U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

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ADVISORY BOARD ON RADIATION AND WORKER HEALTH

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IDAHO NATIONAL LABORATORY WORK GROUP

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FRIDAY JANUARY 15, 2016

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The Work Group convened via teleconference at 10:30 a.m., Eastern Time, Josie Beach, Acting Chair, presiding.

PRESENT:

JOSIE BEACH, Acting Chair JAMES M. MELIUS, Member DAVID RICHARDSON, Member GENEVIEVE S. ROESSLER, Member

ALSO PRESENT:

TED KATZ, Designated Federal Official NANCY ADAMS, NIOSH Contractor BOB BARTON, SC&A RON BUCHANAN, SC&A JOE FITZGERALD, SC&A LARA HUGHES, DCAS JENNY LIN, HHS JOHN MAURO, SC&A JIM NETON, DCAS STEVE OSTROW, SC&A JOHN STIVER, SC&A TIM TAULBEE, DCAS

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1	P-R-O-C-E-E-D-I-N-G-S
2	10:31 a.m.
3	MR. KATZ: So, let's do roll call. Let
4	me note for everybody Josie is chairing today
5	because Phil is not feeling so well. He may or may
6	not be on the line. But Josie was gracious enough
7	to say she'd handle managing the meeting which is
8	great. So thank you for that, Josie.
9	So, we're speaking about a specific
10	site so please speak to conflict of interest as we
11	run through the roll call. And we'll begin with
12	Board Members beginning with our Chair.
13	(Roll call)
14	MR. KATZ: Okay, and we've heard from
15	at least one petitioner representative that he
16	wasn't going to be able to make it although he sent
17	in some comments which I'll register when we get
18	to the comments.
19	But do we have any other petitioner or
20	members of the public who want to register their
21	attendance?
22	(No response)
23	MR. KATZ: Okay. Hearing none, let me

1	just check again. Phil, have you joined us?
2	(No response)
3	MR. KATZ: Okay, I don't hear him. All
4	right, the agenda for the meeting is posted. No
5	other materials are posted, but materials have been
6	sent to the petitioners.
7	And Josie, it's your meeting.
8	ACTING CHAIR BEACH: Okay, thank you
9	very much and good morning, everyone.
10	So, we do have a report that was sent
11	out on January 13 from NIOSH. We'll be starting
12	with that report.
13	We also have a report from SC&A sent out
14	I believe this week, also early this week.
15	And the petitioners did send an email
16	out. Everybody should have that, the one that Ted
17	is going to read later on.
18	And I think Tim sent out an email this
19	morning. Is that the one you were referring to,
20	Tim, that gave us the case numbers so we could
21	gormalate them a little engine between NIOCII and
	correlate them a little easier between NIOSH and

1	Update on DCAS Special Exposure Cohort
2	DR. TAULBEE: So, that was just one
3	piece of it.
4	And then I had a table for regarding
5	SC&A's observation number 1 that we can discuss at
6	that time.
7	ACTING CHAIR BEACH: Okay, perfect.
8	So those should be all the documents.
9	And Tim, I'm going to go ahead and start
10	with your update if you're ready to do that.
11	DR. TAULBEE: Certainly I can do that.
12	What I was planning on doing here from I guess a
13	presentation or discussion standpoint was to kind
14	of fill you in on what we found in reviewing these
15	18 cases and our conclusion.
16	I wasn't going to go through every
17	single one of them. I was hoping that I would make
18	mine a little abbreviated and then we could get into
19	more details with what SC&A, their observations.
20	And my reasoning for this is that many
21	of these cases we agree on. And so I didn't feel
22	that it would be beneficial to go through all of
23	that, if you're in agreement with that, Josie?

1	ACTING CHAIR BEACH: I absolutely am.
2	Is everybody else also in agreement?
3	MEMBER ROESSLER: In agreement.
4	MEMBER MELIUS: Yes, fine, go ahead.
5	DR. TAULBEE: Okay. All right, thank
6	you.
7	Well then where I want to I guess in a
8	sense start with this is our Table 1 which is on
9	page 4 where we went down and basically discussed
10	all of the 18 in a summary.
11	And this is different than the report
12	that we sent out last week, our interim report,
13	where we needed to do some follow-up.
14	And really the follow-up is what I
15	wanted to focus on, this particular in the
16	beginning here. Because it is relevant to SC&A
17	observations 2 and 3 primarily.
18	ACTING CHAIR BEACH: I'm getting a lot
19	of static
20	(Telephonic interference)
21	DR. TAULBEE: Are you getting a lot of
22	static from me?
23	MR. KATZ: Yes. I'm not sure it's from

1	you, Tim. But everyone else at least mute your
2	phones and then.
3	Tim, are you working off of a normal
4	phone?
5	DR. TAULBEE: I'm working on a
6	speakerphone but is that any better? I just moved
7	its location.
8	MR. KATZ: Let's see if everyone else
9	has everyone else muted their well, they can't
10	answer me. If everyone else is muted we'll see how
11	it goes.
12	DR. TAULBEE: Okay. Well, I guess
13	this is a test then. If this is still staticky let
14	me know and I'll go
15	ACTING CHAIR BEACH: Tim, it's
16	working.
17	DR. TAULBEE: I'm sorry?
18	ACTING CHAIR BEACH: Whatever you did
19	is working now.
20	DR. TAULBEE: Okay.
21	ACTING CHAIR BEACH: No static.
22	DR. TAULBEE: All right, good. Okay.
23	Well, then when we went through these 18 we ended

up with three people that we needed to do additional 1 follow-up on. Because we didn't quite understand, 2 especially number 17 and 18 of our cases, where we 3 had some individuals that had some bioassay and 4 5 they had no external dosimetry reported by the site. 6 7 Based upon our review of procedures this shouldn't ever happen. 8 There was one slight possibility in that the site did conduct some blank 9 10 analysis, in that they took workers who were not exposed and conducted a bioassay on them. 11 And we thought number 17 fell into that 12 13 category, but it turns out he did not, as a 14 possibility of having bioassay with no external dosimetry having not gone into an area. 15 and this 16 So, in case, this discovered really the week of Christmas, the week 17 before Christmas. 18 And then we were in discussion the week 19 20 of Christmas with the site to try and get out there to try and resolve what was the issue here 21 associated with how could we 22 have somebody 23 monitored via bioassay, and indicating CPP like

1	number 18 was, and no external dosimetry records.
2	One of the things that we found in our
3	review was, according to their procedures and
4	now I'm drawing your attention to page 3 at the top
5	where I've taken an excerpt of their dosimetry
6	record-keeping.
7	And it indicates that if a visitor film
8	had a positive dose, or an exposure, then this
9	individual became a matter of record for the site.
LO	And the master index was checked in the
L1	presence of an assigned health physics number.
L2	And if it was found then the necessary cards were
L3	prepared and this value was added to their dose of
L4	record.
L5	And if no number was found then the new
L6	number was assigned to this individual.
L7	We go onto say in the bottom half of that
L8	paragraph that approximately 98 percent of
L9	visitors received statistically zero exposures,
20	and that these data appear only on the visitor list
21	prepared at the time of the badge servicing.
22	These lists are retained indefinitely
23	as well as the film in case any questions should

1	arise at a later date.
2	Actually we're at a later date and we're
3	asking questions about these visitor and temporary
4	badge dosimeters. And so this is where we went
5	back.
6	Now, if you recall, in April we went and
7	captured all of the CPP temporary badge reports so
8	that we had a comprehensive roster there for the
9	site, for CPP.
10	We did not capture the temporary badge
11	reports for all of the other areas - MTR, Test Area
12	North, Central Facilities, auxiliary reactor
13	areas, et cetera.
14	And so our goal going back last week to
15	the site was to identify all these temporary badge
16	reports.
17	Because what we were finding was when
18	we went through the 18 there were certain people
19	that we believed that they were monitored onsite,
20	but the site wasn't reporting any dosimetry for
21	them.
22	And the only way to really verify that
23	they were monitored was to go to these temporary

badge reports based upon this paragraph that we 1 found in this Idaho report 12056. 2 And the second purpose was to do the 3 follow-up on these three cases which were 7, 17 and 4 5 18 by our numbers, and particularly 17 and 18 where we had some bioassay, to see if they appeared on 6 7 any temporary badge reports other at areas indicating that they were monitored. 8 And what we found with number 18 was he 9 10 was monitored via bioassay at CPP in June of 1970. 11 In scanning these records, or looking 12 through them, and there's two types. One is the 13 temporary badge reports that you commonly see. 14 And the other are visitor insert cards which when you look at an individual claimant's files you'll 15 see some of these temporary cards that are really 16 small. 17 They're like 1 and a half inch by 2 inch 18 cards that list their name, their location, their 19 20 company, the dates that they wore this badge. When you flip the card over the dose is on the back. 21 22 And so what we were looking for was in 23 particular individual number 18. And so we found

1	a box of these cards.
2	Now, most of these cards have already
3	been scanned and indexed. One of the first boxes
4	we opened up had not been scanned and indexed. And
5	that was probably in the CPP era from 1969 through
6	I believe August of 1973.
7	So, fortunately these cards were in
8	somewhat chronological order. I won't say exactly
9	chronologic because you have to go up a few months
10	or back a few months. But in general they were in
11	order and so we could start looking at the 1970.
12	And we quickly found three dosimeter
13	badges from CPP for case number 18 here, clearly
14	putting him in the SEC as eligible.
15	And so at that point we started to talk
16	to DOE and were asking why weren't these cards part
17	of the record.
18	Now, we knew because of the zero dose
19	and the paragraph that I read to you earlier that
20	they were not really considering them a matter of
21	record, but they were retaining this information.
22	But in other cases these visitor cards
23	have been indexed and we get those zero dosimetry

1	readings for individuals.
2	They didn't have a real good answer as
3	to why this box hadn't been scanned or indexed other
4	than early on they were not indexing the zero
5	dosimetry reports on these temporary badges.
6	Later on in their indexing series
7	this was going back 2004-2005 time frame when they
8	were trying to pull all these records together and
9	build their master database, they started to index
10	the zeros as well.
11	And so this particular box, actually
12	there was two boxes there, about 5,000 cards in each
13	of the small boxes had not been indexed, had not
14	been scanned or indexed. Which is how this
15	individual was missed if you will from the
16	dosimetry reporting.
17	It's not that he wasn't monitored, it's
18	not that the cards are not available. It's that
19	the cards have not been scanned or indexed.
20	Post-August 1973 time frame it appears
21	as if all of those cards have been indexed.
22	We requested a copy of those electronic
23	files. We haven't received them yet so that we can

1	compare them against those particular indexes
2	or not indexes, the actual cards themselves.
3	Because we found multiple boxes of these cards.
4	It's easy to tell whether they've been
5	indexed or not. If they have been indexed there's
6	a little wrapper around a band of cards, maybe 1
7	inch stack of cards that will have a unique number.
8	You see these 30-XXX numbers within
9	their reports. These are 50-XXX numbers. So it's
10	easy to tell which ones should have been indexed
11	and which ones have not.
12	We did look at the other CPP ones in the
13	post August of '73 and we did find those boxes, and
14	they appear to have all been indexed based upon the
15	little bands around the card bunches.
16	So this was a problem that we identified
17	and talked to DOE. And DOE has committed to
18	indexing all of those individuals.
19	We have scanned them. We turned those
20	files over to DOE so that they can begin indexing
21	them.
22	While we are doing our close-out
23	meeting with the gite reng both DOF as well as the

1	contractor Battelle Energy Alliance, DOE brought
2	in their health physicist as well and I could
3	explain the situation to him.
4	And they were all in agreement that
5	these really needed to be indexed, and should have
6	been in the past but they had not been yet.
7	And so DOE asked the contractor for a
8	cost estimate so that they could get funding
9	authorized in order to do this work.
10	So that's the visitor insert cards
11	related to case number 18.
12	Case number 17 was different. This
13	wasn't a case of the visitor index cards. These
14	were temporary badge reports.
15	And what was unique about this
16	individual was he had bioassay in 1963 oh by the
17	way, before I go on, are there any questions?
18	MR. BARTON: Yes, Tim, this policy of
19	as you said, and was one of my main questions.
20	Because I know I had seen these visitor they're
21	like the size of a credit card or something like
22	that, right?
23	And they have the zero written on the

1	back. It kind of looks like a lower case sigma.
2	When did that policy start that they
3	or is it a universal policy that they would not I
4	guess enter these into the main database, or assign
5	a health physics number, or however they were
6	missed. Is that restricted to a certain time
7	period? Or was that kind of universal?
8	Because it seems like some of them were
9	included in the original DOE files and then
10	apparently some of them aren't like you discovered
11	last week.
12	DR. TAULBEE: Right. It's actually
13	not clear from the site from that standpoint.
14	If there was a page that had a positive
15	dose on it by somebody else, then all of those names
16	were entered. But there doesn't appear to be any
17	consistent timeframe for this particular indexing
18	that occurred. If an individual was on the
19	temporary badge reports, then you may not see them,
20	is what the bottom line was.
21	One of the interesting things, when we
22	started going through the files we did find on there
23	some of these 30-dash numbers that we would see in

1	the file.
2	But as you're going through the entire
3	stack you would see that all of the positive doses
4	had been moved to the front of the stack. And that
5	in the latter half were all of the zeros. So there
6	was kind of a repeat, if you will, of the calendar
7	year, because they are generally chronological.
8	And those didn't always appear in the
9	back half of the electronic file, although they
10	were present there in that particular folder within
11	the box.
12	And so this is where we've talked to DOE
13	and requested that they index all of these. And
14	they're concurring that these all do need to be
15	indexed. But there doesn't appear to be a
16	timeframe of where this was going on.
17	The temporary badge reports and the
18	index cards, we didn't really find any, I don't
19	believe, post-1974 that appeared not to have been
20	indexed yet. So I believe this only pertains to
21	prior to '74, but I can't be sure of that until we
22	get the records and compare them.
23	Does that answer your question, Bob?

