of a brief history of PER-12 and
18	the issues that brought it about and some of the
19	criteria for selection and identification of
20	impacted cases that were reviewed.
21	During the meeting of the Advisory
22	Board in October 2009, SC&A was tasked to review
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90 PER-12, which is the evaluation of highly 1 2 insoluble plutonium compounds. And this was initiated by NIOSH when 3 4 they acknowledged and became aware of the existence of these highly insoluble forms of 5 б plutonium at various DOE facilities, which 7 prompted an investigation into the effects on the exposed workers. 8 And in response to this issue, they 9 10 produced a document, OTIB-49 Rev. 00 which is entitled Estimating Doses for Plutonium 11 Strongly Retained in the Lung. 12 13 And this document which has, in fact, been reviewed by SC&A, I don't believe we 14 had any findings regarding that document, felt 15 16 to be a very good document. provides quidance for 17 Tt. reassessing the organ doses for these highly 18 19 insoluble forms of plutonium, which are called Super S and which really are not handled 20 adequately by the ICRP Task Group on the Lung 21 22 Model for the ICRP Task Group which looks at Type NEAL R. GROSS

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S as the most insoluble form.

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2	Thereafter PER-12 was issued to
3	determine which completed claims required
4	re-evaluation for the effect of OTIB-49.
5	In March of 2010, we submitted the
6	Program Evaluation Report Review, and when we do
7	one of these reviews, we basically go through
8	five subtasks and I'll go ahead and just list
9	those, itemize them for Josie and Lori.
10	The first is what we do is we assess
11	NIOSH's evaluation and characterization of the
12	actual issue that gave rise to the PER.
13	The second is we assess the specific
14	methods that are proposed for corrective action.
15	The Subtask 3 is to evaluate the
16	stated approach for identifying what we call the
17	universe of potentially affected cases and also
18	the criteria by which a subset of those cases of
19	potentially affected DRs may be selected for
20	re-evaluation.
21	Subtask 4 is to actually conduct
22	audits of the DRs that are affected by the PER
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1 under review, and as most of you know, this is the first time that we've actually gotten to 2 Subtask 4. 3 We have been tasked to review 14 PERs 4 out of a total of 31 that have been produced and 5 б this is the first time that we've actually looked at the cases for review. 7 And having said that, we can move on. 8 Subtask 5, that is to prepare a comprehensive 9 10 written report that contains the results of all the above steps. 11 So this report basically fulfills 12 Subtask 4, and when we talk about an affected 13 claim for a dose reconstruction, we're talking 14 about there's basically three things that we're 15 16 looking at. And in this particular case, the 17 first was that the DR had been completed on or 18 19 before February 6, 2007, which was the issue date for OTIB-49. 20 the involved 21 The second was facilities had the potential for 22 Type SS NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701

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1 plutonium, and three was that the Probability of Causation was less than 50 percent. And based 2 on this criteria, NIOSH identified 4,865 cases. 3 4 They then applied two screening criteria to reduce this potential universe down 5 б to those that could actually be candidates for 7 review. One was to look at the cases that, 8 based on the increase in the dose, it was 9 10 determined that in the worse case situation an organ dose could go up by a factor of 4. 11 And because the excess relative risk 12 is proportional to dose, then what we looked at 13 is a potential increase that would result in a 14 revised PoC that could be at least 45 percent. 15 16 And based on these criteria, they basically looked at kind of a window, two trigger 17 levels between 16.97 and 45 percent. 18 19 And then in addition to that, because we're looking at different categories of 20 target organs as well as different types of 21 22 monitoring, there were those particular cases NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1 that were based on air monitoring that were not 2 for respiratory tract tissue could also be 3 eliminated.

And using those two criteria, they were able to then reduce this pool of potential cases down to 1,757 claims.

7 Τn our review of PER-12, we concluded that the selection criteria of the 8 claims described in Section 3 of PER-12 were 9 10 scientifically sound, inclusive of all potential variables affecting the 11 DR and maximally conservative. 12

And the next step was to really select cases to satisfy subtask 4, and if you go to Table 1.1 on Page 11, there's a matrix here. And the Potential Categories of Dose Reconstructions is the title of this and you look down. The Column 1 has the Target Organs.

There's four different categories here that are of concern, lung and thoracic lymph nodes, which will be what they're going to call respiratory tract cancers or target organs, the

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extrathoracic region, GI tract and systemic
 organs.

four 3 And then there are also 4 different types of monitoring that were used in the dose reconstruction, either urinalysis, 5 б lung counts, fecal samples or air samples. 7 And you can see there's urinalysis and fecal sampling. You would want 8 to potentially re-evaluate all the four categories 9 of target organs, but for lung counts and air 10 sampling only the lung and thoracic lymph nodes. 11 So basically what we proposed in our 12 review was that at least one DR from each of those 13 14 categories be reanalyzed as part of the Subtask 4. 15 16 And we were able to actually find nine cases, two of which were repeats, that 17 satisfied the different characteristics. 18 19 Sections 2 through 10 look at the actual dose reconstructions that were reviewed. 20 And for Privacy Act concerns, I know 21 we're not allowed to mention case numbers or 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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identifying information so I will parse my words accordingly so that none of that information is 2 divulged. 3

1

4 Kathy Behling in the April meeting had gone over Case 1, but I'm going to go ahead 5 б and go through all of them just in broad 7 brushstrokes here so that we have an overall picture of what we found here. 8

And you'll see in Section 2 on Page 9 10 12 is really broken down into three subsections and this is how all of the targeted, if you will, 11 dose reconstruction reviews were conducted. 12

13 The first section is kind of the background information. It just lays out, you 14 know, what the conditions were, the time frame, 15 16 what the energy employee's occupation was and the types of cancer he or she incurred and the 17 date of those diagnoses. 18

19 The second section basically 20 compares the original and the reworked dose reconstructions and we present a table here 21 22 which just summarizes the previous and revised

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1 doses.

2	We never went through and did any
3	calculation because that's really outside the
4	scope of our purview.
5	All we do is just take a snapshot and
б	put it out there and then show and discuss the
7	impact of the high-fired plutonium in a revised
8	dose for that particular source.
9	So this particular case here, this
10	is Case number 1. This is for an employee who
11	worked at the Oak Ridge National Laboratory from
12	the mid 1960s to the mid 1990s.
13	This particular worker had in vitro
14	urinalysis bioassays and a whole-body count.
15	He was diagnosed with a systemic cancer in 1999
16	and a GI tract cancer in 2006.
17	If you look at the reworked and the
18	original dose reconstruction, you can see that
19	the original dose reconstruction used TIB-2,
20	which is a maximizing approach that basically
21	assumes that 10 percent of the maximum
22	permissible body burden is incurred. It looks
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	98
1	at 28 different nuclides, and so it's really a
2	super-maximizing approach.
3	And if you go to Table 2.1 on Page
4	13, you can see the previous dose and the revised
5	dose.
6	The total in the previous dose was
7	about 43.6 rem, the revised dose is 18.2 and the
8	internal dose went down from 14.155 to 0.958 rem.
9	Now, if you look at the Section 2.3
10	on Page 13, this is the review of the OCAS-PER-12
11	issues related to the case.
12	And the bottom of the first
13	paragraph will show you that this particular
14	case was selected by the Subcommittee because it
15	represented an individual who was monitored by
16	urinalysis for assessing dose to both the GI
17	tract organ and the systemic organ.
18	Okay, in the original case, there
19	were positive bioassays and the systemic organs
20	were based, as I said, on ORAUT-OTIB-2.
21	And as I said, this is a hypothetic
22	model that assumes an intake of 28 radionuclides
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1 including plutonium-238 and -239 on the first day of employment and it's only used for 2 non-compensable cases. 3 4 The reworked dose reconstruction, NIOSH noted the employee was monitored on 5 б several occasions in the early '60s and then twice in the late '60s. 7 And they used an IMBA computer code 8 to calculate a fitted chronic intake of Pu-239. 9 10 And it was determined that Type S plutonium provided the highest dose and that 11 resulted in doses for two periods that are shown 12 in Table 2.2 on Page 14 and the Type Super S 13 plutonium adjustment factors from OTIB-49 were 14 applied. 15 16 And if you look at Table 2.3, it shows where the two organs, the systemic organ 17 and the digestive organ, for both a fitted and 18 19 coworker model fitted for the period for which 20 the energy employee had bioassay and the coworker for the later period. 21 And in both cases, for both organs 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1 and both types of models, the internal doses to the organs of concern did increase. 2 3 However, when you look at the total 4 decrease in the dose, it should be noted that the main reduction is due to the use of OTIB-2 in the 5 б original reconstruction. 7 And then what else Kathy did was at the bottom of the page here they list the actual 8 guidance in OTIB-49 for the particular matrix 9 10 element, for the type of organ category, as well as the monitoring type. 11 And here you can see in italics the 12 guidance from OTIB-49 for systemic organs and at 13 14 the top of the next page for unmonitored individuals using coworker data. 15 16 And the summary of this is quite favorable. We were able to verify that the 17 assumptions were appropriate. The data was 18 19 entered into IMBA correctly. And we basically found the rework 20 was done in accordance with the guidance in 21 22 OTIB-49 and we had no findings with the NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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methodology for assessing this energy employee's exposure to the insoluble form of plutonium.

The next case is on the top of Page 16. This is for an employee who worked at the Nevada Test Site for one day in the early 1980s and then again from the late 1980s to the mid 1990s. He worked at the Tonopah Test Range during four of those years.

10 And he was monitored for external 11 dose as well as internal monitoring in one year 12 by means of a whole-body count and one fecal 13 sample.

This particular employee was diagnosed with a systemic cancer in 1997 and in 16 1998 he was diagnosed with respiratory tract 17 cancer.

18 NIOSH had performed the original
19 dose reconstruction in 2005. The claim was
20 reworked in 2009.

21 In addition to re-evaluating this 22 case based on the exposures to plutonium for Type

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Super S, there was also a revised utilization for
 all current methods of the DR.

And the original dose and the revised dose are presented in Table 3.1. There's a previous dose and a revised dose for both categories of organs.

7 In Section 3.3, the review of the 8 issues related to this case. This particular 9 case was selected because it represented an 10 individual who was monitored by fecal sampling 11 to both respiratory tract and the systemic 12 organs.

The original dose reconstruction, there were two bioassay measurements throughout employment. No internal dose was assigned from these bioassays, indicating the results were considered insignificant.

In the reworked case, NIOSH accounted for non-detect or the sub-MDL Pu-239 results in the fecal sample by using the approach of using missed dose, which is one-half the detection limit which in this case was 0.004

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1 picocuries per gram.

2 The doses were calculated as kind of standard procedure for both absorption Types M 3 4 and S with not surprisingly Type S resulting in the highest dose to the respiratory tract and 5 б Type M to the systemic organ. 7 Also the rework assigned environmental intakes for employment at the NTS 8 and the Tonopah Test Range based on ORAU 9 10 Technical Basis Document 0008-4, the NTS TBD. And to account for Type Super S, both 11 the missed bioassay doses and the environmental 12 doses were multiplied by the Attachment D dose 13 adjustment factors. 14 The top of Page 18 there's a Table 15 16 3.2. This lists the assumptions that were used in calculating the internal dose from exposure 17 to plutonium. 18 19 You can see the doses are listed there. 20 In evaluating this case, we reviewed the guidance that was provided in TIB-49 again. 21 This is in italics. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	The guidance was provided for each
2	of these cases for the type of situation that
3	we're considering, the systemic organs,
4	respiratory tract organs in this case, and the
5	type of monitoring that took place.
6	So I'm not going to read through all
7	that. I mean, it's all there. It's all taken
8	directly from TIB-49.
9	And we went through and looked at all
10	of the TIB-49 guidance, the bioassay records,
11	IMBA runs and the worksheets for this case. And
12	we once again verified that everything was done
13	correctly and we have no findings regarding this
14	case either.
15	Try to move a little bit quicker
16	here. Don't want to spend the entire day going
17	through these.
18	MR. KATZ: I don't know if all the
19	Board Members had a chance to read these.
20	MEMBER BEACH: I didn't. You
21	didn't really have any findings with any of
22	these, did you, that I remember?
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1	MR. STIVER: Well, actually there
2	was one kind of minor finding with one of the
3	cases.
4	But, you know, they're all laid out
5	the same way. You know, the TIB-49 guidance was
б	applied for the particular type of organ and the
7	monitoring type.
8	And, yes, I mean, we don't really
9	have to go through each of these. Typically
10	when we do a dose reconstruction presentation,
11	we go through a lot of detail but we don't
12	necessarily have to do that for all eight of
13	these.
14	MR. KATZ: I think it's good to go
15	through detail when you have findings because
16	then that's germane for the
17	MR. STIVER: Yes, in this case what
18	we can do, just in the interest of time, we can
19	just go straight to the Summary Conclusions.
20	CHAIR MUNN: That's probably good
21	after we covered these first two fairly
22	thoroughly so that
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MR. STIVER: Yes, I mean, all the 1 others are basically going to be the same type 2 of situation. 3 4 CHAIR MUNN: Yes, and anyone who wants to re-review the material that's here in 5 б more detail is certainly free to do so. We know 7 how rigorous SC&A has been in its review which is, of course, of interest to us. 8 9 And we know we can pick up very 10 quickly from the first paragraph what the real basis for selecting this particular case was and 11 fortunately you have set out for us what the 12 13 results were of what you see and the last 14 paragraph tells us whether there were findings. The one that was of 15 MEMBER BEACH: 16 interest to me, Page 33, the case that was reworked and then granted. I was just trying to 17 determine, and I think I did determine, that 18 19 NIOSH actually reworked it. It was nothing that 20 SC&A did. You just reviewed it. Yes, they do the 21 MR. STIVER: 22 reworks and we just review those like we do for

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107 any dose reconstruction audit. 1 2 CHAIR MUNN: To identify that their rework was done correctly. 3 MR. STIVER: Was done in accordance 4 with the guidance in the document. 5 б CHAIR MUNN: Right. MR. STIVER: And according to --7 MEMBER BEACH: And I think in this 8 case they used DOE records where they hadn't 9 10 previously possibly, so it was all pretty straightforward I thought. 11 12 MR. STIVER: Yes, in this particular situation there were not any real 13 wrinkles or any difficult technical issues that 14 came out. They were all done in accordance with 15 16 the guidance and we felt it reflected very well on NIOSH. 17 So really basically just go to the 18 19 Summary Conclusions. Yes, this is on Page 43, Table 11.1. 20 This lists, once again, some matrix 21 22 with the 16 elements here and you can see the **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 different cases are listed by the type of 2 sampling and the type of organ. And the bottom line really here is 3 4 in the last paragraph. We concur with the approach and the assumptions used by NIOSH. 5 We 6 felt they did a good job. We had no findings regarding any of 7 the nine cases that were evaluated for the highly 8 insoluble plutonium. 9 10 MR. KATZ: So, John, this also satisfies Task, I mean, what is it? Task or 11 Element 5 --12 13 MR. STIVER: Subtask. 14 MR. KATZ: Would be you too, right? Because this is the conclusory report. There's 15 16 not another report to write. reviewed the methodology 17 Υου originally. You concurred with all of that. 18 19 Now you've reviewed cases to see that it was 20 implemented correctly. You've concurred on implementation. Is there another report? 21 MR. STIVER: Well, in essence, this 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 is the first time we've gotten to this point I I was thinking about that last night 2 think. when I was coming to do this. 3 4 And I think between the report we produced under Subtask 3 and then this, it pretty 5 б well covers the waterfront. So this is the 7 MEMBER BEACH: comprehensive written report? 8 MR. KATZ: Yes, I think this does it 9 10 in this case. I think you could have a case 11 where when you go through this implementation you have issues and that may result in a general 12 report afterwards that might be somewhat 13 different that you might need to write a separate 14 report, but in this circumstance it seems like 15 16 you covered the --Yes, I think this 17 MR. STIVER: pretty well closes it out, you know. 18 19 MEMBER BEACH: Well, the only 20 question I would have is there was 4,800 and some odd cases and you reviewed nine. That's not a 21 22 very high percentage. Does it matter? NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	MR. KATZ: They didn't need a
2	representative sample of each type. The issue
3	was to make sure that for each way in which a case
4	might be different they had reviewed an example
5	to see that it was actually implemented
6	correctly. So it's a little different than
7	MR. STIVER: Yes, we were not trying
8	to get a representative sample to try to derive
9	
10	MEMBER BEACH: Oh, okay.
11	MR. STIVER: an error rate in the
12	reconstruction process really. It was just to
13	have a sample from the different categories that
14	were of interest.
15	And that's something else. I don't
16	know if you knew that but in the Dose
17	Reconstruction Subcommittee is when those cases
18	are selected and then they're brought back and
19	so just the process is described for you well in
20	our methodology paper on PER evaluations. Yes?
21	MEMBER ZIEMER: It is, I think,
22	reassuring to see that this has proceeded the way
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111 1 we hoped it would. 2 Α couple of questions for clarification. 3 It's my understanding that 4 claimants are not notified in advance that they're going to be reviewed, right, to raise 5 6 their expectations? 7 MR. HINNEFELD: Not today, not today. 8 MEMBER BEACH: I wouldn't. 9 10 MEMBER ZIEMER: In other words, 11 they get notified if there's a change and they get compensation but --12 13 MR. HINNEFELD: The history on this is that we had identified several situations 14 15 where PERs were required and we shared that with 16 Labor. 17 We had not made progress on completing PERs and evaluating cases and Labor 18 19 essentially got, you know, impatient --20 MEMBER ZIEMER: Right, right. HINNEFELD: -- with us and 21 MR. shipped 22 back all these cases that could **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS

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1 potentially be affected. And so when they did that, they told the claimants we're shipping 2 these back to NIOSH. 3 4 MEMBER ZIEMER: Oh, okay. So claimants knew that --5 б MR. HINNEFELD: And so we go through 7 this and so you have thousands, literally thousands of people who had been denied once. 8 Maybe they had started being a little less angry 9 10 about that. Then they got a letter saying, hey, we're going to reconsider your case. 11 12 MEMBER ZIEMER: Oh, no. 13 And then a few MR. HINNEFELD: 14 months later get another letter that says you're denied again. 15 16 ZIEMER: Okay, yes, MEMBER so 17 that's not very helpful. MR. HINNEFELD: I told them at the 18 19 start don't do that. We told them all along 20 don't do that. They got impatient. They did it anyway. Because of the reaction, they now agree 21 22 that they will not do that anymore. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1MEMBER ZIEMER:Yes, there's no2point.

3 MR. HINNEFELD: The PER process now 4 is to identify the affected claims, the ones that could potentially change, redo the math, you 5 б know, not necessarily rewrite a whole dose 7 reconstruction report, redo the math, provide the results back to Labor for those instances 8 where it looks like it's going to change, ask 9 10 them to reopen the case and then they send only 11 those cases.

MEMBER ZIEMER: Separately, John, I'll just mention, for consistency in here some of your tables show dose units, some don't. Tables can often get separated from text. I'll pull one out here.

Table 3.1 doesn't have any units in it, so this could get pulled out by someone and they don't know whether you're talking about rems or sieverts or whatever unless the text is present.

22

MR. STIVER: That's true.

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114 MEMBER ZIEMER: I think usually you 1 have the units in there but you need to be 2 consistent in that. 3 4 MR. STIVER: Yes, it got past us on this one. 5 б MEMBER ZIEMER: And then in Table 7 5.3, some of them are in dpm and some are in becquerels and I'm a little puzzled. Sometimes 8 it's because the original source is that way and 9 10 you're quoting it, so that may be the source of 11 that. But it did cause me to wonder as to 12 13 are the federal agencies ever going to move to SI units or is this just not going to happen? 14 Ι love being in the old units because I feel 15 16 comfortable -- but the rest of the world is in SI units and I think of it a lot because, you 17 know, last week, the Health Physics meeting, 18 19 virtually all the papers were in SI units. The Journal uses that now. 20 MR. HINNEFELD: Journal and all the 21 22 health physics societies are in SI units. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	MEMBER ZIEMER: And I think NRC is
2	not yet and DOE's sort of use one and put the
3	others in parentheses or use the new ones and put
4	the old ones in parentheses. But I couldn't
5	remember if NIOSH had an official policy.
6	MR. HINNEFELD: We do not really.
7	MEMBER ZIEMER: No.
8	MR. HINNEFELD: I think that there
9	is interest within the agency, meaning CDC for
10	sure, for emergency situations to use SI units.
11	And that came up during Fukushima
12	when the whole world's talking about sieverts
13	and becquerels and here we're doing
14	translations, you know, trying to do hasty
15	translations into units, you know, common units.
16	So there is interest in the part of
17	CDC certainly to do that, although this is a very
18	small group of people within CDC. It really
19	didn't rise to the level of a major initiative.
20	So I thought about that while I was
21	at the meeting last week to say, gosh, we're
22	using rem in our program and curies and shouldn't
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1 we be doing this too?

2 MEMBER ZIEMER: I didn't necessarily want us to get off on this in this 3 4 meeting. It just occurred to me because you had mixed units in the tables here and --5 MR. HINNEFELD: Yes, I blame John. б 7 (Laughter.) CHAIR MUNN: Well, now you've done 8 it, Paul. You've gotten us into it. 9 And I 10 would like to insert one thought that doesn't have anything to do with whether or not we should 11 go forward in the future with whatever CDC wants 12 to do, CDC's going to do, and there certainly 13 isn't anything that this Subcommittee says or 14 does that's ever going to affect that one way or 15 16 the other. But I would call to your attention 17 that certainly the claimants with whom we are 18 19 dealing are familiar with the, if they know any 20 terminology at all, if they know anything about it, then they know the terms that we're talking 21 about.

22

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1	And if you're talking about having
2	to translate something, then you're asking for
3	daily translation with every interaction that
4	you have with clients in which you refer to any
5	dose at all.
6	Any claimant here is going to
7	understand what a millirem is much more clearly
8	than they'll
9	MEMBER ZIEMER: And I agree with
10	that. Even I understand it better.
11	CHAIR MUNN: From my perspective,
12	we're dealing with terminology that certainly I
13	believe everyone at this table is comfortable
14	with and I strongly believe that our claimants
15	universally are.
16	MEMBER BEACH: Well, and that's
17	what we're still using. It works so.
18	CHAIR MUNN: Yes. I would strongly
19	advise against our making an attempt to change
20	in this venue.
21	MEMBER ZIEMER: Right. But in
22	Table 5.3 where you've mixed them, is that
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118 1 because you're quoting a different source and 2 it's been --MR. STIVER: I thought those were 3 4 basically taken right out of the calculation, 5 right, was the units that were -б MEMBER ZIEMER: That were used so 7 you --MR. STIVER: Yes, you can select 8 whatever units you want I guess. 9 10 MEMBER ZIEMER: Right, got you. 11 MR. STIVER: Some were dpm per day. Others were becquerels per year. 12 13 MEMBER ZIEMER: Yes. Okay, sorry to get us off on that. 14 That's all right. 15 CHAIR MUNN: 16 It's all your fault and that's --(Laughter.) 17 MR. MARSCHKE: Wanda, I have a 18 19 question. 20 CHAIR MUNN: Yes. MARSCHKE: MR. Ι 21 have а database-related question. In the database, we 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 are tracking PER-12 and basically in the initial portion of it we have an entry saying that there 2 was basically no findings in our initial review. 3 4 Now, do we want to make a second entry, basically a second finding saying that 5 б now that we've done the case review there are no 7 findings that were identified during the case reviews as well? 8 Given the amount of 9 CHAIR MUNN: 10 effort that both the Subcommittee and SC&A have put into that review, it seems reasonable to me 11 that we should include a note indicating --12 13 MEMBER BEACH: And could you reference that document? 14 15 CHAIR MUNN: Yes. 16 MR. MARSCHKE: Yes. I guess on the other hand now, in the hypothetical, if on the 17 other hand we had identified findings during the 18 19 case review, we would add those individual 20 findings into the database and track them through the database. 21 Probably. 22 What else CHAIR MUNN: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

2	MR. MARSCHKE: I'm going to take the
3	action item to do that offline as opposed to
4	trying to do that live in the
5	MR. KATZ: I think we just need the
6	Subcommittee's final decision that whether it
7	concurs with the SC&A final report and that this
8	concludes the Subcommittee's review of this PER.
9	CHAIR MUNN: That certainly meets
10	my approval. Is there anyone here who sees any
11	different approach?
12	You agree that we shall ask Steve to
13	do that for us and that he will notify us when
14	he's made that correction addition, not a
15	correction. Do you have any objection to that,
16	Dick?
17	MEMBER LEMEN: No.
18	CHAIR MUNN: Very good.
19	MEMBER ZIEMER: No objection. In
20	essence, we are closing that
21	CHAIR MUNN: The entire
22	MEMBER ZIEMER: whole entire
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121 1 thing. 2 MR. KATZ: Yes, closing it. Yes, yes, closing it 3 CHAIR MUNN: 4 the second time. 5 MR. KATZ: So I think probably, as 6 we close these PERs just along the lines of that 7 other TIB-70, it's probably good to report out to the full Board on PERs as you close your 8 reviews. 9 10 MS. K. BEHLING: Wanda? 11 CHAIR MUNN: Yes. This is Kathy 12 MS. K. BEHLING: 13 Behling. Yes, Kathy. 14 CHAIR MUNN: MS. K. BEHLING: First of all, I 15 16 just wanted to thank John for handling this for me today. The move is one of those things I 17 think that gets ranked up there as one of the more 18 19 stressful events in your life. But anyway, we're both sitting here. 20 But I just did want to make one 21 additional comment. The fact that we did agree 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com 1 last time during the Subcommittee meeting that I would prepare a summary of each of the cases 2 and try to give you an overview of all of the 3 4 doses. But what's important to note here is 5

б that the fact that there were no findings, we 7 were strictly focusing on the OTIB-49 issues and the fact that NIOSH did appropriately apply OTIB-49 in all of these cases.

