CENTERS FOR DISEASE CONTROL AND PREVENTION

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

ADVISORY BOARD ON RADIATION AND WORKER HEALTH

DOSE RECONSTRUCTION REVIEW METHODS WORK GROUP MEETING

MONDAY, MARCH 11, 2024

The meeting convened at 11:05 a.m. EDT

via teleconference,

Dr. Dave Kotelchuck, Chair, presiding.

Vet Reporting

Certified Court Reporters

PO Box 72314

Marietta, GA 30007

678-646-5330 ext. 514

reporter@vetreporting.com

Members Present:

Kotelchuck, David, Chair

Beach, Josie, Member

Frank, Arthur, Member

Martinez, Nicole, Member

Ziemer, Paul, Member

Registered and/or Public Comment Participants:

Roberts, Rashaun, DFO

Barton, Bob, SC&A

Behling, Kathy, SC&A

Brackett, Elizabeth

Buchanan, Ron, SC&A

Calhoun, Grady, DCAS

Gogliotti, Rose, SC&A

Mangel, Amy

Marion-Moss, Lori, SC&A

Rafke, Michael, HHS

Rutherford, LaVon, DCAS

Sharfi, Mutty

Smith, Matthew

Taulbee, Tim, DCAS

TABLE OF CONTENTS

PROCEEDINGS

(11:00 a.m.)

WELCOME AND ROLL CALL

DR. ROBERTS: We're at five after, so I'm going to go ahead and get started. So, good morning and welcome, everyone. I'm Rashaun Roberts. I'm the designated federal official for the Advisory Board on Radiation and Worker Health. This is a meeting of the dose reconstruction review methods work group. You can find the agenda for today's meeting on the NIOSH website under scheduled meetings for today, along with all of the other meeting materials, which were disseminated to the working group and others in advance.

And I'm hearing some interference, so if everyone can check their phones and make sure they're on mute, that will help things go smoothly. So, I want to, again, officially welcome all of you to this video conference.

And I'm going to go ahead and move into the roll call for members of the Board who are on the work group starting with our chair and then in alphabetical order. Everyone, please, state your conflicts as we move through room -- roll call. So, Kotelchuck?

CHAIR KOTELCHUCK: Here, no conflicts.

DR. ROBERTS: Beach?

MEMBER BEACH: I'm here, and I'm conflicted with Hanford.

DR. ROBERTS: Frank?

MEMBER FRANK: Here, conflicted with Pantex.

DR. ROBERTS: Martinez?

MEMBER MARTINEZ: Here, I'm conflicted with Savannah River site and Oak Ridge X-10.

DR. ROBERTS: And Ziemer?

MEMBER ZIEMER: I'm here and conflicted with Oak Ridge X-10 also.

DR. ROBERTS: Okay, great. Thank you. Let's move to DCAS/ORAU.

MR. CALHOUN: This is Grady Calhoun. I'm conflicted at Fernald.

MR. RUTHERFORD: This is LaVon Rutherford. I'm conflicted at Fernald.

DR. TAULBEE: This is Tim Taulbee. I'm conflicted at Mound.

MS. MARION-MOSS: This is Lori Marion-Moss, and I'm conflicted at Mound.

DR. ROBERTS: Anyone else for DCAS/ORAU? Okay. Let's move on to SC&A.

MS. MANGEL: Amy Mangel, conflicted at Pacific Northwest National Laboratory.

MS. GOGLIOTTI: Rose Gogliotti, no conflicts.

DR. BUCHANAN: Ron Buchanan, conflicted at Los Alamos.

MS. BEHLING: Kathy Behling, no conflicts.

MR. BARTON: Bob Barton, no conflicts.

DR. ROBERTS: Anyone else for SC&A? Okay. Let's move on to HHS and contractors.

MR. RAFKEY: Michael Rafke, HHS, no conflicts.

DR. ROBERTS: Any of -- anyone else for HHS and conflicts -- and contractors. Anyone on from DOL, DOE, other departments? And last, but not least, are there any members of the public who'd like to register their attendance? Okay. Hearing none, let's go ahead and officially move into the meeting.

I just do want to cover -- cover a couple of reminder. So, in order to keep everything running smoothly and so that everyone speaking can be clearly understood, please, make sure you're on mute unless, of course, you need to speak. If you don't have a mute button, press star six to mute. If you need to take yourself off mute, press star six again. And we are not using any audio through Zoom.

As I mentioned before, the agenda and meeting materials can be found on the NIOSH website for this program. Other materials were provided to Board members and to staff prior to this meeting. The materials that are relevant to today's meeting can be opened up and followed as we work through the meeting agenda. So, with that, I will go ahead and turn the agenda over to the work group Chair, Dr. Dave Kotelchuck. Over to you, Dave.

CHAIR KOTELCHUCK: Okay. Thank you. Okay. Welcome folks. This meeting represents a resumption of regular activities for this work group, which is not met as a full group since September 2018. And, also, as an introduction to the working group for our two new members.

Let me start out -- let me take the liberty of starting out with a little

bit of history since we haven't met for such a long time and memories fade even for those of us who've been on the working group for a while. As I noted in the letter sent to all of you last summer, the dose reconstruction reviews methods working group was established by the Board in 2016 under the broad mandate of to be responsible for advising the Board on possible new approaches to reviewing a sample of the NIOSH dose reconstruction. It was established and chaired by James Melius who was then chapter -- chairperson of the Board. Jim had previously enlisted Mark Griffon, a former Board member to write a report on instances of professional judgment in the dose reconstruction process and assess approaches to improve consistency of these professional judgments, among the various dose reconstructors.

In November 2017, Mark gave a preliminary report to this working group. And he said -- and maybe I should just quote him -- the idea was, first of all, to determine whether professional judgment could result in potential inconsistency. In other words, are these judgments such that two different dose reconstructors could get significantly different answers or doses or whatever in certain areas of the dose reconstruction? Later, in December of 2017, Mark gave a full report to the Board, and it's in the Board transcript for that meeting, December 2017.

At that time, I reported just before -- just before Mark spoke that we had completed by then 25 blind cases, and the two reviewers from NIOSH and SC&A agree --- agreed on their dose reconstruction represent -- recommendation in all of these cases. That is, in all 25 cases, both dose --

both those reconstructors reported POCs above 50 percent or below 50 POCs probability of -- of compensation.

I should add now that there was one case at that time that we hadn't finished. I reported we've -- we were in all -- the two were in agreement in all 25 cases. There was one case, however, that was not -- we didn't finish going over. And, in fact, the two differed dramatically. And there was, essentially, a programmatic difference in approach. There -- there were program -- what we call now program judgments, what Mark calls program judgments.

And later, we resolved these by going to the AWE, the atomic weapons employers work group -- work group, and that group decided that the NIOSH approach was, in fact, the better, proper one. So -- so, we had that one -- one disagreement, which has not yet been resolved. So, based on these blind results then reported, many of us on the Board saw no pressing need to implement changes in the DR process. I should do -- underline the word "pressing." There's always -- we can always do better. We always should try and do the best we can and improve as best we can in a complex dose reconstruction process.

So, the -- we then met -- we then met in September. We -- sadly, a month after the -- this report to the December 2017 meeting, within the month, I'm Melius died suddenly. And at that time, I was asked to chair this working group. And we met for the first time in September of 2018. Actually, the last time, December of 2018. And it was clear that we needed

to set priorities for following up the recommendations of the report, of the Griffon report. We were not, at that point, able to -- or we did not decide that there was a particular approach that we wanted to pick. We were still uncertain about the priority. And so, we just decided to continue doing the blinds, which is the certainly and very important -- a matter in terms of determining consistency from the different dose reconstructors.

And, also, we decided to add a column in our reporting listing the professional judgment made during each review, and we've continued to do that since. However -- and we did that for the next year. But -- and by the end of the next year, we had done 32 blinds.

But in March 2020, the COVID pandemic hit and interrupted our work. And then, the -- even with the vaccine, we came to almost a complete halt in that dose recon -- dose reconstruction review process beyond cases in the pipeline when the federal government instituted its cybersecurity modernization initiative. And even now, we have not worked our way through to get into everything, and we still have, as you'll see, one blind, which we have not been able to complete because of that.

So, I don't know if there are any questions or comments so far. I'm just trying to catch everybody up to where we are and why we haven't met in such a long time and why we need to meet and move ahead at this point.

REPORT ON RESULTS OF 49 BLIND CASES ANALYZED THROUGH SET 30

CHAIR KOTELCHUCK: Okay. Then I'd like to get on with the agenda and first review the results of the blind cases that we have analyzed so far, the 49 that we have looked at. Is it possible to -- I'm -- Rose, maybe you will be at -- would you be able to put up the handouts at this point?

MS. GOGLIOTTI: Let me get that started. No problem. Okay.

CHAIR KOTELCHUCK: That would be nice. There we go. Okay.

Go up to -- go up to one, the first page.

So, this is -- you'll see on the left the blind numbers, and the blind numbers go up to blind 50. As many of you have probably noticed, there is one missing on the second page, B46. And B46 is still blocked by the cybersecurity initiative, and we'll get to it. So, we have 49 cases completed.

And let's take a look -- let's go back to, again, the first page. Sorry to rummage us between the cases. But there you see on the 17the set B3, this is the case that I mentioned before, where NIOSH had 45.9 percent POC and the SC&A had a vastly larger one, 85.4 percent. And that really was -- that was a programmatic difference, which -- which we've resolved and -- and the focus by Mark has been mostly on the professional judgment, not the program judgment. Here was one.

And now, let's go down to the other two. You'll notice the star on the left on the one in the left-hand column, and now, we'll go down to the other two where there are stars, namely B34 and B35. As we started -- as we

started to -- as we were having success, which is to say agreement, between the two dose reconstructors in these blind cases, we decided look, let's push the envelope and pick cases where they -- the NIOSH POC was very close to 50 percent, the kind of caught off point -- and by the way, let me just reiterate for -- for -- for all that these -- the data in here are not final data. They're not the -- they -- they are the data that we have. The final judgments are made by the -- by the Board and by and by -- and by the -- eventually the DOL.

But on B34, we took -- we started with a NIOSH of 50.06, a POC, and we got one that was 49.43. So, there's a disagreement there, if you will. However, I would argue that that's -- is that really a difference in professional judgment or is it the fact that it's just ordinary variability in a complex dose reconstruction process. And I -- my suspicion is it's the latter.

