Documents (20)

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Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title:

Japan's Fukushima Daiichi

PMT Counterpart Audio Files

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Pages 1-33

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(CONFERENCE CALL INITIATED)

CALL MODERATOR: This is HHS SOC. We can see you. Can you see and hear us all right?

MALE PARTICIPANT: Yes, sir.

CALL MODERATOR: Okay, well we are dialed up on the call. We'll begin momentarily.

Just remember to keep your VCC on mute. Thank you.

MR. TEMPLE: This is Jeff Temple from the United States Nuclear Regulatory Commission.

CALL MODERATOR: Thank you, sir.

MR. PLAYER: Michael Player, Virginia-1

CALL MODERATOR: Which agency, sir?

MR. PLAYER: Virginia-1 DMAT.

CALL MODERATOR: Thank you.

MR. MASTRIANNI: Bill Mastrianni, South Carolina-1 DMAT.

CALL MODERATOR: Thank you, sir. State Department or USAID rep, are you on the call?

(No response)

CALL MODERATOR: Travel, are you on the

(No response)

CMDR ADAM: This is Commander Al Adam,

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call?

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DMAT.

1	Joint Regional Medical Plan of FEMA Region 9 and 10.
2	CALL MODERATOR: Thank you. Any other
3	callers, identify yourselves at this time.
4	MR. COLEMAN: Norm Coleman, ASPR.
5	CALL MODERATOR: Thank you.
6	MR. FUEL: Rick Fuel, Region 10, REC.
7	CALL MODERATOR: Thank you.
8	MR. CHRISMAN: Eric Chrisman, Missouri-1
9	DMAT.
10	MR. HOLDMAN: Kevin Holdman, Texas-1
11	DMAT.
12	CALL MODERATOR: Thank you.
13	MR. ZIMM: Brendan Zimm, DTRA.
14	CALL MODERATOR: Thank you.
15	MR. WASSER: Jim Wasser, IRCT.
16	CALL MODERATOR: Thank you.
17	MR. INGSTRAN: Jim Ingstran, National
18	Guard Bureau of Joint Surgeons.
19	CALL MODERATOR: Thank you.
20	MR. PARKER: Lloyd Parker, IRCT.
21	MR. RICH: Chad Rich, NDMF.
22	CALL MODERATOR: Thank you.
23	MR. MABELY: Steve Mabely, Department of
24	Veterans Affairs.
25	CALL MODERATOR: Roger, thank you.

1	MS. AUSTIN: Francesca Austin,
2	Department of Veterans Affairs.
3	CALL MODERATOR: Thank you.
4	MR. SEBASTIAN: Frank Sebastian, DMORT
5	10.
6	CALL MODERATOR: Thank you.
7	MR. WERR: Carl Werr, Region 4, REC.
8	MS. PALONE: Emily Palone, REC Region 3.
9	CALL MODERATOR: Thank you, ma'am.
10	MR. CURRIN: Steve Currin, CIP.
11	CALL MODERATOR: Thank you.
12	MS. MILLER: (indiscernible) Miller,
13	IRCT.
14	CALL MODERATOR: Thank you.
15	MS. SILENS: Nadine Silens, acting REC
16	Region 9.
17	CALL MODERATOR: Roger, thank you.
18	MS. ODOM: Janet Odom, REC Region 5.
19	CALL MODERATOR: Thank you.
20	MR. NEILEN: Robert Neilen, Joint Staff
21	J-4.
22	MS. WOOD: April Wood, American Red
23	Cross.
24	MR. MAYER: Harry Mayer, REC Region 3.
25	CALL MODERATOR: Thank you.

1	MS. TODOCA: Tomorosa Todoca.
2	(indiscernible, possibly DHA)
3	CALL MODERATOR: Thank you.
4	MS. GRACI: Nadine Graci in the
5	(indiscernible, possibly Ash's office).
6	CALL MODERATOR: Thank you.
7	MR. CAGE: Chris Cage, Region 7 REC.
8	CALL MODERATOR: Thank you for calling.
9	MR. TWEEDY: Kevin Tweedy, Missouri-1
	DMAT.
1	CALL MODERATOR: Thank you.
. 2	MS. TAYLOR: Amy Taylor, Region 6 REC,
.3	ASPR.
4	CALL MODERATOR: Thank you.
.5	MS. CATCHEE: Karen Catchee, Florida-4
16	DMAT.
L 7	CALL MODERATOR: Thank you.
8.1	MS. BROOKS: Kay Brooks, Florida-1 DMAT.
19	CALL MODERATOR: Thank you.
20	MR. BLENCHED: Glen Blenched REC
21	(indiscernible, possibly NCR).
22	CALL MODERATOR: Thank you.
23	MS. MYERS: Martha Myers, IRCT.
24	CALL MODERATOR: Thank you.
25	MS. KENDRICK: Elizabeth Kendrick,

(indiscernible, possibly IRIS).

CALL MODERATOR: Thank you.

MALE PARTICIPANT: Is anyone from Travel on the call?

MR. ZIMM: Yes, I'm here. David Zimm.

CALL MODERATOR: Thank you. Okay,

callers please remember to mute your phones using *6

or the mute button. We will begin momentarily.

Thank you.

Again, callers, remember mute your phones and use *6 for the mute button. Thank you.

DR. SIZEMORE: Good afternoon, Tom

Sizemore. Welcome to 2011 Pacific Basin EarthquakeTsunami Conference Call. If we could have it quiet
in the dock, please, and if I could ask everybody to
make sure that they put their phones on mute with
*6.

As you go through your presentations and briefings today I am particularly interested in whether or not you're having any shortfalls on meeting our time lines on having a response. Or anything else that's creating a problem for you.

So, with that we're going to jump straight in to Region 9.

MR. SHEEHAN: Good afternoon, Dr.

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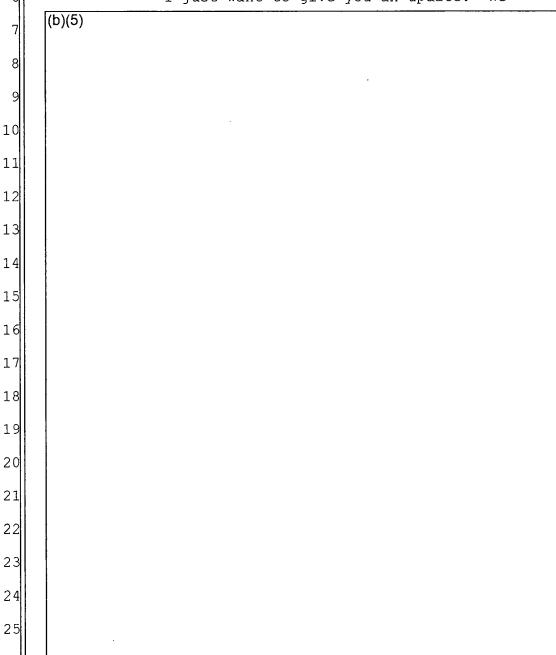
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Sizemore, this is Kevin Sheehan in Region 9 RRCC.

And I'm here with Jerry Fenner, REC from Region 9

and Roshadden Young who's a (indiscernible, possibly RIST) team member who's also deployed out here with us locally.

I just want to give you an update. We



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11	So, maybe an offline discussion after
12	this, but how you want to have that information to
13	tell us how to proceed.
14	MR. SHEEHAN: You know, Mike, that would
15	(b)(5)
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22	MP DIAVED. Vog (b)(5)
23	MR. PLAYER: Yes, (b)(5)
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	MALE PARTI	CIPANI:	kevin,	tnere s	going
(b)(5)					
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(b)(5)	
<u> </u>	MR. SHEEHAN: Yes, sir, we understand
(b)(5)	
	MALE PARTICIPANT: Say that again? I'm
sorry.	
	MR. SHEEHAN: (b)(5)
(b)(5)	
	MALE PARTICIPANT: All right, we are.
Move on.	Thanks.
	MR. SHEEHAN: Thank you, sir.
	MALE PARTICIPANT: Pending any questions
that concl	udes my report.
	DR. SIZEMORE: Okay, any questions for
Region 9?	We'll move on to Region 10, please.
-	MR. FUEL: Good afternoon, this is Rick
Fuel Regi	on 10 REC.
(b)(5)	On to the.
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16		(b)(5)	Ī	hank:
17		you.		
18			DR. SIZEMORE: Thanks. Questions	for
19		Region	10?	
20			Again, for both regions, great, gr	ceat
21		work.	I appreciate all the hard stuff that yo	ou're
22		getting	g done out there and you're influencing	
23		strate	gies.	
24			Let's move onto EMG starting with	ops.
25			MALE PARTICIPANT: Thank you, sir.	
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9	MALE PARTICIPANT: I'm sorry, we are on	
10	another call. What?	
11	MALE PARTICIPANT: Could you just give a	
12	status of traveling staff? (b)(5)	
13	MALE PARTICIPANT: Yes. (b)(5)	
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	MALE PARTICIPANT: Thank you, sir.
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	FEMALE PARTICIPANT: Yes, this is field
(b)(5)	
	MALE PARTICIPANT: Afternoon. (b)(5)
(b)(5)	MADE PARTICIPANT. ATCETHOOM.
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	MALE PARTICIPANT: Is there anyone out
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of international operations? Are you online? FEMALE PARTICIPANT: I am. We have no updates beyond what you heard from the SOC who's doing a fabulous job, thank you. MALE PARTICIPANT: Questions for anybody in ops. Move onto log, please. LT DEGRASSIO: Thank you, sir. Lieutenant DeGrassio with the logistics brief. (b)(5)(b)(5)10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 **NEAL R. GROSS**

DR. SIZEMORE: Questions for logs? Move onto plans, please. MALE PARTICIPANT: Good afternoon, sir. (b)(5)Thanks. DR. SIZEMORE: Thanks. And let me go (b)(5)10 (b)(5)Good work. 11 Let's move onto admin/finance. 12 13 MALE PARTICIPANT: Hi, this is (indiscernible) from admin/finance. Is there 14 15 somebody on the SOC as well? MALE PARTICIPANT: David, Tiffany had to 16 17 step out so --18 DR. SIZEMORE: You got it. MALE PARTICIPANT: Okay, sorry about 19 20 that. 21 MALE PARTICIPANT: -- we did get the two 22 mission assignments. MALE PARTICIPANT: We've got -- we saw 23 (b)(5)24 25

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19 (b)(5) 10 11 12 13 14 15 16 17 18 Pending any questions I think we've got 19 everything that needed to be covered and that's 20 21 enough. DR. SIZEMORE: Thanks. Let's move onto 22 23 fusion. 24 MS. FUNAMOTO: Good afternoon, sir. 25 This is Monica Funamoto with fusion. At this time **NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS**

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we have nothing to report but we are standing by ready to assist. Thank you. DR. SIZEMORE: Thanks. Anything from the CMO office? MR. GERRADON: Good afternoon. Andy (b)(5) 10 DR. SIZEMORE: Thanks. Moving to our Health and Human Services partners starting with 11 12 CDC. 13 MR. MAVEN: Hey Tom, Phil Maven. The (b)(5)14 15 16 17 18 19 20 21 22 23 24 25 **NEAL R. GROSS**

DR. SIZEMORE: All right, thank you. We'll get to NRC shortly. Let's move onto FDA. MALE PARTICIPANT: FDA, good afternoon. (b)(5) **NEAL R. GROSS**

(b)(5) That's all I have unless there are any questions. DR. SIZEMORE: Good report, Mark. Any questions for FDA? Move on -- is CMS on? MS. FIELD: Nothing new here. Is Diane Whittington on? 10 11 (No response) 12 MS. FIELD: Tom, this is Jean Field. (b)(5)13 14 15 16 17 DR. SIZEMORE: Thank you very much, 18 Jean. SAMHSA, are you on? HRSA, are you on? 19 MALE PARTICIPANT: We are, sir, and we 20 have nothing to report. Thank you. 21 DR. SIZEMORE: Thanks very much. ABC, 22 are you on? 23 MALE PARTICIPANT: Yes, sir, we are. (b)(5)24 25 **NEAL R. GROSS**

(b)(5)And that's all we have to report at this time. DR. SIZEMORE: Thank you. OSSI, are you on? Anything to report? Okay, nothing to report in the SOC on OSSI. ATF? We'll move onto our supporting agencies starting with NORTHCOM DoD. National Guard? MR. INGSTRAN: Sir, this is Jim Ingstran with the National Guard Bureau of Joint Surgeons. (b)(5)10 (b)(5)11 12 13 14 15 Otherwise there's no change from our 12 16 17 o'clock conference. 18 DR. SIZEMORE: Great. Thanks very much, 19 Jim. Let's move onto the Department of Veterans 20 Affairs, headquarters and/or regional. 21 MALE PARTICIPANT: Veterans Affairs has (b)(5) -22 23 24 25

1	(b)(5)
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4	(b)(5) And that's all I
5	have to report.
6	MR. WATTS: Sir, this is Greg Watts with
7	the RIM for Region 10.
8	DR. SIZEMORE: Yes, go ahead.
9	MR. WATTS: First off, I want to give
10	kudos to Rick up there for keeping the VA and my
11	office in the loop on situational awareness and
12	reporting. I just want to give you guys kudos and
13	thanks a lot.
14	DR. SIZEMORE: All right, thanks.
15	Moving onto American Red Cross, please. Not hearing
16	anything. Coast Guard, are you on?
17	FEMALE PARTICIPANT: I'm sorry, sir, (b)(5)
18	here I am. For American Red Cross.
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1	(b)(5)
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4	That concludes my report, thank
5	you.
6	DR. SIZEMORE: Great, thank you very
7	much. Coast Guard, are you on? NRC, are you on
8	again today?
9	MALE PARTICIPANT: Yes, Nuclear
LO	Regulatory Commission.
1	DR. SIZEMORE: Yes, (b)(5)
12	(b)(5)
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15	MALE PARTICIPANT: Pat Milligan, are you
16	on the call? We have not received a formal request
L 7	that I'm aware of. We've activated our headquarters
L 8	
L 9	MS. MILLIGAN: I'm here.
20	MALE PARTICIPANT: Okay. We've
21	activated our Region 4 incident response center to
22	monitor our licensed assets in Hawaii and in
23	California. And headquarters has taken the lead for
24	national-level type requests and monitoring what's
25	going on in Japan.
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To my knowledge, and Trish, correct me if I'm wrong, we've not received a formal request for KI from anybody. FEMALE PARTICIPANT: That's correct, not yet. DR. SIZEMORE: Can you share with us if that was requested where you would get it? Or do you have it, rather? Or would you need some assistance from Health and Human Services? MALE PARTICIPANT: Trish? FEMALE PARTICIPANT: The NRC doesn't stockpile KI. We just recently shipped an order -or had an order shipped to the State of Pennsylvania, or the Commonwealth of Pennsylvania, excuse me. And they would be able to relinquish a

chunk of their KI supply upon demand to -- if we needed to borrow it back. So it wouldn't be a problem for us to put our hands on a lot of potassium iodide tablets pretty quickly.

DR. SIZEMORE: Okay. So just to let you know if you're interested in Health and Human Services support just give us a call. We're here 24/7 through the SOC.

FEMALE PARTICIPANT: Okay.

MALE PARTICIPANT: Trish, do you have

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any questions about the efficacy of KI at this point in the reactor process by the time we get it there?

It may not be of much use.

FEMALE PARTICIPANT: Certainly a couple of things to think about.

One is that if you're going to take KI

One is that if you're going to take KI tablets that needs to be taken within 4 to 6 hours of a release in order for it to be effective.

And more importantly than that, a couple of things. They've evacuated the population at risk so you've got 100 percent protection with evacuation.

And then the Japanese diet is extremely iodine-rich given their seafood consumption, particularly their seaweed which is a huge important part of their iodine. So their thyroid glands are already at least 50 percent blocked which gives a really good protection from any radioactive iodine uptake. (b)(5)

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Having said all that, should the decision be made we are able to pull it together and get some KI upon demand.

DR. SIZEMORE: Great summary, appreciate

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MALE PARTICIPANT: Let me give you our headquarters -- maybe offline I'll give you our headquarters operations center phone number. You can call us 24/7 at that number with any requests.

DR. SIZEMORE: All right, thank you. Is there anybody on the line that I've missed that has somebody for the good of the order?

Okay, going to the SOC here. Public affairs?

FEMALE PARTICIPANT: The only update to add is that FEMA and USGS held a press conference at 1:45 today for national U.S. press.

 $\label{eq:decomposition} \mbox{DR. SIZEMORE: Anybody else in SOC that} \\ \mbox{I've missed?}$

All right, folks, we'll schedule another one of these in the morning. I would like to ask our Region 9 what a good time would be for you.

MALE PARTICIPANT: We're going to have a 7 o'clock shift change briefing, so what about 8 o'clock Pacific, 11 o'clock your time?

DR. SIZEMORE: 1100.

MALE PARTICIPANT: Yes, 1100 Eastern.

DR. SIZEMORE: Okay. Watch for it.

MALE PARTICIPANT: All right, thank you

sir.

DR. SIZEMORE: Thanks very much. I appreciate everybody's hard work and attention to detail. And with that, SOC out.

(Whereupon, the foregoing matter went off the record)

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(CALL INITIATED)

MR. GRANT: Hi, this is Jeff Grant. (b)(5)

(b)(5)

Did you get that?

FEMALE PARTICIPANT: Your name is what?

MR. GRANT: My name is Jeff Grant.

FEMALE PARTICIPANT: Okay.

MR. GRANT: All right? Thanks.

(Whereupon, the foregoing matter went

off the record)

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33 0-92H-3L03765094 (CALL INITIATED) (indiscernible) FEMALE PARTICIPANT: (b)(5)MR. GRANT: yes? FEMALE PARTICIPANT: Yes, it is. MR. GRANT: This is Jeff Grant. I just (b)(5)called a few minutes ago (b)(5)FEMALE PARTICIPANT: Okay. (b)(5)MR. GRANT: 10 (b)(5) 11 12 13 FEMALE PARTICIPANT: Okay. 14 MR. GRANT: All right? 15 FEMALE PARTICIPANT: Thanks. MR. GRANT: Thanks. 16 Bye. 17 (Whereupon, the foregoing matter went 18 off the record) 19 20 21 22 23 24 25

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(CONFERENCE CALL INITIATED)

MR. TEMPLE: Hi, Jeff Temple, U.S.

Nuclear Regulatory Commission.

CALL MODERATOR: Thank you, sir.

MALE PARTICIPANT: (indiscernible,

possibly Travel).

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MR. ROUSSEAU: Mark Rousseau, FDA.

CALL MODERATOR: Thank you, sir.

MR. PHILLIPS: Jimmy Phillips, logs.

MR. MABELY: Steve Mabely, Department of Veterans Affairs.

CALL MODERATOR: Is Travel on?

MALE PARTICIPANT: (indiscernible)

CALL MODERATOR: Thank you. EMO?

MR. HARPER: Victor Harper.

MR. WALKMAN: Tim Walkman, DMS.

MR. ROGERS: Rogers, field operations.

MS. PLUME: Emily Plume, Region 3 REC.

MS. SANDERS: Hi, this is Melissa

Sanders with the REC IRCT program.

MR. COLEMAN: Hi, Ron Coleman, ASPR SME.

MR. HERRERA: Gerald Herrera, ASPR

Region 4.

MALE PARTICIPANT: (indiscernible) NCR.

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MALE PARTICIPANT: (indiscernible)

public health representative to the Public Health

Agency of Canada.

CALL MODERATOR: Thank you, sir.

DR. SIZEMORE: This is Tom Sizemore.

We're going to go ahead and get started with the 2011 Pacific Basin Earthquake-Tsunami ESSA Conference Call.

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b)(5)	Thank
you very much.	

With that we'll go ahead and get a

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Region 9 update from the IRCT. MR. SHEEHAN: Good afternoon, everybody. This is Kevin Sheehan from Region 9. The RRCC --(b)(5) (b)(5)That completes my report. Now, Terry Klein will give a report on the IRCT. 10 11 MR. KLEIN: Thank you. That being said (b)(5)12 13 14 15 16 17 18 Just looking around the room do any of 19 20 the section chiefs -- we're good. Thank you. 21 DR. SIZEMORE: Anything else from Region 9? 22 23 MALE PARTICIPANT: No, that concludes 24 our report. 25 DR. SIZEMORE: All right, anybody have **NEAL R. GROSS**

any questions for Region 9? All right.

It looks like we'll go ahead and talk
about the nuclear situation update. Is NRC or would
you give us a little update, please?