1	MR. BARTON: Sort of. I mean, this is
2	a pretty complex thing, I guess, we're talking
3	about here. I mean, we were talking about these
4	visitor badges. And sometimes they're included,
5	sometimes they're not. I mean, it was strange to
6	me.
7	Because I remember, as I'm reading this
8	and I'm seeing, okay, well, if they had zero then
9	they weren't necessarily recorded in the master
LO	file, which makes sense as the site's operating.
L1	But then I'm thinking, well, you know,
L2	in some of the claims we looked at they did have
L3	those visitor badges and some of them they didn't.
L4	So I'm just trying to get my head around
L5	the extent of
L6	DR. TAULBEE: It is extensive. And if
L7	you recall, we captured all of the CPP temporary
L8	badge reports so that we could kind of define the
L9	Class and verify, well, at least what we thought
20	was verified, that all of those records were
21	available.
22	Which brings me to another point, here,
23	associated with those temporary badge reports. As

1	I indicated in one of the emails, we did not capture
2	the other areas. We just captured CPP back in
3	April in order to look at these.
4	So, when we were doing these claim
5	evaluations we always had these CPP temporary badge
6	reports available, but we didn't have the other
7	ones to notice where a worker might also be if there
8	was a discrepancy as to whether they were
9	monitored.
10	MR. BARTON: So, an important
11	distinction, I think, that the Work Group needs to
12	understand, because, you know, both of us have been
13	swimming through these kinds of records. There's
14	a temporary badge report that's kind of a listing
15	of a bunch of workers. And then there's a visitor
16	card that is for an individual worker.
17	And what we have now is that the
18	visitor, you know, card, we'll call it, if that was
19	zero it was not always entered into a temporary
20	badge report, which was a listing of all the,
21	essentially, visitors at a specific location on
22	that day, or that week, or whatever it is.
23	Is that correct?

1	DR. TAULBEE: That's correct, let me
2	say, sort of. From the standpoint of post-1969
3	that appears to definitely be the case, that the
4	temporary badge reports do not necessarily contain
5	even the temporary badge reports for CPP do not
6	necessarily contain all these visitor cards. So
7	that aspect is correct.
8	In the earlier years, prior to like '69
9	timeframe, they appear on both. The visitor cards
10	that we could find, they also appear to be on the
11	temporary badge reports where they were typed in,
12	as well. So, it's a little bit of both across the
13	era.
14	ACTING CHAIR BEACH: This is Josie.
15	Tim, on page 13 of your report, talking about number
16	7. And it says under your first paragraph, "Please
17	note that cards from 1968 through 1972 were not
18	reviewed." Can you just explain that briefly?
19	DR. TAULBEE: Oh, for this individual.
20	Because there was no indication of employment
21	during that time period for him.
22	ACTING CHAIR BEACH: So you just didn't
2.3	bother to go through those gards. Is that right?

1	DR. TAULBEE: Right. We scanned them,
2	but we did not sort through them looking for this
3	individual.
4	ACTING CHAIR BEACH: Okay. I just
5	wanted to be clear on why you didn't look at those.
6	Okay.
7	DR. TAULBEE: It was due to his
8	employment period. That's all.
9	ACTING CHAIR BEACH: Okay.
10	DR. TAULBEE: Or at least his reported
11	employment period, because there seems to be some
12	discrepancies with that too.
13	ACTING CHAIR BEACH: to have a
14	conflict, yes. Okay.
15	DR. TAULBEE: Okay. Well, let me
16	continue on this temporary badge report
17	discussion, here, because it really becomes
18	evident in Case No. 17.
19	MEMBER RICHARDSON: Before we move on
20	this is David Richardson.
21	DR. TAULBEE: Yes, sir.
22	MEMBER RICHARDSON: You're moving to a
23	different case? Can I ask about this one still?

1	DR. TAULBEE: Sure.
2	MEMBER RICHARDSON: Okay. So, you
3	said that the temporary badge reports are being
4	scanned. And I think did you refer to it as
5	being indexed?
6	DR. TAULBEE: Yes.
7	MEMBER RICHARDSON: So, what does that
8	mean?
9	DR. TAULBEE: Well, what happened when
10	the site when this program first started, the
11	site really did not have an electronic database
12	other than annual doses. And we requested from all
13	the sites all of the dosimetry readings, not just
14	annual doses.
15	And so in order to do that they had to
16	go back through their reports, their monthly
17	reports, their weekly reports in the very early
18	years, and they had to start indexing them.
19	And so what the site did these are
20	the regular reports, not temporary badge reports.
21	These are the regular reports. And so they set up
22	a large number of data coders, indexers there in
23	the facility. I want to say they had about 10

people working at one time, going through and 1 typing in all of the names and showing that this 2 person has a record in this file on this page. 3 So, when they got through all of it, all 4 5 of these monthly, weekly reports that they had, they had a large database. And that's what they 6 7 use when they respond to claimant requests at this time. 8 They will go through, they will type in 9 10 the person's name or badge number, and they will 11 get multiple hits, and they will make determinations as to which ones are part of this 12 13 person and which ones are not. Mostly it's due to 14 name misspellings, that type of thing. It's pretty evident to see. But with the electronic 15 records post-1958 it's pretty uniform as far as 16 name spellings go. 17 And so that's the database that they 18 Then they start opening up the files. 19 pull up. 20 They'll go to that page. They'll print out that And they send it to us as part of the file 21 22 for dose reconstruction.

Does that make sense?

1	MEMBER RICHARDSON: That part makes
2	sense, yeah.
3	DR. TAULBEE: Okay. What they did not
4	enter into that index is these temporary badge
5	reports and these visitor insert cards from last
6	week.
7	Let me clarify. Those that were zero.
8	Okay? The ones that had positive dose, those were
9	entered. But the ones that were zero they did not
10	enter. And so that is what we're asking them to
11	do at this time.
12	And I think it'll become clearer on the
13	next case that I discuss as to why.
14	MEMBER RICHARDSON: Yeah, well, I
15	mean, I'm just looking at the reports. Like with
16	the master file card you have the full last name,
17	the full first name, the first middle name if it
18	occurs. You have an AAC number. You have a date
19	of birth. So you've got several things that allow
20	you to verify an individual as a unique person.
21	DR. TAULBEE: Right.
22	MEMBER RICHARDSON: And what's
23	described as the procedure is that a temporary

badge number was assigned if it's not -- if the 1 person doesn't have an assigned health physics 2 they're assigned this temporary badge 3 If I'm understanding properly. 4 5 And so that's not a unique linkage to So what you have is, as it appears on 6 this form, is a last name, as you said, hopefully 7 spelled correctly, and then sometimes one initial, 8 and sometimes two initials. 9 10 So what becomes the thing to say that [identifying information redacted] is the same 11 [identifying information redacted] on a work site 12 that's that large and you don't have a date of birth 13 14 or a unique employment number? 15 DR. TAULBEE: There's really nothing. It's the name, the company, and that's basically 16 The date associated with the temporary badge 17 18 report. 19 MEMBER RICHARDSON: So this person --20 I mean, I'm just playing the devil's advocate. This person said that they worked there in different 21 22 years, but the fact that there's a [identifying 23 information redacted] who appears for a four-day

1	interval several days before, there's going to be
2	the presumption that it's that person.
3	And the other way around. There may
4	have been somebody whose name was [identifying
5	information redacted] and first initial was B who
6	did appear, but we're not sure it's that person
7	because we don't have their date of birth, or an
8	AAC number, or anything like that.
9	So, just for me to understand, the
10	linkage of an individual on this badge report is
11	very, very tenuous.
12	DR. TAULBEE: Yes.
13	MEMBER RICHARDSON: Okay. And the
14	report that I'm looking at has a single day on it,
15	4/28/61. And it seems to be reporting employment
16	over a very short interval.
17	These were temporary badge reports that
18	span one day. And it's not quite clear why some
19	of them are logged on $4/24$. Is there a temporary
20	badge report issued day by day, or is it issued at
21	the end of a week? What's the periodicity of these
22	reports?
23	DR. TAULBEE: Basically, it depends

1	upon the batch going along. You'll notice they're
2	not all necessarily uniform as far as dates. In
3	this particular case, when there's just one date,
4	that means that badge was only worn for one day.
5	And that worker went into the area for that one day.
6	MEMBER RICHARDSON: Right.
7	DR. TAULBEE: Where you see, in this
8	case, 4-24-28-61 means he did wear that visitor
9	badge all week long. And each time he came in he
10	wore the same badge. When he left for the day he
11	hung it back up and the next morning he came in and
12	he could pick it up again.
13	MEMBER RICHARDSON: But in principle,
14	somebody, the badging period for these temporary
15	badges may be very short, and they may have
16	DR. TAULBEE: They're almost always
17	very short.
18	MEMBER RICHARDSON: And they may have
19	many of them.
20	DR. TAULBEE: Yes.
21	MEMBER RICHARDSON: Like, they could
22	have intervals. So the issue of missed dose when
23	you're badging on a one- or two-day interval is

1	really different than a missed dose on a quarterly
2	interval, for example.
3	DR. TAULBEE: Exactly. And that's
4	what I was planning to get to on the next case,
5	exactly that point.
6	MEMBER RICHARDSON: Okay. Yeah, I
7	mean, it's just for me to understand what's
8	happening. But I think I'm
9	DR. TAULBEE: Okay.
10	MEMBER RICHARDSON: Okay, thank you.
11	DR. TAULBEE: No problem. So David
12	gave a great introduction for the Case No. 17 that
13	I want to discuss next.
14	This was an individual who worked out
15	of Central Facilities. He was a [identifying
16	information redacted] and so that was where he
17	worked. And in talking with the dosimetry lady
18	last week who was explaining a lot of this to us,
19	she knew this individual. He worked in the
20	building right next to her during this time period.
21	And she started out there in 1961 timeframe.
22	So, what we did with this individual is
23	we were looking for where was he notentially

1	monitored, because we did not find him in any of
2	our CPP temporary badge reports that we captured
3	back in April. But he did have bioassay during
4	this time period.
5	So, being a [identifying information
6	redacted], he was one of them that we were concerned
7	with, one of the candidates of monitored via
8	bioassay because he wasn't exposed so he was
9	considered a blank, and whether we could find
LO	documentation on that.
L1	What we found in looking for the other
L2	individuals, as well as him, we looked through the
L3	Central Facilities temporary badge reports and we
L4	did not find him for the '63 through '66 time
L5	period.
L6	Where we did find him was on the SPERT
L7	temporary badge reports and the MTR temporary badge
L8	reports. And we found a bunch of them for this
L9	individual. And I would draw your attention to
20	let me see the page.
21	ACTING CHAIR BEACH: Twenty on the
22	report.
) 2	DP TAILBEE: Dage 20 And here I've

gone through all of the temporary badge reports and 1 pulled out each of the dosimeters that were issued 2 to this individual during the 1963-1966 time period 3 where we see bioassay. And this is a case where 4 he had 20 dosimeters assigned to him during this 5 time period. 6 Unfortunately, as I mentioned earlier, 7 this raised a huge red flag with us in that, in his 8 dose reconstruction, we had conducted his dose 9 10 reconstruction assuming during this time period 11 that he was only exposed to onsite ambient dose, levels, 12 environmental because there was no reported dosimetry of him going into an area. 13 14 I think you can see that this is a 15 problem, in that this person was clearly going into Without having these temporary badge 16 reports indexed we were under-assigning the missed 17 dose for this individual. 18 In this particular case, it's not a huge 19 20 amount of dose that we would be assigning, but it is significant, in that with 20 dosimeters, the LOD 21 22 over 2 would be 5 millirem per dosimeter.

his total dosimetry would be 100 millirem with an

1	upper bound of 200 millirem that we would be
2	reporting by our standard procedures.
3	So these temporary badge reports are
4	and can be very significant for the workers. In
5	particular, individuals like this one who didn't
6	routinely work in an area, but did visit them in
7	a non-routine manner, but multiple times.
8	It can be very significant for
9	construction trades workers from that standpoint,
10	in that they could go into these areas. And in
11	fact, we see some of the same issues with
12	construction trades workers. We'll see them at
13	MTR. We'll see them at SPERT. We'll see them up
14	at Test Area North.
15	They're not claimants right now, at
16	least the ones, some of the names that kept popping
17	up to us. But if we were to give a response without
18	these temporary badge reports we would be
19	underestimating their dose, as well.
20	So, this was pointed out to DOE and they
21	have also committed to indexing and entering all
22	of these temporary badge reports, as well.
23	But as David was pointing out, this is

going to be a particular issue with name spellings. 1 In our tables that are on page 19 you'll see the 2 different name spellings for this individual. 3 The pronunciation of his last name I 4 5 can't give here because of the Privacy Act, but if you pronounce the first letter as an individual 6 7 alphabet letter and then the rest of his name, that was how you pronounced his name. 8 So when he's giving his name to a guard who's 9 10 entering it onto these visitors inserts you can clearly see how some of these other spellings came 11 about from that standpoint. 12 13 And so this is not going to be an easy 14 task for the site to do in order to index these and link them to an individual, but it's something that 15 is necessary and needs to be done. 16 this particular this 17 In case, individual wouldn't be part of the SEC due to cancer 18 type, but from a dose reconstruction, for the 40 19 20 percent that wouldn't be part of an SEC, certainly need to get these temporary badge reports 21 indexed such that we can do the DRs correctly and 22 23 include all of the missed dose.