And similarly, if we go to B35, we had -- chose 48.6 percent for NIOSH and it's 50.35 for SC&A. And it seems to me, it's not at all clear that -- what -- what those differ, but the differences are so small, it's just that we chose cases that were on the borderline of that 50 percent, which will be, ultimately, the 50 percent cut off.

So -- so beyond that -- so, we have three out of 49 cases, 6 percent that -- where there's a disagreement, and I would -- I've argued before the Board -- I presented this material a little bit earlier before the Board when we had a bit fewer cases. And I said this is a -- this is a very important level of agreement that two dose reconstructors and not going to get answers

that would result if -- went through everything that would result in -- in a -- in the two cases would result in a -- a disagreement in compensation.

So, with that -- first, are there any questions about this -- in this table or questions or comments about the table? Any remarks that anybody would like to make?

MEMBER FRANK: Yeah, this -- this is Arthur. I -- as a newbie to this, I assume the -- let's say B35 where one was below and one was above, that the person did get compensated. And as I was looking over the material, I really was struck by the one you commented upon already, the 80, you know, versus 40 kind of difference. Is there some explanation of why that -- and there was one other than that a 6 or 7 percent difference as well -- where do you think that came from? It may have been resolved, but why -- why did it occur in the first place?

MS. GOGLIOTTI: I can speak to that. The first case was very early in the process. And, I believe, at that point in time, we were doing two dose reconstructions reviews. One was focused on following the NIOSH DR guidance, and one was more of a general health physics application, not using the NIOSH guidance. And, I believe, that's why the POC difference was so high. That predates my time as a dose construction chair or subcommittee task manager, but that was thoroughly investigated for B3.

The other one, I believe, you're talking about is -- was --

MEMBER FRANK: There's two others. There's B -- there's B25 where it's 48 versus 40 and B42 -- I'm sorry, B43, which was 49 versus 38. I

mean, those are significant differences.

MS. GOGLIOTTI: They are. I -- if you're interested, I can send you the full report that goes into exactly why each of them happened. There's very different reasons for all of them. Some come down to SC&A not being as familiar with all of the procedural guidance as NIOSH, because we only do a handful of dose reconstructions whereas, NIOSH does thousands. So, some of it is explained by that. Some of these, the difference comes from using different versions of IREP. There's an Enterprise Edition, which does a lot more statistical --

CHAIR KOTELCHUCK: Okay. Fine. I'm back again. I'm so sorry, folks. I have a wireless, battery gave out. We're -- can everybody hear me?

DR. ROBERTS: Yes.

MS. GOGLIOTTI: Yes. We're just --

CHAIR KOTELCHUCK: Yeah, pardon me for the delay. So, --

MEMBER FRANK: This is -- this is Arthur. I'm getting an explanation of some -- of a question I had.

CHAIR KOTELCHUCK: Ah, very good. And I trust somebody has answered it, the question --

MEMBER FRANK: We're in the middle of the answer. I don't need --

CHAIR KOTELCHUCK: (Indiscernible) --

MS. GOGLIOTTI: -- working on it.

MEMBER FRANK: Yeah, I --

MS. GOGLIOTTI: I can --

MEMBER FRANK: -- don't need the full report or send me --

MS. GOGLIOTTI: I can send you the full report or there's also a summary document that we've made that kind of outlines the differences.

MEMBER FRANK: Yeah, the summary of the -- because --

MS. GOGLIOTTI: Okay.

MEMBER FRANK: -- I just wanted to know that there was some rational reason for it. And apparently there is. I just --

MS. GOGLIOTTI: Yes.

MEMBER FRANK: -- wanted to know what it was as -- as a newcomer to this committee. I want to --

CHAIR KOTELCHUCK: Very good.

MEMBER FRANK: -- understand --

MS. GOGLIOTTI: Yeah.

MEMBER FRANK: -- why -- why it --

MS. GOGLIOTTI: These are very complicated. Yeah, I will send you that.

MEMBER FRANK: Okay.

MS. GOGLIOTTI: And I think that it will make a lot more sense, but every one of these cases, the subcommittee on dose reconstruction has spent considerable amount of time going over, so they have all been investigated thoroughly.

MEMBER FRANK: Thank you.

MS. GOGLIOTTI: -- differences. I do want to also point out, though, that the NIOSH POCs are the ones that -- not -- are given to DOL. SC&A's reviewing cases that were already completed by NIOSH. So, we are blinded, so we don't get to see what NIOSH did, but we're just doing our best to complete a dose reconstruction to compare it to theirs.

MEMBER ZIEMER: Yeah, and this is Ziemer. Can I add to that comment? For example, on B34, Arthur, the NIOSH value of 50.06 would be the one that determined compensation. And even if SC&A's was below that, kind of after the fact, you wouldn't go back and -- and take away the compensation even if you decided that the 49.43 was actually a better number. Once -- once that goes to D -- Department of Labor, I believe, that's it.

MEMBER FRANK: All right. Because B35 --

MEMBER ZIEMER: -- thing I was --

MEMBER FRANK: -- is the reverse, you see? And so, --

MEMBER ZIEMER: Yeah, I understand, understand, but that -- because that, in itself, unless NIOSH decided that there was some error made because -- and I think it was -- and the explanation was that SC&A did not always have the exact same guidelines when they did things sort of from scratch or blindly. So, and you would say, for example, on some of these -- like B34, you would say scientifically that's the same number.

MEMBER FRANK: Yeah.

MEMBER ZIEMER: It only becomes -- it only becomes an issue from a

public policy legal point of view. Because, for example go down to B42, Rocky Flats. You -- where you have a 40 -- well, looks like a 47, I'll call it a 48, and the other one's a 49. We don't worry about that being a percent or being that 1 percent or -- different by that one percent number because it's -- has no significance from a legal point of view. Neither one is not going to be compensated.

In fact, on the Hanford one, which is way far apart, we say, okay, the -- there's some reason for that, but it doesn't affect the results. So, it's those ones that are right up there at 49 and 50 that we say okay, did we make any errors there that where -- where NIOSH would actually have to go back and redo something. But there -- there's so many --

MEMBER FRANK: Yeah.

MEMBER ZIEMER: -- there's so many cases where scientifically the numbers, basically, are the same. And --

CHAIR KOTELCHUCK: Right.

MEMBER ZIEMER: -- you know, I've said before, and I don't think we know any of these out to two decimal places anyway.

CHAIR KOTELCHUCK: Right, right.

MEMBER FRANK: I -- I agree with that. So, you know, a difference of a percent, even maybe 2 percent are probably not different, but it does make a difference --

MEMBER ZIEMER: (Indiscernible) --

MEMBER FRANK: -- in terms --

MEMBER ZIEMER: -- terms of the --

MEMBER FRANK: -- compensation --

MEMBER ZIEMER: -- the actual errors that -- yeah. Yep. In terms of the actual errors, these --

CHAIR KOTELCHUCK: There's --

MEMBER ZIEMER: -- numbers are mostly --

CHAIR KOTELCHUCK: Right.

MEMBER ZIEMER: -- pretty close and an occasional one --

MEMBER FRANK: Yeah.

MEMBER ZIEMER: -- there's something --

CHAIR KOTELCHUCK: Right. And -- and Arthur, I might add that when we do the 1 percent review of cases, not blinds I'm talking about, but just the review of cases in the -- in the subcommittee for dose reconstruction reviews, in well over 500 cases that we've examined, there was only one time that it was determined, as we did the review, that a mistake was made or -- no or -- or -- or a compensation decision would -- changed as a result of updating background material for that case. And that case had already been compensated and should not have been. And that -- we decided as a matter -- NIOSH decided, as a matter of policy, that we -- if we made a mistake, the one mistake in the 500, that that person -- that person -- their compensation decision was not changed, and we didn't ask for the -- quotes, ask for the money back as a matter of fairness. And so, good -- good, I'm glad and that -- that useful discussion.

Can we go perhaps --

MR. CALHOUN: This -- this -- this is Grady. Can I just add a little bit more to that? Thank you, Dr. Kotelchuck.

CHAIR KOTELCHUCK: Sure, of course.

MR. CALHOUN: What Dr. Frank -- I just wanted to expand this a little bit on the case that Dr. Kotelchuck is talking about and -- and he's absolutely right, and that was way back in the day. You probably aren't aware, but we had so many cases that we couldn't get them completed in a reasonable amount of time. And so, a decision was made to use a highly, highly claimant-favorable approach to some sites where we didn't have all the data. And so, that resulted in compensation of that case. It was intentional at that time, because that was the best we could do at the time. And so, that was the one where -- yeah. We went -- we actually, did it according to procedures, but we have refined things much more than that since then. So, just this little more detail. But that was the one time that we had a true mistake notified -- identified by both sides, yeah.

MEMBER FRANK: Thanks very much. I -- you know, I asked these only because, you know, as a new -- newcomer to this group, I want to understand and get things right moving forward. So, I appreciate all of this discussion. Thank you.

CHAIR KOTELCHUCK: Right. I -- I -- I agree -- I also am happy for this discussion, and thank you, Grady, for not so much a clarification, but the detail that you're able to give all of us. It does go back a long time and

that case -- many of these cases. So, thanks, Grady.

So, how about -- let's how go on with -- (audio break) now. Again, could I -- is it possible -- will -- I want to -- I do want to come back to the handout later, but I would like to just go over the slides, just talking about the representativeness of our cases in terms of -- good.

So, this is -- I should have -- if I may, I should have listed the members of the -- of our -- of our work group, namely, myself, Arthur, Nicole, Josie, and Paul Ziemer. So -- and Paul.

So, could I go -- I'll go -- let's go to the first -- the next slide. Good.

So, we have covered -- here are the facilities covered and the number of cases at the facilities. Obviously, at the very large facilities, the large DO -- many large DOE facilities, we have by -- we have a larger number of blinds cases that we have selected; however, in total, we have -- if you count the 17 unique facilities, as well as the ones listed above, we have a total of 30 DOE and AWE facilities, which we've covered through these blinds. So, I think we have a pretty representative sample of the facilities that -- who -- for whom we have claimants and dose reconstructions are done.