MR. TEMPLE: Hi again. Jeff Temple,
U.S. Nuclear Regulatory Commission.

Our operations center in Rockville,
Maryland is staffed with a full liaison team, a
partial executive team. We're on the phone now with

our Chairman (b)(5)

With a partial reactor safety team and a partial protective measures team who are doing kinds

of what-if calculations.
(b)(5)

We've got two people en route as part of a USAID team to get boots on the ground to help perhaps provide more information, provide a conduit of information to see what kinds of services we need to provide, if any.

We've not been requested to provide any services yet to the Japanese government, to their regulatory agency.

We continually are monitoring what's going on. It looks like one nuclear plant has had a

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minor release of radiation with a partial explosion earlier today, or last night actually. We're going to continue to monitor that.

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(b)(5)
And

they've evacuated people for a large distance.

We're also looking at a second set of reactors about 10 miles away where there might be loss of coolant problems as well. So we're continually getting new information. So there's at least one reactor we're following closely.

And again, we're not the regulators.

The Japanese regulate that so we're not in the position to provide advice or anything. They're perfectly capable of fixing their own plants. So we're just in the monitoring mode at this point.

MALE PARTICIPANT: So, Jeff, tell us a little bit about what the Japanese will want to be doing with that plant. Is the -- will it be just to get water back in over the core?

MR. TEMPLE: That's what they're doing.

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they're using a combination of ocean water and a chemical called boron. Boron is a poison that stops the chain reaction process. So all nuclear power plants have boron, sometimes in fuel rods or actually what we control rods.

When the control rods are all the way out you're at 100 percent power. When the control rods which are filled with boron pellets are all the way in you're at zero percent power.

Then there are backup systems to manually load boron into the reactor. So they're doing all kinds of combinations and it looks like -- it looks like they are providing water to keep the reactor cool.

Again, they have a problem with loss of ac power and they're trying to get diesels in there to restart some pumps. So that's something that we're monitoring as well.

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But we're continuing to get information from the Japanese, from IAEA, from the nuclear industry, the Nuclear Energy Institute. We're getting information from a number of different

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sources and trying to piece it together as best we can. So, we'll be watching it again all night tonight and seeing what we need to do. And hope to get more information tomorrow when we get a couple of guys with boots on the ground. DR. SIZEMORE: All right, great. Questions for Jeff at the NRC? MR. YESKI: Yes, Jeff, this is Kevin Yeski at HHS. You mentioned that there was a 10 (b)(5) 11 12 (b)(5)13 MR. TEMPLE: (b)(5)14 15 16 17 18 19 20 21 22 23 24 25

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DR. SIZEMORE: Other questions?

MR. TEMPLE: Wish I could tell you more but we really can't at this point. It's -- if it were one of our U.S. nuclear plants we'd have an automatic data feed from the plant computer. could tell you exactly what the temperatures are and pressures and the water flow in this pipe and water flow through this valve and so forth. But we don't have that type of data so we're doing the best we can to cobble together pieces of information.

MALE PARTICIPANT: And to your knowledge does your equivalent in Japan have this kind of data?

Yes, they have similar MR. TEMPLE: kinds of tools. I don't know if it's exactly the same.

But again one of the problems is they may need five generators but because of the damage on the ground it's going to be, you know, catching hell to try to get five generators through roads that have caved in and trees down and houses down, airports broken up and everything else. So my guess

is that they're in a pickle when it comes to trying to get together the resources they need. I think the U.S. military is providing some assistance. MALE PARTICIPANT: And these are generators that are too big for rotor lift? MR. TEMPLE: I think so. And I'm not sure what the full story is on that. MALE PARTICIPANT: Yes, okay. MR. TEMPLE: But at one point they were 10 11 using some batteries from cars to help keep some 12 valuable pieces of equipment going which is a very good technique. Use what you've got, including car 13 batteries, so. 14 15 They seem to be getting more resources 16 applied to the thing. DR. SIZEMORE: All right. 17 18 questions, comments? 19 MR. YESKI: A follow-up question, Jeff. Again, Kevin Yeski. 20 21 So, I mean your impression is -- to be 22 more controlled, or about the same, or getting 23 worse? 24 MR. TEMPLE: Well, at this point from 25 what we've seen over the past several hours it's

about the same. It may be getting a little bit better, we're not sure. (Interruption from an automated recording) DR. SIZEMORE: This will go on for a second, hang on. It will repeat it. Hang on. MR. TEMPLE: Okay. (Interruption from an automated recording) DR. SIZEMORE: Thank you. 10 11 MR. TEMPLE: So again because of the 12 scattered information we're getting I don't want to characterize it as better or worse or anything else 13 so please don't quote me. 14 15 It seems to be that they're getting water to the core which is a good thing. We're not 16 17 seeing a lot of isotopes out on the ground anywhere and that's probably a good thing too. So we don't 18 have a lot of data and a lot of numbers yet but. 19 20 MR. DASHMAN: Jeff? Scott Dashman from CDC. 21 22 MR. TEMPLE: Yes. 23 MR. DASHMAN: If they're pumping 24 seawater and boron chemical into the reactor vessel 25 does that mean they're basically writing off the

unit?

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MR. TEMPLE: Well, I'm not sure. It's - they'll have to probably get rid of their fuel
which they're going to I'm sure do anyway.

What I understand, and again don't quote me, but what I understand is when you do that they can scrub the reactor core itself and probably load new fuel if they have to. I'm not 100 percent sure of the method, but what I've heard is the fuel has to go away but the reactor itself can be used again.

DR. SIZEMORE: Other questions?

MR. TEMPLE: And again, I wish I could be more specific but without boots on the ground and without the kinds of data feeds that we're used to with an American plant it's hard to kind of piece together the data and come to conclusions we're in better shape, we're in worse shape.

DR. SIZEMORE: That's a great report, Jeff. Thanks. I appreciate you giving it.

MR. TEMPLE: Yes.

DR. SIZEMORE: Let's talk a little bit about what we heard about -- from the Department of State and see if we can get an update from them if they're on on the 40 people who were trying to get out of Japan, or at least away from the reactor.

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State, are you on? (No response) DR. SIZEMORE: Has anybody got an update on those, the status of those folks? MR. TEMPLE: NRC again. We haven't heard anything since we talked to the State Department this morning during the call. DR. SIZEMORE: Okay. There's a State Department call tonight so maybe there will be more information then. 10 MR. TEMPLE: What time is that call? 11 DR. SIZEMORE: We've heard I think it 12 13 was 2100. 14 MR. TEMPLE: Okay. 15 DR. SIZEMORE: Any information on --16 from anybody on USAID support requests? 17 MR. TEMPLE: We're not aware of any 18 requests and we've got two of our people from our 19 emergency preparedness group at USAID down at 20 Pennsylvania Avenue at the Reagan Building. And we 21 have not heard any requests. 22 Again, we've got liaison people there 23 just to kind of if we do get requests to figure out 24 which kinds of resources we can provide to them. 25 But no requests that I'm aware of yet.

MALE PARTICIPANT: Dr. Sizemore, other than the DART and the two (indiscernible, possibly USAR) that they talked about early on on part of that, that's the same thing we've heard.

We heard yesterday that potentially that like the NRC folks talked is to let some of their experts in to go in potentially with the DART team.

That's the only thing we've heard.

MR. TEMPLE: We've got one guy on that plane and one guy that left this afternoon in a separate plane.

And again I wish -- I'm sorry I can't provide more descriptive and more accurate information, but we're still kind of piecing together what we're seeing from several different sources. And some of it matches, some of it conflicts. And so we're trying to work through that process. So I wish I could be more specific and give you more information.

We're going to do a call tomorrow because hopefully I can provide more information at that time.

DR. SIZEMORE: Yes, I think we'll look and see what's going on. We're going to talk about that in just a second.

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MR. TEMPLE: Okay.

DR. SIZEMORE: Let's talk a little bit about demobilizing the people out of California.

Does anybody see a problem with going ahead and demobilizing them now?

MALE PARTICIPANT: Tom, you probably saw some of their earlier comments. This is Mike. The RRCC has already shut down and those folks from the region have already moved out of where the IRCT is.

They're standing by. They've done their demob plan. They've got everything standing by in omega for us to let them go ahead and start making the travel orders tomorrow.

That would also include taking the second command and control IRCT element off of alert. That would also include 4 team folks that were in Missouri that were actually activated in place but we couldn't get out. But they're still considered activated in place. And then all the other teams that are on alert.

And I would recommend unless we hear something drastic and we haven't in the last couple of days I would recommend letting them demob and taking all the rest of the people off of alert and off of being activated.

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Room for comments.

MR. DELINSKY: This is David Delinsky for A&F. We did -- I did talk to Gerald Fenner. We

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MALE PARTICIPANT: Yes, I think our intent was Travel and everything had connected. They got the plan to try to get everybody out. They're on standby mode and if they get ready to do it tonight. We just wanted to kind of make sure we went through the -- yes, no, Dave, our intent is to get them all home tonight. Or tomorrow, sorry.

MALE PARTICIPANT: So Kevin Yeski, do you have any problem with going ahead and pushing the demob button?

MR. YESKI: No, go ahead, execute the plan. Let's get them home tomorrow. I think it's just wise to keep them there tonight in case there's any last-minute changes in requests for assistance.

DR. SIZEMORE: So, RRCC and forward post, you got that? Is field ops on?

MALE PARTICIPANT: Field ops is on.

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MALE PARTICIPANT: All right. So you guys (indiscernible) we can take everybody off alert. We can take Missouri-1 off of being activated in place and then work with the post to get everybody home.

FEMALE PARTICIPANT: Mike, this is Pam.

I just got off mute. I'm on.

MALE PARTICIPANT: Okay, thanks.

DR. SIZEMORE: Mike, what that leaves then is a discussion about a call for tomorrow.

We're going to hear -- there's going to be two DOS,

Department of State calls tonight.

And how about we schedule a 10 or 11 o'clock call tomorrow morning? That lets people on the west coast get a little rest tonight. And then get a briefing from what we hear from Department of State. Unless of course the Department of State call indicates that we want immediate USAID action. That make sense, everybody?

MALE PARTICIPANT: Yes, sir, we could probably do it anytime tomorrow that's convenient with you all. If we put everybody on planes and back in their vehicles tonight they're all going to be -- all the people on the west coast are going to be moving anyway. Unless they're all going to get

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on by cell phone when they move.

MALE PARTICIPANT: Do you want to do it like around noontime instead of earlier in the morning?

DR. SIZEMORE: Sure, we can do that.

MALE PARTICIPANT: That way it gives

people time to get moving, get their business done

and their work done. And then we can have the call.

I think most of the west coast stuff is done. I think most of what we're going to be dealing with potentially from here on in is USAID potentially or Department of State even though that's unlikely. But I think let's try and do it around noon tomorrow.

MR. TEMPLE: All right. This is Jeff Temple, NRC. That works for me.

MALE PARTICIPANT: -- just have a --

DR. SIZEMORE: All right, well we'll have a regular call. And we're just keeping up -- at 12 o'clock tomorrow. Remember to spring your clocks ahead tonight. And we'll -- it will be a brief call, hopefully, just to get a USAID update.

And Jeff, if you could sign on we'd appreciate it to give us any information you have on the radiation.

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MR. TEMPLE: Sure. I'll plan on being on the call at 12 noon tomorrow. Not a problem. DR. SIZEMORE: Thank you so much. MR. TEMPLE: My pleasure. MALE PARTICIPANT: Hey Tom, before you go I'd like to talk to CDC and maybe Jeff, hang on for a second or two. MR. TEMPLE: Sure. Yes. MALE PARTICIPANT: I just have some 10 questions that we don't need to tie up the whole 11 group for. 12 MR. TEMPLE: Okay. 13 MALE PARTICIPANT: Dr. Sizemore, this is Joe. 14 15 DR. SIZEMORE: Yes. MALE PARTICIPANT: It's -- given all 16 that's moving along we still probably need an ops-17 18 log call. It will be a real quick one tomorrow. 19 And if it just needs to be with the headquarters folks. I'd just like to touch base with everybody 20 21 to make sure we've got (indiscernible) in place. 22 We'll do it about an hour before the ESSA call. So 23 at 11. 24 DR. SIZEMORE: Eleven o'clock for the

ops-log call. Twelve o'clock noon for the ESSA

call.

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Okay, go ahead, Kevin. Dr. Yeski?

MR. YESKI: Yes, I'm here. Sorry. You

know, the rest of the group can sign off. The

questions I just had for CDC, you know, apparently

at least through some email traffic I've seen that

Department of State has a lot of questions about

(indiscernible) Japan and they're looking for travel

advice.

You guys have the travel website. State
Department has a travel website. We need to see if
we can get some information up on our site to
(indiscernible) reference to that kind of stuff.

MALE PARTICIPANT: Kevin, Phil, hang on just a second till everybody finishes hanging up.
You're coming in broken.

MALE PARTICIPANT: Sorry, I'm not hearing people hanging up.

MALE PARTICIPANT: Is that better?

MALE PARTICIPANT: Yes.

MALE PARTICIPANT: So I guess Phil and Scott, if you're still on --

MR. TEMPLE: Jeff Temple, still here.

MALE PARTICIPANT: And Jeff. Apparently the Department of State is getting lots of phone

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calls from people, U.S. citizens in Japan who are wanting to leave and just have a bunch of questions about travel. And we just need to (indiscernible) any information we can put up on (indiscernible) website.

I know you (indiscernible) your site with earthquake and radiation stuff. So maybe we can look to talk about how we can get some travel information up there, number one.

Number two, apparently there was some concern about the -- some exposed American citizens who want to return to the States for care.

MR. TEMPLE: Yes.

MALE PARTICIPANT: And there's been an issue about whether they're going to let them come back or not. And I don't know what role (indiscernible, possibly DBMP) or whatever, DBMQ is involved in that. But it's likely to come up on a later call tonight.

MR. TEMPLE: Okay.

MALE PARTICIPANT: It would be nice to get some information about.

MR. TEMPLE: Do we know how many U.S. citizens maybe might be contaminated?

MALE PARTICIPANT: You know, we heard

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today, you know, Department of State said 4 out of the 40. MR. TEMPLE: Okay. Yes. Oh, those are from the GE workers you mean? MALE PARTICIPANT: Yes. MR. TEMPLE: Yes, yes. MALE PARTICIPANT: So that information is likely to come up. I just need to get a read from you guys before 9 o'clock on what, you know, the rules are about that. 10 It seems to me that the common sense 11 12 approach is if they're not contaminated then they 13 should be able to fly back. MR. TEMPLE: Yes. What I heard I think 14 15 from the call this morning from the State Department was three people inhaled maybe potential radioactive 16 17 dust or gas and one person was splashed with 18 something that may have been contaminated. 19 So I'm not sure. That's a good question we'll have to take a look at as to whether we get 20 involved in that or not. My guess is we don't. 21 22 State Department can call us if they need our help. 23 That might be EPA, I'm not sure. I'll do some

MR. WHITCOMB: Kevin, this is Bob

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checking.

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Whitcomb. We were already on a call with that just awhile ago. We've got the issues worked out about routing the requests for information from State Department.

And we'll treat this as we did for the polonium incident where we put out travel advisories through CDC working with our global folks.

MALE PARTICIPANT: Kevin, I'm on too.

This is Norm. So, we're involved in this.

MALE PARTICIPANT: Okay, so I just, you know, if this comes up on our State call tonight I just need to be able to talk the issues reasonably well with these guys. It may not come up since you guys have already talked but if you could just send me a paragraph or a couple of bullets on this so we can talk it straight.

But you know, there was talk initially, and again, I don't know who was saying this. It all came to me by emails and different ways that they

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MR. WHITCOMB: Doesn't to us either.

MS. CONIUM: This is Kimberly Conium from Department of State.

MALE PARTICIPANT: Okay.

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1	MS. CONIUM: We were actually told that
2	all 40 employees were examined and that none have
3	exposure. And that they would be permitted to board
4	commercial transport.
5	MALE PARTICIPANT: Okay.
6	MR. WHITCOMB: Excellent. A solution to
7	the problem. Excellent.
8	MALE PARTICIPANT: Love it when it all
9	works out. Thanks, Kimberly, that's great
10	information.
11	DR. SIZEMORE: Kimberly, did you hear
12	that there will be a call tomorrow at noon?
13	MS. CONIUM: No, thank you. I just
14	joined pretty late, so.
15	DR. SIZEMORE: Yes. So we're going to
16	have a call at noon tomorrow. Same call-in number.
17	And we'll get a report from the NRC, from Jeff.
18	And if you can be good enough to call in or have
19	someone call in, find out where we are with State
20	Department issues.
21	MS. CONIUM: That would be great. Thank
22	you.
23	MR. TEMPLE: Kimberly, Jeff Temple from
24	the NRC. You guys are doing a call at 9 o'clock
25	tonight. Is that something we should be on the

1	conference call too? Don't need to?
2	MS. CONIUM: You probably should,
3	actually.
4	MR. TEMPLE: Okay.
5	MS. CONIUM: I know that you dispatched
6	some individuals to Japan.
7	MR. TEMPLE: Yes, yes.
8	MS. CONIUM: So I think any updates from
9	you would be helpful.
10	MR. TEMPLE: Okay. Can somebody send us
11	the number to call and the passcode and all that
12	stuff?
13	MS. CONIUM: Yes. What's your email?
14	MR. TEMPLE: Let's see.
15	MS. CONIUM: Or a phone number I could
16	reach you?
17	MR. TEMPLE: Yes, the best thing is to
18	send it to our 24-hour operations center.
19	MS. CONIUM: Okay.
20	MR. TEMPLE: And the phone number is
21	301-816-5100.
22	MS. CONIUM: Okay.
23	MR. TEMPLE: You call them and they'll
24	give you a good email address. We get they sent
25	the agenda and the call-in number for this

conference call to our headquarters operations center. And they just printed it out for me. So, yes, that would be the best thing to do. So, 9 o'clock, Department of State. MS. CONIUM: Yes. MR. TEMPLE: Okay, great. DR. SIZEMORE: Questions? MALE PARTICIPANT: Tom, that's all that I had. DR. SIZEMORE: Okay. Anything else from 10 11 anybody? MR. TEMPLE: Let me -- while we've just 12 got three or four of us on the phone line, my 13 personal cell phone if anybody would like it is --14 it's a Maine number, 207-441-2727. 15 16 MALE PARTICIPANT: Thank you. MR. TEMPLE: So anybody that needs me in 17 a heck of a hurry or something, you know, please 18 feel free to use my -- I wouldn't give it out to the 19 20 whole group of a hundred and something, but tell the folks here in the federal family that's fine. 21 MALE PARTICIPANT: All right, thank you. 22 23 MR. TEMPLE: Great, thank you. And I'll 24 talk to you guys at noon tomorrow. 25 MALE PARTICIPANT: Quick question for

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Kevin.

MALE PARTICIPANT: Go ahead.

MALE PARTICIPANT: Kevin, with regard to

your request about travel information, normally

State Department --

(Whereupon, the foregoing matter went off the record)

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(CALL INITIATED)

LT MCDONNELL: NRC, Lieutenant McDonnell. Can I help you?

MR. GRANT: Hi, Lieutenant McDonnell.

This is Jeff Grant. I'm in the operations center

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LT MCDONNELL: Okay.

MR. GRANT: All right? Thanks.

(Whereupon, the foregoing matter went

off the record)

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(CONFERENCE CALL INITIATED)

MALE	PARTICIPANT:	(b)(5)		
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The key will be here -- will be agricultural issues. So USDA and FDA will be involved in that.

I would expect -- and a lot of those -- .

it's going to be communications, is helping people
understand that the radiation levels that we're
seeing while measurable are not large or are not
dangerous by the point -- the time the plume gets
here. And I think those are going to be our key
issues at this time.

MR. TEMPLE: Excuse me, this is Jeff
Temple from the U.S. Nuclear Regulatory Commission
just joining the conference. What is USDA doing -put together a team to do what?

MALE PARTICIPANT: All I'm saying is if that plume arrives in the United States --

MR. TEMPLE: Okay.