1	So, with that, are there any questions?
2	MEMBER RICHARDSON: This is David
3	Richardson.
4	DR. TAULBEE: Yes, sir.
5	MEMBER RICHARDSON: So, what's is
6	there an algorithm that's being used? How did
7	these variations on spelling get identified as
8	opposed to others?
9	DR. TAULBEE: By hand, myself and Mitch
10	Findley going through thousands of these pages last
11	week and pulling them out.
12	MEMBER RICHARDSON: So, that's I
13	mean, that's admirable and it has it seems kind
14	of not something you could do every day, I hope.
15	DR. TAULBEE: Oh gosh, no. No, no.
16	They're going to have to once they get these
17	indexed they're going to have to start coming up
18	with some kind of algorithm from a search
19	standpoint in order to pull some of these out.
20	Some of it takes some common sense, as
21	well. You know, if you've got a worker who's
22	Cases 17 and 18 are prime examples. Both of them
23	had bioassay and no external dosimetry. That

shouldn't be possible at the site and we knew that 1 We just had to find these records. 2 going in. Where was this coming from? And why were they not 3 part of the system? And we found out why: these 4 5 temporary badge reports and these visitor inserts. So, you know, as people are going 6 7 through some of this they're going to have to be claimant-favorable 8 flexible and from the standpoint of does this person -- is this person 9 10 included or not? 11 Some of the DR responses that we got on the 18 claims, some of the individuals I don't think 12 13 are that individual. It's a common name and this 14 person reported on the DOL form that they worked at the site post-1986 type of timeframe, and we're 15 getting some dosimetry from 1957 under the same 16 names, initials, and it's indicating a visitor from 17 Aiken, South Carolina. 18 So, you know, you've got to use some 19 20 sense as to whether this record is really part of And I think DOE can dump all of these 21 this or not. 22 records to us, and it's up to us dose 23 reconstructionists to go through and sort out which

ones make sense and which ones, especially with a 1 common name, could be somebody else or is likely 2 somebody else. 3 Yeah. 4 MEMBER RICHARDSON: I mean, and 5 you've raised the issue of common names, which is one important problem. And you identified a pool 6 of records that were previously -- I mean, over the 7 last extended number of years have not been used, 8 but now because of a logical problem have been 9 10 pulled in. And that's an important addition. 11 But when there's not а unique 12 identifier, as this case is showing, I mean, it's 13 not simply that it's even the same letters are 14 included in these variants. So there's, what, six 15 letters in some spellings of the name, and yet those are not even six unique things on a permutation. 16 There's different letters added in. 17 There's letter omitted. 18 if 19 And to be you want claimant-favorable and not just justify it based 20 on what looks like it could be sound variance. 21 22 Because sometimes it appears the first name becomes 23 part of the first initial, for example. The first

1	letter of the last name becomes part of the first
2	second letter of the first initial.
3	There's you get into these
4	probabilistic linkage algorithms. But this is an
5	example of one that's really hard, unless you're
6	going to be extremely favorable on linkage
7	variance.
8	Yeah, so I think that poses a problem,
9	and it's not one that typically health physicists
LO	deal with but more like information scientists deal
L1	with.
L2	DR. TAULBEE: Right. In this
L3	particular case there's 10 variations of this
L4	individual's name.
L5	MEMBER RICHARDSON: Yeah.
L6	DR. TAULBEE: But as I'd like to point
L7	out, you know, again, this is a problem for dose
L8	reconstruction that we are working with DOE to
L9	resolve because this is a significant issue really
20	regardless of the SEC from this standpoint. This
21	is something for DRs that we've got to go back in
22	and deal with and redo dose reconstructions that
23	have been done in the past.

1	MEMBER RICHARDSON: I agree.
2	MR. BARTON: Tim, if I could. I'm
3	sorry, I got temporarily cut off there. I was
4	going for my mute button and I hit off. Very
5	clumsy.
6	But what I heard you saying was almost
7	at the onus was on the dose reconstruction. But
8	what we're talking about is an SEC Class
9	Definition. I mean, this would be something that
10	DOL would have to do the digging to, you know, as
11	you said use the common sense and try to figure out
12	if there's a chance the person was at CPP.
13	Maybe I was misreading what you were
14	saying there, but this would be something DOL or
15	DOE would send the records to and then DOL would
16	make the determination. I mean, this wouldn't be
17	a dose reconstruction issue because it wouldn't
18	well, as far as I know, NIOSH doesn't really
19	adjudicate that part of the process. Maybe you can
20	clarify that.
21	DR. TAULBEE: If you recall, the
22	process that we were talking with DOL and DOE about
23	was they would send the claim to DOE, they would

search their records to see if the person appeared 1 on any of the dosimetry for CPP. 2 So, with the temporary badge reports 3 for CPP you can go through and look for these 4 individuals within there. 5 And indexing them, obviously, is the preferred method here. 6 do have to use some logic from that standpoint. 7 But that's just for CPP. 8 What I'm talking about from a dose 9 10 reconstruction standpoint is all of the other This individual worked at SPERT and MTR, 11 areas. He was doing a project out there and was 12 clearly. 13 primarily at SPERT in 1963 and then in MTR in 1964 14 during these time periods. He went there multiple 15 times. So, doing a dose reconstruction for this individual, we need to include these dosimeter 16 badges. 17 So, Tim, this is 18 ACTING CHAIR BEACH: Josie again. While that's true, what Bob was 19 20 pointing out is what we're focused on is how -- will this person be included in the SEC based on these 21 22 And it seems pretty complicated in documents? 23 that sense.

1	DR. TAULBEE: Yes, it is complicated,
2	but it's complicated across the board here at INL
3	that we've
4	ACTING CHAIR BEACH: Right, right.
5	MEMBER MELIUS: This is Jim Melius. I
6	guess let's presume this person worked in CPP and
7	all this gets indexed. Well, we've got to search
8	the index under, you know, the letter at the
9	beginning of the alphabet, or the letter towards
10	the end.
11	DR. TAULBEE: So you use wild cards and
12	you search from that standpoint. I can tell you,
13	I went through all of the 1966 CPP temporary badge
14	reports for this individual and did not find him.
15	MEMBER MELIUS: I'm not saying he's
16	I'm just saying about the process is pretty
17	questionable how it would be implemented.
18	DR. TAULBEE: Well, I mean, the first
19	thing is that they've got to be indexed. And then
20	to determine. I mean, I understand that this is
21	not simple. But, you know, one of the things that
22	can be done as the indexers are doing the indexing
23	is developing dropdown-pulldown menus for

individuals so it gets tagged without the different 1 name variations associated with it. 2 There's different techniques, 3 David knows way more about this than I do, of 4 5 different ways of coding the data in order for this to happen. 6 7 I pointed this out to DOE last week and they are aware of it, as well, of different methods 8 to try and streamline and get rid of the name 9 10 variations from this standpoint. But it's 11 something that we've got to work through for dose 12 reconstruction, as well. 13 MR. FITZGERALD: Tim, Joe Fitzgerald. 14 Did you -- maybe I missed it. On the temporary 15 badge reports, was there any way to validate that there's a complete set historically going back? 16 And this is going back pretty far. And given the 17 status of these kinds of records, which are sort 18 of somewhat below the normal dosimetry records, how 19 20 did you come out on that? I have not found a way to 21 DR. TAULBEE: 22 validate that we've got them all. If you recall 23 during my previous Board presentations, when we

1	indicated that the temporary badge reports were
2	complete what our complete review was is we went
3	through to see if we had temporary badge reports
4	for every month of every year from 1963 through
5	1974, and we did. But with CPP or just at CPP.
6	We did not look at MTR's history nor for SPERT or
7	any of the other areas, just CPP.
8	What ends up happening in hindsight of
9	that aspect is that DOE did index all of the
10	positive doses. So, there were positive doses in
11	every month of every year under the SEC, which is
12	why we went through the temporary badge reports.
13	We saw what appeared to be a complete set that was
14	clearly not a complete set.
15	So that was how that got missed on our
16	end. But I have not seen any other independent
17	numbers that are consistent across time to give us
18	how many temporary badge reports, how many visitors
19	were entering an area. I have not seen that.
20	MR. BARTON: Tim, this is Bob
21	(Simultaneous speaking)
22	MR. BARTON: I'm sorry, go ahead.
23	DR. TAULBEE: If I could just point out

here that, for some of these individuals, whenever 1 DOE receives a request for somebody and, you know, 2 they're doing employment verification and they 3 don't find this person within their system, 4 5 sometimes DOL is using employment verification by association. 6 7 Ιf for this person worked this particular company and during this time period that 8 company had a contract with INL, and therefore 9 10 that's how employment is being effectively set by 11 the Department of Labor. 12 These temporary badge reports are going to help DOE and DOL identify people who worked in 13 these areas that may not have any other indication 14 of them working for a subcontractor. 15 Tim, this is Bob. 16 MR. BARTON: might, could we explore -- I mean, I think it's a 17 very major point, you know, one of the things you 18 presented at the last Board meeting was 19 20 comparison or validation of the fact that we had all the records. And you just mentioned that you 21 22 found temporary badge reports for every month. 23 Αt least in observations, those weren't my

1	necessarily compiled on a monthly basis, but it was
2	really like whenever they decided to put one out.
3	I mean, you find dates all throughout a month.
4	Is there any way, in that validation
5	I don't recall, is there any way to compare that
6	against, for example, what you did with the health
7	physics reports where they said, "we had this many
8	badges issued, " and then you can go and look at the
9	actual log books and count them.
LO	Is there any way to validate the
L1	temporary badge reports against something like
L2	that to make sure that you might have temporary
L3	badge reports in every month, but unless you know
L4	that you have all of them in that month it's I
L5	guess that's my question.
L6	DR. TAULBEE: No, I fully understand
L7	what you're saying there, Bob. And I wish there
L8	were.
L9	We can for some years, I will say that.
20	There are some years in those monthly reports they
21	did report the number of temporary badge reports.
22	But it was not consistent across the time period.
23	But for the months and years that we do have that,

that is something that could be done from that standpoint. But I know it's not complete over the whole '63 to '74 time period.

MR. BARTON: Would that extend to the visitor -- again, we have two different things here which sounds the same. We have a temporary badge report which it says it right at the top. It's the heading of the report and it has a list of workers who worked in that specific time frame, whether it be a week or whatever.

And then you have these visitor cards which are sort of a new -- new information that you uncovered last week at INL. I mean, would that be included? See, this is where I'm getting confused because maybe we have a list of how many temporary badges were recorded, but maybe not a list of all the visitor cards. Because the visitor cards are individual. It's one individual, one name. Ιt lists the company and there's usually a stamp they put at the top that shows the area. And the temporary badge reports are all usually for one area and has multiple people listed. And I don't believe it says the company. I think it says the

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name and maybe an assigned badge number. 1 If you could go into that a little bit 2 3 more. One thing to keep in mind 4 DR. TAULBEE: here is that some of these visitor insert cards that 5 we're talking about do appear on the temporary 6 7 badge reports even in the 1970s. Some of them. Not all of them. 8 The rhyme and reason, from what I can 9 discern from the records, is that if they were an 10 11 Idaho Nuclear Corporation employee, then theirs were entered onto the temporary badge reports. 12 Ιf 13 they were Westinghouse, they were entered. Ιf 14 they were Argonne, they were entered. But, having said that, I also do see a 15 few from some of the construction trades that are 16 H.S. Wright and Arrington Construction and so 17 18 forth. So it doesn't seem to be completely one way the other. Ιt to be both. 19 seems But predominantly in the 1970s, where these visitor 20 insert cards are, that construction trades were not 21 22 uniformly entered onto these temporary badge 23 reports.

1	So, the time period of '69 through that
2	'73 really has there's two records. The visitor
3	cards are the complete record that we found,
4	because they are all listed there in a box and
5	they're all sequential within there. And then you
6	have the temporary badge reports we captured back
7	in April that you can pull up at that time period
8	and see individuals. And those have been typed
9	from those visitor insert cards. So it's kind of
10	a dual record, if you will.
11	MR. BARTON: With the visitor insert,
12	are these the originals from or have they been
13	scanned?
14	DR. TAULBEE: Yes. Yes.
15	MR. BARTON: They're the originals?
16	So you have like almost a deck of cards that you're
17	looking at with the visitor.
18	DR. TAULBEE: Yes. Many decks of
19	cards.
20	MR. BARTON: Okay. Yeah. Oh, I
21	imagine. Okay, thank you.
22	DR. TAULBEE: Okay. So, that was what
23	we found last week that caused us some pause,

Τ	especially from the temporary badge reports,
2	people missing.
3	One individual well, several
4	individuals that we see a big issue with missed
5	dose associated with dose reconstruction, and that
6	is vendors who routinely went into areas, such as
7	the Coca-Cola man or the telephone people. We see
8	their names one day at CPP, one day at NTR, the next
9	day up at SPERT, another day at ARA. They could
10	have five or six of these temporary badge reports
11	per week for the individual. So, clearly this can
12	result in a large fraction of missed dose.
13	Now, we've been discussing inside of
14	how do we actually assign a dose to somebody along
15	these lines and I'm not sure that we've had to yet
16	at INL. But we'll certainly be working on it from
17	that standpoint.
18	But the key was we need to get these
19	temporary badge reports entered, keyed, such that
20	we can then perform better or more accurate dose
21	reconstructions for these individuals.
22	MR. BARTON: This is Bob again. I
23	completely agree with that. But I don't think

1	that's what we're really talking about right now.
2	We're talking about the efficacy of these records
3	to administer the SEC Class, as written currently.
4	So, yeah, absolutely, I mean, these
5	will have a big impact on some dose reconstructions
6	for missed dose. But really we're talking about,
7	can we identify who went into the CPP during the
8	period we're looking at?
9	DR. TAULBEE: I understand, and I
10	believe from these temporary badge reports we can
11	identify these individuals. It takes some effort.
12	MR. BARTON: Yeah. No, that's clear.
13	I mean, like I said before, Tim, no one's been
14	swimming through this stuff more than me and you
15	trying to figure this out. And I'd like to say,
16	I mean, if you read both reports, they're
17	remarkably similar on a lot of the conclusions
18	drawn as far as these 18 claims.
19	The one we're talking about currently,
20	which I believe is case 17 in your report, and it's
21	either observation 2 or 3. I don't have it right
22	in front of me right now.
23	But this person who the draftsman

that we're talking about, they have the internal 1 monitoring at CPP. But we only have these 2 temporary badge reports -- these are temporary 3 badge reports, not visitor cards -- associated with 4 5 MTR and SPERT. And we have other internal monitoring, Ι think associated with 6 7 Facilities, during these overlapping periods where 8 he's monitored internally at CFA, Central Facilities. 9 There's some temporary badges 10 associated with MTR and SPERT. And then you have this -- it's a problem child, clearly, the fact that 11 12 there's this bioassay record that says CPP. Well, I would like to 13 DR. TAULBEE: 14 point out, or at least discuss that bioassay record 15 here some, if now is a good time. Because on the same day that it -- and actually I would like for 16 people to look at that particular record for this 17 individual. And I believe it is on page -- let me 18 find this in the report there, Bob. 19 Just a second. 20 This would be page 11 of SC&A's report. And it says "Facility, CPP." 21 22 Now, my opinion, based upon the weight 23 of the evidence here of him working in SPERT and

MTR, was he was on an annual bioassay schedule 1 because of him potentially entering areas, is why 2 his monitoring was. There was no whole body 3 counter at CPP, okay? The whole body counter was 4 5 at Central Facilities. They did have a mobile lab that would go around, but it didn't start until 6 around the '66-'67 time period, so right in this 7 8 era. But if you look at the Figure No. 3 here 9 10 that you pointed out, Bob, that his present work area is CF-689, which is Central Facilities, 11 Building 689, where the drafting department was. 12 13 And it indicated his years in present 14 location, four years. Backing this up puts us at the same time period of the 1963 through 1966. 15 This questionnaire that he filled out is on the same 16 date of this whole body count. I honestly think 17

As I said, I went through every single page of the temporary badge reports looking for this individual in 1966 and did not find him, even with all the name variations that we found in other

that somebody typed in the wrong facility, or wrote

in the wrong facility for his whole body count.

