

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
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ADVISORY BOARD ON RADIATION AND  
WORKER HEALTH

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HANFORD WORK GROUP

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MONDAY  
MARCH 23, 2015

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The Work Group convened by teleconference, at 2:00 p.m. Eastern Time, James M. Melius, Chairman, presiding.

PRESENT:

JAMES M. MELIUS, Chairman  
BRADLEY P. CLAWSON, Member  
PAUL L. ZIEMER, Member

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ALSO PRESENT:

TED KATZ, Designated Federal Official  
SAM GLOVER, DCAS  
MIKE KUBIAK, ORAU Team  
MARK LEWIS, ATL  
JENNY LIN, HHS  
ARJUN MAKHIJANI, SC&A  
JIM NETON, DCAS  
KNUT RINGEN  
GAIL SPLETT, DOE  
FAYE VLIENER

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

(2:02 p.m.)

MR. KATZ: Welcome, everyone. This is the Advisory Board on Radiation and Worker Health, the Hanford Work Group. There are materials, for people listening on the line, there are materials, including the agenda and documents for this meeting today, on the NIOSH website under the Board Section under today's date.

Okay. Let's start with roll call. And one of the things I guess I'll note up-front, please, everybody listening on the line, if you're not speaking, mute your phone, press star-6 to mute your phone, if you don't have a mute button. And then press star-6 again to take your phone off of mute.

Let's get going with roll call. For Board Members, we're speaking about a specific site, so please speak to conflict of interest with respect to the site as we go through it, for all agency personnel. And let's begin with the Chair

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1 and the Members of the Work Group.

2 (Roll call.)

3 MR. KATZ: Okay, so that takes care of  
4 administrative matters. Jim, it's your meeting.

5 CHAIRMAN MELIUS: Okay. Thank you, Ted.  
6 I think this will be a relatively brief meeting.  
7 And I think will start by turning it over to, I  
8 believe, Sam Glover will talk to us about the  
9 Petition Evaluation Report. Sam?

10 MR. GLOVER: Thanks, Jim. Unlike my  
11 colleague, I think I've got my presentation down  
12 to a reasonable number of slides.

13 CHAIRMAN MELIUS: Okay.

14 MR. GLOVER: I have to tease Tim. So,  
15 I am going to start out with a little bit of overview  
16 about the Hanford site. I have shared portions of  
17 my screen, I'm hoping that comes through properly.  
18 So, I'll change slides, but as people want to follow  
19 along I'll try to make sure that I call out the slide  
20 number. I know not everybody is able to log in with  
21 us.

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1                   So I'm going to go ahead and go to Slide  
2                   2 here. So, this will be the presentation, Jim, that  
3                   I'll put on at the Board meeting.

4                   CHAIRMAN MELIUS: Right.

5                   MR. GLOVER: Okay. All right. So,  
6                   Slide 2. I want to point out, you know, this has  
7                   not been fast. You know, this has been --- SEC 57,  
8                   obviously, it's been a while that it's been  
9                   ongoing. But I kind of wanted to start out by  
10                  discussing a little bit of the complexity of such  
11                  a diverse facility. You know, Hanford every few  
12                  years changes their mission, their contractors.  
13                  Every time they change their contractor, they  
14                  change their records. And it is an extremely  
15                  complicated site to do research at.

16                  So, we have a very diverse site. It's  
17                  a large number of documents. There are tens and  
18                  tens of thousands of boxes, and you have to go  
19                  through and follow through the different  
20                  facilities and who owns them, and the changes in  
21                  records, and all those changes have happen over

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1 time.

2 So, NIOSH has worked to review this  
3 complex facility to address the many different SEC  
4 issues that have been identified and changed over  
5 the life of the Hanford facility. This still falls  
6 under the umbrella of SEC 57 that had started in  
7 the requested time period, 1943 through 1990. All  
8 of this is being extended into 83.14, you know. We  
9 basically came to the conclusion we could do dose  
10 reconstruction, and we would do any other parts of  
11 this as an 83.14 if we identified areas where we  
12 couldn't. So, we are requesting this as an 83.14,  
13 just to kind of go back in history a little bit.

14 Slide 3. So, just a quick review. We  
15 issued a Petition Part 1, SEC 57 Part 1, for the  
16 DuPont time frame, which is when Hanford started  
17 through August 31st, 1946, when DuPont left and GE  
18 took over. The second Class added to the SEC was  
19 September 1st, 1946 to December 31st, 1968. Again,  
20 on both of these we would start out with selected  
21 areas of Hanford.

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1                   We recognized the difficulty then of  
2 actually administering those Classes and putting  
3 people in places, and Class Petition SEC 152  
4 subsumed those previous two Classes, and put it as  
5 all areas and all workers from October 1, 1943  
6 through June 30th, 1972. So, each of these had  
7 different reasons and different, you know, what  
8 were the nuclides involved, and what were the  
9 specifics.