MALE PARTICIPANT: -- it will be an

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1	issue most likely in terms of public health		
2	MR. TEMPLE: Yes.		
3	MALE PARTICIPANT: for USDA and FDA		
4	to worry about in terms of food issues.		
5	MR. TEMPLE: Okay, gotcha. Okay. And -		
6	_		
7	MALE PARTICIPANT: I don't see it as an		
8	inhalation problem, for example.		
9	MR. TEMPLE: Absolutely not.		
10	MALE PARTICIPANT: Therefore, KI is not		
11	going to be the issue.		
12	MR. TEMPLE: Correct. Okay, thank you.		
13	DR. SIZEMORE: NRC, thanks for joining.		
14	MR. TEMPLE: Sorry I'm late.		
15	DR. SIZEMORE: The question that got		
16	floated before you came on.		
17	MR. TEMPLE: Okay.		
18	DR. SIZEMORE: And really thanks for		
19	joining.		
20	MR. TEMPLE: Certainly.		
21	DR. SIZEMORE: Is just trying to get		
22	some idea about the possibilities from the Japanese		
23	power plant.		
24	MR. TEMPLE: We don't have anything to		
25	report. We're kind of tracking along like everybody		

else is. Not sure of the status. Our Chairman is down at the White House in the senior-level executive-level briefing as we speak. We're not sure what's going to come out of that but we're briefing the President and his team as we speak. And we've sent a couple of people, some of our senior reactor, boiling water reactor experts to Japan with the U.S. Agency for International Development. They put together a 70- or 80-person advance team, so. DR. SIZEMORE: And can you address the questions of folks that -- U.S. citizens that were exposed and what's being done with that. MR. TEMPLE: With U.S. citizens who have been exposed in Japan? DR. SIZEMORE: Yes, the -- I think it's been reported that three GE employees. MR. TEMPLE: Oh, yes. I'm not sure. We're in touch with GE. I'm not sure what the outcome of that is going to be, but we are in touch with GE. And I'm not sure what the answer is to that to be honest with you. Are we doing another conference call later today? DR. SIZEMORE: That's -- we're going to

talk about that in just a second.

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MR. TEMPLE: Okay. I'll try to have --MS. DRESSER: This is Heather Dresser calling in from the State Department's Task Force. I can speak to that and perhaps we can check that our understandings are matched up. MR. TEMPLE: Okay. DR. SIZEMORE: Please. MS. DRESSER: We understand that the GE folks are -- all 40 of them are headed from the 10 immediate vicinity of the Fukushima reactor down to 11 a hotel closer to Tokyo. We understand that GE chartered a bus to 12 13 collect them because their vehicles had run out of 14 fuel and that that bus had arrived to the group and 15 the group was then coming en route. (b)(4),(b)(5) 16 (b)(4),(b)(5) 17 18 19 20 21 22 23

The latest we heard from GE was that they intended for the individuals involved to come

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to the United States, but our consular folks in
Tokyo are in close contact with the group, working
with them on where they can receive the medical
treatment that they might need and how best to
proceed.

MR. TEMPLE: This is Jeff Temple from
the NRC. Do you have any indication as to what
their exposure levels were?

MS. DRESSER: We do not.

MR. TEMPLE: We don't have that either. Okay.

MALE PARTICIPANT: Hey Norm, this is

Kevin again. Is this something the RITN could help

GE out with?

MALE PARTICIPANT: Yes, if they need, sure. You know, we have the RITN and we have (indiscernible, possibly RAM). We have people available. I'm sure the NRC and others can help as well, so.

MALE PARTICIPANT: Can you just explain that a little bit for the State Department person?

MALE PARTICIPANT: So, we have a thing called Radiation Injury Treatment Network if any people need treatment. They're in fact in alerted - and those are civilians in cancer centers mostly

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who have some experience in this. Al Wiley from (indiscernible, possibly Re-Ax) has been involved. He may even be on the phone call. And we have guidance available, a thing called Radiation Emergency Medical Management which is online, algorithms for medical management which they can be made aware of. MALE PARTICIPANT: Norm, do you know if 10 that's been translated into Japanese? 11 MALE PARTICIPANT: I don't think it is. 12 But I'm sure most of them could speak English or read the English for medical stuff. 13 14 MALE PARTICIPANT: Okay. 15 MS. DRESSER: Thank you very much. I 16 have someone from our Bureau of International 17 Security and Non-proliferation Affairs sitting on my 18 task force with me who's been reaching out to the 19 NRC. Are you part of the operations center, or --20 MR. TEMPLE: Yes, I am. 21 MS. DRESSER: -- way to reach you? 22 MR. TEMPLE: Well, no. Have you been 23 talking with our Office of International Programs 24 people and our liaison team?

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MS. DRESSER: I have been devolving all

of that to my staffers. So, I apologize, I don't have an answer. MR. TEMPLE: Okay. I'm not sure we're getting all that information here in our NRC operations center. Maybe you and I can talk offline. MS. DRESSER: I would love to do that. I'm at 202-647-6611. MR. TEMPLE: 6611. I'll give you a call just as soon as we hang up here. 10 11 MS. DRESSER: Thank you. 12 MR. TEMPLE: Thank you. Appreciate 13 that. 14 MALE PARTICIPANT: And another follow-up 15 question for State here, ma'am. Did you say four 16 zero individuals on the bus? MS. DRESSER: We believe that there 17 would be 40, yes. Thirty-seven of them are American 18 19 I understand the others are other foreign citizens. (b)(5)20 nationals. (b)(5)21 22 MALE PARTICIPANT: And you don't know 23 their exposure level, if at all. 24 MS. DRESSER: No, we do not. We know 25 that only four are even concerned -- four, the

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number four, no zero after it -- are even concerned about anything. MALE PARTICIPANT: Okay. MS. DRESSER: Three may have inhaled dust and one had water splashed on them. DR. SIZEMORE: Okay, thank you very much. Kevin? PARTICIPANT KEVIN: I think that covers the question that I had. I agree with you, Tom, I think we need to have another call later this afternoon when some of this is going to be a little bit clearer. But again, we need to hustle to get some more information about the ongoing scenario in Japan. So, I think an afternoon call is worthwhile. DR. SIZEMORE: All right. The USAID call is at 1700 Eastern. Gary, Kevin Sheehan, what would be the best time after 1700, say they get over at 1800 which is 1500 your time, 3 p.m., what time after that would work for you guys? And does anybody feel that that's too late to have a call as far as information-wise? MR. SHEEHAN: Tom, this is Kevin

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don't have any other operations going on. I would

Sheehan. Anytime after that call works for us.

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1	defer to Gary at the IRCT if he concurs with that.
2	PARTICIPANT GARY: Yes, absolutely. We
3	concur, anytime is fine.
4	DR. SIZEMORE: All right. So why don't
5	we do it at 1900, 7 p.m. Eastern time.
6	MR. TEMPLE: Okay, and that will be the
7	same number and passcode?
8	DR. SIZEMORE: We'll send that out.
9	MR. TEMPLE: Okay.
10	DR. SIZEMORE: I'm getting a shake, a
11	nod yes from the operations center watch officers.
12	MR. TEMPLE: And this is an ESSA call?
13	DR. SIZEMORE: Correct.
14	MR. TEMPLE: Gotcha. Okay, good,
15	because we'll also be on the USAID call at 1700.
16	MS. MICHAELS: This is Gretchen
17	Michaels. Can I put a request out to NRC? Can you
18	forward the SOC a contact person for public affairs
19	at the NRC?
20	MR. TEMPLE: Yes, we can. Anybody that
21	needs assistance from the Nuclear Regulatory
22	Commission, please call the following number: 301-
23	816-5100. And then when you get that's our
24	headquarters operations center. It's like our 24/7
25	911 center.

When you get there State Department should ask for the liaison team. And then if you look for PA ask for the public affairs team. MS. MICHAELS: Thank you. MR. TEMPLE: So call that one number and they can connect you with whoever you need to connect to. And again my name is Jeff Temple, T-E-M-P-L-E. I can also be available at that number. MS. MICHAELS: Thank you. 10 MR. TEMPLE: Thank you. 11 DR. SIZEMORE: Thanks very much. 12 appreciate your help. MR. TEMPLE: Our pleasure. And sorry, I 13 didn't know there was a call. So I will be on the 14 15 1700 USAID call because I've got some liaison people there. And I'll be on the 1900 HHS ESSA call as 16 17 Thanks. Thank you all. well. MALE PARTICIPANT: And Tom, let's make 18 sure USDA is on the call later on this afternoon. 19 20 DR. SIZEMORE: Roger. 21 MALE PARTICIPANT: Okay. 22 DR. SIZEMORE: Will do. Thank you all. 23 (Whereupon, the foregoing matter went off the record) 24

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(CALL INITIATED)

PARTICIPANT ANNETTE: Hello?

PARTICIPANT JOSH: Annette?

PARTICIPANT ANNETTE: Yes?

PARTICIPANT JOSH: It's Josh.

PARTICIPANT ANNETTE: Hey.

PARTICIPANT JOSH: Hi. I'm going to

make you sad.

PARTICIPANT ANNETTE: Why?

PARTICIPANT JOSH: Can we do it at 3 or

12 3:30?

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PARTICIPANT ANNETTE: Oh gee.

PARTICIPANT JOSH: I know. I'm sorry.

He's not sleeping now. He's hoping to maybe do that and then try to get a little bit of sleep.

PARTICIPANT ANNETTE: Okay, 3 or 3:30?

PARTICIPANT JOSH: Three preferably,

19 3:30 if not.

PARTICIPANT ANNETTE: Okay. Well, let me just tell you right now I just -- the only person I actually talked to was Christine Svinicki.

Ostendorff, I can probably get a hold of him. But I

Apostolakis based on the phone numbers that I have

have not been able to get a hold of Magwood or

on the emergency card. Either like they're not answering their home phones and their cell phones aren't set up to even take messages. PARTICIPANT JOSH: Okay. You could also ask the (indiscernible, possibly HOOS) to try to help you track them down. PARTICIPANT ANNETTE: Yes, yes, I'm going to call them and see if they have better numbers than what I have. 10 PARTICIPANT JOSH: Okay. 11 PARTICIPANT ANNETTE: You have your 12 card? PARTICIPANT JOSH: Yes, it's in a 13 different room though. 14 PARTICIPANT ANNETTE: Oh, because I was 15 16 going to ask you if you have, you know, maybe yours 17 is more up to date or something. I'll call the Who 18 Is Center. PARTICIPANT JOSH: Yes, just ask them to 19 20 track them down there. They love doing that. PARTICIPANT ANNETTE: Okay. So you want 21 22 me to try for 3 now? 23 PARTICIPANT JOSH: Yes. PARTICIPANT ANNETTE: Okay. 24 25 PARTICIPANT JOSH: Thank you.

PARTICIPANT ANNETTE: All right, bye. PARTICIPANT JOSH: Bye. (Whereupon, the foregoing matter went off the record)

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PARTICIPANT JOSH: Bye. (Whereupon, the foregoing matter went off the record)

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(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: NRC, it's a recorded line.

MS. SMITH: Hi, yes, it's Brooke Smith.

Can you put us on the conference call with the

U.S.-UK?

MALE PARTICIPANT: Yes, ma'am. One moment.

MS. SMITH: Great, thank you.

(Automated message)

MALE PARTICIPANT: -- in the UK.

MS. SMITH: Hi, this is Brooke --

BRITISH MALE PARTICIPANT: No, that's -- we don't have any BWRs. We've got the advanced gas-cooled reactors, a couple of Magnox reactors still operating, and the single PWR, but no BWRs.

Are you guys in Canada?

CANADIAN MALE PARTICIPANT: No.

BRITISH MALE PARTICIPANT: You're all --

CANADIAN MALE PARTICIPANT: We have our

(indiscernible) CANDUs. Totally different beast.

But, no. So I guess the Americans are quite heavily

-- I think half their fleet's BWR.

BRITISH MALE PARTICIPANT: There's a

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sprinkling of BWRs across parts of Europe, Spain, Germany, different countries. BRITISH MALE PARTICIPANT: Scandinavia. BRITISH MALE PARTICIPANT: Scandinavia as well. I think Finland's got some. France is all PWRs. NORTH AMERICAN MALE PARTICIPANT: Okay, great. Thanks. That's what I thought but I just wanted to confirm that. BRITISH MALE PARTICIPANT: Okay. 10 Just 11 while we are waiting for our U.S. NRC colleagues one of the --12 13 MS. SMITH: Excuse me, this is Brooke Smith from the NRC headquarters operations center. 14 15 We are on the line. BRITISH MALE PARTICIPANT: Oh, hi 16 Brooke, good to speak to you again. 17 18 MS. SMITH: Hi. MR. CRESWELL: Glen Creswell here from 19 20 the UK. There's a fair few extra people with us 21 today. Do you want us to do a roundtable for you? MS. SMITH: I think that would be 22 helpful. 23 24 MR. CRESWELL: Okay, I'll start off. 25 Glenn Creswell from the (indiscernible, possibly

1	NRI).
2	MR. HALL: Andy Hall.
3	MR. MUSKROF: Will Muskrof.
4	MR. THOMAS: Glen Thomas.
5	MR. SHEPHERD: Dave Shepherd.
6	MR. TERRANI: Andy Terrani.
7	MR. CRESWELL: That's all of us from
8	here.
9	MS. SMITH: Great. Brooke Smith,
10	international liaison, NRC headquarters operations
11	center.
12	MR. ALTER: Peter Alter, reactor safety
13	team, NRC operations center.
14	MS. LAO: Chris Lao, director of
15	protection measures team, NRC operating center.
16	AMERICAN MALE PARTICIPANT: That's it.
17	MR. VANDERBORT: Sorry, Adam Vanderbort.
18	U.S. Embassy, London.
19	CANADIAN MALE PARTICIPANT: Just to
20	repeat from Canada and the CNSC in Ottawa we have
21	Richard Tennant, the international liaison officer
22	and Kenneth Brenasof is joining me. He's the
23	emergency director for EOC today.
24	MR. KASSA: And in Vienna you have Sean

Kassa and Anthony Hinton from the Canadian Mission

to the IAEA.

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MR. CRESWELL: Okay. Okay, Brooke, that's all complete from what I've gathered, people joining in.

MS. SMITH: Okay.

MR. CRESWELL: I was just saying as you guys were joining and we talked yesterday that one of the features of this has been the relatively small amount of information which is coming out from Japan. And some of the time lag with it.

Yesterday was a great opportunity to share information with you guys at NRC. I think today is a great opportunity to share that a bit wider. So thanks, NRC, for putting the telephone conference on and widening the detail.

MS. SMITH: Okay. So we kind of do it the same way we did yesterday? You know, go through maybe unit by unit and see what -- you know, the information that we have and make sure we're all hearing the same thing.

MR. CRESWELL: Yes, there you go, Brooke. Do you guys want to lead off?

MS. SMITH: Okay. Peter, did you want to?

MR. ALTER: Okay, we'll start at

1	Daiichi. Daiichi. Okay, starting at Unit 1. Okay.
2	We know the core is damaged because when the
3	when the reactor building roof blew off there was
4	cesium and iodine released and detected.
5	MR. CRESWELL: Yes, agreed.
6	MR. ALTER: The reactor water level is
7	below top of active fuel.
8	MR. CRESWELL: Yes, agreed.
9	MR. ALTER: And seawater injection was
10	lost during the evening.
11	MR. CRESWELL: Of Unit 1?
12	MR. ALTER: At Unit 1.
13	MR. CRESWELL: Go ahead.
14	MR. ALTER: Primary containment is still
15	intact.
16	MR. CRESWELL: Yes, agreed.
17	MR. ALTER: And the reactor building or
18	secondary containment is obviously damaged.
19	MR. CRESWELL: Yes, agreed.
20	MR. ALTER: Okay. Moving onto Daiichi
21	Unit 2.
22	MR. HALL: Just one minute. Andy Hall
23	here.
24	MR. ALTER: Yes.
25	MR. HALL: I wanted to I'd seen a

press report that suggested that they were having problems with the spent fuel storage pool on the top of reactor 1 as well in terms of its cooling. Of course, that was just under the site of the explosion. Do you have any information on that?

MR. ALTER: We don't have any confirmed information, but I can tell you that as long as there is water in the spent fuel pool --

MR. HALL: Yes.

MR. ALTER: -- time -- as long as initially the evaporation rate is slow enough, in other words the water evaporates first and the level lowers. Right now based on what we feel was the last time they refueled Unit 1 that they should not have problems until the fourth day so that it would be maybe tomorrow that they would have problems with the fuel in the spent fuel pool.

Added to that, since it's open to atmosphere it's at a lower pressure and temperature than it would be if it the building was intact. So that might push it off another day.

MR. HALL: Yes, okay. Any idea when the last refueling was? Because we couldn't find that information out.

MR. ALTER: -- know either.

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MR. HALL: Okay, fine.

BRITISH MALE PARTICIPANT: But then -- I really don't understand very much about BWRs. So that space above the fuel pond normally would be pressurized during an incident, would it?

MR. ALTER: No, no. The building is kept covered, okay? The corrugated metal that blew off during the explosion, okay, that keeps it covered. And it is at a slightly negative pressure. And the corrugation and the blowout plug on that floor goes at about a half a pound positive pressure, one-half positive pressure.

BRITISH MALE PARTICIPANT: Okay.

MR. ALTER: Now it's back down to atmosphere pressure. And at least during the night it's cooler up there than it is in the daylight.

BRITISH MALE PARTICIPANT: Yes, understood. Yes, thank you.

BRITISH MALE PARTICIPANT: Peter, one other point of confirmation. I thought I'd seen that the seawater cooling was restored after about a 2-hour interruption. You were saying you've got confirmation of it being lost last evening?

MR. ALTER: All we have absolute confirmation of is that it was lost last evening to

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all three units. And after that, or early this morning our time the roof blew off of Unit 3.

BRITISH MALE PARTICIPANT:

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BRITISH MALE PARTICIPANT: So we haven't got any confirmation of Unit 2. Unit 2 appears to still not have cooling water supplied to it. That's the position that we see which by no means is necessarily correct, it's just the position that we see at the moment.

MR. ALTER: I understand. From my experience they'll need water to all three units.

BRITISH MALE PARTICIPANT: Indeed, indeed. Yes. We're currently -- they're worried about what is currently happening on Unit 2 if they haven't had any cooling into the core for the last 6, 7, 8 hours or so.

BRITISH MALE PARTICIPANT: /
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MR. ALTER: Yes, please send it to Brooke like you did yesterday. BRITISH MALE PARTICIPANT: Yes, will do. MR. ALTER: Okay. What we know about Unit 3 is that the core -- there is core damage. But we knew this morning that during -- late in the evening seawater injection was lost. But you said that has been recovered. 8 BRITISH MALE PARTICIPANT: I think so. MR. ALTER: The secondary containment 10 11 failed early this morning. And that the primary 12 containment is intact. 13 BRITISH MALE PARTICIPANT: Yes. 14 that's agreed, that's how we see it. 15 MR. ALTER: Okay. Unit 2 --16 BRITISH MALE PARTICIPANT: Yes. MR. ALTER: -- we do not know the status 17 18 of the core. 19 BRITISH MALE PARTICIPANT: The only 20 information that we have is that the core -- which 21 we thought yesterday evening, or sorry, when we 22 spoke to you last was fully covered. 23 We had some information come in a little 24 while ago to tell us that it was un -- thought to be

uncovered.

BRITISH MALE PARTICIPANT: Yes, the news channels are reporting it uncovered by midday today our time, 12 GMT. We knew it lost its own cooling system at 4 a.m. GMT.

MR. ALTER: Okay.

BRITISH MALE PARTICIPANT: So potentially 8 hours without coolant and potentially fuel rods uncovered.

MR. ALTER: Okay.

BRITISH MALE PARTICIPANT: I have to say unconfirmed, but that's the latest unconfirmed information we have.

MR. ALTER: Yes, sir. As far as Unit 3 is concerned it's likely, to me it's obvious that there is core damage.

MR. CRESWELL: Agreed.

MR. ALTER: Okay, but we don't have any status of what was released radioactivity-wise when the ceiling blew. Okay?

MR. CRESWELL: We're in the same position. So the -- they say maybe it was a hydrogen explosion. So for hydrogen to be produced there must have been some core damage to generate the hydrogen. Therefore -- damaged it. That's the logic chain that we're following.

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MR. ALTER: Correct. BRITISH MALE PARTICIPANT: The core was uncovered by 2 meters. MR. ALTER: We heard that -- I think I heard that from some Japanese live television report about an hour and a half ago. BRITISH MALE PARTICIPANT: I think TEPCO confirmed that they were down to about 2 meters below top-of-core level last night before they put 10 the seawater cooling back on. 11

MR. ALTER: Okay.

MR. CRESWELL: Okay.