10 And one of the things that I will mention and I did put into the summary is the fact 11 that I believe that the workbook that was created 12 for this particular situation, the OTIB-49 13 14 workbook, was really a major factor in the reason that we had no findings. 15

16 It's an excellent workbook. Ι think it really helped the dose reconstructors 17 tremendously. 18

19 A lot of little tabs in that workbook 20 allows the dose reconstructor to look at fitted doses and coworker doses and make comparisons 21 22 between different types of cancers and that type

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123 1 of thing. 2 So it's well-designed а very workbook and I really attribute that to the fact 3 4 that we had no findings. 5 MUNN: Kathy, CHAIR have you б completed your summary? 7 MS. K. BEHLING: Yes. CHAIR MUNN: Do I have a copy of it? 8 9 MS. K. BEHLING: No. No, I'm 10 talking about this particular report that John 11 just went over. 12 MR. KATZ: Yes. 13 Okay, okay. CHAIR MUNN: Yes, 14 that's a long summary, Kathy, and it's very Thank you very much. 15 thorough. will Ι 16 probably quote not only from your report but from 17 your remarks when Ι report out to the Subcommittee. 18 19 MR. KATZ: Thank you for those 20 remarks, Kathy, because I'm sure the people that work hard on these appreciate kudos where they 21 22 can get them. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. HINNEFELD: Yes, we try not to
2	ever compliment the contractors. They'll
3	attest to that.
4	(Laughter.)
5	MR. KATZ: That's much appreciated
6	and I will just quid pro quo say that this was
7	very nicely carried out, this review. It's very
8	clear, easy to follow and does everything that
9	the Subcommittee asked it to do, so that's
10	appreciated.
11	CHAIR MUNN: The thoroughness is
12	certainly appreciated.
13	MS. K. BEHLING: Thank you.
14	CHAIR MUNN: Thank you so much.
15	All right, I think we are completely done with
16	PER-12, forever hopefully.
17	MR. STIVER: That's good, once and
18	for all.
19	CHAIR MUNN: Yes, very good. All
20	right, then let's move on to our next active
21	item, PER-14. And we have a response to the
22	review I hope and who's going to do the report?
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125 1 MR. STIVER: I can go ahead. This is Stiver. I'll go ahead and finish that one as 2 well. 3 4 CHAIR MUNN: Thank you, John. MR. STIVER: And this is kind of a 5 б unique one in that it's based on, PER-14 is 7 construction trade workers. Basically it's OCAS 2007 and this is based on OTIB-52, which we 8 in detail 9 have been reviewing in this 10 Subcommittee. 11 And I think we're at the point, as you're going to find out later today, that we've 12 essentially closed out or will close out all of 13 the findings at OTIB-52. 14 15 However, when Hans began this, back 16 last year I believe it was -- let me back up just a second. 17 Typically what we will do is if the 18 19 Technical Basis Documents that the PER is referencing have not been reviewed by SC&A, 20 we'll go ahead and do a review as part of the PER 21 review. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1 If they're not, then we'll just go ahead and summarize whatever the findings were 2 or whatever the issues were, like we did with 3 TIB-49 for PER-12. 4 5 However, in this case we had a б document under active review so there was a bit 7 of concern. Should we just wait till this is finished and then do the PER? But the decision 8 was made to go ahead and do it. 9 10 And as part of that, Hans did review TIB-52. He kind of took a second look at it and 11 he identified a couple of issues. 12 Several of findings I believe conditional 13 those are 14 findings. They're going to depend on some further analysis I believe. 15 16 And so we're kind of in a situation where we thought we were closed out on a TIB 17 review but yet there are some new things that 18 have been opened up in the PER review. 19 And so having said that, all that is 20 kind of contingent upon Hans's review of TIB-52 21 22 so I'd like to go through a part of that before NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1 we start, you know, going into the actual findings, if that's okay with the Board. 2 3 CHAIR MUNN: Should we postpone PER-14 until we are looking at OTIB-52? 4 Would it be better to look at the two simultaneously 5 6 or one immediately following the other? 7 MR. STIVER: I think that might be a better use of time to look at them both 8 That's certainly your prerogative. 9 together. 10 CHAIR MUNN: Does anyone have any 11 objection to our postponing 14 until we take up OTIB-52 this afternoon after lunch? 12 13 MEMBER ZIEMER: So you go through 52 and then 14, is that the idea? 14 MR. STIVER: PER-14 is based on 15 16 OTIB-52, which is the construction trade workers. 17 so do it 18 MEMBER ZIEMER: Yes, 19 together? MR. STIVER: So we're just going to 20 do them simultaneously. 21 MEMBER ZIEMER: Oh, okay. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	CHAIR MUNN: Sort of simultaneously
2	or, at the least, one right after the other.
3	MR. STIVER: Steve, you were about
4	to say something?
5	MR. MARSCHKE: In OTIB-52 there's
6	only one item that has been changed since the
7	last go-round. I think it had to do with Finding
8	14.
9	So I don't know at this point. You
10	know, I think, again, going over and looking at
11	some of the responses that NIOSH has made to some
12	of these, basically they're pointing to OTIB-52
13	and saying that, you know, the PER finding has
14	been addressed in the OTIB-52 finding.
15	So what I mean, waiting to go through
16	OTIB-52 and talk about this one particular
17	finding which has been changed since last time,
18	again, I don't know that it really either way
19	I think it's comparable.
20	I don't think it's going to really
21	matter that much if we do it now or if we do it
22	this afternoon because there's not that much to
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129 1 add to OTIB-52. 2 CHAIR MUNN: Good, good. We could just do them 3 MR. KATZ: 4 both now. CHAIR MUNN: 5 What is Very good. That we start with the б your preference? 7 findings in the PER or that we go with the OTIB? MR. STIVER: Why don't we just go 8 ahead and look at the one finding in TIB-52 and 9 10 then we can go back to the PER because these are all going to be new issues. 11 CHAIR MUNN: All right, very good. 12 That's easy hopefully. 13 In theory it will be 14 MR. STIVER: 15 very easy. 16 CHAIR MUNN: Yes. We have one, Finding 14. Okay, Internal Review Objective 17 7.3, Rating 3, the handling of missing dose needs 18 19 to be consistent. Currently some sections include missing dose while others do not. 20 MR. MARSCHKE: Yes. We talked 21 22 about this, I think, at the last meeting. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	CHAIR MUNN: We did?
2	MR. MARSCHKE: And between then and
3	now, NIOSH had taken a look at that comment and
4	they provided this table here, or associated
5	comparison.
6	What they did was looked at, I think
7	this is Rocky Flats. They took the Rocky Flats
8	data and they did a calculation of the dose, the
9	ratio of construction trade worker dose to all
10	monitored worker dose year by year with and
11	without missing dose component being included.
12	And that table is provided in the
13	attachment, which is in the BRS. The BRS
14	attachment is a PDF file which is provided.
15	And they've also highlighted the
16	years where the ratio without the missing dose
17	is higher than the ratio with the missing dose.
18	CHAIR MUNN: And the hot link is
19	active and works.
20	MR. MARSCHKE: And the hot link is
21	active and works. And I think I just lost, where
22	am I?
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131 1 MEMBER ZIEMER: I'm sorry, where do 2 you get the hot link? CHAIR MUNN: Look down at the bottom 3 of 14 and there'll be an attachment. 4 5 MEMBER ZIEMER: Oh, the PDF? б CHAIR MUNN: Yes, right. 7 MEMBER ZIEMER: I got you. 8 CHAIR MUNN: Click on it and you've 9 got it, just as we asked for it to be. Thank you 10 all who were involved in that. MEMBER ZIEMER: Mine says it can't 11 find it. Go back. 12 13 MR. STIVER: Go all the way down to the bottom. 14 15 CHAIR MUNN: We have too many people 16 looking at it. MR. STIVER: Go to the very last 17 18 response. 19 MEMBER ZIEMER: Oh, back here. 20 MR. STIVER: Yes, okay, right there. 21 MEMBER ZIEMER: Oh, right here. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

132 MR. STIVER: Click that and it'll 1 2 take you right to it. 3 MEMBER ZIEMER: Got you. 4 MR. STIVER: Actually the other tab is Next Response, Previous Response, right 5 б there. CHAIR MUNN: It truly gladdens my 7 heart when the hot link works. 8 MR. MARSCHKE: And what I did was I 9 10 took the NIOSH-provided data and did a little additional analysis on it. And if you can look 11 at it, you can see in my follow-up response, you 12 13 can see the additional analysis. 14 I took the average of all the years, compared the ratio with the missing dose to that 15 16 without the missing dose, they were 0.7 versus 0.8. 17 The maximum was a 2.3 ratio to 2.8 18 19 ratio. The number of ratios that were greater 20 than 1 was 12 years. The average of the ratios that were greater than 1 is 1.56 versus 1.78. 21 22 And obviously the number of ratios which were NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com 1 less than 1 was 40.

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2	Now, the last row here is something
3	that I called the average adjusted, and one of
4	the ways that NIOSH looks at this data is that
5	when the ratio is less than 1, they assume a ratio
6	of 1. They don't lower the dose to the
7	construction worker from the all monitored
8	worker.
9	CHAIR MUNN: Well, that's certainly
10	more than generous.
11	MR. MARSCHKE: So if you factor that
12	in, if you take out all the ratios that were less
13	than 1 and substitute 1 for those ratios, then
14	you get a ratio of construction trade workers to
15	all monitored workers of 1.13 when you include
16	missing dose, and when you exclude missing dose,
17	you get a ratio of 1.18.
18	So that's virtually identical
19	numbers and so the bottom line is, you know, we
20	recommend that the finding at this point be
21	closed.
22	CHAIR MUNN: I like your
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1 recommendation. Is there any discussion or any dissension to accepting the recommendation that 2 this finding be closed? If not, please do so, 3 4 Steve. Are you all right with that, Dick? 5 MEMBER LEMEN: Yes. 6 CHAIR MUNN: Thank you. Now, with 7 that in mind, do we have anything else to address in OTIB-52 before we take a look at the PER? 8 MEMBER BEACH: What about 12? 9 Did 10 I miss that? 11 CHAIR MUNN: No. That's in abeyance. 12 MEMBER BEACH: 13 MR. STIVER: Yes, 12, I think, was 14 in abeyance. MR. MARSCHKE: Yes, we received no 15 16 additional information. Since the last Subcommittee meeting, there 17 has been no additional information provided on Finding 18 19 number 12 so there's no reason to change that 20 status. KATZ: It's in abeyance so 21 MR. 22 presumably that is awaiting a revision then, **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

135 1 OTIB-52? 2 CHAIR MUNN: OTIB-52, 12. 3 MR. KATZ: Or something else, some other action? 4 5 MR. MARSCHKE: Basically, if you 6 read on the screen, you'll see in last December 7 NIOSH said that they were going to follow the editorial change as proposed to replace the 8 current wording in Revision 1 and the change is 9 10 indicated there. So I think it's in abeyance waiting for their Revision 2. 11 MR. KATZ: Okay, that's what I was 12 asking. 13 14 MR. MARSCHKE: Yes. MR. KATZ: Okay, so I don't know. 15 16 How far off is Revision 2? Just curious. I'm trying to 17 MR. HINNEFELD: follow the thought process here. I don't know. 18 19 I don't know if any of the ORAU folks on the phone 20 want to comment on this finding or not. On that, we were 21 MR. SMITH: probably just waiting for all these to get 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

136 settled one way or another. This is Matt Smith, 1 by the way, from ORAU Team. 2 With Item 14 being settled, that 3 4 would pretty much then let us go ahead and do the Rev. 2. 5 6 MR. KATZ: Okay, great. 7 CHAIR MUNN: Good. MR. MARSCHKE: Again, like John 8 mentioned, during the review of PER-14, you 9 10 know, some potential additional concerns were --11 MR. SMITH: Right. MR. MARSCHKE: So you may want to 12 13 hold off on --MR. KATZ: Oh, I see, okay. 14 MR. MARSCHKE: -- the Rev. 2 until 15 16 we talk about PER-14. MR. KATZ: I see that. Right, that 17 makes sense. 18 19 CHAIR MUNN: We're fine. All 20 right, we'll move on to PER-14. MR. STIVER: Can you pull up PER-14, 21 Steve? 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

137 1 MR. MARSCHKE: I'm working on it. 2 MR. STIVER: Okay. MEMBER BEACH: And to do that you 3 4 just go right into search? 5 MR. MARSCHKE: I go right into б search, yes, and then you put in --7 CHAIR MUNN: Quickest and easiest 8 thing to do. MR. STIVER: So is that going to 9 10 pull up our review or the actual PER? 11 MR. MARSCHKE: It brings up our findings. See, John, on the screen? 12 13 MR. STIVER: I can't quite see that without my glasses. 14 15 MR. MARSCHKE: May be a little 16 fuzzy. I don't know. 17 MR. STIVER: Right, but that link right there is going to take you to our report? 18 19 MR. MARSCHKE: If we click on this, 20 no. It'll go to PER-14. MR. STIVER: Okay, that's what I 21 thought. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

138 MR. MARSCHKE: Our review is not hot 1 2 linked into the BRS, none of our reviews. 3 MR. STIVER: That was my question. 4 Do you have that available? If not, I can --5 MR. MARSCHKE: Yes. No, it's б available on my flash drive here. I have to go 7 get it. I think it was available in the last meeting. 8 9 MEMBER BEACH: What I got up was the 10 whole case. MR. STIVER: Yes, it gives you the 11 PER, the OCAS PER, not ORAU. 12 13 MEMBER ZIEMER: You click on what 14 now? MR. HINNEFELD: The title up there. 15 16 CHAIR MUNN: If you click on the title --17 Ιt 18 MR. HINNEFELD: says 19 Construction Trade Workers at the top. If you 20 put your cursor on that, it comes up underlined. Click on that. It'll bring up our PER. 21 CHAIR MUNN: It will give you the 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 PER if you want the PER. 2 MR. MARSCHKE: The SC&A review is on the screen now, John. 3 4 MR. STIVER: Right, okay. Okay, I'm starting off on Page 5 of that, on the 5 б Statement of Purpose. I'm just going to do some 7 background information here. Basically we were tasked to review 8 PER-14 in October 2009 and, again, you see that 9 10 we have the five different subtasks. This particular report is going to take us to Subtask 11 3. 12 Go to Section 2.0 on Page 7. This 13 14 is Subtask 1 which is identifying the circumstances that necessitated the need for 15 16 OCAS-PER-14. And this basically just outlines the 17 fact that construction trade workers, which 18 19 include these categories here in the first 20 paragraph, laborers, mechanics, masons, electricians, painters, 21 carpenters, pipefitters, boilermakers, millwrights, sheet 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

metal workers, iron workers, insulators and
 others.

And these particular workers may have, by virtue of their activities, and not necessarily in original construction but certainly in renovating structures that may have been previously contaminated, may have had an elevated potential for exposure.

9 And so this is what really 10 precipitated this particular review. When 11 OTIB-52 came out, sure enough, some categories 12 were elevated and that triggered the PER.

Section 2.1 basically, like I said, whenever we do one of these reviews we summarize the basis documents and we've been through that in detail so I'm not going to go through every single aspect of that.

But if you go to Page 9, relevant conclusions presented in OTIB-52, it lists the conclusions by the different type of exposure, external deep dose, non-penetrating dose, internal dose and occupational medical dose.

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For external deep dose, NIOSH is proposing to use a value of 1.4 for the ratio of construction trade workers to all monitored

this selected the And was as prescribed claimant-favorable external dose 7 adjustment factor. The italicized section here is right out of the TIB.

The application of the conclusions 9 10 and adjustment factors derived in this document are limited to dose reconstruction. Okay, 11 12 okay, we don't need to worry about that.

13 non-penetrating dose, For dose reconstructors should not apply any adjustment 14 factor for non-penetrating dose. 15

16 Based on the comparison of data that showed that CTW doses were adequately bounded by 17 all monitored worker doses, Section 8.3 of 18 19 OTIB-52 recommends using the 95th percentile 20 non-penetrating dose of the site-specific coworker study. 21

And for internal dose, the Hanford

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workers.

1 dose reconstructions covered by this OTIB, intake rates in the Hanford model should be 2 multiplied by a factor of two. 3 4 And then there's a description of the NIOSH approach for occupational medical dose 5 б on Page 10. They basically recommend against 7 using PFG because that would not have been a type of procedure that would have necessarily been 8 used for these types of workers. 9 10 The bottom of Page 10 is SC&A's Section 2.3.1 at the very bottom, the 11 comments. external penetrating dose adjustment factor, we 12 basically agree that the factor of 1.4 for all 13 DOE facilities in all years is conservative and 14 claimant favorable. 15 16 However, this gave rise to some of the findings here and I'm not 100 percent sure 17 what the status of the availability of the CTW 18 19 and all monitored worker data is. 20 But as you'll see at the top of Page 11, we state that at this time SC&A has neither 21 22 been given access to the original dose data nor NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com 1 an explanation that would indicate whether the 2 annual doses for construction workers and all monitored workers were scaled to reflect 3 4 exposure and employment duration in any given 5 year.

б It's kind of a long description of 7 kind of a simple concept. As Hans brought up in the last meeting in April, based on his 8 experience at the utilities, you 9 have а 10 situation where you have some rad techs that are full-time employees. 11

Then you have others, like the 12 13 people that maybe come in for an outage or something like that, who are only working for a 14 short period of time. 15

16 And so you have this mixture of construction trade worker doses that reflect 17 different exposure intervals. 18

19 And I guess the problem is we can't 20 really tell whether those exposures for the short-term workers would be scaled to reflect 21 the full-year exposure, and the issue being that 22

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1 if they weren't and then along comes another unmonitored worker who is there for a full year 2 of employment, is that ratio that's based on some 3 4 partial year doses, I guess for lack of a better term, is that going to possibly underestimate 5 б their dose? 7 Is that going to affect the ratio to an extent that that particular worker who was 8 9 there for a full year might be short changed in some way? 10 Maybe, Steve, you can enlighten us 11 When we were working on the Savannah 12 on this. River Site construction 13 trade worker 14 comparisons, we did a lot of work on looking at different categories of workers, whether they 15 16 were relative to all monitored workers, looked at just construction versus non-construction as 17 well as pooled workers. 18 19 I believe there were some categories where the CTWs were definitely higher but did we 20 ever look at this particular issue? 21 I'm not sure that we 22 MR. MARSCHKE: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1	looked at this issue. We do have a lot of the
2	data that is available in the various electronic
3	databases, and NIOSH has made that available to
4	us and we have looked at that and analyzed all
5	that.
6	If you're talking about original
7	data as to, you know, hard copies and things like
8	that, we haven't looked at any of that.
9	But original data as it applies to
10	the various electronic databases, Savannah
11	River has a DP something or other database. We
12	have looked at that.
13	There are several databases at
14	Savannah River and we looked at all those.
15	NIOSH made them available to us. We looked at
16	REX at Hanford. We looked at, and I think
17	something at INEL.
18	So the only thing we can do is we can
19	go back and we can relook at the database. If they
20	have terms of employment for the various workers
21	that are associated in the database, we can then
22	see whether or not, you know, how long that
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1	particular individual who was in the database
2	was employed at the facility and we can come up.
3	And we haven't attempted to do this
4	at this point. I don't know if it's our task to
5	do it or whether it's NIOSH's task to do it now
6	that this issue has been raised but.
7	MR. STIVER: Well, I can tell you
8	for other sites or other facilities, let's say
9	Fernald, NIOSH has typically gone and done that.
10	It's the very same issue as they've done for
11	Fernald.
12	We have the partial-year exposures
13	and this issue, which is going to be the next
14	finding, is whether mixing the construction
15	trade workers in with all monitored workers
16	artificially depresses the ratio to a point
17	where it may not be claimant favorable too.
18	And that's something that's still on
19	the table in other Work Groups I know, so it may
20	be something that NIOSH would want to
21	investigate.
22	If not, I mean, SC&A could certainly
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147 1 do an analysis that we've done for Savannah River and some others. 2 3 DR. H. BEHLING: John. 4 CHAIR MUNN: Hans had something to add. 5 б DR. Η. BEHLING: This is Hans 7 Behling. I was just wondering if it would be possible for NIOSH just to take a sample of one 8 or two sites and just take the construction trade 9 10 workers from just a random sample and say what is the average employment period for any given 11 12 year? And on the basis of that, you could 13 come to a conclusion that a time adjustment 14 factor needs to be applied or the differences are 15 16 nominal and can ignored. MR. HINNEFELD: This is Stu. 17 T'm going to ask Matt Smith to describe briefly the 18 19 response he sent to us that I held up because I don't have the actual evaluation to be able to 20 attach when we put it in the database so, Matt. 21 22 In preparing the MR. SMITH: Sure. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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response to Number 14 for OTIB-52 itself, as I went through that file for the analysis of the Rocky Flats data, it was apparent that at least for Rocky Flats the original authors of OTIB-52, they did prorate the construction trade worker exposure. So as you look at the results for

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7 So as you look at the results for 8 Rocky Flats and in general that supported the 1.4 9 factor being reasonable, the analysis for that 10 site showed that when you do account for 11 prorating the construction trade workers, it 12 does support the 1.4 factor.

As I looked through the compilation of data that formed the tables and figures in OTIB-52, it looks like if prorating was done it wasn't explicitly obvious to me. It could be that it was done by the original authors as they formed those data sets.

I know you're likely correct. With
Savannah River, we can probably look at it closer
but at least for the one that was immediately
available at hand, Rocky Flats, it looked

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1 promising.

So essentially it's 2 CHAIR MUNN: not a new issue. It's one that the agency has 3 4 been aware of from the outset, and at least in 5 instance that know, it has one we been 6 appropriately answered. 7 Hans's question has been appropriately answered, right? Is that a 8 9 decent summary, Matt? 10 MR. SMITH: Correct, and in the bigger picture when we do the overall coworker 11 studies, we're prorating on that front as well. 12 13 CHAIR MUNN: Good. MR. SMITH: It leads a little bit 14 into the second finding, which is separating the 15 construction trade workers from all monitored 16 workers. 17 That same or similar issue was part 18 19 of the Finding number 13 back on OTIB-52, which I believe that issue was taken care of. 20 I think so. CHAIR MUNN: 21 I know it causes us to 22 MR. SMITH: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	kind of jump back and forth again, but the
2	Finding number 2 for PER-14, the issue there is
3	similar to what was being discussed in Finding
4	number 13 of OTIB-52.
5	CHAIR MUNN: Yes, as you said in
6	your response to the PER number 2 item, yes.
7	MR. SMITH: And, again, the bottom
8	line there is, you know, not a huge difference.
9	And then also to keep in mind is when
10	we apply this factor 1.4, we are applying it to
11	a coworker study that's been done for all
12	monitored workers, so the construction trade
13	workers are mixed into that overall study.
14	MEMBER BEACH: So it looks like of
15	the six findings, some of them have been answered
16	by NIOSH, and then has SC&A went back and looked
17	at those?
18	MR. STIVER: Looking at our
19	response here on Finding 13.
20	MEMBER BEACH: To see if it's
21	appropriate or answered back or?
22	CHAIR MUNN: Of 52.
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1	MD KATZ: Con I courthing?
1	MR. KATZ: Can I say something?
2	CHAIR MUNN: Yes.
3	MR. KATZ: Because, I mean, our
4	intent in these PER reviews was not to rerun OTIB
5	reviews that have already been found and
6	concluded.
7	I mean, we didn't want to do reruns,
8	so I can understand if there's a new finding
9	because of something that was yet to be resolved
10	on an OTIB, but I'm not sure I understand why we
11	would be repeating.
12	MR. STIVER: Yes, I think my sense
13	here is this OTIB Finding 13 is essentially the
14	same as the PER Finding 2. And it looks like we
15	have
16	MEMBER BEACH: I guess my question
17	would be if in answering that you could almost
18	go through and make a recommendation to the Work
19	Group whether it should stay open or be closed
20	based on those answers.
21	MR. KATZ: Yes, I'm just saying more
22	fundamentally it shouldn't even be in here, a PER
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2 MR. STIVER: It shouldn't be a 3 repeat, that's right.

CHAIR MUNN: Yes, it's not an issue anymore. That's why I said what I did earlier when I was clarifying what Matt said. This is not a new issue and it's one that has been in the mix and one that NIOSH has been aware of and incorporated into its activities.

10 MR. STIVER: Looking at the history 11 here, it's been under discussion for several 12 years now and I really don't see that this is 13 adding anything new to the mix.

14 CHAIR MUNN: The apportionment has15 been done essentially is the answer.

 16
 MR. MARSCHKE: We've looked into

 17
 this issue.

MR. STIVER: Yes.

19 CHAIR MUNN: It's been done.
20 MR. MARSCHKE: Okay, so the
21 Subcommittee is instructing me to close this
22 issue in the database? Is that as I understand

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153 it? 1 2 MR. KATZ: Yes. CHAIR MUNN: Is there anyone who has 3 4 an issue with closing PER-14, Finding 2? 5 MEMBER BEACH: So you're saying б close all six findings? MR. MARSCHKE: No, number 2. 7 CHAIR MUNN: We're saying Finding 8 2. 9 10 MR. MARSCHKE: Yes, Finding 2. CHAIR MUNN: We address one finding 11 at a time. 12 13 MEMBER BEACH: Okay, so in closing it, will you put a note in there just capturing 14 why it was closed, that it was --15 16 MR. MARSCHKE: Tell me what you want to put in. We'll type in whatever you want to 17 put in. The Subcommittee --18 19 I think you could say MR. KATZ: 20 that it was addressed in OTIB-52 and closed and 21 _ _ 22 MEMBER BEACH: Yes. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

154 1 CHAIR MUNN: That's what it says 2 essentially. 3 MR. KATZ: Right. CHAIR MUNN: 4 That's what the 5 finding says, Matt says -б MEMBER ZIEMER: That's what Matt's 7 saying. CHAIR MUNN: -- that it's captured 8 in 52, Finding 13, the response --9 10 MEMBER BEACH: And then --11 CHAIR MUNN: -- and says it's appropriate. 12 13 MEMBER BEACH: -- SC&A agrees and is closed. 14 15 MR. MARSCHKE: At this point, SC&A 16 doesn't have to agree because the Subcommittee agrees. 17 CHAIR MUNN: Yes. 18 19 MR. KATZ: Right. 20 MEMBER BEACH: But just so next year you look that up and go, oh, okay. 21 22 MR. KATZ: Just so that we're clear NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 going forward, for SC&A reviews of PERs we're not supposed to be reviewing methodology unless 2 there's open issues that haven't been closed on 3 4 the methodology that's the basis. 5 Otherwise, we're not supposed to be б reviewing methodology. We're supposed to be 7 reviewing implementation of agreed-on methodology. 8 CHAIR MUNN: Yes, whether or not --9 10 DR. н. BEHLING: This is Hans Behling again. Let me just clarify a few things 11 because of the fact that when I reviewed PER-14, 12 as the central author, I was also tasked with 13 looking at 52. 14 And that was not written by me and 15 16 was actually at the time I wrote this and I believe that was in March of this past year that 17 I submitted my report, I think the OTIB-52 was 18 19 still in the process of being modified. I didn't have a full understanding 20 of what the final outcome of OTIB-52 was and so 21 I think this is why we have this problem about 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1	is it a redundant issue. As I said, when I
2	reviewed PER-14, OTIB-52 was still undergoing
3	revision.
4	MR. KATZ: Okay. Thanks, Hans.
5	That's understandable.
6	CHAIR MUNN: Thanks, appreciate it.
7	Any objection to closing Finding 2 in PER-14?
8	Okay with you, Dick?
9	MEMBER LEMEN: This is Dick. Could
10	you repeat what you're closing exactly? Can you
11	just define it for me better?
12	CHAIR MUNN: Yes, let me read you
13	what the original finding was and what we're
14	closing here.
15	The original finding was a
16	conditional finding. "The inclusion of
17	construction trade workers among AMWs may
18	obscure dose differences as stated in Section 4
19	of OTIB-52.
20	"Sometimes the AMW group includes
21	the CTWs and in others it did not. However, the
22	OTIB does not identify which data sets, that is
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1 external deep dose, shallow dose and/or bioassay data sets, failed to separate CTW from AMW data." 2 And the response now is, "This issue 3 4 was discussed in the response to OTIB-52, Finding 13. 5 б "The response states, quote, 7 'Regardless of comparison methods, the outcome favorable would be to CTWs because the 8 correction is typically applied to doses in a 9 10 site-specific coworker model which is based on data for all monitored workers. 11 "When CTW are removed from the 12 comparison population, the ratio favors the CTW 13 if the CTW doses are, in fact, elevated. 14 addition, 15 "In the 20 percent 16 threshold criteria for adjustment falls inside the margin paren, 17 of uncertainty, (approximately 30 percent) for dosimetry 18 19 programs during the film era as well as modern 20 programs covered by DOELAP, ' end quote. "Again, please note that the factor 21 of 1.4 recommended by OTIB-52 is applied to 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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158 1 coworker data that represents a combination of the CTW and non-CTW populations." 2 3 MEMBER LEMEN: Okay. 4 CHAIR MUNN: So on that basis, we are recommending closure of this finding. 5 б DR. H. BEHLING: And, Wanda, just 7 another secondary comment to that issue that I just made, the reason it was cited as 8 а conditional is because of the very reason that 9 10 I mentioned to you. During that time that I was writing 11 this, I think OTIB-52 was undergoing changes. 12 13 CHAIR MUNN: Yes, one of the 14 drawbacks in trying to do the two almost simultaneously. 15 16 DR. H. BEHLING: Yes. at least 17 CHAIR MUNN: Or in parallel. So we are now recommending that it be 18 19 closed on the basis of the statement that I just 20 read to you. MR. MARSCHKE: The statement is the 21 22 Subcommittee agrees with NIOSH that this finding **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

159 has been raised and addressed under review of 1 OTIB-52, Finding 13. Therefore, the status of 2 this finding has been changed to closed. 3 4 CHAIR MUNN: Is that okay with you, Dick? 5 б MEMBER LEMEN: I can live with that. 7 CHAIR MUNN: Very good, thank you. Let's close that. 8 9 DR. H. BEHLING: Are we closing the 10 Finding 1 as well? CHAIR MUNN: No, we're only dealing 11 with Finding 2. 12 13 DR. H. BEHLING: Okay. 14 MR. MARSCHKE: Going back to Finding 1, did we change the status? 15 Since 16 we've talked about Finding 1, did we want to change the status now to in progress? 17 Usually what we do is if we bring it 18 19 up and bring it up and talk about it at one of 20 these meetings, we change the status from open to in progress, indicating that, you know. 21 22 CHAIR MUNN: That's correct. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

160 1 MR. MARSCHKE: And basically the 2 Subcommittee has directed NIOSH -- requested. 3 MEMBER BEACH: Yes, we don't get to 4 direct. 5 MR. MARSCHKE: We don't want them to 6 think that anyway. We have requested that NIOSH 7 look into this issue. CHAIR MUNN: I'm looking at 14.4. 8 9 MR. HINNEFELD: Are we on 14.1?10 Okay. NIOSH agrees to provide a response. Ιt can be as easy as that. 11 MEMBER BEACH: We say that for 3 as 12 13 well? MR. HINNEFELD: Yes, because it's 14 the same issue. Remember, Matt described what 15 16 he looked at at Rocky and we've got it for there I just wanted to not say that unless we 17 too. could provide the analysis, and so that's why we 18 19 didn't put it in here. 20 MR. STIVER: That sounds good. Yes, Finding 3 is exactly the same issue here. 21 22 MR. Somebody on the HINNEFELD: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

161 1 line was going to say something. 2 MR. SMITH: Yes, this is Matt Smith with ORAU Team again. Is the action then just 3 4 to provide the Rocky Flats workbook? 5 MR. HINNEFELD: Well, the data that б would allow people to look at this data and say, 7 yes, when you make this prorating adjustment, you still come out at 1.4. 8 9 SMITH: Okay. And that is MR. 10 contained in that workbook so. MR. HINNEFELD: Okay, well, you'll 11 need to give us some instructions on what to look 12 at though. 13 Sure, sure, a guideline 14 MR. SMITH: to all the different worksheets, sure. 15 16 CHAIR MUNN: They've just broken down so that we need specifics for both deep dose 17 and shallow dose. Now that's Finding 1 and 18 19 Finding 3. MR. MARSCHKE: Finding 3 is the same 20 as Finding 1? 21 CHAIR MUNN: Well, essentially. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

162 1 MEMBER ZIEMER: Conceptually it's 2 the same. Maybe 3 MR. STIVER: there's а 4 smaller data set to draw into, Savannah River and 5 Rocky Flats. 6 MR. MARSCHKE: No, I'm just worried 7 about changing the, basically NIOSH has agreed to look into the issue and the status has been 8 changed to in progress. 9 10 CHAIR MUNN: The Subcommittee's finding is the same in 1 and 3. I mean, the 11 instruction is the same in 1 and 3 for today. 12 13 MR. MARSCHKE: Okay, so that takes care of --14 15 MR. STIVER: Ready to move on to 16 Finding 4? CHAIR MUNN: As soon as Steve is 17 ready. 18 19 MR. MARSCHKE: I'm ready. 20 CHAIR MUNN: All right. There is a database MR. MARSCHKE: 21 22 issue, BRS issue. If you'll notice, actually **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

Hans is the one who has written PER-14. 1 Ιf 2 you'll notice, I've been attributing all these comments to Kathy Behling and that's because the 3 4 database does not allow me to -- Hans is, for some reason, not in the database --5 б MR. KATZ: He's not in the intranet. 7 That's why. MR. MARSCHKE: -- probably because 8 he's not on the intranet. But so it just be 9 10 understood that when you see Kathy Behling's 11 name here we're really referring to Hans. That's fine, that's 12 MR. KATZ: fine. 13 CHAIR MUNN: That's fine. We don't 14 have a problem with that. 15 16 MEMBER ZIEMER: It's a new form of 17 a surrogate. CHAIR MUNN: It is. 18 19 MR. STIVER: A surrogate author. 20 DR. H. BEHLING: Let me know who the boss is. 21 22 CHAIR MUNN: I was going to say that **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

164 1 but I thought it better that you do, Hans. 2 That's great, thank you. MR. KATZ: 3 Hans operates off the 4 grid. 5 CHAIR MUNN: Yes, he is. Finding 4 б we have a response from Liz. DR. H. BEHLING: Yes, this is just 7 a simple wording that I suppose someone from 8 NIOSH could clarify. 9 10 The statement that I had a problem with is the issue of the internal dose should be 11 determined using the same method that is applied 12 13 to all workers. And the assumption is that the 14 construction trade worker was monitored but all 15 other workers were not monitored so I'm not sure 16 I know how that statement should be interpreted. 17 MR. HINNEFELD: Well, this is Stu. 18 19 What the statement intends to say is that there's 20 no, for this, was it internal? There's no correction factor for construction 21 trade So remember this correction factor 22 workers. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701

applies to the application when you're using a
 coworker approach.