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1	ones.
2	So, I don't believe this is a CPP
3	monitoring whole body count. I strongly believe
4	that it's Central Facilities, especially when you
5	look at all of his other bioassay in '63, '64, '65,
6	was all Central Facilities.
7	MR. BARTON: Except he had visitor
8	badges at MTR and SPERT during the same time period.
9	So, that's kind of conflicting information there.
10	Yes, I truly believe his office or what
11	have you was probably in Central Facilities. But
12	clearly he was going out to other areas to perform
13	his job as a [identifying information redacted].
14	And the figure you're pointing out,
15	absolutely. I mean, that's why I included it,
16	because this is information that is key to trying
17	to put this puzzle together. It does say the
18	present work area is CF-689, sure. I actually
19	highlighted that. I highlighted the fact that he
20	puts in four years.
21	The one thing he doesn't check off there
22	at the bottom of the figure is "list the other areas
23	you work, " "worked at MTRS, " and there's a box that

1	says "none" and it's not checked. And this kind
2	of leads me to say that he probably didn't check
3	that because he's like, "well, you know, what do
4	you want me to list every other place at INL that
5	I've gone to?"
6	And like you said, one possibility is
7	that it's a typo, but that doesn't honestly make
8	me feel a whole lot better about it. Because what
9	if you have other typos that go the other way?
10	DR. TAULBEE: I mean, there's no record
11	set that's ever going to be 100 percent complete
12	with no errors. I'm sorry. We're talking
13	hundreds of thousands of records here.
14	In this particular case, to me, he
15	didn't check "none" because he was routinely not
16	routinely, but he was going out to SPERT and MTR.
17	And so, you know, there are other areas that he was
18	going to.
19	But it says contractor area,
20	consecutive months in area. Well, his contractor
21	was the same one that he's working for, INC. The
22	area is different ones. Consecutive months in the
23	area. If you look at his temporary hadge reports

1	he never spent a month in any of those areas.
2	They're all one day here, one day there, or a week.
3	MR. BARTON: I agree completely. It
4	can never be 100 percent. That's an unattainable
5	goal.
6	MEMBER ROESSLER: This is Gen. I'd
7	like to make a comment on that.
8	I think that's the overriding thing
9	that we're dealing with here. We have human error.
10	That's always going to happen. There's never 100
11	percent certainty.
12	And I think what we have to keep in mind,
13	in the background of our minds, what we're really
14	going at is that we have to accept the fact that
15	it's not 100 percent certainty. And then come up
16	with some way of determining how much uncertainty
17	in these records is acceptable.
18	And this goes across the board for the whole thing.
19	I think that's our main challenge.
20	ACTING CHAIR BEACH: Gen, this is
21	Josie. I couldn't agree more. I think errors in
22	DR is one thing, but in the context of what we're
23	talking about now, the Class Definition, we have

to be precise and it has to be clear-cut. 1 weight of evidence has never been used in this 2 And I'm having a hard time with that. situation. 3 4 MEMBER ROESSLER: Exactly. 5 you've pointed out this is a new concept, I think that we've not dealt with it. We're getting into 6 7 something that has probably been applied in other fields. 8 9 It just seems to me we need an expert 10 evaluation on how much uncertainty is acceptable. There's going to 11 I think we have to accept some. 12 human There's human be error. error in everything. 13 14 ACTING CHAIR BEACH: I think in an SEC 15 context it's not acceptable. It has to be claimant-favorable. And in this case I'm afraid 16 it's not, at this time. 17 You can't be 100 18 MEMBER ROESSLER: And if we say we have to be 100 19 percent certain. 20 percent certain, we know right away we can't be. So, we have to think about how would we err in the 21 22 other direction. What are the consequences of --23 well, the only way I can put it is erring in the

1	other direction. And that would be to, it would
2	seem, include claimants who clearly have no
3	exposure.
4	And I guess the bottom line that I keep
5	thinking about is we have a responsibility to the
6	claimants. We want to be claimant-friendly. We
7	also have to think about what the burden is or
8	taxpayers if we make the wrong decision.
9	MEMBER MELIUS: This is Jim Melius.
10	I'd like to weigh in a little bit.
11	I mean, I think that our experience has
12	been that the record systems at many DOE facilities
13	are not supportive of limiting a Class Definition
14	to monitoring or to specific work areas, whatever.
15	Because people moved around, because records just
16	weren't, you know, record systems weren't
17	established for that.
18	I think we've been, you know, Idaho may
19	be better than some, but I think what we're the
20	history of working through this SEC has shown that
21	it's not as straightforward as was first presented
22	to us.
23	And I'm not faulting Tim, but I think

that first we found out that what was the policy 1 in terms of monitoring by the work area had changed. 2 So we have a time period that can't be done by work 3 area, the later time period of the SEC. 4 And then we have this other. 5 We have a record system that I don't think has even been 6 7 explored. These whole temporary ones. Initially, were told that the record monitoring was 8 complete. Well, obviously there was a whole other 9 10 set of records that weren't complete. And it's 11 going to take some time. 12 And I guess one of my concerns here is 13 how long is it going to take to set up a system, 14 get all this stuff done, and even for us to evaluate it as to whether -- how complete it will be, and 15 how feasible it will be to do the kind of individual 16 look-ups that will be needed given the absence of 17 identifying information on many of these records, 18 and the errors that came through for that. 19 20 Again, the one case we looked at may be an outlier in that maybe it's not a common name, 21 22 but to have 10 misspellings of a person's name on 23 these records over a relatively short period of

1	time, and some pretty significant misspellings in
2	terms of being able to look up within the alphabet,
3	indicates how complicated this will be and how
4	difficult.
5	And I don't think we can even get to your
6	point, Gen, of how do we estimate the uncertainty
7	because I don't think I think we're far from
8	having enough knowledge of the record system and
9	how complete those record systems are to be able
10	to judge that.
11	MEMBER ROESSLER: I agree, Jim.
12	That's at the back of my mind is that we cannot
13	guarantee 100 percent. So, when do we make the
14	decision? What is the weight of evidence here? I
15	just think that's what we should be keeping in mind.
16	MEMBER MELIUS: Yes, yes.
17	DR. TAULBEE: If I could say something
18	here that Dr. Roessler just alluded to, in that by
19	you know, if, say, the designation were to change
20	to all workers at the site, what you're setting up
21	is a situation where you have people that indicated
22	in their computer telephone interview that, say.
23	They worked at Test Area North. The locator card

indicates that they worked at Test Area North. 1 Their dosimetry all indicates they worked at Test 2 Area North on a month by month by month basis. 3 Their bioassay indicates that they worked at Test 4 5 Area North. But what you're going to be proposing is that they were exposed to plutonium in the cells 6 and laboratories at CPP. 7 Yeah, but what about MEMBER MELIUS: 8 all the claimants who've already died? 9 There's 10 not going to be an interview on them and I think we're not going to be able to rely on their 11 survivors to know their work area. 12 13 I mean, I think -- like we've So, encountered in many other sites, Tim. 14 limited to what's in a record system for ensuring 15 that people are in -- worked in a particular area. 16 And it's not in general proven to be a very feasible 17 18 system. 19 Well, what I'm getting at DR. TAULBEE: 20 here is the weight of an evidence here. And these temporary badge reports are typically for one day, 21 I do believe the maximum I've ever seen 22 or a week. 23 is a month.

1	So, from that standpoint, when we cast
2	the net for CPP of who would be included, we made
3	it fairly unrestricted from that standpoint, of a
4	single dosimeter badge.
5	And so, to me, the chances of missing
6	somebody under one of these temporary badge reports
7	is very low. They would not be in the CPP Class.
8	And in fact, the two that we've
9	identified, two out of 881, one of them ends up in
10	the Class, that would be Case No. 18. Number 17
11	does not based upon his other area dosimetry.
12	So, that's what I think some of the
13	uncertainty that Dr. Roessler is getting at, you
14	know, kind of a weight of the evidence, we're never
15	going to be 100 percent, but this is pretty darm
16	close.
17	MR. BARTON: This is Bob. I agree with
18	everything Tim just said. I mean, it's extremely
19	close. But it is not 100 percent, so it sort of
20	becomes a weight of evidence is a tough term to
21	use when you're talking about claimants.
22	But, you know, I don't think we can shoo
23	away Case No. 17 on a typographical error. And if

we do, then you have to consider if there are other 1 typographical errors that are going to, I guess, 2 hinder other claims from being accepted into this 3 because of it. 4 5 And Tim is absolutely correct. You're going to have cases where all the evidence points 6 to someone being in another area, like Test Area 7 North. And we're never going to get to 100 8 And frankly, I'm not sure we could ever 9 percent. 10 have gotten there, really, with any of these sites. 11 I mean, the record-keeping at INL is pretty incredible, in my opinion. Definitely the 12 13 best that I've ever encountered working in this 14 program for going on 10 years now. I mean, it's incredible record-keeping. 15 And it becomes, I think, a question of 16 opinion and policy on what's acceptable. 17 the acceptable error rate? And I think that's what 18 everyone is struggling with. 19 20 ACTING CHAIR BEACH: Well, and Bob, something else to add to that is, how many records 21 22 of these has SC&A searched through, how many 23 records has NIOSH searched through to come up with

2	DOL is going to have to be doing these
3	searches. They're making those decisions based on
4	the Class Definition that we give them. And it's
5	going to be clear-cut for them. That's where my
6	concern lies. Because professional judgment,
7	weight of evidence, it all shifts over to the DOI
8	side. Am I not correct in that? When this Class
9	Definition goes through, then it's their
10	determination.
11	DR. TAULBEE: It will be DOI
12	determining, but they will be sending a request to
13	DOE to ask them, "Do you see any monitoring for this
14	individual in CPP?"
15	And so, as soon as they find a single
16	dosimeter within CPP, then they're part of the
17	Class and it goes back. "This is the documented
18	proof that this person is part of the Class." And
19	they don't go through all of these variations.
20	MS. LIN: This is Jenny. $M_{ ilde{y}}$
21	understanding is that this Class Definition has
22	been vetted with DOL. And to date, DOL didn't
23	express any concerns that they are not able to move

these 881?

1

1	through this SEC Class. So, please correct me if
2	I'm not right on this, but that was my understanding
3	of the based on our last discussion with DOL.
4	DR. TAULBEE: You are correct, Jenny.
5	The nuances that we have found in the past six
6	months or so of doing this evaluation are
7	effectively that. I mean, that's part of why we
8	modified the Class Definition
9	(Telephonic interference)
10	DR. TAULBEE: This is something that
11	DOL doesn't even, I guess, in a sense, consider.
12	Because in the past they've not seen them, from that
13	standpoint.
14	What DOL indicated during our
15	discussions last year associated with this Class
16	was that they felt the dosimetry records were
17	sufficient in order to place an individual in the
18	area. And that was all that they were looking for.
19	MEMBER RICHARDSON: Yes, this is David
20	Richardson.
21	I mean, I believe DOL would say that.
22	And I believe that they don't appreciate the
23	complexity of what they're agreeing to.

So, I mean, if you start with a master 1 roster which has reconciled all the name variants 2 into something which provides you with -- I mean, 3 one approach to this is all possible "also known 4 5 as" names. So, all variants that are encountered in all the records. 6 And somebody has to evaluate that those 7 are indeed the same individual. And in this case, 8 there's no other piece of information, like date 9 10 of birth or unique worker ID number. So, I don't 11 quite see, right at this point, how you do that, 12 you create that unique list. 13 But that's what they want to be able to 14 do. They want to be able to refer to a list, search 15 all name variants, and say are they on the list or not. 16 If they have to sit down and do judgment 17 I don't believe there's anybody -- I mean, from my 18 experience with other parts of DOL handling kind 19 20 of the non-radiological side of this, they're not staffed right now, as I understand it, to be making 21 22 these types of judgments that involve, as I said, 23 either probabilistic linkage algorithms,

something that's going to be fairly deep 1 in information science. 2 Like Dr. Melius pointed out, you can't 3 go to an alphabetical listing of names and find this 4 5 person. And, again, as the discussion said, I 6 7 think you've done an incredible job of being able to document how, in a detailed kind of detective 8 search, one can make sense of an individual's 9 10 history with a high level of kind of logical 11 consistency. 12 But, to me, it becomes a question of 13 who's going to implement this given the problems 14 with at least this section of the records. again, pointing out this section of the records 15 doesn't -- is not so important for a large group 16 But I think it's going to be a large 17 of people. -- it's a large amount of information that has to 18 be processed and reconciled. 19 20 And that's going to be, you know, my experience working with these types of records is 21 that's something which requires quite a staff to 22 23 do. And it's never going to be reconciled in any

way that's at a high level of certainty. 1 Ιt involves a lot of judgment when you have families 2 that are working on the same site, and fathers and 3 You don't have dates of birth. 4 5 So, this is why they're recording all these juniors and seniors and the thirds. 6 7 there are a lot of people, at other sites, with the same name and first initial. And you're trying to 8 keep track of them. 9 10 And here they're coming into records 11 that don't have а clear time-recording 12 periodicity. And there's multiple records over 13 short intervals of time. It's a lot of data 14 cleaning, as I see it. And I would also point 15 MEMBER MELIUS: out that the Department of Labor approved a Class 16 Definition which has been changed once. 17 NIOSH -- and I don't think Department of Labor is 18 this whole temporary file problem, 19 aware of temporary monitoring file problem. 20 And we still don't know how complete 21 22 those temporary files are, because I think you 23 indicated that earlier, Tim.