BRITISH MALE PARTICIPANT: Can I just ask how are they actually managing the injection of seawater into the reactor vessel? Do you know what the means of achieving it is?

MR. ALTER: Okay. We know that they are using fire trucks. And basically what that does, it gives them the higher volume of flow. No higher -it's the same pressure but higher volume of flow. And so that they're able to feed as many as all three of the plants.

Our conjecture is that their installed diesel-driven fire pumps could not handle the volume that they would need so they brought in fire trucks.

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1	BRITISH MALE PARTICIPANT: Okay.
2	BRITISH MALE PARTICIPANT: Peter, do you
3	know
4	MR. ALTER: Say again?
5	BRITISH MALE PARTICIPANT: to
6	introduce the injectables into the reactor?
7	MR. ALTER: You're going to have to
8	repeat your question.
9	BRITISH MALE PARTICIPANT: Do you know
10	which route they are using to inject this water to
11	the reactor?
12	MR. ALTER: we have is guesses over
13	here. We do not know.
14	MR. CRESWELL: Okay. We're at exactly
15	(indiscernible, possibly the same place). Thanks
16	for confirming.
17	(Laughter)
18	BRITISH MALE PARTICIPANT: Well, the
19	uncertainty as regards the injection is that we've
20	heard of course of seawater being injected into the
21	reactor itself. But also it's being injected into
22	other parts of the building.
23	Do you have any views on that as to
24	where they might be injecting it with

MR. ALTER: Injecting it inside primary

containment.

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BRITISH MALE PARTICIPANT: Yes.

MR. ALTER: And what they want to do is flood the primary containment at least for Unit 1 and 3 up to the bottom, the outside bottom of the reactor vessel.

MR. CRESWELL: Okay. Does that create some sort of cooling of the vessel?

MR. ALTER: What they're guarding against is if the fuel (indiscernible, possibly slumps) out of the core you want the bottom of the vessel -- you want water in contact with the bottom of the vessel.

MR. CRESWELL: Yes, it keeps it all -- understood, understood. Thanks.

MR. ALTER: Okay.

NORTH AMERICAN MALE PARTICIPANT: Peter, can I ask a question going back to the hydrogen production? Is that -- in a BWR does that necessarily mean that you're having fuel failure, or is there production?

MR. ALTER: No, the hydrogen production comes from clad-water interaction, or clad-steam interaction. It's coming right off of the clad.

And then eventually the clad gets weak enough that

it can't hold the fuel. NORTH AMERICAN MALE PARTICIPANT: Yes, I understand that. So --MR. ALTER: The same mechanism as in a PWR or a CANDU reactor. NORTH AMERICAN MALE PARTICIPANT: Okay, so it's zircaloy-cladding interaction. MR. ALTER: Zirc-water interaction, that's right. But it's actually steam, it's not liquid water. 10 11 NORTH AMERICAN MALE PARTICIPANT: Okay. So it's indicative of fuel -- imminent fuel 12 13 failure, right? 14 MR. ALTER: Yes. NORTH AMERICAN MALE PARTICIPANT: Okay. 15 The other thing I was going to ask is in terms of 16 17 decay power for those BWRs do you have a sense of what we're looking at at day 4 after shutdown? 18 19 MR. ALTER: It's the same decay curve 20 for every reactor, 6 percent immediately, 1 percent 21 within a couple of hours, and then, you know, 22 regular decay after that. So any core decay, power decay chain that you've ever seen, it's the same for 23 all reactors. 24

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NORTH AMERICAN MALE PARTICIPANT: Okay,

great.

BRITISH MALE PARTICIPANT: Coming back to the hydrogen explosions. There appears to have been in the top part of the building as you say within the secondary containment. Would you have expected hydrogen to actually have flowed into that region?

MR. ALTER: Okay, when -- when the pressure builds up into primary containment, the primary containment, it's steam and hydrogen.

Because if they're getting (indiscernible, possibly core) and the cladding's been uncovered for any length of time you're going to get steam and hydrogen together.

That causes primary containment, the steel primary containment vessel to over -- to pressurize. And the objective in all of the boiling water reactor procedures regardless of what level they're at, what reactor, or what containment is to preserve containment, the steel liner of containment. So what they do is they vent it somehow.

In this country we have a larger -caused the industry, the boilers industry to put
large vents that go directly to the stack, or to the

stack as fast as possible. But to get there they've got to go through that reactor building somewhere. Okay? So we don't know if the Japanese have had to install what are called those hardened vents, the large hardened vents. Regardless of how they did it the -what they're venting now to primary containment is in the reactor building for awhile. 10 BRITISH MALE PARTICIPANT: Yes, that's -11 - I'm guessing that's pretty well filled up that --12 MR. ALTER: Well, it's in the building, 13 but it might be in something as flimsy as a regular 14 ventilation duct work like you have over your head 15 in the building you're in. BRITISH MALE PARTICIPANT: 16 Yes, yes. 17 all just looked up, yes. 18 (Laughter) MR. ALTER: And depending upon how much 19 20 pressure was originally in containment when they 21 started to vent and how fast they vent they blew up 22 those vent ducts. 23 BRITISH MALE PARTICIPANT: Yes, sure. MR. ALTER: And it could start -- we 24

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feel that the hydrogen and oxygen -- I'm just

talking basic design here. BRITISH MALE PARTICIPANT: Sure, sure, yes. MR. ALTER: The hydrogen and steam got into the reactor building at ground level. BRITISH MALE PARTICIPANT: Okay. MR. ALTER: Okay? In one corner of the -- all these reactor buildings is a -- essentially a loading access hatch so they can bring stuff from 10 ground level all the way up to the refuel floor, or stop off at any one of the intermediate floors. And 11 12 that hatch is about four times the size of a soccer 13 goal. 14 BRITISH MALE PARTICIPANT: Yes. 15 MR. ALTER: Okay? So, wherever the explosion was in the reactor building that brought 16 17 all that energy immediately up to the refuel floor 18 where this corrugated siding is. 19 BRITISH MALE PARTICIPANT: Ah, okay. 20 So, the explosion may not have been actually 21 primarily in the -- underneath the cladding. It may 22 well have been somewhere else in the building and 23 that was the --

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MR. ALTER: We suspect it was as low --

at least ground level.

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And in

BRITISH MALE PARTICIPANT: Okay, so a kind of shotgun effect going up the -- up that access shaft, yes. MR. ALTER: Yes. Okay? BRITISH MALE PARTICIPANT: That's really useful. We were making some other assumptions. MR. ALTER: What I've been telling you is just basic design. I've only been teaching boilers since 1979. (Laughter) BRITISH MALE PARTICIPANT: Yes. a few more years, yes. MALE PARTICIPANT: Can we go back one step? We've been discussing the water being poured into the primary containment in order to prevent damage from the core. Now, but the question of seawater injection into the reactor itself, it still seems to be up for discussion. Is that also taking place? MR. ALTER: The word we had yesterday, when I was here yesterday was that they were sending some water to both places, inside the reactor vessel to below the core and into containment below the

MALE PARTICIPANT: Presumably they're

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reactor itself.

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injecting water into the reactor and then venting that in order to maintain the temperature. The outfall is they're not circulating water through there, they're just putting it into the same (indiscernible) over and they're boiling off -- they're boiling it off to keep the pressure down. Does that make sense?

MR. ALTER: That's correct. And to get the water into the reactor vessel itself they have to have release valves open.

MALE PARTICIPANT: Okay.

BRITISH MALE PARTICIPANT: Okay. There seems to be just around conflicting information as to if they are or not injecting seawater into the reactor. In our view on balance the information evidence is that they are. But we do occasionally get bits of information implying or even saying they're not. But we go with the -- with you guys in NRC that they are doing that.

MR. ALTER: Yes. The one thing that we have to say, and this -- once again, this is based on generic knowledge of all boilers, is that they are many more hours into a station blackout when they first lost diesel, they're many more hours into a station blackout than anybody has analyzed.

BRITISH MALE PARTICIPANT: Yes

MR. ALTER: And the station blackout analysis is basically the same for pressurized water reactors as it is for boiling water reactors. It's just the mechanisms of how things move around is different.

MALE PARTICIPANT: Let me ask you another question. Given my -- I'm looking at the electrical systems here. Any word on -- presumably the switchgear and all that were flooded. Are they making any attempts to reestablish the electrical system in the plant?

MR. ALTER: All we know is that what you just said, is that the electrical switchgear was flooded. And if it was flooded with seawater, obviously tsunami is seawater, it would take quite awhile to clean that up so that they could use even a portion of it.

BRITISH MALE PARTICIPANT: We saw some photographs on TV this morning comparing the reactor site, like a Google Earth photograph, before the event and after it. And before the event it looks like a four-reactor nuclear power station. After the event it looks like, forgive me guys, but a ruined scrap yard with four boxes there. So it

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1	looks to me like just about everything except the
2	reactor buildings has been just swept away in the
3	process.
4	MR. ALTER: Yes, the concrete portion of
5	the reactor buildings are pretty well still intact.
6	BRITISH MALE PARTICIPANT: Yes, agreed.
7	MR. ALTER: Primary containment except
8	vent path is still intact.
9	BRITISH MALE PARTICIPANT: Agreed.
LO	MR. ALTER: And the reactor vessels are
1	still intact and hopefully they're able to maintain
L 2	the release valve open.
L 3	BRITISH MALE PARTICIPANT: Yes, agree
L 4	with all that. So the switching yard and all that
L 5	sort of stuff looks like it's just been swept away
L 6	with the tsunami.
L 7	MR. ALTER: Yes, sir. As far as Daini
L 8	is concerned basically what we know is nothing
L 9	different than what we discussed yesterday at 3
20	o'clock.
21	BRITISH MALE PARTICIPANT: Yes, yes, we
22	got the same, that all shutdown with
23	MR. ALTER: Normal makeup and offsite
24	power.
25	BRITISH MALE PARTICIPANT: Yes, there

were a couple of wrinkles on that. There was a summary sheet put out by IAEA which showed a couple of the normal cooling systems on two of the units not being quite right (indiscernible) 2 and 4. But essentially they've still got enough cooling on and they're in a good (indiscernible, possibly bit).

I think, if you like, they're wrinkles, the kind of wrinkles you might expect when you're trying to take (indiscernible, possibly cores out) at the same time.

MR. ALTER: Yes. And we really have no other information about Onagawa other than what we shared last night.

BRITISH MALE PARTICIPANT: Same here.

There's very little information come out, or that we managed to pick up in the last 20 hours or so.

MR. ALTER: Yes. And then of course both of us are looking for any information about any other plants near the water all the way -- on both the northeast and northwest side of the island.

BRITISH MALE PARTICIPANT: And thanks for the information you gave us last night, when you spoke last about the west side of the island and the magnitude 6.6 event on that. That caused us to --

MR. ALTER: And it's out in the water.

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We don't think that's near land. BRITISH MALE PARTICIPANT: Understood. MR. ALTER: In the Sea of Japan. BRITISH MALE PARTICIPANT: In the Sea of Japan. MR. ALTER: That's correct. BRITISH MALE PARTICIPANT: We're putting a bit more thought into what's happening in the rest of -- including on aftershocks and stuff. 10 MR. ALTER: Yes, sir. 11 BRITISH MALE PARTICIPANT: MR. KASSA: Just a couple of questions 12 13 or issues from Vienna here. The latest IAEA documentation that we found posted on Unit 1 only 14 15 mentions the injection of seawater interrupted. 16 can't find anything mentioning that it's been 17 reestablished. So, again, if our UK colleagues do 18 see something we'd like to see that. The second question is about Unit 3. 19 20 One of our people we spoke to at the agency talked 21 about there being a valve problem which might cause 22 an issue in terms of venting pressure out of there. 23 Have you guys heard anything about that? NORTH AMERICAN MALE PARTICIPANT: 24 25 heard something about that just before I came over

here to sit down and talk. I know nothing more than that and I don't know the source. And we don't discuss anything unless we verify it by another source.

MR. KASSA: Yes, I understand. Again, I don't think we've got it verified but I think we do have a report from TEPCO which says that they've been having problems with a valve. And there was certainly some clear information that said they had been manually operating some ventilation valves.

MR. ALTER: Okay. I can tell you this. In general for boiling water reactors a lot of the valves that you need to work in these conditions, and this includes the release valve on the reactor itself, you need both pneumatics, either air or nitrogen, and dc control power.

BRITISH MALE PARTICIPANT: -- they've had to do it annually.

MR. ALTER: And if both of those are -one or the other of those are lost you can get to
the valve -- excuse me, if you can get to the valve
those valves can be opened manually even though they
might not be designed to. You get a big enough
wrench you can do almost anything.

BRITISH MALE PARTICIPANT: Okav.

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BRITISH MALE PARTICIPANT: Again, talking about the reestablishment of seawater cooling. I'll look to where the source of information was for the valve operation and see if we can share it with you. MR. ALTER: Okay. BRITISH MALE PARTICIPANT: Okay. Have you got an email address in Vienna that we can send stuff to? MR. KASSA: The easiest one is our 10 general email address here at the mission. 11 12 but VEERM. BRITISH MALE PARTICIPANT: Victor Echo 13 14 Echo Romeo Mike. 15 MR. KASSA: Yes, okay, sure. Victor Papa Echo Romeo Mike. 16 17 BRITISH MALE PARTICIPANT: Victor Papa 18 Echo Romeo Mike, okay. 19 MR. KASSA: At international.gc as in 20 Golf Charlie --BRITISH MALE PARTICIPANT: Golf Charlie. 21 22 MR. KASSA: -- CA as in Charlie Alpha. 23 BRITISH MALE PARTICIPANT: Say again 24 that last part? At? I'll go back to the good old-25 fashioned technique. VPERM@international.gc.ca.

1	MR. KASSA: That's it, yes.
2	BRITISH MALE PARTICIPANT: Thank you.
3	CANADIAN MALE PARTICIPANT: Could you do
4	us a favor as well? Could you add the CNSC external
5	liaison email into that as well? It's Echo Oscar
6	Charlie 2 at CNSC-CCSN.gc.ca.
7	BRITISH MALE PARTICIPANT: Okay. Again,
8	I'll go back to the non-phonetic version of that.
9	So that's EOC2@cnsc-ccsn.gc.ca.
10	CANADIAN MALE PARTICIPANT: Affirmative,
11	thank you.
12	BRITISH MALE PARTICIPANT: Thank you.
13	CANADIAN MALE PARTICIPANT: And I have a
14	question from CNSC. In PWR we have (indiscernible)
15	thermocouple to measure the temperature at the fuel.
16	Do you have that kind of system in BWR?
17	NORTH AMERICAN MALE PARTICIPANT: No.
18	CANADIAN MALE PARTICIPANT: Do you have
19	any severe accident systems or any what are you
20	measuring in containment? Any pressure,
21	temperature? What are you going by when you're
22	deciding to vent or not?
23	NORTH AMERICAN MALE PARTICIPANT: We're
24	going by pressure in containment. Yes, it's
25	pressure in containment. You want to stay beyond

below, excuse me, you want to stay below design pressure for the containment vessel.

High temperatures inside the containment just means that the equipment in there might not be -- you might exceed its environmental qualifications.

MALE PARTICIPANT: For the TMI, one action plan for the TMI was that you have to have thermocouple to measure the temperature of the fuel.

I believe there should be some kind of that system in BWR.

MR. ALTER: Not in boilers. In boilers all our nuclear instrumentation is actually in the core all the time that it's being used. So, essentially -- and the top of each control rod drive mechanism has a thermocouple in it as well. So we use a combination of those two things to know what temperatures are. But we have no requirement in boilers for in-vessel temperature.

BRITISH MALE PARTICIPANT: It's not at all clear to us to what extent they've still got any instrumentation that's working for them.

MR. ALTER: We've received no word on that. You can use a direct reading pressure instrument for containment pressure. But we believe

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that they have some remote indication of that. BRITISH MALE PARTICIPANT: Okay. And actually, it's not entirely clear to us either what condition their control rooms are in. NORTH AMERICAN MALE PARTICIPANT: not heard word one about the control room. But then initially what rad levels (indiscernible) during the first explosion. BRITISH MALE PARTICIPANT: Yes, they 10 report them to be (indiscernible) intact after the 11 explosion. But whether that means functional is 12 another matter. NORTH AMERICAN MALE PARTICIPANT: 13 14 back to the severe accident management guideline, in 15 the United States we do have severe accident 16 management guidelines. But --17 NORTH AMERICAN MALE PARTICIPANT: 18 sorry. We have SAMGs but we don't know whether or 19 not the Japanese do. 20 BRITISH MALE PARTICIPANT: We're in the 21 same position. We have the same sort of thing but 22 we don't know -- we've got no idea what the Japanese 23 have. (b)(4),(b)(5)NORTH AMERICAN MALE PARTICIPANT: 24 25 (b)(4),(b)(5)

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(b)(4),(b)(5)

NORTH AMERICAN MALE PARTICIPANT: Okay.

And that comes from where?

NORTH AMERICAN MALE PARTICIPANT:

(b)(4),(b)(5)

(b)(4),(b)(5)

NORTH AMERICAN FEMALE PARTICIPANT:

That's their emergency center.

NORTH AMERICAN MALE PARTICIPANT: 1 understand.

MR. KASSA: One other question from Vienna if we could. The venting from these units, is that normally filtered? And if so, is it being filtered any longer for Unit 1 and 3 given the explosions and whatnot?

NORTH AMERICAN MALE PARTICIPANT: During normal operation if they vent at all, and I'm talking about starting up, shutting down, getting ready to go in, or closing up containment, it does always go through a filter.

Under emergency conditions the normal vent path that they would be using still goes through that filter, but the larger direct vent

system in most cases goes directly to the elevated release point or the stack. It's just that while it's going through the reactor building it's any one of a number of different configurations. BRITISH MALE PARTICIPANT: Okay. MALE PARTICIPANT: (indiscernible) on the general question. Do you know what the design

basis is on the seismic qualification of the fuel

ponds? And whether they've managed to retain the

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AMERICAN MALE PARTICIPANT: The fuel storage pools are seismic class 1. So they're the same classification of all of the safety systems --

the pools themselves.

integrity?

BRITISH MALE PARTICIPANT: We have a picture -- information or intelligence on what their current state of integrity assuming that they're not leaking at the moment.

NORTH AMERICAN MALE PARTICIPANT: Okay.

BRITISH MALE PARTICIPANT: But that's just an assumption.

BRITISH MALE PARTICIPANT: A question following up on that. Does the cooling pump also need to be (indiscernible, possibly prorated) in order to keep the fuel subcritical?

AMERICAN MALE PARTICIPANT: Not in a boiling water reactor. BRITISH MALE PARTICIPANT: Oh, okay. AMERICAN MALE PARTICIPANT: The -- yes. Not in a boiling water reactor. BRITISH MALE PARTICIPANT: Okay. AMERICAN MALE PARTICIPANT: I could --BRITISH MALE PARTICIPANT: Okay. Just a very general thing. We have not made any real 10 concerted attempt to contact the Japanese safety 11 regulator. We think their minds will be fairly well concentrated on what they've got to do within Japan 12 at the moment. I don't know if anybody has spoken 13 14 to anybody, any of our colleagues in the regulatory 15 agencies in Japan or not. I'm sorry? 16 AMERICAN MALE PARTICIPANT: Since I've 17 been here I have not heard for sure about any of 18 those interactions. BRITISH MALE PARTICIPANT: Okay. 19 20 thought as well. Yes. We really don't want to push 21 it too hard because they -- I know where my mind would be focused if I was there. 22 23 MS. SMITH: This is Brooke Smith. just wanted to interject just briefly. As an agency 24

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our policy, we clearly have our op centers up and

running 24 hours a day since this occurred.

But we've been extremely, extremely limited in what we've said publicly. We don't want to get out ahead of the Japanese. We don't want to be quoted in the press as, you know, any hypotheticals or what-if type scenarios.

We've had I think one or two press releases and they're very high-level, you know, just generic "The NRC is monitoring the situation" type messages.

So our conversations have been limited to, you know, within the U.S. Government and now these technical exchanges with the UK and Canada. So, we've been extremely sensitive, you know, with our communications with Japan and also, you know, what we've been saying from a public affairs sort of standpoint.

BRITISH MALE PARTICIPANT: Thanks,

Brooke. We've taken almost the exact same line.

MS. SMITH: Okay.