10                   We continued our review. 1972 was when  
11 a number of different challenges, the thorium, and  
12 some different components, we changed over and  
13 started looking at some other areas. And then we  
14 found that --- we recommended the July 1972 through  
15 December 31st, 1983, again for all areas at Hanford  
16 as Petition 201.

17                   And it's been that way for a number of  
18 years now. We've continued to work with the Board  
19 regarding the SEC matrix. I should mention that  
20 one Class was not added. I included this because  
21 it was a lot of work. SEC 155 was the falsification

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1 of radiological records. And so through all of  
2 this, the Board has been with us on many of the data  
3 captures. And we, obviously, brought in folks for  
4 a lot of different interviews and have done a lot  
5 of work at Hanford.

6 So, Slide 4. So, essentially, SEC 57  
7 remains open before the Advisory Board, and an  
8 issues matrix continues to be addressed. During the  
9 review of these issues, NIOSH and the Work Group  
10 agreed there were some circumstances that we should  
11 look at a particular group of workers during the  
12 period '84 to '90, after the end of the last SEC,  
13 based on documents and correspondence that those  
14 employees were not monitored for routine bioassay.

15 The correspondence indicated that  
16 while they may have pre-job bioassay, they actually  
17 weren't getting any follow-up. So we began to look  
18 into those records. We conducted detailed  
19 follow-up, including review of monitoring records  
20 and worker interviews. And as part of this, we  
21 recommended that a lass be added to the SEC so that

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1 workers' claims can be processed during this time  
2 frame while the remaining issues are addressed by  
3 the Advisory Board.

4 This is an 83.14, so it does not talk  
5 about any other area that we --- it tries to stay  
6 focused on issues that we cannot do, that we feel  
7 that we cannot do. So, the latest Hanford petition  
8 was qualified for evaluation March 13th as an 83.14  
9 petition.

10 Next slide, Slide 5, please. And that  
11 was part of the issue for the Working Group, is that  
12 when you do have an 83.14, you have to have a  
13 petitioner. And so we had to wait for documents,  
14 and get those files in place so we could actually  
15 issue --- get a number in place and issue the  
16 report. So, I do apologize for the lateness. We  
17 certainly had intended to get this to you before  
18 the beginning of the month.

19 So, as we looked at this group of  
20 workers, DOE operated at Hanford using a large  
21 number of prime contractors. And this flexed. It

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1 went up and down, they expanded and they contracted  
2 throughout time. And in this period of time they  
3 were in an expanded mode. Each of those prime  
4 contractors had many subcontractors; in  
5 particular, the construction trade workers.

6 So, each of these prime contractors at  
7 Hanford were responsible for implementing their  
8 own radiological control program. And so they  
9 individually got to determine who was monitored and  
10 how they should be monitored, with guidance.  
11 Battelle, PNNL, provided general guidance to all  
12 of them. And they were also the contractor who was  
13 involved with administering the external and  
14 internal dosimetry programs, access in the  
15 bioassay for the site.

16 So, construction support services was  
17 conducted under a separate prime contractor during  
18 this time. And actually from 1953 up through 1987,  
19 J.A. Jones was the principal. Was the principal.  
20 They were the radiological service, construction  
21 support services contractor, and in '87 it switched

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1 over to Kaiser.

2 Slide 6 we see that we had J.A. Jones,  
3 they're the prime contractor from 1953 through  
4 February 28th, 1987. And I mentioned, you'll see  
5 in the slides that they are cumulative for that  
6 year. And so you'll see workers shifting from one  
7 company to the other. And so these things don't  
8 happen instantly, there's always a time period  
9 where things are implemented. So you'll see some  
10 of that lag in the graphs I present.

11 Kaiser Engineers at Hanford, beginning  
12 in '86 they began to transition in as the prime  
13 contractor for construction services, with full  
14 transfer on March 1st of 1987. And they also  
15 maintained their own radiological control program.

16 Next slide, which is Slide 7. Now, as  
17 we began to look at this we realized that these  
18 trades workers supported an incredibly broad range  
19 of activities, including activities involving  
20 research, fuel handling, plutonium processing, the  
21 decontamination and decommissioning of these

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1 facilities. They provided support to reactor  
2 outages. These workers, without having follow-up  
3 bioassay, worked in high contamination and high  
4 airborne radioactivity areas, in areas such as the  
5 100-N reactor, the PUREX fuel processing  
6 facilities, the various 300 area research  
7 facilities, plutonium finishing plant, as well as  
8 vaults.

9 Review of the J.A. Jones and Kaiser  
10 Engineering operating procedures found detailed  
11 external dosimetry practices, but the bioassay  
12 program to support these operations was not  
13 addressed. There may be information regarding  
14 that they had to be on full face, or that they may  
15 have some respiratory --- some issues maybe having  
16 them on respiratory protection, or some general  
17 notes, but nothing as far as what were the follow-up  
18 bioassay, what were the other programs surrounding  
19 it? So, it was much different than what the other  
20 programs had.