1	DR. NETON: Yeah, I think that's true,
2	Dr. Melius. This is Jim Neton. I was going to
3	point that out. And I don't think the Department
4	of Labor knows about these index cards.
5	MEMBER MELIUS: Yeah, yeah.
6	DR. NETON: One thing that I'd like to
7	point out that's concerning me, at least, is that
8	the Class Definition requires 250 days of work at
9	CPP.
LO	And it does say based on one film badge,
L1	or visitor one TLD or film badge, because I think
L2	during that time period a person could have worked
L3	at CPP and only had a badge exchange once a year.
L4	MEMBER MELIUS: Right.
L5	DR. NETON: But now when we're looking
L6	at these visitor badges they certainly don't rise
L7	to the 250-day level, in my opinion.
L8	I don't know how one would deal with that. I'm just
L9	sort of pointing that out. You still have a
20	250-day monitoring requirement to be eligible for
21	the Class. And these are one-day badges, I mean,
22	very clearly, I think. They couldn't be one-year
23	badges.

1	So I don't know how one reconciles that
2	with the 250-day monitoring requirement. Just a
3	comment. I don't know what the answer to that is.
4	DR. TAULBEE: This is Tim.
5	(Simultaneous speaking)
6	MEMBER MELIUS: This is Jim Melius.
7	I've raised that issue before because it sort of
8	complications this issue. As I recall, and Tim or
9	somebody can correct me, is that, yeah, again, it's
10	you have one badge and it can cover a whole year
11	or whatever, time period, one record.
12	And so in that sense, it may be the best
13	we can do. And as I recall, there weren't any other
14	records that would provide a way of supporting
15	that, or alternative ways of determining the 250
16	days, within that area.
17	DR. NETON: Right, but I think that was
18	independent of having these visitor badges
19	themselves, which is a slightly different
20	situation.
21	MEMBER MELIUS: Yeah. But then the
22	corollary question is, well, you know, say we
23	dismiss the temporary. We don't include the

temporary badges in that. Well, what if there's 1 somebody that went in there once a month for a week 2 or something? I mean, we don't know enough, we 3 don't have enough level of detail to know who's 4 5 represented within those groups. I mean, I'm skeptical, but I don't know 6 7 the work practices there. And there may be certain 8 types of people that were assigned to other areas 9 but went in there guite frequently under 10 temporary badge. Construction workers, 11 draftsmen, other monitoring people. I don't know. This is Tim. 12 DR. TAULBEE: If I could 13 answer some of these questions that were posed 14 here, or provide clarification, if I can. The decision for one badge was due to 15 the potential for annual monitoring of routine 16 people in the area, such as secretaries or clerks 17 or somebody who did not routinely go into the hot 18 sides or rad sides of the buildings, but they 19 20 clearly worked at CPP. So it would be possible for somebody, 21 22 from that standpoint, to be monitored once per year 23 that they were there. That does not really apply

1	to these temporary badges, although, from my
2	thought process, as far as the Definition, if you
3	had one badge in the area, that was sufficient to
4	get you in the Class. And then if you had 250 work
5	days there on the site in that time period, then,
6	to me, that would include you as part of the Class.
7	But nobody that I have ever found or
8	these temporary badge reports had one issued
9	most of them were a day, many are a week. I seem
10	to recall once seeing one that appeared to be for
11	a month. And that was it. Never more than that
12	time period, certainly not a year, from that
13	standpoint. The year was only for routine
14	monitored people that were part of their master
15	system.
16	MEMBER MELIUS: My concern with that,
17	Tim, is it's a limited sample.
18	DR. TAULBEE: I understand. I'd like
19	to say I've been through thousands of these pages,
20	so.
21	MEMBER MELIUS: Well, until we get it
22	indexed in some way it's hard to judge. And I
23	don't necessarily think we have to wait that long.

1	but I think it's I guess I'd like to have more
2	assurances on that. If we're going to exclude
3	these badges from the Class.
4	DR. TAULBEE: I would not propose to
5	exclude them from the Class, by no means. I'm
6	proposing that they are included. And if you
7	appear on one of these CPP temporary badge reports,
8	you're part of the Class. Or a visitor insert
9	card.
10	MEMBER MELIUS: Well, then that
11	doesn't answer Jim Neton's question on the 250
12	days.
13	DR. TAULBEE: That's the part that I
14	would leave up to DOL to determine whether or not
15	they consider this person then working in that area
16	for 250 days. That's part of employment
17	verification.
18	MEMBER MELIUS: That's a good way of
19	kicking the can there. You're saying DOL would
20	determine whether they worked in the CPP for 250
21	days?
22	DR. TAULBEE: I think employment
23	onsite, but that's, again, up to DOL.

1	MEMBER MELIUS: Oh yeah, onsite
2	employment. So you're going back to the original
3	Definition?
4	DR. TAULBEE: That's correct.
5	MEMBER MELIUS: Okay. Then our
6	concerns about the temporary badge is still
7	personally, I just don't think we know enough about
8	how complete they are at this point in time. And
9	how feasible it is to be able to use them, you know,
10	the look-up issue.
11	ACTING CHAIR BEACH: Hello? This is
12	Josie again. Tim, did you have more on your
13	report? I don't know if you covered your last case
14	fully yet.
15	DR. TAULBEE: The last case was one
16	that I went into a great deal of write-up, because
17	we spent a lot of time looking for dosimetry for
18	this individual. And we did not find him on any
19	of the temporary badge reports during the time
20	period of his employment, and certainly not under
21	CPP.
22	We did look through all of the 1973
23	cards, visitor insert cards, for this individual

and did not find him. 1 There are some discrepancies with his 2 employment verification with regards to 3 Department of Labor files that were sent over in 4 that we're seeing some dosimetry for him, in a time 5 period where employment was not verified. 6 And so there's -- and some work for a contractor 7 8 that appears to have been an NRF contractor at that time period. 9 10 And I would like to point out that, from a temporary badge report standpoint, we did not 11 look at or capture any of the NRF temporary badge 12 13 So, many of the construction trades reports. 14 workers that would do work over there, we did not capture them, we did not look at them for any of 15 these individuals. 16 So, if they're onsite, this 17 individual had indicated, at least the survivor 18 CATI had indicated, they worked around spent fuel 19 20 pools, they very well could have been over at the 21 NRF as well. And we just didn't find anything that indicated he worked at CPP during the covered time 22

period.

23

And that really pretty much summarizes 1 the three issues that we did follow-up on last week 2 from that standpoint. 3 The rest of the cases I felt were pretty 4 5 straightforward as far as being able to resolve whether they were at CPP or not. 6 Tim, could I ask on that 7 MR. BARTON: 8 third case. I'm scratching my head. How did you determine that their dosimetry was incomplete? 9 10 Like, how did you flag them in the first place? 11 DR. TAULBEE: We flagged them based The interview indicated that 12 upon interviews. when he went out of an area, he was surveyed, which 13 14 is consistent with the multiple interviews we've conducted out at the site. We've conducted like 15 60 or 70 interviews. And many of the construction 16 trades workers indicated that exact point, that 17 when they came out of the contamination area they 18 were surveyed by health physics. 19 20 So, I felt the individual clearly had been in contamination areas. And it might be the 21 22 1974 time period when he was monitored at EVR 2, 23 or out at RWMC at the Burial Grounds that he was

Τ	referring to, as well.
2	But since he did mention working around
3	spent fuel pools, there are clearly some at MTR as
4	well as Test Area North. There is the staging area
5	at CPP, and then at NRF there's also spent fuel
6	pools there.
7	So, that was one of the triggers where
8	we felt that there was some additional dosimetry
9	out there we felt we should be able to look through
10	and find.
11	And with him, like I said, we looked
12	through the CPP and we did not find him. He could
13	be on one of the MTR visitor cards that we'll be
14	scanning the week after next, but those weren't
15	organized chronologically that made for an easy
16	look from that standpoint. But we certainly did
17	not see him at any of the CPP dosimetry records that
18	would place him at CPP during the SEC time period.
19	Does that answer your question, Bob? I
20	rambled a lot there. Sorry.
21	MR. BARTON: Yeah, no, it does. I
22	think we kind of highlighted the it was a CATI
23	with a survivor that mentioned the monitoring going

1	out of an area. Thank you.
2	Well, that would strictly be for
3	contamination. Because, I mean, it kind of seems
4	like if they were already badged, I guess they would
5	be looking for contamination on the shoes or
6	something like that? Is that what the thought
7	process is?
8	DR. TAULBEE: Well, many of the
9	construction trades would come in, especially
10	pipefitters in particular and insulators, would
11	come into an area and do a job. And they would
12	dress out in PPE. And upon exit they were surveyed
13	out of the area.
14	But they might only be there a few days,
15	you know, two to three days. I mean, that's it.
16	So it wasn't a long-term thing. But it was
17	something that came up consistently during the
18	interviews coming out of contamination areas.
19	Josie?
20	ACTING CHAIR BEACH: Yes, I'm still
21	here. I was just waiting. So, does that conclude
22	your report then, Tim?
23	DR. TAULBEE: Yes.

1	ACTING CHAIR BEACH: Okay. And any
2	questions for Tim? Any other questions I should
3	say.
4	If not, we'll move on to SC&A's report.
5	And Bob, I believe you're going to take that on,
6	correct?
7	MR. BARTON: That's correct, Josie.
8	ACTING CHAIR BEACH: Alright.
9	Review of Class Definition
10	MR. BARTON: Okay, so, essentially I'm
11	going to start at the end with what our summary
12	recommendation was, which has changed somewhat
13	considering the additional data capture that
14	happened last week.
15	Basically, we had six observations,
16	four of which are really pertinent to the SEC Class
17	Definition. Two of them related to things we saw
18	in the records that might give us pause, but upon
19	running them down we felt we were on solid ground.
20	One of them had to do with some of the
21	supplemental records we had were undated and do not
22	contain headers, but they were clearly dosimetry
23	records in two of the claims. But if you really

started to put the puzzle pieces together on that, 1 it appears this was just a format that they used 2 relative to the SL-1 incident. 3 At least that's what we found for these 4 5 two cases in which we found records with dosimetry but didn't have, again, no dates and no column 6 7 And the way we were able to kind of come to that conclusion is you find, you know, 100 pages 8 later, you find records that had similar numbers 9 10 for penetrating and non-penetrating external dose 11 that kind of lined up with the undated records we And those were clearly associated 12 were seeing. 13 with the SL-1. 14 So, even though that's kind of a red flag when you first look at them we were able to 15 figure out that it really wasn't a problem. 16 So that was not really pertinent to our discussion 17 here. 18 The other that 19 one wasn't really 20 pertinent is we found one record where they transmitted what I refer to as a career dose total. 21 22 And it'll say something like, you know, 1963-1968, 23 and it'll give the total external exposure.

talked about, and 1 As we Tim mentioned numerous times, this was sort of part of 2 an efficiency measure in the early years where we 3 didn't really need to see each individual dosimetry 4 5 results, but as the process evolved we figured out that we did. And in one of the 18 cases we noticed 6 7 that the career dose that was reported excluded a couple of years in the late '60s. 8 And so we said, well, the only point 9 being is those 10 there you can't use totals 11 necessarily to administrate the Class, if it's accepted as it's written. 12 So those were the two observations that 13 14 didn't really necessarily affect the SEC Class Definition, but were sort of germane to the whole 15 16 process. Now we get to the four that we sort of 17 mentioned in our summary recommendation. 18 them we have just discussed extensively. 19 20 were Cases 17 and 18 in Tim's report. And those were the ones that had bioassay at CPP and we did 21 22 not have corresponding dosimetry. 23 One of them, obviously, is sort of, I

quess, pragmatically adjudicated based on the fact 1 that those visitor cards were uncovered for the 2 And actually the dates on them really 3 do line up nicely with when the, I think it was an 4 in vivo result was taken. The other one, again, we talked about 6 This is the one where it might be a 7 extensively. 8 typographical error where we do have visitor badges associated with MTR and SPERT. We have internal 9 10 monitoring over the same time period associated 11 with Central Facilities. But then that fly in the ointment, the in vivo record that says CPP. 12 13 So, those two were really the big ones, 14 where you have evidence they were in CPP and no external monitoring. One of them we found the 15 visitor badges and one of them could possibly be 16 It's a handwritten record, so I don't 17 an error. know. 18 Again, as I said before, that one still 19 20 kind of gives me pause, because if we're going to talk about typographical errors, the human error, 21 22 as Gen pointed out, is always going to be there. 23 You're never going to be at 100 percent.

I guess the remaining two are the ones 1 that would qualify for new conversation. And this 2 would be Observation 1. And this is related to 3 something I had never seen before in the INL 4 claimant records. And I refer to it as a box and 5 record number. And essentially what this is -- and 6 7 Tim probably knows way more about this than me. And I think he's got some material that he might 8 want to show the Board on this. 9 10 basically it's an electronic But 11 database search. And it pops out the box number and the record number presumably within the box of 12 13 where you're going to find this person's dosimetry 14 records. 15 these I'd never seen before. Again, when we did the supplemental dosimetry 16 request for the 18, five of the 18 contained them. 17 The others did not. 18 So, one of the things we did upon seeing 19 20 this new information is try to match up those record numbers that are in this listing with what we're 21 22 actually seeing in the dosimetry file which was 23 transmitted to us.

