

Centers for Disease Control  
National Institute for Occupational Safety and  
Health  
Subcommittee on Dose Reconstruction Reviews  
Thursday, September 12, 2019

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

Members Present:

David Kotelchuck, Chair  
Josie Beach, Member  
Bradley P. Clawson, Member  
James E. Lockey, Member  
David B. Richardson, Member  
Loretta R. Valerio, Member

Also Present:

Ted Katz, Designated Federal Official  
Nancy Adams, NIOSH Contractor  
Bob Anigstein, SC&A  
Bob Barton, SC&A  
Kathy Behling, SC&A  
Liz Brackett, ORAU Team  
Ron Buchanan, SC&A  
Grady Calhoun, DCAS  
Rose Gogliotti, SC&A  
John Mauro, SC&A  
Michael Rafky, HHS  
Beth Rolfes, DCAS  
Muttu Sharfi, ORAU Team  
Scott Siebert, ORAU Team  
Matt Smith, ORAU Team  
John Stiver, SC&A  
Tim Taulbee, ORAU Team

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## Proceedings

(10:34 a.m.)

## Welcome/Roll Call

Mr. Katz: So welcome, everyone. This is the Advisory Board on Radiation and Worker Health, it's the Subcommittee on Dose Reconstruction Reviews. And we have a fairly full agenda.

The materials for today's meeting are posted, well actually, very few materials, the agenda is posted on the NIOSH website under today's date, scheduled meetings, today's date. The agenda's there. And there's a report to the Secretary that this subcommittee is drafting for the Board. And that should be on the website as well.

Oh, Paul, that's actually the first discussion the subcommittee's having this morning. So let me go on to roll call.

Now, I think we have cases dealing with specific sites. We need to deal with conflict of interest here. So let me just remind the Board members that I have on about conflicts where they are to recuse themselves from the discussion.

And for Josie Beach, who's on, she has Hanford to recuse herself from. Brad Clawson, INL, and Argonne-West for a portion, I think, but INL principally. And for Lockey, the main set aside concern for him are the Oak Ridge sites.

Okay. And they are all on. Dr. Kotelchuck is the chair. And he's on as well. And we also have Loretta Valerio. Oh, and she is recused principally from the New Mexico site. So that covers them. We don't have David Richardson yet. But we have a quorum. And let's go on to the NIOSH ORAU group and see who's attending.

(Roll call.)

Mr. Katz: All right. Let me just remind everyone on

the phone to mute your phone except when you're talking to the group. That will help everybody. And Dave, it's your meeting.

Chair Kotelchuck: Okay. Well, fine. Welcome, folks, I'm glad you're all here. So first item on the agenda is the Draft Secretary's Report.

Now, I might just add something right now in terms of the agenda, the order. Obviously, we will have to comment about, we'll have to comment about the, getting in my way here, hold it, we will have to comment about the Allied Chemical and Dye case.

And that is in the Secretary's Report. It is a call as to whether we want to start talking about that and then get into the Secretary's Report. Personally, since I worked on the draft, I'd rather start with the Draft Secretary's Report. But then that means we will have to come back to it for a few moments after we resolve, I hope, the Allied Chemical and Dye case, blind case.

Are folks comfortable with going over the Draft Secretary's Report, recognizing that we're going to have to come back to the one case later? And that may influence something in the report.

Member Beach: Dave, this is Josie, I'm okay with that.

Member Lockey: Jim Lockey, I'm okay with that.

Member Clawson: This is Brad Clawson, I'm okay with it.

Chair Kotelchuck: Great. Well then, let's ---

Member Valerio: Loretta, I'm okay with that.

#### Review Draft Secretary's Report

Chair Kotelchuck: Wonderful. So let's start with the Draft Secretary's Report, the draft report to the Secretary. We can go over, I suggest going over it piece by piece, that is we could put the report up

now on the screen, I hope.

Ms. Gogliotti: Can you see my screen, currently?

Chair Kotelchuck: There it is, yes. It's on the screen. Thank you, good, good.

First overall, before we get into specific, as you see, basically, first the dedication to Jim Melius. And we can go over that. And then basically we'll go over, as I say, piece by piece.

And I tried to basically use the same format as we used in our 2016 report to the Secretary. So a lot of it looks familiar in form, and then it's all updated, of course, to Sets 14 through 21.

So are there any overalls that people want to say just before we get in, comments, and then we'll go into specifics. Anybody have any overalls, okay.

Member Beach: This is Josie.

Chair Kotelchuck: Good.

Member Beach: Dave, this is Josie. I just wanted to say I really appreciated the dedication to Jim at the front of the report.

Chair Kotelchuck: Yes. And that was near and dear -  
-

Member Beach: I thought that was fitting.

Chair Kotelchuck: And it was near and dear to my heart as well.

Member Beach: Yes.

Chair Kotelchuck: And I feel very good about it, and I think quoting Paul here as speaking for all of us. And, okay, shall we go into first the pieces now, unless somebody else wants to say something overall?

Okay, first the dedication itself. Is there any change anybody wants or anything?

Member Beach: Well, one thing I was curious about, Dave, this is Josie again, in the introduction, when we talk about NIOSH or the Board, we spell it all. You know, you give the full definition of NIOSH. And that hasn't been done for SC&A. So I didn't know if that's ---

Chair Kotelchuck: You know ---

Member Beach: -- one point that should be spelled out.

Chair Kotelchuck: It is interesting. That is a good question and one that I pondered over. I did an earlier draft in which I said formerly Sanford, Cohen and Associates. And then I think, Ted, when you were looking over it, you suggested that it really was not relevant.

And then I went on the SC&A website. And SC&A folks are here. And I could not see any reference to Sanford, Cohen and Associates. It's as if you reorganized, I don't know when it was, 2012 or something like that, and it's just SC&A.

Ms. Gogliotti: Dave, I can comment on that. We did drop Sanford, Cohen, and Associates. It's purely SC&A, Incorporated now.

Chair Kotelchuck: Right. That's what I thought. And the old name, and so we can probably just go, that's its name. Just like NL Industries. It used to be National Lead, but now it's NL. Does that make sense?

Member Beach: Thanks.

Chair Kotelchuck: Okay, good. The most important thing is that SC&A wishes to refer to itself that way as its total name and not a reference to the previous name.

Okay, other comments, anything else anybody wants to say on that? Okay. Then let's go to the next page. All right. I'm going to look, I'm actually

going to get it on my other screen, full screen.

Member Richardson: Hi, Dave. This is David Richardson. One thought I had is whether, at one point we had described a little bit more of the initial methodology about kind of a target sample and the proportion that we had aimed to review and --

Chair Kotelchuck: Right.

Member Richardson: And I think it was in the ten-year review as well. I don't know if we sort of just jump in and say the first 100 were reviewed, we're reviewing the next one.

There might be a place for a little bit in the overview of the review procedure, stepping back and saying, you know, we recognize there's a large number. It's not possible to review all of them. And a procedure was put into place to do some sample reviews.

Chair Kotelchuck: Is that not in Page 4, overview of the new procedures?

Mr. Katz: It is. It's in that already.

Chair Kotelchuck: It is mentioned. Certainly the goals of ---

Member Richardson: I believe it's, I mean, it says, what, you can point me, maybe I'm not looking at the right place. They're based on several criteria?

Chair Kotelchuck: It's definitely in there. I'm looking for it.

Member Richardson: It's basically probability. I don't think there's anything about, like, a target sample or ---

Mr. Katz: Yes, it's in there, Dave. It's in there. It's not on this page maybe, but I remember it distinctly when I reviewed this twice.

Chair Kotelchuck: And I --

Mr. Katz: So we talked about a one percent sample and that we continue to think that's adequate, yes.

Chair Kotelchuck: Yes.

Member Richardson: Maybe in the discussion.

Chair Kotelchuck: It may be worth introduction, let's see, it may be worth adding farther up though. I'm not sure. So far, I'm just screening through it, and I haven't seen that reference. But it is in there, no question about it.

Member Richardson: Okay.

Chair Kotelchuck: Yes.

Member Richardson: I'm probably just missing it.

(Simultaneous speaking.)

Member Richardson: I was imagining something like, you know, typically there's an introduction, which is sort of general, and then procedures which --

Chair Kotelchuck: Right.

Member Richardson: -- would, you know, describe a methodology.

Chair Kotelchuck: Yes, I think ---

Member Richardson: But if it's there, it's there --

Chair Kotelchuck: It is there.

Mr. Katz: Yes. Well, we can just run through this all. And then if, at the end of running through, we run across it, at the end of running through, if you feel like it should be in a different place, we can move it.

Chair Kotelchuck: Right. Why don't we do that. Okay. But as I say, as we say, it's in there. Maybe it should have a little greater emphasis.

All right, table of contents, unless I paginated it

wrong, that's there. So let's go to Page 3. Well, no, Page 3 we just finished. That was the, we talked about overview of review procedures.

Page 4, all right, anything? And by the way, later on I'm taking, obviously, some notes. And others are too, I'm sure. But where there are particular suggestions, and of course even editorial changes that people are going to recommend, if you will end up sending them to me, I can send people, if you don't have it already, a Word version. What was sent out to you all was a PDF version which some of us can change and some of us cannot. I cannot.

Ms. Gogliotti: I also put the Word version in the folder. So everyone should ---

Chair Kotelchuck: Oh, great. Okay, wonderful. So anybody who sees things that -- some of them, by the way, as I mentioned to Rose the other day, some things you may have seen and want to change that are, if you will, too small to bring to the attention of the entire group but, you know, would stiff up the sentences and tighten them, so please send them to me and Ted, right, Ted?

Mr. Katz: Yes, thanks.

Chair Kotelchuck: Yes, just to make sure, so we have a copy.

Okay, so let's go on to findings down on Page 5. Okay, just a paragraph, cases sent to NIOSH for dose reconstruction.

Ms. Gogliotti: Dave, I have a comment on this.

Chair Kotelchuck: Yes, good.

Ms. Gogliotti: In the previous report, we used the date of November 1st of 2015. And there were 44,000 claims --

Chair Kotelchuck: Yes.

Ms. Gogliotti: -- 42,000 which had been

adjudicated. And here we're using an earlier date but with a larger number of cases.

Chair Kotelchuck: Yes. I believe, I not only believe, I know that the previous one was in error. When I spoke to Grady, when we talked, hold it just one second, my screen is acting up. Pardon me for just a moment. One second, please.

When I spoke to Grady about it, and I asked, when actually did you finish the reviews of Sets 14 through 21? And of course, it was a long time ago. And then we started reviewing them. And I tried to clarify this in the table. I did not go back and say that there was an error in the previous report. But there was.

Because in the previous report, I simply gave the date that I was doing the work, or the date I believed that we were doing the reviews, that we completed the reviews, not when we completed the cases, the DRs for the cases. And I believe it is clarified here. That is, when we go to the tables where ---

Ms. Gogliotti: I did see that you had mentioned that, something about that later in the report. But --  
-

Chair Kotelchuck: Yes.

Ms. Gogliotti: It just seems --

Chair Kotelchuck: There it is on Table 1.

Ms. Gogliotti: -- disingenuous to present very different numbers.

Chair Kotelchuck: Right. Completed NIOSH, 14 through 21 reviews were completed in 2018, which seems like a long time, but there it is. That was because we were behind probably on the reviews previously when we tried to catch up.

So do you feel or do others feel that there should be some, we can have a footnote, just indicate a

correction of the last one? But this is correct.

(Simultaneous speaking.)

Chair Kotelchuck: -- Grady is still on the line.

Mr. Katz: I don't know, this is Ted. It's correct. I think it will be fine if you want to footnote it for someone that's actually going to go and compare, which is hard to imagine.

But nonetheless, if you're worried about that, absolutely, you can just put a footnote there and say this has been corrected from the X report, the previous report. And it seems like that would suffice.

Chair Kotelchuck: I actually chose not to do that, even though I was well aware that the previous number was --- and what do other people on the subcommittee think? Is it worth putting something in?

This is one case where I don't think anybody will go back and check and see, wait a minute, that doesn't make sense, the two dates on the two. And I would gladly explain it to anyone who comes back to us, or somebody from the Secretary's office. But I don't think it's worth putting up here. I think ---

Mr. Katz: Yes.

Chair Kotelchuck: But that's my own feeling. First, subcommittee members, what do you think? Is it worth a footnote or not?

Member Beach: I think it is, personally. This is Josie.

Chair Kotelchuck: Okay. How about others?

Member Lockey: I'm okay either way. I'm all right.

Member Richardson: Yes, this is David Richardson. I'm okay either way. I think it wouldn't be a bad thing just to, it doesn't even have to say that it was

an error. It could just say clarification, these are the facts.

Chair Kotelchuck: Yes. Ted, in this case, since you are a liaison to the Secretary's office, what do you think?

Mr. Katz: I am quite sure they're not going to look at the old report. So I'm quite sure it won't matter to the Secretary's office.

Chair Kotelchuck: Okay. My feeling is if it wouldn't matter, then I would also move that we not do it. Most of the people and, Josie ---

Member Beach: No, no, I'm fine. I can live with either one too.

Chair Kotelchuck: So let's not do that. Let's not put on a footnote. And thank you, Rose, for seeing that. Of course, you work within this field in a level of detail that the Secretary is, much farther, deeper down into the trenches than people in the Secretary's office. But we want to be accurate and correct.

And so, all right. Well, then let's, now I skipped down to the findings. Wait a minute, no, we were on the findings, and that was Page 5. Anything else, and particularly the cases sent for dose reconstruction?

If we think we want to emphasize the one percent, it could be in the intro, or it could be in cases sent to NIOSH for dose reconstruction. And it could be in here. We'll keep that in mind, efficiency measures for dose reconstruction, in writing it and in talking to folks.

Ms. Gogliotti: And we're content with leaving the September 9th, 2014, also.

Chair Kotelchuck: Pardon?

Ms. Gogliotti: We're content with leaving the September 9th, 2014, date.

Chair Kotelchuck: Yes. I missed the burden of what you said, maybe my --

Ms. Gogliotti: Oh. I was just curious, because you said that September 9th, 2014, is the date that NIOSH completed their reviews.

Chair Kotelchuck: Yes.

Ms. Gogliotti: We should be more interested in when we completed the reviews.

Chair Kotelchuck: When we completed our reviews?

Ms. Gogliotti: Of these, either when we were tasked ---

Chair Kotelchuck: We did, and that's on Table 1, down there on the next page. DRs completed by NIOSH September 9, 2014. Reviews of these DRs by the subcommittee were completed August 16th, 2018. That is a correct date.

Ms. Gogliotti: Okay. And I was just confirming that that was the correct statistic that you wanted to present.

Chair Kotelchuck: Yes. And this is one, particularly the 2014, that was gotten directly from Grady. I gather he's not on the phone right now. And I'm sorry that he has family problems. And I talked with him at some length about those dates and realized that that is the way it happened. Those are correct.

Mr. Katz: Yes. I think it's all good, David.

Chair Kotelchuck: Yes, okay. Dose reconstruction cases, and anything in Table 1, okay, partials, total. I did put, and folks may want to ask, you'll notice that in Table 1 I put the total as 100.1 percent and then said percentage exceeds.

Now, many people would simply round it off and put a note down saying may exceed 100 percent due to round-off. I personally prefer, since we have the numbers right in front of us, and anybody can add

the numbers and see that it adds to 100.1, so my feeling is that's it. And we've clarified it, certainly, with the footnote to the table.

Member Beach: Yes, I think that's fine, Dave.

Chair Kotelchuck: Okay. Going down now, partial dose reconstructions, Table 1, reporting on Table 1. You'll note that, and again, the results in Table 1, at the bottom of Page 6, the results from Table 1 are similar to those presented in the 2016 except that the best estimate DRs decreased from 7.8 in that report to 3.9 percent here.

And I noted, and again, this was in discussion with Grady, this decrease is an artifact of the change by NIOSH in determining which cases were designated as best-estimates.

And examination by NIOSH of all cases determined best-estimates, since the program's inception, indicates that, in the early years of NIOSH doses, many cases were completed using best-estimate approach for administrative reasons that were not, if you will, 45 to 52 percent.

And Grady and the staff working with him went through all of the best estimates and said we're really calling best estimates 45 to 52 percent. And when that happened, that halved the percentage of best estimates. And I just wanted to alert folks to that. That's really a change.

But it really is a matter of, if you will, proper bookkeeping. And implicit in that is the fact that what we used in the 2016 report was we used a different methodology, not so much an error as a different methodology. So comments? Okay.

And at the bottom on that next page, there is a small, on Page 7, near about the last paragraph before dose reconstruction cases reviewed, 13.4 percent of cases were claims filed by or on behalf of female energy employees. And NIOSH does not collect, as we said last time, does not collect data

on race or ethnicity.

So I did not have anything further to say about that. I thought I had made a comment, and as I'm looking at it, the question is what percentage of, if the 13 percent were claims that were filed, what is the percentage of female energy employees. It may be or it might be worth saying that's about, I believe, that is about the percentage of female energy employees.

Member Beach: I thought you addressed that somewhere else too, David. There was more of a comment on it --

Chair Kotelchuck: Good, I'm glad. Good, that's fine. Then let's figure we'll see that as we scroll down.

Mr. Katz: Yes. And it may be just, Josie, that you're thinking about, there is a comment about it being an aim to capture more of --

Member Beach: Correct.

Mr. Katz: -- the female claimants as we go along. But I don't happen to know that we know the percentage of energy employees that are, I don't know where we get that statistic from.

Chair Kotelchuck: Yes. I think you're right.

Mr. Katz: I don't think we know it? I think we only know, you know, our demographics of our claimant population.

Chair Kotelchuck: Yes, I think you're right You're right. And that's why there's no more comments. I mean, it seems like it's just a sentence hanging in there without any comment. But we do comment later. Or let's, again, when we come to that later in the scroll, let's see what --

Mr. Katz: Let me, Dave, if I could just make a suggestion, I mean, to keep in mind as we get to it, it may more make sense. Because this does sit there sort of as a weird appendage, since it's not

discussed in any substantive way. It's just laid out as a descriptive statistic, and we don't have a lot of other specific descriptive statistics.

But you may want to just bring this in to the point where you want to make your point about increasing women. Instead of having it here, use it with an introduction.

Chair Kotelchuck: You know, that makes sense. Yes.

Mr. Katz: But, I mean, we'll surely get there, but you might want to --

Chair Kotelchuck: I think that would be a good idea. I mean, just what strikes me is when we say this is that that's a number, you know, like no comment. It's more like a no comment comment. Here's a number. And it's in a context.

We wouldn't even be concerned about of that except that there is a larger context. And with the people who want to answer that question, we want to know. So yes, I think that's a good idea. Let's look as we go down.

Let's continue on to dose reconstruction cases reviewed. Okay, let's see, probably the easier thing is to go down to the tables. Two hundred and thirty-two cases, Page 8, 232 cases examined reflected the Board's desire to focus on best estimate cases because of sensitivity of their compensation decisions to variables in the DR calculations, of course.

And then we go to Table 2, and you see that, basically, we've been consistent in the last two reports, that is '16 and now '19, that 84 percent of the cases reviewed, 83 and 84 percent the same, essentially, were best estimate. And the overestimate is more or less the same. Underestimate, we didn't do in this round.

And overall, 490 cases reviewed which, as you will see of course, as you will remember looking at

Table 1, is a little over one percent. And that's where I'm going to comment about that. Any comments about Table 2?

Member Lockey: Hey, David, Jim Lockey. No, I think you did a great job in this report. And I think it's very comprehensive. I just have one comment about the second full paragraph on Page 8.

Chair Kotelchuck: Good, okay.

Member Lockey: It starts with of the 166 cases. Do you see that paragraph?

Chair Kotelchuck: Yes.

Member Lockey: The second sentence there goes on, and on, and on. It's a rather complex sentence.

Chair Kotelchuck: Of these percentages?

Member Lockey: Yes, just, make a note. I think I would, I've read that sentence three or four times, and I understand it. But it's a very long, complex sentence. And maybe it can be broken down.

Chair Kotelchuck: Oh, yes, I will do that, yes, break it up. Thank you for that. That's helpful. Yes, indeed. Okay, I'm sure that can be done, and I will do it as we go to the Board, if we go to the Board.

Findings among reviewed cases, so the average findings among reviewed cases, Page 9, an average of 1.46 findings per cases is half what we found in the 2016 report which is good. That means that the different groups that are doing the analyses are doing things in similar ways so that the SC&A findings don't, that SC&A is not finding as many findings. And for the 166 cases we'll go to Table 3.

Member Lockey: David?

Chair Kotelchuck: Yes.

Member Lockey: Before you do that can I have you, on Page 9, Jim Lockey, the third full paragraph

against the background of overall decrease in the rate of findings ---

Chair Kotelchuck: Yes.

Member Lockey: -- do you see that?

Chair Kotelchuck: I do.

Member Lockey: Is that paragraph needed? Do we need to do a proportional analysis and then we switch off to just absolute percentages? I was wondering.

Chair Kotelchuck: Quality concerns.

Member Lockey: Is it needed? It sort of ---

Chair Kotelchuck: Well, that's a question. We certainly did do that. We started doing that in this past round, certainly before you came onto the subcommittee. And we are continuing to do that. It was useful as we developed this report to really assess what was the problem.

I mean, it's trying to lead us to the question of where we might make progress in terms of investigating, you know, changes in the procedures to improve things. So I actually think it's worth it. But I don't know, what do other people think?

It certainly stands out here, and that's all I say about it. We even changed the quality concern, the quality criteria as we went along, right, and changed it in the middle of this report.

What do other, let's start with the subcommittee members. Do they have any, since many of you were there during this period and with these changes, what do you folks think? Does it work?

Member Lockey: David, I thought you made your point very well when you broke out, you know, where the percentages, and the overall percentages and numbers were dropping drastically as far as where corrections had to be made.

And we were going to focus on the, and why we were going to continue to focus on areas that were issues. I just got, I thought there was too much information, and I had to switch gears in my mind, whether it was one percentage to another percentage or so.

Chair Kotelchuck: Interesting. This is David, by the way?

Member Lockey: Jim Lockey.

Chair Kotelchuck: I'm not, David, is this you?

Member Lockey: No, Jim, Jim Lockey.

Chair Kotelchuck: Oh, Jim, okay. I'll tell you why, I'm sorry, I'll tell you why I think this is a complicated paragraph. And first I had to say that if we're talking about quality concerns at all, which we do in Table 3, I believe, quality concern rose from 15 percent to 23 percent.

And I know, Ted, I spoke with you. And you said it looks like we're doing a poor job. Look, we have more quality concerns. And then I realized, and you helped me realize that, no, no, actually the rate of quality concern findings were going down.

Mr. Katz: Right.

Chair Kotelchuck: What that did was it forced us to kind of back up and clarify the rise from 15 to 23 percent. I feel like, so it's messy. I mean, in the sense of it's not linear in the way that most of them were just reporting, well, we did this, we did this. You say, oh, wait a minute, looks bad. Well, no, it isn't really bad. And here's why.