21 Next slide, Slide 8, please. So, the

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1 work in fundamental radioactive control practices  
2 was very different than the work conducted by the  
3 other prime contractors. Monitoring data for  
4 internal dose are available from other prime  
5 contractors. And I want to point out that J.A.  
6 Jones and Kaiser had a small group of permanent  
7 workers, but in general they would hire workers on  
8 a temporary basis to deal with jobs, as needed.  
9 So, it could be difficult in the records to  
10 understand are they --- because sometimes they'd  
11 be subsumed or listed as a J.A. Jones employee in,  
12 say, REX, but not always. And then as we speak to  
13 the Class Definition, and why we were forced to deal  
14 with this convoluted description doing it in  
15 reverse, as we describe this as Department of Labor  
16 and Department of Energy, it'll become more  
17 apparent.

18 Slide 9, please. So, subcontractors  
19 are difficult for the Department of Energy to  
20 determine if they worked in the capacity of  
21 construction trades, and also which company was

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1 responsible for the dosimetry. So, they could be  
2 hired by other --- so that, you know, they were  
3 hired on a temporary basis, they could work for  
4 other companies. So it would be very difficult for  
5 them to identify in these back and forth which  
6 companies the subs really worked for. So,  
7 obviously, for J.A. Jones and Kaiser, many of their  
8 employees were of this type. It's particularly  
9 difficult to work with them.

10 So, in consultation with DOL and DOE,  
11 we found that we could not limit a Class to J.A.  
12 Jones and Kaiser Engineers and their  
13 subcontractors. They just could not administer  
14 that Class. So DOE has identified that they have  
15 excellent employment records for the  
16 non-construction prime contractors, and we know  
17 that Westinghouse subsumed all of the primes,  
18 including the construction primes, in '93, but they  
19 had partial implementation in '87.

20 So, let's take a look on Slide 10,  
21 please. My colleagues at Department of Energy

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1 provided a bigger graph, or PowerPoint, that  
2 actually had the Department of Energy and all of  
3 its contractors. And I stole part of this to try  
4 to help show the diversity. And unlike Savannah  
5 River, we have a very diverse group.

6 I circled in blue the prime contractors  
7 that we are identifying as excluded. So, places  
8 like Battelle Northwest, Rockwell Operations,  
9 United Nuclear. And these are all in the time  
10 frame --- there are some that are --- you know,  
11 this is a graph that starts back in time into the  
12 '60s or earlier. So, I tried to circle things to  
13 draw your attention to which ones are in the time  
14 frame we're dealing with here, which is '84 through  
15 1990.

16 You see Westinghouse at Hanford, then  
17 they actually become --- through 6/20/87, and then  
18 they go through '93, so they actually had --- it  
19 was Boeing Computer Services, and finally, the  
20 Hanford Environmental Health Foundation.

21 The two that we are trying to

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1 specifically focus on was J.A. Jones and Kaiser.  
2 So we've identified a deficiency in J.A. Jones and  
3 Kaiser for our program for administering the  
4 EEOIPCA, in trying to determine dose, that it is  
5 hard to use their records to support dose  
6 reconstruction. Whereas, the other contractors  
7 seemed to have a radiological control program that  
8 --- they had their own separate program. We don't  
9 have anything that shows that they have a similar  
10 deficiency.

11 When we realized that this group and  
12 these --- the other parts of this were still before  
13 the Board, but, you know, we're focusing on this  
14 group of workers and companies that specifically  
15 we were able to identify has not done bioassay for  
16 their workers.

17 So, let's go to Slide 11, please. So,  
18 the basis for our findings include we found a  
19 virtual absence of monitor with J.A. Jones  
20 employees for internal dose during the period 1984  
21 through 2/28 of '87. Correspondence files and

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1 memos indicate that Kaiser --- that they  
2 recognized the bioassay problem in construction  
3 trades and they issued a memo to PNNL that they were  
4 going to substantially increase the monitoring.  
5 However, for budgetary reasons, the implementation  
6 of that program was delayed.

7 So we began looking at the data in REX,  
8 and trying to come to grips with their program, to  
9 identify when the proper cut-off --- when it looks  
10 like we do have these workers in our cohort so that  
11 we can properly do coworker data sets.

12 And it's not just bioassay, or, you  
13 know, they just did something. They had to do the  
14 right kind of bioassay. It couldn't be pre-job  
15 bioassay, they needed to be part of a routine  
16 bioassay program. It needed to be routine, not  
17 just pre-job, that they have to have the chest  
18 counting and plutonium urinalysis, and to bring  
19 that up to a similar level to what the rest of the  
20 Hanford prime contractors were doing. You'll see  
21 that in our next set of graphs.

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1                   So, NIOSH reached the determination  
2                   that by the end of 1990, Kaiser had implemented a  
3                   program that allowed dose reconstruction using  
4                   personal dosimetry data or coworker data for the  
5                   construction trades workers.

6                   Slide 12, please. Okay. I tried to  
7                   indicate --- it looks like we've got some  
8                   changeover between two different --- some color  
9                   changes, some lines got deleted, it looks like,  
10                  when we went between different programs. So, I  
11                  apologize for that. But you can follow the dots  
12                  and the dashes.