BRITISH MALE PARTICIPANT: The UK government, the Foreign & Commonwealth Offices, the only thing that they've put out is our advice to UK citizens in Japan. And that's as being essentially to follow the advice that's given in Japan because

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it's quite simple advice. MS. SMITH: Yes, and you know, I was here last night and that was being discussed. I just got here this morning again. I don't know if that actually went out or not. So we may have issued the same thing. BRITISH MALE PARTICIPANT: Yes, okay. And the stuff that we're saying generally is just almost word perfect for what you just said. MS. SMITH: Okay. So we're all on the 10 11 same line of thought. So, you know. 12 BRITISH MALE PARTICIPANT: I think we've 13 had a lot of pressure from Mike Whiteman, our chief 14 inspector, to give some interviews and statements. 15 And he will keep to that end of it without getting 16 drawn into stuff too much. But I think he may feel 17 obliged to answer some questions in describing what 18 he understands has happened. 19 But we'll try and make sure he sticks to 20 facts in evidence and certainly no second-guessing 21 of any of the regulators or anything. 22 MS. SMITH: Yes, okay. Is there 23 anything else?

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(indiscernible) from me. That is do you have any

BRITISH MALE PARTICIPANT: Just

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1	views on prognosis of the extent to which they will
2	be able to control the situation, maintain the core
3	within the reactor pressure vessel and prevent a
4	release to the environment?
5	NORTH AMERICAN MALE PARTICIPANT: We'd
6	have to know more about what current conditions are
7	to get to forecast. And our forecasts are based
8	on are they able to get water back into the vessel,
9	and are they able to keep water as close as possible
10	to the outside of the vessel inside containment.
11	BRITISH MALE PARTICIPANT: Yes. Do you
12	have any analyses, for example, of the cooling of
13	the outside of the vessel which would indicate that
14	it could maintain its integrity?
15	NORTH AMERICAN MALE PARTICIPANT: Our
16	national lab, the Department of Energy national lab
17	has done a lot of research on that. And there is a
18	NUREG if you know what a NUREG is
19	BRITISH MALE PARTICIPANT: Yes, sure.
20	NORTH AMERICAN MALE PARTICIPANT: on
21	that. But I don't know the number. I'd have to
22	search for that.
23	BRITISH MALE PARTICIPANT: Okay, that's
24	fine.
25	BRITISH MALE PARTICIPANT: Don't worry

about that.

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BRITISH MALE PARTICIPANT: Yes, if you could send us an email with that NUREG number on, actually, that would be quite useful. Is that possible, Peter?

MR. ALTER: We'll do the research and try and get the number. And I'll give that number to Brooke.

BRITISH MALE PARTICIPANT: Thank you very much.

BRITISH MALE PARTICIPANT: Okay, thanks very much indeed.

Brooke, I think we're just about all set at this end. The only thing that I'd like to suggest is would it be possible to actually repeat this this same time tomorrow?

MS. SMITH: Yes. It's Brooke again.

Yes, we can make arrangements maybe tentatively for
the same time, 9:30 Eastern Standard Time here. And
we'll coordinate that.

I think everybody has the emails for the -- is it the LIA02.hoc@nrc.gov. It's a general international liaison email address. If it's not myself there will be somebody else taking over later this afternoon for me. But we're more than happy to

1	coordinate that. And hopefully Peter is here
2	tomorrow or we'll find out who's here from the
3	Reactor Safety Team.
4	MR. ALTER: I'll be in the building.
5	MS. SMITH: You'll be in the building.
6	BRITISH MALE PARTICIPANT: Yes, I know
7	the feeling.
8	MS. SMITH: Okay. But, yes. So let's
9	just tentatively, you know, plan for something and
10	maybe later, I guess it's later in the day there.
11	We'll try to set something up through email
12	communication.
13	BRITISH MALE PARTICIPANT: Yes, that's
14	good.
15	MS. SMITH: Okay.
16	MR. TENNANT: Richard Tennant here, the
17	external liaison for CNSC right now.
18	Just a couple of questions. Have you
19	guys done any plume modeling about any kind of plume
20	that's going to affect your western shoreline?
21	MR. ALTER: Okay, we have to get our
22	protective measures person back. She got bored
23	listening to me.
24	(Laughter)
25	MR. TENNANT: Apples and oranges. Okay,

we've done some projections but we've had trouble with projecting based on a 72-hour continuous inject of radioactive material into the atmosphere versus the actual problem that occurred. So, our numbers indicate that it's minimal, or less than minimal, but we would, like you say, we've been holding back information on that aspect because our projection showed that it might affect your shoreline as well. So we wouldn't want to put numbers out that are in conflict. So maybe perhaps we could touch base later on that.

FEMALE PARTICIPANT: We're in the process of looking at the actual readings from the site and do the calculation there too. So we are in the process of working that ourselves.

MR. TENNANT: Okay. Do you guys have any -- have you guys deployed any radiological teams that are taking your readings, or readings -- you guys are reading that site? Or are you just going from what's been projected from Japanese information?

FEMALE PARTICIPANT: That's information we're using. We are using the official information that's being made available by the government, by the Japanese government.

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MR. TENNANT: Okay. So, okay, we're in the same boat there.

FEMALE PARTICIPANT: Right.

MR. TENNANT: All right.

BRITISH MALE PARTICIPANT: Our environment agency colleagues in the UK have done some modeling on the basis of potential releases from Japan using actual weather conditions.

One piece of information at the back of our mind, please don't use it, is it would take 5 days in current weather conditions for anything to circulate round the Pacific.

Clearly their interest was in how long it might take to get here to western Europe. If I can get those guys who are on to -- in (indiscernible) office I can (indiscernible) whatever they've got.

FEMALE PARTICIPANT: Okay. We are -- I mean, not a dose assessment. We are actually not trying to speculate how long the plume may be traveling because the weather changes all the time.

And any type of projection we do based on that type of guesstimate is bound to change. So we're not spending any effort on that right now at all.

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BRITISH MALE PARTICIPANT: Okay, good point. We -- our environment agency guys just were doing it just to get an order of magnitude view on just what the -- any possible scenarios might be. FEMALE PARTICIPANT: Okay. Well --BRITISH MALE PARTICIPANT: No attempt to predict, just in terms of scenarios. But it would be good if this is stuff that we're passing around, if we could be kept in the loop. NORTH AMERICAN MALE PARTICIPANT: 10 11 Brooke, can I just confirm your email? You said 12 LIA02? MS. SMITH: 02.hoc@nrc.gov. And then 13 14 let me -- there's two international desks. 15 other one is LIA03, zero three, sorry. We say oh and zero. So, LIA02.hoc@NRC.gov and then 16 17 LIA03.hoc@nrc.gov. NORTH AMERICAN MALE PARTICIPANT: 18 is the main line or the equivalent? 19 MS. SMITH: They're the equivalent. 20 21 There's somebody staffing both of those computer 22 terminals. 23 NORTH AMERICAN MALE PARTICIPANT: Okay. 24 And can I get -- do you have an external liaison

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officer at the UK?

Temple's email address. BRITISH MALE PARTICIPANT: Yes, that's because our equivalents of your LIA02 had broken down on us. But we've now got our correct one working. What I'll do, I'll get the guys to just send you an email to confirm what that is. MS. SMITH: Okay, fantastic. 10 CANADIAN MALE PARTICIPANT: All right. 11 And Brooke, we were supposed to have a CNSC-U.S. NRC 12 teleconference at 10:30. I'm hoping we're going to 13 cancel that and we'll just --14 MS. SMITH: Yes, we wanted to bring us 15 all together at one time just because of resources. 16 And I think it would, you know, having a trilateral 17 exchange of information has been helpful. 18 BRITISH MALE PARTICIPANT: Yes, 19 absolutely agree. It's been really useful. 20 MS. SMITH: Okay, great. I'm happy. 21 Good. 22 BRITISH MALE PARTICIPANT: And thanks 23 for your indulgence and the time you've spent on it. 24 MS. SMITH: Oh, no problem. We're happy 25 to have done it.

MS. SMITH: I think we have Charlie

BRITISH MALE PARTICIPANT: Okay. MR. KASSA: Vienna here. Can we just jump in with one last point? Sorry. You had discussed earlier your advice to your citizens in Japan. I just wanted to confirm that Canada has also provided the same advice to our staff at the embassy and consulates as well as their families and other Canadians to follow the advice of the local authorities. (b)(4),(b)(5)MS. SMITH: Okay. That's good to know. BRITISH MALE PARTICIPANT: NORTH AMERICAN MALE PARTICIPANT: Tomorrow at 0930 Eastern Standard Time we'll do this again? MS. SMITH: Yes. CANADIAN MALE PARTICIPANT: Excellent. At CNSC we're finished. BRITISH MALE PARTICIPANT: Okay. guys, goodbye. MS. SMITH: Okay. Bye bye.

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(CONFERENCE CALL INITIATED)

MR. TEMPLE: Jeff Temple, NRC is on the line.

MR. WHITCOMB: Bob Whitcomb, radiation

study, CDC on the line.

MALE PARTICIPANT: All callers, please remember to mute your phones using the mute button and/or *6. Otherwise we will mute your line. Thank you.

 $$\operatorname{MR.}$$ HIMMLER: This is Bernell Himmler from OPP.

CALL MODERATOR: Thank you.

MS. MYERS: Jennifer Horstein Myers,

NIOSH.

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MS. BADER: Judy Bader, ASPR.

MS. PASSMAN: Tina Passman, ASPR.

CALL MODERATOR: Thank you.

MS. HASTINGS: Cathy Hastings, OHA.

CALL MODERATOR: Thank you.

MR. CAGE: Chris Cage, Region 7 REC.

CALL MODERATOR: Thank you.

MR. KIRCHNER: David Kirchner, Region 10

REC.

CALL MODERATOR: Thank you.

MR. ESPINOZA: Greg Espinoza, NOC

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CALL MODERATOR: Thank you.

MS. TAYLOR: -- Taylor Region 6 REC.

CALL MODERATOR: Thank you.

CMDR DEE: Commander Mark Dee, National operations center.

CALL MODERATOR: Thank you. All callers, please remember to mute your phones using *6 and/or the mute button. Again, we will mute your phones if you have an open mike. We will begin immediately. At this time is EPA on the call?

Okay, thank you. Dr. Sizemore.

DR. SIZEMORE: Good morning. This is

Tom Sizemore in the Secretary's operation center.

Welcome to the 2011 Pacific Basin Earthquake-Tsunami

ESSA Conference Call, objective being to discuss the current response operations and future actions and update on the reactor situation and any public health issues.

First of all I'd like to close off the deployment of HHS assets by getting an update on the re-deployment from EMG ops, please.

MALE PARTICIPANT: Yes, sir. All HHS deployed staff are demobilized with the exception of seven Missouri-1 staff who are in travel status

today. Thank you. DR. SIZEMORE: Thank you. And from logs with regard to the equipment that we deployed, can we get a status update, please? MALE PARTICIPANT: All right. At 1530 last night Eastern Standard Time all the caches are back in (indiscernible, possibly Maryland up in the rack) ready to go. MALE PARTICIPANT: Please use your mike. 10 DR. SIZEMORE: Thanks very much. I'd 11 like to move now to, if FDA is on, to get an update 12 on situations regarding Alaskan shellfish and 13 finfish with regard to any kind of problems that you 14 may be seeing or planning for. Over. FDA, are you 15 on? 16 MR. KERRINGTON: Well, this is Clark 17 Kerrington. Am I the only one on? DR. SIZEMORE: Tag, you're it, buddy. 18 19 MR. KERRINGTON: Okay. We wouldn't have 20 seen any problems at this point. We don't regularly 21 monitor for -- so if there is a problem we wouldn't 22 know it. But we don't have any reason to think that 23 there is one. 24 DR. SIZEMORE: Okay. And with regard to 25 other foodstuff, USDA. What about the stuff that

we're importing from Japan? MS. MORRISON: Tom? DR. SIZEMORE: Go ahead. MS. MORRISON: Okay, can you hear? DR. SIZEMORE: FDA? MS. MORRISON: Yes, this is Ellen Morrison, Tom. DR. SIZEMORE: Hi. MS. MORRISON: Hi. I just wanted to say 10 we're meeting with our centers this afternoon to discuss strategy here, including food. 11 I think one of the bigger concerns would 12 13 be if a plume was to come to the U.S. on the 14 (indiscernible, possibly cultural side) is the --15 Clark Kerrington already said we're not so concerned about the fish in the water and the dilution factor. 16 17 We have to date seen no plume data coming out of Department of Energy, FRMAC, or 18 anything that would indicate what, if any, state --19 20 concerned. I see Washington and Oregon are doing 21 some air sampling, but we really don't have a lot of 22 data to base what we would do. 23 However, we are having a strategy 24 meeting and have today (indiscernible) talk about

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possibilities of what we might do should plume data

come to the U.S. And also, to look at imports that we see coming in from Japan on a regular basis. DR. SIZEMORE: Okay. Thanks, Ellen. And USDA, do you look at imports also? Pardon my ignorance on this, but who monitors the meat products from Japan? MALE PARTICIPANT: It's the Food Safety Inspection Service out of USDA. There's very little that does come in, but there are a few things that 10 come in. And we haven't talked to those folks yet 11 on this. 12 DR. SIZEMORE: Okay. We'd be interested for tomorrow if you would be able to give us an 13 14 update on at least a way forward or what thoughts 15 you have. 16 MALE PARTICIPANT: Yes, we can do that. 17 FEMALE PARTICIPANT: No problem. 18 DR. SIZEMORE: All right. Thank you very much. Let's go on then and go -- Department of 19 20 State, are you on, please? Can we get an update? 21 State, we're not hearing you if you're on mute. All 22 right, let's -- we'll give them a call. But, NRC, 23 Jeff? Thanks for being on again.

MR. TEMPLE: My pleasure, Tom. Good morning, everybody. Jeff Temple from the U.S.

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Nuclear Regulatory Commission.

Status update. We're monitoring very closely the three Daiichi units. Fukushima Daiichi Unit 1, core damage. Unit 2, probably core damage. Unit 3, probably core damage.

As far as we understand they are venting so there's some minor radioactive release that you would assume comes with venting. The containment structures we believe are still intact.

We're also looking at the spent fuel pool inventories and those seem to be intact from what we understand from the Japanese right now. So we're continuing to get information.

We have two people on the ground that are basically attached to the Ambassador's hip.

We've been asked to send another team of anywhere from six to eight people, so we're mobilizing them.

We'll have them on a plane this afternoon en route to Japan.

We're also receiving requests for other kinds of things including some technical analyses, what-if kinds of things and so forth. So.

DR. SIZEMORE: And, thanks Jeff.

MR. TEMPLE: Sure.

DR. SIZEMORE: Can you talk about the

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(indiscernible, possibly pods) on this call? Where we are with that or anything? MR. TEMPLE: With the what? I'm sorry. DR. SIZEMORE: The Las Vegas pods. MR. TEMPLE: Oh, from what I understand, and I can't speak for them, but I believe that the aerial monitoring assets from Nevada have been dispatched. But I'm not sure, don't quote me on that. They've been dispatched to Japan is what I 10 heard this morning. 11 DR. SIZEMORE: Okay. 12 MR. TEMPLE: I'm not sure. But that's 13 what I heard in a conference call earlier. And 14 again, that's a DOE asset so we'd have to check with 15 DOE. But from what I've heard they've been 16 dispatched to Japan. 17 DR. SIZEMORE: And so far it appears 18 that Japan has been pretty lucky in the direction of 19 the wind blowing any steam release or anything off 20 to sea. 21 MR. TEMPLE: Yes. And there's also --22 DR. SIZEMORE: -- change. 23 MR. TEMPLE: Well, there's also rain 24 and/or snow predicted in the forecast for the next 25 day or two, so that's going to cut us a little bit

of slack. So we're continuing to monitor that.

We have a full liaison team staffed. We have people at USAID 24/7 now coordinating requests. We've received a lot of equipment requests from Japan and from the Ambassador. So we're mobilizing to kind of find those resources, some of which will be military. Because we can't get stuff there fast enough from the domestic U.S. supplies.

We're also working with a partial protective measures team and they're working with NARAC and DOE and FRMAC and so forth. And we also have a partial Reactor Safety Team and they're looking at what-if kinds of scenarios. So.

And we're still going 24/7. Our Chairman, Dr. Jaczko, is in charge of our operations. So we're going full bore and the requests from Japan are increasing almost exponentially.

MALE PARTICIPANT: Roger that.

DR. SIZEMORE: Any questions for Jeff at the Nuclear Regulatory Commission? Okay, thanks again for being on.

MR. TEMPLE: My pleasure, Tom.

DR. SIZEMORE: Has State signed on? The written report from State indicates as of 7:30 this

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morning that they had -- Japanese officials were confirming 2,800 dead after another 1,000 bodies washed up onshore. But that there might be 10,000 or more dead.

That 1.4 million households are going without water and 1.9 million households are without electricity. And the national police agency in Japan estimated 37,700 buildings were damaged or destroyed.

So, tomorrow -- we'll go around here again to see if anybody else has anything else, but tomorrow we want to make sure -- we'll have this call again tomorrow to just bring everybody up to date on any kind of public health issues or requests for assistance.

But we are interested in looking at foodstuffs and trying to get -- I think that will be a question for public affairs. And we'll try to get that tomorrow.

Public affairs, are you on? Can you update us, please?

PUBLIC AFFAIRS PARTICIPANT:

(b)(5)

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DR. SIZEMORE: All right. Any "oh, by the way's" on the call or other information for the good of the order?

CDC PARTICIPANT: Tom, Phil here down at CDC. Just a tidbit of information.

One of the reports we got today from reporters in control centers, and I don't have geographic locations of them, but over 40 calls either people have consumed potassium iodide or asking if they should consume potassium iodide.

We certainly know anywhere in CONUS nobody should be popping any potassium iodide at this point in time. Still, no direct media inquires down to CDC.

One of the things we're leaning forward to is on traveler alerts with Department of State and our DGMQ to see what potentially may be the road ahead as far as any sort of screening processes or anything else that we may be involved in as flights arrive from Japan into Hawaii or continental U.S. More to follow on that one. That's it.

DR. SIZEMORE: Okay, great. And then our partners to the north, the Canadians. Any comments from, or concerns, or updates? From Canada or our liaisons in Canada.

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MR. LEPRAIRIE: Hi, it's Andre

LePrairie. And so far no comments or concerns, but
we're asking to see if there's any messages from

Canada on imports from food supplies. And maybe
we'll have those by tomorrow.

MR. TEMPLE: Again -- Tom, Jeff Temple
again from the NRC. We found I think yesterday or
the day before a plume plot on the Dredge Report
with the NRC logo on it. That did not come from us.

If anybody sees any plume plots anywhere on the internet or anyplace else please call us and let us know because we want to verify them.

We called them, we asked them to remove it.

So this particular plume plot was done by somebody in Australia. They stole the NRC logo somehow and so forth, I believe. So we got that taken down because that showed horribly bad information. So just keep aware of that.

If you see anything the NRC operations center is 301-816-5100. Call and ask for me, Jeff Temple, and we can get that information to our public affairs people.

DR. SIZEMORE: Thanks, Jeff.

MR. LAYMAN: Tom Sizemore, Phil Layman.

Just a quick question. Do we have any known truth

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1	as far as exposure Navy vessels? We understand they
2	relocated based on potential exposures and certainly
3	there's some news reports. Do we have truth from
4	DoD on that one?
5	DR. SIZEMORE: DoD are you on?
6	NORTHCOM?
7	MR. TEMPLE: We at the NRC continue to
8	receive information from Naval reactors about what
9	they're monitoring on the Ronald Reagan. So we're
10	continuing to get air sample data, rad data and so
11	forth from them.
12	So I don't have that and I don't think
13	we're prepared to release that because that's
14	military information, but there is a line of
15	communication from Naval reactors to the NRC.
16	MALE PARTICIPANT: We'll check on that
17	too.
18	MR. TEMPLE: Okay. They could release
19	it to you potentially, but I don't feel comfortable
20	doing that, so.
21	MALE PARTICIPANT: Right.
22	MR. TEMPLE: It's not my data, so.
23	MR. LAYMAN: Tom Sizemore, Phil Layman.
24	Thanks. Yes, if you can get somebody on the DoD
25	Joint Staff that would be helpful.