And they're always either 30-dash-some 1 number, or as Tim had mentioned, the visitor badges 2 were 50-dash-something. And so you could take 3 that listing and then go look in the actual file 4 5 and say, and it's really written right on the top of the page. "Yes, there it is, there it is." 6 But for one of the claimants, and this 7 is Observation No. 1, the very first listing has 8 a handwritten note next to it that says "not found." 9 10 And if you look in the file, you can't find that record number either. 11 Now, when you put the pieces together 12 based on the limited five claims we had these for, 13 14 you can kind of figure out, and it's written in my 15 report, that it was just the record apparently that was not found, not the whole box. 16 And also that it's very likely associated with records in 1961. 17 That's based on the record number, the box it was 18 in, and sort of neighboring records based on that 19 20 cataloguing number. So really 21 it isn't necessarily pertinent that particular 22 for case, in 23 pragmatic sense, but it did give me some pause that

we've never seen these before for other claimants. 1 So, at least from my view, we really 2 didn't have a notion to what extent you might have 3 a listing of all these records you should have, but 4 5 you can't find them. And so that gave me some 6 pause. 7 And I know Tim's got a response ready So I'll pass it over to him. 8 9 DR. TAULBEE: Okay. Thanks, Bob. 10 Let me just try and do some clarification here on 11 this particular issue. The printout that you're looking at is 12 from their indexing database. 13 This is what they 14 go through for the individual, in that some people 15 will have 30 pages of records here. And they go through each one when they pull the person's name 16 up, and they go to that particular file. 17 The record, by the way, is a file. 18 the electronic file within their system. 19 20 is where this person's supposed to have appeared. And the document type was an area exposure report 21 22 which is their routine dosimetry. The box number 23 off to the right is what box these files came out

1 of.

And so when they were doing this indexing that I was describing to David earlier they would take a box of these area exposure reports, they would take a folder and they would scan it. And then they would tag that particular folder with that 30-dash, I think in this case it's -10802.

And then when the indexers went through the process of building the database they would enter every person's name that appeared on every page of that file. And so this particular individual was tagged on page 305.

So, whenever they go through then to develop a claim they print all of these out. They go through their database. They open up each of these files, extract that particular page, and send it to us for dose reconstruction.

Now, in some cases, some of these files aren't necessarily -- got removed, got updated, the number changed, or whatever reason that they got a "not found" in this particular case. What they're supposed to do is go through and determine

1 was this person on the page or not from that standpoint. 2 The individual that you pointed out 3 here I would like to point out had three name 4 5 changes during their time period at INL, three last So they might not have found it 6 name changes. under one name, but that person might be on that 7 8 page still. The box is available. 9 The page that I 10 on the shared directory this morning put up identifies what the title of that box is. 11 1961-1962 dosimetry files. And you go to the far 12 13 right of that and it's for the MTR reactor area, 14 for test reactor area. 15 So, as you pointed out this really isn't germane from the time period standpoint. 16 also not germane from the location standpoint. 17 This isn't a CPP file. This would be for MTR, for 18 their work out at MTR. 19 20 One thing that I did want to -- in your writing that did cause me some pause here, and part 21 22 labeled this particular of why Ι file 23 misunderstanding, is that you indicated that we

1	went through all of the CPP dosimetry and we said
2	that they were complete.
3	And I still stand by those particular
4	statements from that standpoint, because we went
5	through all of them and we compared a monthly basis
6	the number of people monitored in the area versus
7	the number reported in health physics.
8	But we only did it for CPP. This
9	particular box is MTR. We did not look at all of
LO	the other areas.
L1	And if you recall during my
L2	presentation to the Board or the discussion that
L3	we had possibly in the September time frame we found
L4	another hole back with CX dosimetry.
L5	In July they provided us the CX
L6	dosimetry. This would be for the construction
L7	area at CPP. And when we went through we found that
L8	there were 22 pages that hadn't been scanned.
L9	We were able to see that, and we went
20	back to the site. They went and pulled that
21	particular box and said sure enough, these pages
22	got missed from that standpoint. And they
23	re-scanned them and added them to the particular

files. 1 So, from that particular standpoint, I 2 solidly stand behind all of the CPP area exposure 3 reports, that those are complete for CPP. 4 This new hole that we found is the 5 temporary badge reports and the visitor inserts. 6 But the original area exposure reports for CPP are 7 complete and have been checked. 8 Other areas we 9 have not. 10 MR. BARTON: I quess, and I got cut out there for a second, Tim, but I heard almost all of 11 12 what you had to say. 13 Again, it from was a concern standpoint, that, I mean, the notion that a certain 14 record was missing. Even though, like I said and 15 you just confirmed, it was not related -- that it 16 was not related to CPP, I didn't know that part 17 about it, but I could surmise, and I put my argument 18 in our paper that it was not from the SEC period. 19 20 But it gives me pause that I've only looked at five of these listings, and so for the 21 rest of the claimant population, and really the 22 23 workforce in general, the potential claimants,

1	it's a bit troubling when you see, oh, this record
2	was not found. Even though it doesn't make any
3	difference, really, for this particular claim in
4	the pragmatic sense, you know.
5	I guess well, maybe it would be
6	better if you expounded a little bit on that
7	verification process. Because as I seem to
8	remember, in most cases you found more records than
9	were reported in the health physics summaries. Is
LO	that correct?
L1	DR. TAULBEE: That's correct, yes.
L2	MR. BARTON: Well, and you know, on
L3	first blush, it certainly seems like the result of
L4	that would be beneficial. But I guess I would say,
L5	well, how many if they don't match up, how many
L6	more might there be, if that health physics total
L7	doesn't really reflect the number of records that
L8	we have?
L9	You know, this whole thing comes all the
20	way back to there's some uncertainty, we can't put
21	a number on it.
22	DR. TAULBEE: One thing that you're
23	not, or maybe people aren't understanding here:

1	this dosimetry listing that you've got here is from
2	an indexed database. There could be, and likely
3	are, human errors within that database, as well.
4	So, this person got tagged as being on this
5	particular page within this file, and they very
6	well may not be, from that standpoint.
7	So, this is just one of those potential
8	uncertainties that we run into in looking at a large
9	volume of records here.
LO	ACTING CHAIR BEACH: Tim, this is
L1	Josie. Is there any way to know if these temporary
L2	records are accurate and complete?
L3	DR. TAULBEE: For certain time periods
L4	we can do that for temporary badges, yes. But for
L5	other time periods, no.
L6	We could go through when they reported
L7	the temporary badge reports and go through and do
L8	a tally when they included them on those dosimetry
L9	roll-ups. Yes, we could do that. But I know I
20	can't cover the entire time period.
21	ACTING CHAIR BEACH: So, you're saying
22	you could do some of them, but still not all of them.
23	You could go through and see what certain time

1	periods were accurate and complete. But there's
2	still going to be some that you're not able to do
3	that with.
4	DR. TAULBEE: Right, because I don't
5	have a secondary, independent method of doing it.
6	A separate report that issues it, or discusses it.
7	MR. FITZGERALD: Tim, Joe. I guess
8	one thing that concerns me, given your description.
9	You know, yes, there is an accepted fact of life
LO	that there will be errors in an index. You know,
L1	even with an SEC process, the records, the first
L2	order records may have errors. That's just the way
L3	it is.
L4	What strikes me as a little different
L5	here, though, is that's kind of an objective
L6	process where if you are in the database, you're
L7	in, or in the index, you're in, and if you're not,
L8	you're out. And, you know, it's certainly up to
L9	DOL to police any errors that may crop up. And
20	that's happened in the past.
21	In this case, and I think you keyed on
22	this description in your report, one has to be a
) 2	little hit more subjective and use a hit of a weight

of evidence approach because you do have bits and 1 pieces of other records, secondary records, 2 temporary badging reports that can facilitate 3 locating a worker, or not locating a worker in CPP. 4 5 But in this case, you do have to be a little bit more subjective and exercise judgment. 6 And I'm very familiar with that process. 7 You know, certainly that is a philosophy and approach that 8 quides dose reconstruction, and particularly when 9 you don't have a black and white set of records. 10 You have to use weight of evidence. 11 12 something that, in this case, And 13 underpins an SEC Class Definition, however, when 14 one moves toward that subjectivity as opposed to an objective approach, that's a bit unprecedented. 15 I quess I am trying to think of a 16 situation where a weight of evidence approach has 17 underpinned an SEC Class Definition. 18 I know it's not direct, but it in a sense 19 20 is the gateway because if the weight of evidence conclusion is, and judgment is that person likely 21 wasn't in CPP then certainly they would not show 22 23 up on the SEC roster.

1	So, you know, and this gets back to
2	Gen's original comment of how much uncertainty. I
3	guess I would add how much subjectivity versus
4	which I think DOL tends to rely on a more objective
5	basis can one have in a Class Definition.
6	And I guess I keep coming back to that
7	because that just feels like we're walking down a
8	different path than we have in the past. I don't
9	know if you could comment on that.
10	DR. TAULBEE: I'm not sure what to
11	comment on that. In a sense, you are correct, but
12	part of what got us into the subjectivity was going
13	through and trying to come to closure on all 881
14	cases that worked at INL during this particular
15	time period.
16	And so in many ways we're trying to
17	prove a negative of whether this person worked in
18	this area or not. And so evaluating the records
19	is going to be subjective from that standpoint.
20	That was what our task was, at least that's what
21	I took it as what the Work Group wanted. And so
22	that's what got us down into this particular path.
23	MR. FITZGERALD: But I think it's clear

1	the secondary records and I think this was the
2	test that the Work Group was looking to, is to
3	whether the secondary records would provide an
4	objective basis, since the primary records, the
5	external dosimetry file, did not. Would the
6	secondary records provide that?
7	And my sense is that, to a large extent,
8	they have, but there's still a fairly high
9	uncertainty which can only be addressed through
10	weight of evidence judgment.
11	And, again, that's what sort of
12	concerns me, you know, we're in dose reconstruction
13	that makes sense because one has to exercise
14	technical judgment. In this case, this is a
15	gateway to an SEC Class Definition. And to me,
16	that's a different context.
17	And of course that's a Work Group
18	decision, or a Work Group assessment. But I guess
19	that's kind of where my concern comes from.
20	DR. TAULBEE: Can I ask what you're
21	referring to as primary and what you're referring
22	to as secondary records?
23	MR. FITZGERALD: Well, the primary, I

1	think, we started out was everybody who went into
2	CPP would necessarily need to be badged. And
3	certainly that was the conclusion. And then there
4	were clearly some exceptions to that and the
5	process has been one of evaluation whether those
6	exceptions could be addressed through other means.
7	And those other means, of course,
8	include temporary badge records, include other
9	forms of records. But I'm just saying that as
10	opposed to a level of certainty or objectivity,
11	which is what you have in the external file, I think
12	what we're finding is that there's still some
13	ambiguity on several individuals.
14	And, again, this is a sample. This is
15	not the universe of workers who may have worked at
16	CPP. This is a sample that we're dealing with. So
17	we don't know what that universe may have.
18	But the sample itself certainly shows
19	that there are some exceptions, which, in terms of
20	the evaluation, I don't disagree with you. I think
21	looking at the preponderance of evidence you might
22	be able to place somebody there or not.
23	But I think, since this is a process

question as well as a technical question, the 1 process conclusion is that you sort of get down to 2 having to use weight of evidence when you have some 3 individuals whose records are somewhat ambiguous, 4 5 there isn't something that's firm. DR. MAURO: This is John Mauro. 6 T have 7 a question that steps back a little bit. I've been listening and it's extremely informative. 8 9 Т understand that you have 10 Definition of your Class, and you both went 11 through, SC&A and Tim went through a process to ask, okay, we have these 18 cases and questions. 12 13 say, okay, and at the end of the process, Tim, you 14 uncovered lots and lots of information related to visitor badges and index cards and said, "hmm, 15 these people might have been missed" -- that's what 16 I'm hearing -- under the current Definition and the 17 way in which I guess everyone deemed it would be 18 implemented. 19 20 But I'd like to know, when you walk away from that, and I recognize the 18 is a sample, would 21 22 you say that some of those people that emerged

during this process of testing the definition you

23

1	would have missed if you didn't go through this
2	process?
3	And what I mean by missed is they should
4	have been included in the Class because they
5	probably were at CPP, or they might have been at
6	CPP for 250 days. Or is the takeaway, "we're not
7	quite sure"?
8	It sounds like a lot of the people you
9	might have missed may have been relatively
LO	short-termers.
L1	So, in a way, I'm asking, stepping way
L2	back and say, does the process we just went through
L3	lead you to a sense that the current Definition,
L4	or perhaps a modification of the Definition, could
L5	still leave you in a place where there's a very real
L6	possibility that you're going to miss some people?
L7	DR. TAULBEE: Let me try to address
L8	this in two parts here first.
L9	First, in saying that the 18 are a
20	sample is not quite correct. We started with 881.
21	And we were able to place them either in the Class
22	or not in the Class based upon the records that we
23	had in hand initially.