3 So if you have a construction trade 4 worker in this instance and you're using the 5 coworker approach, there's no construction 6 trade worker adjustment. You use just the 7 coworker approach as is published probably in 8 the Site Profile.

9 So that's what this is intended to 10 say. I mean, you know, we think we understand 11 what it means so we don't know that there's any 12 need to revise it.

13 DR. H. BEHLING: Let me just get a 14 quick understanding of what you're saying, Stu. You have a construction trade worker 15 16 for whom there is no internal dose monitoring. What do you do to assign this an internal dose? 17 MR. HINNEFELD: We would use the 18 coworker approach, the same coworker approach 19 that we would use for someone who was not a 20 construction trade worker. 21

DR. H. BEHLING: Okay, so there's no

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166 1 adjustment factor, just a coworker dose 2 assignment. MR. HINNEFELD: Correct, there is 3 4 no --5 DR. H. BEHLING: Is it the 50th I'm just б percentile, the 95th percentile? 7 hoping to get some clarification as to what that statement means, just a little more definitive 8 9 statement to back up that approach. 10 MR. HINNEFELD: Well, I don't know sitting here which percentile or distribution we 11 would use. I think it might differ. 12 13 But the fact is that the purpose of this whole document, 52 and PER-14, were all 14 about construction workers and construction 15 16 trade worker adjustment. What this is trying to say is in this 17 instance, there is no construction trade worker 18 19 adjustment. You just use whatever the approach is for coworkers. 20 CHAIR MUNN: Hans, are you looking 21 at Liz's response? 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	DR. H. BEHLING: No, I'm not. I'm
2	only looking at my own writeup. Right now we're
3	just living out of boxes for the next few weeks
4	probably.
5	CHAIR MUNN: Well, I don't envy you
6	at all. Would you like me to read the response
7	that we have in front of us?
8	DR. H. BEHLING: Okay, that would be
9	helpful.
10	CHAIR MUNN: Quote, '"The internal
11	dose should be determined using the same method
12	that is applied to all other workers, ' end quote,
13	means that the CTWs are treated no differently
14	than other workers. The same criteria are used
15	to determine potential for intake and coworker
16	values would be the same for all workers." So
17	that's the response to the finding.
18	DR. H. BEHLING: Okay, I think that
19	clarifies it for me.
20	CHAIR MUNN: Do you find that
21	acceptable?
22	DR. H. BEHLING: Yes, from my point
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168 1 of view but I'm not the one who makes the final 2 decision. CHAIR MUNN: Well, does SC&A find 3 4 that --5 MR. MARSCHKE: I think if Hans says б he finds it acceptable because --7 MR. STIVER: Yes, he's the author. CHAIR MUNN: Well, in view of the 8 fact he said he's not the one to make the 9 10 decision, I'm looking at the guy I think should be the decision --11 STIVER: SC&A believes that 12 MR. that could be closed, yes. We're satisfied with 13 14 that. CHAIR MUNN: Our notation for today 15 16 should say that SC&A concurs and that the Subcommittee concurs, unless I hear to the 17 contrary and this item is closed. 18 19 I think, John, you can go MR. KATZ: 20 ahead and present while Steve's furiously typing. 21 22 MR. STIVER: Okay, I was just going NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

169 to wait for him. 1 2 CHAIR MUNN: What is he presenting? MR. STIVER: We're just going to 3 4 give the background for Finding number 5 here. Well, Finding number 5 CHAIR MUNN: б 5's fairly clear and Lori has a response to it 7 that we --8 MR. KATZ: Weren't we trying to proceed through this? Weren't we trying to 9 10 proceed through? 11 CHAIR MUNN: Yes, we are. All right. So okay I 12 MR. KATZ: 13 thought --Ι just didn't 14 CHAIR MUNN: understand what John was going to present since 15 16 we have his finding and we have --MR. KATZ: Well, no one was speaking 17 and so. 18 19 (Laughter.) 20 MR. STIVER: And I was waiting for Steve because I didn't want to get ahead of him 21 too far. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 Yes, Finding 5, Subtask 3, on Page 15 of our report, there's five different 2 criteria that are used to go through these 977 3 4 potentially affected claims. 5 And the finding, as you can read it б right here, "The extent to which NIOSH has screened and evaluated the universe of 977 7 claims by means of the above-cited criteria was 8 not discussed in OCAS-PER-14. 9 "As such, NIOSH has not identified 10 the actual number of CTW claims, from among the 11 977 potential claims, that are eligible for the 12 PER's dose adjustment factors and, therefore, a 13 new DR." 14 then Lori 15 And has provided а 16 Would you like me to read that? response. No, I figure it's 17 CHAIR MUNN: Lori's response. 18 19 MR. STIVER: Okay. 20 MR. HINNEFELD: Do you want to do it 21 or you want me? 22 MS. MARION-MOSS: You can. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	
1	MR. HINNEFELD: Okay, this is Stu.
2	There are four categories for dispositions on
3	the 977 cases.
4	For 52 cases we asked that DOL return
5	those, okay, that they are affected and we need
6	to do something different with those cases.
7	There were 620 of the 977 that didn't
8	meet the five criteria on Page 4 of the PER, or
9	the criteria. I don't know if it's five. See
10	if I can figure out how to get back there.
11	Those have to do with was coworker
12	data used in a dose reconstruction, is the person
13	a construction trade worker.
14	There are Probability of Causation
15	thresholds because the adjustment can't raise.
16	You can only raise the Probability of Causation
17	by so much.
18	Let's see, what were the others on
19	there? I can get to them if my computer works.
20	MR. STIVER: Number 5 is just the
21	application of those trigger PoC values.
22	MR. HINNEFELD: Okay. So anyway, a
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1	set of criteria are listed in the PER and so 600
2	of the 977 don't meet all the criteria. Let's
3	see, which number am I on here? We're on five.
4	CHAIR MUNN: Yes.
5	MR. KATZ: Yes.
б	MR. HINNEFELD: There were 84 cases
7	that have already been returned either for a new
8	dose reconstruction, for instance the person got
9	an additional cancer, or for some other reason
10	so we already have them back.
11	And 221 of the cases had been
12	requested for return because of a different PER.
13	I know we got probably lymphoma or Super S
14	because those were the big ones.
15	So that accounts for the 900 and some
16	odd cases and what happened to them. So, you
17	know, we know what happened to them all and, you
18	know, the ones that had to be reconsidered were
19	reconsidered and it amounts to the 52 additional
20	besides the ones we got back for other reasons.
21	MR. STIVER: Yes, this is John
22	Stiver. That's a satisfactory explanation to
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me.

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2	I think, if I can speak for Hans, I
3	think his concern was that there was no
4	discussion of it in the PER and sought
5	clarification, and now that you've provided
6	that, I think we can put this one to rest.
7	DR. H. BEHLING: John, the reason is
8	that the finding is that in order to satisfy
9	Subtask number 4, we have to have some
10	understanding of the total number of cases that
11	will be affected by the PER.
12	And so it's really not a finding,
13	other than the shortcoming that the system in
14	time, or at least at the time that I was reviewing
15	PER-14, I did not have the numbers that I could
16	look at and sort of make a recommendation that
17	would satisfy Subtask 4 in terms of identifying
18	the number of cases that we would have to review.
19	And so, in essence, it's really not
20	a finding, other than the fact that the number
21	out of the 977 which is the universe of potential
22	claims that need to be looked at was not defined
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174 in PER-14 and usually it is. 1 2 MR. KATZ: Thanks, Hans, understood. 3 4 MEMBER BEACH: So we can close that 5 one? б CHAIR MUNN: I don't know. Can we close it? 7 8 MR. STIVER: We can close it. Do 9 CHAIR MUNN: we have any 10 objection, Dick? 11 MEMBER LEMEN: No. 12 CHAIR MUNN: Steve, you can show 13 this as SC&A accepted the information provided by the --14 MEMBER LEMEN: Did you hear me? 15 16 CHAIR MUNN: Yes, we did. Thank SC&A accepted the data provided by NIOSH 17 you. as being acceptable and the Subcommittee has 18 19 closed this finding. 20 MR. STIVER: Ready to move on to Finding 6? 21 22 CHAIR MUNN: Yes. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	MR. STIVER: Okay, now this is one
2	we talked about at the last meeting. This was
3	triggered by this quote on Page 4 of PER-14
4	regarding external coworker dose assignment.
5	"If no external coworker dose was
6	assigned, there's no OTIB-52 adjustment to be
7	made and the claim is not affected by OTIB-52."
8	And I think the concern we had here
9	was what about cases that would have been
10	adjudicated before a coworker model was
11	available for a particular site?
12	And so we had a situation where there
13	could be a subset of these 977 claims that would
14	be given possibly an environmental dose or would
15	otherwise not be given a coworker dose based on
16	OTIB-52 or a coworker model that existed at that
17	time.
18	And I think looking at the
19	transcript on Page 211 or 212 from April, Stu
20	provided an explanation that those cases would
21	have been pended until a coworker model was, in
22	fact, developed.
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1	MR. HINNEFELD: Right.
2	MR. STIVER: Is that correct?
3	MR. HINNEFELD: Yes, early on in the
4	program at several sites we had lots of cases
5	pended for a coworker model because we knew that
б	it was not an appropriate case for environmental
7	and we didn't have another way to do it and
8	overestimating approaches weren't going to
9	work.
10	So we didn't have a way to do it so
11	we pended them and we waited, so the success of
12	getting rid of the backlog of claims is partly
13	the result of getting these coworker approaches
14	done at these various sites. So that's the
15	answer and that's standard in here too.
16	MR. STIVER: That's satisfactory to
17	me. I think we can go ahead and close that one
18	out if the Subcommittee agrees.
19	CHAIR MUNN: Any objection from any
20	Member of the Subcommittee?
21	Hearing no objection, Steve you may
22	use the same closure statement that was used in
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177 the preceding finding. We're going to lunch now 1 2 folks. Want to just keep 3 MR. STIVER: 4 working through? CHAIR MUNN: 5 No, we're going to б lunch now and we'll be an hour. 7 MEMBER LEMEN: Wanda. CHAIR MUNN: Yes, Dick. 8 This is Dick and I 9 MEMBER LEMEN: 10 may be a little bit late getting back from lunch. That's one of the reasons I'm not there. I have 11 12 an appointment, so carry on without me. We'll do that and 13 CHAIR MUNN: please let us know when you do return, Dick. 14 MEMBER LEMEN: Never fear. I will. 15 16 CHAIR MUNN: Thank you so much. MR. KATZ: Thank you, Dick, and --17 CHAIR MUNN: Good luck. 18 19 MR. KATZ: -- thank you to the Behlings and we will rejoin. And thank you all 20 to the DCAS support at --21 22 MR. HINNEFELD: ORAU Team. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. KATZ: ORAU?
2	MR. HINNEFELD: Yes, they don't
3	want to associate too closely with us.
4	MR. KATZ: That's mean. Okay, see
5	you after lunch.
б	(Whereupon, the foregoing matter
7	went off the record at 12:21 p.m. and went back
8	on the record at 1:25 p.m.)
9	
10	
11	
12	
13	
14	
15	A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N
16	(1:25 p.m.)
17	MR. KATZ: Good afternoon,
18	everybody. Advisory Board on Radiation and
19	Worker Health, Procedures Review Subcommittee.
20	We're back from lunch break. Let me check on the
21	line and see, do we have Dr. Lemen? He thought
22	he might be a little bit late. Okay. Not at
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1 this time, but it sounds like, from the number on the phone, we have everyone else who we might 2 3 expect. 4 CHAIR MUNN: Probably so. We 5 closed out PER-14. We're still working on PERs. 6 The next one we have ready is PER-17. Are we up 7 on the screen yet? We will get there. Give us just a moment. 8 9 MR. KATZ: So I wasn't totally 10 clear, PER-14, were you finished? 11 MR. STIVER: Yes. 12 MR. KATZ: Okay. 13 CHAIR MUNN: Get back into the BRS 14 here. Just a moment. MR. MARSCHKE: There's no findings 15 16 in the database. MR. STIVER: There were no findings 17 for PER-17. 18 19 CHAIR MUNN: No. 20 MR. MARSCHKE: Do you want us to add a placeholder finding to that effect like we did 21 We added, basically, a placeholder 22 on PER-12? NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	finding saying that, SC&A has reviewed
2	CHAIR MUNN: Yes.
3	MR. MARSCHKE: this PER and has
4	no findings.
5	CHAIR MUNN: We hadn't discussed,
6	prior to this meeting, I believe, what to do in
7	that case, and as far as I'm concerned, we
8	established the precedent earlier this morning.
9	I see no reason why not. As a matter of fact,
10	it's probably a very good idea since this may be
11	accessible to people long after we've gone to our
12	just rewards, whatever that turns out to be.
13	MR. KATZ: So is PER-17 one where we
14	need to consider whether audit cases are needed
15	are not? Is that where we are with that?
16	MR. STIVER: Actually, if we could
17	back up just for a minute for PER-14, we did not
18	talk about the audit cases. That was one thing
19	that was still left.
20	CHAIR MUNN: I'm sorry. I didn't
21	hear you, John. PER-14?
22	MR. STIVER: As far as PER-14 goes,
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1 we didn't discuss the audit cases. So the next step to go to is Step 4 on that, or to Sub-task 2 4. 3 4 CHAIR MUNN: All right. 5 MR. STIVER: And that's pretty б straightforward. We recommended selecting one 7 DR from each of the ten categories that were produced, and now that NIOSH has identified the 8 different subcategories, or the four groupings, 9 10 of that 977, we could go ahead and proceed with that. 11 Now, I don't know, how would you want 12 to do that? At the next Board meeting or the 13 14 next Work Group meeting? MR. KATZ: No, you can do it now, but 15 16 I mean, the Subcommittee can do that now, but can you just say a little bit more, does it make sense 17 to select one from each of the categories? 18 Is that necessary? 19 20 MR. STIVER: Well, it would certainly give us the overview of the different 21 22 types, you know, that we'd want to look at from NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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each of the different facilities.

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CHAIR MUNN: Well, but they aren't 2 necessarily different facilities, are they? 3 4 MR. STIVER: For 14, for each of the DOE facilities, I believe. Well, let me just 5 б read what we have here. SC&A recommends the selection of ten DRs from each of the ten DOE 7 sites listed in Table 2 for SC&A audit. So go 8 back to Table 2, which is on Page 13, we have 9 10 Hanford, PNNL, the Kansas City Plant, Los Alamos, Pantex, Portsmouth Gaseous Diffusion 11 Plant, Savannah River Site, Weldon Spring, Oak 12 Ridge National Laboratory, and the Y-12. 13 MR. KATZ: So is there a different 14 methodology applied at each facility? I'm just 15 16 trying to understand what's the --MR. STIVER: Well, what we'd want to 17 do is look at each -- remember how we were talking 18 19 about how, potentially, there might be differences in the data for the different sites 20 and how those were implemented. 21 And so we 22 believe that just looking at one of each of the NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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1 different sites might give us a better overall 2 view of how all these were implemented. I mean, certainly, you could pick 3 4 more from Savannah River or, you know, Rocky Flats, or one of the others, but we thought, 5 б maybe, rather than trying to make а 7 representative weighting like that, we'd just pick one of each. Kind of like what we did with 8 PER-12. 9 10 MR. KATZ: No, I wasn't suggesting any representative weighting, I was just trying 11 to understand if there's actually -- with 12 PER-12, there's actually a different approach 13 for each. I mean, each category shows one was 14 testing sort of a different -- there's a 15 16 different method applied and I'm just asking if there is a different method applied for each 17 site, the fact that they're different sites in 18 19 and of itself, I don't whether that matters or 20 not. If you're saying there's different 21 22 data to select from or something. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. STIVER: Well, I think, you
2	know, I don't know if the different sites would
3	really matter all that much. You know, this is
4	a recommendation. I mean, TIB-52 is basically
5	going to be used as, kind of, an overarching, I
6	think, for all construction trade workers, so I
7	mean, we could pick more from sites that had more
8	representation.
9	This is just what they had put forth
10	as an option. I think it could go either way.
11	I think you got a pretty good feel for how well
12	it was implemented.
13	CHAIR MUNN: Well, it's not clear to
14	me
15	MR. KATZ: That's something for the
16	Subcommittee to chew on.
17	MR. STIVER: Okay.
18	CHAIR MUNN: whether using ten
19	sites is necessarily going to give us anything.
20	MR. STIVER: Well, in that case,
21	what sites would you recommend using? I mean,
22	we could pick from those that have more
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1 availability. I don't think it would hurt to do 2 It wouldn't detract from the process and that. whether it would enhance the process to look at 3 the different sites --4 5 Well, that's CHAIR MUNN: my б thought. What's it getting us, really? And I 7 guess I haven't really given any real thought to that, but just my knee-jerk reaction is that it's 8 hard to see what added value there is in doing 9 10 ten cases. MEMBER ZIEMER: What would be the 11 alternative to it? 12 13 MR. STIVER: That's what I was wondering, the alternative, would you pick all 14 from Savannah River or a particular site? 15 Ι 16 mean, I would think you'd want to have some representation of all the different affected 17 sites. 18 19 MR. HINNEFELD: If I could suggest something, this is Stu, Hanford has a different 20 approach than the others. Hanford has an 21 22 adjustment for internal and the others don't. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 So you would want, probably, a Hanford case. Other than that, you know, one other case, 2 somehow, just doesn't seem sufficient, but I 3 4 don't know if you need a case from every site. And then, another thing to think 5 б about is, of the four categories we identified, 7 you know, one of them, first of all, just drops out because they don't fit the criteria, so you 8 won't have any there. But there were 52 we 9 10 specifically asked for that. And then you have a group that returned before we could ask for 11 them and a group that were returned because of 12 a different PER. 13 The simplest way to do this is to do 14 cases that only have this PER evaluated. 15 That 16 would be the cleanest look at these cases. So you kind of pare down the number you select from. 17 This doesn't say a lot about the number you 18 select, but the only thing that comes to my mind 19 20 is you want to make sure you have a Hanford that's affected. 21 And I don't know if you need every 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1 site, but maybe, you know, a couple others or something, and select, preferably, the cases 2 that are only affected by this, just for the 3 4 simplicity of review. If you don't want a simple review, there's another way of thinking 5 б of this, you know? 7 Did we do a good job when we had all these complicating factors in there? 8 Maybe 9 you'd want to do a couple from the more 10 complicated category. MR. STIVER: Well, I think it kind 11 of gets back to the purpose of selecting these, 12 really, just looking at the implementation of 13 this particular PER, kind of like we saw with 14 PER-12. Now, in that case, we did have some that 15 16 were kind of complex because they were returned for other reasons as well. 17 Right. 18 MR. HINNEFELD: 19 MR. STIVER: But we didn't really 20 look at that. All we looked at was whether, you know, the high-fired plutonium was addressed 21 22 correctly. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	MR. HINNEFELD: Yes.
2	MR. STIVER: And that's what we
3	would do here. Presumably, we'd want to keep in
4	that same kind of process and that same focus.
5	MR. HINNEFELD: Right.
б	CHAIR MUNN: I think the same level
7	of rigor with what you want to apply.
8	MR. MARSCHKE: TIB-52 does not
9	directly affect, or it's not used OTIB-52 is
10	not used by the dose reconstructors directly, is
11	my understanding. Basically, TIB-52 is used to
12	construct these coworker tables.
13	And if you look in these documents
14	that are identified on the right-hand column of
15	Table 2, usually what they do is, these documents
16	have a table of coworker doses and now, with
17	TIB-52, they're adding a second table of
18	coworker construction worker doses.
19	So really, what is important is, how
20	did NIOSH use TIB-52 to construct from the
21	coworker dose table, how did they construct the
22	construction coworker table? Because that's
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1 really where you're applying -- the 1.4 gets applied in that step of the process. 2 3 MR. KATZ: Okay. 4 MR. MARSCHKE: And so, I mean, if it's applied correctly, then the construction 5 coworker table is calculated correctly. б Ιf 7 it's not, you know, then it doesn't really matter individual what they do in the dose 8 9 reconstructions because the construction 10 coworker table has not been correctly calculated. 11 MR. KATZ: So is the main issue to 12 13 look and see that that table is done correctly for each site where it's created? Is that what 14 you're saying? 15 16 MR. MARSCHKE: My opinion is, really, it's at least as important as looking at 17 the individual dose reconstructions. 18 19 MR. STIVER: You know, I don't know if Hans is still on the line as the author of the 20 document. 21 22 Yes, I'm on the DR. H. BEHLING: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

line. 1 And I was just going to make a comment There's really no single justification 2 here. for selecting ten, to be honest. The only 3 4 question I had is, are the construction trade workers different in different locations? 5 For б instance, a facility that is dominated by 7 nuclear power plant production reactors, et cetera, like Hanford, would the construction 8 trade worker profile be different in terms of 9 10 composition than another site? Again, it doesn't really matter, but 11 that was one of my thinking ideas of selecting 12 at least one DR from each of the ten sites. 13 14 MR. STIVER: Thank you, Hans. Ι think that, and also Steve's point that we would 15 16 also want to look at, you know, this kind of adds another complicating layer, but, you know, I was 17 just looking at TIB-52 and its impact, but how 18 it was implemented in these other documents, as 19 20 well. MR. HINNEFELD: This is Stu, if I 21 22 can just offer, this may not be a TIB fix or a NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

1 TBD fix. This may be a workbook fix. This a workbook function where those 2 might be documents may not have changed. I don't know if 3 4 they did or not, but you can build a workbook and select construction trade worker and apply it 5 б without ever going back and changing it. 7 MR. MARSCHKE: I can't remember --I don't know if MR. HINNEFELD: 8 they're changed or not. 9 10 MR. MARSCHKE: I can't remember which site it was, but I remember that, actually, 11 Ron Buchanan, in one of his reviews, so it was 12 maybe Rocky Flats, I'm not sure, but one of the 13 sites that Ron Buchanan reviewed the Site 14 Profile for, he actually went through and did the 15 16 calculation of, how does the coworker dose table compare to the construction coworker dose table. 17 And both these tables were available 18 19 in the documents that he was reviewing. I don't know if it was Y-12 or which one it was, or it 20 was Rocky, or what it was, and I can go back and 21 look into that a little bit more, but --22

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MR. SMITH: This is Matt Smith with 1 ORAU team, and yes, it was an action item back 2 several years ago when OTIB-52 was first 3 4 released for us to go back through and update all the coworker TIBs, to include the table that 5 б you're talking about. And I think the one Ron 7 was looking at was X-10. But, yes, back when even Rev. 0 of 8 9 OTIB-52 came out, we did a pretty quick 10 turnaround on updating all those TIBs. This is John MR. STIVER: Okay. 11 Another question for you, now, did you 12 Stiver. also go through and update all of the workbook 13 tools in conjunction with the tables and so that 14 those would be changed for each of these sites 15 16 as well? My quick answer is yes. 17 MR. SMITH: The ultimate answer we can get for you to confirm 18 19 that. 20 MR. STIVER: Okay. Well, in my mind, based on this new information that I didn't 21 22 have before, I would certainly say we'd want to NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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look at all the different sites, and also
 factoring in what Steve said about the, you know,
 the fact that Hanford was being treated a little
 bit differently for internal.

5 We'd want at least a couple from б Hanford, I would think, at least one, maybe more 7 than one, and then we'd also want to look at these other sites in terms of, you know, how well this 8 was implemented in the TIB and also in the tools. 9 10 In the Dose Reconstruction Subcommittee we've had several findings about 11 the workbooks being updated and implemented in 12 They're so incredibly complex 13 a timely manner. 14 it's very easy to see how things could get They might not be programmed in 15 overlooked. 16 there quite right. So I would want to look at

17 it in that respect, as well.

MARSCHKE: 18 MR. So what you're 19 saying, I guess, John, is there may be three 20 phases to this next step. One is where we look coworker OTIBs 21 at the to see that the relationship between the coworker table and the 22

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1 construction coworker table -- step 2 would 2 maybe be looking at the workbooks associated 3 with those, and Step 3 may be the actually 4 looking at some dose reconstructions. 5 MR. STIVER: Or within the dose

б reconstruction, we could look at those aspects 7 of the dose reconstruction. I think, you know, we would certainly want to wrap that into it. 8 9 MR. HINNEFELD: Yes, I wouldn't 10 break the tool out separately myself. I would just say, you're going to do the documents, 11 12 you're going to do the dose reconstructions, and as you do that --13

MR. STIVER: Yes, as part of the dose reconstruction, we can look at, you know, these.

MR. SMITH: This is Matt Smith again with ORAU team and I went next door to confer with Pete McCartney that the tools do indeed include the OTIB-52-based coworker data.

21 MR. STIVER: Okay.

22 MR. KATZ: That's good.

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1	MR. STIVER: All right. Thanks.
2	MR. SMITH: You bet.
3	CHAIR MUNN: So would you like to
4	summarize what your proposal is with respect to
5	review of cases under PER-14?
6	MR. STIVER: Okay. I think what
7	we'd want to do is, first, look at only those
8	cases that are affected by PER-14 that don't have
9	other issues associated with them. We'd want to
10	look at representative cases from the Table 2
11	sites, and within that, we would want to verify
12	in the reconstruction that the tools were
13	appropriately modified for that application.
14	And so I guess, Steve, if there's
15	anything else you could think of that we'd want
16	to look at, I think that would be our main
17	criteria for selection.
18	MEMBER BEACH: How many from each
19	site? Because you had mentioned one from
20	Hanford. It seems like you might want to do two.
21	MR. STIVER: I think a Hanford site
22	case will you know, it'll show whether it's
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196 been implemented in a different way. I know 1 2 we'd need more than one. 3 MEMBER BEACH: Just one. Okay. 4 MR. STIVER: At least one. 5 MR. MARSCHKE: Well, again, if you 6 look at the table you can see that Hanford and 7 the Pacific Northwest Lab, they both use the same OTIB-30. 8 9 MR. STIVER: Yes. 10 MR. MARSCHKE: So if you do one from 11 each you're, in effect, doing two associated with that OTIB. 12 13 MR. STIVER: Yes. 14 MEMBER BEACH: Makes sense. 15 MR. STIVER: And the only difference for Hanford is you'd have 16 the internal component associated with that. 17 Right. 18 MR. KATZ: 19 MR. STIVER: And that would 20 probably be reflected in the workbook. CHAIR MUNN: So you are suggesting 21 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

	197
1	MR. KATZ: So ten DRs.
2	
	CHAIR MUNN: ten DRs?
3	MR. STIVER: Ten DRs.
4	MR. HINNEFELD: Okay. Now, it'll
5	be our action to find the cases?
6	MR. KATZ: Yes.
7	MR. HINNEFELD: Okay.
8	CHAIR MUNN: To find the pool.
9	MR. HINNEFELD: We'll see what we
10	can do. I think we'll start with the 52 that
11	we've asked for back. We may not get all ten
12	sites.
13	MR. KATZ: Right.
14	MR. HINNEFELD: And so then we'll
15	move on to the other categories, like the ones
16	that were returned before we asked for them.
17	MR. KATZ: Yes. And then we will
18	MR. STIVER: Right. Yes. Just
19	work your way through them.
20	MR. HINNEFELD: At some point we'll
21	get to all ten sites, I would think.
22	MR. STIVER: And if not
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198 1 MR. MARSCHKE: Well, if there's no site being affected, then you can't really, you 2 3 know --4 MR. KATZ: It's not an issue. MR. STIVER: Yes, you don't have any 5 6 cases for that. 7 MR. MARSCHKE: If you don't have any cases then there's no cases that have been --8 9 MR. HINNEFELD: Well, actually, 10 we'll get to all of them. We don't have just a ton of cases from Kansas City, but we've got 11 12 some. CHAIR MUNN: Well, we don't need to 13 build future activities, I wouldn't think. 14 MR. HINNEFELD: The others all have 15 16 a pretty healthy population, I think, of claims and so I think Kansas City might be the only --17 MR. STIVER: Yes, if we had one 18 without cases, I don't think that would affect 19 the overall. 20 MR. KATZ: So previously, we had had 21 the DR Subcommittee do the actual selection, but 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com 1 it's not clear to me whether that's necessary or 2 whether you can just pull randomly, according to 3 the characteristics, and that be that. 4 CHAIR MUNN: Well, it's going to

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take NIOSH a while to build a pool and we can, if we want the Dose Reconstruction Committee to consider being the selector, that was considered to be desirable at one juncture, but like you, Ted, I really don't know whether that's a necessary --

MR. KATZ: I mean, it's up to you. You can decide here, but if you think that you can just have DCAS select these cases randomly from the --

15 MR. STIVER: Well, that would be the 16 first step to begin with. I mean, even if we do 17 it through the Dose Reconstruction 18 Subcommittee.