Let's go to the second slide. Good. This is years employed among the 49 blinds cases. You see that, essentially, the number of years of employment is flat between 10 and 40 years of employment. And it turns out that that is the -- the flatness of -- of the -- the -- the -- of the years employed in those three categories are, actually, identical. They represent

74 percent of the facility -- of the blinds that we've looked at. Similarly, in the 2019 report that the Board did to the secretary, we had 74 percent of the cases that we reviewed in -- though -- in those employment categories, some 10 to 40. So, we're, basically, covered -- a good -- again, this is a good representative sample. There are small differences in the categories 10 to 19, 20 to 29, etc., which is no surprise. Tens here tend to be larger at the younger end, that is ten -- the -- the 25 percent from 10 to 20, if you will, is -- are a little bit higher. And the 30 to 39 percent or 30 to 40 percent, if you wish, a little lower than they were a few years ago. But this is -- again, this is -- shows that we are -- we picked a good representative sample of blind -- a good sample of blinds that are representative of the cases that we've reviewed.

And now, in the last slide here -- Okay. Gender. Of the 49 cases reviewed, as you've seen, 22 percent were female and 78 percent were male. Whereas, as of November 15th, 13.6 percent of total claims involve the female energy employee. In other words, we have -- the blinds cases we have a larger percentage of females than we have over the total claims in all of the 20-plus years that we've been active as a Board. So, that's -- we -- I think it was only -- certainly in -- in during the years that I've been on the Board, we -- in the earlier years, I think we did not have an adequate representation of female claimants in our -- in the dose reconstruction cases that we reviewed. And, but by then -- but by now, having focused on making sure that we did not undercount the -- the -- or I should say where

we had too poor rep -- we had lower representation for females, in this case we have higher. However, if I may just add, from the subcommittee on dose reconstruction reviews, we have only 10 percent of our total claims that we have reviewed -- of the hundreds that we've reviewed are female. So, we still have to catch up or we would still wish to catch up and increase the number of female employed -- female employees that we consider for a dose reconstruction review.

MEMBER ZIEMER: Dave, could I insert a question at this point? Do we know --

CHAIR KOTELCHUCK: Sure.

MEMBER ZIEMER: -- or can we find how many of the actual claimants are male and female? In other words, if -- if it -- if it's 50/50, that's one thing, but does this reflect the claimant population, I think, is -- is the -- would be the question. I -- I'm -- I'm suspecting in the early days, at least, there were a predominance of male employees, but I don't know that that's the case for sure. But I -- I suspect NIOSH might know what the distribution of males and females are on the total claimant population.

CHAIR KOTELCHUCK: It does. It does, but -- but the last time when we reviewed and the reports that we gave to the secretary, 10 percent of all claimants over the years are female. And we're --

MEMBER ZIEMER: Okay.

CHAIR KOTELCHUCK: -- saying that -- wait a minute, 10 percent of the -- of the claimants are female.

MEMBER ZIEMER: Well, then -- then -- then --

CHAIR KOTELCHUCK: (Indiscernible) --

MEMBER ZIEMER: -- the represent -- representation --

CHAIR KOTELCHUCK: -- got that wrong --

MEMBER ZIEMER: -- (indiscernible) --

MS. GOGLIOTTI: Can -- can I -- can I speak on this?

CHAIR KOTELCHUCK: I got it backwards.

MEMBER ZIEMER: Go ahead.

CHAIR KOTELCHUCK: Go ahead, Rose, please.

MS. GOGLIOTTI: So, that's the last time that we evaluated this. The most current data available was 2015 from NIOSH. At that point in time, 13.6 percent of all NIOSH claims were female. And, I believe, when we looked at time periods, though, like, looking at five- or 10-year intervals, the percentage of women claims is actually going up considerably. I did not review the latest numbers on this, but we have it, and I'm sure NIOSH has more current numbers. It's a little bit forgot because we lost access to NOCTS, so we can't easily check some of these things, but, I believe, it was closer to 30 percent of claims now are female. Grady, do you -- do you know the numbers?

MR. CALHOUN: I do not. I will get -- I will get that number, though. I can make that request real quick, but it shouldn't be that hard to get, I wouldn't think.

CHAIR KOTELCHUCK: Oh, no. Yeah, right, right. That is a

(indiscernible) --

MS. GOGLIOTTI: I believe there's a graph in a handout that the dose reconstruction subcommittee looked at and some of the numbers -- or the numbers are scaling up. So, the average might still be fairly low, but if you look at each individual year, the percentage of females is definitely increasing.

CHAIR KOTELCHUCK: Yeah.

MS. GOGLIOTTI: And that --

MEMBER ZIEMER: Yeah.

MS. GOGLIOTTI: -- may just be a reflection on more females entering the workforce in later years.

CHAIR KOTELCHUCK: Right. And --

MEMBER ZIEMER: So, this is Paul, again. So, the second bullet there then, the 13.6, does that represent total claims, not blind case --

MS. GOGLIOTTI: Correct.

CHAIR KOTELCHUCK: Correct. Yeah.

MEMBER ZIEMER: I gotcha.

CHAIR KOTELCHUCK: And it's my --

MEMBER ZIEMER: So, the original -- the original 22 percent doesn't look too bad, though, compared to that, but compared to current rates then it should be higher.

CHAIR KOTELCHUCK: Right, right --

MEMBER ZIEMER: Gotcha.

MS. GOGLIOTTI: With the blinds we're, actually, doing a fairly good job, in my opinion, of getting an adequate sample of females.

MEMBER ZIEMER: Yeah.

MS. GOGLIOTTI: With the regular dose --

MEMBER ZIEMER: I was trying to re --

MS. GOGLIOTTI: -- reconstruction --

MEMBER ZIEMER: Yeah. I was trying to recall in the early days, they -- and I don't recall on blinds. Did we actually -- in do -- doing the selections, did we look at that? I know we were looking -- first of all, if you start looking just around cases around 45 to 55 percent, you -- you're ruling out a lot of things. And then we were looking at location, we were looking at types of cancers. I was trying to recall. Did -- and I wasn't on the committee at that time. Did -- did you look at male/female ratios or -- or male/female as a -- as a selector in -- in those early cases?

CHAIR KOTELCHUCK: We did not until a bit later in the process. Remember, --

MEMBER ZIEMER: Yeah.

CHAIR KOTELCHUCK: -- it was the really set -- set 17 that we -- cases that we started looking more carefully at the male/female --

MEMBER ZIEMER: Ah, okay. Gotcha.

CHAIR KOTELCHUCK: Yeah, (indiscernible) --

MEMBER BEACH: I think -- this is Josie. I think it was just the last two -- two to three sets we really started focusing on that.

CHAIR KOTELCHUCK: Right, as we realized that we were -- we were -- we needed to do better. And --

MEMBER BEACH: Yeah, I think your last report to the full Board pointed that out. I'm pretty --

CHAIR KOTELCHUCK: Yeah.

MEMBER BEACH: -- sure that's where we started.

CHAIR KOTELCHUCK: Right. Right. But we're moving --

MEMBER ZIEMER: Good. Thank you.

CHAIR KOTELCHUCK: -- is that we're moving on that and we're -- we're aware of it, and we're trying to compensate for the changes that are taking place as -- as we -- as the procedures continue, as our program.

So -- so -- well, that's good. And are there any other comments or questions about what we've been doing? So, we have, you know, three out of 49 cases that are -- that there is a difference in -- I wouldn't say in the -- I wouldn't say the competence -- not the compensation decision, but the compensation dose -- recommendation as being below or above 50 percent (indiscernible).

MEMBER ZIEMER: I have one. This is Ziemer again. I'm sorry, I have one additional question that just popped into my mind when we're thinking about male/female. Well, has -- has anyone looked at other -- say, ethnicity issues? Are we looking properly at racial differences?

CHAIR KOTELCHUCK: No, because we don't -- we have never -- that -- which is to say, the -- the DO -- the DOE and, you know, has never

collected that data. We don't have data on racial differences at all or ethnic differences. So, --

MEMBER ZIEMER: I think we --

MS. GOGLIOTTI: -- do --

MEMBER ZIEMER: -- I think we do. We do for skin cancer, I think.

CHAIR KOTELCHUCK: -- true. Yes, sir, we do. You're right. You're right. For skin cancer, that is a question, and -- and it is asked. I don't --

MS. GOGLIOTTI: But we've never tracked whether or not we're looking at -- at different ethnicities at a proportional rate.

MEMBER ZIEMER: Yeah.

MS. GOGLIOTTI: I don't think that has ever come up. But we can --

MEMBER ZIEMER: And I don't -- I don't know how -- how important it would be. It just popped into my mind. We -- we sort of automatically do it if there's skin cancer.

CHAIR KOTELCHUCK: Yeah.

MEMBER ZIEMER: I think.

CHAIR KOTELCHUCK: You're absolutely right --

MEMBER ZIEMER: -- the question is.

CHAIR KOTELCHUCK: Oh. For skin cancer --

MEMBER ZIEMER: So, --

CHAIR KOTELCHUCK: -- that is a question that is asked, --

MEMBER ZIEMER: Yeah.

CHAIR KOTELCHUCK: -- but for all others, that is not asked. And the

data is not collected.

MEMBER ZIEMER: I -- I don't --

CHAIR KOTELCHUCK: (Indiscernible) --

MEMBER ZIEMER: I don't know necessarily that it's an important question, so I --

CHAIR KOTELCHUCK: Right, yeah.

MEMBER ZIEMER: -- but, at least, I thought of it. Thanks. That's --

CHAIR KOTELCHUCK: Yeah.

MEMBER ZIEMER: I just wanted to find out for sure.

CHAIR KOTELCHUCK: So, very good. And -- and that's -- it's important to think about such questions as we continue our efforts, but it certainly has not been part of our working group or subcommittee activities to consider whether data should be collected in the future or should have been collected. That -- that is, I think, that certainly the Board could consider it and -- and think about recommendations, although, we're -- we're just trying to do a good job on the materials that we -- on the information that we collect. And, I -- I believe, we are doing a good job on that.

So -- so, if -- are there any other questions or comments, and all are welcome on this.

If I may -- if I may say, as I -- this is the first time I've had a chance to sit down the last couple of weeks, as we prepare for this meeting, and take a look at the group of 49 blind cases. Long ago I think when we had

25, I tried to do some statistical analysis of it, and people -- the Board members said Dave, with 25 cases, don't. You're -- you're getting ahead of yourself. Let's wait until we have more cases. Well, with 49 cases, it seems to me that we have enough of a sample that I did in the last week or so start looking at the -- the difference between the -- the difference in POCs. That is, taking the POC that NIOSH did minus the POC that -- that SC&A did.