What we came down to was 18 that needed 1 follow-up, that the records were not clear. And so 2 this is not a sampling of 18 people. 3 starting from 881 and working our way down, from 4 5 that standpoint, to one that we needed to do follow-up on. So, that's the first point I'd like 6 to make. 7 The second one is you are correct that 8 had we not gone through this exercise in going 9 10 through we would have missed Case No. 18 in this 11 particular case. Actually, we would not have missed Claim No. 18 -- let me clarify that --12 because this individual does not have a cancer that 13 14 is eliqible for the SEC. We would miss people like Case No. 18. 15 So, coworkers of his that would file a claim in the 16 future, had we not found this issue with the visitor 17 inserts, would have been missed with regards to 18 CPP. 19 20 of the ambiguity with Some the temporary badge reports was with the other areas 21 22 of trying to place certain workers in other areas 23 to do the follow-up and basically show that, yes,

1	this person was monitored during this time period.
2	They were not at CPP, they were in this other area.
3	And in doing so, that's when we found
4	we kind of discovered the dose reconstruction
5	issue of, hey, we really need these other files in
6	order to complete dose reconstructions. So,
7	that's how that issue got raised.
8	We had all of the CPP temporary badge
9	reports since last April. But there is that gap
10	of '69 through '73 that if they were not zero or
11	if yeah, if they were zero if they were not
12	zero, they were already in the system.
13	If they were zero and they were not one
14	of the other prime contractors, although that's not
15	consistent either, then they could have been
16	missed.
17	So, people like No. 18 could have been
18	missed from our Class Definition, yes.
19	DR. MAURO: Good, thank you.
20	MR. BARTON: If I could, at least from
21	SC&A's side, when we talk about sort of really
22	processing through the 800 to 900 claims that we're
23	talking about that would be affected right now with

1	this SEC Class, they were reviewed, but I want to
2	point out that, at least on our side, it was to
3	varying degrees.
4	When we set out with our last study I
5	sort of did the mock SEC administration test to try
6	to get down. And that's sort of where SC&A arrived
7	at their claimants that we wanted to follow up on.
8	But that doesn't speak to the fact that
9	certain claims, for example, if they had external
10	dosimetry in that latter SEC period, we didn't dig
11	any farther on them at all.
12	So, in a pragmatic sense, yes,
13	absolutely, they'd either be covered or not. But
14	even the covered claims, definitely for that latter
15	part, weren't really investigated further to
16	really test the Definition.
17	So I'm not comfortable saying that
18	we've done a complete analysis on all available
19	claims. The process that brought us to these 18
20	involved some quick decisions saying, well, that
21	person would be covered so we're not going to really
22	dig any further.
23	So we don't know if there's other

1	problem children out there that perhaps would be
2	covered, but also have evidence in their file that,
3	you know, for that specific period they were at CPP
4	and we don't have the necessary requirements for
5	that.
6	So I just want to kind of qualify that,
7	at least from SC&A's standpoint. I don't know
8	specifically what NIOSH's process was, but for ours
9	we sort of if they immediately qualified for the
10	Class Definition as written, we didn't dig any
11	further.
12	DR. TAULBEE: Same with NIOSH. We did
13	the same thing that you did, Bob, in that if they
14	immediately qualified and they had monitoring
15	between 1970 and '74 based upon the Class
16	Definition we did not look further, no. Because
17	they were already part of the Class.
18	So, I totally agree with you 100 percent
19	the review was to varying degrees as we were
20	whittling this down.
21	ACTING CHAIR BEACH: This is Josie, if
22	I may interrupt for a minute.
23	The website just posted both reports,

1	so they are now available online if anybody is
2	looking for those.
3	DR. TAULBEE: What you'll find with the
4	NIOSH one is that it's heavily redacted.
5	MEMBER MELIUS: I was going to say,
б	hopefully redacted, right?
7	DR. TAULBEE: Heavily redacted.
8	MEMBER MELIUS: Yes, I know, I know.
9	But hopefully that one was the one that was posted.
10	MR. BARTON: Yeah, I'm trying to pull
11	it up right now. I mean, what's there, just the
12	title page?
13	MEMBER MELIUS: Tim, this is Jim
14	Melius. Do you have a timeframe on the indexing?
15	DR. TAULBEE: I don't at this time. I
16	can give a guess, which I'd really rather not.
17	DOE asked the site to give them a cost estimate and
18	a timeframe in order to do that.
19	MEMBER MELIUS: Okay.
20	DR. TAULBEE: And that just occurred
21	last Thursday. And so they were working to see
22	what it is that they would need in order to do this
23	indexing.

1	My well, I said I wasn't going to
2	guess. My guess is six months to a year. There
3	are 21 boxes still to be scanned. We had tagged
4	them with temporary badge reports from other areas,
5	but they have not even been scanned yet.
6	DR. NETON: Sorry, Tim, this is Jim. I
7	missed the estimate you gave.
8	DR. TAULBEE: Okay. My best guess
9	would be six months to a year for them to index
10	these. We tagged 21 boxes of temporary badge
11	reports last week and those are going to be scanned
12	the week of the 25th. We'll have some data
13	scanners out there doing that. And then all the
14	records will be available to DOE to index.
15	They can start indexing now, though,
16	because all of the visitor insert cards we already
17	turned over to them and told them these were of
18	highest priority first because those were directly
19	CPP visitor cards.
20	MR. BARTON: This is Bob. We've sort
21	of been using specific cases or observations, what
22	have you, as springboards for this discussion.
23	There is one more, and it was SC&A's

Observation 6, Case 6 for us. And it's actually 1 NIOSH's first case. And this was an individual who 2 we have -- this is the classical problem that we 3 started with back in July where we have an annual 4 5 external exposure record showing the person in question monitored from 1963 to 1965, but we do not 6 7 have any individual dosimetry records to say where 8 that person was actually badged. And from what I'm hearing, this might 9 10 become important because, if that person was part of these visitor cards that haven't been captured 11 yet, I don't think they would make it into the 12 13 They shouldn't have made it into the system. 14 system to show that they were monitored from '63

So, again, we have that gray area where we know they were monitored, we're not quite sure where. And even with the supplemental data request we don't have additional information, individual dosimetry logs, what have you, that would place that monitored worker in a specific

That was the problem back in July and

location.

to '65.

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we really solved most of them. Most of them were 1 solved by the construction dosimetry that was 2 captured later. 3 But, again, this is one that I was 4 5 surprised at because, again, we have an annual record for this person. So they made it into the 6 system somehow, but those files at least were not 7 transmitted as part of the supplemental request. 8 And, again, that's Observation 6, Case 9 10 6 for SC&A, and Case 1 for NIOSH. 11 DR. TAULBEE: If I may speak to this one a little bit here. Part of why this individual 12 13 made it into the system was he was monitored at CPP 14 in 1959 and he received a substantial dose as a 15 visitor at CPP. That's in the temporary badge 16 reports that we have. And he was actually monitored for a fission product intake at that 17 time. 18 The in-between time period which you're 19 20 referring to, in the 1963-65 time period, we looked again through all of the CPP temporary dosimetry 21 reports and did not find this individual in there. 22 23 We did not look through all of the other temporary

1	badge reports of other areas. And as I pointed
2	out, if he was a zero dose then he was not in there,
3	or he may not have been entered.
4	The time period for the visitor inserts
5	only applies from '69 to '73 for CPP, in that they
6	are not currently included or indexed from that
7	standpoint.
8	So, I guess my I just wanted to make
9	that kind of clarification there for other people.
10	We did look through the '63-'65 temporary badge
11	reports and did not find this individual.
12	MR. BARTON: I agree with that. But it
13	almost makes it more troubling to me because this
14	individual made it all the way into the
15	computerized printout for annual doses in
16	1963-1965.
17	And as you said, this sort of anomaly
18	of not included in them in the main system if they
19	had zero dose wouldn't apply to those years. So,
20	we're still talking about an individual who was
21	monitored that we see via the annual dose totals,
22	which are zero, but we can't find them anywhere.
2.3	So we don't really know where they were actually

1	monitored at.
2	I do agree with your comment about the
3	1959. That's pretty clear. I think he was at CPP
4	and got monitored both internally and externally
5	in 1959. But the fact remains we simply don't know
6	where that individual was during those first three
7	years of the SEC period.
8	DR. TAULBEE: That is correct. And
9	the only way I think we're going to find where those
10	zeros came from is the temporary badge reports for
11	this individual.
12	MR. BARTON: But as you said, they
13	should be there unless we're talking about the
14	'69-'74 time period. Before that he should have
15	cropped up.
16	DR. TAULBEE: They're only in the
17	temporary badge reports that we have scanned
18	already for CPP. The other ones we have not
19	scanned yet or reviewed. And so if they were under
20	a temporary badge they were then entered into the
21	dosimetry system for that particular area even if
22	he was a zero. If they were already in the system.
23	So, it's one of the other temporary

1	badge areas is where this person likely was. I can
2	say with considerable confidence that he was not
3	at CPP from '63 to '64.
4	MR. BARTON: I guess my concern is why
5	those I mean, why the Department of Energy
6	supplemental request for this directly from the
7	site wouldn't have identified those temporary
8	badge reports for the other site beyond CPP.
9	DR. TAULBEE: Because there's one
LO	index.
L1	MR. BARTON: I'm not talking about the
L2	visitor cards. I'm talking about the listing of
L3	temporary badge reports.
L4	DR. TAULBEE: The temporary badge
L5	reports had not been indexed either. The visitor
L6	cards were the temporary badge reports. Neither
L7	of them have been indexed.
L8	MR. BARTON: I see.
L9	DR. TAULBEE: And that's what the site
20	is going to be working on, because we need them.
21	DR. MAURO: Tim, this is John again.
22	The level of granularity that you're working on is
2.3	incredible. And I've been listening very, very

1	carefully. And what I heard was the 18 that you
2	went through, you learned a lot. You learned that,
3	yes, the Definition as used was problematic. And
4	so used, you could have missed some people. So
5	that was revealing. That's what I heard.
6	But then you also said something very
7	important, that is, in the process of going through
8	this you found so much other information in the form
9	of boxes of index cards and visitor badges, all of
10	which provide additional information which is now
11	being scanned. I assume we're talking about names
12	of people.
13	Now, granted that the names are
14	problematic, you know, spellings and stuff like
15	that. But what I'm hearing now is that you're
16	loading up a database now that will add names.
17	Once that's done and that information
18	is available to NIOSH and Labor, would you say that
19	the people that you would have missed, you will no
20	longer miss now because of this fix, this patch,
21	to go in and grab things?
22	And that would be one level of
23	questions, that now you've made certain repairs on

1	the database that now the people that you had
2	affirmative evidence that you would have missed,
3	now you have evidence that, no, you would have
4	caught them.
5	But I also heard you say, however, in
6	the process of going through this, you revealed
7	certain categories of problems where there may
8	still be some people out there that this new list,
9	this new and expanded database, could still have
10	missed because of the certain root cause issues
11	that emerged.
12	That means that, well, even with the
13	addition of this database and these additional
14	data, there's still elements to things that you've
15	learned that says that, yes, there still could be
16	some people that the process with the new and
17	expanded database could still miss.
18	I go back to this kind of question
19	because it sort of steps out of the weeds and tries
20	to get back up to what did we all learn from this
21	process.
22	DR. TAULBEE: To answer your first
23	question with regards to do I feel that, once this

database has been expanded and indexed with the CPP visitor inserts ,do I feel then that we would not miss any of these people? Absolutely correct. I believe that this fix of indexing the inserts will completely -- or will fill that particular gap if you will at this time.

The latter one is the one that I'm not quite sure what you're asking, because I don't believe -- the additional issue with the temporary badge reports having not been entered it for other areas doesn't really apply here to the CPP standpoint. Because we have the temporary badges already for CPP. Now, granted, DOE has not indexed them, but we have them available in our hands to where we can see them at this time, and assist if an issue comes up.

DOE is going to index them so that's part of that larger group of indexing. But once that is completed from the temporary badge reports, I don't see where we would be missing anybody. And I believe we would actually be improving dose reconstruction as a whole across the entire INL site, and ANL, by the way, in that we've now got

1	all of these visitors that are coming and going and
2	we have their dosimetry associated with it.
3	Whereas before it wasn't available to us.
4	DR. MAURO: Okay, thank you.
5	ACTING CHAIR BEACH: Okay, Bob, at this
6	point anything else on your report?
7	MR. BARTON: Those were
8	(Telephonic interference)
9	MR. BARTON: main observations pertaining
10	to the efficacy of the Class Definition. I think,
11	as I said before, I mean, if you read both reports
12	I don't think NIOSH and SC&A are in disagreement.
13	(Telephonic interference)
14	MR. BARTON: It's what you do with that
15	information. As Tim said and we reiterate, you
16	can't be 100 percent. And that's
17	(Telephonic interference)
18	MR. BARTON: is how it was put. And
19	it's really what do you do now.
20	ACTING CHAIR BEACH: That was what I
21	was wondering, Bob. Yes.
22	MR. BARTON: Right. And it's an
23	incredibly tough decision. And I think both NIOSH

1	and SC&A have been wrestling with it to a great
2	extent. And, you know, you look at the writeups
3	on these 18 claims and you see
4	(Telephonic interference)
5	MR. BARTON: and there's always
6	going to be some level of uncertainty. And again,
7	I mean, it's a tough one. And I think it really
8	comes down to what is going to be acceptable to you
9	all and the Board as far as assurance that not one
10	single claimant might be missed.
11	I think there's certainly some
12	indications of gray areas. I mean, we still have
13	the one claim that might be a typo. We have the
14	annual record, but maybe those can be explained by
15	the temporary badge reports that haven't been
16	captured yet. We don't know that. It's very
17	difficult.
18	And, you know, one of the other things
19	is the fact that we can't really validate the
20	completeness of the temporary badge records, or
21	when you get even to finer detail the visitor cards.
22	Which the temporary badge report, again, is a
23	listing of a bunch of workers who worked over a

1	certain time span, usually a week or something like
2	that. But we don't have any secondary reference
3	that we can judge that against. And certainly the
4	visitor cards, we don't have any reference to judge
5	that against, whether those are all complete. So
6	it's very difficult.
7	And, you know, I think NIOSH and SC&A
8	are both in agreement that you just, you cannot
9	reach 100 percent assurance, but to what level is
10	going to be acceptable to the Board.
11	MEMBER MELIUS: This is Jim. I think
12	the real dilemma, at least for me, is the fact that
13	we're not even going to be able to evaluate the
14	temporary/visitor completeness, or evaluate the
15	information in it until it is indexed, and that's
16	going to take some period of months to do.
17	And so it's not like there's a
18	straightforward next step to do. At the same time,
19	what has bothered me throughout this process is
20	that we keep discovering things about this site.
21	We discovered this new set of badges
22	that weren't indexed. We discovered a policy
23	change that we didn't know about earlier. So it

1	keeps, you know, the target keeps changing
2	somewhat, or the basic information available keeps
3	changing.
4	But Josie, what I would suggest is that
5	I'm certainly not ready to make a decision or
6	a recommendation at this point in time.
7	At the same time, I think it behooves
8	the Work Group to come up with at least to
9	evaluate this and report it in a way to the Board
10	to give the Board input in terms of what should be
11	the next step on this particular Class Definition
12	and SEC recommendation.
13	Work Group Recommendation
14	And what I would suggest is that the
15	Work Group plan to meet before the next Board
16	meeting, which is at the end of March, and discuss
17	this.
18	I mean, Tim's report we received two
19	days ago, less than two days ago, and SC&A's about
20	a week before that. I think based on some of the
21	discussions here I think I understand them better,
22	but I'd like to go back through them. And
23	understand and go back to some of the earlier

1	reports and presentations.
2	MEMBER ROESSLER: Jim, this is Gen.
3	I'm sitting here listening to all of this the whole
4	time and as a Board Member feeling a really huge
5	responsibility. And I think it would be really good
6	to, as you suggested, present this at the Board and
7	in some way get input from other Board Members.
8	Because it's their responsibility also.
9	We're really working on new ground.
10	Whichever way we go on this, and we're going to have
11	to go one way, we're going to be setting a precedent
12	for this program and potentially other programs,
13	and the impact that we make is rather huge. So I
14	think the more input we can get from other Board
15	Members and others would be very helpful.
16	ACTING CHAIR BEACH: I don't disagree
17	with both of those. I'm also interested in NIOSH's
18	position on this. It does set a precedent for SECs
19	that we haven't encountered before. So, that's
20	one area.
21	So, in presenting to the Board we can
22	give them a quick update next week and I don't
23	have any problem doing that on just where we're

Τ	at, a brief overview, and what our next plan is to
2	meet prior to the March meeting.
3	Does that sound about right? Jim and
4	Dave, of course I want to hear from you also.
5	MEMBER ROESSLER: I think if you could
6	draft something, Josie, in the next few days and
7	pass it around to the Work Group Members. And then
8	we can I don't know if this is acceptable, Ted,
9	but then we can talk about it a bit.
LO	ACTING CHAIR BEACH: Well, the next
L1	meeting is on Wednesday so there's not a lot of
L2	time.
L3	MEMBER ROESSLER: I know, there's not
L4	a lot of time. But I think it should be a report
L5	from the whole Work Group. So if there's something
L6	that you could draft quickly and we could give input
L7	I think that would be helpful.
L8	MEMBER MELIUS: I think a report should
L9	be sort of a process report.
20	ACTING CHAIR BEACH: Yeah.
21	MEMBER MELIUS: We've gone through
22	this. There's issues and we plan to meet again and
23	discuss in more detail at the March meeting.