MR. KATZ: But I mean, the Dose Reconstruction Committee's only function in this was to select cases, but if you agree upon how these cases are to be selected here, DCAS

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selects them, and hands them over to you, SC&A,
 and you start the work, and there's no additional
 step to be taken with the Dose Reconstruction
 Subcommittee.

5 MR. STIVER: Okay. You know, this 6 being, really, the first time we've come up 7 against this. I mean, I thought it was the 8 process that we had, you know, identified 9 earlier, but yes, I mean, that'd be much value 10 added in certain situations.

11 MR. KATZ: That's what I'm 12 wondering.

MR. STIVER: Well, I'd be willing to just go ahead and, you know, just have DCAS select them. The criteria are pretty straightforward here.

MR. KATZ: Yes.

17

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18 CHAIR MUNN: So have we, in our 19 discussion here, come around to the idea that we 20 will do nine DRs?

MR. KATZ: Ten.

MEMBER BEACH: Ten.

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201 1 CHAIR MUNN: We're going to look for 2 ten DRs despite the fact that we have --MR. KATZ: One for each site. 3 4 CHAIR MUNN: I know, but we also 5 discussed that Kansas City Plant has a small 6 pool. MR. KATZ: Yes, but Stu's going to 7 look into whether there are cases or not. Ιf 8 9 there's a case, we want it. Right? 10 CHAIR MUNN: But if there's not a case, then we would have nine. 11 MR. HINNEFELD: Then we'd do nine. 12 13 MR. KATZ: Then we'd do nine. 14 MR. HINNEFELD: Right. Actually, for Kansas 15 MR. KATZ: 16 City, even if there's not a case, they can still look at the tools. 17 MR. STIVER: Yes, that's the other 18 19 aspect of it. 20 MR. KATZ: Yes. So they can still do that check even though there hasn't been a 21 case to look at. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

202 1 MR. STIVER: Yes, we wouldn't have a rework, we can still look at the --2 3 MR. KATZ: Right. 4 MR. STIVER: -- process that's in place. 5 б MR. KATZ: Right. And that makes 7 sense that you would do that. CHAIR MUNN: All right. NIOSH has 8 the action. Anything more on PER-14? 9 10 MEMBER BEACH: Once NIOSH delivers 11 that you'll just --MR. KATZ: Yes, you could just 12 13 consider a test, yes. MEMBER BEACH: Can you look at the 14 tools prior to getting the cases --15 16 MR. KATZ: Yes. MEMBER BEACH: -- or do you want to 17 wait? 18 19 MR. HINNEFELD: They can certainly 20 look at the TBDs and the TIBs. MR. STIVER: Yes, we can look at the 21 22 TBDs and we can arrange through DCAS to have **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

access to the latest version of the tools. 1 2 MEMBER BEACH: So you can be doing 3 that at the same time. Okay. 4 MR. KATZ: Yes. That's good. 5 CHAIR MUNN: All right. б MR. SIEBERT: This is Scott 7 Siebert. One thing on that, you may just want to make sure you're looking at the tool version 8 that was in place when the claim was run. 9 10 MEMBER BEACH: Good point. 11 MR. KATZ: Right. MR. SIEBERT: As opposed to the 12 13 recent tools. That's a good point, 14 MR. STIVER: Thank you. 15 Scott. 16 MR. SIEBERT: So you may want to wait for the claims to come across. 17 MEMBER BEACH: Good point, or see 18 19 how many revs are -- I mean, it shows revs, right? 20 MR. KATZ: Yes. Thanks, Scott. Are we ready for 21 CHAIR MUNN: PER-17? 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. KATZ: Yes.
2	MR. STIVER: Are we ready for that?
3	We can get started on PER-17?
4	CHAIR MUNN: Yes, please.
5	MR. STIVER: Okay. PER-17, I'm
6	looking here at the SC&A review of that document,
7	dated May 15th, 2012, and this is a review of
8	NIOSH's Program Evaluation Report of this
9	PER-17, evaluation of incomplete internal
10	dosimetry records from Idaho, Argonne-East, and
11	Argonne-West National Laboratories.
12	As far as the background information
13	here, this case was assigned by the Advisory
14	Board back in May of 2010. We looked at the,
15	again, first three categories of sub-tasks,
16	which would be identifying NIOSH's evaluation of
17	the characterization of the issue, NIOSH's
18	specific methods for corrective action and
19	evaluating the PER's stated approach for
20	identifying the potentially affected DRs in the
21	criteria by which a subset was selected for
22	re-evaluation.
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1 Again, let me just reiterate that we did not have any findings in this particular PER, 2 but I'm just going to go through the different 3 sub-tasks and what was done. 4 A little bit more of the history 5 б under Sub-task 1. In April or May of 2006, there 7 were two dose reconstruction reviews that claimants involved exposed INL and 8 at questionable 9 Argonne-East that contained 10 notations response to request for internal monitoring data. 11 For the INL claim, the notations 12 stated there was no recordable dose and for ANL 13 East, the notations stated no internal dose. 14 More inquiries were made that revealed that INL, 15 16 ANL-E, and Argonne-West as well, did not consistently include the dose data in response 17 to request for such data by NIOSH. 18 19 NIOSH concluded that, for a given 20 Energy employee at any of the three sites, were either provided with all or none of 21 the 22 employee's internal monitoring records. And so NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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1 there was a potential for missed internal dosimetry data that had been requested, but not 2 received by NIOSH, and centered around these 3 in 4 handwritten notations this form OCAS-INT-004, which is a checkbox form that 5 б either stated no internal dose or no recorded 7 dose. Our comment on that was that we found 8 this revelation by NIOSH to be commendable. 9 10 Further inquiries did reveal instances where some EEs may not have been monitored for internal 11 12 exposure, but requests for such -- or excuse me, where they were monitored, but where requests 13 for such records had not been provided. 14 And so NIOSH correctly concluded 15 16 that, in such instances, the corresponding reconstruction, organ doses, and derived PoC 17 were potentially incorrect. 18 19 For Sub-task 2, this is the approach and methods for corrective action. 20 Okay. There were three different steps here that were 21 undertaken in order to identify the potential 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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claims. 1

2	First, they determined the total
3	number of non-compensated claims for these
4	facilities and, as of January 24th, 2007, there
5	were 677 INLs, 87 Argonne-Wests, and 69
6	Argonne-Easts submitted non-compensated claims
7	for a total of 833.
8	Okay. The next was to review each
9	case with respect to completion of the internal
10	dosimetry status section and then based on
11	information in the notations contained in the
12	OCAS-INT-004, determine which of the 833 claims
13	qualified for additional request.
14	Our comment as of the time of the
15	review, we requested that NIOSH provide that
16	information that would identify the
17	subcategories of the 833 claims, which they did.
18	And a cross-reference of the ID numbers by NIOSH
19	revealed that some claimants had been employed
20	at more than three sites, which reduced the total
21	number of potential claims from 833 down to 789.
22	The initial responses to requests
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for internal dosimetry data are then summarized in columns B and C of Appendices A, B, and C to this document, which really comprise the lion's share of the document. This is actually a fairly short review. Section 4 on Page 8, this is Sub-task

3, Section 2 of the PER identified a set of three
criteria for identifying the claims for which an
initial request for internal dose data contained
the following notations.

First category would be, there were no internal dose records in the original response and along with or without a handwritten note stating no internal reportable dose.

A second was, there were no internal dose records in the original response and the OCAS-INT-004 was marked as internal dosimetry records not readily available or without a handwritten note stating no internal recordable dose.

21 And then category three, the INT-004 22 contained no markings or notations and there are

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1 no internal dose records provided with the original response. And we have a little note 2 here, the initial responses to requests for 3 4 internal dosimetry data are summarized, once again, in columns B and C, and were used by NIOSH 5 б to select those cases where additional 7 information was requested. Using those criteria, this Okav. 8 set of 833 was winnowed down. We identified a 9 10 number of 223 cases from the 789 for which information and clarification 11 further of internal exposure were requested. 12 Responses 13 for 142 cases contains notes stating the EE was either not monitored or that no 14 internal exposure records could be found. 15 16 And these are summarized in columns D and E of Appendices A, B and C. Additional 17 requests for internal dose data were, therefore, 18 19 not generated for cases when this information 20 was provided in the response because NIOSH concluded there was no need for a re-evaluation, 21 which makes sense. 22 NEAL R. GROSS

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1	In total, bottom-line, NIOSH
2	identified 83 cases for which responses dictated
3	the need for a re-evaluation of the employee's
4	dose with the following representation. There
5	were 62 from INL, 14 for Argonne-West, six from
6	Argonne-East, and one with employment both at
7	INL and Argonne-West.
8	So our review of the data found no
9	inconsistencies or errors with the
10	identification and selection of cases as
11	specified in Section 2. And we also highlighted
12	the 83 cases shown in Appendices A, B and C so
13	that they're easily identifiable.
14	As far as Sub-task 4, which would be
15	selecting cases, we independently assessed the
16	current status of the 83 cases in the NOCTS
17	database. Now, remember, this is back in May,
18	so things may have changed a bit. The claim ID
19	numbers are not identified in Appendices A, B and
20	C of the current status.
21	The 83 cases as shown in Appendices
22	D, E and F for INL, Argonne-West, and
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1 Argonne-East, respectively. For illustration, if you want to go to Appendix D, you can see that 2 it identifies 63 3 the status of cases. 4 Thirty-eight of these have a completed revised dose reconstruction. 5

б It has been adjudicated by Labor. 7 Twelve have a completed revised DR, but without final DOL decision. And 13 are still awaiting 8 completion of a revised DR. 9 And so the 10 selection of the DRs for audit by SC&A we feel would be limited to those, obviously, that have 11 been adjudicated and we recommend selecting at 12 13 least three INL cases, two Argonne-West cases, 14 and one Argonne-East case, presumably, based on the relative proportions of the available cases. 15 16 And that's really where we stand on PER-17. 17 DR. H. BEHLING: And this is Hans, 18 19 the numbers that he just cited under Section 5 20 Sub-task 4, may have changed since we issued this 21 report. 22 Right. MR. STIVER: NEAL R. GROSS

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1	DR. H. BEHLING: So, I guess, at
2	this point there may have been more completed
3	than were made available to me at the time that
4	I reviewed this PER.
5	MR. STIVER: Yes, thanks, Hans. We
6	ought to keep that in mind that this is a snapshot
7	in time, that things may have changed.
8	CHAIR MUNN: Yes, but it's pretty
9	current.
10	MR. STIVER: Yes.
11	MR. HINNEFELD: This is Stu. I
12	have a question. When you determined the
13	adjudication status on these, did you look in the
14	case file and find a letter from DOL?
15	MR. STIVER: I'll have to defer to
16	Hans on that. He was the author of this.
17	DR. H. BEHLING: Actually, I think
18	somebody from NIOSH provided me with those
19	numbers.
20	MR. HINNEFELD: Okay.
21	MR. STIVER: Okay. So we can
22	update if we need it.
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I	

1 MR. KATZ: John, my attention lapsed for a moment when you said the numbers of 2 cases based on -- why would you choose multiple 3 4 cases for the same --5 I'd say that was my MR. STIVER: б presumption was that it would have been based on 7 the proportions of the three sites that were in the adjudicated bin. Is that correct, Hans? 8 Is that why they were --9 10 DR. H. BEHLING: Yes. It was just a proportionality. And the fact is, there's 11 really nothing constant. The additional 12 information that was provided on this second 13 14 attempt to retrieve internal exposure, obviously, varies for each of the cases. 15 And so 16 you can't just say one case represents all of them. 17 In fact, they may all differ and so, 18 19 on the basis of proportionality and just be somewhat conscious of cause. I decided to use 20 a proportionality thing because of the fact that 21 INL had the largest number of cases that had to 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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be reconstructed. It was just sufficient to say 1 2 that we at least take three -3 MR. KATZ: I see. 4 DR. H. BEHLING: -- and then one 5 from ANL-West, and ANL-East, just one, based on б proportionality. 7 MR. KATZ: Okay. Thanks, Hans. 8 CHAIR MUNN: Any comment? The 9 proportion seems reasonable to me. That's not 10 any other, really, mitigating factors. Any 11 problem with suggesting six has been as suggested here? 12 13 So can DCAS randomly MR. KATZ: 14 generate those cases from the pools that they 15 have? 16 MR. STIVER: I would assume so. They provided the information to begin with. 17 MR. KATZ: Yes. 18 19 MR. HINNEFELD: Yes, I'll have to 20 figure out how we did it. I mean, the most know about for the 21 accurate way us to adjudication status of the case is to ask DOL 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

215 1 because sometimes we get the copy of the final 2 determination letter and sometimes we don't. 3 So the most accurate way for us to 4 do it is ask. And if we asked in May, I don't know that we would necessarily need to ask again. 5 б We probably have enough adjudication of the 7 cases to select from. Yes, MR. KATZ: right. 8 Absolutely. 9 10 MR. HINNEFELD: So that would be the 11 only thing I'd want to reassure myself is that we do, in fact, know these cases are adjudicated. 12 13 MR. KATZ: Yes. 14 CHAIR MUNN: So? 15 MR. HINNEFELD: Yes, we can do that. 16 MR. KATZ: Okay. And so they will send the cases to SC&A, kind of, just copy the 17 Work Group with these transmittals of cases so 18 19 the Work Group knows that SC&A has received their work fodder. 20 All right. Anything 21 CHAIR MUNN: The action is NIOSH's. 22 else PER-17? on **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	Therefore action North Stem in DED 10
	They're going for six. Next item is PER-18,
2	which I have done. I have sent notation to the
3	LANL Work Group telling them that the action is
4	theirs.
5	MEMBER BEACH: Did we get copied on
6	that?
7	CHAIR MUNN: I sent it directly to
8	your Chair.
9	MEMBER BEACH: Minus the Procedures
10	Work Group.
11	CHAIR MUNN: I will send copies. I
12	had thought I would send copies when I heard back
13	from them, but I can do that.
14	MR. KATZ: I can testify that she
15	sent it though, because she copied me.
16	MEMBER BEACH: Oh, I was never in
17	doubt of that.
18	MR. KATZ: I know. I'm teasing.
19	CHAIR MUNN: All right. PER Number
20	20, result of a single case review.
21	MR. HINNEFELD: Well, this is Stu,
22	and I think I'm supposed to talk about this.
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1	This is our Blockson PER. And the findings at
2	issue here are whether or not the selection of
3	Class M of uranium is the appropriate selection.
4	That's what we selected in the Site Profile for
5	Blockson for the uranium exposures that occur in
б	the uranium category.
7	And the finding is, this was U-308,
8	that's Class S in certain references, including
9	ICRP, in order to be, you know, since there's
10	this uncertainty about solubility class,
11	shouldn't you use S for claims where it would be
12	most beneficial?
13	My initial response was, I don't
14	know if anything's affected because all the
15	respiratory tract cases are going to be getting
16	paid through SEC anyway, and I think I reported
17	previously that, after looking at the Blockson
18	cases, there is, in fact, one case that,
19	interestingly enough, has a respiratory tract
20	that's a extrathoracic lymph node target organ,
21	but is not an SEC cancer.
22	It's a Hodgkin's disease of the
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1 supraclavicular lymph nodes. And in thinking about, you know, and discussing this back, I was 2 chastised for even introducing the idea that 3 nothing's affected, because even if there had 4 been zero cases here, the issue might remain 5 б because it happens frequently, even in а 7 situation of an SEC, the claimant is still alive and has an additional cancer, and they want 8 medical coverage for the non-SEC cancer. 9 10 Those cases are returned to us for dose reconstruction and we reconstruct as much 11 as we can reconstruct for all the cancers. 12 So just because, you know, the analysis I did 13 doesn't necessarily mean it would be no harm and 14 no foul even if it were zero people. 15 16 we're back to the original So

17 argument about the solubility class of the 18 uranium. Our position is, and has been all 19 along, that the solubility class of the material 20 made at Blockson was M.

CHAIR MUNN: Absolutely.
 MR. HINNEFELD: And the reason we
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1 say that is that, it was a sodium diuranate that was produced by this process, that was then 2 heated to be dried in an oven, but it was a sodium 3 4 diuranate and it wasn't really U-308. It's referred to in 5 some AEC б documents as U-308 being obtained from Blockson. 7 And it's our conclusion from looking at documents from that era that the AEC routinely 8 talked about the receipts from their suppliers 9 10 in terms of U-308 equivalent. That's what they said. 11 CHAIR MUNN: MR. HINNEFELD: It would be U-308 12 contained in yellowcake, or in concentrates, or 13 something like that. So the fact that AEC 14 describes it as a U-308 does not mean that it was 15 16 actually a chemical U-308, they were talking about the equivalency; the amount of the actual 17 uranium they were getting. 18 19 So our position remains that this 20 was a sodium diuranate product that was then dried. We have some references about sodium 21 22 diuranate solubility and it's actually pretty NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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So we feel like we've addressed it 1 soluble. appropriately. So that's the place where we 2 3 are. 4 MR. STIVER: Yes, this is John I was reading through the transcript on 5 Stiver. б this discussion from the last time, and I looked 7 into Blockson a little bit more, and I would tend to concur that the type M is reasonable. 8 9 CHAIR MUNN: Yes. There's nothing 10 in Blockson's history. There's nothing that MR. STIVER: 11 indicates you would have any insoluble material. 12 13 CHAIR MUNN: There's nothing in that process that would lead us to believe there 14 15 anything other than what's been was 16 characterized already. So does this clear the issue for us? Are we considering this to be 17 PER-1, I mean, PER-20, Finding 1? 18 19 MR. HINNEFELD: I forget which 20 finding it is right now. MARSCHKE: Finding 1 meets 21 MR. 22 NIOSH's science solubility class type M for NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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221 uranium and its use. 1 2 CHAIR MUNN: Yes, that's it. That's it. 3 MEMBER ZIEMER: 4 CHAIR MUNN: That's what we're talking about. 5 6 MR. HINNEFELD: And there's a 7 second finding that talks about the absorption fraction, which is the same question. 8 9 CHAIR MUNN: It's, again, urine 10 excretion. MR. HINNEFELD: Right. It's just 11 12 GI versus respiratory. 13 CHAIR MUNN: Yes. MEMBER BEACH: So that would be the 14 second one; Finding 2? 15 16 CHAIR MUNN: That would be -- this report applies to both Finding 1 and Finding 2. 17 And hearing no objection, Steve, you may 18 19 indicate in both cases that NIOSH reports there's no reason to consider this anything 20 other than Type M. SC&A has agreed. And the 21 Subcommittee has closed Findings 1 and 2, unless 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

222 1 I hear argument to the contrary. 2 Dick, have you returned yet? 3 (No response.) 4 CHAIR MUNN: And that will apply to 1 and 2, which means that we are complete with 5 6 PER-20. Now then, while Steve is going to work 7 on that --MR. KATZ: Cases. 8 9 CHAIR MUNN: -- we can --10 MR. HINNEFELD: Start the cases? 11 CHAIR MUNN: -- start the fun part of the PER review. What? 12 13 MR. KATZ: Cases. That's what I was 14 CHAIR MUNN: We can now start the fun part of the PER 15 saying. 16 reviews. MEMBER ZIEMER: That would be the 17 18 cases. 19 MR. KATZ: Oh, I see. That's the 20 fun part. I see. Okay. CHAIR MUNN: 21 Yes. Now we get to 22 pick all the new stuff we can play with. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

223 1 MR. HINNEFELD: No, Ted was talking 2 about the cases --MR. KATZ: Cases for this PER. 3 4 MR. HINNEFELD: -- the audit cases for PER-20. 5 6 CHAIR MUNN: For PER-20. 7 COURT REPORTER: I didn't get that I'm sorry. exchange. 8 MR. KATZ: We trampled each other. 9 10 MR. HINNEFELD: Yes. CHAIR MUNN: It's probably just as 11 You did get his saying cases, right? 12 well. 13 COURT REPORTER: Right. 14 CHAIR MUNN: And so what he's calling for is the selection of cases from the 15 16 Blockson site for these folks to take a look at. BEACH: 17 MEMBER Ts there а recommendation of how many we need from this? 18 19 CHAIR MUNN: Shouldn't be a very large number. The site is small and all of the 20 claims would be very similar. Very similar 21 22 indeed. So it's just a question of having SC&A NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 do their review to assure that our cases that they have in front of them have been done in 2 accordance with the --3 4 MR. STIVER: Let me just take a look at PER-20 to see if we have actually made the 5 б recommendation or not. 7 MR. KATZ: Right. MR. STIVER: Let's see. 8 I've already closed 9 CHAIR MUNN: 10 mine. Okay. The table that 11 MR. STIVER: I had sent out, that Ted sent out just a couple 12 13 days ago, which is the complete update of PERs as of May, Table 1 has the status of all the PERs 14 that have been assigned. And I believe we're on 15 16 Page 6 for PER-20, and we did, in fact, recommend for the Subcommittee to select between three and 17 five DRs to complete using the best estimate 18 19 approach. MR. KATZ: And what's the basis? 20 MR. STIVER: Let me go ahead and, 21 kind of, give you a little bit better background 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

here. Okay. There are three different things
 here. Let me just read SC&A's finding here.
 And this is verbatim.

4 SC&A concurs with NIOSH's approach, of selection criteria, for 5 assumptions б reassessing claims affected by Revision 1 for 7 the Blockson TBD. SC&A did, however, identify three potential issues that were not adequately 8 9 addressed in the TBD: solubility, f1 uptake, 10 which is the same thing which we just closed out, and three, bounding radon estimates. 11

These issues have been raised and are being resolved under purview of the Blockson Work Group. So this, again, a bit of a snapshot in time.

16 March 2011, the Subcommittee meeting, I see we presented the findings. 17 Yes. The Subcommittee agreed with SC&A's findings. 18 19 The number of cases re-evaluated were 91. The 20 total claims with PoC less than 50 percent, 32 are compensated, and 59 were denied. 21

And at the time, a recommended

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1 selection criteria, SC&A recommended the 59 2 denied claims be classified based on the original approach used for dose reconstruction, 3 4 i.e., maximize for best estimates, and the DR Subcommittee select three to five DRs completed 5 б using a best estimate approach. 7 Т was not involved in this particular PER and I do not have the basis for 8 that particular selection. I think it was 9 10 probably a best guess of what would cover the waterfront. 11 MR. KATZ: Okay. So maybe we need 12 to, rather than move forward, since we don't 13 really know the basis for choosing three to five, 14 maybe we can just --15 16 MR. STIVER: Yes, I think we might want to back off on this. 17 MR. KATZ: -- get clarification on 18 19 that first. 20 MR. STIVER: Yes.

21 MEMBER BEACH: Who made the 22 recommendation? NEAL R. GROSS

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227 1 MR. STIVER: I don't know. 2 Probably John, who's not available. MR. KATZ: It's okay though. 3 MR. STIVER: Yes, I mean, we can 4 5 certainly -б MR. KATZ: We can discuss this at 7 the next meeting. I think with some of 8 MR. STIVER: 9 these, actually, that's not the only PER that had 10 outstanding case selection criteria. 11 MR. KATZ: Right. MR. STIVER: But I think 12 we definitely need to take another look at this 13 because some of these are kind of old and we're 14 dealing with a moving target here. 15 16 MEMBER ZIEMER: So who made the final numerical determination before? It's the 17 basically the number that would go in that second 18 19 to last column. Where it says, determined number of cases, who determined that? 20 The Subcommittee. MR. KATZ: 21 That would be the 22 MR. STIVER: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

228 Subcommittee. 1 2 MEMBER ZIEMER: Subcommittee? MR. KATZ: After considering --3 4 MR. STIVER: If you're considering all the --5 б MR. KATZ: There are suggestions about what basis there should be used in the 7 report. 8 MR. STIVER: Right, if you consider 9 10 all the latest. MEMBER ZIEMER: All right. 11 MR. At this 12 STIVER: time, remember, the solubility issue is still in 13 question. 14 MR. KATZ: Right. 15 Exactly. 16 That's why it's confusing, I think. Right. 17 MR. STIVER: We're basically just looking at radon estimates at 18 19 this point. 20 CHAIR MUNN: And so what we're really and truly seeing here is, are we revising 21 our previous stand with respect to -- and would 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	the DR Subcommittee make this evaluation.
2	MR. KATZ: No. It's just that SC&A
3	needs to figure out what is a reasonable basis
4	for selecting a number. It may be that one case
5	is enough to check it. It may be that you need
6	we need a basis for making
7	MR. STIVER: Yes. At this point I
8	don't feel comfortable not knowing what the
9	basis for this recommendation of three to five
10	was.
11	CHAIR MUNN: And SC&A
12	MR. STIVER: I need to go back and
13	revisit that.
14	MR. KATZ: Right, so that's an
15	action item for SC&A.
16	CHAIR MUNN: SC&A action.
17	MEMBER ZIEMER: Yes.
18	MEMBER LEMEN: I'm back.
19	MR. KATZ: Welcome.
20	CHAIR MUNN: Good. Welcome back.
21	Glad to have you, Dick.
22	MEMBER ZIEMER: Yes, they may have
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1 already considered the types of cases and came up with the three to five, but we don't know that. 2 3 MR. STIVER: Exactly. I just need 4 to follow up on that. MEMBER ZIEMER: Right. 5 б CHAIR MUNN: We're just getting 7 ready to look at future PER assignments. Ι tried to do it earlier and they wouldn't let me. 8 9 MR. HINNEFELD: This is Stu now, am 10 I clear that we don't have an action on PER-20 case selection? 11 MEMBER BEACH: Correct. 12 13 MR. STIVER: Not until after we clarify our criteria here. 14 CHAIR MUNN: It's my understanding, 15 16 first, we're going to hear from SC&A what they now believe we should be looking at. Dick, did 17 you receive the material that was just sent out 18 19 by Ted, which is, again, an update of the Program 20 Evaluation Report reviews --MEMBER LEMEN: 21 Yes. 22 CHAIR MUNN: -- May 2012 status? NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

231 1 MEMBER LEMEN: Yes, I did. 2 CHAIR MUNN: That's what we're going to be looking at now. 3 4 MEMBER LEMEN: Okay. I've got it. 5 CHAIR MUNN: Okay, in an attempt to 6 try to define what the next group of PERs are to 7 be assigned to SC&A for review. MR. STIVER: Wanda, if I could step 8 in for just a second. 9 10 CHAIR MUNN: Please do. MR. STIVER: I'd sent out an earlier 11 document. I remember at the Santa Fe meeting, 12 it was June 20th, we talked about a whole series 13 of, you know, from TBDs, Technical Basis 14 Documents, procedures, and then PERs. 15 16 CHAIR MUNN: Everyone has it. MR. STIVER: 17 And there was conditional authorization granted 18 for, I 19 believe, eight documents. And we decided we 20 would go back and look at the PERs, kind of, separately one-by-one. 21 22 MR. KATZ: Right. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. STIVER: And so what I did is
2	I've created an annotated version of that budget
3	discussion document, which everybody's got, and
4	I guess the first thing that I would like to do,
5	if we could just go through and look at those,
6	those eight documents, if we can go ahead and get
7	those formally authorized, the ones that were
8	tentatively authorized for the Board meeting,
9	and then go look at the PERs
10	MR. KATZ: Wait.
11	MEMBER BEACH: I thought those were
12	done.
13	MR. KATZ: I'm confused. No. The
14	Board for Site Profiles you mean?
15	MR. STIVER: No, not the Site
16	Profiles. Remember, the Site Profiles were
17	authorized, but there was a series of documents
18	that were new documents and we've identified, I
19	believe, five of those, and there were others
20	that had been gone through two to three revisions
21	since our review, and we identified, I believe,
22	four from each of those two groups.
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233 1 And those, I can show you, where they 2 can be found. BEACH: I thought 3 MEMBER we authorized those? 4 MR. STIVER: Looking through the 5 б transcript, I wasn't a 100 percent sure, and I 7 looked through the transcript, and I believe Dr. Melius indicated that these should be formally 8 the Procedures Subcommittee 9 assigned in 10 meeting. MR. KATZ: What's the name of the 11 document that we're --12 13 MR. STIVER: It's Follow-up Budget Discussion for Full Board Meeting. 14 MR. KATZ: Okay, thanks. 15 16 MR. STIVER: Okay. MEMBER ZIEMER: And what's the date 17 on that? 18 19 MEMBER BEACH: June 15. 20 CHAIR MUNN: Well, the most recent agenda item and report was sent by Ted on the 21 23rd. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

234 1 MR. STIVER: Yes, that would be the 2 annotated version. 3 CHAIR MUNN: Yes. 4 MEMBER BEACH: So which one is the 5 easiest to work from at this point? б MR. STIVER: I think the easiest to 7 work from is the follow-up budget discussion. It has everything laid out in it. The only thing 8 this doesn't have regarding PERs is the Table 1, 9 10 which would have already been assigned in the status, which we have already determined is a 11 little out of date. 12 13 MR. KATZ: So what page should we go 14 to? 15 MR. STIVER: So let's go to --16 MEMBER ZIEMER: What's the document we're looking in? 17 It's called Follow-up 18 MR. KATZ: 19 Budget Discussion of Full Board Meeting. 20 MEMBER ZIEMER: And it was sent on email? 21 Ted sent it on the 22 MR. STIVER: **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

235 1 23rd, I believe. 2 MEMBER ZIEMER: 23rd of? 3 MR. STIVER: Right here. No, 4 that's 6/18. 5 MEMBER ZIEMER: Oh, that's the б 18th. 7 MR. STIVER: No, that's the old one. MEMBER ZIEMER: That's the old one. 8 23rd? 9 10 MR. STIVER: Yes, 23rd is the July 11 MEMBER ZIEMER: Oh, July. 12 13 MR. STIVER: Yes, July. 14 MR. KATZ: Yes. 15 MEMBER ZIEMER: Let me get back here 16 then. I thought you said it was sent in June. Yes, we're kind of 17 MR. STIVER: mixing up our dates here. 18 19 MEMBER BEACH: Well, my date says 20 June. MR. STIVER: The actual document 21 I didn't revise everything. All I did 22 does. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

236 1 was annotate the June version. 2 CHAIR MUNN: The document date is The transmission date from Ted is the 3 June. 23rd of this month. 4 5 MR. STIVER: I actually have a hard б copy if you just want to look at that. 7 MEMBER ZIEMER: Yes. I'm wondering if you might have actually sent it to 8 my -- this is my CDC mail. Maybe they didn't 9 10 send it to the CDC mail. CHAIR MUNN: Yes, it went to the CDC 11 mail, Paul. 12 13 MEMBER ZIEMER: For me? 14 CHAIR MUNN: Yes. MR. STIVER: He has the hard copy 15 16 here. CHAIR MUNN: On the 23rd, July 23rd. 17 What page did you 18 MEMBER BEACH: 19 want to start on? 20 MR. STIVER: Let's look at Table 3 on Page 6. These are the documents already 21 reviewed by SC&A. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	MR. MARSCHKE: These aren't PERs.
2	MR. STIVER: No, we're not in PERs
3	at all yet. We're not getting to the PERs just
4	yet.
5	CHAIR MUNN: Haven't gotten there.
б	MR. STIVER: Okay. These are the
7	documents that we have recently reviewed. I
8	believe we've got some PROCs and OTIBs, a mixture
9	of the two. This is previously reviewed
10	documents with two to three revisions since SC&A
11	review.
12	And basically, what we found in
13	Table 3, we found five documents that we thought
14	might merit review and during the discussions in
15	Santa Fe, we received tentative approval, to be
16	finalized today, for four of those.
17	MEMBER BEACH: What happened to
18	0066?
19	MR. STIVER: We decided the quality
20	assurance records management really wasn't
21	something that would merit a full review. So
22	OTIB-0005, which is internal dosimetry organ,
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1 external dosimetry organ, and IREP model
2 selection by ICD-9 code. That was tentatively
3 authorized.