13                  What you see is that both monitoring  
14                  programs, or both monitoring companies, are on  
15                  here. The highest line, the inverted triangles,  
16                  shows the total number of workers identified as  
17                  J.A. Jones who had external monitoring during that  
18                  period. And if you look below them, Kaiser wasn't  
19                  doing --- they weren't responsible for this  
20                  service at that time frame, so we're only talking  
21                  about J.A. Jones. You see that there's virtually

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1 no in vitro or in vivo bioassay being conducted.

2 Now, for Kaiser, they begin, you see,  
3 1986. Since that's the whole year for that, you'll  
4 see that they start coming in. And you'll see that  
5 they do have higher levels, but it's not until you  
6 get into the period around 1990 when they actually,  
7 you'll see on the next graph, that they actually  
8 come up to a level which is appropriate -- or not  
9 appropriate, but similar to what other contractors  
10 at Hanford are doing.

11 So, let's go to Slide 13, please. So,  
12 this slide focuses on the Kaiser increases. And  
13 you'll see that they come up, they start very low  
14 at the beginning, which is the J.A. Jones. Then  
15 in '88 you see the ramp up during the 30 percent  
16 of workers with external having --- in this case  
17 we have in vitro bioassay. And then it stayed  
18 pretty flat through '89. By 1990, and continuing  
19 past that, they begin to mirror the traditional.  
20 So, that's why we chose the end of 1990. That's when  
21 they came up similar levels of the other prime

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1 contractors.

2 Slide 14, please. So, our  
3 recommendation is that J.A. Jones and Kaiser  
4 employees, and all subcontractors -- so not just  
5 their subcontractors; DOE does not really feel  
6 that they can try to split these out -- will be  
7 included in the recommended Class. So we will use  
8 any internal dose data that may become available  
9 for individual claims. We will use external and  
10 medical dose to complete partial dose  
11 reconstructions.

12 Now, we will continue to perform full  
13 dose reconstructions for DOE employees, and all the  
14 specifically identified prime contractors who were  
15 excluded from this Class during this period. And,  
16 obviously, we will continue to evaluate the  
17 remaining issues at Hanford during the '84 to 1990  
18 period with the Advisory Board.

19 Slide 15, please. So, you'll see this  
20 rather unusual table for DR feasibility. So dose  
21 reconstruction is feasible, and a full dose

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1 reconstruction during this time frame is done for  
2 Department of Energy, Battelle Memorial Institute,  
3 Westinghouse Hanford, Hanford Environmental  
4 Health Foundation, Rockwell, Boeing Computer  
5 Services, and UNC Nuclear. And that's for the  
6 period '84 through '87.

7 Then we have a change in who the prime  
8 contractors are. This is part of the contraction,  
9 at least partial contraction, at Hanford from '87  
10 through '90. Still having DOE, and Battelle,  
11 Westinghouse, and the Hanford Environmental HF,  
12 Health Foundation. Some of the others, of course,  
13 subsumed by Westinghouse. And we conclude that  
14 dose reconstruction is not feasible in the period  
15 of '84 through December 31st, 1990, for all other  
16 employees, Department of Energy contractors and  
17 subcontractors.

18 Slide 16, please. So, you'll see for  
19 the external component of this, the heading in the  
20 third column has changed, that we're saying partial  
21 reconstruction is feasible, because we're

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1 obviously going to use the records that are  
2 available to do external dose. So, the same  
3 companies we consider feasible for external for  
4 both periods. It's the discussion on the partial  
5 reconstruction feasibility in external dose, is  
6 why we split this up and changed the headings. So,  
7 certainly, if there's any questions on that, let  
8 me know.

9 Slide 17, please. And just, again, as  
10 usual, we tried to give you some level of effect  
11 on what the Class might be. There's 5,384 claims  
12 submitted for dose reconstruction at Hanford.  
13 During this time frame, there's 2,175 claims. The  
14 number of dose reconstructions worked during this  
15 time period, completed is 1,801. Numbers of  
16 claims for which internal records were obtained is  
17 1,532. That doesn't mean they were obtained and  
18 were the right kind of bioassay, but we have 1,532  
19 claims which had bioassay records. And the number  
20 of claims with external dosimetry records is 2,125.

21 So, this is going to require a pretty

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1 careful review of the cases by Department of Labor.  
2 Based on our records, we have determined there's  
3 about 723 cases at NIOSH with a PoC of less than  
4 50 percent, and 29 cases at NIOSH currently that  
5 may need further evaluation and looked at whether  
6 they have this kind of employment. And, also,  
7 Department of Energy has indicated that they have  
8 substantial new information on employment for the  
9 older cases, particularly involving  
10 subcontractors, that they've got a lot of new  
11 finding aids that provide substantially more  
12 information regarding employment time at Hanford.  
13 And with the nuance of this, they have to be  
14 re-requested to provide that new information. So,  
15 I know they're looking at having a substantial  
16 amount of work to look at these cases, and look at  
17 the employment, and the impact of these  
18 subcontractors.