And I just sort of -- I have to say I don't have a statistical package at home. I'm retired now. But I -- I just started looking at that. And I have to say I was kind of interested and pleased. I made a little histogram of the 49 case -- cases. And sure enough, I have not quite a -- not a Gaussian distribution, not a normal distribution, but a distribution that peaks at the difference equals zero, right, just about or close to zero. And the mean is about a difference of 0.6 percent -- excuse me -- the median is 0.6 percent, and the mean is 1 point -- 1 point, I think, 6 percent. I had it written down here.

I -- I -- it -- it was not -- first place, it was not an important -- it -- it -- if we want to do it, we should do it correctly and properly. And maybe that's something that it would be appropriate to -- to ask Rose and -- to look at it. But the important point about it is not that one can make such a curve and then it looks -- it has longer tail, but there are a number of cases. I -- I did not -- I was not able to calculate yet. It's simple enough in a -- with a program to calculate the standard deviation in the distribution and then take a look at the -- the events, which are greater than two standard deviations

from the mean. And, but, in fact, there are a number of cases that are really dramatically -- the two TLCs are dramatically different.

Could we go back to the handout, Rose?

Take a look at -- let's go back to -- I think, actually, now let's go to page two where there are a couple of dramatic cases where -- let me see. I have them listed here. The case -- cases 43 and 44, which by the way, they were talk -- we were mentioning before. 43 and 44, these are really large. These are, it seems to me, fairly clear outliers where -- in the differences.

And there are two others. There was B4 and B25. I think that's the first page B4 and B25. Right. 25 down here, 8 percent difference. B4, right, this is over 10 percent difference. So, we have at least four cases that are outliers and a couple more that appear to be probably beyond two standard deviation. I wonder whether it might not make sense, since we have this data, to take a look at the couple of the out -- the four outlier cases -- or four more, once we -- if we plot this -- and do -- to stay -- say what's two standard deviations (indiscernible). These -- the NIOSH always is larger on the tail of this distribution, which is fine. That is to say we're trying to be claimant favorable and the NIOSH POCs and the NIOSH analyses are the determinate ones. I wonder if it wouldn't make sense to take a look at those four cases and look again at the dose reconstruction, which means looking at eight dose reconstructions, and seeing if there's any commonality among them, which accounts for the very large difference in the POC.

I mean, fundamentally -- and this really gets down to the basics here -- we certainly want to make sure that the compensation decisions are not -- are -- are the same for different dose reconstructors; that's good. But if we're asking for consistency, right, then consistency -- literal 100 percent consistency would be that people get the same POC -- both NIOSH and SC&A get the same POC, right?

So, it doesn't matter whether it's above or below that 50 percent compensation cut off. If we're looking at consistency itself, then we ought to just look at all of the 49 cases and say where do they differ and when do they differ by more than ten -- two standard deviations from the mean.

Problem is that's a lot of work. I mean, I know from Rose and from folks at NIOSH, you -- blinds take an enormous amount of work be -- it -- with -- within the framework of what we -- the resources that we have available to our work.

But I think it may -- I wonder if it may not be useful to take a look at them, and I want to ask both the -- the working group committee members, as well as Rose and -- and other staff people and NIOSH folks who are here and SC&A, whether this seems like it might be useful.

It doesn't take away from what we're gonna do later when we -- when we start to talk about investigations of -- of -- of what might be sources of inconsistency -- inconsistency, check them out. But this is, if you will, a side thing, because we're not going to determine major things in four cases. On the other hand, they're enough, it seems to me, it might be worth looking

at. And I, sort of, would like to open that up. And I did not --

MEMBER ZIEMER: (Indiscernible) --

CHAIR KOTELCHUCK: -- first if that approach makes -- if that approach of looking at the difference in the POCs and looking at them is useful -- and I -- I think it is. I think it --

MEMBER ZIEMER: Well, Dave, this is Paul. Didn't Rose tell us earlier that those have been looked at already? Or somebody -- somebody said that they had to looked at that.

CHAIR KOTELCHUCK: Oh, --

MEMBER ZIEMER: Did I --

MS. GOGLIOTTI: -- look at every --

MEMBER ZIEMER: -- misunderstand?

MS. GOGLIOTTI: -- single case in detail. I'm not sure what we would hope to get out of that. Some of these, the big difference is very explainable, and we discussed it all. Sometimes it's SC&A made a big error. Sometimes NIOSH has made a big error. I'm not sure that it's a consistency issue necessarily, though, because SC&A is not trained in any of the NIOSH procedures. We audit them, yes, but we don't regularly use anything. We haven't done our own dose reconstruction in years. I just don't know what value that would add.

CHAIR KOTELCHUCK: Ah-huh.

MEMBER MARTINEZ: Hey, Rose, this -- this is Nicole -- and also, for Dr. Kotelchuck -- so, maybe it would be helpful in the discussion surrounding

Arthur's question earlier. Rose said that maybe she could send out, like, a -- the summary, like, not the full report, because, perhaps, that's too much, but a summary. So, if there's summaries of each of these that would be useful -- excuse me -- to send those out just for -- like, for me, in particular, and maybe for Arthur too, as just a new, kind of, introduction to this subgroup. That could be a good place for us to start, because sometimes I get overwhelmed. Like, look at how many there are. I can't start by all of these, right?

CHAIR KOTELCHUCK: Yeah.

MEMBER MARTINEZ: So, it'd be helpful to have -- try some to start with.

CHAIR KOTELCHUCK: Maybe -- maybe -- and I -- I must admit, I don't remember that we discussed the large differences, but then that may be my memory. We're dealing with things that we haven't -- you know, we haven't met as a group for a number of years. And -- and my memory may be failing me that we had that discussion. And I think -- what do you think, Rose? Is that -- would there be some way of summarizing or looking at those previous without putting a -- a vast amount of work into -- new work into this? (Indiscernible) --

MS. GOGLIOTTI: Yes. At -- at some point, I don't remember the exact set that we started with. At one point we started doing a summary, just these quick little one paragraph with all the numbers and discussing where the differences lay or the big differences in each case. I don't know

that we've done that for every set, and I know for a fact that we have not done it for the most recent set, but --

CHAIR KOTELCHUCK: Right.

MS. GOGLIOTTI: -- I certainly can look into this further and either put something together, if it's not already put together summarizing -- it sounds like you're interested in the big difference ones, so if we could set maybe a POC difference, and I could summarize it all together, maybe that would be helpful?

CHAIR KOTELCHUCK: That would be most helpful. In my opinion, it would be most helpful and --

MEMBER ZIEMER: Would it show up in some of the earlier committee transcripts --

MS. GOGLIOTTI: Yeah.

MEMBER ZIEMER: -- the work group transcripts?

MS. GOGLIOTTI: It should be tracked in all of the transcripts.

CHAIR KOTELCHUCK: Yeah, but seeing that summary, if I don't -- I'm delighted to remember that that summary was done. If you can find it and then perhaps look into the one or two, like the B34 and 43 and 44 and just -- if that would be really -- I think that would be useful and helpful, again, as long as it's within the realm of -- of doable and not a -- a very long --

MS. GOGLIOTTI: No, it would not be too onerous. So, to clarify so I'm understanding, you're interested in the ones where we had a POC

difference or a substantial POC difference --

CHAIR KOTELCHUCK: Right.

MS. GOGLIOTTI: -- not in terms of compensation, but --

CHAIR KOTELCHUCK: Right, and --

MS. GOGLIOTTI: -- so say 5 percent or more? Does that sound reasonable?

CHAIR KOTELCHUCK: Yeah, although, you know what would be really a nice thing to -- I would love just -- it would be a short thing is just to do a little -- a little delta between the difference between the two, plot them out, get them at standard deviation, and take more than two standard deviations. But the ones I see that seem clearly worth two standard deviations even without knowing precisely the -- the standard deviation are B4, 25, 43, (break in audio). And if you could get data on those or -- pardon?

MEMBER BEACH: I think you broke up, Dave. I don't know if those numbers were all clear.

CHAIR KOTELCHUCK: Oh, okay. Well, let me just say again. B4, B25, 43, and 44. All of those -- three of those are double-digit differences of 10 or more, and the V25 is eight, the difference between the two. That would be -- that would be wonderful. I -- I would find that helpful. And I think in the spirit of what Nicole was suggesting, that would be nice. And -- and -- why don't -- Rose, take a look at that, and I will -- if you would, and that would be -- that would be very nice.

And then, with that, I -- are there any other comments or suggestions or whatever, anything further, on these, the 49 that we have completed, which after all -- the blinds that we have completed, which are basic, a basic metric that we want to make sure that we have agreement on between NIOSH and SC&A, and we do have it on these -- in these -- through the -- looking at these blinds. Maybe -- let me see what time it is. It's 12 o'clock. We had assigned ourselves a brief break and then -- because I think we're ready to go on to Rose's report on her memo on the consistency of dose reconstruction. Do -- would folks like to take a brief break?

MEMBER BEACH: I don't need one. This is Josie.

CHAIR KOTELCHUCK: Right. You're in -- you're in the morning -- you're still in early morning. How about those of us who are on the East Coast, would you like a break? Should we just take a -- would people want to just take a 15-minute comfort break and then come back and finish up? I think we'll finish up fairly soon. I -- well, I don't know, but --

MEMBER MARTINEZ: It would be great for me. That would be great for me, just a quick 15 minutes to go get a snack.

CHAIR KOTELCHUCK: That sounds great.

MEMBER MARTINEZ: Thank you.

CHAIR KOTELCHUCK: Okay. How about we do that? It is now 12:03, so 15 minutes will make it 12:20, okay? Would people like -- we'll get back at 12:20 Eastern Daylight Time. All right. Fine. We'll see you all then. And -- and we'll start with, Rose, with your memo and -- and some of the --

MS. GOGLIOTTI: Did we want to talk about the Griffon memo when we come back, actually? Isn't that next on the agenda?

CHAIR KOTELCHUCK: Oh, my goodness. You're right. I did not -- my apologies. We do need to talk about the Griffon memo. I'm not sure how long that will take. You're right. The Griffon memo comes next and we'll -- I'm not sure how long it will take for us to review it because we've all read it, but let's -- let's do that. So, it is I who will go on right after the break at 12:20. So we're -- we're -- we're taking a break now, okay, Rashaun? Okay? We're on break.

(Whereupon, a break was taken from 12:05 p.m. EDT until 12:21 p.m. EDT.)