4 OTIB-20 was tentatively approved. 5 It was the use of coworker dosimetry data for б external dose assignment. PROC-31, Site 7 Profile and Technical Basis Document development. And PROC-61, occupational 8 medical x-ray dose reconstruction for DOE sites. 9 10 MR. KATZ: So Stu, you have this right in front of you. It could be useful to 11 hear from DCAS as to the nature of the revisions 12 13 as to whether -- so the Subcommittee can decide whether it's worthwhile to review them. Are you 14

15 capable of speaking on these?

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16 MR. HINNEFELD: Ι am not verv familiar with these revisions. I don't know if 17 anyone on the phone is or not. First one is 18 19 OTIB-5, which lists target organs and IREP 20 models. I don't know what the last two revisions have done. I don't know if, Scott, do 21 22 you know, or anybody?

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1 MR. SIEBERT: I mean, a bunch of different little things we've updated as the 2 ICRP had stated organ ICD-9 codes. Basically, 3 4 what are we looking for? 5 MR. KATZ: So, for example, that 6 updates an ICD-9 -- and that's kind of trivial. 7 I don't think that really warrants a --MEMBER BEACH: Well the revision is 8 9 10 MR. STIVER: Well, it provides guidance on the selection. 11 So it shows that MEMBER BEACH: 12 13 there's two revisions to that since you reviewed it. 14 MR. STIVER: Yes, since our first 15 16 review, there have been two revisions. Those should be 17 MEMBER BEACH: fairly quick, shouldn't they? 18 19 MR. STIVER: It depends on the 20 nature of the revisions. I guess that was one thing that was kind of outstanding. Basically, 21 we felt that, most of these would merit review 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

to validate the selection criteria. You know, 1 just assess the degree of implementation. 2 MR. MARSCHKE: One thing to do is, 3 4 I mean, we don't have to make a decision just today, but we could, if the Subcommittee would 5 б like, go back and look at these four documents 7 and see if we can maybe provide the Subcommittee with a summary of what the changes were. 8 I mean, usually if you go to the 9 10 document itself, if you pull the document out --MR. KATZ: It calls out --11 MR. MARSCHKE: -- it calls out what 12 the changes were and if there's really no 13 technical changes, if it's just changing, you 14 know, the codes in a table, or something like 15 16 that, to be consistent with the latest revision, then there's really no --17 MR. KATZ: That's all I'm raising is 18 19 that, it's good to understand what the changes are, because if they're trivial, we don't need 20 to spend \$8000 or anything on an SC&A review. 21 Yes, some of these --22 MR. STIVER: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

MEMBER ZIEMER: Yes, and probably
in the table and --

MR. STIVER: Yes, in some of these 3 4 we weren't able to locate the most recent revision. We attempted to do that, so that's 5 б the main reason why we're not seeing -- I went 7 through and looked at the revisions. In some cases, it wasn't clear exactly what had been 8 We have the latest case. 9 done.

10 MEMBER BEACH: Well, it seems like 11 that would be a DCAS action, is to tell us what 12 the revisions were and then go from there. I 13 mean, why would you have to go look for the 14 documents?

MR. STIVER: Well, I was doing that 15 16 in preparation with this document just to try to have a better understanding of which of these 17 might be, you know, worth expending resources. 18 19 MR. KATZ: Right. Well, since they chose 20 CHAIR MUNN: it, you know, they'd have a reason to choose it. 21 22 It'd be helpful to have such a summary,

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1 especially in light of the fact that, in the table itself, the document numbers only show for 2 OTIB-5, the other three don't actually show, so 3 4 that we'd have the title, but not the designation. 5 б MR. STIVER: I sent you a revised 7 version. That accidentally got stripped out. it did get CHAIR MUNN: Yes, 8 stripped out. 9 10 MEMBER ZIEMER: Is this something we could tell easily by going back into the main 11 For example, on OTIB-0005, you've 12 document? got some idea there as to -- some of those items, 13 14 for example, were in abeyance awaiting revision or are these -- there'd be some new items in here 15 16 MR. KATZ: You'll find that these 17 are all --18 19 MEMBER ZIEMER: No, I --These are documents 20 MR. STIVER: that we have reviewed that have undergone 21 22 subsequent revisions and so they might be worth NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701

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243 1 looking at --2 MEMBER ZIEMER: Right. MR. STIVER: -- just on that basis 3 4 alone. of 5 ZIEMER: Some the MEMBER б revisions may have resulted from others too. 7 MR. MARSCHKE: That's why we only identified those that had two or more revisions. 8 We felt that if they did one revision, it was most 9 10 likely, probably, in response to --Right. 11 MEMBER ZIEMER: MR. MARSCHKE: -- the findings. 12 And so we've identified these five that had two 13 or more revisions, but that's the level of 14 research that we've done. 15 16 MR. STIVER: Yes. I mean, we've haven't gone to look and see whether those 17 revisions were just trivial or if they were --18 19 MR. MARSCHKE: Meaningful or, yes, trivial. 20 CHAIR MUNN: And with the OTIBs, 21 22 it's easy for us to take a look on our Board page, **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 the OTIBs, and their changes are listed. So it's easy to see the summary of the changes for 2 the OTIBs. It's not so easy to pull up the PROCs 3 4 and the other --MEMBER BEACH: Well, the first one 5 б I brought up only shows Rev. 1, 0 or 1, so --7 MR. STIVER: Okay. I've got OTIB-5 Revision 4, which I just took off from the list 8 9 of documents. Presumably, we've gone through 10 three changes, so what we have, we currently have Rev. 4, three, so we must have looked at Rev. 2. 11 12 And if you look at the publication record, which is on Page 2 of that document, Rev. 2 is 5/7/2004, 13 and here is an external model correction for 14 ICD-9 code change to medical review. 15 16 We go on to Page 15. External model correction. Okay. I'm not quite sure what all 17 these --18 19 MEMBER ZIEMER: My comment was,

control thing that tells what the revision is, 21

usually, when a document is revised there's a

22 and I think you have that here.

20

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1	MR. STIVER: I have it here.
2	MEMBER ZIEMER: He has that.
3	MEMBER BEACH: You're on Page 2 of
4	40, right?
5	MR. STIVER: Yes, this is the next
6	step that I was hoping to get to.
7	MEMBER ZIEMER: Where is that?
8	MR. STIVER: This is OTIB-5, Rev. 4.
9	MEMBER ZIEMER: Oh, it's in the
10	beginning of that particular
11	MR. STIVER: Yes, this is the
12	tentative.
13	MEMBER ZIEMER: Right.
14	MR. STIVER: An annotation of all
15	the changes that were made.
16	MEMBER ZIEMER: Right. So you can
17	tell whether they're trivial or not.
18	MR. STIVER: Yes, there's actually
19	quite a few. We reviewed Revision 2, which was
20	put out in 2005, and you can see, since then,
21	there's been a page change, Rev. 3 and Rev. 4.
22	The page change was probably fairly trivial.
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1	MEMBER ZIEMER: Yes.
2	MR. STIVER: It just updates Table
3	3.1. Let's see, Rev. 3 adds a discussion by
4	ICD-9 reciting C9 and CM in background session
5	as codes in Table 3.1 that cross-reference codes
6	as clarification for skin cancer. Updates
7	organ selection for ICD-9 codes 155 and 156.
8	Adds clarification this OTIB is not applicable
9	for x-ray procedures. Incorporates internal
10	okay, that's a whole other matter.
11	So that's fairly substantive there.
12	MEMBER ZIEMER: Madam Chairman.
13	CHAIR MUNN: Yes.
14	MEMBER ZIEMER: I'm thinking that
15	what he's looking at now, I think SC&A could do
16	that part fairly rapidly and make a
17	determination if there's substantive changes,
18	and that we, perhaps, could authorize them if
19	they identify those to proceed. I mean,
20	otherwise
21	MR. KATZ: Yes. No, we don't want
22	to do that. That's painful.
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247 1 MR. STIVER: Yes, this is something 2 I was hoping to get through before --But the changes 3 MEMBER ZIEMER: seem to be well-identified. 4 5 CHAIR MUNN: I think they are. б MEMBER ZIEMER: You can look at that 7 and say, yes, we need to look at that. We don't need to look at that. 8 MR. STIVER: Right. 9 10 CHAIR MUNN: If we can get that 11 summary next time, it would be most helpful. those 12 MEMBER BEACH: On four, 13 right? 14 CHAIR MUNN: Yes. STIVER: Actually, I could 15 MR. 16 probably get this done in a day or so. MEMBER ZIEMER: Right, because you 17 have four documents with a page like that --18 19 MR. STIVER: Yes, they're not very 20 many documents. if MR. KATZ: And there 21 are substantive changes, then you just proceed. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

248 1 MEMBER ZIEMER: We could identify what they are and then proceed. 2 3 MR. KATZ: Yes, proceed. I mean, 4 just send us a note to tell us what the results were in terms of what you're proceeding on. 5 б MR. HINNEFELD: This is Stu. Ι 7 would offer to John, if you have trouble finding the latest versions of any of these, just let me 8 9 know. 10 MR. STIVER: Okay. MR. HINNEFELD: We'll make sure we 11 12 put them someplace where you can get --13 MR. STIVER: Yes. I had notes and 14 commented on some of these that they didn't have the latest version. One would have been 15 16 PROC-31. Actually, let's see what I have for PROC-61. 17 CHAIR MUNN: Is that the last one? 18 19 MR. STIVER: I had a little summary 20 of what it does, but not what the latest updates I think I'm -- just a second. 21 were. It's 61. 22 MEMBER BEACH: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. STIVER: Sixty-one. Let's
2	see. This is Number 4. Okay. So, no, I do not
3	have revision updates in this. I thought I had
4	put some of them in, but I know I did it for the
5	PERs, but I did not do it for that first table.
6	So, yes, I'll go back and make a determination
7	of how substantive the changes were and then a
8	recommendation, which, if we determine that they
9	do, in fact, merit a review, would we
10	MR. KATZ: Proceed.
11	MR. STIVER: need to go ahead and
12	proceed with it?
13	MR. KATZ: Yes.
14	MR. STIVER: And just email the
15	Subcommittee?
16	CHAIR MUNN: Yes.
17	MR. STIVER: Okay.
18	MR. KATZ: So just send the
19	Subcommittee a final little memo saying, these
20	ones you're proceeding on because they have
21	substantive changes.
22	MR. STIVER: Okay. All right. We
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1 shall not have that problem with --MEMBER BEACH: Well, and then this 2 should be changed to four instead of five, right? 3 4 Because we're not going to do --5 Actually, there is MR. STIVER: another one on the next page. Actually, there's б 7 four. There should be four. No, these are the five that we -- this is from the previous June 8 9 version. These are just the five that we 10 identified. CHAIR MUNN: 11 Okay. MEMBER BEACH: 12 Yes. 13 MR. STIVER: Okay. Moving along. 14 The next would be approved unreviewed documents. This is Table 5 on Page 9, I believe. 15 And of 16 these five documents that I identified, we felt were candidates for review. We received 17 tentative approval for all except Report 45, 18 19 which is the radium toggle switch, which we 20 probably don't want to spend \$8000 on. CHAIR MUNN: 21 No. The first one is 22 MR. STIVER: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

1 OTIB-55, the Technical Basis for Conversion of NCRP Report 38, Neutron Quality Factors, to ICRP 2 Publication 60, Radiation Weighting Factors for 3 4 respective IREP input. And we felt that one was definitely something we'd like to look at. 5 It is. 6 CHAIR MUNN: 7 MR. STIVER: Okay. Next is OTIB-79, Guidance on Assigning Occupational 8 9 X-Ray Dose Under EEOICPA for X-Rays Administered 10 Offsite. We felt that --MR. HINNEFELD: That should be an 11 12 It should say don't. easy one. 13 MR. KATZ: Yes, what is it? 14 MR. HINNEFELD: I don't know. 15 MEMBER ZIEMER: I have a question 16 though --MR. KATZ: This doesn't make sense. 17 MEMBER ZIEMER: -- on OTIB-55, is 18 19 that actually a procedure? 20 MR. STIVER: I think it's more of a technical basis, not really something a 21 reconstructor would use, but sort of a basis 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

252 1 document for a process. 2 CHAIR MUNN: I guess it's of interest --3 4 MEMBER ZIEMER: I mean, it's sort of like explaining why we would use ICRP-60 instead 5 6 of ICRP something other. 7 MR. HINNEFELD: This is Stu, as I recall, doses for, I don't know if they're still 8 being, but until recently, doses were recorded 9 using neutron quality factors for NCRP-38. 10 MEMBER ZIEMER: Right. 11 MR. HINNEFELD: And the ICRP-60 12 weighting factor recommendations are different. 13 And those documents didn't really publish 14 weighting factors that align exactly with the 15 16 IREP bins, Energy bins, for neutrons. And so this, essentially, describes the mathematics 17 that --18 19 MEMBER ZIEMER: How we will apply these to the bins. 20 MR. HINNEFELD: 21 Yes. 22 MEMBER ZIEMER: Oh, got you. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

253 1 MR. HINNEFELD: There's а 2 conversion factor for this bin in IREP --MEMBER ZIEMER: Oh, okay. I got 3 4 you. 5 MR. HINNEFELD: -- you convert the б recorded neutron dose to what we're going to use 7 using this factor. MEMBER ZIEMER: 8 I got you. 9 MR. STIVER: Yes, there's a little 10 note that I took from the TIB, but the purpose is to provide broader technical basis to convert 11 from recorded neutron dose to dose equivalent 12 13 using radiation weighting factors and the respective site Technical Basis Documents often 14 present this medical basis. 15 16 So what we would want to do is take indeed, you know, how those 17 а look at, conversions were made and then also at the 18 19 implementation. 20 MR. KATZ: Right. CHAIR MUNN: 21 These were approved 22 documents, not necessarily approved procedures. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	MEMBER ZIEMER: Well, yes, but I
2	think your implementation here is the critical
3	thing because I don't think we have to go through
4	a justification of using the latest ICRP
5	document from an old one, it has to do with how
6	you're going to actually implement that into the
7	system where the IREP was, sort of, binned based
8	on the old system. That's how I understand
9	that. That makes sense.
10	MR. STIVER: The way I saw this is,
11	we just basically look at two aspects. We look
12	at the technical correctness. Was it done in
13	the right manner? And then, look at
14	implementation.
15	CHAIR MUNN: Look at what?
16	MR. STIVER: Implementation.
17	CHAIR MUNN: Implementation, but
18	are you really and truly seeing implementation
19	here? Aren't these, for the most part, may not
20	be true of OTIB-55, but aren't the other three
21	pretty much well, they're the PROC pair, not
22	a big one, but I'm
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255 1 MEMBER BEACH: Reading 79 correct, there's a lot of different sites that this is 2 used at. 3 4 MR. STIVER: Yes, basically, you got Table 1 and Table 2. And Table 1 has sites 5 б with known occurrence of occupational x-rays at 7 locations other than the covered facility. We wanted to look at those tables and make sure they 8 9 were, indeed, correct. 10 And then Table 2 contains a list of covered facilities where it's known that 11 occupational medical x-rays were taken onsite or 12 at another covered facility from historic 13 documentation. And Table 2 also contains sites 14 that might have had medical x-rays taken at an 15 16 offsite location. They can't be demonstrated with certainty. 17 So we'd want to look at those tables 18 19 and look at the basis for those to make sure that 20 they were, indeed, correct. CHAIR MUNN: Correct in -- and I 21 22 guess I'm not understanding. Correct in what NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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256 1 way? 2 MEMBER ZIEMER: Are you talking about 0079? 3 4 MR. STIVER: Yes, 79. Well, if they're 5 MEMBER ZIEMER: б offsite, there was always a question of whether 7 it applied. The doses weren't delivered, even if they're required, they weren't delivered at 8 that facility. 9 10 MR. KATZ: Right. They're not 11 counted if they're offsite. And they're not 12 MEMBER ZIEMER: 13 counted. Yes, and this would 14 MR. STIVER: probably be pretty quick if we want to look at 15 16 the --Well, this says 17 MEMBER BEACH: onsite or at another covered facility for this 18 19 particular document. MR. HINNEFELD: I think this is a 20 the compilation of sorting. the 21 It was 22 research. For these covered facilities, where **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 did the x-rays occur and how much evidence do we have that they occurred there? In some cases, 2 this clearly occurred onsite. In some cases, 3 4 there's clear indication that they occurred offsite. And then the other case, if you don't 5 6 know --7 MEMBER ZIEMER: And then if you don't know, what you do --8 9 MR. STIVER: And the other cases, 10 we're not quite sure. MR. HINNEFELD: So I think it falls 11 12 under the category. 13 MR. KATZ: Okay. You're going to 14 look at those ambiguities. MR. STIVER: Yes, we'd want to look 15 16 at the ambiguities. We want to look at, you know, whether the tables are accurate. 17 Then we'd want to look at the criteria for judging --18 19 MEMBER ZIEMER: The table's accurate in what sense? 20 MR. STIVER: In that those are, 21 indeed, the correct facilities that measured 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701

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258 We'd want to look at the technical basis 1 that. for that. 2 3 MEMBER ZIEMER: Okay. You're not 4 looking at x-ray doses, you're looking at --5 MR. That the correct STIVER: 6 facilities were identified. 7 MEMBER ZIEMER: The correct facilities. Okay. 8 9 MR. STIVER: Yes. 10 MEMBER ZIEMER: Because the doses there are a different question. 11 MR. Oh, 12 STIVER: that's а completely different issue. 13 14 MR. MARSCHKE: You have to This table, when we generated this 15 remember. 16 table, we looked at -- and we did just look at documents which have been approved and we have 17 not, and I assume the Subcommittee has not, 18 19 looked at any of these approved documents. So 20 we just want to crack open these documents, see what's in them, kind of do the discussion that 21 22 we're having around this table, and so that if **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1	somebody says, well, what about this document?
2	We can say, yes, we've looked at this
3	document and it's a no-nevermind. So some of
4	these things, you know, we're showing \$8000 for
5	each one of these reviews, but some of them, I
6	think, will come in substantially below that.
7	MR. STIVER: Those are high-sided
8	estimates.
9	MR. MARSCHKE: Yes. So some of
10	them, we may just crack open the document and
11	say, yes, but it's got a technical name, but
12	there's really nothing in here that's going to
13	affect much, and we might just close it up again.
14	MR. STIVER: Yes, it would be like
15	the three sets of procedure reviews that we did
16	before. I mean, some of them, there's no
17	findings. There's just a very brief discussion
18	and that wouldn't take much time at all.
19	MR. MARSCHKE: Then we would have,
20	on the record, yes, the Subcommittee has looked
21	at these documents and, you know, we have no
22	problems with them. And it would be on the
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1 record to that effect.

2 MR. STIVER: Yes, at least at that point we would have a definitive judgment as to 3 4 whether, A, we looked at them, and what the significance might be. 5 б CHAIR MUNN: Given nothing but the 7 titles, it's hard to see how this is something that we need to be spending much time and effort 8 9 on, but as much as I hate to say this, never 10 thought I would say this, I'd rather see the 11 \$8000 committed than to see us spend the rest of the afternoon trying to figure out why we're 12 looking at these documents. 13 MR. STIVER: And remember, it might 14 not be \$8000. 15 16 It's your money. MR. KATZ: It might be \$200. 17 MR. STIVER: CHAIR MUNN: I agree. 18 Yes. It's 19 only money I intended to use for my dotage. Is there any objection to authorizing SC&A to 20 proceed with their review of the four documents 21 that have been identified in Table 5? 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	MR. KATZ: We've talked about two of
2	them, but what about the other two? Do you all
3	have nothing to say about them?
4	MEMBER BEACH: I just pulled up 0044
5	and just started glancing at it.
б	CHAIR MUNN: It's the only one
7	which, from its title, would lend itself, in my
8	mind, to the kind of review that we would
9	anticipate from our
10	MEMBER BEACH: Well, it's a 2005
11	document, no revisions of it
12	CHAIR MUNN: Well, is there no
13	reason to revise it. Once you've established
14	what you're going to do with an SEC, you've
15	established it.
16	MR. STIVER: Yes, we had never
17	reviewed the guidance for the evaluation of
18	these SEC submissions and so we felt that that
19	would be
20	MR. HINNEFELD: I think you'll find
21	it, fairly, an administrative sort of thing.
22	CHAIR MUNN: Yes, it seems that most
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262 1 of these were. MR. HINNEFELD: But Report 53 is, I 2 think, something we really should do --3 4 MR. STIVER: Yes, 53 is something that really got my attention. 5 6 MR. HINNEFELD: That is substantive and it is brand new. 7 CHAIR MUNN: Looks as though it's 8 going --9 10 MR. KATZ: But so 44, if it's 11 administrative and not technical, we don't need SC&A to review it. 12 MR. HINNEFELD: Well, I suspect 13 that. I don't know for sure. I mean, I trust 14 them to look at it and say, is there anything 15 16 here? MR. STIVER: Yes, we look at it and 17 determine if it's administrative. We would 18 19 make a comment to that effect and it would be --20 MR. KATZ: Then you don't need to review it. 21 MR. STIVER: Well, we would need a 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 full review and we could say --(Simultaneous speaking.) 2 MR. MARSCHKE: I don't think we'd 3 have to do a full review. 4 MR. STIVER: No. 5 б MR. MARSCHKE: mean, a full Ι 7 review, we have a checklist that we have to fill out and all this other stuff. If we just look 8 9 at it and say, this is administrative, then we 10 can put a little paragraph in our report, or whatever, saying that, you know, we have not done 11 a full-blown review because we feel that this is 12 an administrative document or whatever. 13 MR. STIVER: I think Steve and I are 14 15 on the same page with this. That's exactly what 16 I'm saying. If we see something that lends itself as more of an administrative document, 17 that's all it would ake, just a paragraph, as a 18 19 matter of fact. MEMBER BEACH: Well, this is a large 20 document. I mean, it's 61 pages. It goes into 21 examining area facility monitoring information. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

264 1 It spells out quite a few other documents within 2 it. MEMBER ZIEMER: Which one are you --3 MEMBER BEACH: This is the 0044. 4 5 MR. KATZ: It's the SEC. б MEMBER ZIEMER: Oh, there it is. I see it. 7 MR. STIVER: You know, I pulled some 8 information out of the introduction from each of 9 10 these. This was actually a fairly big document. CHAIR MUNN: Well, I think there's 11 no objection to having these four placed in 12 13 SC&A's hands, is there? 14 MEMBER BEACH: No. CHAIR MUNN: If I hear objections, 15 16 speak now or forever hold your peace. Going, going, gone. You have those four. And now on 17 18 to --19 MR. STIVER: Table 6, these were 20 proposed documents --CHAIR MUNN: Almost issued, but not 21 22 quite. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. STIVER: that were selected
2	to review once they're issued and so these are
3	documents that have not yet been approved for
4	release.
5	MEMBER ZIEMER: This is sort of a
6	heads up as to what's coming down the pike.
7	MR. STIVER: Yes, this is what's
8	coming down the pike.
9	MEMBER ZIEMER: So there's nothing
10	to authorize or anything like that.
11	MR. STIVER: No, when the time
12	comes, then we can take a look at these.
13	CHAIR MUNN: This is a later.
14	MR. STIVER: Yes, we just looked at
15	that as a category of what was out there in the
16	pipeline.
17	CHAIR MUNN: Do we have anything
18	else to say about those before we move into the
19	PERs?
20	MR. STIVER: No.
21	CHAIR MUNN: Are we ready to address
22	PERs, folks? If so, let's look at the PERs that
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1 you have outstanding that you have not been assigned and ask everyone -- Ted just recently 2 sent you the segregated table, Table 1. 3 4 MR. STIVER: Actually, if we could look at the other document. 5 б MEMBER ZIEMER: Is that the same as 7 your Table 7? MEMBER BEACH: Table 7? 8 MR. STIVER: The other document of 9 10 Table 7, I went through and made some annotations I added some more information. on these. 11 12 MR. KATZ: Right. 13 I went through and MR. STIVER: looked at each of these PERs. I didn't look at 14 them in excruciating detail, but I looked at them 15 16 and made some preliminary recommendations as to whether we thought it would benefit from a review 17 or we could defer a review. 18 19 CHAIR MUNN: All right. 20 MR. STIVER: And of those, there's 15 that we felt might benefit from review and six 21 others that either have outstanding issues that 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

1 are being discussed in a Work Group or are pretty 2 evident that they really don't need a review. And the ones that are highlighted in 3 4 green are those that we feel could be deferred. 5 The ones highlighted in yellow, obviously, would б be the others. And this is Table 7, starting on 7 Page 12 of the follow-up budget discussion, the annotated version. 8 9 CHATR MUNN: But can't we 10 differentiate the colors here, so you'll have to 11 _ _ Lighter 12 MEMBER BEACH: 13 highlighted, yellow; darker one is green. 14 MR. STIVER: I can indicate to you which ones --15 16 MEMBER BEACH: That's how I could tell on mine. 17 MR. STIVER: And the ones that say, 18 19 may benefit from an SC&A review. 20 MEMBER BEACH: Yes. MR. STIVER: And now, before we get 21 22 started, I'd like to clarify something. I know **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 at the discussions in June there was, what appeared to me to be, some misunderstanding of 2 what our selection criteria really represented, 3 4 that being the number of cases re-evaluated was pretty clear, but the selection criteria, and 5 б the science involved and revising the DR. 7 Now, these ratings of low, medium and high have nothing to do with what we felt that 8 9 this was an important PER. This was really just 10 as a cost basis. This is for our determination of, what do we think it would cost doing it to 11 12 prepare this document? So you could have 13 MEMBER BEACH: left it out for us. 14 I could have left it 15 MR. STIVER: 16 This is taken from an internal document out. and, you know, I probably could have spread that 17 a little bit more. 18 19 MR. KATZ: Ι I actually mean, 20 remember the background for that, so that's not how these came about originally, because, 21 originally, we discussed this low, medium, high 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1	was intended. The thinking that we had talking
2	about this was that, for a highly complex change,
3	that raises real implementation issues as there
4	could be real mess-ups in implementation.
5	But medium, less so, and low, much
6	less concern about implementation, so that was
7	the thinking.
8	MEMBER ZIEMER: So it's a NIOSH
9	cost, so not SC&A cost.
10	MR. KATZ: No, I'm not talking about
11	costs. I'm just talking about this issue of
12	complexity.
13	MEMBER ZIEMER: Well, complexity of
14	oh, got you.
15	MR. KATZ: The complexity of the
16	reason we differentiated that originally was for
17	that, because we thought and we've had a PER
18	where we don't even bother auditing cases
19	because the actual implementation was so simple
20	there was no point going and looking at cases,
21	so that was actually it may relate to cost as
22	well, but that was the rationale for this
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1 taxonomy.
2 MR. STIVER:
3 what you're saying. In

what you're saying. In this particular table,
we put those in based on our cost estimate. You
know, but clearly, complexity is going to impact
the implementation.

7 MR. KATZ: How easy it is to 8 implement the PER.

9 MR. STIVER: Right. Yes, I agree 10 with you.

MR. KATZ: So we wanted to be certain to evaluate those PERs in terms of auditing cases where the implementation was complex.

MR. STIVER: Yes.

16 CHAIR MUNN: But if I extrapolate 17 then from your current definition of selection 18 criteria, then everything we have to look at here 19 is all, and we have the numbers to prove it, are 20 all in the low-cost area anyway. So we can 21 remove that as a concern, right?

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Okay. I understand

271 1 -- well, there's a few that are a little higher. I think there's some that have, and again, I'm 2 just paging through here --3 4 MEMBER ZIEMER: The complexity seems to be level. 5 б MR. STIVER: Yes, the complexity is 7 going to drive the cost up. Say PER-27, or excuse me, PER-30 from Savannah River site is a 8 9 high, and that's \$14,000 as our upper bound 10 estimate on that. What it would cost to do that 11 one. Right. 12 MEMBER ZIEMER: 13 MR. STIVER: So they range between about and 12, and remember, 14 6 those are worst-case scenarios, and oftentimes, 15 they won't even come close to that. 16 So again, I would just 17 MR. KATZ: say, by the discussions we had previously on how 18 19 we would go about this, the high complexity would 20 be priorities, medium would be lower priorities, and low would be less. It's not a budget 21 22 exercise. It's a -- what's most important to NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1 address.