19 Slide 18. So, the Class Definition in  
20 its totality, then, is all employees of the  
21 Department of Energy contractors and

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1 subcontractors. You'll note we did not include  
2 the Department of Energy employees. We're talking  
3 specifically about their contractors and  
4 subcontractors, so we're excluding that right off  
5 the bat. We're not including the DOE employees  
6 directly.

7 So, all employees of Department of  
8 Energy contractors and subcontractors, excluding  
9 employees of the following Hanford prime  
10 contractors during the specified time period.  
11 We're listing Battelle Memorial Institute from  
12 January 1, '84 through December 31st, 1990;  
13 Rockwell Hanford Operations from January 1, '84  
14 through June 28th, 1987; Boeing Computer Services  
15 Richland from January 1, 1984 through June 28th,  
16 1987; UNC Nuclear Industry, January 1, '84 through  
17 June 28th, 1987; Westinghouse Hanford Company from  
18 January 1, 1984 through December 31st, 1990; and  
19 HEHF, Hanford Environmental Health Foundation,  
20 January 1, 1984 through December 31st, 1990, who  
21 worked at the Hanford site in Richland, Washington,

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1 during the period January 1, 1984 through December  
2 31st, 1990, for a number of work days aggregating  
3 at least 250 work days. And the rest of it is the  
4 standard boilerplate Special Exposure Cohort.

5 So, that's the end of my presentation,  
6 Jim.

7 CHAIRMAN MELIUS: Let me unmute there.  
8 Sorry for the delay. Board Members with questions?  
9 Hello?

10 MEMBER CLAWSON: Jim?

11 CHAIRMAN MELIUS: Yeah.

12 MEMBER CLAWSON: This is Brad. I  
13 wasn't sure what was going on there. I thought maybe  
14 my phone had given out.

15 CHAIRMAN MELIUS: Maybe it's just you  
16 and I. Is anybody else on?

17 MR. KATZ: I'm on. I think we're all  
18 still on.

19 CHAIRMAN MELIUS: Okay.

20 MEMBER CLAWSON: I'm getting  
21 somebody's ---yeah, okay.

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1 MR. KATZ: Yeah, someone called in, I  
2 think.

3 MEMBER CLAWSON: Okay.

4 MR. KATZ: No problem.

5 CHAIRMAN MELIUS: Anyway, any Board  
6 Members have questions for Sam?

7 MEMBER ZIEMER: This is Ziemer. I have  
8 a couple of questions.

9 CHAIRMAN MELIUS: Go ahead.

10 MEMBER ZIEMER: Well, first of all,  
11 I'll just start with a remark that I thought the  
12 definition is very strange, and I just don't  
13 understand the reason for it. But are we assured  
14 that the contractors that are excluded, none of the  
15 construction workers would have worked for those  
16 prime contractors. Is that correct?

17 MR. GLOVER: So, for those primes, if  
18 you're working for them, you would be under their  
19 radiological control program ---

20 MEMBER ZIEMER: Oh, if you were a  
21 construction worker then.

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1 MR. GLOVER: So, if you were a sub to  
2 them, then --- only honest to goodness prime  
3 contractor employees, if you're a real Battelle  
4 employee, they were saying that you should be  
5 excluded. We're not trying to exclude any of the  
6 subs. So if you're a worker out of the --- I think  
7 they call it the 3000 area -- my colleagues from  
8 the Department of Energy who are on the line, they  
9 could correct me if I make any error -- but from  
10 the union halls, for any of these temporary people  
11 who would be hired to do construction labor, for  
12 any of these people, we're not trying to exclude  
13 anybody under that, because of the complexity of  
14 this. Only if you're an honest to goodness  
15 employee of that prime contractor. And those  
16 records seem to be very well documented and  
17 established. So, they know if you're a Rockwell  
18 employee.

19 MEMBER ZIEMER: I got you. But those  
20 could include construction workers that they  
21 wouldn't have the monitoring data. Is that what

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1 you're saying?

2 MR. GLOVER: Well, Rockwell, we see  
3 that their employees seem to be monitored. They  
4 weren't part of the same deficiency for our  
5 program trying to evaluate not having that  
6 internal follow-up. At this point in time, we  
7 haven't researched the rest of those. Those areas  
8 would still be before the Board.

9 MEMBER ZIEMER: Got you. And then on  
10 the others, in addition to Jones and Kaiser, some  
11 of the other subcontractors, are those all  
12 construction workers, or were there other  
13 subcontracts?

14 MR. GLOVER: I'm sure that --- well,  
15 see, it's difficult to put your finger on what  
16 exactly is a construction trade worker. I mean,  
17 I was unable to try to tell somebody what the  
18 definition was going to be, because they had people  
19 who would go out in the field for them and would  
20 be doing job evaluations. And it very quickly  
21 became extremely complex as we looked at --- I was

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1 quickly disabused of the notion that I was going  
2 to come up with it as a definition, what would be  
3 the employee's job titles that you would actually  
4 try to pull into it.