DR. ROBERTS: So, let me go ahead and do a quick roll call so you-all can get started. Kotelchuck?

CHAIR KOTELCHUCK: Here.

DR. ROBERTS: Beach?

MEMBER BEACH: I'm here.

DR. ROBERTS: Frank?

MEMBER FRANK: Here.

DR. ROBERTS: Martinez?

MEMBER MARTINEZ: I'm here.

DR. ROBERTS: And Ziemer?

MEMBER ZIEMER: I'm here.

DR. ROBERTS: Okay, great. Over to you, Dave.

CHAIR KOTELCHUCK: Okay. Very good. Back again. I'm -- I'm on my cell phone now, and I think I was getting a little bit -- breaking up a little bit even at the end before here.

REVIEW AND DISCUSSION OF THE GRIFFON REPORT

CHAIR KOTELCHUCK: You know, I'm -- folks, I have listed here that review or discussion about the Griffon report. I'm a little bit of mixed mind. I would certainly be very happy -- particularly, I think, for the new folks on the Board, but really for all -- to do a quick overview of the Griffon report, but I'm not sure it's worth it. We've all -- we've all read it. There may be questions. I could just spend a couple of moments, maybe two or three minutes, just saying what it goes over. The discussions, once we get to the two examples, which is to say, the Savannah River Site and the Linde Ceramic. There, they go into a bit more detail, and I think more appropriate for -- for understanding by the dose reconstructors. I'm not sure how -- how -- in what depth the committee members were able to go into that.

What do people think? I mean, I -- I -- as I say, I could just spend a few moments doing that. If I hear anybody saying please do, I will. If you would rather just go into -- I can perhaps summarize where the professional judgment -- what -- what Griffon (indiscernible) major issues for professional judgment. Should I --

MEMBER FRANK: This is Arthur.

CHAIR KOTELCHUCK: -- do that?

MEMBER FRANK: I -- I -- I read the report, you know, but, you know, for somebody more experienced than I, you know, take two or three minutes and just, you know, again, I reread the executive summary, again, --

CHAIR KOTELCHUCK: Exactly.

MEMBER FRANK: -- but just what, you know -- what was, you know, -- I -- I think I got the gist of it. But for somebody like yourself with a lot more experience, summarize it in two or three minutes.

CHAIR KOTELCHUCK: I'd be very glad to. Let's do it. That -- that's good enough to say. Also, --

MEMBER BEACH: Dave, Dave. This is Josie. Also, --

CHAIR KOTELCHUCK: Yeah.

MEMBER BEACH: -- he did a slide presentation that you didn't post, but it was on December 13, 2017. And it kind of --

CHAIR KOTELCHUCK: Uh-huh.

MEMBER BEACH: -- summarized -- I don't know if you had a chance to look at that. It summarized the report --

CHAIR KOTELCHUCK: No, I didn't.

MEMBER BEACH: Okay.

CHAIR KOTELCHUCK: I -- that's a -- so, I -- I would say -- I now say I should have, but what was the date of that? December -- on December 17th -- oh, the -- the -- the Board meeting that I referred to, right, --

MEMBER BEACH: Yeah, that was --

CHAIR KOTELCHUCK: -- in 2017?

MEMBER BEACH: -- 13, 2017. There was -- he came up with, I believe, six recommendations on professional --

CHAIR KOTELCHUCK: That's right.

MEMBER BEACH: -- judgment. Some of --

CHAIR KOTELCHUCK: Exactly.

MEMBER BEACH: -- them, we actually have (indiscernible). I almost feel like you giving a couple-minute description, but then, also, maybe, have SC&A go back through and give us a brief memo on what's pertinent and what's been started, because some of these we've already started incorporating and it --

CHAIR KOTELCHUCK: Oh, absolutely. But --

MEMBER BEACH: So, anyway, yeah.

CHAIR KOTELCHUCK: -- Rose -- Rose is going to, really, go over her memo and those points and -- and discuss it and we'll make a decision on it. However, I really -- let's -- let's suggest -- I don't think we'd want to go back and try and look at that slide show, but I'll make --

MEMBER BEACH: No.

CHAIR KOTELCHUCK: -- let's send it out to all of the members of the Board and -- of our -- excuse me -- of our working group. And -- and that would be very nice to take a look at.

Meanwhile, let me -- let me just say -- talk through a couple of the review items. So, basically, I mean, when we're -- his report first starts out

by, you know, saying first we have to decide on the approach that the reconstructor takes whether we want to -- whether -- if there's an -- if there's an over -- if there's a an underestimate approach, then what we're really saying is that the dose reconstructor assesses the claimant's POC is more than 50 percent. And then we do an overestimate. It's above 50 percent, probably. And then for those that are really unsure what the POC will be, we go through and make a best estimate, take the best estimate approach, which has historically been between -- POC between 45 and 52? Percent.

They -- as Griffon notes, the question of consistency regarding professional judgment becomes most important when conducting best estimate dose constructions -- where the different dose reconstructions -- dose con -- dose reconstructor judgment may affect the compensation decisions. So, we're going to do best -- basically, best estimates between 45 and 52 percent, as you saw on the table today, the handout. But, you know, this represents only about 5 percent of all the claims processed. So, this limits our database for assessing the consistency of our professional judgment.

Then, basically, Griffon goes on to review the dose reconstruction process itself. The reconstruction of external and internal doses, of medical doses, of doses from accidents and incidents, and then finally the QA/QC reviews. So, I must say, I found it -- personally, I found that interesting to go over the attachment -- attachment A where we, actually, have the

roadmap, the flow diagram for all of the decisions that a dose reconstructor has to do. And for those -- or let me just say, I found that interesting to go over it again. And this is what has to -- what has to be navigated for each and every best estimate dose reconstruction.

So, he then -- then he talks about, finally, the professional judgments, the six types of professional judgments he thinks would be -- what we should consider looking at, at which we will look at later today. First, is -- and this is, of course, in the summary, in the executive summary. Judgments regarding worker location for the purpose of internal and external dose estimates. Judgments regarding job title, judgments in calculation -- in the calculation of missed external and internal doses, and that is frequent, of course, that we -- there -- we don't have a full record of the personnel -- of the personnel monitoring throughout the -- all the years the person works, and so we have to go over in terms of interpolate between them or extend them.

And then the -- then we -- well, we have to -- I'm sorry, I'm getting ahead of myself. The -- reconciling discrepancies in the available dosimetry data and then judgments based in calculating the internal dose on -- from in-vivo and in-vitro measurements, and those are usually limited in -- to an extent that we have -- and finally judgments regarding calculating dose associated with incidents and accidents, which -- so, those are the -- those are the six programmatic areas that rock -- that he suggests that we would want to look at, and Rose will go into those later, after we finish here.

And one of the contributions, I think, that -- that Griffon makes is that, not only -- he was assigned to do professional judgment, but he recognized that we -- we actually have programmatic decisions to make that have a biggest -- that have a major impact on dose reconstructions. And these are particularly important when we have limited amounts of data, and so often we (indiscernible) AWE, atomic weapons employers, sites where there are claims. We have to -- we -- we have basic programmatic decisions that have to be made, and that is the Lynde case that he uses in the example here.

So, and he discussed in -- even in the executive -- I think in the executive summary that, you know, ORAU, NIOSH, Board could do various investigate very -- think of examples to investigate some of the areas of program judgment. And, basically, we've done -- we decided that the best, most efficient way of doing our work was to look at the blinds. And that's, as you see, what we have been doing for these years, but it's time to move on.

And I don't know if there's anything else I want to say about -- I would say, maybe, just to end the thing, one of the significant goals of our -- of our meeting today is to take another updated look at ways we might move forward on other additional studies of consistency outlined in the report that I was -- just summarized. So, this is -- are there any questions? I mean, I think we're ready to go on with -- with Rose's memo, which dates back to March 2016, eight years ago. And -- and she'll review it. Is there anything

else that people have questions about the report -- aspect to the report that they either did not understand or want to consider further or critique in the report? Is there any --

MEMBER ZIEMER: Dave, this is Paul. I have -- I do have a question or two.

CHAIR KOTELCHUCK: Great.

MEMBER ZIEMER: Let me -- let me start with a comment. The Griffon report was not a report for this committee or for SC&A, per se. It was a report to NIOSH. And the recommendations in the report were recommendations to NIOSH. And they were fairly specific considering how to track issues where professional judgment came into play, particularly for the cases where it was -- that program judgments -- although those were important, but those are mainly -- those are typically handled through a process that involves the Board and involves NIOSH and SC&A, but more of the personal dose reconstructor judgments and how we would track and keep track of them or how NIOSH might keep track of them and have some way to assess the consistency there. And, of course, we would monitor that.

But my question at this time, and it might be helpful for our work group as well as for SC&A, is what specifically has NIOSH introduced into the system to track and evaluate the personal judgments?

MR. CALHOUN: This is -- this is Grady. I can, kind of, address a little bit of that. In establishing --

MEMBER ZIEMER: Yeah, that's what --

MR. CALHOUN: -- all the --

MEMBER ZIEMER: -- I was getting at, Grady, and hoped you would do that. MEMBER ZIEMER: Okay. Good, good. Well, I think there's several things that have happened, you know, that -- that was written a long time ago. And --

CHAIR KOTELCHUCK: Sure.

MR. CALHOUN: -- you know, some of the things that we've done is -- are when we do get to that point between 45 and 52 percent -- and I'm going to lump ourselves and ORAU together, but they -- they've doubled up on the peer review, and you'll see that in the dose reconstruction report. So, there's actually two different peer reviewers that are done -- that are -- that are listed on dose reconstructions that are -- in the best-estimate category. So, I think that, also, the work that Dr. Kotelchuck has done in the dose reconstruction review subcommittee has -- has, kind of, helped us look at any of these, I'll call them, programmatic -- not inconsistencies, but the programmatic issues that -- that could affect professional judgment. And if you look at the dose reconstruction subcommittee, you'll -- sometimes you'll find that okay, well, this looks like an issue that maybe could be programmatic, and then that's referred over to the -- the procedure subcommittee, and then they'll look at that as well. And it seems that -- that we've -- we've got a whole bunch of oversight now, not only between ORAU and DCAS, but the Advisory Board and subcommittees as well. So, I think that -- that since that was written, we've just, kind of, naturally taken

additional steps to ensure that our work is as consistent as it can be. You're always going to have some professional judgment out there, but I -- I think that -- that we've done a good job with all of the help from the Advisory Board and company and ORAU to try to make it as consistent as we can.