2	MR. STIVER: Kathy, are you still
3	online, Kathy Behling? I guess not. I guess my
4	only concern there is that, whether she used the
5	criteria in the same manner that you're
6	indicating when she put this table together.
7	MEMBER BEACH: Well, yes, because
8	they all say low. The science is the only one
9	that differentiates between
10	MR. STIVER: Yes, the selection
11	criteria might be fairly straightforward.
12	MEMBER BEACH: Yes.
13	CHAIR MUNN: That's what I was
14	saying.
15	MR. STIVER: But that has
16	CHAIR MUNN: I thought I said.
17	MR. STIVER: nothing to do with,
18	really, the impact of implementation
19	necessarily. It could be pretty significant.
20	MEMBER BEACH: You did.
21	MR. STIVER: Anyway, if people are
22	ready, we can start going through these. The
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2 is PER-13. This is Revision 2. It relates to a Technical Basis Document which was produced in 3 April of 2007. 4 This is the evaluation of the impact 5 б of changes to the isotopic ratios for the Paducah Gaseous Diffusion Plant. And it was determined 7 that those ratios published in the TBD did not 8 provide an accurate or bounding dose estimate. 9 10 Therefore, a revision was required ratios also affected and the revised 11 environmental dose estimates and required a 12 modification to a Technical Basis Document, 13 19-4. 14 As you can see, there's about 734 15 16 affected claims. Selection criteria, low,

first one, this is on Page 12 of Table 7, this

1

science involved, medium. Because these are
sorted based on the number of cases we evaluated,
this represents the most potentially affected
claims.

21 And so we felt that this one would 22 benefit from a review.

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1	MEMBER BEACH: So oh, I'm sorry.
2	MEMBER ZIEMER: The exact number is
3	I'm sorry. Go ahead.
4	MEMBER BEACH: I was just going to
5	say, I know we're reviewing this in our Work
6	Group also. How does it correlate to this
7	review in what we're doing?
8	MR. STIVER: It would be kind of
9	analogous to the TIB-52 PER-14 in which you've
10	got an ongoing review and you also have a PER
11	because the changes could impact doses, so there
12	may be the type of situation where you have to
13	go back and re-evaluate cases because the doses
14	are going up, and they trip a PoC threshold.
15	But then you still have the separate
16	issue of, you know, debating the nuances of the
17	TBD itself, which may or may not impact this part
18	of
19	MEMBER BEACH: Okay.
20	MEMBER ZIEMER: Is this number of
21	cases re-evaluated, is this the actual number
22	that the DOL has sent back; this 134?
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1	MR. STIVER: Yes, I believe that's
2	what this comes from. These are the claims that
3	would be it's kind of like what we've found
4	in the other PER-77.
5	MEMBER ZIEMER: Right. Yes.
6	MR. STIVER: Those are based on
7	NIOSH's selection criteria.
8	MR. MARSCHKE: I kind of agree with
9	Josie here. I mean, this is a PER that is on a
10	document that this Subcommittee doesn't really
11	review. This is on a Site Profile document.
12	This PER is associated with a Site Profile
13	document, which the Work Group is reviewing
14	those. This Subcommittee doesn't review them.
15	So why would this Subcommittee get
16	involved in the PER review of that document? To
17	me, it seems like this should go whoever is
18	reviewing, you know, 19-5, TKBS-19-5, they
19	should also be this PER should go along with
20	that.
21	MR. STIVER: Okay. Well, answer me
22	this then, are there situations in the past that
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1	I would not know myself, having not been involved
2	in that that long, are there situations where the
3	PERs are evaluated in Work Groups as opposed to
4	the Procedures Subcommittee, or is that
5	something that's done here in Procedures only?
6	CHAIR MUNN: It's been done here in
7	Procedures only.
8	MR. HINNEFELD: PERs have only been
9	done here.
10	MEMBER ZIEMER: Right. And we
11	don't review Site Profiles.
12	MR. MARSCHKE: But we don't do Site
13	Profiles.
14	MEMBER ZIEMER: Right.
15	MR. STIVER: No, we don't. But
16	see, the change to a Site Profile or any other
17	document
18	MEMBER ZIEMER: May result in a PER.
19	MR. STIVER: results in a PER if
20	they're potentially affecting the PoC. And so
21	you're actually looking at two different angles
22	for the same document.
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1	MR. HINNEFELD: If I could offer one
2	thing. This is Stu. This was a specific change
3	in the prescribed transuranic impurities at the
4	diffusion plants and how to apply those. And
5	so, you know, the PER could be evaluated to see
6	did we make that change appropriately and
7	address those cases appropriately.
8	The part of the review that I think
9	we'll start to trip over the Gaseous Diffusion
10	Plant Work Group would be, is the solution
11	correct part of the PER review, which we've done
12	on some of these things.
13	MEMBER ZIEMER: But we don't look at
14	that here.
15	MR. HINNEFELD: Well, it's come up
16	on some. You know, if the technical resolution
17	hasn't been subject to a review, then it's
18	reviewed as part of this effort. In this case,
19	ultimately, the technical solution here is in
20	review in the Gaseous Diffusion Work Group, and
21	so that part could be excluded.
22	If you choose to do it, the PER
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1 evaluation could take, at face value, the transuranic numbers that were presented in the 2 Site Profile change. You know, don't opine on 3 4 those, just take those at face value, and say, given those, was the PER executed correctly? I 5 б mean, to me, it's certainly doable here. 7 MR. KATZ: It's doable. I would just suggest we don't, though, because the PER 8 review starts with the methodology. 9 I mean, 10 normally, with the assumption that the methodology has been reviewed, and is all 11 kosher, and gives that background. 12 I would suggest we wait till that's done before we have 13 a PER review. 14 I mean, why do the PER review --15 16 MEMBER ZIEMER: Well, in fact, I don't understand why you'd have a PER until 17 you've answered the question. 18 19 MR. KATZ: Well, because they move 20 ahead. MR. HINNEFELD: We did this change 21 and this PER before the current discussion of a 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1 Site Profile.

2	MEMBER ZIEMER: Oh, I got you.
3	MR. HINNEFELD: Yes.
4	MR. STIVER: And typically what we
5	will do is, if a basis document has not had a PER,
б	which in this case, the Technical Basis
7	Document, that hasn't been formally reviewed by
8	SC&A, then we will do that review. But here's
9	a situation, kind of like what we have in TIB-52,
10	only in a grander scale
11	MR. KATZ: Right.
12	MR. STIVER: where you've got
13	that review going on as we speak in a different
14	venue.
15	MR. KATZ: Right.
16	MR. STIVER: And so, you know, I
17	think Stu may be on the right track here and if
18	you go ahead and move forward with this, let's
19	just look at implementation. And if I don't
20	start questioning
21	MR. KATZ: Well, I don't see the
22	point in doing that until the technical matter
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280 is resolved. 1 2 MR. STIVER: How far along is the technical review on it? 3 4 MEMBER BEACH: Well, we keep trying 5 to schedule a meeting and we keep getting pushed б back to, I believe, next year now, was the last 7 one. CHAIR MUNN: I agree with Ted. 8 9 MEMBER BEACH: That's for the 10 Gaseous Diffusion. 11 CHAIR MUNN: There's real no pressure on us to select this right now. 12 I can 13 see no reason why we have to make that decision. You recall 14 MEMBER BEACH: the emails. 15 16 MR. KATZ: That's right. CHAIR MUNN: There's no reason why 17 we cannot postpone this until the issue has been 18 19 resolved in Work Group, is there? 20 MR. STIVER: Okay. CHAIR MUNN: Yes, this is one we can 21 do without. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

281 1 MEMBER ZIEMER: Question though, NIOSH, based on some determination, either 2 the 3 internally or with Work Group, has 4 determined that they should go back and review some cases, is that correct? 5 б MR. HINNEFELD: Well, this is all 7 done. MEMBER ZIEMER: Yes, it's already 8 done. 9 10 MR. HINNEFELD: Yes, this has all been done. 11 MEMBER ZIEMER: Already been done. 12 13 It would be a little bit like, I'm trying to think of a case, high-fired plutonium. When we go 14 back and do a PER on it, we don't look at whether 15 16 or not they should have considered high-fired plutonium versus, you know, what some other 17 model -- we hadn't looked at that here, right? 18 19 CHAIR MUNN: No. 20 MR. KATZ: Right. It's not our job. 21 CHAIR MUNN: 22 MEMBER ZIEMER: Now, suppose that, **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

1 in the discussions on high-fired plutonium, NIOSH had said, oh, let's just go ahead and do 2 the PER process and review all these. And then 3 4 before the whole issue is reviewed, the Work Group, well, that would be us, wouldn't it? 5 It's overarching. б 7 CHAIR MUNN: Yes, it would be us for that. 8 9 MEMBER ZIEMER: But let's suppose 10 you said --11 CHAIR MUNN: Bad example. 12 MEMBER ZIEMER: -- you know, we don't accept that super-fired theory and we're 13 14 going to keep things as they are. If they've gone ahead and done it, it's too late anyway, 15 16 right? Well, that's why we 17 MR. STIVER: have that Sub-task 2 in the PER review process 18 19 where, you know, we will take a look at the basis 20 and if it's been reviewed, then we summarize what that might have been, like we did with TIB-49. 21 22 MEMBER ZIEMER: Yes. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1 MR. STIVER: It's pretty easy to do 2 when you're dealing with a TIB. When you're dealing with a Technical Basis Document that's 3 4 under review, it's more nuanced. And I guess that's the question. We can certainly look at 5 6 the selection criteria, evaluating the basis, 7 but going in and looking at the Technical Basis Documents would be, you know, going after a 8 moving target here. 9 10 MEMBER ZIEMER: Yes. MR. KATZ: Yes. 11 MEMBER ZIEMER: Well, a TBD is not 12 13 a procedure, per se. MR. KATZ: Well, yes, but it's kind 14 15 of an --MR. STIVER: It's a basis document. 16 MEMBER ZIEMER: It's a basis for a 17 procedure. 18 19 MR. KATZ: Yes, right. 20 CHAIR MUNN: Let's hold PER in abeyance until we have looked at the others. Ιf 21 we go ahead and identify the others as being 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 appropriate to move forward on, then we don't have a problem. SC&A can live without one 2 assignment. What's our next one? 3 4 MR. STIVER: The next one is PER-31. This is Y-12, again, TBD revisions. This is 5 б their Technical Basis-14. It's been revised 7 several times. Some changes would result in an SEC designation, while others would increase the 8 dose for some previously completed DRs. 9 10 And let's see, this was produced in 2007. It refers to Rev. 1, page change 2 of the 11 -- okay, but this is the one that incorporated 12 some substantial changes that increased doses. 13 This is the equilibrium ratio of thorium-228 to 14 15 232. Okay. So you're assuming less 16 equilibrium. Okay. So you're going to have a higher thorium-232 content. 17 This would increase the dose 18 19 estimate for claims containing thorium intakes.

> incorporate designations SEC and NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

And then I have the concurrent version of the

Rev. 3, which is dated March 2012, they both

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determined that those revs do not result in 1 2 increased doses and do not require a PER. So the PER is still valid and there's 3 4 nothing new that came along that might result in an additional PER. But this is one where it 5 б could be a big impact on dose. Let's see, 7 there's almost 700 claims that would be involved. This is one, I don't believe is under 8 review at this point. Y-12, I don't believe a 9 10 Work Group has been appointed for Y-12 at this point. 11 MR. KATZ: No, it's not. 12 13 CHAIR MUNN: No. Does anyone have 14 any objection to assigning this document to SC&A? 15 16 MEMBER BEACH: No. 17 CHAIR MUNN: Dick? If not, you're assigned PER-31. 18 19 MR. STIVER: Okay. The next one is one with medium science involved. 20 This is PER-21, Rocky Flats Plant dose reconstruction 21 22 method modifications. Let's see, PER-21, dated **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 September 2007, involved revisions to several 2 TBDs and TIBs. Basically, Technical Basis 3 and 4, medical and environmental did require PERs 3 4 and that was really the basis for this. 5 there's several different So б documents that have all been changed that are 7 kind of resulting in this PER. It's not just one particular one. And so that's, I guess, why the 8 science involved would be a little bit more 9 10 complex; 590 potentially affected claims in this 11 one. 12 CHAIR MUNN: If anyone has any reason why they should not be assigned, speak 13 14 now, please. You're assigned PER-21. 15 MR. STIVER: Okay. Thank you. 16 All right. PER-32, Nevada Test Site TBD revisions. Let's see, this is Technical Basis 17 Again, several revisions. Some result with 18 8. 19 an SEC designation and there's increased dose. The PER was initiated or completed and 20 Okay. put forth, published, December 2007. 21 Technical 22 Ιt refers to Basis NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	Documents 4 through 6, revised in April 2010.
2	Okay. There were two changes that could result
3	in an increased dose. Okay. These are kind of
4	small changes. First being the increase in the
5	detection limit for the dosimeters used after
6	1986. There could be a missed dose issue on
7	that.
8	Second is an adjustment to missed
9	and recorded dose from '60 to '65. Okay. This
10	was using a different type of film pack, a DuPont
11	559 with a lead filter. Okay. So this was kind
12	of a small change in dose or PoC, but
13	CHAIR MUNN: Large impact.
14	MR. STIVER: a large impact. A
15	large number of claims affected. So, you know,
16	we try not to look at the impact on PoC on these,
17	but more, you know, just, is the science being
18	done correctly? Certainly, you know, the Group
19	might want to look at that in terms of, you know,
20	how to best allocate resources.
21	CHAIR MUNN: These changes were
22	very significant.
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1	MEMBER ZIEMER: I have a question.
2	CHAIR MUNN: Yes.
3	MEMBER ZIEMER: Part of the changes
4	were to accommodate SEC designation. I'm
5	trying to understand how that impacts here. Are
6	we then talking about non-SEC cancer claims on
7	the rest of it?
8	MR. HINNEFELD: Yes, well, when an
9	SEC Class is designated
10	MEMBER ZIEMER: Right.
11	MR. HINNEFELD: for a site where
12	we have a Site Profile
13	MEMBER ZIEMER: Right.
14	MR. HINNEFELD: that means that
15	there's something that we thought, you know,
16	that we can't
17	MEMBER ZIEMER: Right. You could
18	do that, you're really not doing now.
19	MR. HINNEFELD: So we couldn't do
20	that.
21	MEMBER ZIEMER: Right. So those
22	are out.
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289 1 MR. KATZ: So those changes 2 themselves, obviously you don't need SC&A to review because it's just taking away something 3 4 5 MEMBER ZIEMER: Right. б MR. KATZ: -- that used to be a 7 procedure. MEMBER ZIEMER: But the number of 8 cases are still what's left outside the SEC then. 9 10 MR. STIVER: Yes, this was after the SEC designation. 11 MR. HINNEFELD: I don't know. 12 MR. STIVER: No, you know what? 13 14 Actually, they may not be. MEMBER ZIEMER: I'm just trying to 15 16 get a feel -- what? MR. STIVER: They may not be because 17 18 19 MR. HINNEFELD: No. 20 MR. STIVER: -- remember, this PER was produced in December of 2007 and the changes 21 to accommodate the SEC were done in April 2010. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	And so the revision, those two changes that I
2	indicated, in July of 2007, which precipitated
3	the PER, may be impacted to some extent by the
4	SEC designation.
5	MR. KATZ: It may be impacted
6	enormously; the SEC designation.
7	MR. STIVER: Now, this is external
8	dose.
9	MR. HINNEFELD: There should be a
10	smaller number of claims, because what'll happen
11	is that, since there were what, 400 and some odd
12	looked at by the PER, is that what that 481 number
13	is?
14	MR. STIVER: Right.
15	MR. HINNEFELD: That's how many the
16	PER looked at? That was done in '07.
17	MEMBER BEACH: Right.
18	MR. HINNEFELD: Before the addition
19	of Nevada Test Site of 292, so it would be a great
20	many of those cases, undoubtedly, went to the SEC
21	and so it may be irrelevant anymore.
22	MR. STIVER: So you may need to
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291 review the number of claims on this. 1 MR. HINNEFELD: Boy, it's going to 2 be hard to find. 3 MEMBER ZIEMER: I think it would be 4 good to clarify that. I mean, this could, in my 5 6 mind, have dropped it way down. 7 MR. STIVER: Yes, we may be looking at 10 or 15 cases for all we know. 8 9 MEMBER ZIEMER: Yes. I mean, quite 10 willing that they go ahead and look at and figure out whether it's --11 MR. STIVER: Yes, I think this one 12 might be better to be deferred, given that --13 Well, either that 14 MEMBER ZIEMER: 15 or tell us what the right thing -- I mean, unless 16 the Chair wants to proceed in some way. I'm only raising a question. I don't object to them 17 looking at it. I'm just thinking that it may be 18 19 a little -- I don't think I fully understand 20 what's going on here with the interplay of the SEC. 21 CHAIR MUNN: What is the desire of 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

292 1 the Committee? 2 If you would like to MR. HINNEFELD: know how many cases are currently possibly, I 3 4 think we can do that, because the two changes that John describes here would affect people who 5 б were after 1986 and people who worked from 1960 7 to 1965. So you've got those sets of people 8 9 who are outside the SEC. And, I mean, I would 10 think you would result in a somewhat quite a lot smaller number than 480. 11 MEMBER BEACH: But we don't pick 12 these based on the number. At least, I wouldn't 13 think we would. 14 MR. KATZ: Well, it's a factor. 15 16 MR. STIVER: Well, it's going to be. It's somewhat of a 17 MEMBER BEACH: factor. 18 19 MR. STIVER: I mean, I'm trying to 20 look at the resources. Not sure you're going to do all of them --21 22 MR. HINNEFELD: Honestly, a change NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

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1	in the sensitivity of dosimeter, I mean, you're
2	talking from 20 millirem to 40 millirem, maybe,
3	for exchange.
4	MR. STIVER: Yes, you can figure out
5	the maximum number of exchanges that would be and
6	would that be significant in terms of PoC?
7	MR. HINNEFELD: I don't want to
8	offer anymore work if we think we can defer this
9	one and get enough work somewhere else. I don't
10	want to offer to do this.
11	MR. STIVER: Okay. Let's just keep
12	this one in abeyance.
13	MEMBER ZIEMER: And I know we don't
14	base it on numbers, but suppose it was ten people
15	affected, would you still want to do it right
16	now?
17	MR. STIVER: Well, we'll get down to
18	those towards the bottom of the grouping. There
19	are some that are very few cases impacted.
20	CHAIR MUNN: Do I hear defer?
21	MEMBER BEACH: I'm fine with
22	deferring it and maybe getting an idea of what
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294 1 we're even looking at there. 2 MR. STIVER: Then, also, have DCAS look at the number currently affected --3 4 MR. HINNEFELD: Well, do you want us to do that or can we just wait on that? 5 6 MEMBER ZIEMER: If we're deferring it, let's do other stuff. 7 MR. KATZ: We choose to defer it. 8 9 MR. STIVER: Okay. We'll come back 10 to it. CHAIR MUNN: Deferred. 11 MR. STIVER: Deferred. 12 13 CHAIR MUNN: PER-11. 14 MR. STIVER: Okay. This is the K-25 TBD and TIB revisions. This PER was 15 16 initiated in September 2007 and does, indeed, refer to the latest TBDs. In the latest 17 issuance of OTIB-26 and OTIB-52, which we're so 18 19 familiar with, several changes were required to the K-25 external dose TBD, which impacted our 20 methodology. 21 And I have here, the revisions to the 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

external coworker model would affect any claim 1 completed before May 21st, 2005, but there's 2 kind of this narrow window here because the data 3 4 was not available until November of 2004, so it's kind of a small number of cases would be 5 б impacted. Well, 432, at least on that. 7 OTIB-52, okay, we already know about OTIB-52. So it would impact the construction 8 9 trade workers, obviously. So you have two 10 different aspects of it. Ι quess the construction workers may be contributing most of 11 that 432. 12 13 CHAIR MUNN: Do Ι hear any objections to assignment of this? Going once, 14 15 going twice, you're assigned PER-11. 16 MEMBER BEACH: Here's a question. How many of these do you think we're going to 17 I was just wondering if we --18 assign? 19 CHAIR MUNN: Probably 10; maybe 15. 20 MEMBER BEACH: I was just wondering if we couldn't decide if we had questions on some 21 of them, to look at those, just to speed up the 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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1 process a little.

2 CHAIR MUNN: However you'd like to 3 do it, Josie. I don't care.

4 MEMBER BEACH: It's just a 5 suggestion.

6 MR. STIVER: Well, I could suggest 7 something here. It's starting to get down on Page 19 -- you're getting down to where you've 8 got 15 and fewer affected claims. Granted, that 9 10 may not be the best basis for determining whether 11 to proceed. However, we got four of those we have recommended deferring, and so there's 12 13 really only one in that group that we may pick. Well, even now, if you go down here, 14 let's just jump ahead for a second. 15 This is

16 PER-34 on Page 19, Harshaw Chemical. If you 17 don't mind. If everybody's onboard for that we 18 could just take a look at that real quick. And 19 this is, again, a TBD revision.

20 MR. KATZ: Let me just suggest, I 21 don't think it's trivial to consider these 22 one-by-one.

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1	MR. STIVER: Okay.
2	MR. KATZ: So I would just suggest
3	you get as far as you want to get. It'll be
4	plenty, because we're already assigning, so I
5	don't think you should just, sort of
6	MR. STIVER: Jump ahead?
7	MR. KATZ: forget the
8	consideration and just dump them onto them. I
9	think you should just consider the ones as far
10	as you want to consider and then move on in the
11	agenda. We'll have another meeting and more can
12	be assigned.
13	MR. STIVER: Okay.
14	CHAIR MUNN: They'll still be
15	there.
16	MR. STIVER: Seems reasonable.
17	Okay. So, let's see, we just left off on
18	CHAIR MUNN: Can we go to PER-5?
19	MR. STIVER: Yes, PER-5, this was
20	misinterpreted application of external dose
21	factor for Hanford dose reconstruction.
22	MEMBER BEACH: We missed 11 though,
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1 just for --

2	CHAIR MUNN: We've assigned PER-11.
3	MR. STIVER: 11's been assigned.
4	MEMBER BEACH: Oh, I thought we
5	didn't. Okay. Thank you.
б	MR. STIVER: Okay. This PER was
7	produced in June 2006. Thirty-one cases were
8	identified that required re-evaluation. The
9	maximum increase in external dose was nearly 5
10	rem and the minimum was 80 millirem, so these 30
11	cases could be a potential underestimates in the
12	magnitude of now only about 5 rem, which, you
13	know, it could impact a compensation decision,
14	at least close to 50 percent.
15	So again, you got a small number of
16	cases, but it looks like the impact could be
17	significant.
18	CHAIR MUNN: Is there any objection
19	to assigning PER-5?
20	MR. KATZ: Okay. Well, actually,
21	this one, you can't even speak to, Wanda.
22	CHAIR MUNN: I know. I can't vote
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299 1 on it. 2 MR. KATZ: Paul, you can ask Dick this question. 3 MEMBER ZIEMER: Well, okay, so if 4 Josie and Richard --5 б MR. KATZ: Josie and Wanda are out. 7 MEMBER BEACH: No, I can't. MEMBER ZIEMER: Oh, you're both 8 9 out. 10 MR. KATZ: Yes, this is Hanford we're talking about here. 11 MEMBER ZIEMER: I'm a majority of 12 one then. 13 CHAIR MUNN: No, you have --14 MR. KATZ: So you have Dr. Lemen. 15 16 MEMBER LEMEN: I'm still here. MEMBER ZIEMER: Okay, Dick, you got 17 a coin there with you? I don't object. Let's 18 19 go ahead. I'm willing to have them assign the Hanford. 20 MR. KATZ: I think that makes sense. 21 MR. STIVER: 22 That might be a good **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

300 1 one. CHAIR MUNN: You're assigned PER-5. 2 MR. KATZ: PER-5. 3 MEMBER ZIEMER: It's PER --4 5 MEMBER LEMEN: That's okay with me. б Josie, what's your vote. MR. KATZ: No, Josie can't vote. 7 MEMBER ZIEMER: She can't vote. 8 MEMBER LEMEN: Oh, she can't. Oh, 9 10 who is it, just me and Paul? 11 MEMBER ZIEMER: Yes. It's all on your 12 MEMBER BEACH: 13 shoulders. MEMBER LEMEN: All right, Paul. 14 15 MEMBER ZIEMER: Okay. 16 MEMBER LEMEN: I'll go with you. Ι 17 agree. MEMBER ZIEMER: We're going to do 18 19 it. All the blame's on our hands if it's --20 MEMBER LEMEN: I know. It's a heavy burden. 21 22 MR. KATZ: Very good. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com CHAIR MUNN: Can we move on to PER-16?

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2

MR. STIVER: PER-16, this is one we 3 4 considered deferring. This is the 5 implementation of the IREP procedures for claims б near 50 percent PoC. And this is the 30-run 7 average using 10,000 replicates of the Monte Carlo code in order to get tighter statistics. 8 9 And let's see, a little summary 10 here. Okay. It was for PoCs between 45 and 50 percent were revised to increase statistical 11 precision like I 12 just said. The largest increase resulting from the change was 2.27 13 14 percentage points and the largest decrease was 2.71. 15

16 Basically, then these newly established PoC values remained below 50 percent 17 for each claim. So we felt this was pretty 18 19 well-established. The statistical precision 20 was getting better. It didn't appear that this is a significant change. So we thought, you 21 22 know, while it would interesting to look at that,

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302 1 that maybe there's some others that seemed more 2 useful. MR. KATZ: It's just a mechanical 3 4 process. 5 MR. STIVER: Yes, it's a mechanical б process. 7 MR. KATZ: They're pointless to review, I think. 8 MR. STIVER: Yes. So that's where 9 10 we are on PER-16. PER-10, however, looks a little more interesting. This is the effect of 11 the --12 13 CHAIR MUNN: So what are we doing with PER-16? We are removing it --14 MR. KATZ: We're not reviewing. 15 16 CHAIR MUNN: -- from the list, right? 17 MEMBER ZIEMER: Well, at least 18 19 deferring it. MR. STIVER: Yes, either defer or 20 remove. At this point we're just not going to 21 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

303 1 CHAIR MUNN: Well, let's make the 2 decision whether or not we are going to remove it. 3 4 MR. STIVER: I would. If it 5 CHAIR MUNN: is of low б consequence at this moment, then it's not going 7 to likely increase in consequence as time goes Shall we keep this on the list active or 8 on. shall we remove it? I would choose to remove it. 9 10 MR. STIVER: I would agree to remove it. 11 Thank you. 12 CHAIR MUNN: Remove it. 13 MR. KATZ: Josie's shaking her 14 head. She's pondering away. CHAIR MUNN: Now, let's go to PER --15 16 MEMBER BEACH: Yes. MR. KATZ: For the record. 17 MEMBER BEACH: I heard him shake his 18 19 head yes. 20 MR. KATZ: I heard Dick shaking his head too. 21 22 MEMBER BEACH: Okay. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	MR. STIVER: Okay. PER-10, this is
2	the Rocky Flats neutron dose reconstruction
3	project. This one was produced in April of
4	2007. Additional neutron doses relating to the
5	effort of the NDRP made it necessary to reassess
6	completed Rocky Flats DRs. Eighty-eight of
7	these require reevaluation. The science
8	involved here would be a medium level.
9	Let's see, based on guidance for the
10	use of Rocky Flats in ORAU-OTIB-50 2005. Okay,
11	that was the basis for this PER. TIB-50 has been
12	canceled. That information was moved into
13	Technical Basis Document 6. Let's see, there's
14	an October 2010 revision clarified guidance for
15	the use of neutron dosimetry data.
16	It's not clear whether the there
17	may have been inconsistent guidance from 2007 to
18	2010 and it may result in additional
19	questionable dose assessments.
20	CHAIR MUNN: On the other hand,
21	there may not be.
22	MR. STIVER: There may not be.
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305 1 CHAIR MUNN: And so shall we spend 2 \$12,000 to find out? MR. STIVER: Let's see, the cases 3 4 may concern workers at the plutonium production 5 facility from '52 to '69 when workers were б monitored for neutrons using NTA film. The 7 additional neutron dose data may cause an increase or decrease on a case-by-case basis and 8 9 probably would cause a -- I think that's where 10 the complex science comes from. CHAIR MUNN: A great deal has been 11 made of NTA film. 12 13 MR. KATZ: Does this relate at all to the SEC or no? 14 MR. HINNEFELD: I don't think so. 15 16 I remember that, when I was working in the program, we wanted to get the NDRP neutron doses 17 from Rocky and they weren't done yet. And it was 18 19 actually hung fire for us to get it. We thought 20 we were going to get it quite a lot earlier than we did. 21 CHAIR MUNN: A long time. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1 MR. HINNEFELD: But we did get it 2 eventually and so once we had those, those now became Rocky Flats reported exposures for these 3 4 cases, as opposed to what they had told us earlier, so I'm pretty sure that's what prompted 5 6 this PER. 7 MR. STIVER: Probably why. CHAIR MUNN: I think so too. 8 My 9 preference would be to remove it. Does anyone 10 object? 11 MR. HINNEFELD: Remove it? MEMBER ZIEMER: Based on? 12 13 CHAIR MUNN: You want to do it? I don't care. 14 MR. HINNEFELD: Ι don't do any of these things. 15 16 CHAIR MUNN: I know you don't. MR. HINNEFELD: If I'm not talking 17 about this down here, I'm going to be talking 18 19 about something else. 20 CHAIR MUNN: Yes, and we like to keep you busy. 21 MEMBER ZIEMER: What would be the 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