So it does affect the rhythm. But what are folks, I mean, other folks thinking about? The question is, is it worth it?

We are certainly collecting that information. And I think we will continue to do so. We haven't, Jim, we haven't been talking about it quite as much in our

meetings. But the folks at SC&A are faithfully recording these things.

Mr. Katz: Dave, let me give you just my thought about how to think about this a little bit.

Chair Kotelchuck: Okay.

Mr. Katz: Not that I have a suggestion for what to do here exactly, one way or the other. But really what this tells you, this information, if you were to summarize it, is that the different problems, let's just call them problems, or whatever, are falling at different rates. And the quality problem is falling less at a slower rate, but it's still falling, than the other nature of problems.

Chair Kotelchuck: Yes.

Mr. Katz: And if you think about it, that actually makes a lot of sense. Because the quality problems, you know, I mean, there's been a lot done, which we've all talked about in this subcommittee, to reduce quality problems. There's been a lot that's been systematized, and automated to solve a lot of quality problems.

But when you think about it, at the end of the day, eventually there really should only be quality problems. Because you're slowly knocking out all the other more sort of procedural methods problems. You're knocking them out. And in the end, you'll only have quality problems. And they'll be 100 percent or close. But this is sort of the natural evolution of improving a system, I think.

Member Beach: Does this need to be in a different section maybe, like under the efficiency measures? Or would it make more sense to have it somewhere else? Because I think it's valuable information.

Mr. Katz: And, well, so the last thing I need to say about this is I think you could do a couple of things. One, you could keep it as it is, of course. Or two, you could sort of summarize its significance so that

someone understands what's really being said here. Or of course, you could, as Jim was questioning, you could lop it out. So I think there are three approaches to this --

Chair Kotelchuck: Right.

Mr. Katz: -- we've got to discuss.

Chair Kotelchuck: Right. We could certainly ---

Member Lockey: This is Jim Lockey. I'm sort of biased against proportional studies anyway. Because it all depends on the denominator, you know. But any way you guys decide, it's fine with me. I just thought it didn't add anything to the report. That's all.

Chair Kotelchuck: Well, I'll tell you what, let me also think about it and whether, if we highlighted it by a sub-head, quality concerns, and said what was going on, that the quality, we're improving the procedures and then give this --- So let me, maybe what we would do is put this as something to consider, that I might want to make some changes in this before presenting it to the full Board.

Would folks feel okay about that? Of course, I would send it, before I'll send to the Board, I assume, following this discussion, changes that are made based on this discussion I would send out to all of you --

Member Lockey: Right.

Chair Kotelchuck: -- before we gave it to the other group. So why don't we do that, just let me take a look at it and see if I can put it in a way that would make the purpose of it clearer.

Member Beach: Sounds good, Dave.

Chair Kotelchuck: Okay, I just go to Table 3 now, and so that I see what were some of the issues that we looked at and noted that the percent of findings, issues not covered by anything above categories is

fairly large. So it suggests that maybe some of the issues, maybe we should think about, as we move forward, whether there are other issues that we should look at in terms of type of issue. Anyway, that's a passing comment.

Now, a significant sentence just below Table 3 of the grand total of 498 cases reviewed only one had its compensation decision changed which is, I think, a pretty significant finding. You know, I mean, we've gone over nearly 500 cases. One got changed, one compensation decision.

So it doesn't stand out very much, even though it is, I think I come back to it in the conclusions. And I don't know, maybe it should somehow be highlighted more.

Okay, rate of dose reconstruction cases reviewed, and this is where we're coming down to, David, what you commented about. In 2016, the Board established the goal of reviewing one percent. And that's where I put it. And then we have completed reviews of 1.04 percent.

Ms. Gogliotti: Dave, if we could just go back up here, I wanted to point out that you do discuss female energy workers on the end of Page 9.

Chair Kotelchuck: Oh, really. Thank you very much. Among the 450 cases and percent by female energy workers, oh yes, here it is. Yes, this percentage is less than the 13.4 percent involving female energy workers. And thank you for bringing our attention to it.

Actually, it suggests to me, since I literally repeat the 13.4 percent, whether we shouldn't just strike out the one sentence without comment. Although, I do make a comment about collecting information about race.

And to the extent that I talk about race above, if we leave the race issue, what information do we capture about race, which is very little, it sort of,

anybody reading it would say, well, what about gender, since those two are tied.

So there's no question that if I struck that one sentence above, it is down here. It is stated down here in this paragraph on the bottom of Page 9.

You know, can we go back to, do we want to scroll back up to that original paragraph, which was on Page, was it five?

Member Beach: It was Page 7. I think you could actually strike that. Because it doesn't really ---

Chair Kotelchuck: Yeah.

Participant: I think so too.

Chair Kotelchuck: Okay. And I'm looking at it right here, NIOSH does not collect data on race or ethnicity. Okay.

Member Beach: That's a stand alone ---

Chair Kotelchuck: Yes. I'll tell you what, why don't on Page 7, maybe I'll suggest this, Page 7 strike and put a note at the end of that paragraph, the below claims are, a note that we will be talking about gender down below.

Mr. Katz: Dave, I would just, you could not just strike that sentence, just strike the whole paragraph. The whole paragraph really doesn't get anyone anywhere. So I would just strike the whole thing.

Chair Kotelchuck: Well, it's ---

Member Lockey: This is Jim Lockey. I would agree with that.

Chair Kotelchuck: Yes.

Member Lockey: I think, you know ---

Chair Kotelchuck: It doesn't add to what information we have. Some people might read the thing, and

look at it, and say ---

Mr. Katz: And then we don't talk about demographics in general. So it's, like, there's no reason to have these particulars. It's just ---

Chair Kotelchuck: You know, I'm becoming persuaded that that maybe would be a good thing. We're not introducing new information, in fact, we're introducing information that we're not collecting information.

Mr. Katz: And that we're not using in any way.

(Simultaneous speaking.)

Chair Kotelchuck: Which is not an affirmative finding in the report.

Mr. Katz: Yes.

Chair Kotelchuck: Okay. I think I would strike that. And do folks, other committee members, some of you have spoken, other ones feel okay about that?

Member Valerio: This is Loretta, Dave. I agree with that. I agree with just striking the entire paragraph.

Chair Kotelchuck: Shall do. And others? Okay. Okay, good. That's sharpening things up.

And then we're going to go to the bottom of Page 9 now, back to bottom of Page 9. And then I do address, were filed by female energy workers or survivors. And there's the information right there, 13.4 percent of the claims.

Member Beach: Well, if you read the first sentence, Dave, it actually says 50 cases, ten percent were filed by either female workers or their survivors. And then it goes on to say this percentage is less than 13.4 percent.

Chair Kotelchuck: Right.

Member Beach: So I'm wondering if that's

necessary? I don't know if you were using the 13.4 from the ---

(Simultaneous speaking.)

Chair Kotelchuck: -- 498 cases ---

Member Beach: Yes.

Chair Kotelchuck: It suggests that, well, we want the reviews to be, you know, to be representative of the population that submitted claims. And it is a little lower.

Actually, probably given some assumptions, 50 is a small enough number that, if we made some assumption about the distribution of cases, it might not be really statistically significantly below 13.4 or as consistent with -- So are you suggesting --

Member Beach: I don't know where the percentage, that 13.4, comes from now. Is that in a table somewhere.

Chair Kotelchuck: No, the 13.4 is what we just struck on Page ---

Member Beach: And so we should strike that too, I believe.

Mr. Katz: No. I mean, Josie, I think you're just missing, this is sort of the whole point that Dave's making. Is that, you know, there's a larger percentage of the whole claimant population that NIOSH has dealt with that are women than the percentage that the Board has reviewed. So that's --

Member Beach: Okay.

Mr. Katz: -- that is the point of this.

Chair Kotelchuck: Yes.

Member Beach: All right, okay.

Mr. Katz: I think it's reasonable to have it here.

Because you're going on to say you'd like to, you know, and we've been working, frankly, on increasing that number by ---

Chair Kotelchuck: Yes. I remember Wanda Munn often referred to that and said that we were not looking at women, we were not picking cases from women workers in the early days or not a high enough percentage. We weren't paying attention to the fact that we were missing or were not doing as many women as we should be to be representative.

But, you know what I can do and, Josie, what this illustrates to me is that I should affirm that 13 percent of the claims are of female energy workers rather than saying this is less than.

The most significant point is that among the 480, ten percent, instead of saying it's less say however, or not however, the percentage of claims involving females is 13.4 percent. This is lower than the other. In other words, state it affirmatively which emphasizes its significance.

And then, right below, we say while women have been employed in a wide range, et cetera, et cetera.

Member Beach: That makes sense, Dave.

Chair Kotelchuck: Yes. So we will do that on Page 9, affirmative. Okay, state the fact and then do a comparison rather than only state it with respect to another number when it's significant. Okay, we're down to Table 3.

Ms. Gogliotti: I just have a quick question.

Chair Kotelchuck: Yes, indeed.

Ms. Gogliotti: This last statement on the bottom of Page 9, that the DRs are more frequently completed using overestimating efficiency methods.

Chair Kotelchuck: Wait, excuse me one second. Oops, see, wait a second, I just, boy, I'm sorry. I accidentally hit a wrong button. Excuse me one

second folks. And I'm going to the bottom of Page 9, okay, on the bottom of Page 9. Do go ahead, I'm sorry.

Ms. Gogliotti: I was curious if the NIOSH data supports this or if this is an inference.

Chair Kotelchuck: Which is the sentence? I lost as you were starting.

Ms. Gogliotti: Sorry.

Chair Kotelchuck: No, I'm sorry. Which thing ---

Ms. Gogliotti: That the DRs are more frequently completed using overestimating efficiency methods.

Chair Kotelchuck: No, I'm sorry, I don't see that.

Mr. Katz: Are you on Skype?

Chair Kotelchuck: Right, right.

Mr. Katz: Are you on Skype, Dave?

Chair Kotelchuck: Yes.

Ms. Gogliotti: Is that supported by the data. I don't have data to check this myself.

Member Beach: Well, it goes with the sentence. So you almost have to read the whole context of it.

Mr. Calhoun: This is Grady. I don't think we've ever provided that information. I mean, anecdotally, you'd think that that's the case. But I can't tell you that that is, in fact, the case. It most likely is, but I don't think we've ever evaluated that.

Mr. Katz: Implicit is we probably should check that if we're going to say that.

Chair Kotelchuck: Okay.

Member Beach: And, Dave, did you see where it starts, right, while women have been employed in a wide range of occupations within covered facilities.

And it goes on for several lines.

Chair Kotelchuck: Okay. No wonder, no, I've been looking ---

Member Beach: Very long run-on ---

Chair Kotelchuck: I was unclear, and people were, you're right.

Mr. Calhoun: I may have missed something on this, because I've been up and down. But I'm wondering what the value of this is at all. Because if this is just talking about you guys reviewing the dose reconstructions we do, I almost don't even see what the point of this sentence is or this calling out ---

Chair Kotelchuck: Well, the point of the sentence is to explain why, at the bottom of Page 9, we have ten percent of the cases reviewed were for women. And yet women put in 13.4 percent of the claims. So it's a little lower.

It's both, I believe, progress in terms of the cases reviewed, that I suspect we did less than ten percent before, and I guess I could check that, but 13.4 percent of the claims. So I want to say why we need to do some more work in reviewing more cases.

Mr. Calhoun: But isn't this almost trying to infer that the percentage of claims that are in the best estimate category are the same as the percentage of claims in the overall claimant pool? Because I don't know if that can be the case with such a small sample size.

Chair Kotelchuck: Well, yes. It is certainly true that this is not, there's no data documenting this, starting back to where we started earlier, and have been more heavily represented. And literally, I don't know. So maybe I have to strike it for lack of proof. Again, it makes sense. But in reviewing, maybe I should just scratch the ---

Member Beach: Hey, Dave?

Chair Kotelchuck: Yes.

Member Beach: When you get to the next sentence, it also supports that sentence. So I think you might want to just think about the whole thing.

Chair Kotelchuck: Yes, I think so. And, you know, maybe I want to strike out several, one, two, three sentences and just conclude from the, you know, the 10 percent and 13 percent among the current cases being reviewed. And going forward, the subcommittee has paid greater attention to selection of cases to improve representation among covered facilities.

Mr. Katz: Dave, I think you could do that. And that would certainly simplify matters.

Chair Kotelchuck: You're right. I mean, it's always a problem putting data in where we can't back it up. I mean, you're right. I take it as a given. But I ---

Mr. Katz: Even if, I mean, they could go into the data and look at this. But really, the rest of the details don't really matter when your bottom line is let's improve representation.

Chair Kotelchuck: Yes. I will do that. Sounds to me good. And I hear other subcommittee members that, Josie, I think you were saying that.

Member Valerio: So, Dave, this is Loretta. Are you going to strike the entire paragraph or just rewrite it?

Chair Kotelchuck: I am going to go from the paragraph on the first, I'm going to rewrite the first two sentences at the bottom of Page 9 to affirm the 13.4 percent of claims, to affirm it before I compare it.

And then, I'm going to go directly on Page 10, I go directly to the single sentence, among the current sets of cases being reviewed and going forward, the

subcommittee has paid greater attention, which certainly we have.

Member Valerio: Okay.

Chair Kotelchuck: And there is good reason to expect that the percentage will increase as this program continues. So I'm going to strike those first several sentences on Page 10. But it moves smoothly I think.

Mr. Katz: Yes, I think that's good.

Chair Kotelchuck: Yes.

Member Valerio: Thank you.

Chair Kotelchuck: Okay, good. Thank you. Now, let's see.

Ms. Gogliotti: Then right above Table 3 ---

Chair Kotelchuck: Pardon?

Ms. Gogliotti: Right above Table 3 there is a sentence that says, was the proper judgement made regarding placing a person physically at a work location?

Chair Kotelchuck: Okay, if I may, just let me get the Table. Oh, pardon, I'm going the wrong direction to get Table 3. I'm working, obviously, on my own computer, my CDC computer. Table 3, yes.

Ms. Gogliotti: Immediately above it there's just a random sentence.

Mr. Katz: Yes, that's just an artifact, I think, Rose.

Chair Kotelchuck: I just got here, so what are you saying?

Member Beach: Yes, that's not in my version of this.

Mr. Katz: I think it probably got just accidentally copied and pasted there out of the Table somehow. But it's just an artifact. It just needs to be blocked

out, yes.

Chair Kotelchuck: Okay. Right, okay. Delete what's proper judgement. Good, I'm just taking this down. Okay, shall do. All right, Table 3, we'll go past now. And we're down to Page 11, rate of dose reconstruction cases reviewed. And this is where we affirm the goal of one percent.

David, from the discussion that we had before, I am tempted to repeat the first sentence under the rate of dose reconstruction cases reviewed in 2016 and put it somewhere up top in terms of procedures. Because it's a very important, this is a very important goal. And it's just buried in the text. So I'm tempted to take the first sentence to establish the goal and essentially repeat it somewhere up top.

Member Beach: You have it repeated on Page 15 and underlined as a note also.

Chair Kotelchuck: Page 15?

Member Beach: Yes. And it's my Page 15, and it's underlined.

Chair Kotelchuck: Yes. Let's see.

Member Beach: But you do have it there also, just a note, Dave.

Chair Kotelchuck: Right, yes. But what I think the problem is, that if I want to repeat the sentence, essentially repeat the sentence somewhere near the beginning, and the rate of going back to Page 11 for the dose reconstruction cases reviewed, it needs more emphasis. And it just hangs up above in the early, or I think it will just be hanging.

Would folks be open to my exploring ways of putting it somewhere near the introduction or method, getting it in there so it doesn't hang loose, and then keeping this the way it is now? Because it's a clear paragraph. Would that be ---

Member Beach: Yes, Dave. I think that would be a good suggestion.

Chair Kotelchuck: Okay, shall do.

Member Beach: And you may, I don't know if you need to keep it on Page 15, but we can talk about that when we get to it.

Chair Kotelchuck: Yes, we'll talk about that. Okay, good.

Member Valerio: So, Dave, this is Loretta.

Chair Kotelchuck: Hi.

Member Valerio: On Page 3 in the introduction, the first paragraph, the last sentence ---

Chair Kotelchuck: Page what, pardon me?

Member Valerio: Page 3.

Chair Kotelchuck: Three, okay. Going back ---

Member Valerio: It's on Page 3 in the introduction, first paragraph, the last sentence, would that statement be changed or modified in any way? Because it does say that the Board has just said a review of the subcommittee of one percent of individual dose reconstruction is adequate.

Chair Kotelchuck: Wait a minute, the Board has just, oh, yes, one percent. Yes, you're right. It says it right there. We missed it when we were talking. You've identified that we have put the one percent of individuals is adequate and has been established. The Board established the subcommittee to select cases.

You know what, again, I think maybe the way, so interestingly, when we talked about it before and Dave referred to it, and we looked around, we didn't see it, right. I mean, I skipped over it and others, I think, did.

Maybe what I ought to do for that sentence is turn it around like I've done the other one. The Board has determined a goal in 2016 of review of one percent of individual dose reconstructions, period. Forget about adequate and just state affirmatively that the Board has, this is the goal right there, rather than it's adequate and now is a goal.

Mr. Katz: I think that's good.

Chair Kotelchuck: Yes, okay.

Member Valerio: Right, thank you.

Chair Kotelchuck: Yes, I think that's very good, thank you. Intro, affirm one percent. Good. Okay, thank you.

Let's go back down to 11. I think that's right. Okay, we got in the one percent. I underlined the 1.04. That is that sentence, because it's an important one. And now we're into blind case reviews.

Now, first you folks, let's just go to Table 4 first. Folks saw the letter from Paul Ziemer indicating that the NIOSH review of the Allied Chemical and Dye case, the methodology was correct, and therefore the Number 3 -- of Table 4, Number 3, Allied Chemical and Dye, 45.9 percent has been affirmed by the Surrogate Data Working Group. So that stands.

Now, the 85.4 percent sits there, because that is what SC&A stated and affirmed the methodology.

I spent a lot of time yesterday going over the transcripts of our old discussions in 2015 about this case. The subcommittee, four of us of the six who are now on the subcommittee were there at the time of that discussion. Both Loretta and Jim are new and weren't part of that original discussion.

But I think that the subcommittee discussed the SC&A, the SC&A presented its perspective. And the committee looked at it and, I would say, accepted

that this was a legitimate scientific approach. And we didn't say, at the time that we talked about it before, we didn't say it's wrong. We said, no, no, it's an approach. It does give you a very large number.

But implied was that it's not, from what we could see, it was not scientifically incorrect. It used professional judgement, there was a professional judgement issue on the surrogate data, because it was entirely surrogate data for a plant that had no profile and no measurements whatsoever made on the exposure, external or internal, for the employees there. And there were 18 claims that have been filed from that site.

So in putting together this table, I left the 85.4 percent in there, because this committee has not determined what to do. Or maybe, and probably now that we're going, if it's after our break, the next thing we're going to talk about is the Allied Chemical and Dye case.

And I think I have some ideas about how we might handle it. And just to anticipate that, I'm going to suggest that the 85.4 percent might be reasonable to consider sending to the Dose Reconstruction Review Methods Working Group. Between 45 and 85 percent is so vast that we do need to figure out, I mean, if we got cases, if we had many cases like this, if we have only one, the difference is so great as to make somebody say, well, how good is this whole approach?

I mean, most of the other cases, the PoCs between NIOSH and SC&A are similar, right, not always the same, not always the same composition as we'll see.

In this grouping, by the way, in Table 4, the only case, blind case, where there was a difference in compensation decision is that Case Number 3.

I suspect that we will want to put, after we have our discussion about this case later today, that we will put a little asterisk after 85.4, and I think we have

to say something. I mean, I don't think it can, I mean, that difference cannot go unnoted and uncommented upon.

So maybe the thing to say is you folks are looking at the table, the results are really quite good and in full agreement, except for that one. And let's say that that one, we will come back later, once we finish the discussion on what to do about Allied Chemical and Dye, finish up that discussion, we may come back to this thing and put an asterisk or do something with it. And so I would just say we'll leave it here for the moment. And I'm going on at length.

Ms. Gogliotti: Dave?

Chair Kotelchuck: Yes.

Ms. Gogliotti: If I can make a suggestion, we covered some of these in the last letter. It might make sense to just remove the ones that have happened that we already discussed.

Chair Kotelchuck: I'm a little unclear. We discussed, all of these have been discussed and approved by the committee.

Ms. Gogliotti: Yes.

Chair Kotelchuck: Right.

Ms. Gogliotti: But I believe we discussed them in the last letter.

Chair Kotelchuck: Oh, you mean our last report?

Ms. Gogliotti: Yes, in which case you're just repeating information.

Chair Kotelchuck: Oh, you're right about that. You are right, and I am repeating information. I believe we had up through, I think it was, just looking, we had through Set 20.

No, but I'll tell you, one of the reasons I think I'd

like to have it in is that it's very impressive that we have so many cases where we have two blind reviews. And they are quite similar on the compensation decisions.

It really reinforces the sense that we're all on the same page, if you will, and that our procedures are well enough documented that two independent people doing them --

Member Lockey: Hey, Dave?

Mr. Katz: Go ahead, Jim.

Member Lockey: Dave, this is Jim Lockey. Maybe I'm missing something here, and I wasn't on the Committee early enough. But if you look at the Allied Chemical, PoC 85 versus 45, didn't you explain that in the paragraph preceding that that it was reviewed? And it was thought that the NIOSH approach was correct, and that's the end of it. Or am I missing something here?

Chair Kotelchuck: No, that's what I said. I mean, and that's ---

Member Lockey: But why doesn't that just put that to bed? What's the issue?

Chair Kotelchuck: Well, the issue is that, how can we have, the Subcommittee has reviewed all of these, right, and we're sending in the report that we think we've reviewed every one. We do, we've reviewed, here's a case where we reviewed it, and the differences are vast. I mean, I feel like it calls for an explanation of some sort.

Member Lockey: But isn't the explanation that it was reviewed, and they looked at the two approaches, and it was ---

Chair Kotelchuck: Ah, no.

Member Lockey: -- didn't they send to us a letter saying that the NIOSH approach was correct?

Chair Kotelchuck: Yes.

Member Lockey: Then that's the end of it.

Chair Kotelchuck: No, no. But I have to say, the Surrogate Data Working Group only reviewed the NIOSH analysis. It is the determinative one, right? It's the one that decides compensation. The SC&A are not, if you will, official. And we in no way -- the question is, are the compensation decisions correct? All of the compensation decisions are made based on NIOSH.

Ted and I talked about this at some length. I originally viewed this, and I even have said it, I think, at times in the Committee in the past that, oh yes, here are two independent people. Ted pointed out that, no, NIOSH is the one that is charged to do the analysis that results in a compensation decision. The folks at SC&A, I mean, the folks in NIOSH have done 40,000 DRs. The folks in SC&A have done 500.

And sometimes they have changed. In the course of discussion, they have changed when they found out that there was some information that they didn't have, or there was, I mean, they don't have as much experience as NIOSH does. But more importantly, NIOSH determines the compensation decision.