CHAIR KOTELCHUCK: Yeah. Thank you. Thank you. That -- okay.

MS. BEHLING: Dr. Kotelchuck?

CHAIR KOTELCHUCK: Yes?

MS. BEHLING: This is Kathy Behling. I was --

CHAIR KOTELCHUCK: Yes?

MS. BEHLING: -- just wondering if I could interject or ask a question here. We talk about --

CHAIR KOTELCHUCK: Sure.

MS. BEHLING: -- blinds are so important in looking at consistency issues. I thought that there was a point in time that NIOSH and ORAU used to do some blinds where to dose reconstructors would sit down, do the same case, and compare notes. Am I correct there? And if that happened, would it be worthwhile for the work group to, maybe, look at the outcome of those, if that's even possible to share, that NIOSH could share that information?

MR. CALHOUN: I -- I can tell you that we used to do that within DCAS, and we would pick at random a set number of dose reconstructions, and we would do blind reviews on them. And we quit doing that. And the reason we quit doing that is because after doing so many, we weren't finding any significant differences. And at the time, we were choosing them at

random, and if you know how our dose reconstruction process works with overestimates and underestimate, it's really hard to come up with the same POC. The goal is really just what side of 50 percent is it on, and that's the most correct. And so, once the -- the dose reconstruction subcommittee started focusing on 45 to 52 percent cases, it just really was no longer a benefit to us, because so many cases -- the most critical cases were being reviewed. There's very few of those that fall into that 45 to 52 percent, and nearly every one of them is reviewed or will be reviewed during this process. And those are the ones where, you know, even a small error can result in a change in comp -- compensation decision. So, we did those for maybe the first four years or five years, and we would put out reports on those. But we quit -- we quit doing it because of the increased oversight that we had from the dose reconstruction subcommittee and really the procedures review subcommittee, and just the fact that we weren't finding any significant differences in the reviews that we did.

CHAIR KOTELCHUCK: Yeah.

MS. BEHLING: Okay.

CHAIR KOTELCHUCK: Right.

MS. BEHLING: Yeah. I remembered something that -- that you were doing some (audio break) wondered if that would benefit the work group to look back at those, but it sort of sounds like that -- that probably is not going to be of a great benefit to the group.

MR. CALHOUN: No, and it was very long ago --

CHAIR KOTELCHUCK: Yeah, yeah.

MR. CALHOUN: -- you know, once, we started, you know, the -- the -- the work that's involved on both our side and the ORAU side and SC&A side and the dose reconstruction subcommittee side is -- is pretty significant with these reviews. So, --

CHAIR KOTELCHUCK: Yeah.

MR. CALHOUN: -- just adding another layer to that, it just didn't seem of benefit to us since we're all getting the same results. And, basically, the reviews that the dose reconstruction subcommittee are doing are more pointed at the cases most likely to have a difference. So, I think those are time better spent, actually.

MS. BEHLING: Okay, thank you.

CHAIR KOTELCHUCK: I agree.

MS. BEHLING: Thank you.

CHAIR KOTELCHUCK: I agree, but thanks, Kathy, for the question. And anything further? I mean, I didn't say -- of course, it goes without saying that Rose -- Rose's memo is cited in the Griffon report and is -- as we look at -- as we look at the -- the methods working group, I think that -- it seems to me, a natural move then to -- unless there are other questions or comments, to go on to Rose at this point and have her discuss the memo, which is, as you noted in the Griffon report itself.

So, Rose, would you -- would you like to begin?

REVIEW AND REPORT ON SC&A MEMO: CONSISTENCY IN DOSE RECONSTRUCTION (3/11/2016)

MS. GOGLIOTTI: Sure, if everyone's okay with that. So, way back in November of 2015 when this work group met, one of the ideas that was really important to Dr. Melius at the time was dose reconstruction consistency. So, at that time, we were tasked with using our institutional knowledge to suggest possible areas where there might be some inconsistencies and then to propose possible ways to investigate those consistency issues throughout dose reconstruction. And so, that was the point of this memo. And I know we've talked about it a lot over the years. I think there hasn't been a meeting where it hasn't come up at some point, but we haven't really done anything with it, per se.

I do want to stress that this was an eight years ago -- eight years ago exactly today, because we strive for consistency --

CHAIR KOTELCHUCK: Wow.

MS. GOGLIOTTI: So, some things might --

MEMBER FRANK: Three cheers for that.

MS. GOGLIOTTI: Yeah, so --

CHAIR KOTELCHUCK: Did it -- in your -- you did it in your callow youth. No, but go ahead. Sorry.

MS. GOGLIOTTI: Yeah, absolutely. So, we started looking at dose reconstruction reviews that we already do to see where it would fit inside of that approach. And, of course, we do two types of dose reconstruction

reviews. We have our standard dose reconstruction reviews and our blinds. And to grossly oversimplify a very complicated process, (indiscernible) with our nonblind dose reconstructions, they're technical reviews we're looking at for QA issues or any errors that might be related to how well the guidance documents are adhered to. Those -- whatever -- we have findings and observations where we identify problems and QA errors.

And where -- as our blinds, we really have an independent dose reconstruction. So, we start with the raw material, the same raw material that NIOSH starts with, and we dig in and do our own dose reconstruction and then compare what we did to NIOSH. And, of course, we're going to see a lot of differences. We're not robots. SC&A only does a couple reviews a year. So, we see those, but we're not really identifying findings. So, we thought, based on that, it was more appropriate to look for consistency issues when we were doing actual dose reconstruction reports.

So, we suggested maybe doing -- selecting some cases with very similar qualities and then comparing how (indiscernible) they were done. I, honestly, don't think that that's a good approach. There are so many differences within a dose reconstruction. Again, we're not robots. Procedures just can't be fine-tuned enough where we're making exactly the same decisions every time. I think that the dose reconstruction subcommittee could tell you it's a very complicated process. And you simply can't proceduralise everything perfectly. And, I think, that putting a dose reconstructor on that blind wouldn't really be appropriate.

So, thinking about what else we could do, we suggested perhaps a nonblind partial review where we selected a set number of cases with the given criteria that we wanted to identify or look into for consistency and doing partial reviews focusing on only those. So, similar to what we do for subtask four in a PER review where we select certain cases, but we only look at the one area that we were targeting. And, of course, that wouldn't be a -- we can't look at 10 percent of a case and do 10 of those, and that's not the same amount of work as doing one. There's, obviously, a lot of background information that you need in order to investigate any one case.

But using our institutional knowledge, we came up with a list of seven different things that we thought there might be areas of inconsistency that might impact dose reconstruction. These were done eight years ago. I don't know that this is the best list. I think that the program has evolved quite a bit in the past eight years. Just looking at the workbook, a lot of decisions are now automated. So, some of these things, I don't think are great approaches.

But we suggested looking at coworker dose or the location of skin cancers for medical X-rays, specifically, the cancers on the head or on the upper back where there might be a difference in the dose assigned, looking at the use of in-vitro and in-vivo data, construction trade worker determination, whether or not a glove box factor was used, exclude -- exposure area criteria, where the EE worked in an Oak Ridge facility. And these are just some suggestions that we came up with where there might be

areas of consistency that -- it would be a challenge, I believe, to even select cases for any of these. They would have to be done around the same time period, they would have to have similar employment histories, exposure criteria, similar work locations, employment dates. It's just a challenging thing to target. And, of course, we would have to, also, select POC cases around 50 percent, because if they're not a best estimate, really -- not to say we don't care about consistency, but it just doesn't really have an impact on the final compensation decision.

So, that was this memo. Does anyone have any questions?

MEMBER BEACH: None here for -- for me.

CHAIR KOTELCHUCK: No, I -- I mean, I think we may --

MEMBER ZIEMER: -- here.

CHAIR KOTELCHUCK: Yeah.

MEMBER BEACH: You know, Rose, -- this is Josie. I guess, one thing I would ask is, this is -- this was written quite a number of years ago. Have you pinpointed anything that you would change or that would -- moving forward from this time period, is -- is there a different memo you would have given us today?

MS. GOGLIOTTI: I think --

MEMBER BEACH: Because what --

MS. GOGLIOTTI: -- would look the same. I haven't thought about exactly what I would change. I think a lot of these would be very difficult, if not impossible, to execute. This was early when I was involved with the

dose reconstruction subcommittee and, I think, maybe a little naive in what was possible. At the time, we were looking at all sorts of cases, not just the best estimates. And things that were appearing to be not consistent, I believe, may have been the result of different efficiency assumptions, which were perfectly fine and acceptable, but they look different when we're only looking at a handful of cases. I think, in general, this is a very hard area to target. And, of course, this was done around two years before the Griffon memo. And so, here we were just looking at personal.

MEMBER BEACH: Right. There's two different --

MS. GOGLIOTTI: Things --

MEMBER BEACH: -- judgments --

MS. GOGLIOTTI: Yes. Versus the programmatic --

CHAIR KOTELCHUCK: (Indiscernible) --

MS. GOGLIOTTI: -- judgments. And I don't think that we even considered programmatic judgments. I do think it's important, whatever the work group decides, that we're trying to get the biggest bang for our buck, going after something where there's a lot of cases. Because at the end of the day, if it's only impacting a case a couple millirem, yes, it would be great to do it consistently, but if it's not really making a difference, maybe that's not the best area to focus our resources on, --

CHAIR KOTELCHUCK: Yeah.

MS. GOGLIOTTI: -- if that makes sense.

MEMBER BEACH: It -- it does. It feels like we should revisit this, but

in a -- today's time frame and (audio break) eight years ago.

CHAIR KOTELCHUCK: I mean, among these, trying to think about which ones could we do reasonably, I -- I sort of wondered -- I -- I'd like to move on with some of these program judgments and not -- excuse me, look on with some of these investigations. And I sort of lean to wondering whether the -- looking at the 50s and 95 percentile selection for -- for coworker dose might be something that would -- might yield us something useful with a relative -- in a relatively short period of time or without excessive use of resources. I mean, I -- I wondered first --

MEMBER ZIEMER: (Indiscernible.)

CHAIR KOTELCHUCK: -- Rose sees something that might be useful. I think this comes up a lot, mostly in AWE sites, of course. But -- is that it all -- you think that was -- that might be useful or how -- in a way, I -- I looked to you and to SC&A for what would -- might make most sense to begin with and to see if there are -- where -- where is the lowest hanging fruit among these six types of recommendations.