1	ACTING CHAIR BEACH: Yeah, because I
2	can't imagine that the other Board Members would
3	have any time to even come up with any good
4	discussion for Wednesday.
5	So I think, just like you said, a
6	process report and then plan on meeting and having
7	a fuller report hopefully in March. Where people
8	have time to read some of these reports. Because
9	there's no time between now and Wednesday.
LO	MEMBER ROESSLER: And there's probably
L1	not time at the meeting either now that I think
L2	about it for Board Members to absorb it and come
L3	up with anything.
L4	ACTING CHAIR BEACH: No, not on
L5	Wednesday, I cannot even imagine that.
L6	MEMBER ROESSLER: I agree.
L7	MR. KATZ: Right. This is Ted. And
L8	following, I think, Josie's just getting this
L9	process report to let people know where things
20	stand. I'll send out then both of these reports
21	directly to all the rest of the Board Members.
22	And you can ask them, Josie, to read
23	these and get familiar. Because it is, it's pretty

1	dense, it's a lot of stuff, and it would be helpful
2	if they had time to do their homework which they
3	will if they get it very quickly. It'll be helpful
4	for the discussion then in March wherever you get
5	at that point.
6	ACTING CHAIR BEACH: Correct.
7	MEMBER MELIUS: This is Jim again.
8	And I would just say if there's issues as we look
9	at the reports again and think about it, if there
10	are issues of clarification, whatever, I think it
11	might be helpful to pass those along to either SC&A
12	or NIOSH or both of them prior to our Work Group
13	meeting.
14	MR. KATZ: Yeah. And let's just do
15	that through me so I can be sure that sort of the
16	bases get covered. But I think that's a good idea.
17	
18	ACTING CHAIR BEACH: And I think we
19	should probably try to plan a face-to-face before
20	the March meeting.
21	MR. KATZ: If you want. Since I have
22	four of you, all but Phil, on the phone, if you want
23	to look at your calendars now we can actually pick

1	a date.
2	MEMBER ROESSLER: Okay, let me get
3	mine. I agree on the face-to-face.
4	MR. KATZ: But I'm sorry, are you
5	saying this next meeting will be face-to-face?
6	ACTING CHAIR BEACH: Yes, the one
7	before the March meeting.
8	MR. KATZ: Okay. That's fine,
9	whatever you'd like.
10	DR. TAULBEE: This is Tim. While
11	you're looking at your calendars, I did a quick scan
12	through the dosimetry reports to see which years
13	I could potentially verify the temporary badge
14	reports for CPP area.
15	We certainly wouldn't have the other
16	ones scanned yet. They'll be scanned but they
17	certainly wouldn't be in our possession to do an
18	evaluation on other areas.
19	But CPP, it looks like up through 1966,
20	so we could evaluate '63-'66, and then '72-'74.
21	There might be one more in between that gap, but
22	I don't know about that.

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1	reported for CPP in some of those areas that we
2	could potentially provide some input to the Work
3	Group at a meeting.
4	MR. KATZ: For dates, if you folks have
5	your calendars out, I think this should be
6	sufficiently in advance of the meeting, because
7	it's going to be a lot to report on for Tim and Bob
8	and the Work Group to the Board.
9	How about the week of March 1st? How
10	does that week look for you folks? For example,
11	March 1st, March 2nd, 3rd.
12	MEMBER ROESSLER: I'm okay.
13	ACTING CHAIR BEACH: I'm clear.
14	MEMBER MELIUS: March 2nd, 3rd and 4th
15	I'm not available.
16	MR. KATZ: Okay. How's March 1st?
17	Okay for you, then?
18	MEMBER MELIUS: Yes.
19	MR. KATZ: And David? How's March 1
20	for you? That's a Tuesday.
21	MEMBER RICHARDSON: March 1st looks
22	okay.
23	MR. KATZ: Okay. So we are, just to be

1	clear, we're going to plan for a face-to-face then
2	in Cincinnati on March 1st.
3	MEMBER ROESSLER: Okay.
4	ACTING CHAIR BEACH: Okay.
5	MR. KATZ: And of course, if one of you
6	can't travel because of teaching or other duties,
7	you know, we'll have a phone hook-up too so you can
8	join if you can. I'm thinking especially of David.
9	MEMBER MELIUS: And I assume Tim and
10	SC&A, Bob, will be available?
11	MR. KATZ: Right. I mean, that's
12	essential, right. So I'm assuming I would hear
13	from you, Tim, or Bob, now if it's a problem. March
14	1st?
15	MR. BARTON: I go where I'm told, Ted,
16	so.
17	MR. KATZ: Okay. Well, how about Tim?
18	DR. TAULBEE: Yes, I am available.
19	I'm very glad you picked that week because the
20	previous week I'm not available.
21	MR. KATZ: Okay, okay. So there it is.
22	It's March 1st. And we'll let the petitioners
23	know, too, that we have that as a date.

1	MEMBER MELIUS: Okay.
2	ACTING CHAIR BEACH: Okay. And on
3	this, I will put together, with SC&A's help, a
4	presentation for Wednesday, mostly just a status
5	report. And of course, that will be sent to NIOSH
6	hopefully by the first of the week. So, Monday,
7	Tuesday morning at the latest.
8	MEMBER MELIUS: NIOSH won't be around
9	Monday. It's a holiday.
10	ACTING CHAIR BEACH: A holiday for you
11	guys. Okay, Tuesday morning at the latest, then.
12	MEMBER MELIUS: And the earliest is
13	fine too.
14	ACTING CHAIR BEACH: The earliest.
15	Okay. So we'll get that out.
16	MR. KATZ: I'm sure you'll be fine,
17	Josie. It's a process. You're not going to be
18	getting into any
19	ACTING CHAIR BEACH: Right, right.
20	Yeah. And then, Ted, could you at this time, if
21	there's nothing else on either report or any
22	questions, could you go through the petitioner's,
23	the authorized representative's email?

1 Petitioner Comments I was waiting to do that. 2 MR. KATZ: We sort of jumped the gun and got into this matter. 3 But let me just read this for the record for the 4 Work Group meeting. 5 NIOSH had sent email, 6 So, an the petitioner counselor for NIOSH, to one of the 7 8 petitioners, the representative of the petitioner asking about -- who had looked at the agenda and 9 10 saw what the issue is. And here's what he wished 11 to convey at least. "As the authorized representative for 12 the INL petitioner, the proposed Class, if it still 13 14 requires proof of a radiation monitoring badge for CPP, then my position is that is not a viable manner 15 of implementation of the SEC. 16 "I'm aware that the Board has also 17 presented this concern to NIOSH. 18 I am concerned that if approved with this Definition then there 19 20 will be some workers that are not accounted for in the SEC Definition. 21 22 "I know from Mr. Taulbee's presentation

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1	efficiently kept at INL. However, as an
2	authorized representative for workers at INL, I
3	affirm that there will very likely be exceptions
4	and issues that will challenge that proposed
5	Definition."
6	And that's it, that's his comment.
7	ACTING CHAIR BEACH: Thank you for
8	that. Any other items to discuss before we move
9	to the next brief update?
10	(No response)
11	Brief Update on Other DCAs
12	ACTING CHAIR BEACH: Hearing none,
13	then we were going to hear from NIOSH and from SC&A
14	on updates of other activities to date.
15	So, Tim, would you like to start or
16	that?
17	DR. TAULBEE: Okay. I'm not sure what
18	other activities you're wanting an update on, but
19	I will give you one.
20	ACTING CHAIR BEACH: I didn't put this
21	together so I was assuming that
22	MR. KATZ: So, this is Ted. I'll speak
23	for it because I did put it together although I

shared it with everybody for their comment and got 1 2 no comments. But I'm assuming there was other SEC 3 aside this getting 4 work from done. 5 definitional matter getting done on both sides of the fence, both at DCAS and SC&A. And I thought 6 7 it might be useful for the Work Group just to hear 8 how the rest of that is going along. Okay. Well, then, from 9 DR. TAULBEE: 10 my standpoint on the SEC side of things, since the 11 update in November we have been working diligently on the ANL-West SEC. And I have seen an early draft 12 of that and DCAS has reviewed it. 13 And ORAU is 14 implementing our comments into the report. 15 are expected to get a re-draft on Tuesday of next week. 16 So that one is rolling along to where 17 we should definitely be able to present it to the 18 Board at the March meeting for sure, and hopefully 19 20 actually get it to you 30 days in advance, at least that is our target right now. So, that could be 21 22 unprecedented in and of itself. 23 So, that's the other SEC activities

1	that we have been working on.
2	ACTING CHAIR BEACH: That's terrific.
3	Okay.
4	MEMBER MELIUS: Tell us where to send
5	the bottle of champagne.
6	(Laughter)
7	DR. TAULBEE: Well, we haven't
8	achieved it yet. Give it time.
9	ACTING CHAIR BEACH: Okay, thank you
LO	for that. And it sounds like you're right on
L1	target from what we discussed last meeting.
L2	Bob, or anyone from SC&A, could you let
L3	us know what you're working on?
L4	MR. STIVER: This is Stiver. I can
L5	give you kind of a thumbnail sketch of where we are.
L6	ACTING CHAIR BEACH: Okay.
L7	MR. STIVER: As everybody is I'm sure
L8	aware, the week of the 25th through the 28th of this
L9	month we'll be out at the site doing worker
20	interviews and some data capture.
21	You'll recall the primary focus of the
22	data capture is to look at Burial Grounds and also
) 2	CDD in the pre-1963 the pre-SEC period. And also

to see if we can find some actual measurements of 1 dissolver content and so forth, anything above and 2 beyond what Ron Buchanan was able to locate in the 3 SRDB, to kind of try to validate the OTIB-54 and 4 5 TBD-5 approaches of using the index fission product radionuclides to estimate -- based on the ratios, 6 7 to estimate the potential intakes of actinides and other fission products. 8 So, that's going to take up most of that 9 10 week. In addition, we were tasked to do a couple of other activities. 11 12 One was to create an issues matrix. 13 And we have that pretty well in hand. It still 14 needs to be fleshed out a bit for the SEC. a mechanical related question regarding that. 15 reviewing the transcript from our last meeting, it 16 seemed to me that what you wanted, I think Josie 17 had mentioned this, was kind of one comprehensive 18 matrix that would cover the entire waterfront, both 19 20 the Site Profile and the SEC. And typically what we do is we try to keep those separate. 21 22 ACTING CHAIR BEACH: No, I think I 23 wanted those separate.

1	MR. STIVER: You want them separate?
2	Okay. So that'll make our job a lot easier. We
3	already have the Site Profile one. All those
4	issues are still kind of in abeyance, really, at
5	this point, or they're kind of on the back burner
6	until we get a handle on the SEC.
7	ACTING CHAIR BEACH: No, John, let's
8	definitely keep those separate.
9	MR. STIVER: Okay. Well, that's going
10	to make it a lot easier for us, then. It shouldn't
11	take much longer than a couple of weeks.
12	Having said that, I'm not going to be
13	around. I'll be here next week, and then the week
14	after the trip. So, probably sometime in February
15	we could get that out.
16	MR. KATZ: And John, are you setting
17	these up on the BRS?
18	MR. STIVER: We will, yeah. Right now
19	it's just in a Word format. But yeah, it will
20	definitely be up on the BRS once we get it all
21	fleshed out.
22	And the other thing, I believe, was you
23	wanted the prioritized list of the 52 reactors,

1	which ones that we felt were probably the most
2	pertinent for the SEC discussion determinations.
3	And that report is in the works and should be also
4	done sometime in February.
5	ACTING CHAIR BEACH: So, possibly
6	we'll have both of those before the
7	MR. STIVER: That would be the goal, to
8	have them before our face-to-face meeting.
9	ACTING CHAIR BEACH: Okay. Before the
10	March 1st meeting. Terrific.
11	MR. STIVER: Right. And that's all I
12	had. Unless anybody else Bob, do you have
13	anything else to add to that?
14	MR. BARTON: No, I think you covered
15	the waterfront there.
16	MR. STIVER: Okay.
17	ACTING CHAIR BEACH: Okay. And then,
18	Work Group Members, any additional comments,
19	clarifications?
20	MEMBER ROESSLER: Nothing here. Good
21	job, Josie.
22	ACTING CHAIR BEACH: Okay, thank you.
23	And Jim, anything from you or Dave?

1	MEMBER MELIUS: No.
2	MEMBER RICHARDSON: No.
3	ACTING CHAIR BEACH: Okay. So we've
4	already discussed the petitioner comments and the
5	worker recommendations. And I would say, unless
6	there's something else, we are at a point we can
7	close.
8	MR. KATZ: Very good. Thank you,
9	Josie. Thank you, everybody else.
10	(Whereupon, the above-entitled matter
11	was concluded at 1:02 p.m.)
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