5 MEMBER ZIEMER: The Department of  
6 Labor feels they can administer this the way --- is  
7 that correct?

8 MR. GLOVER: I think they are concerned  
9 that it is going to be outside their normal, you  
10 know --- it's going to be work. DOE has continued  
11 to say they think they can support this.

12 Gail Splett from DOE is on the line, I  
13 think. I don't know if she wants to chime in or  
14 not, but they continue to state --- and I know  
15 Department of Labor had said that they thought that  
16 this was --- because we reworked this with their  
17 input. It is convoluted. This is, obviously, not  
18 our preferred way of trying to write a Class.

19 MEMBER ZIEMER: Well, and then my final  
20 question was, so we've identified Kaiser and Jones,  
21 but why are we not able to identify the names of

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1 other subcontractors that are on the prime list?

2 MR. GLOVER: My colleagues told me  
3 that, when I got --- there's like 5,000.

4 MEMBER ZIEMER: What? Really?

5 MR. GLOVER: Oh, there's like --- there  
6 may be more than that. There's 5,000 companies who  
7 are subcontractors to --- it's unbelievable.

8 MEMBER ZIEMER: Oh.

9 MR. GLOVER: And I may be under --- I  
10 may be actually understating how many --- so,  
11 again, in the issue of being relatively concise,  
12 I was told if I tried to do that, that I would have  
13 to list every one of them that I tried to exclude,  
14 and that they weren't able to really --- because  
15 of this back and forth working between different  
16 companies, that it would be extremely difficult to  
17 try to exclude subcontractors.

18 MS. SPLETT: This is Gail Splett in the  
19 Richland Operations Office for DOE. We do have a  
20 list that we've been maintaining of  
21 subcontractors, and it currently lists over 68,000

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1 subs that we have used over the years. And we  
2 believe that's not even close to the totality. And  
3 I think what Sam is alluding to is a sub that worked  
4 for Jones one week may be a sub to Rockwell the next  
5 week, and that's extremely common. So, for us to  
6 say these are the only subs to Jones and Kaiser  
7 would be really impossible, you know, with any  
8 level of certainty.

9 MEMBER ZIEMER: Well, I guess I'm a  
10 little bit nervous about what this list of  
11 X-thousand other subcontractors looks like. I  
12 mean, are we talking about somebody who serves the  
13 Coke machine or something like that?

14 MS. SPLETT: If they were a direct  
15 subcontractor, there are some of that, but many of  
16 them, during the construction, would have some  
17 very small companies. That's absolutely true. We'd  
18 get five to six layers down of subcontracts. Very  
19 common for tank farms, for example, Jones had the  
20 contract for construction, they bid it, they  
21 subcontracted it to George Grant, who had multiple

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1 thousand subcontractors working on it. And each of  
2 those subcontractors may have subcontractors.

3 MEMBER ZIEMER: Someone who works for  
4 one of those sub-subs, they still have to show 250  
5 days actually on the site to be eligible, right?  
6 Not just 250 days working for a sub.

7 MS. SPLETT: That's correct. That's my  
8 understanding.

9 MEMBER CLAWSON: Sam, this is Brad. Can  
10 I make a comment, too? Because I understand what  
11 Dr. Ziemer is kind of alluding to. Would that be  
12 all right?

13 MR. GLOVER: You're a Board Member. You  
14 absolutely can.

15 MEMBER CLAWSON: One of the things,  
16 being involved with this all --- one of the things  
17 that got into this was, in this time frame, J.A.  
18 Jones was the major --- they did most of the major  
19 construction, so he had all of these different subs  
20 that he had contracts going out to, but one of  
21 --- here's one of the convoluted parts that really

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1 flows into me. His major contract was like  
2 refuelings and a lot of other stuff, so they would  
3 take and they would bring in hundreds and hundreds  
4 of construction trades a week. And as we're used  
5 the term, turn 'em and burn 'em, they would be  
6 burned out within a week, and then they'd go off  
7 and they'd do another project until they could get  
8 their dose down in the next month or so. Then  
9 they'd come back in to a hot one.

10 And we saw a lot of this going on.  
11 There's hundreds and hundreds of small contractors  
12 that did other jobs. But, see, they utilize this  
13 whole labor pool, is what I would call it, to be  
14 able to do a lot of these hot jobs. And this is  
15 why -- and I will admit that I agree with Sam on  
16 how we're proceeding ahead, because there's no way  
17 to be able to take and cut out this group and say  
18 that they didn't get it. You know, they could be  
19 working for a contractor filling pop machines one  
20 week, and the next one they could be in a hot cell.

21 But they're still there, they're still

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1 on the site 250 days. Well, this is the  
2 utilization of manpower, and talking to some of the  
3 construction trades, they were emptying the halls  
4 for three to four hundred miles away using these  
5 people to do these hot jobs, but also doing other  
6 jobs. Because this was kind of a unique group of  
7 people to be able to use out there to be able to  
8 do this work.