MS. GOGLIOTTI: I mean, yes, I think the coworker dose is a possibility. There may be some consistency issues with that. I don't want to say that they exist, because I don't have evidence to support that, necessarily. I think that is --

CHAIR KOTELCHUCK: Nor do I.

MS. GOGLIOTTI: -- one of the --

CHAIR KOTELCHUCK: Nor do I.

MS. GOGLIOTTI: -- areas definitely --

CHAIR KOTELCHUCK: Nor do I.

MS. GOGLIOTTI: -- where professional judgment definitely plays a factor. In order to do that, we need --

CHAIR KOTELCHUCK: And by the way, --

MS. GOGLIOTTI: -- a site with a lot of coworker doses assigned, and I don't have access to the resources where I could pick, necessarily, the best one. And we'd have to decide -- I would suggest probably doing external dose. If we're working on a low hanging fruit, that would be a much easier determination --

CHAIR KOTELCHUCK: Yes.

MS. GOGLIOTTI: -- to make.

CHAIR KOTELCHUCK: Yes. Yes.

MS. GOGLIOTTI: I don't know if NIOSH has the ability to search cases to see which ones are using coworker doses and not to see, maybe, a good site to suggest. Is that OTIB-20 as external coworker, if I'm not mistaken? Maybe 19?

CHAIR KOTELCHUCK: Uh-huh. Right.

MR. CALHOUN: This is Grady. And I -- I don't know how easy that would be for us to find, because there's, also, kind of a gradient of how those things are used. You know, you might use the external dose for this and as a -- as a maximizing approach, you know, it can be just like any other overestimate/underestimate. We could use the 95th percentile as an

overestimating approach or 50th percentile as a best estimate. So, it might be -- it might be tricky. I'm sure all of the documents are listed on each individual dose reconstruction report that are used, but that -- I think we'd have to, kind of, really look at what the goal of this is.

CHAIR KOTELCHUCK: Well, --

MS. GOGLIOTTI: I guess, the starting point would be are we looking to target personal judgments or programmatic judgments? Is that a good starting question to ask? (Indiscernible) --

CHAIR KOTELCHUCK: Fair enough.

MS. GOGLIOTTI: -- to go?

CHAIR KOTELCHUCK: Fair enough. And -- and to me, I always say that the professional judgments are -- rather than the programmatic judgments would make more sense, I mean, to start with. And by the way, even to suggest that one of these is better to begin with, one of the different approaches, none of us knows. I certainly do not know whether this is likely to yield something.

But those that are easier to -- to take on and check would be helpful. And to me they're -- I just have a guess that over -- having done a lot of dose reconstruction reviews over the years, that the 50 and 95 percent choices would be ones that would seem, I fear, more arbitrary. But for -- that -- for dose reconstruction (indiscernible).

But I, also, don't feel like I under -- I know, which sites would -- where -- which sites would yield the better choices. I would assume the

larger DOE sites where there are a lot of persons -- where we have to use coworker data for DOE sites, like we did, perhaps, in SRS, the Savannah River site where we had to -- we had a long debates about the construction workers and how we assess them. But -- but I'm less -- not certain where -- I was kind of hoping that you might have some thoughts about which ones to choose.

Although in -- well, first, your first question. I would say professional judgment. And, maybe, we should seek input from other folks about --

MEMBER BEACH: This is Josie.

CHAIR KOTELCHUCK: I --

MEMBER BEACH: Dave?

CHAIR KOTELCHUCK: -- for the -- yes, Josie?

MEMBER BEACH: You had said personal judgments, and you just said professional. So, are -- are you -- did you change your mind on that?

CHAIR KOTELCHUCK: No. I mean, personal and professional, to me, are the same, the professional judgment made person --

MEMBER BEACH: Well -- well, one --

CHAIR KOTELCHUCK: -- basically, you can get --

MEMBER BEACH: -- one is, actually -- one is, actually, in the procedure of how to do it. The other one is the person has to make the judgment on their -- based on, you know, them, --

CHAIR KOTELCHUCK: Right.

MEMBER BEACH: -- not proceduralised, so it's -- it -- there's a little

bit of a difference. But so, we would do them together then?

CHAIR KOTELCHUCK: No, I think program judgments ended up going through your subcommittee, the procedure subcommittee, and would involve a lots more input from various -- among us, right, various subgroups, NIOSH, SC&A, etc. So, I am really thinking of, if you will, personal professional judgment. I just would think that that would be more likely to yield something useful and -- and if there is any inconsistency, that it would show up more readily.

MEMBER ZIEMER: Right. Dave? Dave, this is Paul. I -- I agree with that. I think the programmatic ones have reached a kind of, consensus amongst, not only NIOSH, but the Board and --

CHAIR KOTELCHUCK: Right.

MEMBER ZIEMER: -- and SC&A through all the reviews and so on. But the personal ones, I -- I would not like to think that they are arbitrary, that the -- the dose reconstructor in making a personal judgment does not flip a coin or something. He has a reason for it. And what we would like to see, I think, is that there's a consistency in how you make that decision. For example, whether it's the 95th percentile or 50th or whichever it is, is there's some consistency on making that decision. If it's -- if it looks like it's just arbitrary, then -- then we have a problem. We need -- We (break in audio). And then we look to see if that can -- if there's a consistency in how those decisions are made. (Indiscernible) --

CHAIR KOTELCHUCK: Right. Right.

MEMBER ZIEMER: -- right or -- right or wrong. If it's professional judgment, you can always argue well, our thought process a little different for this person than the next, but what -- I think what we would like is that when they come to that kind of decision, that they have some understanding of how you go about making that decision. It should not be completely arbitrary, in my mind.

CHAIR KOTELCHUCK: No, absolutely not, nor is it now.

MR. RUTHERFORD: Dr. Kotelchuck? This is LaVon. Can I say something? I do --

CHAIR KOTELCHUCK: Yeah, --

MR. RUTHERFORD: -- I think --

CHAIR KOTELCHUCK: Yeah, yeah.

MR. RUTHERFORD: I just wanted to point out and remind everyone, too, that, you know, professional judgment that's made like that, say, whether to use the 50th percentile or 95th percentile by the -- by the dose reconstructor, it is reviewed by four people before it goes out the door. So, every -- I mean, on ORAU's side, there will be somebody reviewing that -- that decision that that individual has made when it -- when they complete their dose reconstruction and send it over to us, we'll have an individual that will review that and that decision as well. And -- and then it'll go on to tech review for one of our senior-level people to review it again. So, there is -- it's -- a random decision is not going to be made. I mean, they're not going to flip a coin on it without want -- somebody questioning that.

UNIDENTIFIED MALE SPEAKER: Right.

MR. RUTHERFORD: They're going to want to know why you made that decision. So, I just wanted to throw that in there.

CHAIR KOTELCHUCK: Well, that's good. So, you're saying four people go over, which I -- I was not aware of. And I just assumed that it was two persons. So, okay. That's an important review. And also, --

MEMBER ZIEMER: That's what -- that's what gives the consistency if you have those reviews. That's -- that's what you want.

CHAIR KOTELCHUCK: Certainly do. Certainly do. And then there's the question of the decision -- the dose reconstructor is to ask whether it is likely or unlikely that the person -- whether the person is less -- I'm trying to remember the precise wording of -- is it likely versus unlikely to be exposed the same as the coworker -- as the coworkers they're comparing it to? LaVon or -- or Grady? What is -- what is to determine if --

MR. RUTHERFORD: Say that again (indiscernible).

CHAIR KOTELCHUCK: Pardon?

MR. RUTHERFORD: This is LaVon. Can you say that again?

CHAIR KOTELCHUCK: Yeah. What is the determinant word that we add to the dose reconstructor in making the decision of 50 versus 95 percent? That they have -- they are likely to have the same exposures as the coworkers, or they're less likely or unlikely?

MR. RUTHERFORD: I --

CHAIR KOTELCHUCK: Is that the correct word?

MR. RUTHERFORD: You know, I don't know the exact words and Scott Siebert's --

CHAIR KOTELCHUCK: Uh-huh.

MR. RUTHERFORD: -- on here right now. But that -- he could -- he could probably indicate what the exact words are. But an individual that's doing a dose reconstruction is going to look at okay, am I -- I -- if -- if I have an unmonitored person and I'm looking at using a coexposure model and -- for that period or -- I'm going to look at okay, what -- what was this individual doing, how is other, you know -- what is their potential for exposure, is this a best estimate case, is this a -- is this something that I can overestimate, and -- and -- and to maximize the dose, because it's not going to exceed 50 -- 50 percent. I mean, there's a lot of questions you're going to ask yourself on making a decision, unless it's prescriptive in the TBD. If it's prescriptive in the TBD that says if -- if the person falls into this job category, then they will get the 95th percentile, if the person falls into this category, they'll get the 50th percentile. Unless it's prescriptive, there's a lot of thought that will go into it, depending on how the case is working out. I think Rose even mentioned a lot of -- a lot of that earlier.

CHAIR KOTELCHUCK: Uh-huh.

MR. SMITH: This is Matthew Smith ORAU team. I can add a little bit of context to it.

MR. RUTHERFORD: Thanks, Matt.

CHAIR KOTELCHUCK: Thank you.

MR. SMITH: And -- and in OTIB-20, which Rose -- that's correct. That would be the current OTIB to lean on for external dosimetry coworker -- or coexposure, rather. Yeah, guidance is in there with respect to approaching and claim with 50th or 95th percentile. And that TIB has undergone quite a few reviews, and I'll leave it at that. That -- that's the typical look at.

CHAIR KOTELCHUCK: Mmm. Mmm. Well, thank you. The -- maybe we have to turn the question around and ask are there any of these possible investigations that -- that we -- that would appear to us to add to improving our consistency? Which we -- we start out by saying based on the blinds primarily, we are really quite consistent. I was -- and I have said in the past, we're remarkably consistent. And that's great. That's an assurance to the claimants as well as to our own staff and our own -- the government agencies we answer to.