1	DR. SIZEMORE: Yes, and thank you.
2	So, EPA, are you on? State, have you signed on?
3	MS. HENDERSON: This is Lindsey
4	Henderson from the Bureau of Consular Affairs. I am
5	on the State Department Task Force. I'm here.
6	DR. SIZEMORE: Thanks. I read part of
7	the situation report, the unclass portion of the
8	situation report on dead and without electricity and
9	so forth. But can you give us any update on any
10	kind of public health concerns or requests for
11	assistance that Health and Human Services could help
12	with? Do you copy? Department of State, are you
13	still on?
14	MS. HENDERSON: Yes, I'm here.
15	DR. SIZEMORE: Can you give us any
16	information on public health requests for assistance
17	that Health and Human Services can help with?
18	MS. HENDERSON: To my knowledge we have
19	not had any health requests for assistance.
20	DR. SIZEMORE: All right, thank you. I
21	appreciate you getting on.
22	MS. HENDERSON: It's not a problem.
23	Sorry for the delay.
24	DR. SIZEMORE: Dr. Yeski, do you have
25	any comments or questions?

1	DR. YESKI: No, I don't. I think our
2	concerns here are the weather shifting as we talked
3	about a little bit before, that if there's releases
4	and this weather shifts and starts blowing the stuff
5	back over population centers we'd have some concerns
6	about that. But I think we've covered all the areas
7	of concern today. Thanks, Tom.
8	DR. SIZEMORE: Anymore questions,
9	concerns, or comments? All right. We'll meet agair
10	on call here at 11 o'clock Eastern time tomorrow.]
11	appreciate you getting on, State. Thanks for
12	getting on. We hope to have you on again tomorrow.
13	MS. HENDERSON: Not a problem. Is this
14	going to be the same call-in information as this
15	time?
16	DR. SIZEMORE: Yes.
17	MS. HENDERSON: Great, we'll be there.
18	Thank you.
19	MR. TEMPLE: Thanks, Tom, I appreciate
20	it. Jeff Temple.
21	DR. SIZEMORE: All right.
22	MR. TEMPLE: See you.
23	(Whereupon, the foregoing matter went
24	off the record)

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(CALL INITIATED)

FEMALE PARTICIPANT: Hello?

MALE PARTICIPANT: Hi.

FEMALE PARTICIPANT: Hi.

MALE PARTICIPANT: Heading through to

the Metro.

FEMALE PARTICIPANT: Okay.

MALE PARTICIPANT: Okay?

FEMALE PARTICIPANT: All right.

MALE PARTICIPANT: Everything all right?

FEMALE PARTICIPANT: Yes.

MALE PARTICIPANT: All right.

FEMALE PARTICIPANT: Okay.

MALE PARTICIPANT: Call you when I call

you.

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FEMALE PARTICIPANT: All right. When

are you getting on the bus?

19 MALE PARTICIPANT: When the bus starts

20 to move.

FEMALE PARTICIPANT: Okay.

MALE PARTICIPANT: Okay, bye.

FEMALE PARTICIPANT: Bye.

(Whereupon, the foregoing matter went

off the record)

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NUCLEAR REGULATORY COMMISSION

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March 15, 2011

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(CALL INITIATED)

ANNE MARIE: Hello, Anne Marie speaking.

MR. BRANDON: Hello. This is Lou

Brandon, NRC.

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ANNE MARIE: Oh, hello.

MR. BRANDON: I'm calling back from Ron Morgan's page. He sent me a text message, actually.

ANNE MARIE: I did. I wasn't sure if he'd already clocked out or not, so.

MR. BRANDON: I'm here till 7 Eastern time.

ANNE MARIE: Okay. Well, good. Then we'll both pull the grave together.

So, Ron had some questions for you. So if you have a chance to jump onto the bridge line check his questions probably first. And I'm going to lob one at you that you don't have to answer right off the bat because I think his will probably trump mine.

But we're both looking at the Unit 4 spent fuel pool, the case summary that you sent, the two batches. One was a one batch 2-hour on cover reach. The other one was a seven batch. We also were having problems getting that into Turbo FRMAC

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as was Ron. And he'll probably have more questions.

Ours was just regarding the source term.

We know that from both cases, in both case
summaries the strontium-90 was much, much higher
than the yttrium-90.

MR. BRANDON: Okay.

ANNE MARIE: And I mean, I was just

ANNE MARIE: And I mean, I was just wondering if that was something, you know, if you guys caught that. If that's intentional. We just didn't know how to explain that. In one it was like an order of magnitude, in the other it was two orders of magnitude.

MR. BRANDON: Okay. So, I guess no one's asked that question. The strontium is greater than yttrium but it's a daughter product.

ANNE MARIE: Yes, the yttrium-90 is a daughter product of strontium-90.

MR. BRANDON: Yes.

ANNE MARIE: And so if there's a rational, you know, physics explanation for it, wonderful. But everything I've ever done has been, you know, very close, so.

MR. BRANDON: Yes. So, it sounds like
- it sounds like that's a technical question for our

contractor. He's done the work to characterize all

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the daughter products and he's gone through and some of them, the long-lived ones, you know, are built in. And the short-lived ones run separately and grow in as you go forward. And he has put in some rules there.

ANNE MARIE: Okay. Well, that one -- MR. BRANDON: I might be -- go ahead.

ANNE MARIE: I didn't -- I did not personally double-check the rest of them. That one just jumped out, you know, just by the quick eyeball screening. And so if there's a rationale -- we don't want to beat it to death or anything like that. But it just seemed odd. And so if that is true issue I might go back and double-check some of my other favorite ratios.

Because I don't know, we might have a rule that's just on -- you guys have a rule that we don't know about.

MR. BRANDON: You know, everyone makes mistakes so you may have just caught one of the mistakes that's in RASCAL. If that's the case that's great because we can fix it.

ANNE MARIE: Yes. Or if not it would be great to know the rule for it.

MR. BRANDON: The rationale for what's

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going on.

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ANNE MARIE: Yes.

MR. BRANDON: I don't think it's so sophisticated that it's going to -- it's going to plate out one and not the other.

ANNE MARIE: Right.

MR. BRANDON: RASCAL doesn't.

ANNE MARIE: It's just from the dosimetry standpoint because of how strontium-90, you know, you know, goes for the longer -- it contributes over the longer term. And so that's why it catches our eye immediately. So. All right, well then here --

MR. BRANDON: You noticed that just for this particular run? Or was it in the other runs too?

ANNE MARIE: You know, I haven't looked at the rest of them. I just -- we just caught these two.

MR. BRANDON: Okay.

ANNE MARIE: So I can -- I'll go back and look at the -- it's actually on my list on back shift to go back and verify. I know, scope all of the summaries and verify what went into Turbo FRMAC. That's just one of our lower priorities as time

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permits.

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MR. BRANDON: Okay.

ANNE MARIE: Because I'm not acting as CM home team right now, I'm acting as, you know, NARAC support, so.

MR. BRANDON: Okay. I'm going to note this as a RASCAL issue and we'll follow up on it.

ANNE MARIE: Okay, great.

MR. BRANDON: Now, the bridge line, you said Ron -- was that the same one we were on before?

ANNE MARIE: Yes. So you hop on there and if you need the phone number call me back.

MR. BRANDON: Or if -- if there's someone else on the bridge line I could just talk to them over the telephone, right?

ANNE MARIE: Right. Valerie on the bridge line will have Ron Morgan. But Ron Morgan's been listening in on the bridge line so if you just give him a holler on the bridge line then you can take it offline using whatever phone number he wants to.

MR. BRANDON: Okay, very good.

ANNE MARIE: Hey, great. Thanks for calling back.

MR. BRANDON: Good talking with you,

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Anne Marie. ANNE MARIE: Yes, have a good night, Lou. Hopefully it's a slow night. MR. BRANDON: So far it's steady. Thanks, bye bye. ANNE MARIE: Yes, it does seem that way. Goodnight. (Whereupon, the foregoing matter went off the record)

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(CONFERENCE CALL INITIATED)

CALL MODERATOR: Hi, this is the bridge line. Who just joined us?

MR. BRANDON: Hello, this is Lou

Brandon, NRC. I didn't understand your question.

CALL MODERATOR: I just asked who you

were and you answered.

doing, Lou?

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MR. BRANDON: Okay. I'm on to get Ron
Morgan's phone number. Is Ron on right now?

MR. MORGAN: He is indeed. How you

MR. BRANDON: How are you doing, Ron? I'll just give you a call.

CALL MODERATOR: Hey, Lou? Don't go away. What's your phone number?

MR. BRANDON: My phone number is 301-816-5410. But I don't think he can call into this number here. I think you can call into 301 -- hold on, I'll get you a number you can call back on.

Okay, you can call me back at 301-816-5195.

CALL MODERATOR: 5195.

MR. BRANDON: Yes.

CALL MODERATOR: And that's a call-in number for you. All right, thank you.

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1	MR. MORGAN: Lou, my number is area code
2	(b)(6)
3	MR. BRANDON: Okay. Say that one more
4	time, please?
5	MR. MORGAN: (b)(6)
6	MR. BRANDON: I got
7	MR. MORGAN: (b)(6)
8	MR. BRANDON: Okay.
9	MR. MORGAN: (b)(6)
10	MR. BRANDON: you're cutting
11	out a little bit. (b)(6)
12	MR. MORGAN: Correct.
13	MR. BRANDON: (b)(6) okay. All right.
14	I'll just call you back, Ron, and we can talk off
15	the bridge line on your questions. Okay?
16	(Whereupon, the foregoing matter went
17	off the record)
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(CALL INITIATED)

MR. MORGAN: Lou.

MR. BRANDON: Ron, all right.

MR. MORGAN: Hey, are you tired enough

this morning or what?

MR. BRANDON: Am I tired?

MR. MORGAN: Yes.

MR. BRANDON: No, no, I'm going really strong right now. So some of these mornings I get a little sleepy but there's enough interesting activity going on.

MR. MORGAN: Yes?

MR. BRANDON: How about you?

MR. MORGAN: I'm starting to fade fast.

MR. BRANDON: You're Mountain time,

right?

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MR. MORGAN: Yes.

MR. BRANDON: So what is it, 1:24 there?

MR. MORGAN: Yes, it is. I'm fading

fast. So, you got my -- my first --

MR. BRANDON: Question?

MR. MORGAN: -- comment on your RASCAL

file, right? Meaning that I tried to --

MR. BRANDON: Yes.

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1	MR. MORGAN: go through that
2	procedure that was in that email about three times
3	this and plus that.
4	So, I did it by saving the file
5	initially under a different name and then
6	manipulating it using Excel manipulations.
7	MR. BRANDON: Okay.
8	MR. MORGAN: I did everything within the
9	file and I didn't so I didn't change I don't
10	think I changed anything. And I tried about three
11	ways to make sure that I didn't change anything
12	within the file except for just the pure numbers.
13	MR. BRANDON: Okay.
14	MR. MORGAN: And it still won't load for
15	me.
16	MR. BRANDON: I tried it once with the
17	old version of RASCAL before we went to 4.0. And I
18	was able to import a source term and look at. When
19	we went to
20	MR. MORGAN: In format?
21	MR. BRANDON: In Turbo FRMAC, yes.
22	MR. MORGAN: Okay.
23	MR. BRANDON: When we went to RASCAL 4.0
24	we increased the number of radionuclides and they
25	also worked out which radionuclides had the

daughters built in. And we put an asterisk on all those radionuclides. So if you look at that spreadsheet and look at cesium if it has an asterisk behind it then our doses (indiscernible) sent you a file that's going to be difficult to import into Turbo FRMAC. So RASCAL is now set up, when we export that CVS source term file it asks you a question do you want to strip off all the asterisks. And 10 everybody should say yes, but we've got a lot of new 11 staff here who may not be aware of that. So. 12 MR. MORGAN: Well, I don't think that's the problem. 13 14 MR. BRANDON: Okay. 15 MR. MORGAN: I don't think that's the 16 problem. 17 MR. BRANDON: If that's not the problem 18 then I'm not sure what it might be. 19 MR. MORGAN: I have two files. Have you 20 seen the email that I'm referring to, what I'm --21 when I talk about the procedure that it's asking me 22 to go through to build a source term? Okay --23 MR. BRANDON: Is it something we sent 24 out? 25 MR. MORGAN: Actually, I'm not sure.

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Let me have a -- I'll look at it as we're talking. Basically it is asking the -- in the body of the email it asks for -- okay. So an email was sent out. In the body of an email there's a procedure and then there are attachments. And the attachments include two RASCAL files. One file has the activity for seven --MR. BRANDON: Seven batches of fuel? MR. MORGAN: Yes. And those seven are 10 all spent fuel', meaning that they're old fuel. 11 MR. BRANDON: Old spent fuels, yes. 12 MR. MORGAN: And then one batch is new spent fuel. 13 14 MR. BRANDON: Okay. MR. MORGAN: But it's based on the one-15 third core load. So the procedure in the email says 16 17 multiply this one batch by three. MR. BRANDON: Oh, okay. 18 MR. MORGAN: A third time --19 20 MR. BRANDON: Yes, yes. 21 MR. MORGAN: -- a full core load because 22 that's what four did. And then add to that the 23 activity from the seven -- the sum of those seven 24 batches.

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MR. BRANDON: Yes.

1	MR. MORGAN: So I took one source term,
2	multiplied everything in it by three.
3	MR. BRANDON: Got it, okay.
4	MR. MORGAN: And saved that. And then I
5	saved it again in a different file name and added in
6	the activities from the seven batches
7	MR. BRANDON: Okay.
8	MR. MORGAN: the sum of the seven
9	batches. And I saved that.
10	MR. BRANDON: Okay.
11	MR. MORGAN: And I can run the original
12	files, the one batch and the seven batch files, I
13	can run them.
14	MR. BRANDON: They'll go into Turbo
15	FRMAC? Okay.
16	MR. MORGAN: Yes, they'll come in fine,
17	but I can't run the summed file.
18	MR. BRANDON: The original file is
19	comma-delimited text file.
20	MR. MORGAN: Correct, as is
21	MR. BRANDON: So that's is that what
22	is that what's being imported into Turbo FRMAC, a
23	comma-delimited text file?
24	MR. MORGAN: That's right. That's
25	correct.

1	MR. BRANDON: So after you do your
2	gyrations and manipulations is it are you getting
3	it back into that format?
4	MR. MORGAN: Yes. I saved it as a
5	comma-delimited text file.
6	MR. BRANDON: Okay. So what could it
7	be? What's changing here?
8	MR. MORGAN: Well, you know what?
9	(indiscernible) I'm going to give up on this for
10	tonight. Let's go to something else where I might
11	have more luck.
12	And that is that Unit 3 is MOX, is
13	running MOX.
14	MR. BRANDON: Are you sure it's running
15	MOX? They've been approved to run MOX, but I'm not
16	sure they actually were running it.
17	MR. MORGAN: I can send you an article,
18	and I think it's Nuclear News or something, I can't
19	remember what the source is, but it's an article and
20	it's an open press article. It's in the open
21	literature article. Unit 3 of Fukushima Daiichi.
22	MR. BRANDON: Okay.
23	MR. MORGAN: That says that it was going
24	to load MOX in I think it's October or November of
25	last year.

MR. BRANDON: Okay. So they may be using it. MR. MORGAN: I'm reasonably sure that there is MOX. MR. BRANDON: Okay. MR. MORGAN: But even if there's -- and there's been a couple of references to MOX on Unit 3 over the last day that I've been looking at this. So, I'm reasonably sure that they're running MOX. 10 At least people are under the impression that it's 11 running MOX. 12 MR. BRANDON: Okay. 13 MR. MORGAN: And so my question is do 14 you have a RASCAL file --15 MR. BRANDON: No. 16 MR. MORGAN: -- which has --17 (Laughter) 18 MR. BRANDON: No. MR. MORGAN: I just struck out twice. 19 20 (Laughter) 21 MR. BRANDON: Yes. The assessment of 22 the folks around here who considered that was, well, 23 it probably won't make much difference. But RASCAL 24 is not set up to provide a source term based on MOX 25 fuel. We would have to build that in in the future

1	and it hasn't been an issue for all of the licensees
2	here, so.
3	MR. MORGAN: Okay.
4	MR. BRANDON: It hasn't been done.
5	MR. MORGAN: Okay. Well, that's all I
6	needed.
7	MR. BRANDON: All right.
8	MR. MORGAN: going to run MOX if you
9	happen to have it and evidently you don't so I'm not
10	going to worry about it.
11	MR. BRANDON: So, from your expert
12	opinion what do you think? If there was MOX in
13	there.
14	MR. MORGAN: I would be astonished if it
15	made, you know, even a 1 percent difference.
16	MR. BRANDON: Really?
17	MR. MORGAN: Yes.
18	MR. BRANDON: Okay.
19	MR. MORGAN: I can't imagine, you know,
20	if we're talking about dose within the first year of
21	someone outside of the plant boundary, either
22	inhalation or external, there's just no way it's
23	going to make any difference.
24	MR. BRANDON: Okay.
25	MR. MORGAN: But the question was raised

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1	because somebody thought that the press would be
2	interested in that subject.
3	And in fact, I heard one of the press
4	reports that I heard was some guy made a comment on
5	reactor number 3 actually has plutonium in the fuel.
6	You know, that would
7	MR. BRANDON: Yes, yes.
8	MR. MORGAN: really scare you.
9	MR. BRANDON: That would scare you?
10	MR. MORGAN: That was supposed to be a
11	joke, sorry.
12	MR. BRANDON: Oh, sorry, I got
13	distracted. A guy was coming through I was talking
14	to.
15	MR. MORGAN: Yes.
16	MR. BRANDON: Okay, so what you're
17	saying is not much difference, but the fact that
18	there's plutonium in there blows things out of
19	proportion.
20	MR. MORGAN: Yes.
21	MR. BRANDON: From a public perspective.
22	MR. MORGAN: Yes. But not my job, not
23	my problem. We'll leave that to the PR folks.
24	MR. BRANDON: Yes.
25	MR. MORGAN: Yes. Okay.

1	MR. BRANDON: Okay, Ron.
2	MR. MORGAN: Appreciate it.
3	MR. BRANDON: Nice to cross paths during
4	this response here.
5	MR. MORGAN: Yes, yes.
6	MR. BRANDON: So, are you working up the
7	source terms for NARAC to run? Are you assisting?
8	Is that what's going on here?
9	MR. MORGAN: I'm running Turbo FRMAC and
10	I'm acting as the consequence management home team
11	with Sara Hoover.
12	MR. BRANDON: Okay.
13	MR. MORGAN: There's three pairs of
14	assessment scientists who are who are manning the
15	home team 24/7.
16	MR. BRANDON: Okay.
17	MR. MORGAN: Me and Sara are one pair
18	and the other two are from Sandia.
19	MR. BRANDON: Did some of those guys get
20	sent out, actually deployed to Japan?
21	MR. MORGAN: There's one assessment
22	scientist did, yes. Well, I guess a couple of that
23	you could consider to be qualified as assessment
24	scientists. Rich Thorum and Kirsten Ryland.
25	MR. BRANDON: Okay. So then it sounds

like Tony's still around. I mean, Terry Krauss is still around? MR. MORGAN: Krauss is one of -- Krauss and Bryan Hunt is one team. And then Tom Leish and Art Shanks is the third. MR. BRANDON: Got it. MR. MORGAN: So. There's somebody manning the home team 24/7 and most of it is answering silly questions. But we are running Turbo 10 FRMAC to at least have solid numbers to give people 11 when they want it. 12 MR. BRANDON: Okay, so Terry worked 13 through some of those problems, incorporating a RASCAL source term into Turbo FRMAC. 14 MR. MORGAN: Yes. 15 16 MR. BRANDON: If you know a time when he's around and awake he might be able to give you 17 18 insight. 19 MR. MORGAN: Yes, I'm going to do a 20 turnover and ask them to turn that over to Terry as something that if he wants to play with it --21 22 MR. BRANDON: Okay. 23 MR. MORGAN: -- suggest that he might 24 play with it. But I'm not going to spend anymore 25 time on it.

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1	MR. BRANDON: Okay, Ron. Good talking
2	with you.
3	MR. MORGAN: I think I'm going to lay
4	down here on the floor and take a nap.
5	(Laughter)
6	MR. MORGAN: I tell you, I'm beat. All
7	right, well
8	MR. BRANDON: All right, we'll talk to
9	you next time.
10	MR. MORGAN: Bye now.
11	(Whereupon, the foregoing matter went
12	off the record)
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Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

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Japan's Fukushima Daiichi

PMT Counterpart Audio Files

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THURSDAY,

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(CONFERENCE CALL INITIATED)

MR. MORGAN: HAZMAT, Morgan.

MR. BRANDON: Hey Ron, it's Lou Brandon.