9 MEMBER ZIEMER: Yeah, yeah, a little bit  
10 like the rotating people that do the shutdowns on  
11 commercial reactors.

12 MEMBER CLAWSON: Yeah --

13 MEMBER ZIEMER: -- have the hot jobs.  
14 Yeah.

15 MEMBER CLAWSON: Right. And this was  
16 really true, but at Hanford these hot jobs  
17 continued on not just, you know, this is what we're  
18 doing for this one, yeah, they'd go to the next one.

19 MEMBER ZIEMER: Yeah, I got you.

20 CHAIRMAN MELIUS: Any other --- Bill,  
21 did you ever come on the line? I guess not. Arjun,

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1 are you on the line?

2 MR. MAKHIJANI: Yeah, I was on mute.

3 CHAIRMAN MELIUS: Okay. I don't know  
4 if you --- from SC&A, I don't know if you have any  
5 comments.

6 MR. MAKHIJANI: The one comment I have  
7 is, looking over, we haven't talked about the  
8 records of non-construction workers for some time.  
9 And I know the Evaluation Report covered it, but  
10 I'd like, you know, maybe Sam to expound a little  
11 bit more on that.

12 MR. GLOVER: So, as we started, you  
13 know, to identify this Class and the correspondence  
14 and the comparison, we had to begin pulling those  
15 records, but we haven't to look through them,  
16 Arjun. That's why we're --- we're excluding them  
17 because it may take us X amount of time. It's not  
18 going to be something we can do overnight. We'll  
19 got to pull those records, try to figure out what  
20 the rest of these are. So we've got requests in  
21 to Hanford to try to understand what their record

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1 systems are, because now we've got seven or eight  
2 primes that we have to put our arms around. In the  
3 interest of trying to work on this construction  
4 trades Class, we just didn't want to hold it up.

5 MR. MAKHIJANI: Oh, okay. I understand  
6 better now. Thank you.

7 CHAIRMAN MELIUS: Yeah, so this is sort  
8 of inclusive for the Class, but it doesn't really  
9 exclude other people in the sense that, you know,  
10 NIOSH or the Board's reached a conclusion on these  
11 other groups that dose reconstruction is feasible.

12 MR. MAKHIJANI: Thank you, Sam.

13 MR. GLOVER: You got it.

14 CHAIRMAN MELIUS: Ted, I don't believe  
15 the petitioner was going to be on the line, or  
16 wished to comment.

17 MR. KATZ: Yeah, I don't believe so,  
18 but I like to always open that opportunity just in  
19 case someone changes their plans or what have you.

20 CHAIRMAN MELIUS: So, if the  
21 petitioner for this petition is on the line wishes

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1 to comment, you're welcome to, but you're also  
2 welcome not to.

3 MS. VLIEGER: Dr. Melius?

4 CHAIRMAN MELIUS: Yes?

5 MS. VLIEGER: Who's listed as the  
6 petitioner?

7 MR. KATZ: No, we won't talk about that  
8 if --

9 CHAIRMAN MELIUS: But it is the  
10 petitioner for this specific 83.14.

11 MR. KATZ: Right.

12 MS. VLIEGER: Okay, because there was a  
13 time period where I was listed as the petitioner.

14 CHAIRMAN MELIUS: But not on this ---

15 MR. KATZ: Not on this one.

16 CHAIRMAN MELIUS: Not on this  
17 particular petition.

18 MS. VLIEGER: Perfect, then I'll mute.

19 CHAIRMAN MELIUS: Yeah, and you're  
20 welcome to comment in the public comment period  
21 when we have it later this week. It's sort of a

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1 technicality, but ---

2 MEMBER CLAWSON: Jim, this is Brad.  
3 Can I make a comment, though, just something you  
4 covered there just a minute ago? I agree, like I  
5 said, wholeheartedly with Sam on this 83.14, what  
6 we've got into. But in no way do I say that this  
7 exact cut-off date --- when we looked at this, as  
8 Sam has alluded to, this was a clear cut to them,  
9 no questions. This is where, you know, this time  
10 is where you started to see the upgrade of the dose  
11 reconstruction. We have not dove into the prime  
12 contractors, or really even the subcontractors.

13 This was just a cut-off time where Sam  
14 says, you know what, Brad, I feel confident right  
15 here. And if we continue on into this and we see  
16 these, you know, this is just a clear-cut 83.14.  
17 But by no means do I want to say that, yes, we're  
18 absolutely --- there's substantial information on  
19 primes or subcontractors at this time. We need to  
20 evaluate it more in-depth.

21 MR. GLOVER: Yeah, we did it as a matter

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1 of, you know, convenience is the wrong word, but,  
2 you know, the data at that point, without dragging  
3 it out for months and months and months trying to  
4 figure out, you know, arguing about the 1990.  
5 That's when the data certainly got better, but we  
6 understand that we have more discussions that are  
7 going to be with the Board.