I mean, put it this way, we -- I -- we always feel like there could always be improvement, but the question is, is there value in putting effort into investigations such as those that Rose outlined and that -- and that -- and that Mark Griffon talked about. I mean, maybe, you know, I -- I -- my -- my feeling is we haven't done very much over the years, and it seems like time to consider whether we could or should move on to try to -- to make an effort to check some of these out. But if we don't think -- if collectively we don't think that we're going to make much progress, then -- then let's just -- we would just continue doing what we're doing and not attempt further investigation based on the written report. So, maybe I should entertain

thoughts about that.

Obviously, by the way, for the new folks that -- that that's a -- difficult for you to assess, but some of the older -- timers here -- are we -- are we gain -- is there any gains in trying -- and Rose, is there any gain in trying to move ahead to different approaches -- additional investigations? I just started out with 50 versus 90 percent -- 50 versus 95 percent in coworkers, but.

And I'm impressed that, you know -- that LaVon, when you talk about four people are going to review these choices, right? And I, also, understand that they are -- it's not a one word choice. It is a -- it is a collection of different information that we have that we try to put together, a job title, work location, etc., information from the --

MEMBER FRANK: This is --

CHAIR KOTELCHUCK: Go ahead.

MEMBER FRANK: Yeah, this is Arthur. I -- you know, as I've been listening to this, what strikes me as I'm learning more and more about this, is that the error rate, if you want to call it that, the number of cases that -- that are misadjudicated or possibly misadjudicated are very small. And this sounds like a fairly major effort for probably not a whole lot of change down the road in what the actual outcomes are for what's been going on in terms of compensating people appropriately. And so, you know, is a major effort like that to look at these, you know, small differences or subgroups, is it really going to make much of a difference in how well or not well the

program is actually operating?

CHAIR KOTELCHUCK: Yeah. I -- I -- I think that's a cogent observation. I mean, that -- and part of the reason that we didn't start pressing on this years ago was that with our blinds, which seemed to us to be the most significant metric to decide how well we're doing, we're doing quite well. And, I guess, again, and I started in this discussion saying what might be low-hanging fruit. And maybe the answer is, at this point, there is no low-hanging fruit that wouldn't -- that would give us a reasonable gain in consistency without a huge effort on the part of the staff. What do other -- what are other folks thinking? And -- and I appreciate, Arthur, your -- your observation. I mean, maybe this is a -- I mean, Rose, you -- you know more about the different kinds of approaches. And I've wondered -- I do have a --

MS. GOGLIOTTI: I, actually, do kind of wonder if this is -- is this a good segue into what the procedures subcommittee is going to start implementing, and I wonder if that is going to achieve some of your goals without increasing the workload too much.

CHAIR KOTELCHUCK: Mmm.

MS. GOGLIOTTI: -- a point we could --

CHAIR KOTELCHUCK: Yeah.

MS. GOGLIOTTI: -- bring that up now?

CHAIR KOTELCHUCK: Yes, why not? Please, do. And, maybe, you or somebody or Josie would talk about what that -- those -- that initiative is,

because that is just starting up -- and Kathy.

MS. GOGLIOTTI: Yeah, I have Kathy on the phone, and I think that she was going to give a quick presentation.

CHAIR KOTELCHUCK: That's great.

MS. BEHLING: Okay. Can everyone hear me?

CHAIR KOTELCHUCK: Yes.

MS. GOGLIOTTI: Yeah.

MEMBER BEACH: Yes, I sure can.

UNIDENTIFIED MALE SPEAKER: I can.

REPORT ON RECENT PROCEDURE REVIEW SUBCOMMITTEE INITIATIVE ON CONSISTENCY IN DOSE RECONSTRUCTION

MS. BEHLING: Yes, very good. Yes. I -- I'll -- when this dose reconstruction review (indiscernible) work group began discussing ways of assessing concerns about professional judgments, one of the initial review targets that you made was consistent -- consensus -- yeah, consistency of -- for approach -- a consistency of approach across multiple AWE sites. And as I mentioned during the last full Board meeting, the subcommittee on procedure reviews is just starting a review of dose reconstruction guidance for smaller sites, both AWE and DOE facilities, for which site profiles have not been developed.

They use this guidance and template approach. And our review process will include evaluating both the site-specific dose reconstruction

guidance documents, as well as the accompanying dose reconstruction template. In addition, we've decided that our review will also assess several dose reconstruction claims that have been adjudicated using this guidance. And in thinking about this, I just thought that since this review process is in its beginning stages, we thought it might be worthwhile for SCA -- SC&A to identify areas while doing these dose reconstruction reviews where professional judgments are necessary.

And it's envisioned that we'll compile a summary report that will identify areas of professional judgments and compare the consistency or lack of consistency of the judgment decisions. This summary report will then be shared with this work group, which Josie is the chair of the subcommittee -- of the procedure subcommittee and also a member of this work group, so that should be an easy transition to share that information with this group.

And I -- as we've said, assessing the consistency of professional judgments is certainly not an easy task. And there are no guarantees that even this approach will be fruitful; however, it appears that it's an opportunity that we should pursue and that has been endorsed by the Board at the last full-Board meeting.

CHAIR KOTELCHUCK: Right. So, maybe, we should view this as the way forward (indiscernible). You're right. We've talked about it. We've talked about it in the -- the dose reconstruction review subcommittee and in the Board and are supportive. And how long -- how long -- what kind of time frame, you or Josie, would -- would we talking about in terms of

developing a report? Developing this approach?

MS. BEHLING: Well, it's -- if you'd like, Josie, I can at least start that conversation. We are having a procedure subcommittee meeting this week, the 14th, on Thursday. And --

CHAIR KOTELCHUCK: Right.

MS. BEHLING: -- I was going to suggest at that meeting that we select, maybe, at least two of these DR templates to review. Now, we've already looked at two, and we only looked at a very small number of cases for those two. They could be incorporated into this process, but it -- it hasn't been done so far. So, that would be my suggestion that we would start this process at that meeting. And Josie, I don't mean to speak on your behalf.

MEMBER BEACH: Oh, no. That's -- that's fine. I was going to say the same thing once we -- once we started. And Dave was wondering about time frame. So, we meet typically every two to three months, and we have for quite a while. I think -- I don't think we can report at this Board meeting, but perhaps the next one, once those two are suggested and accepted by the subcommittee.

CHAIR KOTELCHUCK: Mmm.

MEMBER BEACH: Because I -- I mean, that should be --

CHAIR KOTELCHUCK: Well, that --

MEMBER BEACH: -- if we decide this -- on Thursday, the very next one we should be able to have at least a bit of data; is that correct, Kathy?

MS. BEHLING: Typically, when we are tasked with something, and especially something as significant of a report as this -- because I'm envisioning that we look at – at -- at least five cases, if that is available to us. And so, we get a six-month time frame for doing that, that work, after being tasked.

MEMBER BEACH: Okay.

CHAIR KOTELCHUCK: Right. Well, that -- that -- we're talking about -- what, to my mind, is a reasonable time frame. We're talking about a time frame of -- of, essentially, a year, right, six months to a year, in that -- that to me is -- that would provide useful information to then how this work group should -- could -- could proceed or should proceed.

What do others think on the (indiscernible)? This has been (indiscernible) the report with -- the -- the Griffon report was put out seven years ago, right? Eight years ago. So, that might be helpful.

DISCUSSION ON PATH FORWARD

CHAIR KOTELCHUCK: And we're not coming up with anything in today's meeting of -- in the -- from the -- Rose's memo that suggests that this is something promising. Whereas, you have -- yours is a bird in the hand in that is going on and will advance our understanding. And maybe we should just say that's good. Again, what do others think? How do others feel, particularly working group?

MEMBER ZIEMER: This is Paul. Really, there's no reason for us to try

to duplicate or do something similar. It's already being done. We don't want redundancy here to -- let's see what -- what the subcommittee comes up with, and that may very well satisfy everybody's need here.

CHAIR KOTELCHUCK: That sounds good. Yeah. Okay.

MEMBER BEACH: Dave, let me -- let me -- let me remind folks -- this is Josie -- again, that Paul and I are both on both committees, so.

CHAIR KOTELCHUCK: Right. Right. That sounds good. Well, I think -- I think that sounds promising. And I'm -- I'm -- I'm ready to go on with it, basically, understanding that -- Rose, how do you feel about -- about that? I've been talking --

MS. GOGLIOTTI: I think --

CHAIR KOTELCHUCK: We've been talking about it.

MS. GOGLIOTTI: I think that's a good path forward. I still will put together the summary documents that you requested on those four cases and --

CHAIR KOTELCHUCK: Yes.

MS. GOGLIOTTI: -- also I'll send out the information on dose female graphs that we have done historically. And --

CHAIR KOTELCHUCK: Good.

MS. GOGLIOTTI: -- maybe, at our next meeting, we can reconvene and see if you want to explore anything further there.

CHAIR KOTELCHUCK: Okay. And we'll be kept informed by our members who are on both of the working groups or subcommittees. And I

don't think -- and -- and frankly, we're not likely to meet for quite a while now, probably then, perhaps, sometimes nine months or a year from now, something like that.

But, I think, we have perhaps -- I believe, we have a consensus at this point that we don't see any -- adopting any of the procedures as promising enough to undertake, and we have a procedure going on with the -- the procedures subcommittee -- procedures and review subcommittee. So, I think we have -- I think we've come to a decision -- a consensus, I should say. Any -- any other thoughts or consideration or concerns about that as the consensus of this meeting?

It certainly makes me satisfied that after many years of delay beyond our control with the modernization and the COVID epidemic, that we're taking a look again and seriously trying to pursue our work and keep moving the needle forward. And this seems to be the best way. So -- so, I would say -- are there any objections to saying this is our consensus? I think --

MEMBER FRANK: None for me.

MEMBER MARTINEZ: None for me. I agree.

CHAIR KOTELCHUCK: Okay. Well, that's good. Then, I think, that indeed, we have a consensus. And we will keep in touch, Paul and Josie and I, and -- and Rose will mail out the materials that we asked for today that were suggested looking at. And we will be in touch. I will give a report at the next Board meeting of this discussion and where we're at.

So, with that, I think we can conclude the meeting. Rashaun, do

you -- are you ready to --

DR. ROBERTS: (Audio break.)

CHAIR KOTELCHUCK: Okay. Okay -- (audio break) Then thank you all for -- for joining us, not only the working group, but the other -- other staff. And we're back in -- if you will, we're back in business, functioning again and doing what we can to move the needle forward. With that, I -- I will call the meeting concluded. Okay. Thank you all.

(Whereupon, the meeting was adjourned at 1:25 p.m. EDT.)