But the surrogate people never reviewed 85.4. The Committee looked at it. And I will say when we sent it to the surrogate data people, I think we just, I think we stopped looking at it. We might have gone on and talked a little bit about the 85.4. And in fact, we will do that this afternoon when we finish this.

So it doesn't, 85.4 has never been examined by anybody else, except the Committee did, I would say, took a look at it and had some preliminary thoughts and analysis. Am I correct, Ted?

Mr. Katz: Yes, Dave. They didn't look at that. The surrogate data folks didn't look at the SC&A approach, nor do, I think, they need to because

that's really not the point.

And I think you could just footnote this. And I do think, I agree, I understand what Jim's saying. Well, we have this explanatory sentence, so why do we care about it? But when someone does just look at the table, it does pop out. And I do think an explanatory footnote would be helpful since it does pop out.

And I think you could just footnote it along the lines of, don't hold me to my specific language, but I think you need to footnote it along the lines that, and explain SC&A took a very different approach to this dose reconstruction which is a sort of, and as a consequence, you know, achieved very different results.

And then you can just reiterate that the NIOSH approach is considered valid by the Surrogate Data Work Group and this Subcommittee as well.

Member Lockey: Ted, that's what I was trying to say is, you know, I think our results here overall are excellent in relationship to agreement. And I think in this case there was an explanation, and the explanation was defined by the Surrogate Data Group. And I'm willing to put this to bed and move on.

Chair Kotelchuck: Okay. Well, how about we do this? We've talked about it now. We will come back, because we have an obligation. I mean, the Surrogate Data Group sent their results back to us. We have to pass on what finally do we do about this. What is our position? And do we need to do anything further about it, or do we just say done?

We can talk that out this afternoon (Telephonic interference.) goal, hope is to put a little asterisk after 85.4 percent and do some (Telephonic interference.). So how about let's say this is a good discussion, and what you suggest, Jim, may be what we in the end do, or a footnote. And let's go on.

Member Lockey: Thanks, Dave.

Chair Kotelchuck: Yes. Okay, thank you. All right, so people who have read the Set 26 blinds will note that, coming right up for the next report that will be in, I don't know, 2021, or '22, I hope, long time in the future, if we do have two cases where there are disagreements in compensation decisions. However, we have not reviewed that yet or we will fairly soon.

I don't know if we'll get to it today. But that will be interesting. But the first set of B2, you know, we have one disagreement. That is really good, particularly when we use best estimate cases to start to do the blinds with, in the first place. Okay --  
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Member Beach: Dave, this is Josie, I have a question.

Chair Kotelchuck: Yes.

Member Beach: So back under the blind case reviews, we talk in two paragraphs about the professional decisions made by NIOSH were grounded in the best available science.

Chair Kotelchuck: Right.

Member Beach: And then the next paragraph it goes over the professional judgments made in light of inadequacies. Anyway, so that just reminded me that, last meeting, we talked about brainstorming. SC&A was going to brainstorm some ways to kind of document the professional judgments.

And I was just curious if that had been done. I know I didn't see anything. But I didn't want to lose that. Because we do have another document in the methods group on the professional judgments. And I think it's an important part of this section.

Chair Kotelchuck: Right.

Mr. Katz: So SC&A, go ahead.

Chair Kotelchuck: Well, the methods, we started collecting these. And we're doing that now with the cases where professional judgment's been good. But that comes for sets beyond Set 21. We were only going through Set 21. And we didn't start it until later.

So that's why it doesn't appear. And it will appear, and maybe it should appear in terms of things that we are, in fact, I think it may in the conclusions or, excuse me, for the things that we're going to be doing in the future.

Mr. Katz: Yeah. And it possibly could be captured there. But it is, so, Josie, if you looked at that new set of blinds, SC&A did implement that for that new set.

Member Beach: No, no, no, and I realize that. And maybe I'm jumping ahead of my question, so I'll ask it again later.

Chair Kotelchuck: Okay, fine.

Member Beach: Okay.

Chair Kotelchuck: Yes. Now, folks, it's 11:56. But I think we're near the end. And we ought to finish this up, I hope, soon. So I'll move along. That means we may not, I'm hoping that we can finish by a quarter after 12:00 East Coast time if that's okay with people.

Mr. Katz: Yes, that's fine, Dave, plow on.

Chair Kotelchuck: Okay. All right, distribution of dose reconstruction cases. Now we go to the graphs, distribution of dose reconstruction cases among covered facilities. And this is -- Rose did a very nice job, if I may say, on Figure 1, breakdown of the case reviews by employment site. Obviously if there's more than one employment site, each site was counted separately. And that's first without respect to any goals. This is just what case reviews we did.

And the individual sites with three or more cases are identified individually. And then sites with two cases are down there. You'll see two thirds of the way down with 15 sites with two cases. There are 15 of them. And the bottom sites with one case, there are 34 of them that we have reviewed.

Then, we go to Figure 2. And Figure 2 looks at the goal of one percent of total claims. So the yellow, or mauve, or I'm not sure what you call it, the yellowish is reviewed cases. And the goal is one percent of total cases. And as you see, we have hit one percent of total cases.

Well first, the caveat said right below, well, let me see, the next paragraph, hold it, the caveat that, it's in here somewhere, that our goal is one percent of all claims, not one percent of the claims from each factory which is, oh yes, where is it, the orange bar?

Oh yes, I'm sorry, the bottom of Page 14, underlying note, the Board's goal is to review one percent of total DR claims, not one percent of all claims from a given facility. Some facilities may require greater attention.

And that's important. But on the other hand it's valuable, I think, to see where the number of reviewed cases is taller or longer than the goal of one percent which is in blue.

And in particular, what was important to me was that, to me at least, that the remaining one percent of the sites, there were 120 cases. And one percent would have been, what was it, something like 90-something. So we exceed one percent for the smallest places which are the ones you worry about missing.

And also, for the, where are the remaining one percent, wait a minute. Where are, on this table where are the ones with two, pardon me, one second, sites with two cases, 15 on the previous figure. Oh, yeah, no, those are sites with one and two are, with the two and three are distributed.

So of course, we won't see. We'll see the plants. And we have all of the plants listed. And you'll see, you know, in many cases, the blue bars, and I document that below, that in many cases the blue bars do exceed the yellow bars, meaning we've gotten more than one percent. I don't think there's anything much to say. And I don't say much.

Folks, are you okay with those two tables?

Member Beach: I am, Dave. This is Josie.

Chair Kotelchuck: Okay.

Member Valerio: I am, Dave. This is Loretta.

Member Lockey: Hi, Jim Lockey, I am too.

Chair Kotelchuck: Good, okay. Then let's go down to Page 16, Figure 3, cases reviewed by Probability of Causation. Now, one thing that I make a break in (Telephonic interference.) between below 50 and 50 and above. Because those are compensable, 50 and above.

But in terms of the cases reviewed, you remember that we go from 45 to 52 percent. So cases reviewed are in the lower orange, and also in the blue. And we have 45 percent of the cases reviewed, of the 166, the ones we're reviewing now, 45 percent of them are between 40 and 49. And I compare it with last time which there are some small increases and decreases, I note years.

Let's go to Number 4 unless there is, not a lot to say on these, but it's data that, you know, should break down Figure 4, break down 166 case reviews by years of employment. And that is interesting to look at.

For the first time, we have, first, two percent of the claims filed were for people who worked less than a year which is to say 250 days or more, less than a year, 250 to 365.

And the people with greater than 40 years,

minimum 6 percent. And that's down, of course, because, well no, it isn't. I'm not sure. I forget. I don't know. Just looking, I don't remember what I said. But there wasn't, yes, nothing profound, it seems to me, slightly below the 67 percent reported in 2016, small changes as we might expect. All right, so that's four, five types of cancer cases.

Ms. Gogliotti: Dave?

Chair Kotelchuck: Yes.

Ms. Gogliotti: With this I wanted to point out, I think your second sentence here in the section is misinterpreting ---

Chair Kotelchuck: Which section, the second sentence with respect to Figure 4?

Ms. Gogliotti: Five.

Chair Kotelchuck: Okay, for five. Let's go down to five. One minute. All right, and what is the second sentence figure? There are 287 cancer diagnoses.

Ms. Gogliotti: That is incorrect. That is risk models. We don't track the number of diagnoses, so we track risk models that were used in the claim.

Chair Kotelchuck: Ah, yes. You are correct. You are absolutely right. Figure 5, risk models. Now, I keep using diagnoses all the way through, don't I?

Ms. Gogliotti: Yes.

Chair Kotelchuck: But is it, if I change diagnoses to risk models, is that everywhere? Is that ---

Member Beach: No, that won't work later on, I don't believe.

Chair Kotelchuck: Yeah. No, I don't. Thank you for making that point, because this absolutely needs to be corrected. But I don't know, I will just say review and risk models correct and review. Because I'm not sure how I discussed it as we went down in the

paragraph. I will correct that paragraph, let's just say that. Thank you.

The Figure 5, the breakdown of 166 cases, this is the last time, I believe, the last report that we did, we didn't break down the non-melanoma skin, the BCC SEC, but they are, I mean, those are, of course, the highest, and all male genitalia, which seems a little surprising to me. The lung cancer, the all male genitalia, put it this way, it suggests to me the all male genitalia would not be where I would expect the radiation effects to --

Ms. Gogliotti: Dave?

Chair Kotelchuck: It would include radiation effects as well as effects of prostate cancer which may, which are not one of our --

Ms. Gogliotti: If I could point out here, the reason that you're seeing more of the skin cancers and the prostate cancers showing up here --

Chair Kotelchuck: Yeah.

Ms. Gogliotti: -- is because of the SECs.

Chair Kotelchuck: It's because of the --

Ms. Gogliotti: The SECs. These are non-SEC cancers. So they're not automatically compensated.

Chair Kotelchuck: Right.

Ms. Gogliotti: And so these kind of select for themselves because of that.

Chair Kotelchuck: Ah.

(Simultaneous speaking.)

Ms. Gogliotti: -- to support that, but I'm sure that's why.

Chair Kotelchuck: Yes.

Dr. Taulbee: This is Tim Taulbee. That is true to a

certain degree, that the SEC cancers have been kind of screened out from that standpoint. But even before the SECs started, our dominant number of, or a higher proportion of claims coming in were skin and prostate cancer. Those are the biggest numbers that we do see, even before the SECs played a role. The SECs have skewed it further, but they are still dominant within the claimant population.

Chair Kotelchuck: Yes.

Mr. Katz: Yes, they're just more common cancers.

Chair Kotelchuck: That's right. And those cancers, those lines include both radiation-induced cancers as well as other cancers that have other sources of causation, let's say, whether genetic or whatever.

Mr. Katz: I mean, all cancers are treated as radiation-induced, whether they are or not.

Chair Kotelchuck: That's right. And that is the way the law is written. And that's correct and good. And it's certainly worker-friendly, claimant-friendly. Anyhow, this is an interesting graph, but not a lot to say.

Then a breakdown of cases reviewed by decade first employed, six, Figure 6. And here (Telephonic interference.) we're starting to get cases from the 1990s. And one percent of our cases that we reviewed, the 166, one percent of them are now for folks who started working in the 1990s.

And, of course, the percentage from the 1930s has gone down because of the demographic aging of the population and deaths which makes a small residue of folks who are still alive who can file claims. So it's interesting. And the largest group is, of course, from the 1950s, as one might expect.

Okay. Administrative changes, now these are, we're finishing up now.

Ms. Gogliotti: Dave, I'm sorry to interrupt. I just

want to point out one more thing here.

Chair Kotelchuck: Surely.

Ms. Gogliotti: With this section, I don't know that we can draw the conclusion that the decline is coming from eligible claims, only because we're not randomly selecting our claims.

Chair Kotelchuck: I'm sorry. Let's go, what are you referring to, which paragraphs or which --

Ms. Gogliotti: This is the sentence that splits Page 19 and 20.

Chair Kotelchuck: Yes. Okay. This reflects --

Ms. Gogliotti: Because we ---

Chair Kotelchuck: -- reflects the expected decline in eligible from older, long-term employees and their survivors.

Ms. Gogliotti: We don't have a random sampling of NIOSH claims. We have a targeted sample.

Chair Kotelchuck: Right.

Ms. Gogliotti: And so we can't draw conclusions about the whole population. That would have to come from NIOSH.

Chair Kotelchuck: Mm-hmm.

Ms. Gogliotti: Because we do have that information when cases are selected.

Chair Kotelchuck: Uh-huh. I don't quite see that. But maybe my, it's certainly true that it is a selected sample. I don't know, others, what are others thinking? And maybe I'll try to understand better.

Mr. Katz: I think this, before anyone else steps in, since I haven't thought about this, I think you might want to say this is likely as opposed to this reflects so affirmatively, saying it quite as affirmatively. But it is a very reasonable inference that that's what

this is reflecting.

Chair Kotelchuck: Yes.

Mr. Katz: Because of the nature, when the claims come in and what claims can get to be reviewed, and so on, and the fact that that older population definitely is passing out of this program, and the younger population is growing in this program.

Chair Kotelchuck: Yes.

Mr. Katz: I mean, it's pretty darn reasonable to expect that that's having an influence even though, you know, nobody's run the numbers ---

Chair Kotelchuck: It feels right.

Mr. Katz: Yes.

Chair Kotelchuck: Like, I mean, strictly speaking, she is correct in that.

Mr. Katz: Yes. I said you could just say this likely reflects.

Chair Kotelchuck: I'm open to that, what do others think?

Member Beach: Can you strike it? Do we need that sentence?

Chair Kotelchuck: Well, you sort of put a graph down among the 100, the percentage of cases who started working has increased.

Member Clawson: Yes. But, Dave, this is Brad. You put that out there, myself, I would just strike it. You know, I understand what you're doing. You're making an observation ---

Chair Kotelchuck: Right.

Member Clawson: -- in my eyes about this. But myself, I'd just strike it. We want this to be as exact as possible. And I don't think that adds anything to this.

Chair Kotelchuck: In other words, strike that sentence and then leave among the six, the percentage of cases who started working has increased and in the, in other words, state the facts. Well, okay. I mean, you're right. That's the only one where we go beyond saying give me the numbers. I mean, it's one that reflects an opinion which certainly we can't back up.

Member Richardson: Well, to me, it's more of an observation.

Chair Kotelchuck: Yes.

Member Richardson: You know, and just like Jim says, you know, you can look at this, and you can figure it out pretty easy and stuff like that. But my suggestion would be let's just take and strike it out, stay with the facts, get it done.

Chair Kotelchuck: Yes. You know, that's a good argument to me. So we'll just strike that one sentence. And then all the other ones are numerical, and these things have changed, and essentially let the reviewer think what that might mean without trying to assert what it means --

Member Clawson: Right. Because it's human nature that we want to put kind of what we feel into this, and what we've seen, and stuff like that. But in this kind of a report, I think we ought to leave it all out. I think we ought to just deal with what the facts are in the numbers and go from there. Let them come to their determination.

Chair Kotelchuck: Sounds good. What do others think, feel comfortable with that?

Member Valerio: I do, Dave, this is Loretta.

Chair Kotelchuck: Good. Good. Okay, hearing no more, I'll strike it. Thank you.

Administrative changes. So the next section, the Board modified one aspect of the procedures to

improve review efficiency, that NIOSH and SC&A are more actively engaged in technical discussions to raise concerns, and talking about our movement now to Category 1 and Category 2, Type 1 and Type 2 review cases.

So this saves the Subcommittee time and allows it to focus on more complicated cases. And in either circumstance, all review cases are discussed and finally resolved by the Subcommittee.

So we're giving NIOSH and SC&A license to talk and interact more which is good. But the decisionmaking has not changed. But the review procedures have been speeded up. And why there's no numbers about how it speeded it up, but can't do that now.

Okay. Then I just took a Table 5 to take the Type 1 and Type 2 issues and noticed that the Type 1, the relatively easy ones that NIOSH and SC&A resolved together, are two-thirds of the cases.

Okay, other Board review activities, because the nature of this report is very much what's going on with the DRR Subcommittee, but on the other hand, there are an enormous number of other things going on that not only deserve mention but are critically important to the way the Board functions.

And I just tried a paragraph, as I did in the previous report, not to forget the important roles by all the other, the SECs, and the other subcommittees, the Procedure Subcommittee, et cetera. So I think there's nothing really new said here.

Conclusions, yes, let's go over them each. The Board continues to reach its goal of reviewing one percent during this third report to the Secretary. Since the 22, since the 2016 has reviewed another 166 which yielded a total of 243 findings, a drop in findings rate of almost 50 percent.

And then this review shows that none of the findings result in revisions completed to the extent that they would subsequently change the

compensation decision. That is, I'm talking about the 166 cases.

We continue to solicit blind case reviews. As of this report, 32 blinds have been reviewed. Findings affirm that the procedures were properly and professionally carried out. This is a strong validation of consistency of dose reconstructions.

And then four, the above three conclusions along with Board's ongoing review provides the Board with a high level of confidence that the process now in place is scientifically sound and consistent, and I repeat that again, and note that the methods and information are not static as new information comes in, et cetera, et cetera, and methods will improve to better reflect new information and new procedures.

How do people, do those seem to be the three, I mean, the three significant findings? Is there any other one that we should put in or emphasize?

Member Lockey: No, I think that's good, David. Jim Lockey a good summary.

Chair Kotelchuck: Okay. And then four basically said, of course, things change and we'll keep up with the changes.

Okay, recommendations, the Board should continue to review at least one percent of total DR cases. The Board should continue to conduct blind case reviews at the current rate.

Three, the Board shall modify the review process to make it more efficient and timely by focusing more effort on the critical parts of the dose reconstruction evaluation. In particular, the Board should initiate a process to conduct reviews focused on evaluating consistency and accuracy of dose reconstruction.

For cases where dose can make it, make individual judgments. The Board will work with the Subcommittee and NIOSH technical contractors to identify key targets. Okay, how about ---

Member Beach: My only suggestion on the third one, Dave, is can you break that into sentences? It's pretty long.

Chair Kotelchuck: Number three?

Member Beach: I think that there might be two parts in that second sentence, under three, yes.

Chair Kotelchuck: Yes. Okay, break it up, Number 3, conclusions, I mean recommendations, Number 3. Yes.

Member Beach: And you could maybe bulletize some of the things you're ---

Chair Kotelchuck: Pardon?

Member Beach: -- like the individual judgments.

Chair Kotelchuck: Could I what? Could I ---

Member Beach: I was just wondering if you could bullet ---

Chair Kotelchuck: Bullets, yes, bullets. That might help. Okay, that's good. And I will do that. It's long, and I shall do that. All right, folks. So ---

Member Beach: Dave, this is Josie again. Overall, I just want to say I think you did a fantastic job on this report, excellent work.

Member Lockey: I concur with that, Jim Lockey.

Chair Kotelchuck: Thank you.

Member Lockey: Very comprehensive, David.

Chair Kotelchuck: All right, good. I appreciate it. So basically, can I hear a resolution that we make the modifications that we talked about today? I'll send you a copy, but that basically we agree to pass this on to the Board with the revisions from today, pass it on to the Board for its December meeting.

Member Lockey: Jim Lockey --

(Simultaneous speaking.)

Member Lockey: I make that recommendation, or second it.

Chair Kotelchuck: Okay, thank you. All right.

Mr. Katz: So one other note, Dave?

Chair Kotelchuck: Yes.

Mr. Katz: I just, while we've been going through this, I've just been thinking about that possible footnote to the table on the Allied line.

Chair Kotelchuck: Yes.

Mr. Katz: So I just wanted to put this out there so that people could chew on it, not that you have to respond to it now.

Chair Kotelchuck: Right, okay.

Mr. Katz: My thought about that footnote would be to say something along these lines, while both the NIOSH and SC&A approach to this dose reconstruction case are reasonable, the NIOSH approach is more precise and hence must be used, or something like that which I think characterizes the situation simply and hence doesn't leave someone just scratching their head about ---

Chair Kotelchuck: All right. I'm taking that down. And we'll come back to that then after lunch when we go to that case.

Mr. Katz: Oh, okay. Yes, sure.

Chair Kotelchuck: Thank you, good, good. So folks, it's now, well, you didn't take a vote. All those in favor of forwarding it to the Board?

Member Clawson: This is Brad, I'm good.

Member Lockey: Jim Lockey, good.

Member Valerio: Loretta, good.

Member Beach: Josie, I'm good.

Chair Kotelchuck: Okay. Sounds like it's unanimous and, good. It is now 12:25. Let us get together then at 1:30. We'll take an hour and six minutes. So at 1:30 Eastern Standard Time we'll get back together, and we will discuss the Allied Chemical and Dye case and then the other blinds. Okay, folks?

(Simultaneous speaking.)

Mr. Katz: All right, thanks, everyone.

Chair Kotelchuck: Have a good lunch or breakfast, as the case may be.

(Whereupon, the above-entitled matter went off the record at 12:29 p.m. and resumed at 1:34 p.m.)

Closure of Blind Review of an Allied Chemical and  
Dye Corporation Case from Set 17

Chair Kotelchuck: All right. Shall we begin? Okay, folks, let's begin. Let's begin. Let me just, an administrative matter to mention to Ted.

Mr. Katz: Sure.

Chair Kotelchuck: As I was reviewing the transcript we were going, we're going on to the Allied Chemical and Dye, as I said before.

Mr. Katz: Right.

Chair Kotelchuck: Reviewing the transcripts of the discussions that we had in the past, during 2015, I noticed that in the early drafts some of them called it Allied Chemical and D-I-E, not D-Y-E.

And I can understand that. And that was on 4/14/15, our meetings 4/14, 6/24, and 9/21/15. Within a while, it was in the early ones that there were a few cases of D-I-E.

Could you have someone, some staff, or ask someone to just review them over. It's easy

enough. Find D-I-E, and change it to D-Y-E, so that we're consistent. I'm sure I didn't make the error myself. But on the other hand I certainly --

Mr. Katz: No. It's the court reporters that do the --

Chair Kotelchuck: Right.

Mr. Katz: -- transcriptions. So --

Chair Kotelchuck: And I review them. Right. And I review them.

Mr. Katz: Yes.

Chair Kotelchuck: And I don't, it's hard to think that it escaped me. But on the other hand, whatever it is, it's incorrect in the official transcript.

Mr. Katz: That's fine. They're long transcripts. Totally understandable.

Chair Kotelchuck: Yes.

Mr. Katz: Just tell me the dates of the transcripts, and I'll get those fixed.

Chair Kotelchuck: Okay. In 2015, 4/14, 6/24, and 9/24.

Mr. Katz: 9/24?

Chair Kotelchuck: Yes.

Mr. Katz: Okay. Of 2015? Okay, that's going a long way back. But yes, we can get those corrected.

Chair Kotelchuck: I'd appreciate that. Okay.

Mr. Katz: Yes.

Chair Kotelchuck: Folks, time to talk about the Allied Chemical and Dye. Fundamentally, after the Surrogate Data Working Group said that the NIOSH procedure was correct, was proper, and they approved it, they sent it back to the Committee.