MR. MORGAN: Lou, this is Ron. How are

you doing?

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MR. BRANDON: Did I make 15 minutes?

MR. MORGAN: You did.

MR. BRANDON: We've got a complex situation. We sent out a RASCAL source term where we had one unit and the source term activity ended up being about the same activity released as multiple units which we teamed up in one RASCAL run. And the dose projections from the single unit ended up being higher than the dose projections from contributions from three different units so we needed to explain that. It was a mess.

But it looks like it's a meteorological influence, a greater dispersion in one case and higher wind speeds. So I think they got that under control and their management is being briefed. That was the basis of this press release from the NRC that's saying the U.S. should evacuate personnel out to 50 miles.

MR. MORGAN: Right.

MR. BRANDON: So there's a lot of scrutiny on that. Okay. Anyway, now my attention is with you and I'm listening. MR. MORGAN: Do you know when the fuel bundle -- at what temperature it will degrade, at what temperature it will fail, at what temperature the zirconium will burn? MR. BRANDON: Oh, yes. MR. MORGAN: Do you know who I can talk to about that? 10 11 MR. BRANDON: Yes. We -- here at the 12 NRC headquarters we have an Assessment Team, 13 Protective Measures Team, and right next door is the 14 Reactor Safety Team. 15 MR. MORGAN: Okay. 16 MR. BRANDON: So those guys are the 17 engineers who keep up with all those stats. So I can tell you approximately maybe 2,400 degrees 18 Fahrenheit or Centigrade you get that zirconium 19 20 fire. But I can hook you up with a guy who probably can give you specific details here. 21 22 MR. MORGAN: Okay. Who is that guy? 23 MR. BRANDON: Well, hang on for 2 minutes. I'll walk over there and see if anyone has 24 25 that knowledge at their fingertips. Then they can

1	talk to you right now, or maybe if they need to get
2	their notes together they can call you back.
3	MR. MORGAN: Okay.
4	MR. BRANDON: So hold on just for a
5	minute. I might get you a response right now.
6	MR. MORGAN: Okay.
7	MR. BRANDON: Still there?
8	MR. MORGAN: Yes.
9	MR. BRANDON: Yes, we've got a guy who's
10	got some notes here.
11	MR. MORGAN: Okay.
12	MR. BRANDON: I'll pass him onto you.
13	MR. MORGAN: Okay. Who am I talking to?
14	MR. SALAY: Hey, Ron Morgan, this is
15	Mike Salay.
16	MR. MORGAN: Can you tell me your last
17	name, please?
18	MR. SALAY: S as in Sam A-L-A-Y.
19	MR. MORGAN: Okay.
20	MR. SALAY: And
21	MR. MORGAN: I'm in the consequence
22	management home team and I'm just trying to get a
23	sort of a sort of numbers to pass the
24	(indiscernible, possibly ho-ho) test for the
25	different sorts of scenarios in the fuel pool as far

as whether or not fuel would fail, or whether the zirconium -- at what temperature the zirconium would burn and at what temperature the zirconium would -- a zirconium fire would propagate.

MR. SALAY: Yes. Well, I have a chart here that's for -- actually for -- basically for -- within a steam environment, but also just happened to observe part of a test a few weeks ago for a test on something like this. And it was around 1,150k in the air if I recall correctly.

MR. MORGAN: That it did what?

MR. SALAY: That's where the zirc reaction started being quite energetic, around there.

MR. MORGAN: Okay. And so you would expect at 1,160k in air for the -- for it to fail fairly quickly, right?

MR. SALAY: Yes, that's -- yes. What they had to do with this experiment is they just had electrically heated rods, zirc rods, I'm not sure exactly what kind of clad they were using, and just a bundle. And they were heating it at -- I think they were trying to -- trying to do a spent fuel pool experiment and this is -- yes, it just happened to be near my office so I went in and looked at it

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for awhile. And, yes.

So they just ramped it up, you know, for the course of I think 10 hours and then when -- what happened is you'd have -- they had oxygen centers at the bottom and the top. And you could tell that --

MR. MORGAN: The delta P tells you how much --

MR. SALAY: Yes. So they had thermocouples along the whole thing and they had oxygen centers at the top and the bottom. And pretty much the oxygen concentration at the top which would go down gradually, but then as it approached the burning point where it would escalate a lot it would just -- it dropped completely and then it would just go. And it had happened at about 1,150k.

MR. MORGAN: Okay. Do you have any idea when the zirconium fire would self-propagate?

MR. SALAY: Well, that's when -- that's about the point where it would -- because your temperature ramp, your electric temperature ramp was kind of fixed, I guess they had a fixed power. And that's when it sort of, it curved up.

MR. MORGAN: Right, okay.

MR. SALAY: Yes, so that's --

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MR. MORGAN: So that's when temperatures started rising is what you're saying. MR. SALAY: Well, the temperatures were rising gradually by electrically heated. That's when the zirc reaction was --MR. MORGAN: Was driving the rise. MR. SALAY: Yes, yes. MR. MORGAN: Okay. MR. SALAY: Yes, a big jump. MR. MORGAN: Do you have any idea in the 10 11 sort of racks that are in the spent fuel pool for 12 Unit Number 4. And first, I guess, do you have any 13 idea whether or not those are close-packed racks? 14 MR. SALAY: I've heard conflicting 15 information on that. We've heard they -- we have a 16 presentation where it said they've gone to close-17 packed but there's also been engineers on the news, Japanese engineers on the news saying that it's not 18 19 close-packed. They have about, I think almost two 20 and a half cores so they don't have to be close-21 packed. So. 22 MR. MORGAN: Okay. Do you know, do you 23 have any idea whether a zirconium fire like that would propagate over the -- would things just sort 24

of start happening like Alka Seltzer in a cup, or

would it -- would it go with -- is it possible for one bundle to go and just leave the others? So the question (indiscernible, possibly surely) is with the fresh fuel that's in the number 4 spent fuel pool, would that fresh fuel -- is it possible for that fresh fuel to go and leave the aged fuel essentially pristine?

MR. SALAY: I don't know. I wouldn't -- MR. MORGAN: You don't know?

MR. SALAY: Yes.

MR. MORGAN: Okay.

MR. SALAY: What I remember from the experiment again is that it sort of -- the hot spot starts from the top and sort of propagated downwards slowly.

MR. MORGAN: Right.

MR. SALAY: And so it seemed that it didn't propagate too quickly. So if there's some way to reject heat, I don't know.

MR. MORGAN: It wouldn't propagate.

MR. SALAY: Yes.

MR. MORGAN: Do you have any idea how aged the fuel would have to be to get below that temperature? How old did the fuel have to be -- yes. So, when would you expect fuel that was

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1	uncovered, at what age would you say well, it will
2	survive by itself?
3	MR. SALAY: I've heard about 3 years
4	out.
5	MR. MORGAN: So, it would self-fail in
6	air until it was 3 years old?
7	MR. SALAY: That's what I heard.
8	MR. MORGAN: Okay.
9	MR. SALAY: Yes, it's not
LO	MR. MORGAN: Yes, it's not not
1	definite, but something along those lines?
12	MR. SALAY: Yes.
١3	MR. MORGAN: Okay. Well thank you, sir,
L 4	I sure appreciate it.
15	MR. SALAY: All right.
16	MR. MORGAN: Can I talk to Lou again?
17	Is he around?
L 8	MR. SALAY: Lou? I can't remember what
L 9	he looks like. Lou?
20	MR. MORGAN: Okay. Hey, Mike, thank
21	you, I appreciate it.
22	MR. SALAY: All right. Yes, sorry I
23	couldn't give you more.
24	MR. MORGAN: No, that's that's what I
25	needed.

1	MR. SALAY: He's coming.
2	MR. BRANDON: Hello, Ron.
3	MR. MORGAN: Hey, Lou. Yes, if need be
4	I think I got a feel for where the problems come in
5	so I'm good.
6	We that spent fuel source term that
7	you had that went out in that 50-mile radius, is
8	that being modified, do you know? Are you
9	MR. BRANDON: Well
10	MR. MORGAN: working with a new
11	source term?
12	MR. BRANDON: Let me try and describe
13	what's happening here. We have in RASCAL a spent
14	fuel pool module and we can run that for one unit.
15	So if we're talking about one spent fuel pool
16	basically it asks you for the date of the freshest
17	fuel, I mean the date of the last bundle that was
18	put into the spent fuel pool. So you've got one
19	fresh bundle in there and then every other bundle is
20	18 months older than the one before it.
21	MR. MORGAN: You're talking bundle or
22	batch?
23	MR. BRANDON: I meant batch. Batch,
24	batch, batch.

MR. MORGAN: Okay, that's fine. So it

is an 18-month cycle.

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MR. BRANDON: It's an 18-month based on just an average refueling cycle.

MR. MORGAN: So that's not specific to this plant, but it's an average.

MR. BRANDON: I'm sorry?

MR. MORGAN: That's a RASCAL default.

It doesn't necessarily say that this plant is on an 18-month cycle, that it's a RASCAL default, right?

MR. BRANDON: That's right. It's just a one general module to fit all plants and to kind of give you a ballpark summary of what to expect for a source term.

Now, what's happening is that we're getting requests from our management to model two or three spent fuel pools at the same time, plus a contribution from another reactor who has a containment problem.

MR. MORGAN: Right.

MR. BRANDON: So, rather than use that module in RASCAL we're trying to characterize these things creatively by figuring out what the activity would be of the freshest bundle and then adding a little bit more fuel, or whatever we can do to put it in one RASCAL run and get it out.

2 3 4 5 6 7	rerun that spent fuel pool run there have been a bunch of them that have been created and sent out. So, I'm not sure which one you're talking about here. MR. MORGAN: Okay. Well, we're we're
4 5	So, I'm not sure which one you're talking about here.
5	here.
6	
	MR. MORGAN: Okay. Well, we're we're
7	
- 11	here and available to you if you have any questions
8	about. And I can get plume plots and this and that
9	for you if you're interested.
LO	MR. BRANDON: Okay.
1.1	MR. MORGAN: I guess
12	MR. BRANDON: Most of what's gone out is
13	the worst case scenario where we just try and
14	characterize how much fuel is likely to be present.
15	And then you melt it all and then you release it
16	pretty fast. So it's all extreme situations that
17	are not very characteristic of what you'd really
18	expect to see out there.
19	MR. MORGAN: Right. Are you also
20	releasing your non-volatile?
21	MR. BRANDON: Well, not
22	MR. MORGAN: Like your zirconium and
23	stuff like that.
24	MR. BRANDON: It's no, it's just the
25	regular, I think the NUREG/1465 radionuclides. So
<u>, </u>	7 T 1 1 1 1 NUDEC / 1 ACE 1/ 1 /

there's about 60 radionuclides that'll show up in the source term.

MR. MORGAN: Okay.

MR. BRANDON: You know, but you've got nobles, you've got the iodines and cesiums and then you've got a bunch of particulates in there.

MR. MORGAN: Right. But all of it is being released, or do you have a release fraction? How does your release fraction work? Do you just say that you've got this whole list of nuclides and a release somewhere between 1 percent and 100 percent of it?

MR. BRANDON: The way it works is you —
if we're talking about a reactor then you damage the
fuel by uncovering it for a certain amount of time.
It bottles up in containment. And then you have
options for the release pathway.

MR. MORGAN: The design basis.

MR. BRANDON: You can -- yes. We can do -- the original runs we were doing here were design basis leak rate of a half a percent per day. And you can scale that all the way up to worst case which is total failure, 100 percent per hour. So all these worst case scenarios is just pushing that stuff out there, like the top blew off and it's all

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1	exploded into a puff.
2	MR. MORGAN: Right. Okay. All right.
3	Well, thank you. I sure appreciate it. Good
4	information.
5	MR. BRANDON: I hope that helps. What
6	we're trying to get is something we can tie in to
7	give it more characteristic RASCAL runs based on how
8	fast this stuff is being really released out there.
9	MR. MORGAN: Right, right. Yes. Okay.
10	I wish you luck. We're all going to need that in
11	the next couple of days.
12	MR. BRANDON: All right, well stay in
13	touch. You've got our number and I've got yours.
14	And
15	MR. MORGAN: Yes, yes, indeed. Thank
16	you.
17	MR. BRANDON: We'll talk to you next
18	time.
19	MR. MORGAN: All right.
20	MR. BRANDON: Thanks. All right.
21	(Whereupon, the foregoing matter
22	went off the record)
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(CALL INITIATED)

FEMALE PARTICIPANT: Good afternoon, Ops New Reactors.

MR. LOMBARD: You sound so professional.

FEMALE PARTICIPANT: Thank you.

MR. LOMBARD: This is Mark Lombard. We just sent you a set of slides that Mike can use for talking points in his phone call that's probably already started.

FEMALE PARTICIPANT: Oh, perfect. I'll put it out right now.

MR. LOMBARD: Because we never got confirmation from NRR so I simplified the one slide and sent it over.

FEMALE PARTICIPANT: Okay.

MR. LOMBARD: It should be from Jim

Anderson or maybe from some weird address here in
the operations center.

FEMALE PARTICIPANT: Okay. How many pages?

MR. LOMBARD: I think it's 9 or 10.

FEMALE PARTICIPANT: They have so many people in there I'm trying to figure out how many copies I should make.

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	,
1	MR. LOMBARD: Oh.
2	FEMALE PARTICIPANT: I guess they all
3	don't have to see a copy.
4	MR. LOMBARD: Yes, I don't know. He's
5	not going to go through every piece of that, it's
6	just kind of background information when he needs to
7	refer to it.
8	FEMALE PARTICIPANT: He knows it's
9	coming?
10	MR. LOMBARD: Yes.
11	FEMALE PARTICIPANT: Okay. Thank you,
12	sir.
13	MR. LOMBARD: Okay, you're welcome.
14	FEMALE PARTICIPANT: Bye.
15	MR. LOMBARD: Bye.
16	(Whereupon, the foregoing matter
17	went off the record)
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0-FC(F7-03765094

(CALL INITIATED)

MALE PARTICIPANT: NRC, it's a recorded line. May I help you?

MS. JONES: Yes, hi, this is Cindy Jones in the PMT. Can you connect me with the call with the UK, France, Canada?

MALE PARTICIPANT: Sure, you're the second caller. Stand by.

MS. JONES: Thank you.

MALE PARTICIPANT: Cindy?

MS. JONES: Yes.

MALE PARTICIPANT: Let me try that again. Obviously I can't do that. Okay, can you call back in again? It's locked up the phone.

MS. JONES: Sure, no problem.

MALE PARTICIPANT: All right, thanks.

(Whereupon, the foregoing matter

went off the record)

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(CALL INITIATED)

MALE PARTICIPANT: NRC?

MS. JONES: Yes, hi, it's Cindy Jones

again.

MALE PARTICIPANT: All right, stand by.

MS. JONES: Nothing's happening.

(Whereupon, the foregoing matter

went off the record)

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(No audio to transcribe)

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0-FCOK-L03765094

(CONFERENCE CALL INITIATED)

MR. DUDEK: Hi, Michael Dudek, how are you?

MALE PARTICIPANT: Hello, is anybody

there?

MS. SCHWARTZMAN: Hello, this is Jennifer Schwartzman from the NRC.

MS. JONES: Hi, Jennifer. This is Cindy Jones.

MS. SCHWARTZMAN: Hey, Cindy.

MS. JONES: Do we have our guests

online?

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MS. SCHWARTZMAN: I don't believe so yet. I have just sent them a note reminding them what number to call.

MS. JONES: Okay.

MS. SCHWARTZMAN: Stand by. Hello?

MS. CLOS: Hello. I am Adeline Clos

from ASN.

MS. SCHWARTZMAN: Hi. You've got

Jennifer Schwartzman and Cindy Jones from the NRC on
the line. We're awaiting our UK and Canadian
colleagues.

MS. CLOS: Yes. And also IRSN should be able to participate in this telephone conference.

MS. SCHWARTZMAN: Oh -(Whereupon, the foregoing matter went off the record)

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(CONFERENCE CALL INITIATED)

MS. JONES: Hello?

MS. CLOS: Hello?

MS. JONES: Yes, okay.

MS. CLOS: We lost them I think.

MS. JONES: Hi, this is Cindy Jones.

I'm also at the NRC.

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MS. CLOS: Hi, Cindy, it's Adeline.

MS. JONES: Hey, Eveline. Very good to

talk with you. How have you been?

MS. CLOS: I'm fine, and you?

MS. JONES: Very good.

MS. SCHWARTZMAN: If you all hold just a moment I'm going to call over to our friends at HSE and see if they are having difficulty calling in.

Just one moment.

MS. CLOS: Okay.

MS. JONES: So I saw the press releases,

Eveline, about the French prediction of

(indiscernible, possibly in a) scale at level 6.

MS. CLOS: Yes.

MS. JONES: For this.

MS. CLOS: It's not coming from me.

MS. JONES: I didn't think it came from

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the national officer, no. MS. CLOS: No. Yes, it was a topical context during an exchange with the media. has been (indiscernible, possibly predated) at level 6 on the NSK but it was not our initial report, so. Yes. And it's not up to us to write such news. MS. JONES: Exactly. MS. CLOS: To come from (indiscernible). MS. JONES: Yes. MS. CLOS: I know. I (indiscernible, 10 11 possibly overhear). 12 MR. WALKER: Hello, can you hear me? 13 MS. JONES: Yes, we can. MR. WALKER: Hello. So what is it, it's 14 good afternoon in the U.S. I think? Yes. 15 16 MS. JONES: Yes. 17 MR. WALKER: It's evening here and we're losing sense of time. Hello. I'm Steve Walker. 18 19 I'm an inspector with the Nuclear Installations Inspectorate and I'm joined here by my colleague 20 Alan Bunker. We're going to try and the best we can 21 22 to get some joined-up thinking going concerning 23 aspects of source terms and the like. 24 Can you just confirm that you have

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received from us a summary of what we've been doing

1	with source terms and dose calculations? I'm afraid
2	this document doesn't have a title other than to say
3	it's version 0.1E.
4	MS. CLOS: No, we've got nothing. I
5	didn't (indiscernible). I didn't receive any
6	documents.
7	MR. WALKER: Okay.
8	MS. JONES: No, and this is Cynthia
9	Jones, director of the Protective Measures Team in
LO	the Ops Center. We have not received it either.
L 1	MR. WALKER: Okay. Well, I apologize
L 2	for that. We'll get this sent to you.
13	Can I have your email address? First of
L 4	all, Cynthia. You're NRC, are you, Cynthia?
15	MS. JONES: Yes.
۱6	MR. WALKER: And your email address?
L 7	MS. JONES: Let me see. The best
L 8	Jen, you're on the line, correct?
L 9	MS. SCHWARTZMAN: Yes, I am.
20	MS. JONES: The best thing to do is to
21	get it through our Operations Center.
22	MR. WALKER: Okay. I've got an email
23	address here that was used today, LIA02.hoc@nrc.gov.
24	MS. SCHWARTZMAN: That would be fine.
25	If you send it there we'll make sure it gets to the

1	others here at NRC.
2	MR. WALKER: Okay. I do apologize for
3	your not having received the document.
4	MS. JONES: No problem.
5	MR. WALKER: So Cynthia Jones at NRC.
6	And who else have we got?
7	MS. CLOS: Adeline Clos from ASN.
8	MR. WALKER: Are you the person
9	MS. CLOS: Adeline yes. I'm not
10	actually at the emergency center. I am in my office
11	inside the (indiscernible). I know it's so hard to
12	confirm. So could you please give me essentially
13	the document directly on my email address?
14	MR. WALKER: Okay, and your email
15	address is?
16	MS. CLOS: Is Adeline A-D-E-L-I-N-E dot
17	Clos.
18	MR. WALKER: Clos C?
19	MS. CLOS: Clos. C-L-O-S.
20	MR. WALKER: Yes.
21	MS. CLOS: At ASN.fr.
22	MR. WALKER: ASN.sr.
23	MS. CLOS: F, F like France.
24	MR. WALKER: Sorry, sorry. So, okay.
25	MS. CLOS: You should have my email

1	address (indiscernible) information with your
2	emergency center today and yesterday.
3	MR. WALKER: Who else do we have
4	anybody else in this conference?
5	MS. SCHWARTZMAN: I don't believe our
6	Canadian colleagues have joined us.
7	MR. WALKER: Okay, right.
8	FRENCH MALE PARTICIPANT: Yes, and are
9	you with NSO? (indiscernible) part of the
10	(indiscernible).
11	MR. WALKER: Which organization is this?
12	FRENCH MALE PARTICIPANT: ARSN.
13	MR. WALKER: IRS?
14	MS. CLOS: IRSN. IRSN, supporting the
15	organization from ASN.
16	MR. WALKER: And what was I'm sorry,
17	I didn't catch your name.
18	FRENCH PARTICIPANT RAINOND: Jimo.
19	MR. WALKER: Can you spell that for me?
20	FRENCH PARTICIPANT RAINOND: So R-A-I-N-
21	O-N-D.
22	MR. WALKER: Do you have an email
23	address?
24	FRENCH PARTICIPANT RAINOND: Yes, it's
25	with the center of IRSN. So it's C-E-I
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1	MR. WALKER: C-E-I dot?
2	FRENCH MALE PARTICIPANT: Not dot.
3	Sorry, minus.
4	MR. WALKER: Oh, minus. Okay.
5	FRENCH PARTICIPANT RAINOND: Minus. So,
6	minus C-E-C.
7	MR. WALKER: C-E-C.
8	FRENCH PARTICIPANT RAINOND:
9	(indiscernible) A-R-S-N-I-N
10	MR. WALKER: I'm awfully sorry, I'll try
11	again. C-E-I hyphen, or minus as you say, C-E-C and
12	then what?
13	MS. JONES: I think it's then the at
14	symbol.
15	MR. WALKER: At.
16	FRENCH PARTICIPANT RAINOND: C-E-C minus
17	C-E-C@irsn.fr.
18	MR. WALKER: I-R-S-N.FR.
19	MS. CLOS: F-R like France.
20	MR. WALKER: Thank you very much. There
21	are many reasons why we wanted to make contact with
22	these overseas agencies involved in commentary on
23	the efforts going on in Japan.
24	MS. JONES: We're starting to have a big
25	echo here.