307 1 basis for removing it? 2 CHAIR MUNN: A couple of bases. MEMBER ZIEMER: Okay. 3 4 CHAIR MUNN: One, in my mind, was 5 just given to us by the information about what б followed up this particular PER. And the other 7 is the relative cost against the number of cases that are being affected. 8 MEMBER BEACH: Is any of this going 9 10 to be addressed in the current Work Group 11 deliberations? Will any of this come to play? MR. HINNEFELD: Well, the current 12 work that we're involved in at Rocky is the SEC 13 14 Evaluation Report relates to tritium exposure. 15 MEMBER BEACH: Tritium? 16 MR. KATZ: Yes. MR. HINNEFELD: Now once we deliver 17 that, I don't know whether this would come up or 18 19 not. 20 MR. KATZ: Well, there's two things, though, for the Work Group. 21 There's that, the SEC. 22 They're gearing up, or not NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

308 1 gearing up, but they'll be ready. 2 MR. HINNEFELD: We intend to deliver that --3 4 MR. KATZ: To address that, right. 5 MR. HINNEFELD: -- because then we 6 have to start assessing --7 MR. KATZ: Right. But the other thing the Rocky Flats --8 9 MR. HINNEFELD: -- contractors and 10 make sure that they know we're serious. And I 11 suppose they're listening. We intend to present that in September. 12 13 MR. KATZ: Yes. But the other thing that the Rocky Flats Work Group will be 14 doing is looking at, now, the TBD issues that 15 16 were left behind from SEC actions. MR. HINNEFELD: Yes. 17 MR. KATZ: So that is separate and 18 19 I can't answer your question, Josie, as to whether --20 MR. HINNEFELD: I don't know. 21 MR. KATZ: -- this relates to what's 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 in their, sort of, TBD issues that were remaining 2 after all that SEC work. I don't know. I know there is a matrix that I believe Joe Fitzgerald, 3 4 or someone, updated to prepare for that. Ι don't know what's on it. 5 б MR. STIVER: I can take that as an 7 action to work with Joe and see exactly where they stand. 8 MR. KATZ: Yes, I think it's Joe. 9 Т 10 could be wrong about that. MEMBER BEACH: And for me, I'm okay 11 with deferring this at this time, but I don't 12 think we should remove it. That's just my 13 14 thought. 15 MR. KATZ: Yes, I agree too. Ι 16 don't think -- first, just the fact that it's a limited number of cases should be really not a 17 reason to remove anyway, particularly if it's an 18 19 important complex change that we might worry about how it was done. 20 MEMBER BEACH: And I'm okay with 21 just moving forward and assigning it as well. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

310 So I can do either of those. 1 CHAIR MUNN: Paul? 2 MEMBER ZIEMER: I favor deferring 3 4 for the time-being. 5 MEMBER BEACH: Okay. б MR. STIVER: Well, at least until we 7 sort out what's going on in the Work Group. 8 MEMBER ZIEMER: Yes. CHAIR MUNN: Dick? Defer? 9 10 MEMBER LEMEN: I would say defer. Hello? 11 12 MEMBER ZIEMER: We got you. 13 CHAIR MUNN: Thank you. Got it. 14 MEMBER ZIEMER: We're good. CHAIR MUNN: PER-10 is deferred. 15 16 PER-27? MR. STIVER: 27, 17 Clarksville/Medina Site Profile issue. 18 Some 19 claims completed using information were 20 developed prior to its issuance. Due to TBD changes during the comment resolution process, 21 the dose is assigned to the pre-TBD claims or 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

311 underestimated; approximately 65 of them. 1 And no additional information under 2 here other than that there are no additional TBD 3 revisions since the PER was initiated. 4 5 MR. KATZ: We probably have SECs. б MR. HINNEFELD: We just added 7 Classes to both these places. MR. STIVER: Just add a Class. 8 We got SEC issues now. 9 10 MEMBER BEACH: I think we should go 11 back and automatically re-look at those cases that were done before --12 13 MR. HINNEFELD: No, we did. That's what the PER-27 did. 14 15 MEMBER BEACH: Right. 16 CHAIR MUNN: It closed it. I guess the question 17 MR. STIVER: then would be, how many of those would be 18 19 candidates for the SEC? 20 CHAIR MUNN: Any problem with assigning this? 21 MEMBER ZIEMER: Well, we have the 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

same issue on this. Are these the number of 1 2 cases after the SEC has been --MR. KATZ: No, this is prior. 3 MR. STIVER: This is October 2007. 4 5 It goes back to MR. HINNEFELD: 6 2007. That was probably the number of claims 7 that fit this category that were done before the TBD was finalized. And I don't remember this 8 9 issue at all, so I don't know what the issue was. 10 It was an internal issue, you know, uranium internal issue. That's all off the table now 11 12 anyway. 13 There could be MEMBER ZIEMER: 14 hardly any cases left here. MR. KATZ: I would defer this one. 15 16 MR. STIVER: Yes, this is not going to be a candidate for --17 MEMBER BEACH: And could we look at 18 19 this and see? MR. KATZ: Yes, it's worth figuring 20 out what the SEC --21 MR. STIVER: Defer with an update. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. KATZ: impact was.
2	MR. HINNEFELD: Well, who's looking
3	at it, SC&A or us?
4	MEMBER BEACH: I would say
5	MR. STIVER: I would say you.
6	MR. HINNEFELD: Okay. And what
7	should we tell you about it? I mean, the number
8	of cases that well, first of all, we could find
9	out what the issue was.
10	MR. KATZ: Right.
11	MR. HINNEFELD: What we were doing
12	before and then what the TBD made us do
13	differently.
14	MR. STIVER: Yes, and whether
15	that's even an issue.
16	MR. HINNEFELD: So I can find out
17	what that is.
18	MR. KATZ: And if the SEC takes it
19	off the table completely, then of course,
20	there's no value to this at all.
21	CHAIR MUNN: The recommendation is
22	that this is to be deferred. Do you have any
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314 objection, Dick? 1 2 MEMBER ZIEMER: I hear none. 3 MEMBER LEMEN: No. 4 CHAIR MUNN: No objection. 5 MEMBER ZIEMER: No. б MR. KATZ: No objection. CHAIR MUNN: PER-27 is deferred. 7 MEMBER LEMEN: No. 8 9 MEMBER ZIEMER: Yes, we got you. 10 CHAIR MUNN: Thank you. We got it. MR. KATZ: Thank you. 11 CHAIR MUNN: Next is PER-30. 12 13 MR. STIVER: Okay. This is, again, a Savannah River site TBD revision. So this is 14 also a dated one; December 2007. It addressed 15 16 changes in Rev. 1 of Technical Basis Document 3. This would be the occupational medical. 17 It's been revised three times. Some of these 18 19 revisions would result in an increase in dose for previously completed DRs. 20 Again, 54 may be modified. It may 21 22 not be applicable nowadays, given the SEC. So NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

315 my recommendation would be deferral on that. 1 2 CHAIR MUNN: What is the Committee's desire? 3 4 MEMBER BEACH: Would that come with some action also to look at that to see where we 5 б stand? 7 MR. STIVER: Yes, in any case you're going to have to do the occupational medical 8 doses for anybody who falls outside the SEC. 9 10 MEMBER BEACH: Exactly. MR. STIVER: The only impact for the 11 SEC would be on the number of claims. So if you 12 want to reassess the number of claims. 13 14 MEMBER BEACH: Or just assign it because it needs to be done if it's been reviewed 15 16 three times. MR. STIVER: That would be a Board 17 decision. 18 19 CHAIR MUNN: Paul? 20 MEMBER ZIEMER: I don't have a feeling that these occupational medical doses 21 rarely affect anybody's outcome, do they? 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

316 MR. STIVER: The only time they do 1 2 is if --MEMBER ZIEMER: They'd have to be 3 4 right out --MR. STIVER: -- PFG is involved. 5 б MEMBER ZIEMER: What? MR. STIVER: The only time that I've 7 8 seen any kind of a substantial impact was when a PFG gets done. 9 10 MR. HINNEFELD: Yes, photofluorography was done. 11 MEMBER ZIEMER: Yes. 12 13 MR. STIVER: In this case, I'm not 14 sure. MEMBER ZIEMER: And they were doing 15 16 lumbar spines at Pantex? MEMBER BEACH: This is Savannah 17 River. 18 19 MR. STIVER: No, this is Savannah 20 River. MEMBER ZIEMER: Oh, at which one? 21 Oh, I'm looking at --22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

317 1 CHAIR MUNN: We're on PER-30. 2 MR. STIVER: Yes, I think you're looking at 26. Yes, these are two similar --3 4 MR. KATZ: Wait, so PER-30 is medical doses? 5 6 MR. STIVER: Yes. These are medical doses. 7 MR. KATZ: And the science is high? 8 MR. STIVER: I think there might be 9 10 some complexities. Again, I didn't personally do that review. 11 MEMBER ZIEMER: Well, this says the 12 13 revisions would result in an increase of doses and could be --14 MR. STIVER: I think in determining 15 16 the magnitude of the doses for a given claimant might be what's causing the --17 MR. HINNEFELD: Do we know for sure 18 19 this is only medical? I mean, Savannah River is that Site Profile where it's all one --20 MEMBER BEACH: Yes, it doesn't say 21 it. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

318 1 MR. HINNEFELD: There are no 2 individual --Oh, you know, you're 3 MR. STIVER: 4 right. This is not necessarily related to -okay. That's my mistake. 5 б MR. HINNEFELD: And if I'm not 7 mistaken, there might be a PFG question at Savannah River because they told us for a long 8 time they didn't do them, and we started finding 9 10 the little films that are taken with a PFG for a camera that say, oh, gosh, you really were. 11 12 MR. STIVER: Okay, that changes everything then. 13 MR. HINNEFELD: So there might be a 14 medical, you know, meaning non-PFG to PFG 15 16 decision in there. There might be other decisions as well because it doesn't say it's 17 specifically a medical. 18 19 MR. STIVER: Yes. 20 CHAIR MUNN: Well, Savannah River shows an occupational medical dose section 21 revision effective November 30, 2009. And TIB 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

319 1 MR. KATZ: This is December 2007. 2 3 MR. STIVER: Okay. 4 CHAIR MUNN: Yes. It doesn't show, prior to that, the original --5 б MR. HINNEFELD: Okay. Lori has 7 found the PER and here -- is that the first bullet? 8 CHAIR MUNN: PER-30, it says --9 10 MR. HINNEFELD: Okay. Yes, here are the changes that this PER was written for. 11 Rev. 0 required the urine samples be adjusted to 12 a daily rate by assuming 1.4 liters per day 13 standard rate; however, many samples reported 14 this activity per 1.5 liters, that sounds like 15 16 it would make it go down. Revision 0 provided a table that 17 contained errors in the pre-calculated missed 18 19 intakes for plutonium exposure. The values that were miscalculated in Rev. 0 were corrected 20 in Rev. 1. All the values for type M plutonium 21 22 were too high in Rev. 0 and values for type S were NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1 too low.

2	Because of this, claims used type S
3	values and Rev. 0 required a new dose estimate.
4	Let's see, some dose estimates, including
5	ambient external dose, change in hours from 2000
6	to 2500. TBD included table of maximum
7	site-wide ambient intakes of various isotopes.
8	In that table, the heading for plutonium and
9	uranium were transposed and corrected in 1.
10	Most dose estimates from that
11	would be a computational tool. That tool
12	contained the appropriate values. Some claims
13	well, that seems to be kind of a small deal
14	there.
15	CHAIR MUNN: There is some
16	MR. HINNEFELD: Some of the changes
17	in these two revisions presented phased
18	implementations and this approach TBD is issued
19	with some sections either marked reserved or a
20	specific issue is not covered in order to allow
21	the completion of claims unaffected by that
22	aspect of the dose reconstruction.
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The revision is later issued with 1 2 new information so that the affected claims can be completed. These types of modifications do 3 4 not require an evaluation. In this case, this case was the photofluorography implementation 5 б in Rev. 2. It's quite a hodgepodge --7 MR. STIVER: Yes, there's a whole --MR. KATZ: It's a menu of different 8 little things. 9 10 MR. HINNEFELD: And it could go, some of them go up and some go down. 11 MR. STIVER: Yes, depending on how 12 13 you type this. CHAIR MUNN: Getting into analogous 14 arguments, you name it, there's been a revision 15 16 for it. 17 MEMBER BEACH: So are we going to assign this one? We're not. 18 19 CHAIR MUNN: What is the desire of the Committee? 20 MEMBER ZIEMER: Sounds to me like we 21 22 may need to assign this one. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701

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322 1 MEMBER BEACH: Yes. 2 MUNN: You're assigned CHAIR PER-30. 3 4 MR. STIVER: Okay. 5 CHAIR MUNN: Next item, PER-26; б Pantex. 7 MR. KATZ: Do you want to move on in 8 your agenda? 9 MR. STIVER: How many we got so far? 10 MR. HINNEFELD: I've got five in mine. 11 MEMBER ZIEMER: It feels like we've 12 13 done more than five. 14 MR. KATZ: We deferred a number. (Simultaneous speaking.) 15 16 MR. MARSCHKE: You did ten and we assigned five, deferred four, and we moved one; 17 according to my book. 18 MR. KATZ: I'm just asking you, 19 Wanda, you have a lot of other things on your 20 agenda here. 21 22 CHAIR MUNN: They'll still be there **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

323 1 next time. 2 MR. KATZ: Right. So it's just a 3 matter of what's more important for you to get 4 to. 5 MR. KATZ: I'm fine to carry on. б It's 3:30 right now. 7 CHAIR MUNN: Yes. MEMBER BEACH: It's break time. 8 MR. KATZ: It's break time. 9 10 CHAIR MUNN: All right. We're on break. 11 MR. KATZ: And return at what time? 12 CHAIR MUNN: We'll return in 15 13 minutes, that would make us --14 MR. KATZ: Okay. 3:45? 15 16 CHAIR MUNN: All right. 3:45 is fine. 17 MR. KATZ: Okay. 18 19 (Whereupon, the foregoing matter went off the record at 3:32 p.m. and went back 20 on the record at 3:45 p.m.) 21 MR. KATZ: Okay. So we're ready to 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

324 1 get started again. Dick, are you back on the 2 line? MEMBER ZIEMER: I think he said he 3 4 may -- well, he didn't say he may. 5 MR. KATZ: He was going to return. б MEMBER ZIEMER: Yes. 7 MR. STIVER: He said he might be late. 8 9 MEMBER BEACH: No, that was after 10 lunch. CHAIR MUNN: At the suggestion of 11 the Members here in the room, we will stop 12 working on the PERs, we'll pick those up the next 13 time we meet, and we will move on to the two OTIBs 14 we have listed for after lunch, move from those 15 16 to the IGs, and if we have any time leftover, we'll do the carryover items. 17 Otherwise, we will carry over the 18 19 carryovers. OTIB-37, you want to go for us, Lori? 20 MS. MARION-MOSS: Yes. Elyse, you 21 22 want to --**NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1	MS. THOMAS: Yes. This was one
2	where, you know, there were findings. NIOSH had
3	provided some responses back in 2009, but that
4	was when the database, or I guess the Board
5	Review System, was being designed, or worked on,
6	and so those responses somehow never got entered
7	into the Board Review System.
8	And I don't think they might have
9	been distributed to the Subcommittee and SC&A,
10	but it would have been as an attachment to an
11	email, and I don't know that the Subcommittee has
12	ever really examined those responses.
13	So just in combing through older
14	items in the Board Review System, I came across
15	them, and I went ahead and entered the responses
16	with the original date.
17	CHAIR MUNN: Thank you, Elyse. Do
18	you want to tell us which findings you are
19	speaking to; 2 and 4, correct?
20	MS. THOMAS: Yes, it's OTIB-37,
21	Findings 2, 3, and 4. One of them, I'll have to
22	call them up here on the Board Review System, has
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327 1 we provided a response back in 2009. It just 2 never got entered. 3 CHAIR MUNN: Correct. 4 MS. THOMAS: So you'll notice the 5 status is still open and it says the response is, б uranium enrichment was the purpose of the plant. 7 The statement in the TBD was meant to indicate that bioassays began with plant startup. 8 MR. KATZ: This is OTIB-37. 9 10 MEMBER ZIEMER: Oh, 37. Examining the numbers 11 MS. THOMAS: included in the coworker study, there were as 12 13 many or more workers samples early in the plant's history than in later years. 14 15 CHAIR MUNN: Thank Ι you. 16 appreciate that, Elyse. Do we need to await an SC&A response to that? 17 MR. MARSCHKE: I'm not ready to talk 18 19 on --20 MR. STIVER: I'm not ready on this either. 21 MR. MARSCHKE: -- 37. 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

328 1 CHAIR MUNN: Action item, SC&A, 2 Finding 2, OTIB-37. 3 MR. HINNEFELD: Can we change the 4 status then to in progress? CHAIR MUNN: 5 Change status to in б progress. 7 MR. KATZ: SC&A response needed. Okay. 8 Next item is Item 3, 9 CHAIR MUNN: 10 the finding was that the fitting of the data to a log normal distribution is statistically 11 acceptable, but many times did not represent 12 13 well the data at the high-end of the results. Significant discrepancies between the high real 14 results and the ones generated by the curve. 15 16 And the response that we had was, in August of 2009, you see that response, and today 17 there is a new response from NIOSH. Want to go 18 19 ahead? 20 MS. THOMAS: Yes, I'll read the latest response with the 2012 date. OTIB-37 has 21 been incorporated into ORAU-TKBS-0019-5, which 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

329 is the Portsmouth Gaseous Diffusion Plant 1 2 occupational internal dose TBD. The 95th percentiles are provided, including direction 3 4 to the dose reconstructors about when to apply 5 them. б The TBD will be issued in the near 7 future. 8 CHAIR MUNN: Does SC&A want to postpone that and include that in their action 9 10 item? MR. STIVER: I would want to include 11 it in the action item. 12 13 MR. MARSCHKE: Well, yes, but the 14 only thing is, we can't really do too much until the TBD has been issued. 15 16 CHAIR MUNN: Okay. It's still in 17 your court. MR. STIVER: Okay. 18 19 CHAIR MUNN: The status should not 20 change. MR. STIVER: Well, wait a minute. 21 MR. MARSCHKE: Well, the status can 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com 1 change to in progress.

2 MEMBER BEACH: In progress. well, that's 3 CHAIR MUNN: Oh, 4 right, because it's still open because it wasn't 5 caught; the August one. It wasn't caught. And б Finding 4, when NIOSH uses the 50th percentile dose distribution it should not be understood as 7 the 50th percentile of the worker's intake 8 9 rates. 10 They correspond to a model intake rate that will fit the chosen percentiles for 11 some periods of time when the urine excretion 12 13 rates will be underestimated and some periods of time when they will be overestimated. 14 This observation is not critical to 15 16 the intake rate model, but instead, is an argument in favor of raising the percentile from 17 which the intake should be derived. We have a 18 19 response that was made in August of 2009, now just being incorporated for the first time. 20 You want to read that? 21 22 Okay. It says, this MS. THOMAS: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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1 finding isn't completely clear. It seems to be describing the variation of individual data 2 points from the fitted line that describes the 3 4 data. If it is saying that a larger percentile of the bioassay results should be used, from 5 б which a larger intake rate would be derived, the 7 same variation of those individual points from the line that fits them will be present. 8 If this finding means to convey that 9 10 the use of the full distribution intake, rather than a higher percentile, like the 95th, may not 11 be claimant-favorable in every case, then NIOSH 12 concurs and the document has been changed as 13 noted in the response to Finding 3. 14 15 And that response was, essentially, 16 drafted in 2009, which is why it has that date, but that last phrase, you know, was added to the 17 response in 2012. 18 19 CHAIR MUNN: Right. All right. 20 I'm assuming that also goes in the action item for SC&A. 21 That goes in the action 22 MR. STIVER: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

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1	item as well. I need to get a better
2	understanding of what transpired and why.
3	CHAIR MUNN: Very good. And again,
4	status changes.
5	MR. MARSCHKE: In progress?
6	CHAIR MUNN: In progress.
7	MR. STIVER: In progress.
8	CHAIR MUNN: Thank you very much,
9	folks. We appreciate that. Is there any other
10	activity with respect to OTIB-37? Any comment
11	that needs to be made? If not, let's move on to
12	the next item on the agenda, which would be
13	OTIB-54, the status of the new revision.
14	MS. THOMAS: Yes, this is Elyse
15	again, and the OTIB-54, the revision to it, has
16	not been issued and so NIOSH is waiting to
17	respond to those SC&A comments until the
18	revision is actually completed. So we're not
19	there yet, but we're moving in that direction.
20	CHAIR MUNN: Do we have any
21	expectation as to when it might be available?
22	Any guesstimates?
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1	MS. THOMAS: That, I'm not sure.
2	MR. HINNEFELD: Well, we have a
3	project schedule that is fluid.
4	CHAIR MUNN: Right.
5	MR. HINNEFELD: Okay, because we
6	always have a newest hot issue to go work on,
7	like, right now it's Rocky Flats and Los Alamos
8	to make sure those are ready for September. So
9	we make up these project schedules with the
10	understanding that they're fluid.
11	This schedule, I hate to put a lot
12	of stock in this, but it looks like this is about
13	scheduled for somewhere in the October time
14	frame now, with the caveat that that could
15	change, and in fact, this may not even be the most
16	up to date because of the resources that are
17	being required elsewhere.
18	So you're talking about, you know,
19	not in the next couple of weeks, but with any
20	luck, by the end of the year.
21	CHAIR MUNN: Going to classify it as
22	a carryover with probable completion before
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334 1 year-end. MR. HINNEFELD: Well --2 probable 3 CHAIR MUNN: Or by 4 year-end. That's close enough. 5 MR. KATZ: Okay. So it does not б need to be on the agenda for the next meeting. 7 MR. HINNEFELD: I mean, if you would ask us, is it done? 8 MR. KATZ: Are you ready? 9 10 MR. HINNEFELD: Yes. CHAIR MUNN: Yes, I'll have it as a 11 placeholder. 12 13 MEMBER ZIEMER: Just a question, is that an ORAU OTIB? 14 15 MR. HINNEFELD: Yes. 16 CHAIR MUNN: Yes, it is an ORAU --MEMBER ZIEMER: Why am I not seeing 17 it on the Board Review System? I see 51, 52, 57. 18 19 CHAIR MUNN: No, OTIB-54. We'll 20 get it for you. MEMBER ZIEMER: Well, aren't they 21 normally in order in here? 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	CHAIR MUNN: No.
2	MEMBER BEACH: Not necessarily.
3	MEMBER ZIEMER: Not necessarily.
4	CHAIR MUNN: No, they were grouped
5	by when they were assigned.
6	MEMBER ZIEMER: Oh, that's right.
7	CHAIR MUNN: So if you put it in your
8	search block, you'll pull it up.
9	MEMBER ZIEMER: Got you.
10	CHAIR MUNN: All right. Let's move
11	on to the IGs. We'll start with IG-001.
12	MR. MARSCHKE: At the last meeting
13	SC&A was asked to look at the revision, the
14	recent revision, to IG-001 and see whether or not
15	or see how many outstanding issues could be
16	closed after that revision. And back in May, I
17	sent to the Work Group, or to the Subcommittee,
18	an email giving you the review Kathy Behling
19	did that review, and I sent the Subcommittee a
20	summary of that.
21	And I'm working desperately here now
22	trying to get up to speed. And it looks like
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336 1 what we did was, Kathy went through and she 2 identified a number of the non-closed issues, which --3 CHAIR MUNN: Which is still about a 4 dozen or so as I recall. 5 б MR. MARSCHKE: Which could be 7 closed, or some of them could be closed, and some of them, we're still going to be recommending 8 9 that they still remain open. I'm just trying to 10 get this set up here. CHAIR MUNN: Did we get the system 11 populated? 12 13 The database has MR. MARSCHKE: 14 been populated. I'm just trying to figure out 15 which ones we want to go to. We want to go to 16 Issue Number 1, which, we're changing our recommendation from transferred to close. 17 We want to go to Issue Number 8. 18 19 CHAIR MUNN: Shall we take them one 20 at a time or do you want to run through --MR. MARSCHKE: I want to make some 21 22 notes here, which one we want to go to. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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337 1 CHAIR MUNN: Okay. 2 MR. MARSCHKE: 18 was changed, 21 was changed, 23 was changed. Okay. Now, I want 3 4 to go to the -- okay. IG-001. Okay. In 5 Finding Number 1, basically, the finding was б covered. Finding 1 and Finding 19 are the same, 7 so at this point, SC&A is recommending that Finding 1 be closed since it's a duplicate of 8 Finding 19. 9 10 CHAIR MUNN: Committee Members, do you have your data --11 MEMBER BEACH: So it remains open in 12 13 19? It shows open. That's why I was --14 MR. MARSCHKE: It shows it being 15 open, yes. 16 CHAIR MUNN: So we're closing Number 1 if you have no objection. 17 Are you reading Number 1; the current finding? 18 It's 19 dated May. 20 MEMBER BEACH: May 7th? CHAIR MUNN: Yes, right. 21 MEMBER ZIEMER: And Number 19 is 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 much more extensive than Number 1, so you're saying that Number 1 is like a subset of 19. 2 They're not identical. There's a lot more stuff 3 4 in 19. MR. MARSCHKE: Well, what happened 5 б was, 19 -- what I think -- yes, you see, starting 7 with Issue 19, or actually, starting with Issue Number 18, you're on Rev. 2 of IG-1. Findings 8 Numbers 1 through 17 are on Rev. 1. 9 10 So what Kathy did was, she did both the reviews, and now she's doing this, you know, 11 she did, also, this for today, she looked at the 12 previous issues and Finding 19 is basically just 13 saying a deficiency identified under Rev. 1 14 review was a fragmented structure and illogical 15 16 sequence of the information here in the finding resolution process. 17 NIOSH agreed with SC&A's comments, 18 19 they were constructive, and future revisions 20 would include changing the structure. However, no such modifications were introduced in Rev. 2 21 So it's really kind of just relating 22 of IG-1. NEAL R. GROSS

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1 the two findings on structure of the document. CHAIR MUNN: Let me interject here 2 IG-001-01 has moment, Steve. 3 just no а technical issue in it. It is deficiencies with 4 procedure layout, include fragmented structure, 5 б excessive amount of useless data, and historic 7 background in the main body, and critical data for dose reconstruction found in the appendices 8 rather than the main body. That was the issue. 9 10 The issue is now considered a subset of Finding Number 19, the latter one being a 11 finding on the later revision of this IG. 12 Does anyone have any problem with closing Finding 1? 13 Dick? 14 I'm okay. 15 MEMBER LEMEN: 16 CHAIR MUNN: Hearing no objection, Steve, please note that Finding 1 has been 17 accepted by the Subcommittee as closed. 18 19 MEMBER ZIEMER: Just a procedural 20 question here, we're basically closing it because it's covered again in the other finding. 21 22 That's correct. The CHAIR MUNN: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

340 other finding --1 2 MEMBER ZIEMER: But the other finding --3 4 CHAIR MUNN: Is much more 5 extensive. б MEMBER ZIEMER: -- is number what; 19? 7 8 CHAIR MUNN: 19. MEMBER ZIEMER: And that's not been 9 10 closed. That's still 11 CHAIR MUNN: No. 12 open. 13 MEMBER ZIEMER: It seems to me, when we say it's closed, we should reference the fact, 14 in essence, the issue hasn't been closed. 15 16 CHAIR MUNN: No, this finding is closed and it's closed because, as the last --17 MEMBER ZIEMER: Because it's 18 covered in the --19 CHAIR MUNN: -- item states it's 20 covered under Finding 19. 21 22 MEMBER ZIEMER: Okay. I guess I **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

341 1 didn't open the --2 CHAIR MUNN: That wording appears in the text. 3 4 MEMBER BEACH: The last one, yes. 5 CHAIR MUNN: Item 1 is now -б MEMBER ZIEMER: Igotit. I see it. 7 Okay. CHAIR MUNN: Okay? 8 MEMBER ZIEMER: I hadn't seen that 9 10 last comment. CHAIR MUNN: Item 1 is now closed. 11 12 MEMBER ZIEMER: Yes. Okay. Good. 13 CHAIR MUNN: Go ahead, Steve, once 14 you finish there. Didn't mean to provide you with a bow wave. 15 16 MR. MARSCHKE: I think I got it. The Committee has determined that this finding 17 is closed since the concerns raised by this 18 19 finding are covered in Finding 19. 20 MEMBER ZIEMER: That's good. That satisfies Dr. CHAIR MUNN: 21 And Dr. Ziemer being satisfied, we can 22 Ziemer. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com 1 move on to Item 2.