Normally, since we sent it to that Working Group without, as a Committee, deciding what we wanted to do with it, and if we approved it as it stood.

Obviously, as I indicated before, I think that the gap between the 45 percent and 85 is so large and disturbing, that even though it's the only one where the compensation decisions differ, that it deserves more close examination.

Now, I don't know, I'd like to ask Committee Members how to proceed on it. Four of us were here for the discussions in 2015. And you may well remember them.

Rose put out materials. The, particularly the one where they were comparing the SC&A and NIOSH reconstructions for that case. And it's on the, in the materials for today's meeting.

The question is, do we want to go over it again? I mean, we could simply go over the report. And remember, two people, Jim and Loretta, have not had a chance to, have not, were not here for that discussion. And hopefully they have had a chance to look at the materials on the website for this meeting.

Or should we just simply say, here it is. And, but we do have the option of just saying, fine, that we approve the scientific procedures to the best of our ability. And simply accept, and then go on to other things, other blinds that we, for SEC 26.

And I suspect -- I'm confident SC&A is ready, prepared to go over the comparison file if people think it's worth it.

Ms. Gogliotti: Dave, we were under the impression that we were just going to be closing this case out. We didn't spend a substantial amount of time preparing to discuss this case in detail.

Chair Kotelchuck: Okay. Well, I mean, I'm certainly at one level prepared to do that. Why don't we find

out from the Committee Members whether they would like to have us go over this, if not now, some other time?

Although, I would like to put it in the report. So, I will, that I lean toward simply approving. But I, first, whatever it is, I think before we approve, we have to ask the Committee Members, the Subcommittee Members what they, how they feel they would like to proceed.

Member Clawson: This is Brad. I can tell you that my personal opinion is, we've spent a lot of time on this. We've, I think we've run this to ground.

I think that we've done everything that we do. I was kind of in the impression too that, okay, because there was a difference, and stuff like that, but NIOSH's position that they still did it correctly, and everything else like that, there was just, we had a difference of opinion on this. And myself, I don't see spending much more time on it, and proceeding there. But that's just my opinion.

Chair Kotelchuck: Well, that's what was asked then. Other folks? I mean, I agree, frankly. But I want to make sure that --

Member Lockey: But I agree with that also.

Chair Kotelchuck: Pardon?

Member Lockey: Jim Lockey. I agree with that.

Chair Kotelchuck: Okay.

Member Lockey: Go ahead and move on.

Chair Kotelchuck: Okay, fine. Other? That's good.

Member Valerio: This is Loretta, Dave.

Chair Kotelchuck: Yes.

Member Valerio: I would agree as well.

Chair Kotelchuck: Good. Well then, I think formally

what we need to do is accept the report, and the comparison. I mentioned earlier that, before we consolidate this, I wonder if it wouldn't be wise to send this to the Methods Working Group, the DRR Methods Working Group, to see where, if it was any possibility of understanding what, how the difference in professional judgment, how that could lead to such a vast difference. I happen to be Chair of that Working Group. And, but --

Dr. Taulbee: Well, this is Tim. Can I --

Mr. Katz: Let me jump in first. This is Ted.

Chair Kotelchuck: Please do.

Mr. Katz: I mean, that is not the role of the DRR Methods Work Group. So, I don't think it's appropriate to send it to them. Because it's not all what they were constituted to do.

The DRR Methods Work Group was constituted specifically, way back from when we had backlog issues, and then beyond, to think about whether we had come to a point where we should change our DRR methods review.

And that's really it. Not to look at individual cases. Or to sort out issues like this, which was a --

(Simultaneous speaking.)

Mr. Katz: -- which is why it was done through the Surrogate Data Work Group.

Chair Kotelchuck: Right. Right.

Mr. Katz: So, I just don't think it's appropriate to refer it to that Work Group. Because --

Mr. Katz: Maybe you're --

Mr. Katz: This is not in their mandate.

Chair Kotelchuck: Yes. You may be right about the broader -- I think, Josie, you're on that committee

as well? That's the Working Group, are you not?

Member Beach: Yes. I'm on both.

Chair Kotelchuck: Yes.

Member Beach: The Surrogate and the Methods.

Chair Kotelchuck: Do you, and maybe he's, maybe Ted is correct on that. I hadn't thought about that, in terms of, that we were looking to see how -- but at times we looked to see how professional judgment, whether --

Member Beach: Yeah. I think that's a separate issue though, Dave --

Chair Kotelchuck: Yes.

Member Beach: -- in my mind.

Chair Kotelchuck: Well, yes. Okay. Okay.

Member Beach: I mean, and we have already referred it to the Surrogate, so --

Chair Kotelchuck: We certainly did. Well, we've taken -- Well then, with what both of you have said, I mean, I may be, I should not, that it's not appropriate.

And that therefore, it seems as if we would just want to accept now, after getting the report from the Surrogate Committee, we now accept the two, and the two results.

And both of them are, they're both, have different professional judgments. But approved as appropriate professional judgment.

Mr. Katz: Well, Dave, I just need to caveat that. I mean --

Chair Kotelchuck: Okay.

Mr. Katz: -- that I don't think is correct. I mean, they were both reasonable approaches based on the

data that each relied upon. But --

Chair Kotelchuck: Right.

Mr. Katz: The program is, has to use the most sort of precise methods available in a case like this where, you know, the information is very coarse in either case. But it will --

Chair Kotelchuck: Right.

Mr. Katz: More coarse in the approach that SC&A took. That there, it's not like there is an option to go with the SC&A approach. It's not an option.

Chair Kotelchuck: That is correct.

Mr. Katz: So, and so I think the statement you just made would be misleading to the public. Because they would think, oh well you could have done either. You can do either, why aren't you doing that one? But that's not an option.

Chair Kotelchuck: Yeah. Well --

Ms. Gogliotti: If I could say something, Dave?

Chair Kotelchuck: Yes. Go ahead.

Ms. Gogliotti: This case is different than most of the blinds that we do in that there is no TBD for Allied Chemical and Dye. So, there is no guidance document that we could go to and say, this is the correct correction factor for this application. This case also has no records. So, there's no DOE files associated with this case at all.

(Simultaneous speaking.)

Ms. Behling: Yes. And this is Kathy Behling. If I could just add to that?

Chair Kotelchuck: Go ahead, Kathy.

Ms. Behling: Okay. I'm sorry. The other issue with this particular case is, a lot of the data, both internal and external, was based on OTIB-43. And

SC&A did apply OTIB-43, but we used data in OTIB-43 for best estimate values.

Where NIOSH took it another step, and said, we can't even use best estimate values for this particular site, because of the amount of, that was processed through that site. And so, we're going to use only ten percent.

When SC&A does its blinds we, I thought that our role was to use the procedures as they existed, to use surrogate data when we need to.

So, when we used OTIB-43, I don't think we felt that it was appropriate to make judgments, such as to make such a broad professional judgment as to say, okay, we're going to reduce OTIB-43 values down to ten percent, because of that throughput.

So, we followed what I think is supposed to be our protocol, and to use procedures that are already in place by NIOSH. And we used best estimate calc, best estimate values, rather than reducing them even further.

Member Beach: Well, and where is that -- Kathy, this is Josie. Where is that guidance that would tell NIOSH to use the ten percent? I know you probably can't answer that. But it is --

(Simultaneous speaking.)

Ms. Behling: Okay. There is, as far as SC&A is concerned there is, there was no guidance. Unless there was one of these DR guidance documents that's specific to a facility.

Now, when I went in and looked at this comparison case, I did ask that same question as to why did they come up with ten percent? And have they applied that ten percent to all of the other cases associated with Allied Chemical?

I couldn't find any guidance documents. But I was able to go in and look at every case that's been

done for Allied Chemical. And it's all been done the same way.

So, somewhere there must be some communications with the dose reconstructors, that this is the approach to take. SC&A did not have access to that information.

Chair Kotelchuck: Yes.

Member Beach: Well, and that brings up one of the questions I had from last meeting: that we asked NIOSH to put together site guidance documents, so SC&A has access to them.

And I think Grady took that on. And I know, I think you're back on the line. Did you give that any thought, Grady? Or, so that there's current documents available?

Mr. Calhoun: Yeah. We've got the methodologies, and other documents that we have. And we have actually started going through some of those.

And if there's a significant number of cases that have been filed with those, those need to be switched from just the, a methodology to some kind of TBD or such.

And now, the guidance documents are a little bit different. And those are kind of like, a lot of times those are, those will be incorporated into TBDs as they are revised.

I think that's the approach. Is that right, Scott? Are you, Scott?

Mr. Siebert: No, I'm here. I will absolutely admit I was not really paying attention, because this is your guys' site. So, I didn't ask, I didn't catch the question. I apologize.

Mr. Calhoun: Yes. It was more of a general question. But with the guidance documents, I mean, sometimes the guidance documents, those would not be incorporated into a TBD, unless the TBD was

revised. But that is done sometimes, right?

Mr. Siebert: That is correct. And as soon as we have, we're updating a TBD Site Profile. We roll anything that's in the guidance document into the TBD. So then it would be fresh. And it would be listed in that tracked document.

Chair Kotelchuck: Yes.

Member Beach: Well, and I think Ron asked the question of having those available. Because SC&A doesn't have a real way to get to those documents. I believe is what his question was last meeting.

Chair Kotelchuck: Yeah.

Mr. Calhoun: I also thought that the methodologies were included in the, I forget which folder it is. But it's in the ADR files folder. It's development, the development folder.

Mr. Siebert: Yes. I think you did.

Mr. Calhoun: I think that they are.

Mr. Katz: Yes. I think so. Because I think you --

(Simultaneous speaking.)

Mr. Calhoun: They should be there. You guys have access to that whole thing.

Mr. Katz: Yes.

Member Clawson: Well, yes, but, this is Brad. If I remember right, when we started into this, and the question was asked, how come did you use this, down to this ten percent?

This is where we get into the professional judgment part. And if I remember right, that's what was told to us. And our question was, how do we, how does SC&A, how do we know when we would be doing something like this, how would you do it? Especially where it's not written down.

And this was, this has been, if I remember right, this has been part of the hangup with this case, and also with this site.

Chair Kotelchuck: Well, part of the hangup, as I recall, and going over the transcripts again, was that the folks from NIOSH really argued that this was, first place, it is a singular case. And, but I think that they are, wait a second. No. NIOSH --

Member Clawson: Dave. Dave, this is a singular case. But back, way back before, when this first started to come out this was part of the issue, is how can we do a dose reconstruction, and redo this, when there was no guidance for them to drop this down to ten percent? And why? Or any explanation on this. So, this has just built up and built up through this.

Chair Kotelchuck: Yes.

Member Clawson: So that's, part of the issue was that we were going to get a professional judgment evaluation, and a little bit of guidance like this. But as we have developed, we're still out there.

And, you know, this is an old question. And yes, we're doing better now, but also, the question still comes back to is, how did we, and why did we do this ten percent?

Mr. Katz: Well, yeah. The ten percent was very fully addressed in previous discussions. That --

Member Clawson: Right.

Mr. Katz: As far as we -- yeah. But the guidance is - - Grady at some point, I don't remember the date, but sent out an email once they had pulled together all the guidance things, saying, here are all of them as they stand right now, as I recall. And that was sent out.

You know, how complete that is, or where that stands now, and as these things change of course,

because it's a moving target, I don't know. But I know I saw that at some point.

Chair Kotelchuck: So, we are, I mean, there is, there will be something coming. There is a process by which NIOSH is going to develop, look into developing what is now a workbook, or some sort of process by which the people who do the dose reconstruction are guided, right? That's --

Mr. Calhoun: Well, we have those in place. The question here is, are they available to everybody. And I think I do remember that I sent out a bunch of them. Gosh, it's been more than probably two years ago.

Chair Kotelchuck: Yes. It's been a while.

Mr. Calhoun: And, you know, the thing of it is, is that we don't typically like to go into full blown TBDs if we only have a couple of cases, like we do in this case.

Chair Kotelchuck: Right.

Mr. Calhoun: So, I can't commit. I mean, there's literally 300 sites out there. So --

Chair Kotelchuck: Yeah. No. I don't think --

Mr. Calhoun: I don't want to --

Chair Kotelchuck: I understand. And you made that clear, that you cannot develop something for every single site.

Ms. Behling: Yes. This is Kathy Behling again. On these guidance documents though, the other thing that I will say is, these are very dynamic documents. They get changed routinely.

And that is because they're not published. And it's easier for them to update the dose reconstructors, and change guidance in these documents, rather than doing it in a Site Profile.

So, we need to have access to a place where the most current guidelines are available. Because they do change quick, very routinely.

Mr. Siebert: And this is --

Member Beach: And that was a commitment made last meeting, to --

Chair Kotelchuck: Yes.

Member Beach: -- figure out how to get those available.

Mr. Siebert: This is Scott. I can't speak to the actual access, because I don't know what SC&A has access to on the NIOSH server. However, I know that a copy of our DR Tools folder gets replicated over on the NIOSH server. And I believe that was for SC&A to have access to all of our tools.

These DR guidance documents are in the same folder with each of those tools. So, in my mind there should already be access. But like I said, I can't check that, because I don't have access to where you guys look for that stuff.

Ms. Gogliotti: Well, perhaps we could talk offline, and get this figured out.

Chair Kotelchuck: Exactly. Exactly what I was --

Mr. Katz: Right.

Chair Kotelchuck: -- thinking.

Mr. Katz: Right.

Chair Kotelchuck: And that can be -- and in terms of actually, I mean, coming to a resolution on this case, it seems to me clear that we don't want to go through it, and that we should resolve simply to accept the report from the Surrogate Data Group. And then accept the two cases into our table. And that those are the results and that would be it. Just simply accept.

Member Beach: Agreed. Dave, this is Josie. I agree with that, Dave.

Chair Kotelchuck: Yeah, yeah. I think -- other people agree?

Member Valerio: Dave, this is Loretta --

Member Lockey: David --

Chair Kotelchuck: Yes. Loretta, yeah.

Member Valerio: And I agree. And I was trying to remember. I know we discussed this before -- and Josie, refresh my memory -- I believe it was during the Surrogate Data Work Group meeting. There was a recent meeting that this was one was discussed. If I --

Chair Kotelchuck: Oh, absolutely. In fact, that was the result. You're on the Surrogate Data Committee, I know. And you --

Member Valerio: Right.

Chair Kotelchuck: And then Paul Ziemer, who's the Chair of it, simply sent me a letter telling me the results of your last meeting. And that's the one in the materials that are there today, the letter from Paul.

Member Valerio: Yes.

Chair Kotelchuck: Yeah.

Member Valerio: Yes.

Chair Kotelchuck: So, I guess, folks, we now, we accept the Surrogate report. And we accept therefore the, that. And we accept the results as they now stand. And this will be in our table.

And I will try to think of -- Ted, you suggested something for the table in the report. And also, maybe I'll think a little bit about what that asterisk in the table, in the report, should say.

And maybe part of it is, I do believe this really is a singular case. I mean, no data, no exposure records whatsoever, no profile. Really very difficult.

But anyway, let's just say we've accepted it. And now I'll try to put something into an asterisk. We'll pass it around, of course, to everybody. And --

Member Beach: And Dave, this is Josie again. Before we move on, I know SC&A and NIOSH just agreed to talk offline on the guidance documents. Can we just get a quick memo or update, or something, of when that occurs, and if it gets resolved? Because we have been talking about that for a couple of years, as Grady pointed out.

Chair Kotelchuck: I think that's --

Member Beach: Most recently last --

Mr. Calhoun: Yes.

Mr. Calhoun: Yes. That's --

Mr. Calhoun: Yes. I'll get something to Ted.

Chair Kotelchuck: Okay. Appreciate it.

Ms. Gogliotti: Who should we direct that inquiry to?

Chair Kotelchuck: Pardon?

Ms. Gogliotti: Who should I talk to about getting that access?

Mr. Calhoun: From us here at NIOSH? Or to them?

Ms. Gogliotti: From NIOSH.

Mr. Calhoun: You can send stuff to me.

Ms. Gogliotti: Okay.

Mr. Calhoun: This is Grady.

Chair Kotelchuck: Okay. Good.

Ms. Behling: And, David, this is Kathy Behling one

more time. Also, if you're looking maybe for some additional words to add to your letter, remember our summary comparison table does put a little summary statement underneath each of the cases, describing the differences. So, that may help you in --

Chair Kotelchuck: Yes.

Ms. Behling: -- putting some words together.

Chair Kotelchuck: Yes. Maybe. I'll take a look at that. I'm actually, the asterisk I think may be not even going into the --

Ms. Behling: The details.

Chair Kotelchuck: -- real specifics --

Ms. Behling: Okay.

Chair Kotelchuck: -- of the case. But thank you --

Ms. Behling: Just a thought.

#### Review Set 26 Blind Dose Reconstruction Cases

Chair Kotelchuck: -- for alerting me. So, folks, I think we have now disposed of this item. And we're ready to go on to the next two blinds. And both of them have, we've asked the SC&A to rework, and they have.

And still we have two cases where the compensation decisions differ. The PoCs don't differ by much. But the compensation decisions, since they're both around 50 percent, do differ.

And with that I'll ask Rose or Kathy, would you like to start with Ames or Los Alamos?

#### Los Alamos National Laboratory

Ms. Gogliotti: Let's start with LANL.

Chair Kotelchuck: Okay. Very good. LANL it is.

Ms. Gogliotti: Okay. So, as a refresher we presented this case at the last meeting.

Chair Kotelchuck: Now, is LANL, pardon me, is LANL up on the Skype there?

Ms. Gogliotti: It is on my screen. Can everyone else --

Chair Kotelchuck: Oh yes. Oh yes. Okay, good.

Ms. Gogliotti: Okay.

Chair Kotelchuck: Right.

Ms. Gogliotti: So, this is a LANL case. The EE had several decades of employment. And quite a lot of cancers, as you can see on the screen. Of course, we have to avoid using Privacy Act-protected information.

The original dose reconstruction we did had a PoC of 36 percent. But there was one aspect that you asked us to look at again. And that was the X-ray dose.

There was a single X-ray, the first one that was done for this claimant that, once you analyze the record, although it didn't directly say on there that it was a PFG scan, with historical knowledge, and it does appear in the TBD that it was a PFG scan, which SC&A did not include in the initial report. So, we went through and added a PFG, and removed the initial scan that we should find instead.

And that results in a small difference in PoC, but notable because it is on opposite sides of the spectrum here. And once we did that our medical doses here, you'll see are virtually identical.

Chair Kotelchuck: Right.

Ms. Gogliotti: So, the main difference in this case, now that we've corrected that, comes down to the number of working hours that we assigned per year.

NIOSH assumed 2500, which is the number directly out of PROC-60, which gives guidance for best estimate claims. While SC&A instead used the number from the TBD, which is 2,080, which is a smaller number than the TBD, from the TBD.

And that was also because the CATI, in the CATI the EE reported that they did not work overtime, and they only worked 40 hours per week. And PROC-60 does allow for modifications to the default assumptions in PROC-60, based on the CATI report.

Chair Kotelchuck: Okay.

Ms. Gogliotti: And this difference, although it's not that many working-hour difference, gets amplified because there are so many cancers in this claim.

Chair Kotelchuck: Yes. And right. Are, pardon me one second. I mean, my feeling is, I mean, it was appropriate that you do it. And there's, we did discuss this last time, except that one issue of the medical in that first year.

And no surprise it didn't change much. But the difference between the PoCs is less than one percent. So, I mean, the PoCs were remarkably close.

We happen to be working in an environment where this is a compensation decision. And there is, if you will, there's a line in there above which people are compensated, and below which they're not.

But if we're asking, as we are here in blinds, whether we're essentially performing the results in the same, performing the analysis in the same way, we are.

And we're remarkably close. And no surprise, since the original LANL case was right around 50 percent. It's, well, in fact it was 50.06. So, pen was compensated, by the way.

Then I, this is just a small difference. I personally

feel comfortable accepting it, that this has been discussed, and it's appropriate.

And of course, with a certain amount of variability and professional judgment, PoCs will differ a little bit. And this is really a little bit of difference. Even though compensability would have been different had one done it rather than another.

Member Beach: So, this is Josie. You might have discussed this, and I might have missed it. The cancer site number 2, there was a bit of a difference there, in the external dose. What was the difference in that one? Was that the work days also? Or --

Chair Kotelchuck: I don't know. I'm looking. Site number 2, yeah. Yeah. I mean there are differences, large and small.

(Off microphone comment.)

Chair Kotelchuck: I don't recall the prior discussion on the cancer number 2.

(Simultaneous speaking.)

Ms. Gogliotti: Looks like it's an environmental dose. And it's possible we used a different dose correction factor, maybe.

Chair Kotelchuck: I mean, you know, every little bit. I mean, looking at Table 1-2, you know, they're all just a little bit different.

Some are a little bit more different and less. I don't see anything, to me, I don't see anything that stands out in 2, other than there's a difference.

The question, I mean, I ask people, are people concerned that this is, this would be the second case where there's a difference, among our blinds where there's a difference in compensation decisions?

Ms. Gogliotti: The third.

Chair Kotelchuck: Pardon?

Ms. Gogliotti: I believe it's the third.

Chair Kotelchuck: I can't hear that. Maybe I'm, my phone is fading a little bit.

Member Lockey: Hey, Dave. Dave, it's Jim Lockey. I mean, I'm not concerned. I think these are so close, it's remarkable to me that they're so close. But I do have a sort of a moral dilemma question, or a philosophical question.

Suppose, Dave, suppose this fell on the other side? Suppose the SC&A was 50.06 percent and the NIOSH was 49.43.

Chair Kotelchuck: Yeah.

Member Lockey: Would your approach be any different?

Chair Kotelchuck: I, mine would not. Because the NIOSH dose reconstruction is the correct dose reconstruction at a formal level. And they are the most experienced of the cases.

Do I, like any other Board Member, feel at perhaps a personal level when something is so very close, whether it's this case or any other one coming in at 49.6 or something? Yeah, you feel bad.

Because the difference is a significant difference to the claimant and his or her family. But I would not, no, I would not, I would say it's not compensable if the reverse had happened, and NIOSH had found it below 50.

And I feel as if, if an exception were made, then an exception would have to be made for other people to be fair for other people that got 49.6. And then, we've effectively reduced the decision point from 50 percent, which is in the law --

Member Lockey: Yes. And I do agree with that. One who is involved with scientific studies, there's going

to be some, a little bit of flux. You just want to keep it as low as possible.

And I think our data historically has shown that the SC&A and NIOSH have usually gotten very, very close. So, I think we just have to accept what the data shows, and move on, even though sometimes we may not like it.

Chair Kotelchuck: Yes. Or it may, at the level of persons, rather than people advising on a law, we may feel different.

Member Lockey: Yes.

Chair Kotelchuck: Yes, I agree. And it is understood that in a complex dose reconstruction, there will always be a certain amount of variability. Therefore, there will always be a small, a percentage that are incorrectly decided, quote, incorrectly decided, if one knew what correct was.