8 MEMBER CLAWSON: Yeah. No, I think  
9 that's clear.

10 CHAIRMAN MELIUS: So, Sam, how many  
11 cases will this free up that you guys have? Wasn't  
12 it 760 cases, I thought.

13 MR. GLOVER: Yeah, there's like  
14 probably 750 that we've sent a list back to DOL and  
15 DOE that have employment --- the right --- and a  
16 POC less than 50 percent that will be affected by  
17 this, or may be affected by this.

18 CHAIRMAN MELIUS: Any other questions  
19 at this point? Okay, unless some has another  
20 preference, rather than make a formal  
21 recommendation at this point, I'm not even sure if

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1 we can, given the numbers of people on the line.

2 Board Members, Ted?

3 MR. KATZ: Oh, I mean, it's fine if you  
4 want to. You don't need a quorum with a Work Group,  
5 so you're welcome to make a recommendation and  
6 solicit from Phil and John at the full meeting. But  
7 however you want to handle it is fine.

8 CHAIRMAN MELIUS: Unless someone feels  
9 otherwise, I think let's wait until the full  
10 meeting.

11 MR. KATZ: Sure.

12 CHAIRMAN MELIUS: Straightforward, we  
13 have questions. And since we also just got the  
14 report and trying to see what needed to be clarified  
15 at this point in time. Paul and Brad, is that okay?

16 MEMBER CLAWSON: That's fine with me.

17 CHAIRMAN MELIUS: Paul?

18 MR. KATZ: Maybe Paul is on mute.

19 CHAIRMAN MELIUS: No problem. The  
20 other thing I wanted to try to ---

21 MEMBER ZIEMER: I was on mute. Yeah,

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1 that's fine with me.

2 CHAIRMAN MELIUS: Okay, Paul. The other  
3 thing I want to try to accomplish is maybe, Arjun,  
4 you could give us a brief update on where we are  
5 with sort of the issues matrix, and going forward?

6 MR. MAKHIJANI: Hello, can you hear me?

7 CHAIRMAN MELIUS: Now we can, yes.

8 MR. MAKHIJANI: Okay, sorry. I heard a  
9 phone ringing.

10 CHAIRMAN MELIUS: Yeah, no, it seems to  
11 ---

12 MR. MAKHIJANI: Well, you know, as we go  
13 through these we generally let aside a number of  
14 Site Profile issues. And, actually, could I send  
15 you a note about that before the Board meeting?

16 CHAIRMAN MELIUS: Yes, that would be  
17 fine. I was just wondering if there was anything  
18 --- I think what we need is maybe at the Board  
19 meeting being able to sort of figure out what next  
20 steps would be for the Work Group.

21 MR. MAKHIJANI: Okay.

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1                   CHAIRMAN MELIUS: And to be able to  
2 inform the original petitioners and other people  
3 interested in what's happening with the site, so  
4 we can provide an update and figure out when we need  
5 to meet again.

6                   MR. MAKHIJANI: Let me send you a note  
7 about that. Let me look at the Evaluation Report,  
8 and then I'll send you a note about that before the  
9 Board meeting.

10                  CHAIRMAN MELIUS: Okay.

11                  MR. MAKHIJANI: And I'll be on the phone  
12 at the time of the Board meeting.

13                  CHAIRMAN MELIUS: Right. Yeah. We  
14 have an evaluation matrix, and I guess sort of where  
15 do we stand with that, and does this add more to  
16 it in some ways, or not, other issues?

17                  Okay. Any other comments or questions  
18 from Board Members? If not, I think we can  
19 adjourn. Ted?

20                  MR. KATZ: Yeah, I would just suggest,  
21 though, as you think about this presentation in the

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1 next day before the Board meeting, if you have  
2 anything that you think Sam can expand upon or  
3 clarify in his actual presentation, just let him  
4 know, pop him an email, that'll be helpful for him.

5 CHAIRMAN MELIUS: Yeah, actually, Sam,  
6 I thought you did as good as job as you can with  
7 the situation. I mean, it is complicated to  
8 explain.

9 MEMBER CLAWSON: Well, you know, Jim and  
10 Ted, I want to take this opportunity, because  
11 working with Sam on this, to be able to get into  
12 this and really look at it, and Gail has done an  
13 absolutely marvelous job of getting us this data.  
14 But this is one of the hardest ones that I have ever  
15 really seen, and I appreciate Sam going at with this  
16 kind of attitude, because it is very, very  
17 complicated, I guess I could say that and feel  
18 secure with that. But I really think he's done a  
19 fine job on it, and I think we're headed down the  
20 right path.

21 CHAIRMAN MELIUS: Okay, thank you, and

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1 thanks, everybody. I believe we can adjourn. And  
2 we'll see everybody in Richland in a day or two.

3 MR. KATZ: Right. Safe travels,  
4 everybody.

5 CHAIRMAN MELIUS: Okay, thank you.

6 (Whereupon, the above-entitled matter  
7 went off the record at 2:50 p.m.)

8  
9  
10  
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