2	MR. MARSCHKE: Well, Item 2 is
3	basically a guidance in the again, in Kathy's
4	review of Revision 3, we found that the guidance
5	for film/TLD uncertainty in neutron source have
6	not been addressed in Revision 3. Note, the
7	revision or provision on finding and the lack of
8	guidance on dosimetry and uncertainty in
9	calculation of occupational medical doses,
10	which was resolved in Rev. 2. The finding
11	should remain in abeyance.
12	That's the latest SC&A position.
13	The actual finding was guidance for deriving
14	film and TLD dosimeter uncertainty neutron dose
15	from source term and occupational medical dose
16	using an x-ray machine. Operating parameters
17	requires data and resources that are not
18	available to the dose reconstructor.
19	And what Kathy is saying is that, for
20	the film badge/TLD uncertainty and neutron
21	source, that remains true.
22	MEMBER BEACH: So does that make it
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343 1 a NIOSH action? 2 CHAIR MUNN: So a portion of it's still open. Is Rev. 3 out? 3 4 MR. MARSCHKE: Rev. 3 is out. 5 CHAIR MUNN: So we have the third 6 revision and still don't have this particular 7 finding covered. It's in abeyance for now, so no change in that. It would appear to be a NIOSH 8 action. 9 10 MR. MARSCHKE: Finding --MR. HINNEFELD: This is Stu, can we 11 talk about this one just for a little bit here. 12 13 CHAIR MUNN: Yes, why not? Is the issue here 14 MR. HINNEFELD: that it doesn't provide sufficient guidance for 15 16 individual dose reconstructors? Because dose reconstructors don't use this document. 17 T'm struggling with this one a little bit here. 18 19 CHAIR MUNN: Is this an item that needs to be discussed? 20 MR. HINNEFELD: Well, it'll be for 21 us to come back, I think, with additional 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

information if we want to discuss this. 1 2 CHAIR MUNN: Right. But to me, I mean, 3 MR. HINNEFELD: 4 guidance for film and TLD uncertainty and -well, I don't know about neutron source term. 5 б Normally, that information is all incorporated 7 into some other document, which is then used to build the tool that the dose reconstructor uses. 8 9 CHAIR MUNN: Right. 10 MR. HINNEFELD: You know, this is sort of like a principles, or concepts, sort of 11 document rather than any specific guidance. 12 You know, TBDs are supposed to take these things 13 into consideration when they're written, but no 14 one actually picks this thing up and utilizes it, 15 16 other than, like, a TBD writer. MR. MARSCHKE: Stu, this is kind of 17 what you say, back in 2005 --18 19 MR. HINNEFELD: Yes. 20 MEMBER ZIEMER: Right. MR. MARSCHKE: -- that it's not used 21 by individual dose reconstructors. 22 It's a NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 high-level document. But I think what the key 2 thing, and the reason why it's in abeyance is, however, the comment is valuable feedback and 3 future revisions of this document will be made 4 in light of it. 5 б Revisions that incorporate the comments will be made as time is available. 7 Т think it was that second to last sentence there 8 saying that future revisions of the document 9 10 will be made in light of it. MR. HINNEFELD: Okay. 11 Well, the next 12 MEMBER BEACH: comment says that it's a low-priority for 3, 13 medium priority for 1 and 2. What does that 14 15 mean? 16 MR. MARSCHKE: Well, if you look, again, at the way the comment was written; Item 17 1 was film and TLD dosimeter uncertainty; Item 18 19 2 was neutron dose from source term; and Item 3 20 was occupational medical dose. So they're saying that the medical dose has a low priority 21 22 and the other two have a medium priority. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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346 1 CHAIR MUNN: May we make a response to that a NIOSH action --2 It looks like the --3 MEMBER ZIEMER: CHAIR MUNN: -- to give you a chance 4 to look at it? 5 б MEMBER ZIEMER: 2007 comment _ _ 7 from SC&A has acknowledged some revisions; October 29th comment. The 8 uncertainty calculation of occupational medical exposure 9 10 has been modified. The neutron flux equation has removed, the section describing 11 been assessing neutron dose from source term, and 12 then it says the recommendation remains the 13 14 same, so I'm a little confused by that. It says all these things have been 15 16 done, but what? Nothing's changed? CHAIR MUNN: No, they're focused in 17 on only one of those aspects and that is, the film 18 19 and TLD uncertainty, and the neutron source term hasn't been addressed. 20 The other things have dropped out, but guidance for film and TLD 21 22 uncertainty and the neutron source term have not NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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347 been addressed in Rev. 3. 1 2 The occupational medical dose and dosimeter uncertainty has dropped out. 3 MR. MARSCHKE: So SC&A did address 4 Well, actually, probably Rev. 5 those. 2 6 addressed those. 7 CHAIR MUNN: Yes, they've been addressed. 8 9 MR. MARSCHKE: They've been 10 addressed by Rev. 3. MR. STIVER: That's acknowledged in 11 Kathy's response here. 12 13 CHAIR MUNN: So we're asking NIOSH to take a look at this issue again and see where 14 they stand on the film and TLD uncertainty, and 15 16 the neutron source term. The status still remains in abeyance because it's still being 17 worked and waiting for coverage somewhere or our 18 19 closure of this item upon further information. 20 Okay. I don't want to move off of it unless you're happy. 21 MR. HINNEFELD: I mean, well, we're 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 just going to have to read the original finding 2 and kind of piece this back together --3 CHAIR MUNN: Right. 4 MR. HINNEFELD: -- to figure out what exactly is missing. 5 CHAIR MUNN: Right. 6 7 MR. HINNEFELD: You know, what exactly have we not fixed? Because it's not 8 clear. 9 10 MEMBER ZIEMER: Ι quess it's 11 guidance for film versus TLD uncertainty. MR. Well, it 12 HINNEFELD: has something to do with the neutron source term. 13 14 Apparently there's some comment about a neutron 15 source term technique that we include in there 16 that never got resolved. 17 MR. MARSCHKE: You may want to, also, I mean, look at way back to January 2005, 18 19 you know, report. That was the first one. 20 MR. HINNEFELD: Yes, the first one. MR. MARSCHKE: The very first one, 21 because there'd be more information in that 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

349 1 report than there is in the BRS. 2 MR. HINNEFELD: Yes, right. See, that's what I'm saying. I've got to go back and 3 4 look at that first report --MR. MARSCHKE: Let me look at that 5 б first report. 7 MR. HINNEFELD: -- and then figure out which pieces of which are fixed and not. 8 9 CHAIR MUNN: Action on Finding 10 Number 2; NIOSH; in abeyance; no change. The 11 next one? MR. MARSCHKE: 3, 4, 5, 6, and 7 are 12 already closed. 13 14 CHAIR MUNN: Correct. MR. MARSCHKE: So the next one is --15 16 CHAIR MUNN: We're down to 8. MR. MARSCHKE: -- Number 8. 17 And Kathy reviewed, and this is Kathy, not Hans, Rev. 18 19 3 of IG-1 has included the use of more practice 20 methods, such as employee neutron to dose photon ratios. SC&A recommends closing this finding. 21 Does the Committee 22 CHAIR MUNN: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

350 have any objection to closing this finding? 1 2 MEMBER ZIEMER: Close. 3 CHAIR MUNN: Steve, you may identify -- Josie? 4 5 MEMBER BEACH: No. Any objection? б CHAIR MUNN: 7 Steve, you may indicate that the Subcommittee has accepted SC&A's recommendation and has 8 closed Finding 8. 9 10 MEMBER BEACH: So isn't, like, IG-1 slash 24 slash -- this says 33, some of them say 11 35, I thought that was how many in total. 12 The number changed on me. So is that something --13 Well, remember, we CHAIR MUNN: 14 15 have this particular entry is covering two 16 revisions now, actually, into the third revision. 17 MEMBER BEACH: Oh, so there may have 18 19 been more findings. 20 CHAIR MUNN: Yes. MEMBER BEACH: Okay. 21 22 MR. MARSCHKE: Actually, what those **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

1 numbers after the finding number are, they indicate the page in the January 17th, 2005 2 report where you will find that discussion, or 3 4 in the case of the findings which are on the second Rev., the page in the 2007 document, which 5 б were the findings. 7 MEMBER BEACH: Thank you. CHAIR MUNN: And you closed 8. 8 The next one that I see open is 12. 9 10 MR. MARSCHKE: 12 is in abeyance. CHAIR MUNN: And the latest 11 information we have from Kathy? 12 13 MR. MARSCHKE: There has been no modification introduced into Revision 3 of IG-1 14 to either address the fact that the PA geometry 15 16 dose conversion factors are in error and should not be used or recommend the use of a dosimetry 17 location correction factor. Finding should 18 19 remain in abeyance. Another action for 20 CHAIR MUNN: NIOSH it would appear. As long as you're 21 22 looking at that whole thing anyway, might as well NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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1 do them all, right? All right.

13 and 14, 15 are 2 MR. MARSCHKE: indicated as being closed. That leads to 16, 3 4 Kathy's response, there has been no discussion added to Revision 3 of IG-1 that addresses 5 б environmental uncertainties. Finding should 7 remain in abeyance. CHAIR MUNN: Finding 16? Action 8 9 NTOSH? 10 MR. MARSCHKE: Basically, if you could see way back to the initial response of 11 NIOSH back in 2005, OCAS will revise the 12 uncertainty language in various sections so that 13 it reflects the basis of the uncertainty 14 15 approaches utilized in the program. 16 CHAIR MUNN: Yes, NIOSH will take it as an action item. And that brings us to 17. 17 MR. MARSCHKE: Revision 3 does not 18 19 resolve the issue of consistency or address the 20 need for professional judgement. What is that all talking about? The issue is, the finding 21 22 was, guidance for the selection of uncertainty NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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1 distributions for total organ dose raises 2 questions of consistency requires and professional judgement. 3 4 The initial OCAS response was, OCAS 5 will revise the uncertainty language in various б sections so that it reflects the basis of the 7 uncertainty approaches utilized in the program. And I guess that was not done. 8 Can we add 17 to the 9 CHAIR MUNN: 10 action items for NIOSH to review? This brings us to an open item. 11 This is the 12 MR. MARSCHKE: beginning of the Rev. 2. 13 CHAIR MUNN: We're in Rev. 2 stuff. 14 The comments that 15 MR. MARSCHKE: 16 were initially made on Rev. 2. So these are all open because probably this is the first time 17 we've discussed them here in the Subcommittee. 18 19 CHAIR MUNN: However, Kathy says Rev. 2 has cleaned this one up and recommends 20 that the finding is closed. Any objection? 21 22 MEMBER BEACH: No. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1 MEMBER ZIEMER: No. 2 Without objection, CHAIR MUNN: Steve, you may say that the Subcommittee has 3 4 accepted SC&A's recommendation. This finding 5 is closed. I don't think we have to debate very б much on Finding Number 19. We spoke to it 7 earlier when we were talking about Finding 1. And the recommendation from SC&A is 8 9 that there's been no change in the structure and 10 they recommend keeping it open. We've already said that. 11 12 MR. MARSCHKE: Do you want to keep it open or keep it in progress? 13 14 MEMBER BEACH: In progress. 15 CHAIR MUNN: In progress. 16 MR. MARSCHKE: That's Finding 19. CHAIR MUNN: Yes. And that will be 17 another NIOSH action with regard to IG-1. 18 19 Number 20. 20 MR. MARSCHKE: 20. MUNN: Kathy 21 CHAIR says, the 22 methodology for assessing neutron dose from **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	source term has not changed in Rev. 3. SC&A's
2	recommendation is to keep the finding open. I
3	think she means active.
4	MR. MARSCHKE: Yes.
5	CHAIR MUNN: And it would,
6	therefore, change its status to in progress, but
7	it would be a NIOSH action. Any objection?
8	MEMBER BEACH: No.
9	CHAIR MUNN: Next finding is
10	Finding Number 21. I'm going to read to you
11	while Steve's busy typing. Many technical and
12	site-specific documents have been published
13	since the release of IG-1, Rev. 1; however, Rev.
14	2 of IG-1 does not consistently direct the dose
15	reconstructor to these technical documents.
16	And Kathy's comment is that, Rev. 3
17	didn't include any wording that would direct the
18	dose reconstructor, but it's nearly the same as
19	Finding 22, so she's recommending closing it.
20	Finding 22 says, IG-1 should, but does not,
21	direct the dose reconstructor to technical and
22	site-specific documentation where the DR can
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356 1 find more specific guidance. 2 Sounds like the same thing actually. objection accepting SC&A's 3 Any to 4 recommendation to close 21, as it's covered in 5 22? б MEMBER BEACH: No. 7 MEMBER ZIEMER: No objection. CHAIR MUNN: If not, Steve, on 21, 8 9 say Subcommittee accepts SC&A's you can 10 recommendation as the finding is covered in Finding 22. 11 Question. 12 MEMBER ZIEMER: Stu, 13 can you remind us now, on these IG documents, and they're 14 not used directly in dose reconstruction. They are guidance. Are they 15 16 guidance for dose reconstructors? MR. HINNEFELD: Well, they're sort 17 of foundation documents for the writing of Site 18 19 Profiles and whatever files from those, like, tools and things like that. 20 These are some principles. Remember, IG-1 and --21 22 MEMBER ZIEMER: Right. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. HINNEFELD: let's just say
2	IG-2, IG-1 is like the first thing ever written
3	when we didn't know how anything was going to
4	work.
5	MEMBER ZIEMER: Right. But see,
6	they're asking that it direct the dose
7	reconstructor to this technical document.
8	MR. HINNEFELD: I think we should
9	all remember that.
10	MEMBER ZIEMER: If the dose
11	reconstructors don't read this
12	MR. HINNEFELD: No.
13	MEMBER ZIEMER: what's the point
14	of making that change?
15	MR. HINNEFELD: Well, I don't think
16	we're going to. In fact, when we get to our
17	response to these things that's, essentially,
18	what we're going to say. I want to make sure I
19	follow through this and see what's being talked
20	about, but our response is going to say, any of
21	these findings that have to do with, you know,
22	a dose reconstructor confusion or insufficient
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358 1 specificity to the dose reconstructor should go away because dose reconstructors don't read 2 these things. 3 4 MEMBER ZIEMER: Don't read these. MEMBER BEACH: Do they still use 5 б this document when they're writing the lower 7 documents though? MR. HINNEFELD: Well, I mean, to be 8 9 honest, I don't know who refers to this anymore. 10 It's sort of a principles sort of thing. CHAIR MUNN: It's a historic thing, 11 12 yes. 13 MEMBER ZIEMER: But they're asking for this to tell the dose reconstructors --14 15 MR. HINNEFELD: By now, when you've 16 been doing this program for eight or ten years, you know, you don't have to refer back to this, 17 you know what's being done, and what's accepted, 18 19 and what's being done. 20 MEMBER BEACH: Yes. MEMBER ZIEMER: See, I'm concerned 21 22 about having to spend time revising a document **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

359 1 to tell something to dose reconstructors when 2 they don't even use this. CHAIR MUNN: Well, but we will make 3 4 that decision when we get NIOSH's response. 5 Right. That's MEMBER ZIEMER: 6 fine. I was concerned that we were tasking, not 7 tasking, but suggesting suddenly to NIOSH that they do a lot of extra work for something that's 8 superfluous. 9 10 CHAIR MUNN: No, we just want to close IG-1. 11 MEMBER ZIEMER: We want to close it. 12 13 Okay. 14 CHAIR MUNN: We want to get it to where it needs to be so that we don't have to be 15 16 concerned with it too much anymore. MEMBER ZIEMER: Well, I was sort of 17 thinking maybe we could close it without going 18 19 through that. CHAIR MUNN: Good luck. 20 No, I don't think so. 21 22 MEMBER BEACH: Still got to answer NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com it.

-	10.
2	MEMBER ZIEMER: If we don't think
3	that's the answer, we don't have to. I don't
4	think we have to say that they have to respond
5	to that statement. That's my humble opinion.
6	CHAIR MUNN: IG-22 needs to be
7	MR. HINNEFELD: Just to stir the
8	pot, SC&A is your contractor and you can say,
9	well, thank you, Mr. Contractor, but we're not
10	going to convey these on, we're going to close
11	them without conveying them on to denial.
12	MR. KATZ: I don't know how you
13	record John Stiver's look in here. That was
14	good. I like that.
15	(Laughter.)
16	CHAIR MUNN: We can show Item 22 as
17	in progress.
18	MR. HINNEFELD: Our contractor
19	writes things that we don't convey on to the
20	Board.
21	MEMBER BEACH: We're almost done.
22	MR. KATZ: You can request, but
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361 1 Wanda's not biting. 2 I'm not biting. CHAIR MUNN: Sorry. 3 4 MEMBER BEACH: Now moving on to 23? 5 CHAIR MUNN: 23, yes. б MEMBER BEACH: Recommended 7 closing. MR. HINNEFELD: Well, since 21 was 8 9 closed because of 22, we have an action on 22, 10 right? 11 CHAIR MUNN: Yes, you do. 12 MR. HINNEFELD: Okay. 13 CHAIR MUNN: You are on my list and I'll go through the finding numbers with you when 14 we're done here, that I have, to make sure we're 15 16 on the same page. Kathy says, Rev. 3 does add working to clarify the evaluation of missed 17 neutron data by recommending the use 18 of 19 site-specific neutron to photon dose ratios, and SC&A recommends closing the finding. 20 Which one are we on MR. STIVER: 21 here? 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MEMBER ZIEMER: 23.			
2	MR. STIVER: 23? Oh, okay.			
3	CHAIR MUNN: 23. Any objection			
4	from the Subcommittee?			
5	MEMBER BEACH: No.			
6	MEMBER ZIEMER: Let's close it.			
7	CHAIR MUNN: If not, Steve, please			
8	indicate on 23 that the Subcommittee accepts the			
9	recommendation of SC&A and has closed this			
10	finding.			
11	MEMBER BEACH: So, Stu, is that the			
12	same with IG-003 and 005 as well? Are those,			
13	like, parent documents?			
14	MR. HINNEFELD: Yes, see, I'm			
15	trying to remember which ones those are.			
16	CHAIR MUNN: All IGs are.			
17	MEMBER BEACH: All IGs are.			
18	MR. HINNEFELD: Well, I know the			
19	implementation guidance, which one's 3?			
20	MR. STIVER: 3 and 5, that's a			
21	separate issue. That had to do with the			
22	two-pager subject selection.			
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1	MR. MARSCHKE: Let's finish up.			
2	CHAIR MUNN: Let's not go there			
3	until we finish.			
4	MR. STIVER: That's something			
5	different.			
б	MR. HINNEFELD: 1's surrogate data.			
7	MR. KATZ: 1 is surrogate data.			
8	MEMBER BEACH: Yes, 1 is surrogate			
9	data.			
10	MR. MARSCHKE: Let's finish up.			
11	CHAIR MUNN: Let's don't go there			
12	until we finish with			
13	MR. KATZ: Yes, 4 is surrogate data.			
14	CHAIR MUNN: IG-1. The last			
15	item that we have is Finding 24 and Finding 24,			
16	in the response from SC&A says, Rev. 3 does not			
17	cover correct PA geometries, address			
18	environmental uncertainty associated with			
19	dosimeters, provide more specific guidance for			
20	selection of uncertainty distributions.			
21	SC&A's recommendation is that the finding remain			
22	open.			
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1 Again, we would interpret that to mean change the status to in progress. 2 And without argument, I hope, Finding 24 becomes the 3 last of these items that will be NIOSH action 4 upcoming. Is that acceptable to all? 5 б MEMBER ZIEMER: Yes. 7 MEMBER BEACH: Yes. CHAIR MUNN: Then, Steve, you may 8 9 say as much on your screen. And --10 MEMBER BEACH: So the last revision was in 2007 for IG-001, is that correct? 11 CHAIR MUNN: 12 No. 13 MR. HINNEFELD: No. MEMBER BEACH: Because that's what 14 15 came up here. 16 MR. MARSCHKE: Well, that's а question that Lori and I were talking about at 17 lunch time as to, when you click on the link to 18 19 the document that was reviewed, which document 20 do you want to be pulled up? Do you want the document which the 21 22 findings are associated with to be pulled up, in **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

this case that would be difficult because 1 there's two different revisions of that document 2 in which these findings are associated with, or 3 4 do you want the most recent revision of the document to be pulled up? 5 б MEMBER BEACH: I would prefer the 7 most recent. That's just me. CHAIR MUNN: But if we had the most 8 recent, then we don't have the raw data from 9 10 which the finding was derived. MR. MARSCHKE: But we might have the 11 resolution to the finding. 12 13 CHAIR MUNN: Well, can't we go to later revisions elsewhere? This also begs the 14 question as to why we could not have more than 15 16 one revision, if that's necessary, in our BRS. I quess, from my 17 MR. MARSCHKE: point of view, it was very easy to say that the 18 19 IT people could put multiple links in here; Rev. 20 0, Rev.1, Rev. 2, Rev. 3, and link to multiple versions of this document. But again, that just 21 complicates the, you know, programming of this 22 NEAL R. GROSS

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366 1 thing. 2 CHAIR MUNN: Let's talk offline or have some email exchanges about whether or not 3 4 this is a smart thing to do and how to address it so that we can easily have access to pulling 5 6 up more than one revision. MEMBER ZIEMER: Are we limited to 7 one? 8 CHAIR MUNN: At this moment, so far 9 10 as we know, we are, but we don't know. 11 MR. HINNEFELD: That's a question 12 for our programmers. 13 CHAIR MUNN: Yes. MR. MARSCHKE: Well, right now, the 14 thing, just basically, what you do is you put 15 16 your cursor on the document name and so you'd have to redesign this somewhat. 17 Well, not if the MEMBER ZIEMER: 18 19 document name was basically a file with all three documents or just have them all in there. 20 The PDF size isn't limited, is it? 21 22 Let's don't try to CHAIR MUNN: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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367 1 solve it today. Lori, can you setup а 2 teleconference with at least the three of us --3 MS. MARION-MOSS: Yes, I can. 4 CHAIR MUNN: -- to try to at least 5 identify some potential solution we could bring 6 to the Subcommittee next time? 7 MS. MARION-MOSS: Okay. CHAIR MUNN: 8 Okay. MEMBER BEACH: Yes, because the one 9 10 I pulled up when I hit on that document was 2007 That's why I asked if that was the 11 Rev. 3. latest. 12 13 MS. MARION-MOSS: Yes, it is. 14 MEMBER BEACH: So it is? Okay. 15 MR. MARSCHKE: Rev. 3 or Rev. 2? 16 MEMBER BEACH: I had pulled up Rev. 3. 17 MR. HINNEFELD: Rev. 3 is linked. 18 19 MEMBER BEACH: Okay. So I think 20 you're right, that's a good technical call, Wanda. 21 CHAIR MUNN: Okay. We'll do that. 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	And, Stu, here are action items from IG-1				
2	findings that I have listed on my list as action				
3	items for you; Findings 2, 12, 16, 17, 19, 20,				
4	22, and 24.				
5	MR. HINNEFELD: Exactly the ones I				
б	have.				
7	CHAIR MUNN: Very good.				
8	MR. HINNEFELD: That's astounding.				
9	CHAIR MUNN: It really is. Well,				
10	it's just great minds working in the same camp.				
11	At this juncture, we are going to discontinue our				
12	following agenda and we'll carry over any item				
13	that has not been covered. We need to talk very				
14	quickly about when our next meeting is going to				
15	be and how we can arrange that.				
16	Obviously, since we had so many				
17	carryovers, we have a good agenda to start with,				
18	but we need some time to work on what we've got.				
19	MR. KATZ: Right. I mean, there's				
20	not that much work involved with these; what's				
21	left on the agenda. Although 3 and 5				
22	CHAIR MUNN: Well, we had a lot of				
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369 1 OTIB fun stuff. Maybe not. 2 MEMBER BEACH: What's happening with the two-pagers? Is everything out that 3 needs to be reviewed? 4 5 CHAIR MUNN: No, everything is not 6 out that needs to be reviewed. 7 MEMBER BEACH: Because when I went and looked through them I wasn't sure. 8 CHAIR MUNN: No, it's primarily my 9 10 action. The big news is that the IT folks now 11 have 20 of the completed reports and they are starting to put together a Web page. So you will 12 be able to see that before long and you'll be 13 14 hearing from me with respect to the three batches that we have not addressed. 15 16 MR. KATZ: Well, and Wanda owes me another 30, right? 17 CHAIR MUNN: Ι do. 18 Yes. 19 Actually, 32, I believe, in the batch. I like that. 20 MR. KATZ: Yes. That sounds right. 21 22 But I owe you 15 CHAIR MUNN: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	in between I bete to whit that long but we			
	in-between. I hate to wait that long, but we			
2	can't schedule anything else during this fiscal			
3	year, correct?			
4	MR. KATZ: Right.			
5	CHAIR MUNN: And so that means we			
6	are into October and my calendar won't turn me			
7	loose until I could do the 22nd, I guess, of			
8	October.			
9	MEMBER BEACH: That's a Monday?			
10	CHAIR MUNN: 22nd or 23rd.			
11	MEMBER BEACH: 22nd or 23rd?			
12	CHAIR MUNN: How's everybody else			
13	looking? I assume we've lost Dick. Dick, are			
14	you still there?			
15	MEMBER LEMEN: I am still here.			
16	You've ignored me, but I'm still here.			
17	CHAIR MUNN: Oh, we're not trying to			
18	ignore you.			
19	MEMBER BEACH: Wanda, how's the			
20	30th look for you?			
21	MR. KATZ: I was.			
22	CHAIR MUNN: The 30th would be okay			
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371 for me. We're looking at calendars, Dick. 1 2 MEMBER LEMEN: I know. CHAIR MUNN: Does the 23rd or 30th 3 4 of October sound reasonable to you? 5 MEMBER ZIEMER: Oh, October. б MEMBER LEMEN: Well, the twenties, 7 no, I'll be in Italy then. 8 CHAIR MUNN: Oh, you poor babe. How about the 30th? 9 10 MEMBER LEMEN: I'll still be there. CHAIR MUNN: Oh, you're just going 11 to be there. 12 13 MR. KATZ: That's acceptable if you take me. 14 CHAIR MUNN: Yes. 15 16 MEMBER LEMEN: Well, you can go. CHAIR MUNN: Well, would it be 17 possible? Could 18 you arrange for the 19 Subcommittee to meet in, what city are you going to be near? 20 MEMBER LEMEN: I'm going to Carpi. 21 22 It's near Bologna. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	CHAIR MUNN: Can we fly in?		
2	MR. KATZ: You can fly to Bologna.		
3	MEMBER LEMEN: You can take the		
4	train from Milan to Bologna.		
5	CHAIR MUNN: Very good.		
6	MEMBER LEMEN: I'll be happy to have		
7	the meeting over there. I'll even arrange for		
8	a place to have it if you decide to do that.		
9	CHAIR MUNN: Well, I would like very		
10	much to be able to recommend that, but I don't		
11	think it's going to, if you'll excuse the pun,		
12	fly. So when are you going to be back? We'll		
13	have to decide whether to meet without you.		
14	MEMBER LEMEN: Well, actually, I		
15	will not be available until the first part of		
16	November. Most of my October is shot.		
17	MR. KATZ: That's fine. Only the		
18	end of October would have worked anyway.		
19	MEMBER LEMEN: But any time after		
20	the 1st of November I will be available.		
21	MEMBER BEACH: There's a Board call		
22	on the 5th.		
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1	CHAIR MUNN: Boy, that's a long way	
2	out.	
3	MR. KATZ: That's way out there.	
4	CHAIR MUNN: That's a long way out.	
5	MEMBER LEMEN: We have our Board	
6	meeting on the 15th, right, of November?	
7	MR. KATZ: Yes, what about	
8	CHAIR MUNN: On the 15th? We have	
9	a teleconference call the 5th.	
10	MR. KATZ: What about November 1st?	
11	MEMBER LEMEN: That'll work for me.	
12	CHAIR MUNN: It will?	
13	MR. KATZ: Yes.	
14	MEMBER LEMEN: Yes.	
15	CHAIR MUNN: Anybody have any	
16	problem with November 1?	
17	MEMBER ZIEMER: No.	
18	MEMBER BEACH: No.	
19	CHAIR MUNN: November 1 it is.	
20	MR. KATZ: Going, going, gone.	
21	MEMBER LEMEN: Does this mean	
22	you're adjourning your meeting now?	
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374 1 CHAIR MUNN: It means that we are 2 unless --MR. MARSCHKE: I'd like to have one 3 4 more, just thing, to let the Subcommittee know 5 that, we made some good progress today. If you 6 look at the screen, we have the status at this 7 morning, and it shows we had 43 open, 40 in progress, 92 in abeyance, and 318 closed. 8 And if you look at the current 9 10 status, it shows we have 25 open, 47 in progress, 81 in abeyance, and 340 closed. So we jumped up 11 from 318 to 340 closed issues today, so that's 12 13 22. CHAIR MUNN: Oh, this is excellent 14 progress, especially when we recognize how many 15 16 open items we beat down today. MR. KATZ: Of course, two of them 17 were items we closed, then reopened, but I'm just 18 19 joking. 20 MR. HINNEFELD: Always the optimist. 21 22 MR. Should we assign STIVER: **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 partial credit to those then? In any case, thank you. 2 CHAIR MUNN: MR. KATZ: False progress. 3 4 MR. HINNEFELD: You and Jim. CHAIR MUNN: Thank you all for the 5 hard work that was necessary to get us to where б 7 we are now, even though we're still behind the I'll try to get out notations to you, 8 curve. with respect to the two-pagers, in another 9 10 couple of weeks, and we'll have a teleconference set up to identify what we need to do about the 11 issue of multiple revisions appearing for us. 12 13 And everything else will carry over. 14 Everyone have a -this 15 LEMEN: What's MEMBER 16 teleconference you're talking about? Oh, we had had a 17 CHAIR MUNN: question with respect to how we might be able to 18 19 see more than one revision at a time when we're 20 working with the Board Review System here. We wanted to be able to see when we've had multiple 21 revisions of a procedure, and we have multiple 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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with respect to those various revisions, we could only pull up one of the

revisions at a time and it was confusing because 3 we couldn't see where all of the findings were 4 related in the base document. 5 б So we're going to have a small 7 technical call just to try to identify what we want to do more than anything else and recommend 8 it to you. You'll get an email about that one. 9 10 MEMBER LEMEN: Okay. Thank you. CHAIR MUNN: All right. 11 Thank you. Anything else for the good of the order? Steve, 12 13 thank you again for a yeoman's job and for letting us know that we've made progress. 14 It's greatly appreciated. 15 16 MR. KATZ: Thank you, Lori, as well and everyone behind you guys as well. 17 CHAIR MUNN: Yes, welcome to both 18 19 Lori and Josie. We're glad to have you with us. You both do good work. Thanks a bunch and we'll 20 see you later. We'll leave a light in the window 21 22 for you.

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findings

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		377
1	(Whereupon, the fore	going matter
2	was concluded at 4:42 p.m.)	
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