Member Lockey: Yes. And our job is to minimize that as much as feasible, right?

Chair Kotelchuck: Yes, right.

Member Lockey: I think that's what your point, I think that's what historic data is showing. That NIOSH and SC&A, well, NIOSH has done a good job of that.

Chair Kotelchuck: Yes.

Mr. Katz: But let me put an asterisk on that point, Dave.

Chair Kotelchuck: Please do.

Mr. Katz: Because, and NIOSH is, you know, would be the word on this, it's up to NIOSH, but if in any of these -- so, the Board's role is not to review individual cases with respect to the compensation program.

It's, with respect to, it's peer review, and not, the

Board doesn't have a role in the adjudication. So, and that's all clear. And you all know that.

Chair Kotelchuck: Right.

Mr. Katz: That being said, just as when you review methods, and NIOSH may go back and change methods, and then you'll do reworks, NIOSH similarly is, always has the discretion.

I mean, say you do a blind review, and NIOSH realizes, oh, we missed the boat on this one. NIOSH can always go back and do a rework. Where NIOSH feels it's missed the boat it will, that's what it will do. It's not going to ever --

So, what you were saying, there's going to be some, you know, some wrong decisions that just must be what they are, that's not really true.

Whenever NIOSH determines it has made a wrong decision on a dose reconstruction, it has, at its discretion, the right to correct that case. And that's, and its basic policy is to correct mistakes.

Mr. Calhoun: Only if we said it was a non-comp.

Mr. Katz: Yes.

Mr. Calhoun: If we said it was comp we'd never go back.

Mr. Katz: Yes. Thanks for that clarification. We've never gone to that, that's never been done, and it will never be done to go back on a comp. I'm talking about our non-comps, of course.

Chair Kotelchuck: Yeah. Yeah.

Mr. Katz: Yes. So, I just want to make that clear. That if the Subcommittee stumbles on a case where NIOSH missed the boat, and NIOSH agrees it missed the boat, it will correct that case.

Chair Kotelchuck: Yeah.

Mr. Katz: Yes.

Chair Kotelchuck: That's true. And that's important.

Mr. Siebert: This is Scott Siebert. I mean, I'm not going to talk about the esoteric things you're talking about right now. I just want to get specifically to the case, if that's okay, and point one more thing out.

There are a couple of other small differences throughout the claim. And I believe they fall under, you know, there are either small professional judgment differences or, you know, small things that were done differently.

But one thing I do want to point out, we are right at the 50 percent mark. And a big difference, it may not have a huge impact, but it will have some impact is the fact that for best estimate claims we do run our calculations through a Monte Carlo calculational tool for applying all the distributions, and mixing them together appropriately as a full best estimate.

SC&A, in their assessment does not do that Monte Carlo calculation. I'm not pointing fingers. I just want to clarify that this is the case. They, for example, use a mode of the DCF for the external, versus the full triangular distribution.

And since we're talking about really close to 50 percent, 30 IREP runs, 10,000 iterations, distributions may have a slight difference, and that may be where we're seeing some of these differentiations.

Chair Kotelchuck: Right. Good point. So, yeah. So, others. I mean, Jim, you said, you know, it doesn't disturb you. And it doesn't disturb me either that there's a difference. In fact, I think it's remarkable close, the two.

Member Lockey: If there were similar spreads on a consistent basis, that would be more disturbing. But to see this very narrow differences is, you know, I

think we're pushing it as far as we can push it, you know.

Chair Kotelchuck: Absolutely. And I agree. I think it's, this is closer, by the way than most cases, blind cases in the table that we looked at this morning. Many of them are two or three percents PoC different. And so, anyway, shall we accept this, folks, and (Telephonic interference.) --

Member Beach: You're breaking up quite a bit, Dave. But yes, I agree to accept this report.

Chair Kotelchuck: Yes. Okay. I did change, because I'm on a wireless, I did change the wireless. Am I, is it a little better now?

Member Beach: Yes.

Chair Kotelchuck: Good. And it's, certainly the reception on my end is better. So, okay, folks. So, I think we're ready to go on to the Ames case.

Ms. Gogliotti: Okay. Let me just get it pulled up here.

Chair Kotelchuck: Sure.

#### Ames Laboratory

Ms. Gogliotti: Okay. To refresh everyone's memory, we discussed this at the last meeting also.

Chair Kotelchuck: Right.

Ms. Gogliotti: In the initial Ames case, this particular employee was employed for a handful of years in the late '50s. And they have less cancers than in the previous one, but still a number of cancers here.

When we did the initial case we came up with a PoC of roughly 62 percent. And NIOSH ended up at 48.6. And there was one issue that we were asked to readdress. And that had to do with the missed neutron correction factor.

In the TBD it specifies that for neutron dose a correction factor of two should be used. And it was silent on whether or not it should be applied to missed neutron dose.

And so, SC&A made the assumption that it should be included. And this is actually where the DR guidance document discussion happened at the last meeting.

In the actual DR guidance document for Ames it does say not to address it. And we discussed why that was at the last meeting. And so, we were asked to remove that correction factor for the missed neutron dose.

So, ostensibly we were reducing the missed neutron dose by 50 percent. And when we did that our PoCs were close, but still not quite --

Chair Kotelchuck: Right.

Ms. Gogliotti: -- lined up with the other side, the 50 percent. And with this case the main difference that's remaining has to do with the missed neutron, or the missed neutron and photon dose here.

It's the only difference pretty much in the case, or any difference of significance. And that has to do with, there was a short period of time, several months, that there were no monitoring records for this individual.

And so, SC&A assumed a bi-weekly monitoring, with zero recorded dose. And so, we assigned missed neutron and photon dose to that time period. And NIOSH did not assign any missed dose to that time period. So, that is the difference in this case, or differences in this case.

Mr. Calhoun: And some of this, I can address that if you so desire. And for you --

Chair Kotelchuck: Sure.

Mr. Calhoun: This comes down to -- I'm sorry?

Chair Kotelchuck: Sure.

Mr. Calhoun: Oh, okay. This comes down to, there's a timeframe that does have an apparent gap in that dosimetry coverage. We didn't include it because when we looked through the DOE records it showed that the dosimeter that was assigned to that worker was not used for the period beginning in April of that specific year, and was actually assigned to a different employee later on in April of that year.

They reused their badge numbers. That's always fun. But it was reassigned to a different individual.

There's also evidence in the DOE files that the EE resigned in February to take a teaching position, and then came back, back in the May, June timeframe.

Chair Kotelchuck: Yes.

Mr. Calhoun: And it's not necessarily 100 percent clear. But it's -- the weight of the evidence in our minds seemed to indicate there was a reason he, the individual was not being monitored, and did not have exposure. So that's why we made the decision we did.

Chair Kotelchuck: Right. And that sounds -- certainly to me it makes sense. And that's a perfectly sensible decision. The pen results are really quite similar, less than two percent difference.

If it's -- and I'm, just to say, because we're probably dealing with small variations in the analysis. In this case, NIOSH was below 50 percent, and SC&A was above.

In the previous case it was the opposite, which just goes to show we're probably dealing with random variability in doing the dose reconstruction calculations. Small differences. And again --

Mr. Siebert: But you --

Chair Kotelchuck: Yes, go ahead.

Mr. Siebert: I'm sorry. This is Scott. And I just wanted to say that the whole Monte Carlo calculation that we just talked about in the last one applies to this one as well. Same thing. There's going to be small variability because of that.

Chair Kotelchuck: Right. Right. So, I think we've been over this. It seems sound. Other people have questions, comments, thoughts?

Member Beach: Dave, I think it sounds reasonable. And I agree with this.

Chair Kotelchuck: Yes. Yes, good. Me too. So --

Member Valerio: Dave, this is Loretta. I agree as well.

Chair Kotelchuck: Yes. Okay. So, folks, shall we accept now? Okay? Do I hear any objection? No. All right. Very good. And --

Member Clawson: This is Brad. I'm good with it.

Chair Kotelchuck: Good, good. So, with that, we've taken care of the two blinds that were recalculated for today. Now, on the table, Rose, on the table that you presented in the materials for today, you clearly completed all -- most all of the blinds, you know, from your end. I assume what you're doing is waiting for a response from NIOSH on the other blinds?

Ms. Gogliotti: We closed out the remaining blinds. So --

Chair Kotelchuck: Did we close all of them out?

Ms. Gogliotti: Yes. Other than these two, correct. Yes.

Chair Kotelchuck: Well, okay. My goodness. Okay. My memory failed me. But that's wonderful. So, these blinds are taken care of. And does that mean that we will be making choices soon for another set of blinds, Ted, or have we done so?

Mr. Katz: Well, so we're waiting on them to make more progress, not on blinds --

Chair Kotelchuck: I know.

Mr. Katz: -- but they have another set they're working on.

Chair Kotelchuck: Right. Okay.

Mr. Katz: A normal set, not a blind set.

Chair Kotelchuck: Yes.

Ms. Gogliotti: We're working on the 27th set now.

Chair Kotelchuck: Right.

Ms. Gogliotti: And we'll have that in early November.

Chair Kotelchuck: Okay, good. Good. All right. Now, it's 2:20 p.m. And I think it's time to go on to the last item, which is the regular review cases.

Ms. Gogliotti: Yes.

Chair Kotelchuck: So, now I noticed that there are two basic, we have DOE sites, and AWE sites. There are only four, as I count it only four cases that need to be decided on the DOE site, and quite a few on AWE. Do you want to do DOE, and finish it up today? Is that, what would you suggest?

Ms. Gogliotti: Yes. I'd recommend that we do the Type 2 issues from the DOE matrix.

Chair Kotelchuck: Okay.

Ms. Gogliotti: And then immediately progress into the AWE Type 2 issues, while everyone's still fresh. And then --

Chair Kotelchuck: Okay.

Ms. Gogliotti: -- while everyone's kind of sagging at the end of the meeting we can do the easy ones.

Chair Kotelchuck: Yes. I like that. Okay, fine. DOE it is.

Ms. Gogliotti: Okay. So, let me pull up, actually, BRS here.

Chair Kotelchuck: Issues resolution.

Ms. Gogliotti: Thought I had this pulled up before, but apparently I did not.

### Review Cases from Set 25

#### Hanford PNNL

Chair Kotelchuck: Okay. I see the first one, Hanford PNNL 516.

Ms. Gogliotti: Okay. Here we go.

Chair Kotelchuck: All right. Yes.

Ms. Gogliotti: So, for this one, the Hanford PNNL case. And the finding states that NIOSH did not properly account for all missed shallow doses. And this is kind of an interesting one. So, I'll go ahead and read the finding to you. And then --

Chair Kotelchuck: Okay.

Ms. Gogliotti: As per the guidance of OTIB-17, only a single missed beta-gamma dose is assigned for a given year, for the specific guidelines for the assignment of missed dose at Hanford. And then we quoted the guidance there.

Missed photon dose was assigned for the years 1979 and 1982, but not for the years '75 and '78. During these periods zeros were recorded for non-penetrating readings, but positive results were reported for penetrating dose.

If missed shallow dose was assigned to these years it would increase the dose. And it's not clear if the PoC would be affected in this case.

And NIOSH came back and said that they don't

believe that there is an error in the case. And they said it was based on recording practices at Hanford at the time. And then they go on to say, during the years in question the site reports non-pen and pen dose.

The tool interprets non-penetrating dose as open window dose, minus deep. Then the tool combines the non-pen and pen dose to determine an open window value, then applies the OTIB-17 logic according to the Table 26, or the table on Page 26 of the OTIB.

In the years '75 and '78 there was a positive pen dose for all recorded zero non-pen dose. Since the tool combines the values, both the open window value and the deep value are greater than the zero, so no missed dose is applied. According to this logic the dose was calculated correctly, and there is no missed dose problem.

But then, we're really confused on NIOSH's response. One, because they're quoting from Page 26 of OTIB-17, which is not applicable to the site. We believe that they actually should be using Appendix C, which is on Page 24 of the OTIB, rather than Appendix D.

And we interpret the dosimetry records to show zeros for the non-penetrating values. And no missed dose was assigned. So, maybe NIOSH can clarify here.

Mr. Siebert: Yes. This is Scott. The table that you're referring to on Page 24, yes. It's the attachment that's talking about Hanford, it's actually in a Hanford external TBD as well.

And I think the confusion comes down to terminology. And it probably could be more clearly stated. When it's talking about shallow readings in that table, it's not talking about non-penetrating dose.

It's talking about open window. Everything that

would be seen in the shallow reading, which would be non-penetrating, plus the penetrating, which you'd use for skin dose.

In that case the open window actually equals the deep. It's not a zero. And that's where the different line in that table actually comes into effect. It's the fourth row, if I remember correctly, of data. And it's where it states that missed dose would not be applied.

Ms. Gogliotti: I guess what I'm -- are you insinuating that when the -- in the Hanford dosimetry reports, when it's reported as non-penetrating dose, that is actually the non-penetrating dose component, plus the deep component?

Mr. Siebert: No. When they say non-penetrating they're talking about the open window, minus the deep.

Ms. Gogliotti: So, the shallow dose component?

Mr. Siebert: No. The non-penetrating. That's what I'm saying. This is, OTIB-17 is written to discuss open window, overall skin dose, and deep dose. And, Matt Smith, if you want to jump in on the OTIB-17 discussion portion of it, feel free.

Mr. Smith: Well --

(Simultaneous speaking.)

Mr. Smith: -- I have to declare I am conflicted for Hanford and PNNL.

Chair Kotelchuck: Okay. Good.

Mr. Smith: But what --

Mr. Siebert: But this is --

Chair Kotelchuck: But if you are, you are --

Mr. Katz: Well, no, no. He's not -- well, Matt's

conflicted on Hanford, meaning he can't comment on the case. But he can certainly comment on the generic matter of that guidance.

Chair Kotelchuck: Okay.

Mr. Katz: Yes. That's okay.

Ms. Gogliotti: OTIB-17 does have specific guidance for Hanford though. I don't know if that impacts things.

Mr. Smith: Well, we don't, in OTIB-17, as I recall, have an era-specific table that addresses this timeframe when they have the non-pen and pen. And that's something Scott and I have talked about offline, to have updated in the TBD.

But back to where Scott was leading to, he's absolutely right. That fourth row that he's discussing is actually where the tool reconstitutes the dose, if you will.

There's 100, in that example 100 millirem of deep. And that will translate into also having 100 millirem of shallow in this case. Keith is on the phone call as well, and he can speak specifically to the tool logic.

But if you take a look at Table 6-2, and I believe we've called that out before, 6-2 in the Hanford TBD. It shows you how the reporting value is also correlating with -- I don't have it in front of me right now, dose quantity.

So, you know, to do the math, in terms of what we're trying to achieve here with OTIB-17, the tool actually is adding that deep dose back into what we would call the shallow reading, and to create the shallow reading.

Ms. Behling: This is Kathy Behling. Can I ask a question? In the table we're referring to in OTIB-17, Row 5 of that table shows an example of zero shallow reading, 40 deep reading, and then it tells you to enter that dose as missed dose for electrons,

or low energy photons.

Am I hearing you correctly that that can't happen in this particular case?

Mr. Smith: Yes. That example is there, kind of a carryover from a few examples we saw at Savannah River. When this TIB was written the author put that in there also as a possibility.

But Keith can correct me if I'm wrong. I don't believe we've ever seen that situation. You know, if you think about it, you know, if you're reading something deep, how would you have nothing shallow?

It probably would indicate a situation where you've got a failed or inaccurate dosimeter reading. But just from the physics of it, if I'm reading a deep dose I'm also going to have a positive shallow dose.

Ms. Behling: I will say -- I'm sorry, this is Kathy again.

Mr. Smith: Shallow layer skin's going to, if my dose at ten millimeters is --

Ms. Behling: Of course --

(Simultaneous speaking.)

Ms. Behling: I understand.

Mr. Smith: -- is going to be positive as well.

Ms. Behling: I understand. All I'm saying is, there is a fifth row in that table that would indicate what to do. And the other thing is, I'm working on a case right now for INEL. And there is a situation exactly like this.

The records show zero shallow and deep dose reading. And the dose reconstructors do go in and assign a missed dose for that, based on this, on this example.

Ms. Gogliotti: And I'll also say that if you're getting a result that doesn't make sense, isn't the policy of NIOSH to go with the most claimant-favorable, rather than to assume nothing?

Mr. Calhoun: Well, to be clear, in this case the results make perfectly good sense. The open window is equal to the deep, in which case you would use the fourth line.

I mean, I can't speak to the whole fifth line thing. That's an OTIB-17 question. But in this specific case the data records from Hanford clearly show that the open window would be the pen plus the non-pen.

So, they are equal at that point, and there is no missed dose to be assigned, per our documented records and procedures. And just for a little bit --

Ms. Gogliotti: Perhaps if we could --

(Simultaneous speaking.)

Ms. Gogliotti: -- just send you our math offline, just so you could see why we're confused by this, for this particular case.

Chair Kotelchuck: Somebody was starting to say something. Hello?

Mr. Katz: Well Dave, Rose just suggested that SC&A send Scott or NIOSH their math separately from this meeting, so that they can see why they're -- SC&A's confused about this. Do you hear me, Dave?

Chair Kotelchuck: Yes. Dave Richardson.

Mr. Katz: No. No. Ted. This is Ted speaking to you, Dave.

Chair Kotelchuck: Yes. Go ahead. I heard what you said, surely.

Mr. Katz: So, anyway, that was really the suggestion, if that's okay with the Subcommittee Members. And they can do that, and they don't

have to --

Chair Kotelchuck: Right.

Mr. Katz: It's a long list.

Chair Kotelchuck: Yes. That sounds good. Sounds good to me. Other Board Members, other Subcommittee Members? Sound okay?

Member Lockey: Sounds good to me. Jim Lockey.

Chair Kotelchuck: Okay.

Member Valerio: Sounds good to me. Loretta.

Chair Kotelchuck: Okay.

Member Clawson: I would just like to know the outcome.

Chair Kotelchuck: Okay.

Ms. Gogliotti: Yes. Absolutely. We'll report back to the Subcommittee.

Chair Kotelchuck: And that will come, this will come back to us at a future meeting, of course.

Mr. Katz: Yes. This case is unresolved.

Chair Kotelchuck: Yes. Okay. Well then --

Mr. Smith: I have one more thing to add in prep, ahead of that. Please consult Table 6-2 of Hanford TBD. And Column 2 is the dosimeter measured quantities, this is the non-pen and pen. And then Column number 3 is compliance dose quantities, where you'll see the skin dose equals non-pen plus whole body.

Ms. Behling: And you also need --

Mr. Smith: The whole body, N plus slow neutron plus fast neutron.

Ms. Behling: And you also need to look at the

example table in OTIB-17 for the Hanford case, Line 5, Row 5.

Mr. Siebert: This is Scott. That table is also in the Hanford TBD. You can do one stop shopping there. Because OTIB-17 is old. And it's being updated right now. And the Hanford TBD has been updated. It's also Table C-1 in the Hanford external TBD, so.

Ms. Gogliotti: Thanks. Great.

#### Y-12, 521 Observation 1

Chair Kotelchuck: Good. Okay. Takes care of that. That will come back to us. And then the next case for DOE I see is INL Case 506, an observation. Case 506 and up.

Ms. Gogliotti: Okay. I wasn't aware that there was one still open. Which observation?

Chair Kotelchuck: Case 506, Observation 1. I'm scanning through.

Member Beach: My next one was Y-12.

Chair Kotelchuck: Here it is.

Ms. Gogliotti: My next one that I had was 521.

Chair Kotelchuck: Oh. I know -- you know, I believe I made a mistake. Because I'm looking at 506, and Observation 1.

It is close. I'm sorry. That's my mistake. So, the next one, which one, you said --

Ms. Gogliotti: It's 521, Observation 1.

Chair Kotelchuck: Right.

Ms. Gogliotti: And this is a Y-12 case.

Chair Kotelchuck: That's right. Okay. I agree. And I was in error on the other one. So, there are only three cases that need resolution. Let's go to that one.

Ms. Gogliotti: Okay.

Chair Kotelchuck: Yes.

Ms. Gogliotti: The observation states that SC&A questions the origin of the 13 microrem per hour ambient dose value used to model the best estimate ambient dose in the Y-12 workbook.

The TBD, Table D-7 shows the 50th percentile external environmental dose to be 21 microrem per hour. And the Y-12 guidance document does not recommend any modifications to this.

Chair Kotelchuck: Somebody is speaking in the background. Somebody's speaking in the background.

Dr. Taulbee: Matt, you're not on mute.

Chair Kotelchuck: Okay. Go ahead.

Ms. Gogliotti: Okay. And use of the 13 microrem impacts the total dose assignment by only a few millirem. But it could have a significant impact on other cases. So, we were just curious where this number came from.

And NIOSH comes back and says, the origin of the number is in Section 4.5.2, in the environmental TBD. And we do agree that it's there.

And there it just indicates that the isopleth range from 13 to 21 in the max areas, and eight to 13 in the lower, or the rest of the site.

And then NIOSH goes on to say that the best estimate value of 13 microrem per hour is found on Page 26 of PROC-60. And we were a little confused, because that number no longer exists.

Well, PROC-60 is an old reference. And there it does say the 13 microrem. We completely agree with that. But the TBD has been updated more recently and that number was removed.

Mr. Siebert: Yes. And this is Scott. And we realize that there was the inconsistency between the two documents. And we are in the midst of updating the Y-12 environmental TBD relatively soon. And that information will be added back into that.

Unfortunately, it was just lost between the two versions, although we have it implemented in our processes. So, the documentation of it in the TBD will be back in that environmental section with the next version of the TBD.

Ms. Gogliotti: The entire column was removed. Was there a reason that it was removed, and now it's being added back in? Or was it an error?

Mr. Siebert: I believe it was removed because it's in Procedure 60. And Procedure 60 then changed it. And what I'm saying is, you know, it was an inadvertent removal from both places.

It's still appropriate. It was just inadvertent that it was removed in both. So we're documenting it, getting it back in the TBD.

Ms. Gogliotti: Okay. And so, it was being done --

Chair Kotelchuck: Very good.

Ms. Gogliotti: -- correctly. It's in the workbook correctly then. But it's just not clear in the TBD. Okay.

Mr. Siebert: Correct.

Chair Kotelchuck: So, you're agreeing to resolve it - - this observation to be resolved, right?

Ms. Gogliotti: Yes.

Chair Kotelchuck: This concern. Okay. That's fine. And now, one last one.

Ms. Gogliotti: Okay. The next one is --

Chair Kotelchuck: 515?

Ms. Gogliotti: 512.5.

Chair Kotelchuck: Okay. Then I missed one. Good.

Ms. Gogliotti: Maybe I missed one here. Let me double check my numbers here.

Chair Kotelchuck: Let's see.

### Oak Ridge Facilities

Ms. Gogliotti: You were right. I'm incorrect, it is 515.

Chair Kotelchuck: Oh, good. Okay.

Ms. Gogliotti: Here we go.

Chair Kotelchuck: Okay.

Ms. Gogliotti: And this one has -- oh, it's a Y-12, K-25 and X-10. So, all the Oak Ridge sites. It has to do with californium-252 solubility sites.

And here our finding states that SC&A derived a californium-252 Type S dose to an organ that was approximately 20 millirem greater than that assigned by NIOSH, using Type M for a different organ.

SC&A derived a californium Type S dose approximately 5 millirem greater than that assigned by NIOSH using Type M. And then, this finding had to do with the TBD, Table 5-2 on Page 11, which states that californium-252 Type S is the most probable solubility type at X-10.

And NIOSH responded, saying that the californium-252 is defined as Type M for all compounds in ICRP-68. And they go into ICRP-30 and ICRP-68.

And go on to say that there is not a one-to-one correspondence of solubility classes for ICRP-30 and solubility types in ICRP-68. And that the EEOICPA project follows the type directives in 68.

And then we responded saying that since the TBD

says to make a claimant-favorable choice for the radionuclide in tissues of interest, and Type S provided slightly greater dose to the skin and intestine, it would appear that Type S should be used.

However, according to NIOSH's BRS response, apparently ICRP-68 has already set californium-252 as Type M. And there is no further consideration for californium.

If that's the case, the TBD should be revised to correctly reflect this, even if the X-10 dosimetry lists different information. The TBD is to provide information for the dose reconstructor.

And if that information's not in there, it's hard to follow. And our finding was based on the information in the TBD, which was intended for dose reconstruction.

Mr. Siebert: Well, and that -- this is Scott. And I'll come back and say, that table clearly states that it's classifications from ICRP-1966, which is D, W, and Y.

So, there is no direction at that point to assume Type S material. Because Type S material is not mentioned in that. The only way someone could make that assumption is if they assume that Type Y -- or Class Y is the same as Type S, which it is not.

So, I maintain that the TBD was giving historical information as to how things were viewed at the site. It does not give direction to then expand the idea that Class Y is the same as solubility Type S in the present day, and give direction to use solubility Type S.

So, I think the historical information in the TBD is accurate, as well as the information that we use the latest version of the solubility types from ICRP, which is also accurate.

And I'll just put it this way, we do not find that

information inaccurate or misleading.

Ms. Gogliotti: Would you agree that the TBD would benefit from explicitly stating that Type M should be used?

Mr. Siebert: In each TBD we don't necessarily state which solubility type is appropriate for all types, or all materials. I mean, I guess if you wanted to add additional clarity on top of clarity, that could be done. I'm not going to say that that needs to be done.

But like I said, I believe we're already clear. And we haven't seen errors, we haven't seen it misapplied on our side, so.

Chair Kotelchuck: Can I ask, Rose, is this a question of clarity, or an error? If it's clarity, it should be an observation. Or --

Ms. Gogliotti: I agree, it could be reduced to an observation in this instance.

Chair Kotelchuck: I think it should be. It looks to me as if the issue is an observational issue. And I think it should be reflected, unless -- if I hear other folks object. I do not.

So, this is an observation. But now, is -- are things -- but I'm not sure things are clarified between you, Rose and Scott. Is there a --

Ms. Gogliotti: NIOSH's position is that they're using ICRP-68, and will always use Type M of californium-252. We can accept that. We just found that there was a little room for interpretation there.

Chair Kotelchuck: But now there will not be. Because it's agreed upon that you understand that -  
-

Ms. Gogliotti: Yes.

Chair Kotelchuck: -- as you're asked to review. Okay. Then I think we can close it, right?

Mr. Siebert: Well, this is Scott. The question I had was, we had suggested actually removing the finding because there's nothing wrong. If you want to just download it to an observation because of clarity, I mean, obviously that's in your purview.

But I still don't see that there's any -- we will not be, as far as I'm aware we won't be updating the TBD for clarification, because that information is already in OTIB-60 as well. I mean, I'm not trying to be a pain here --

Chair Kotelchuck: Right.

Mr. Siebert: -- and push back. I just want to --

Chair Kotelchuck: No, no, no --

Mr. Siebert: -- point that out.

Chair Kotelchuck: But this isn't a finding. Whatever is happening, this is not a finding. A finding is --

Dr. Taulbee: All right. This is Tim. If I could intercede here.

Chair Kotelchuck: Please.

Dr. Taulbee: What it sounded like to me just took place was that SC&A agreed that this was more of an observation. And that with your response, Scott, of us using ICRP-68, and then we use Type M for all californium-252, that they're accepting it. So, I believe that this is now closed. It's downgraded to an observation, and closed. Am I missing something?

Chair Kotelchuck: I think that's right. No, that's --

Mr. Siebert: That's fine by me then. Okay.

Chair Kotelchuck: Okay. Well then, we're settled that that's closed. Okay. Wonderful. And unless I hear objection from the Subcommittee, basically, if I don't hear objection, we'll move on. No objection. Okay. Now we're ready to go on. That takes care of

the DOE matrix. Let's go to the AWE now.

Ms. Gogliotti: Okay. Do I have Bob Anigstein and John Mauro online?

Dr. Mauro: Yes. Hi, Rose. This is John. I'm here.

Chair Kotelchuck: Okay.

Ms. Gogliotti: Did Bob join?

Chair Kotelchuck: Bob? Did we hear you?

Ms. Gogliotti: Well, he was planning to join, but if he doesn't join that's okay.

Chair Kotelchuck: Would you want to take, I mean, it's, at 3:00 I was thinking we might take a rest break for a few moments. Would you like me to do, us to do that?

Ms. Gogliotti: It's entirely up to you. We can go ahead without Bob, or I can try and get him on the line.

Chair Kotelchuck: No. If you think we can go ahead without Bob, then let's just keep going ahead. And I --

Mr. Stiver: Actually, Rose, sorry, this is John. Bob asked for somebody to call him, and he'd get on the line when he needed to. So, we'll go ahead and give him a call.

Chair Kotelchuck: Oh, good. Okay.

Ms. Gogliotti: Okay?

Chair Kotelchuck: Good. So, we'll, let's go ahead. So, Aliquippa Forge.

Ms. Gogliotti: Why don't, Kathy, do you mind giving Bob a call, and --

Ms. Behling: I will do that.

Ms. Gogliotti: We'll start with 503.

Ms. Behling: Yes. I'll do that.

Mr. Katz: Okay. So well, do you want to just then take a ten-minute comfort break? And that way they can get Bob on the line. And we don't have him coming in at --

Dr. Anigstein: This is Bob Angistein. I'm on the line.

Mr. Katz: Oh. There he is. Okay, good.

Chair Kotelchuck: There we are. Thank you. Welcome. Okay.

Ms. Gogliotti: Okay. We'll start with Bob's case then.

Chair Kotelchuck: All right. 501 –

#### Hooker Electrochemical

Ms. Gogliotti: This is a Hooker case. And it is Tab 520, Observation 1.

Chair Kotelchuck: 520, Observation 1. Okay.

Ms. Gogliotti: And the observation states that NIOSH should review the doses to all non-metabolic organs and tissues in selecting a surrogate for organs, such as the prostate, which is not included among the organs modeled by IMBA, to ascertain the highest organ that is selected as the surrogate. NIOSH responded --

Chair Kotelchuck: I haven't found it. And I think I'm not -- give me, I just went in order. Which is the case you're looking for?

Ms. Gogliotti: This is the Hooker case. It's at Tab 520, which is a Type 2. We're going through the findings first.

Chair Kotelchuck: Oh, yes. There are a lot of them, are there not? Tab 520. Okay. Are other people following this on Skype?

Member Beach: Yes.

Chair Kotelchuck: Okay.

Member Valerio: Yes.

Chair Kotelchuck: Somehow, I don't know why I'm not getting the Skype. I've been working off of the other. But it is 520, Hooker 520. I will, while you folks talk I'll find it here. Don't know why I'm having trouble with Skype, but you go ahead, folks. Let me not hold you up.

Ms. Gogliotti: Okay. And then I'll --

Dr. Anigstein: Shall I --

Ms. Gogliotti: Well, if you want to go ahead, Bob, that's fine.

Chair Kotelchuck: Yes, Bob. By all means.

Dr. Anigstein: Rose, should I proceed?

Ms. Gogliotti: Go ahead.

Chair Kotelchuck: Yes.

Dr. Anigstein: Okay. This is an issue. This is a -- I don't know if I'm allowed to, am I allowed to mention the organ? Because otherwise it makes no sense. Is that okay?

Ms. Gogliotti: Just don't mention the organ. And it's on the screen for everyone to see.

Chair Kotelchuck: Right.

Dr. Anigstein: Yes. Okay. So, this is a prostate cancer. And since the prostate is not one of the organs for which the ICRP developed those conversion factors, either for internal, nor for external dose.

So, for -- there is a procedure where NIOSH assigns the dose to the urinary bladder. For external dose they use the urinary bladder as a surrogate for the prostate, which is considered to be adequate, or claimant-favorable, at least adequate.

However, for internal they did not use that. And the argument is, well, urinary bladder has its own model for doing internal dose. Because the bladder wall itself does not absorb, does not preferentially absorb uranium.

However, the bladder contains urine, of course. And the uranium does pass through the urine during the early stages of elimination, after intake.

And consequently there is an additional dose from, shall we say external radiation, even though it's, strictly speaking it's an internal dose. But it's the radiation from the urine that affects the bladder wall.

And the NIOSH argument is, no, that doesn't count, because that's a special case. And therefore, we will use another organ. I believe the kidney is what they used as a surrogate.

And my point is that no, they should use -- this is legitimate, because the -- just to remind people of the anatomy, the urine passes through the urethra prior to being excreted. And the urethra passes right through the prostate.

So, the prostate does get some of the radiation from the uranium in the urine, albeit, not quite as much as the bladder does. But since absent a bladder specific model, I mean, excuse me, a prostate specific model, then they should use the most favorable one.

And the most favorable one, which is also reasonable, the location, and the prostate is located right next to the bladder. Urine passes through the urethra, which is in -- surrounded by the prostate.

So, we believe that the prostate, even though it will give us slightly more, using the bladder as a surrogate for the prostate, even though it's probably a slightly higher dose than if they were, if one were to develop a prostate-specific model.

But nevertheless, it's the best we've got, it's the reasonable and claimant-favorable of the available models. So, that's our position.

Chair Kotelchuck: Okay.

Dr. Taulbee: Dave, this is Tim Taulbee. Unless somebody else on my side wants to take this. Okay. There's a couple of things that I would note here.

And we might end up having to wait for Dave Allen to be available to further elaborate, because we're going to be testing the bounds of my internal knowledge here.

But if you look at the dose conversion factors, for the alpha, for the beta, for the gamma associated with uranium as it's passing through the bladder, the majority of the dose, like 99 percent of it is going to be coming from the alpha and the beta. Very little is coming from the gamma.

And if you consider the urethra as Bob is mentioning here, that dose would still be then in the urethra, and not the prostate gland. So, from our standpoint we don't believe that we should be using the bladder for this particular case, for the prostate.

That the majority of the dose, like 99 percent of it is being deposited there in the walls, or in this case it would be in the urethra as it's passing through.

So, I believe here that to use the bladder would be, well, it's incorrect in our opinion. And we should be using the highest non-metabolic or non-modeled organ, if you will. And that's our current position.

And if I'm correct on this, the Probability of Causation is greater than 50 percent in this case, correct? Bob?

Dr. Anigstein: I didn't notice that.

Chair Kotelchuck: I don't know.

Dr. Taulbee: And so, what you're proposing is that

the dose would be even higher for an already compensable case.

Ms. Brackett: This is Liz Brackett --

Dr. Anigstein: I, okay, I don't have, I just have the BRS in front of me. I don't have the entire case in front of me.

Chair Kotelchuck: Okay.

Dr. Taulbee: Okay. Liz, please correct me if I said anything that was in error there. Thank you.

Ms. Brackett: No. That was all correct. I just wanted to add on to that, that this is something that we've been using since pretty much the start of the project. And this was all very clearly documented in OTIB-60, the internal dosage instructions guidance documents.

And it addresses, it doesn't address specifically prostate. It addresses all organs that are not specifically modeled by the ICRP. And it gives clear direction on the selection of organs to substitute when you have one of these organs.

And as Tim referred to, the highest non-metabolic organ, which is not a very good description. But it means one that, it's the organs that do not concentrate the material that you're looking at.

So, it looks at all of them, where it's not specifically concentrated. And we select the one that gives the largest dose to substitute for one that, for an organ that's not even named in the models.

And like you said, I would guess that the majority of cases end up using this highest non-metabolic organ. Because there's so many that are not specifically modeled by the ICRP. So, this has a long history of use.

Mr. Katz: Sorry to interject. But for the court reporter, you might have said it, but, and I missed it. But that's Liz Brackett from ORAU.

Ms. Brackett: Yes. Sorry. I said it. I think somebody else was talking when I said it. So, yes.

Mr. Katz: Okay. Thanks. I just wanted the court reporter to catch that.

Ms. Brackett: So, I didn't have anything else to add to that.

Chair Kotelchuck: I'm not sure where we are, that is in that time. I'm not sure what --

Dr. Anigstein: This is 520, Observation 1.

Chair Kotelchuck: Oh, yes. No, no. I'm here, and listening to the -- I'm not sure what resolution. There's a difference of opinion. I'm not sure -- I don't think I hear an agreement. Or do I? So --

Dr. Anigstein: Well, speaking for --

Chair Kotelchuck: Both of them are --

(Simultaneous speaking.)

Chair Kotelchuck: Yes.

Dr. Anigstein: Speaking for SC&A, I will just reiterate I think we should use, even if it's a small difference we should use the more claimant-favorable approach.

And if this case was, I didn't notice. If this case was compensated, then other, I mean, the purpose of doing these is to get a sample of cases.

And if in this case it was compensated, are the others, which may be just below the compensable level, I mean, you know, this is one, they haven't reviewed all the cases, all the prostate cases in the whole universe of our program, of which there are many.

Dr. Taulbee: But for, as Liz pointed out, for cases of the prostate, where the ICRB has not specifically listed an organ, we use the highest non-metabolic.

We do not use one of these organs in this particular case, urinary bladder. And as Liz pointed out, that's been since the history of this program.

Mr. Calhoun: Yes. This is Grady. And I think we're getting into something here that's beyond this case. Because clearly we followed the procedures in place to do this case. That's not debatable.

I think what you're discussing here now is whether or not the procedure that we've used forever is wrong. So, that's a different discussion.

I don't believe that that procedure is wrong. But that's the issue here. It's not whether this case is wrong. Because this case is right. It's been done to the current procedures. And that's what we're looking at.

Mr. Katz: Well, and hasn't that procedure been reviewed previously?

Mr. Calhoun: I couldn't tell you if it's been reviewed by the Board. I'd imagine. Everything else is.

Mr. Katz: I'm pretty sure it has.

Ms. Behling: It's been reviewed by the Procedures Subcommittee.

Mr. Katz: Right. Right. It's been reviewed and that review is finished, I think, for that one.

Chair Kotelchuck: Pardon. Ted, finish --

Mr. Katz: So, I believe --

Chair Kotelchuck: It's been reviewed by --

Mr. Katz: I believe it's been reviewed and approved by the Subcommittee on Procedures, and the Board, which means that is the procedure.

Chair Kotelchuck: And that has been done in the recent past?

Mr. Katz: Not necessarily recent. I think it goes

back quite a ways.

Chair Kotelchuck: Yes. I mean, to change, to make a change in that would be a massive task. And --

Mr. Katz: Well, I guess --

Chair Kotelchuck: But that, frankly, that's not an argument against. That's simply a statement of fact. But this has been the standard procedure for a long time.

I would say that's a debate that should be held between SC&A and NIOSH. I don't, or to go before - - maybe we should, maybe, Robert, at SC&A, I mean, this should be raised, if you believe that this is correct, that to use the bladder as a surrogate organ to go, to refer this to the Procedures Subcommittee.

Mr. Katz: Well, before they do that I would suggest SC&A goes and looks at what was done in the review of the TIB, whenever that was reviewed, and all of the Subcommittee discussion on that before they even propose that that be taken up by the Subcommittee, to make sure that that perspective hasn't been in any way addressed already, or what have you.

Chair Kotelchuck: Yes. Yes. Is that a reasonable thing? That's a reasonable think, I think, to ask of SC&A.

Member Beach: I would agree with that. This is Josie.

Chair Kotelchuck: Yes. I mean, let's check fully, and come back next meeting with the report. And if that still is -- if it hasn't been considered, or even if it has been considered, and you, in your consideration, feel like this was a mistake, then it should -- this is not the Committee to bring it to.

Mr. Katz: Oh, I know. But if it has been considered, and was put to bed by the Subcommittee, then we

don't bring it back to the Subcommittee. They've already spoken. And so has the Board then.

Chair Kotelchuck: Yes.

Ms. Behling: And this is Kathy Behling. I can take that on if you'd like, Rose. I can look at that. Based on my recollection we did look at OTIB-60, not at the most current version.

The only thing we did do is, there was I think about seven findings. And we went back and made sure that those seven findings were addressed in the most current version.

Chair Kotelchuck: Yes.

Ms. Behling: So, I would call that more of a focus review. But I can give you those details if you'd like, at the next meeting.

Mr. Katz: Yes. Kathy, it sounds like this has been in there from day one. So, it wouldn't be a matter of whether it was reflected in a change or not.

Ms. Behling: Right. And it's also --

Mr. Katz: It should be covered.

Ms. Behling: And it's also in OTIB-5. And we've reviewed that also. So --

Mr. Katz: Okay.

Dr. Mauro: Ted, this John Mauro.

Mr. Katz: Yes.

Dr. Mauro: I've been listening to the conversation. And I picked something up that is nuanced here, and that I think I agree with Grady in that we're bringing something up that I don't believe we've discussed before. This idea of modeling.

In other words, you have these non-metabolic organ issues. We understand that. And of course, you know, it goes back historically. And it has to do

with the biokinetics, and understanding where what radionuclides go when they're, you know, taken into the body --

Mr. Katz: Right.

Dr. Mauro: -- and transported to an organ of concern. But Bob is bringing up -- and I'm only saying this because I think if I understood the commentary, he's bringing up a new issue. And please correct me if I'm wrong.

And that is, the way to think about it is, you've got urine, and it's moving through the body, from the bladder. And then it's cleared. And it becomes an external source. Stay with me for a minute.

We never talked about this before. And from my recollection. And that is, well, you know, what you really have is, you've got urine, and it contains radionuclides.

Chair Kotelchuck: Right.

Dr. Mauro: And it's passing intimately close by many organs.

Chair Kotelchuck: If I may --

Dr. Mauro: And --

Chair Kotelchuck: -- interrupt?

Dr. Mauro: Sure.

Chair Kotelchuck: And I'm sorry, and I hope I'm not being discourteous. But we, I think we just, Kathy agreed to check that. You're saying, based on your recollection this was never discussed.

What we're asking, you know, what Kathy agreed to do is to check it out. And if it's never been discussed, then we figure out what to do, right?

Dr. Mauro: The only reason I brought it up is, I didn't think that the question was pointed. And I'm

just trying to put a point on the question. Yes.  
Kathy certainly --

Chair Kotelchuck: Alright. Okay.

Dr. Mauro: -- can look into it.

Chair Kotelchuck: Well, then fine.

Dr. Mauro: But that's what --

Chair Kotelchuck: Okay.

Dr. Mauro: -- the issue is.

Chair Kotelchuck: Excuse me then. Yes, sure. Go ahead.

Mr. Katz: Well no. Just, John, I mean, you can give Kathy whatever guidance you want.

Dr. Mauro: Okay.

Mr. Katz: And then she can document what that was. And, you know, looking at how this was or wasn't addressed. But --

Chair Kotelchuck: Yes.

Mr. Katz: The Subcommittee at this point really can't do anything with the commentary. So --

Dr. Mauro: Yes.

Dr. Anigstein: Also --

(Simultaneous speaking.)

Mr. Katz: It wouldn't hurt --

Chair Kotelchuck: You may well be right, John.

Dr. Anigstein: Also, I would like to make one more response to the NIOSH comment that the dose, most of the dose is alpha and beta. Alpha of course has an extremely short range. So, it doesn't leave the organ in which it originated.

However, the uranium betas are fairly energetic. If I remember, they have a range of about, they have a peak energy of something like 1.7, 1.8 MEV. And I don't have the anatomical information, you know. But it is up in my head.

But the wall of the urethra I would imagine would be thin enough, may be thin enough that the betas could penetrate. I mean, that energy has a penetration on the order of millimeters, not microns.

So, the beta part may very well, I'm not making a conclusion. But it's just, I'm just making a --

Mr. Katz: But, Bob --

Dr. Anigstein: Pointing out that needs to be looked into.

Mr. Katz: Bob, yes. That's fine. But that's all an issue for another, possibly another group, or whatever, down the road. So, it's not really helping to lay it out now.

So, when a group takes this up, if a group needs to take this up, they can, you can, you know, flesh out your thinking. And so will NIOSH, I'm sure, on their side.

Chair Kotelchuck: Yes. Right. And certainly not taking a position as to whether you're correct or not. But it sounds logical. But we have a mechanism now to deal with it in terms of checking things out before we move further. Kathy will do that. And then we will decide how to move ahead. If that would be okay. So, could we move on to Observation 2?

Dr. Anigstein: Okay. The next, if I can take the liberty.

Chair Kotelchuck: Sure.

## Carborundum Co

Dr. Anigstein: The next two, Observation 2, Dave, deals with the, basically the site, covered under a Site Profile, which is now, has been under extensive discussion within the Carborundum Work Group, and is being revised by NIOSH.

It has not yet been issued. So consequently, Dave Allen, who responded to this observation about the work, the length of the work day, simply said, this will be resolved when the Carborundum TBD is resolved. And SC&A agrees with that.

So, that's a -- it need not be addressed by this Work Group, by this Subcommittee.

Chair Kotelchuck: Sounds good.

Mr. Katz: So yes, can you clarify for me though, please? This is Ted. Carborundum Work Group -- and I may be misremembering and that's why you're going to have to clarify. I thought they are pretty much done.

So, am I missing? Was there a, this, all this business to resolve at that Work Group? Because I thought they were pretty much done with their review.

Member Beach: And was it officially transferred, Ted?

Mr. Katz: Well, nothing was transferred to them. That's for sure. But, I mean, I'm talking about, I thought the Carborundum Work Group had pretty much finished their review.

Because they reported out on their Site Profile Review with the one exception of that one modeling issue, which is also now pretty much put to bed.

But anyway, I didn't think that there is this, these other matters to be addressed by the Carborundum Work Group. I don't know where that's coming from, Dave Allen or whoever. But --

Ms. Gogliotti: I believe the recommendation was to transfer it to that Work Group. Not that the Work Group is actually looking at this issue. There's actually --

Mr. Katz: Well, I mean --

Ms. Gogliotti: -- quite a few of these.

Mr. Katz: I know. But why, so why would they, why would we transfer it to the Carborundum Work Group? Can you just help me understand that, please?

Dr. Anigstein: Oh, excuse me. Oh, the confusion may be that it is labeled in the BRS as Hooker. Is that --

Mr. Katz: That is right.

Dr. Anigstein: It's Hooker 520. And the fact is, that's a little confusing. Because this is an employee who worked a short time at Hooker during the residual period, I believe. And then left Hooker and was employed by Carborundum.

Mr. Katz: Ah.

Dr. Anigstein: So, the bulk of his exposure was while working at Carborundum.

Mr. Katz: Okay. That was completely mystifying to me. But that clears it up. Okay.

Chair Kotelchuck: Okay.

Chair Kotelchuck: So, we're saying that there is a Site Profile issue, or several, that really should be addressed at Carborundum, that hasn't already been addressed by SC&A's review of the Site Profile at Carborundum? And you're agreeing that SC&A didn't address it before? And now is --

Dr. Anigstein: Well, we did address it before.

Mr. Katz: Oh. And so --

Dr. Anigstein: We addressed it. And NIOSH and DCAS, Tom Tomes, I believe, is at the head of that effort.

Mr. Katz: Yes.

Dr. Anigstein: They did accept our comments. But it has not been formally reissued as a new -- as a Carborundum TBD, or a revision, however NIOSH chooses to do it. Either revising the TBD, or revising the Evaluation Report on the SEC.

Mr. Katz: Well, but it's a -- since they did a Site Profile Review, presumably they laid out what the resolutions are.

Dr. Anigstein: Yes.

Mr. Katz: So then, this whole, there's no more referring this to them. They've already done their business. And the only question is applying those resolutions to this case.

Dr. Anigstein: Well, except that the, NIOSH has never issued a -- they have responded to individual issues. They said, yes, we agree with this.

Mr. Katz: Yes.

Dr. Anigstein: Or we will be working on this. But they've never issued a final document, which I would assume SC&A will be asked to review, and --

Mr. Katz: No.

Dr. Anigstein: -- concur with.

Mr. Katz: What I'm saying is, yes, I know. But what I'm saying is --

Dr. Anigstein: So, there is no --

Mr. Katz: What I'm saying is, if they -- when they resolved it they, yes, you can all have a new document. But if they agreed to findings, those agreements to findings are binding, and then you

just apply them to this.

Either the, if they agreed that their approach was wrong, and that they're going to change it, then it's wrong here, and that's all you need to know. You don't need to refer it to them, the case.

Dr. Taulbee: Right. This is Tim. If I can interject here, and add on to what Ted is saying there. You know, we're going to be updating the Carborundum TBD in order to incorporate all of the comments that SC&A and the Work Group, you know, and NIOSH came to an agreement here.

And so, what we would do in a case like this one is we would do a PER when that is done. And so, all of the Carborundum cases then are reopened and relooked at, to see if we need to do -- modify the dose reconstructions.

So, if this has already been addressed by the Carborundum Work Group, I don't see where there's anything more to do here.

Mr. Katz: Right.

Member Beach: This is Josie. If you look at the wording that Dave Allen put on several of these, I think that is what's misleading.

And that needs to be updated to be more current with what we're discussing here today. Because it does say it's being, it's currently being reviewed by Carborundum. And recommended transferring this. So --

Mr. Katz: No. I saw that wording. And I totally agree that the wording -- I'm taking issue with that whole guidance that Dave put in there. I agree.

I don't -- that's not the solution. The solution is to look at this and say, for this specific observation, note the resolutions that go with whatever SC&A's concern was to change it accordingly. And if that's so, then the observation holds. And you close just

as that.

But someone has to sort of apply that material, those decisions to this case. So that you can know whether you're closing it in agreement with SC&A, or not, whatever. It's just, someone's got to apply it, instead of just kicking the can down the road.

Chair Kotelchuck: But is Tim Taulbee saying that they will be applying it in --

Mr. Katz: Tim is saying --

Chair Kotelchuck: -- the PER?

Mr. Katz: Tim is saying that the PER will take care of actual cases. But that doesn't relate to this, the case of each, this Subcommittee.

Dr. Taulbee: We will go through and look at each of these, and make sure that the Subcommittee did address them. And then -- and we are incorporating them into the TBD.

Chair Kotelchuck: Yes.

Dr. Taulbee: And I guess we'll just take that --

Chair Kotelchuck: Okay.

Dr. Taulbee: -- action to report back to you all on that.

Chair Kotelchuck: Very good.

Mr. Katz: Thank you. Thanks.

Chair Kotelchuck: Thank you.

Mr. Katz: Thank you, Tim.

Chair Kotelchuck: That's resolved then. Okay. That resolves Observation 2.

Dr. Anigstein: And the next one, which is a finding, is basically exactly the same category. There was an error in the use of the dose -- external dose

conversion factors, using the -- they used the exposure dose conversion factor, as opposed to the HP-10, the personal dose equivalent, which is what the underlying radiation exposure, what they report it as. So, and again, it's exactly the same discussion that follows.

Chair Kotelchuck: Okay.

Mr. Katz: Yes. So, I think --

Dr. Anigstein: So again --

Mr. Katz: I think, Bob, you don't need to go through all of them. Because we need still the responses that Tim is saying from NIOSH, as opposed to kicking it over to the Work Group.

Dr. Anigstein: Okay. So, there's one more, let's see. So, the finding 1, Finding 2 --

Ms. Gogliotti: Finding 6 is the only one that doesn't have this recommendation.

Mr. Katz: Thanks, Rose.

Dr. Anigstein: Excuse me?

Ms. Gogliotti: Six.

Dr. Anigstein: I think all of the -- no. The three, I think it will be, if I may say it a little simpler. I'm not going to go through it in detail. I'm just going to say --

Mr. Katz: No. But, Bob --

Dr. Anigstein: -- I think we could --

Mr. Katz: -- just go to, Bob, just go to Finding 6.

Dr. Anigstein: Okay.

Mr. Katz: That's the only one that you need to discuss.

Dr. Anigstein: Okay. Finding 6. This is simply, was, I

mean -- let me glance at it very quickly. This has to do with the medical, the external dose from a medical X-ray, the annual X-ray.

And they used the correct conversion factor. They assigned the dose correctly. But there was an error, probably a spreadsheet, somebody slipped their finger on the spreadsheet. And there was a ten-fold error in the uncertainty.

Chair Kotelchuck: Yes.

Dr. Anigstein: And so, that affects, since IREP kicked out the upper end of the uncertainty range. This would affect the uncertainty. And Dave Allen agreed that there was an error in this particular instance.

He says it was a singular error. It was not propagated to other cases, to other exposure factors. And that it will be corrected. And we agree that this is, we accept that explanation, that NIOSH will remedy it, and there's no further issue.

Chair Kotelchuck: Well, okay. Alright. Well, let me understand. Bob, on your, Robert, on your line with calculating using .03 instead of 0.3. And what I'm reading up above is .03 and .003.

Dr. Anigstein: Oh, wait a second. That may have been standard deviation.

Chair Kotelchuck: Oh, I'm sorry. The standard deviation for that. I'm sorry.

Dr. Anigstein: Yes.

Chair Kotelchuck: Okay. Sorry. So, very good. And the NIOSH folks agree that that was an error, and a simple mistake. Sure.

Dr. Anigstein: Okay. And then --

Chair Kotelchuck: Okay. So, that would close that.

Dr. Anigstein: Okay. And Finding 7 is the same as

the earlier ones.

Chair Kotelchuck: Okay.

Dr. Anigstein: Just kicked over to the Carborundum Work Group.

Chair Kotelchuck: Right. And we will, we were going to get the, we'll get a report back about all of those later.

Mr. Katz: Correct. Correct. Correct. That will be a new response from DCAS.

Chair Kotelchuck: Okay. Good. All right. So, we have finished the Hooker cases. Is this time, folks? It's 3:20 p.m. Is this a time that people want to take just a ten minute comfort break?

Mr. Katz: Okay.

Chair Kotelchuck: I mean, I will admit, I could go through to 4:00 p.m. And blast our way through. But a little break is usually needed.

Mr. Katz: Yes. That would be great, Dave. I'd appreciate it at least.

Chair Kotelchuck: Okay. Well, that's good. All we need is one person for something like a comfort break. So --

Mr. Katz: Thank you.

Chair Kotelchuck: It's 3:21 p.m. We'll see you at 3:31 p.m.

Mr. Katz: Okay.

Chair Kotelchuck: See you all. Bye, bye. Ten minutes.

(Whereupon, the above-entitled matter went off the record at 3:25 p.m. and resumed at 3:35 p.m.)

Chair Kotelchuck: Okay, go ahead.

Dr. Anigstein: So, M&C, Observation 1, is that, let me just throw in a quick bit of background. Since not everyone may be up to speed on the M&C.

There was no M&C TBD, but there is a ER for the SEC period for the AWE time. SEC for the AWE period.

And one of the exposure scenarios that NIOSH addresses is that there was a, during the AWE period, there was a separate operation on assembling radium tipped toggle switches for the U.S. Navy.

And workers were exposed to the, internally and externally exposed to the radium, primarily externally exposed. To these little glass half hemispheres, along the edge of the switches to make them glow in the dark.

Chair Kotelchuck: Oh yes. Yes.

Dr. Anigstein: Okay. So, in this instance, the worker was assumed, was given the benefit of the exposure to the radium switches. Which NIOSH did a simple bounding model.

And the observation is that normally people were assumed to work there 40 hours a week. And this particular worker reported that he regularly performed overtime. Says he did 5 hours a week overtime.

So, our point is that he should be given credit for that overtime. So instead of being exposed to the switches for 40 hours, or whatever fraction of 40 hours would normally be given to other workers, he should be given the benefit of the 45 hours.

And then the NIOSH response is, well, since he's already given a bounding estimate, we don't need to increase the dose to account for the overtime.

And our answer is, this is not fair because workers working shorter hours are not known to have put in

overtime, are given a certain exposure and the worker given, even if it's an overestimate, but they should be consistent. There should be consistency between all the DRs which incorporate this exposure scenario. And it should be proportional to the hours worked. I mean, exposure is simply the, exposure, the hourly exposure rate times the number of hours exposed.

Chair Kotelchuck: Yes. Scott, what do you say?

Mr. Siebert: Well, this is a bounding, limiting case where no person doing this work, and I believe it was developed in full-time of doing this work, would exceed this dose.

So, it's not a proportional, it's an upper bound. As well as pointing out, this individual did not work with these switches all the time. Even if they were doing overtime.

He mentioned he visits the area in the CATI from time-to-time. This sounds very familiar to me when we were prepping for this. And there's a reason for it.

We've had this exact same discussion back in the 21st set. We had, let's see, which number was it, 474.1 was the exact same question.

And we had this discussion, went back and forth, and determined that as an overestimating assumption, it did not need to be adjusted, it was reasonable to do it this way. And it was closed out.

And it was actually changed to an observation with a finding at the time. So this is already in observation so it makes since the way it is. But we've already discussed and closed out this issue on a previous claim.

So, like I said, that's 474 if anybody wants to go back and look at it.

Chair Kotelchuck: So, fundamentally, you're saying

that the person did not work 40 hours a week? Get this exposure 40 hours a week.

Mr. Siebert: With this type of --

Chair Kotelchuck: I mean, that's critical.

Mr. Siebert: Clearly, yes. With this type of material, clearly that is correct.

Chair Kotelchuck: I mean, structurally it does not sound right. I mean, whatever exposure that you have you should, that should be a range for the number of hours they work.

What you're really saying is that they don't work 40 hours a week. And you don't, there is no way of estimating the date to remember the earlier discussion, but only vaguely?

There is no way of estimating what the actual time spent in working with this is?

Mr. Siebert: No. Specifically there is no way to specifically know.

Dr. Anigstein: But nevertheless --

Chair Kotelchuck: But we know that it's not 40. We know.

Dr. Anigstein: But nevertheless, but nevertheless, it was assigned 40.

Chair Kotelchuck: Yes, everybody is assigned full --

(Off microphone comment.)

Mr. Calhoun: Yes, Dave, this is Grady. And I think what you're missing here is that he was, it was assumed he was exposed at 40 hours, even though we know he wasn't. Therefore it's bounding.

Chair Kotelchuck: Yes. And --

Mr. Calhoun: Okay?

Chair Kotelchuck: Yes.

Mr. Calhoun: So we find, we assumed it was full-time 40.

Ms. Gogliotti: Fifty percent.

Mr. Siebert: For clarification, we made it half time that he was in the area. So it would be 20 hours a week.

But once again, I felt that it's a bounding result and there's all sorts of other overestimating assumptions in that calculation. So, our position is, it's a bounding result so there is no need to do additional correction for overtime.

Chair Kotelchuck: Okay. And then even people who work 40 and people who work 45 hours, in that situation, would get the same, you would argue, get the same upper bound dose?

Mr. Siebert: Yes. But to remember, the type of work that was, Mutty, feel free to jump in if I'm saying anything incorrect.

But we assume that over the full, we assume three years of exposure for this site. Or exposure to all 5,000 beads at once.

But they actually processed those 5,000 beads over that whole three year period. Actually, it was a smaller than three year period.

So, we already know that the exposure to any single individual who even was working with these is overestimated. Let alone for somebody who is partially in the area at a time.

Chair Kotelchuck: Yes.

Mr. Siebert: So, it's a clear, it's a bounding --

Chair Kotelchuck: It's a way overestimate if it's not.

Mr. Siebert: Right. Because we just don't have

better information, we went with --

Chair Kotelchuck: Yes.

Mr. Siebert: -- the bounding case.

Chair Kotelchuck: Yes.

Member Beach: Well, and if we had this discussion earlier, we should clearly go back and look at what we did at the earlier discussion.

Chair Kotelchuck: Well, you're right, although I'm sure the folks, Scott is reporting correctly about what we said at that time. Not that I remember it well, but I'm sure he's right, that that's what we decided, that we stuck with the bounding and didn't take into account the overtime.

So we, or put it this way, the overtime was accounted for in the bounding itself. Is that not right, Scott?

Mr. Siebert: Correct.

Chair Kotelchuck: Yes.

Dr. Mauro: This is John. I'd like to step in on this --

Chair Kotelchuck: Sure.

Dr. Mauro: -- because you're bringing up a subject that we talked about many years ago.

Chair Kotelchuck: Yes.

Dr. Mauro: And I'm actually, my recollection is different.

Chair Kotelchuck: Okay.

Dr. Mauro: And that is, you're reconstructing the dose to a person, and we all agree that there are ways of expediting the calculation by making simplifying bounding assumptions that everyone would agree an attempt to place an upper bound. Especially if there is some uncertainty.

And you still don't compensate. That's a reasonable thing to do. It's an efficiency method.

But we did have a conversation when you leave the boundaries of what you would call plausible scenarios for a worker. In other words, now we're just throwing a big number at a guy. They say, well, we'll just assume this.

And we've been through this before. We're just going to assume this worst possible situation, throw this big number at this guy, even though it mechanistically does not have any reality to it. And that is, this person actually didn't do this but we're going to throw this number at them anyway.

We've been through this before. And you can't do that. In other words, there is a point where you cross over and you're starting to apply assumptions that granted would be a bounding assumption, but it really mechanistically doesn't apply to the person.

You know, if we know that the person didn't work, only worked there most half time and we know he did other things during that time, but we're just going to go ahead and throw this big fat number at him and not worry about anything else.

So, I'm sort of pushing back here. That I think there is more to the story and that there is a place where there is a judgement of when you do this kind of thing. It has to be within the certain amount of reasonableness.

And I think that what I just heard crossed over to the boundary that, in my recollection, would be a shortcut that is just a little bit too much of a shortcut.

Dr. Taulbee: This is Tim.

Mr. Calhoun: This is Grady. We're assigning a 40 hour week and then we just lowered it in half. That's unrealistically high, come on. Now, that's a little silly now.

Dr. Mauro: No, no, just saying --

Mr. Calhoun: I mean, did I understand, I understand that stuff can be unrealistically high, but this doesn't even reach that order of magnitude.

Dr. Mauro: Okay, I guess we have a difference of opinion. Here we have a worker that we're saying probably may have worked some part-time with this radium bead business.

Mr. Calhoun: Right.

Dr. Mauro: And we're going to do something here. We're going to assume that he was there all the time.

Good. Okay, you want to do that, now, I say that that is certainly on the border on a crude overestimate when we know he was probably doing other things in other locations.

And then, well, if you're going to do that, well then -  
-

Mr. Calhoun: How many hours do you think he was there, John?

Dr. Mauro: Right. There was --

Mr. Calhoun: Ten, five, what do you think?

Dr. Mauro: I'm sorry, say again?

Mr. Calhoun: How many hours do you think he was there?

Dr. Mauro: Well, I think the evidence is that he was, if I recall the case, it was a part-time thing that he was doing. And he had other jobs related that were involved.

But you're saying that, well, let's just make it the worst thing, he was there all the time. And then I'm sort of agreeing with Bob. Well, if you're going to do that, then give me the full amount of time.

Dr. Taulbee: This is Tim. If I can interject here.

Dr. Mauro: Yes.

Dr. Taulbee: Scott, you were saying this was from Set 21, this is 474, is that correct? Point one.

Mr. Siebert: That was the original one, yes.

#### Metals and Controls Co

Dr. Taulbee: Okay. If you guys, if you will go back to that, it's this exact same issue. And for these same beads, at Metals and Controls, where this was discussed back in September, or I guess the original issue was brought up in June of 2016.

And the whole, the exact issue of including eight hours per week of overtime for this exposure to the beads, this was all discussed back then. And it was changed to an observation and closed during the July 2018 subcommittee meeting.

Dr. Mauro: Well, I'm not going to dispute that. I guess the point I'm making is, I'm sort of arguing more from what I would say a commonsense perspective.

Are we really dealing with this model the appropriate way. Now, you may be absolutely right, that this was discussed, resolved and put to bed. And I may be wrong about that, I mean, if that's the case.

But you heard my arguments, why there's something about approaching a dose reconstruction into what you just did, is troubling to me. And like I said, I felt I have to say something about that.

Chair Kotelchuck: Okay. I mean --

Dr. Taulbee: And, again, that was brought up a few years ago and discussed.

Chair Kotelchuck: But I would say that it is new to me, Tim, and useful. That it isn't just that we

discussed the similar case, we discussed this case. At this worksite.

Ms. Gogliotti: Not this case, the site.

Dr. Taulbee: That's correct.

Chair Kotelchuck: Pardon?

Ms. Gogliotti: Different case.

Dr. Taulbee: This site, yes.

Chair Kotelchuck: A different case?

Dr. Taulbee: Difference case, same site.

Chair Kotelchuck: Oh yes. Excuse me, not this case, yes. Another case at this same site.

And, I mean, we can, put it this way. John, you raised, no, yes John Mauro.

Dr. Mauro: Yes, this is John. Yes.

Chair Kotelchuck: Yes, excuse me. John raised an issue that, okay, he didn't think this was appropriate, which means that it wasn't appropriate then. He's trying to get us to change our minds about that.

And I would, I think I would ask other members of the Subcommittee that what their, there has been a bit of discussion now, how they feel about this.

Any thoughts? Are people developing thoughts or questions?

I mean, I feel like I recognize that it is a way, way overestimate. And therefore, it structurally doesn't feel right, but when you're so over, when you so, gone so far over the exposure that you think the person has to be claimant favorable.

My sense is there was no line crossed, that this is, in this case, appropriate. That's my leaning. But others on the Subcommittee, what are you

thinking?

Mr. Katz: Well, while they're thinking, let me just say. There are, over the years, I can't even begin to count how many cases. There's all sorts of situations across the sites that are comparable where you have coarse data, you really can't make a precise judgment, so you just make a comfortable judgment maximizing, knowing that the actual experience wasn't that. It's very common.

Chair Kotelchuck: Yes.

Mr. Katz: And on these individual, very specific dose matters it's never been an issue. I mean, it's been swallowed all over the place and thought to being a reasonable approach to it.

Chair Kotelchuck: Oh, okay. That's helpful.

Dr. Mauro: Ted, I'm sorry to push back a little bit. We're in the middle of this very same question on, I believe M&C.

Where NIOSH has elected to use the film badge data for workers that worked during the AWE period and say, okay, that places an upper bound. Here we have people that worked at the AWE, during the AWE period, we have doses that we could register. But now we're going to apply those same doses to the residual period.

Chair Kotelchuck: John, I really, I feel, I'm going to interrupt you to say that --

Dr. Mauro: Okay.

Chair Kotelchuck: -- we have a Subcommittee work, I mean, excuse me, a Working Group on M&C.

Dr. Mauro: Yes.

Chair Kotelchuck: It is a meeting and it is absolutely appropriate to raise it there.

Dr. Mauro: Yes.

Chair Kotelchuck: But I don't feel like it's appropriate to raise something that we're in the middle of a debate about, in the future. Let's talk about what we've done, what we're doing here, and what has been done in the past.

Dr. Mauro: Okay.

Chair Kotelchuck: And that, your argument is fair. And please make it when we have an M&C working group meeting.

Dr. Mauro: Okay.

Chair Kotelchuck: But I really don't, it really mixes things up terribly to start talking about that other difficult issue when we're trying to deal with a different site and a site that we've already dealt with in this fashion.

So, I'd really like not to do that. And I ask --

Dr. Mauro: Okay. Sure.

Chair Kotelchuck: -- people to -- okay, thanks.

Member Beach: So, Dave, this is Josie. And the bottom line here is the five hours of overtime was ignored and --

Chair Kotelchuck: Yes.

Member Beach: -- do we find that to be acceptable or not.

Chair Kotelchuck: Yes.

Member Beach: That's correct?

Chair Kotelchuck: Yes.

Member Beach: I mean, all the other issues aside, that was what the gist of the observation was?

Mr. Siebert: Yes.

Chair Kotelchuck: And we're not assuming 40 hours.

We really know that the person probably worked 20 hours a week and were --

Member Beach: That's --

Chair Kotelchuck: -- assigning them 40 hours.

Member Beach: Right.

Chair Kotelchuck: And then, so, and we're assigning a very, very high level of exposure, way, way beyond what, in reality, a person must have had.

So, to me it's, it doesn't exceed bounds because we're way over. But I'm sorry, I'm talking to you and actually I originally asked what you're thinking and what other subcommittee members are thinking.

So, where are we coming down or what are you thinking?

Member Beach: Well, the way I think about it is, all the other is assumptions. And did he work overtime or not.

And in his case, or this particular person's case, maybe the five hours didn't make a difference. But if they're routinely not adding the overtime, it may make a difference.

So, on claimant favorability, I would say put in the overtime.

Chair Kotelchuck: Okay.

Member Beach: That's just my opinion.

Chair Kotelchuck: Okay. Well, that's what I'm asking for. How about --

Member Clawson: This is Brad. And I'm agreeing with what Josie says. You know, all of this other stuff is assumptions and everything else.

And we can get into the other part of it, but the whole thing is, is, okay, the overtime, five hours,

it's not going to make that much. We're just saying, we're going to assume this, let's assume the overtime too. Well, I agree with Josie.

Chair Kotelchuck: Okay. Others?

Member Valerio: So, Dave, this is Loretta.

Chair Kotelchuck: Okay.

Member Valerio: I agree with Josie. I would like to have the opportunity to go back since I wasn't on this Work Group during the 21st set, to at least go back and review the, what is it, 474.1.

Chair Kotelchuck: Okay.

Dr. Anigstein: I would like to make a comment about that. Because while this was going on I did go back and look at 474.1.

I just, before we briefed about it I know Ted said that we don't want to enter a M&C discussion.

Not only did we mention overtime, but it was also, my response was that we do not agree that the rate that the NIOSH radium model was an overestimate because whenever it was an overestimate for gamma dose, it completely ignored beta dose. Which would be a significant factor for skin dose.

And we actually did calculations and showed examples. And to my knowledge, NIOSH never addressed that issue.

So I know this is not the time to do it because it wasn't brought up.

Chair Kotelchuck: It wasn't brought up at the time so it's --

Dr. Anigstein: It was brought up as 474.1. I failed to bring it up here in 510. Maybe the amount of time had lapsed.

Chair Kotelchuck: Well, I don't know, if you want to

recast your, if you want to recast this observation I suppose you can and we would put it aside.

Although, I feel a little bit like, hey, that doesn't answer the question that people are trying to grapple with right now, which is, do we put in the overtime. Let's resolve the overtime first.

Dr. Anigstein: Well, the reason I'm bringing it up --

Chair Kotelchuck: Okay.

Dr. Anigstein: -- let me just say very briefly. That in writing up the response, 474.1, we said, we do not agree that it was an overestimate because beta was left out. And that's --

Chair Kotelchuck: And that's what SC&A said.

Dr. Anigstein: Unless somebody contradicts me --

Chair Kotelchuck: I'll tell you what, and maybe do this later in the day. I think there is opinion developing that structurally we should be considering the overtime.

But there are, Loretta, you asked to have the chance to take a look at the other case. And I certainly have not looked at that case.

I could have easily gave us both the chance, and others a chance to take a look at that early case and the discussion. And presumably that's, we have a transcript of that. And it would be interesting to look at that discussion, come back to this next time.

And with the feeling that right now I think the majority of the Subcommittee is feeling like we should go ahead and make it 45. Take the overtime into account.

But --

Ms. Gogliotti: Dave, I can point out this. The PoC on this particular case was 40.8.

Chair Kotelchuck: Yes.

Ms. Gogliotti: And so, this isn't even best estimate.

Chair Kotelchuck: Yes. Although that should not affect our decision. I actually don't care.

I don't care in the sense that, the question is, we normally, a person works overtime, structurally what you do is put the overtime in. Now, there is an argument made why we didn't want to put in the overtime. And we're all considering that.

So, in that sense I don't, it doesn't matter. We have to, we're talking about, are we structurally, are we doing the right thing. Are we doing the analysis properly. That's what we're here for.

So, I would urge, I would suggest that we put this away, table this temporarily until the next meeting and give Loretta and me and other sides to both think about this. And also, take a look at 474.

Would that be okay folks?

Member Lockey: Yes, this is Jim Lockey. I agree with that approach.

Chair Kotelchuck: Yes. Okay.

Member Lockey: Yes.

Mr. Katz: Yes. And the other thing you might want do is DCAS folks, you sort of, you talked about more than, I think there in your response, you may want to flesh that out so that when everybody reads back from this case they also capture your whole thinking about how this was structured.

Chair Kotelchuck: Yes. Yes. I think that would be a good idea.. Or think about it for the next time that we get together.

Mr. Siebert: Yes. This is Scott. I apologize, I didn't understand what you wanted from that.

Chair Kotelchuck: Yes. Oh, yes, no need to make an apology. You didn't do anything wrong. As we talked about it, it just came up.

And to the extent that you clarified some of the issues about how, I mean, to me it was important how big and over, how much an overestimate you made on the exposure.

So, anyway, we're going to hold this off until next time. And shall we go on, it's, yes, it's close to 4:00.

How are people feeling? I could afford to do some easy cases, which is to say Category 1, Type 1. Is that possible for the next half an hour?

Member Beach: Don't we just have one more here? Oh, maybe not.

Chair Kotelchuck: Really? Is that right?

Member Beach: No, never mind.

Chair Kotelchuck: Rose.

Ms. Gogliotti: There is one more Type 2. And then there's also one observation --

Chair Kotelchuck: Okay. It sounds, I hear a call for finishing up, well, we haven't finished MCC. Because we're going to come back to it.

But what is the other one? What is the other finding that we're --

Ms. Gogliotti: 503.5.

Chair Kotelchuck: 503.5, I see. Okay. That's, and all the other ones are Type 1?

Ms. Gogliotti: Correct.

#### Nuclear Metals Inc

Chair Kotelchuck: Yes. Well, okay. There's a virtue in completing what we started. And, Josie, I'll buy that.

So, let's go ahead and do the one Type 2 case, 503.

Ms. Gogliotti: Okay. 503 is an NMI case.

Chair Kotelchuck: Yes.

Ms. Gogliotti: I believe that's Nuclear Metal.

Chair Kotelchuck: Right, right.

(Telephonic interference.)

Ms. Gogliotti: Oh, I have a lot of feedback on my line, does anyone else have that?

Chair Kotelchuck: I haven't.

Ms. Gogliotti: Now it's gone.

Mr. Katz: I heard that, but it's gone.

Chair Kotelchuck: NMI, and there are a number of NMI or is this just one?

Ms. Gogliotti: There are a number, but this particular one is Finding 5.

Chair Kotelchuck: Okay, good. I'll go right to it. And there we are. Okay, let's go.

Ms. Gogliotti: Okay, this is finding, the original finding text was, the analysis of the DR report on accumulation of particles of uranium on skin and clothing employee's conventional models that have widely been used and accepted on the EEOICPA project.

Namely, once the airborne dust loading of fine particles in the respiratory range is determined, the deposition of these particles onto surfaces by gravitational settling can be estimated. This is accomplished by assuming a deposition velocity of .00075 minutes per second.

In a reasonable default time period over which deposition occurs for the surface contamination.

Okay, then NIOSH responded saying that external dose in this claim is based on the individual film badge results. Any airborne uranium dust settled on the skin would also settle on the film badge.

Additionally, the skin is lightly washed everyday while the film badge would not be cleaned on a daily basis. As such, the film badge shouldn't inherently account for any external dose from deposition in a favorable manner.

And then, John, I think you're still on the line?

Dr. Mauro: Yes, I am. Yes. I'm not agreeing with David's answer. I believe it's standard practice, you wear your film badge.

You're in a very dirty environment where you're exposed to airborne uranium and you have your open window film badge, which is there basically to see what the external exposure is from the uranium metal nearby.

When you have a circumstance where there is a potential for skin direct contamination on skin, clothing, hair, face, then you have a situation that needs to be addressed.

Now, David's argument is that, well, the film badge would have also been contaminated as would have the skin. And in my mind, therefore by reading out the film badge, you've captured not only the exposure to the film badge, to the beta emitters at a distance, but you've also captured the exposure to the film badge from the direct deposition.

See, my position is that that's a bit presumptuous. And I'll explain why.

My understanding is, when the film badge itself becomes contaminated, it's something that is often apparently, Landauer for example, you can tell the film, by the way in which the film is developed and the nature of the exposure on the film, that this film badge has been contaminated. And very often those

film badges will be discarded.

So, what I'm getting at is, I believe, and this is almost a policy decision, and we may have had this conversation before, I think that my position is this. Yes, the person has skin cancer.

He has skin cancer on his face and he has skin --

Chair Kotelchuck: Okay.

Dr. Mauro: -- cancer on the leg. Okay?

And the bottom line is this. I believe that, yes, reconstruct those doses using the film badge, open window, classic OTIB-17.

But I believe that in addition to that you should say that, well, we believe it's also plausible that during the course of work it was not uncommon for this person to have direct deposition on the face and hair and other locations.

Chair Kotelchuck: Right.

Dr. Mauro: And you want to add that in, in other words, as an additional exposure. And there are ways of doing that.

Granted, the extent to which that occurs, the duration to which it occurs, how often it occurs is certainly a question that the one could reasonable raise.

But at the same time, I believe that it is appropriate to say that, well, we do, especially on the face, and given the working environment that if you look at the site that my position, our position, SC&A's position, that you should not only reconstruct the doses from what the film badge reading says but you should also do the classic direct deposition on the skin. Especially in the case of the face and what the dose might have been because of that direct deposition.

Because we do know that he was contaminated.

There's a record that he could be contaminated. And there's a record that he had to take a shower at the end of every day because it's a pretty dirty place.

So, I am disagreeing with David respectfully that using just a film badge data alone could capture everything is insufficient.

And this might be important. I know you don't like to talk POC, but he does have a fairly high POC and this possibly could make a difference.

Chair Kotelchuck: Comments?

Dr. Taulbee: This is Tim. Can I respond?

Chair Kotelchuck: By all means.

Dr. Taulbee: Okay. John, it's more of a question back to you on this.

Why do you feel that the film badge, which would be experiencing the same contamination the skin would be, but over the course of the entire wear period of, say a week without it being cleaned, would be an underestimate to a workers skin dose where that deposition would be there and each day they take a shower and wash it off? Why would that film badge be less?

Dr. Mauro: Well, Landauer --

(Telephonic interference.)

Dr. Mauro: Getting some feedback here. One of the things, when you have direct deposition, first of all, the presumption that the direct deposition that fell on his face, would be the same as a direct deposition that fell on the film badge. That's a bit of a presumption.

That, okay, if we got it on the face, he also got it on the film badge. But there's another dimension to this also, and that is, how does Landauer deal with film badges that are contaminated.

That is, do you have direct deposition on them. Because it does show up differently that we have this information from Joe Zlotnicki.

And it's not uncommon that when they do see, they process the film badges, they'll say, this film badge has been contaminated, something fell on it. And it shows up in a different pattern.

Then it would be, let's say, Duane wears the film badge would be, show a degree of blackening when it's at a distance.

So, I guess, I mean, that's really the depth of my concern, that is, I think that for this worker I would give them both. I'd say, here is the external exposure from a distance, from the beta, and here is the, also I would add in the modeled predicted, what would the direct deposition on this face, for example, especially, would be from the direct deposition.

On the presumption that whatever fell on the face did not necessarily fall on the film badge also.

Dr. Anigstein: Yes. Also, if I can intersect. This is Bob. We were also given, we also gathered information from Joe Zlotnicki, who is the former vice president of Landauer, that in many cases their client, in other words, like in this case NMI, would put pouches over, would put the film back in the packages because they didn't want the film badge to be contaminated.

So, while the worker wearing it, the film badge was shielded from direct deposition. And consequently, it would not necessarily show up as a dose.

Dr. Taulbee: Okay. This is Tim. Even if it was in a pouch, okay, depending upon the thickness of the pouch obviously, with uranium betas, they would be coming through. A significant fraction there.

So, I guess back to John's question or John's issue there of the contamination, that Landauer can see

that difference.

I must apologize, I have not gone through every single one of this individual's film badges here, but did you see any evidence of them indicating his film badge was contaminated?

Dr. Mauro: No. But we do have on the back of the sheet, and Bob, you and I have spoke about this yesterday.

One of the rejections for film badges, when they process them, one of them is, when they demonstrate that it appears that the film badge was contaminated. So, the film badges that are in fact contaminated, may not even make it into the batch that they use to reconstruct the person's dose.

Dr. Anigstein: This is, by the way, information from the M&C site that I was referring to. Where we have the complete Landauer, like two years' worth almost of Landauer film badges.

So, I do not know, and John, correct me if I'm wrong, that anybody looks at the NMI film badge records?

Dr. Mauro: That's --

Dr. Anigstein: Anybody at SC&A.

Dr. Mauro: Yes. Yes. I'm raising this as, I think that we need to close the loop on this.

I think that David makes his argument and it's not an unreasonable argument. But I think I'm making an argument also that is reasonable.

And all I'm saying to the Board is that I think we need to look at this a little closer and not just automatically presume that, oh, you don't have to worry about this because the film badge will reveal if there was any direct deposition. Just like it would reveal exposure at a distance. I'm just not ready to accept that dismissal of this issue.

Member Beach: Yes. This is Josie. I absolutely agree with SC&A on this one. After reviewing this issue, which is one of the reasons I wanted to talk about it today because it was fresh in my mind.

Chair Kotelchuck: Go ahead, please.

Member Beach: I just believe that something falling on the skin is much different than on the badge cover or whether it's in a pouch or not in a pouch. I believe that this needs to be explored more thoroughly.

And unfortunately, Dave Allen is not here, and I think that's a disadvantage.

Dr. Taulbee: Okay, this is Tim. I guess then we'll take the action to follow-up on this one and provide a response back to the Subcommittee.

Chair Kotelchuck: That sounds fine. Okay, that will be appreciated. And we'll have a chance to be thinking about it. So, good.

Folks, it's ten after 4:00. I think if we are now finished with the Type 2s for the day, rather than starting some more, I think it's probably time to call it quits for the day.

And that means to decide when, roughly, our next meeting would be.

Member Beach: Before we call it totally quits, can I go back to one subject briefly?

Chair Kotelchuck: Yes. Sure.

Member Beach: From last meeting we discussed the professional judgments and having SC&A brainstorm some sort of way to record those. I don't know if this is something that we should discuss here, although we did discuss it at the last meeting.

But we have the message group that took this up and it's just languishing. We haven't gotten back to the report on professional judgment.

So, I just wanted to know if there was any forward thinking on this or if it's just something we need to keep thinking about?

Chair Kotelchuck: Well, of course in all of the cases that we're getting, there is now a section on professional judgment. I --

Member Beach: No, no, I understand that, but we were talking beyond that of looking to see if some sort of problems developed building of body of data to look back on to see if there is --

Chair Kotelchuck: Right.

Member Beach: So anyway, and that was something that was discussed last meeting that SC&A would maybe get back to the Subcommittee on. I just don't want to lose track of that.

Chair Kotelchuck: Oh, I don't feel like I'm, I feel like we're building up a body of data from each of the reviews that we're doing. And I just didn't think that there was enough time that had gone by that we built up enough of a database to say anything useful.

But I appreciate your raising it. And I certainly don't, I certainly have not forgotten about it.

Member Beach: Okay.

Chair Kotelchuck: Of course, and I'll be open to suggestions as Working Group Chair that at a certain point to say, hey, let's do it, it's time now for a meeting.

Mr. Katz: What I would suggest, this is Ted, what I would suggest we do at this point, it makes sense since we just started that, like with the blinds and so on, and also as we do with the other cases, is you start coding these so that they're easy to compile, where the professional judgment matters occurred down the road for when you want to look at these in that sort of summary way.

If we code these, it would make it a whole lot easier than digging through individually cases to try to find, so like, maybe if the company --

Chair Kotelchuck: Yes.

Mr. Katz: -- resolved a case, we should code those that have an important professional judgment matter in that final resolution, in that table, or whatever it is that covers all the cases, code them so that we can find them easily later.

Chair Kotelchuck: Well, that sounds like a very nice idea.

Member Beach: And, Ted, that's what I thought SC&A had agreed to do last meeting was to come up with some sort of idea, like you just described as coding them.

Ms. Gogliotti: We have looked at it briefly. I have not put out any memos or documentation of it.

Just playing with some ideas right now about the best way to track it.

Mr. Katz: Yes.

Ms. Gogliotti: I can put out a memo if you like, of different suggestions or if you would prefer, we just settle on one internally, that's fine also.

Chair Kotelchuck: I think I would be nice to pull the Subcommittee Members or the Working Group Members in and then if you have some ideas, maybe through them out now rather than waiting until you make a decision and then we are going to go over some of the issues that you're going to go over.

Why don't you just throw it out now. That is, what ideas you have and --

Member Beach: Or the next meeting would be fine too, Dave.

Chair Kotelchuck: Pardon?

Mr. Katz: Yes.

Member Beach: Not to put them on the spot.

Mr. Katz: Yes, we can do it at the next meeting.

Chair Kotelchuck: Yes. Yes. But let me ask, the meeting will be the meeting of this Subcommittee, right?

Mr. Katz: Yes.

Chair Kotelchuck: That they will do it and --

Mr. Katz: Correct.

Chair Kotelchuck: -- and then that may give rise to a message meeting at some point. Right?

Mr. Katz: Right. Right.

Chair Kotelchuck: Okay.

Mr. Katz: And I just would, again, suggest though that the coding, however you want to do that coding, do that after the case is resolved, because then you know you have the agreement of the Subcommittee that that was an issue of professional judgment that was important. As opposed to, at the point when SC&A reviews it, without the other half the Subcommittee's input yet.

Chair Kotelchuck: Well, essentially everything we've done, since we started thinking about this, right, and put in the professional judgment. I mean, there was a start.

Mr. Katz: No, what I'm saying is, the coding for the ones we want to be able to go back to in a summary fashion, should be those after the Subcommittee has done its reviews and that we know that that professional judgement issue stands as an important issue that we want to be able to go back to.

Chair Kotelchuck: Okay.

Mr. Katz: That's all I'm saying.

Chair Kotelchuck: Okay.

Mr. Katz: As opposed to the front end when SC&A has just done their draft review and the Subcommittee hadn't reviewed it.

Chair Kotelchuck: Okay.

Ms. Gogliotti: And I also want to clarify, this is just for the blinds, we have not added any sections on the normal dose reconstruction reviews.

Chair Kotelchuck: You're right. That's correct, you're right on --

Mr. Katz: Okay.

Chair Kotelchuck: -- that's true. And --

Ms. Gogliotti: So that occurred for just the 26th set, that is our only --

Chair Kotelchuck: Right. So, no, we should be thinking of doing that for a regular review.

Mr. Katz: Right.

Ms. Gogliotti: It's more challenging to do for a regular review --

Chair Kotelchuck: Pardon?

Ms. Gogliotti: -- because it's much more challenging to do than a regular review.

Chair Kotelchuck: Yes, it is. Well, let's say this, you're going to come up with suggestions for coding, send it to us, we'll put some things in. Let's think about how we could do that for cases that we're reviewing.

It is harder but I'm impressed with the quality of the ones that we've been doing in the blinds, but

the blinds we're never going to, I wouldn't say we'll never get enough data, but in a few years we have all of, what, about 40 now. It's not very big a database.

So, let's think about how we might think about professional judgment use. Put it into the process by which we review just regular cases.

Ms. Gogliotti: That is not being incorporated in the 27th set, which we are currently working. We could definitely discuss that for a future case set.

Chair Kotelchuck: Yes. Yes, I think we could. I mean, what Josie is saying seems to me to make sense.

Mr. Katz: No. But, I mean, you haven't delivered that site yet so it could still be worked in.

Chair Kotelchuck: Yes.

Ms. Gogliotti: Correct.

Mr. Katz: Yes. So I wouldn't discount it at this point, I would consider that you might be able to work that in still.

#### Next Meeting Schedule

Chair Kotelchuck: Okay. An idea is planted or thinking about something is planted. Let's talk about another meeting.

Ms. Gogliotti: Well, the next meeting we will have completed the 27th set.

Chair Kotelchuck: Great. Okay.

Mr. Katz: Well, we can have communications on this issue by email.

Ms. Gogliotti: Okay.

Mr. Katz: Yes. Okay, so next, talking about next meeting.

Chair Kotelchuck: This is September, we need apparently about three months to get another meeting.

Mr. Katz: It's getting close. Pretty close. Pretty close.

Chair Kotelchuck: Which --

Mr. Katz: Other --

Chair Kotelchuck: -- and December is a disaster to have meetings.

(Laughter.)

Chair Kotelchuck: With all family and these events. So, early January looks --

Mr. Katz: Yes, I think we're stuck with that. Yes.

Chair Kotelchuck: And to my mind, the 2nd or 3rd week in January. Excuse me, the week of January 6th and the week of January 13th, sometime in there.

Mr. Katz: Yes.

Chair Kotelchuck: Now, we have an M&C meeting on the 9th.

Mr. Katz: That's correct.

Chair Kotelchuck: So, do you have any thoughts or people have any thoughts, like --

Mr. Katz: Well, so, yes, so the 7th and 8th, I just think the 6th is probably bad because people will be on leave that week before. A lot of people.

Chair Kotelchuck: Exactly.

Mr. Katz: But --

Mr. Calhoun: Ted, I had it written down that we had a Lead Team meeting on the 8th.

Member Clawson: Oh, you're right. Yes, that's the 8th. Okay.

Chair Kotelchuck: The 7th --

Mr. Katz: The 7th?

Chair Kotelchuck: What's the 7th like for people?

That's mean --

Mr. Katz: Open wide.

Chair Kotelchuck: Yes. That means for some of us meetings on the 7th and 9th. I'm not sure whether the 8th, I didn't catch what kind of a meeting that is.

Mr. Katz: Oh, that's a NIOSH meeting.

Chair Kotelchuck: Okay.

Mr. Katz: NIOSH --

Chair Kotelchuck: Fine.

Mr. Katz: -- meeting. But otherwise, the 13th through the 16th is open on my calendar.

Chair Kotelchuck: Pardon? The 16th?

Mr. Katz: 13 through 16.

Chair Kotelchuck: Yes. I cannot do the 13th, but I can do the 14th. I think I can do every other day that week for myself. Yes.

Mr. Katz: Oh. How does it look --

Chair Kotelchuck: Probably we'll be going Wednesday, Thursday. What about the 14th?

Actually, folks, maybe the 14th is better?

Mr. Katz: How's the 14th?

Chair Kotelchuck: Otherwise a lot of us will be loaded up the previous week. Some --

Mr. Katz: Brad --

Member Beach: The only thing we have pending is our site visit to Sandia, and we don't know when that's going to be yet, Ted.

Mr. Katz: Oh, but it's coming around there. It's right around there though, isn't it?

Chair Kotelchuck: Yes.

Member Beach: Well, it's all those weeks are under consideration right now.

Mr. Katz: Okay. Let me suggest --

Chair Kotelchuck: When will you know?

Mr. Katz: Let me suggest that when we get a date for that, for that Sandia, then I'll send out an email and get options, eight options for this.

Chair Kotelchuck: Okay. Something like 7th, 15th, 16 --

Member Beach: And I'd almost say move it to February 4th if --

Chair Kotelchuck: That's a long time between meetings. That certainly would work, it would work, for my schedule it would work just fine.

Member Lockey: I think we should, send out an email with some dates. I can't --

Chair Kotelchuck: Yes.

Member Lockey: -- I can't make that decision right at the moment.

Mr. Katz: Yes, that's fine.

Chair Kotelchuck: Yes.

Adjourn

Mr. Katz: Let's get the dates for the Sandia site visit

and then I'll send out an email for the Subcommittee, because we also, I think we've lost David Richardson. So, then we can get everybody counted on our date for this.

Chair Kotelchuck: Okay, that sounds good.

Mr. Katz: Okay.

Chair Kotelchuck: Folks, thank you all very much and have a good rest of the week.

(Whereupon, the above-entitled matter went off the record at 4:26 p.m.)