1	MR. WALKER: Okay.
2	MR. LLOYD: Hi, there. Bob Lloyd,
3	Canadian Nuclear Safety Commission has just and
4	staff has just joined the phone call. And, yes.
5	And so thank you for setting this up.
6	MR. WALKER: Mr. Lloyd? Bob Lloyd?
7	MR. LLOYD: Yes, that's right. That's
8	me, thank you.
9	MR. WALKER: And which organization do
10	you represent, Mr. Lloyd?
11	MR. LLOYD: Canadian Nuclear Safety
12	Commission.
13	MR. WALKER: And your email address if I
14	may?
15	MR. LLOYD: Yes. What we're going to
16	give you right now is the email of our contact, Mr.
17	Viktorov, who will be taking over my role in the
18	technical lead here at the emergency operations
19	center in the next couple of days. So, I'll pass
20	you over to Dr. Victorov, okay?
21	MR. WALKER: Thank you. Hello, Doctor.
22	DR. VIKTOROV: Okay, so you can hear me?
23	Alex, A-L-E-X, dot Viktorov, V-I-K-T-O-R-O-V,
24	Viktorov.
25	MR. WALKER: Sorry, V-I-K?

1	DR. VIKTOROV: T as in Thomas O-R-O-V at
2	CNSC, C-N-S-C dash
3	MR. WALKER: CMSC, Charlie Mother Sierra
4	
5	MR. LLOYD: Canadian Nuclear Safety
6	Commission.
7	MR. WALKER: Okay.
8	DR. VIKTOROV: At CESN.gc.ca.
9	MR. WALKER: I'm sorry, the line is
10	rather poor. I'll say this again. So it's at CNSC-
11	TCSN.
12	MR. LLOYD: At the end it's system
13	nuclear. Dot GC for government of Canada dot CA for
14	Canada.
15	MR. WALKER: Oh, dear. The line is
16	awful. What comes after the dash, G?
17	MR. LLOYD: GC as in
18	MR. WALKER: Yes, GC.
19	MR. LLOYD: Dot CA.
20	MR. WALKER: CA. Okay, thank you. I
21	think that's the most difficult bit over, isn't it?
22	MR. LLOYD: Sorry. I hate to I
23	apologize because Dr. Viktorov, we have a common
24	address here that doesn't show up. If I can
25	possibly give you the common address it may be a

1	little bit simpler. And that email will be all one
2	word operationsreviewteam.eoc140 and then it's cnsc-
3	tcsn.gc.ca. Or perhaps if you give us your email
4	and we'll just email you and you can have it.
5	MR. WALKER: Yes, I think my I always
6	thought my email was hard enough but it's actually
7	quite easy. My email is Steve yes, we'll give
8	them the ND version. I'll give you the
9	communications email is NSC
10	MR. LLOYD: Yes.
11	MR. WALKER: Dot emergency.
12	MR. LLOYD: Yes.
13	MR. WALKER: At HSE.GSI.
14	MR. LLOYD: Right.
15	MR. WALKER: Gov.uk.
16	MR. LLOYD: GSS@gsi.?
17	MR. WALKER: Dot gov, G-O-V.
18	MR. LLOYD: Yes. Dot UK. Okay, so
19	NSB.emergency@hse.gsi.gov.uk, right?
20	MR. WALKER: That's it.
21	MR. LLOYD: Perfect. You'll have an
22	email in a second.
23	MR. WALKER: Thank you very much.
24	MR. LLOYD: Thank you.
25	MR. WALKER: Yes, we I mean we have a

few things that we would like to discuss but I'm quite happy for us to speak now about the agenda and what you would like to talk about. It's a pity that you don't have the document that I thought had been sent out earlier today about projected doses.

The UK preoccupation in the last few days has been in trying to establish what the worst case scenario would be for the population in Tokyo.

And we've been grappling with calculations of source inventories.

There have been a few difficulties in doing that. We now feel reasonably confident about the inventories that we think are present in the reactor cores of Units 1, 2, 3 and 4 and also the inventories in the ponds. We --

MS. JONES: And by the ponds -- excuse me, by the ponds, excuse me, do you mean the spent fuel pool? Correct?

MR. WALKER: Yes.

MS. JONES: Okay.

MR. WALKER: So we have a lot of uncertainty at the moment and a lot of discussion in our organization concerning release fractions from the inventories that we are assuming are present in the fuel either in the reactor cores or in the

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ponds. And we would very much like any assistance in gathering data about release fractions in accident situations as they may affect boiling water reactors.

Because as you probably know in the UK we don't have BWRs. We only have one operational PWR. So water-cooled reactors are not reactors that are under a lot of consideration in the UK. We don't have a lot of experience of them.

MR. LLOYD: Well, that's great. I think we -- it's best for us to cooperate because when we were coming up with our own models here we felt a little bit -- a little bit alone in the world. And we were very glad to see the U.S. NRC output which kind of looked like ours. I mean, it may be mutually wrong but at least the two of us together looked at it.

We've got the right staff here to create the sources but we work with our friends in Environment Canada and Health Canada to create doses and the like. So essentially -- so essentially the staff here will work with you as much as we can and we will also try to liaise or put you in contact with appropriate government entities here that can help with the rest.

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MR. WALKER: Okay, that's very good. I think what we would like to do is copy your organizations into the figures that we are generating to see whether they correspond with figures that you're generating yourselves, and also for you to do likewise.

MR. LLOYD: Excellent.

MS. JONES: Yes, this is Cindy Jones at the NRC. I think one thing that is of interest probably to all of you is that the information that we will share with you regarding the press release that was issued yesterday, we are asking that you hold it internally with your own government organizations and it not be shared further outside your government organizations per our agreements that we have with you. Okay?

MR. WALKER: That's fine.

MR. LLOYD: Perfect, yes.

MS. CLOS: Okay.

MS. JONES: Okay. If I could just briefly go through the press release. We have kind of a short period of time. We have about another 40 minutes that we can be on the call and then we have some other rather urgent issues to address today so I'm hoping that's enough time to go through. It's

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my understanding that there's another call tomorrow at 2 o'clock, is that correct?

MR. WALKER: I don't know, but if you've been told that then that must be the case.

MS. JONES: We don't know but we can

MR. WALKER: Yes, that's fine.

negotiate that at the end, how about that?

MS. JONES: There were two dose assessments that were attached to our press release yesterday. Both assessments were the worst case hypothetical computer model analysis of consequences for the release from the Fukushima site. This is for all four reactors.

And I really need to emphasize that it's for your information. The protective measures team here was very reluctant to include this because it has so much variability and it is very hypothetical. But it was requested to be attached.

The first assessment which showed on the date on the top which was dated the 15th I believe assumed that the reactor, Unit 2 reactor at 100 percent core melt as an unfiltered release from a totally failed containment.

Actual meteorological conditions during morning hours of the date that's indicated on the

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긔	top of that sheet. Flow dispersion characteristics
2	included low wind speeds, stable air, some light
3	precipitation.
4	The second assessment represented
5	multiple unit failures, and I think this is where
6	we'll be interested in both the Canadian and UK
7	information as well as France if you have that.
8	The first was for Unit 2 assuming 33
9	percent reactor core damage. The second was for
10	Unit 3 spent fuel pool, 50 percent damage. About
11	180 bundles of newly discharged spent fuel.
12	NORTH AMERICAN MALE PARTICIPANT: The
13	bundles were discharged about 100 days ago, 105 days
14	ago.
15	FRENCH PARTICIPANT RAINOND: Sorry, are
16	you talking about the pool?
17	MS. JONES: Yes.
18	FRENCH PARTICIPANT RAINOND: And that's
19	Unit 4?
20	MS. JONES: No, Unit 3 was the spent
21	fuel pool 50 percent of damage with 180 bundles of
22	newly discharged spent fuel. About 105 days ago.
23	NORTH AMERICAN MALE PARTICIPANT: 105
24	days old.
25	NORTH AMERICAN MALE PARTICIPANT: So,

1	just to belabor the point one more time, there's 180
2	bundles of spent fuel in the pool of Unit 3.
3	NORTH AMERICAN MALE PARTICIPANT:
4	There's more than that, but these the dose is
5	predominated by the 180 newly discharged fuel
6	bundles.
7	NORTH AMERICAN MALE PARTICIPANT: And
8	100 days ago they were discharged.
9	NORTH AMERICAN MALE PARTICIPANT: Yes.
10	MS. JONES: And we're assuming 50
11	percent damage.
12	MR. LLOYD: It's Unit 3, not 4, right?
13	NORTH AMERICAN MALE PARTICIPANT: Yes,
14	3.
15	MS. JONES: Unit 3.
16	MR. WALKER: When you say 50 percent
17	damage, you're talking about 50 percent fractional
18	release, are you?
19	NORTH AMERICAN MALE PARTICIPANT: We're
20	talking about the top half of the fuel has melted
21	and whatever (indiscernible) is released during that
22	event.
23	MS. JONES: And we haven't gotten into
24	release fractions yet.
25	MR. WALKER: So what do you mean when

you talk about 50 percent damage, you mean 50 percent of it is melted. NORTH AMERICAN MALE PARTICIPANT: MR. WALKER: Okay. MS. JONES: And then for Unit 4 assume 100 percent damage Unit 4 spent fuel pool. NORTH AMERICAN MALE PARTICIPANT: assuming we have complete loss of water and there's 550 bundles of newly discharged spent fuel in that 10 pool probably within the last 30 days since they had 11 just emptied the core. 12 NORTH AMERICAN MALE PARTICIPANT: email that I have in front of me that was sent this 13 morning it said 100 percent melt. 14 NORTH AMERICAN MALE PARTICIPANT: Yes. 15 NORTH AMERICAN MALE PARTICIPANT: 16 Making 17 a distinction between melt and damage? NORTH AMERICAN MALE PARTICIPANT: 18 19 not really. We're just saying we melted them. 20 NORTH AMERICAN MALE PARTICIPANT: Okay. 21 MS. JONES: And it's important to note 22 that that is not confirmed. That again goes back to 23 the worst case hypothetical estimate that we have. 24 These are not confirmed. I can't emphasize that 25 enough.

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FRENCH MALE PARTICIPANT: You mean that it is a diagnostic for you? My question is if 50 percent of the bundle are destroyed or damaged it means that level of water in the pond is really, really low. So, the -- to do these around the site is a huge dose rate. Because you don't have any water to protect your fuel for radiation. So the level of radiation around the site will be tremendous high.

NORTH AMERICAN MALE PARTICIPANT: Yes.

And coincident with what we believe was the initiating event to drain the pool, we had a report from the site that adjacent to the Unit 4 reactor building they had a dose rate reading of 40 rem per hour at ground level.

And we attributed that, not having any other information, that was probably some sky shine reflecting back from the spent fuel being irradiated up into the atmosphere.

FRENCH PARTICIPANT RAINOND: Yes, IRSN.

In fact we have -- imagine another scenario for the exclusion of building 4. We have -- imagine that hydrogen could be produced by water facilities. And so today we think that maybe the fuel, that there is some water in the fuel pool of the reactor 4. So

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it's very different function. And we have the feeling that Japanese are sometimes --(indiscernible, possibly little) times to put again some water in the pool. Very different in terms of situation. MR. WALKER: Can I just ask Cynthia, this information you've just given us, unfortunately before this meeting I didn't have time to read a whole lot of emails which have come through in relation to this meeting. Do I take it that you've 10 11 already sent this information to us, Cynthia? MS. JONES: We have shared this with no 12 13 one. 14 MR. WALKER: Okay. MS. JONES: Except for you we have 1.5 16 shared this with Department of Energy who we are 17 working on --18 MR. WALKER: Okay. 19 MS. JONES: -- to get agreement on these 20 values. And we will have that by early tonight. We differ very little in the estimates for this site. 21 22 MR. WALKER: Okay, that --23 MS. JONES: We're refining that today 24 and we will have an agreed-upon value both for U.S. 25 NRC and U.S. Department of Energy by tonight.

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1	MR. WALKER: Okay. And provided that we
2	give you the assurance that we don't share it
3	outside our organization are you able to confirm
4	that you can send that to us?
5	MS. JONES: Yes, I can.
6	MR. WALKER: Thank you very much.
7	MR. BUNKER: It's Alan Bunker here, NII,
8	with Steve. I was told earlier today that the
9	shortest cooled fuel in any of the spent fuel pools
10	was discharged on the 30th of November which would
11	make it 3 months old. I wasn't aware that there was
12	any discharge 30 days ago.
13	MS. JONES: That's the information we
14	have.
15	MR. BUNKER: Right, okay. I need to
1 d	
16	follow that up then.
17	follow that up then. FRENCH PARTICIPANT RAINOND: It was
17	FRENCH PARTICIPANT RAINOND: It was
17 18	FRENCH PARTICIPANT RAINOND: It was discharged from reactor 4 3 months ago.
17 18 19	FRENCH PARTICIPANT RAINOND: It was discharged from reactor 4 3 months ago. MS. JONES: Do you have the same
17 18 19 20	FRENCH PARTICIPANT RAINOND: It was discharged from reactor 4 3 months ago. MS. JONES: Do you have the same information, Emanuel? From France?
17 18 19 20 21	FRENCH PARTICIPANT RAINOND: It was discharged from reactor 4 3 months ago. MS. JONES: Do you have the same information, Emanuel? From France? FRENCH PARTICIPANT RAINOND: Yes. We

MS. JONES: And it mentions this time

1	frame?
2	FRENCH PARTICIPANT RAINOND: Yes.
3	MS. JONES: Of 3 months?
4	FRENCH PARTICIPANT RAINOND: Three
5	months. It was in November. November.
6	MS. JONES: Can you send that to us?
7	FRENCH PARTICIPANT RAINOND: It's a
8	large document, but yes, we can try to send
9	MS. JONES: Or just the page or two that
10	refers to the time period.
11	FRENCH PARTICIPANT RAINOND: Yes, we can
12	try to send you something. Yes.
13	MR. WALKER: Could you copy it to
14	everyone, please?
15	FRENCH PARTICIPANT RAINOND: Yes. Maybe
16	you should send me an email with the address email
17	of all participants and it will be easier for us.
18	MS. JONES: Okay. Jen, do you have all
19	the emails?
20	MS. SCHWARTZMAN: Yes.
21	MS. JONES: Okay, great. We can do
22	that.
23	MR. WALKER: We have used for releases
24	from reactor fuel we've used because we don't
25	have any better figures at the moment we've used a

general release fraction of 10 percent.

MR. BUNKER: From within the core.

MR. WALKER: From within the core.

We're assuming that there's going to be a lot of mitigation in the release due to plateout in the remaining structure of the reactor building if we did have a significant release.

I'm just wondering whether you're at the point, any of you, of having an opinion on what sort of release fractions we should use. I think the key issue is whether we should use a generic figure, or whether we should drill down through the data and assign different release fractions based on nuclides.

We're wondering whether there's a lot of merit in doing a specific nuclide analysis given an awful lot of the material will plate out on its way out of the fabric of the building. I just wonder what your views are on this.

MS. JONES: The code that we're using here is RASCAL. And it's our belief that it has different release fractions of different isotopes, but we have to go back and just verify that.

CANADIAN MALE PARTICIPANT: This is CNSC in Canada. Can I ask what version of RASCAL you're

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using? MS. JONES: 4.0 or 4.1. CANADIAN MALE PARTICIPANT: 4.1? Thanks. MS. JONES: We'll verify that. CANADIAN MALE PARTICIPANT: Yes. That's the verison we're using in Canada. MS. JONES: Okay. FRENCH MALE PARTICIPANT: At IRSN we use 10 for the fuel, for the pool, the release fraction we obtain for the (indiscernible). So we send 11 12 (indiscernible, possibly written transaction) except for plutonium where we have increased the release of 13 plutonium due to the interaction with oxygen. 14 MR. WALKER: Is RASCAL a bespoke 15 16 software package used by your agency, or is this a 17 commercially available product? FRENCH MALE PARTICIPANT: No, we have 18 19 our own developed modeling for really the fraction 20 calculation. So it has been done for PWR, French 21 PWR, but we consider that it was applicable for BWR. MR. WALKER: So who is the author of 22 23 RASCAL? MS. JONES: Actually it's DOE is my 24

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understanding. And we had it configured and used

1	for the applications that we would have for
2	licensees, whether it's for reactors, for material
3	licensees, fuel cycle, gaseous diffusion, and then
4	more recently it was revised for an RDD for a dirty
5	bomb.
6	MR. WALKER: Right, okay. Thank you.
7	MS. JONES: I do not believe it's
8	commercially available but one of the contractors is
9	here. We're checking.
10	MR. WALKER: Okay. Could we our
11	computations are being done by our Health Protection
12	Agency who use similar sorts of code. But they
13	require a separate specification of release
14	fractions. Their software, we have to specify what
15	the source term is for release through atmosphere.
16	And then they compute from there on.
17	It sounds as though RASCAL is more
18	nuclear industry-based and has some release
19	fractions programmed into it.
20	MS. JONES: Yes.
21	MR. WALKER: Okay. Is there anything
22	else you want to?
23	MS. JONES: I think what would be
24	helpful is we will get the information from you.
25	MR. WALKER: Yes. I will make sure

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1	that's sent to you, Cynthia, and to others on the
2	MS. JONES: Great. And I just got a
3	note passed to me, we do have a NUREG which is on
4	our external website. It's a document 1465. We can
5	provide the reference link in the email. And the
6	source term core unrecovered release fractions are
7	in there.
8	MR. WALKER: Oh, right. Okay.
9	MS. JONES: So that's been plugged into
10	the code RASCAL.
11	MR. WALKER: So you could send us the
12	link to that, could you?
13	MS. JONES: Yes.
14	MR. WALKER: Okay, that's good. Thank
15	you.
16	MR. LLOYD: Can I get that NUREG number
17	again, please?
18	MS. JONES: It's NUREG/1465. And I've
19	just been corrected, it's an NRC code.
20	MR. WALKER: Oh, okay.
21	MS. JONES: Not DOE.
22	FRENCH MALE PARTICIPANT: It's IRSN
23	here, Emanuel. So may I ask a general question on
24	the dimensions of fuel pool. Do you have some
25	research showing that the release should be

extremely serious? Or is it possible to obtain a so-called stable state without total release of fission product? Because we --

NORTH AMERICAN MALE PARTICIPANT: Are you -- we're in the process of having a shift turnover so we've kind of missed part of your message, or your question. If I can summarize, you want to know the meteorological conditions? Is that what you're asking?

FRENCH MALE PARTICIPANT: The question is do you have some research or experimental research showing that the damage of the fuel when there is no more water is so high that release is extremely high. For example, the cesium is -- can we say that cesium will be released at a fraction close to 100?

NORTH AMERICAN MALE PARTICIPANT: Just to clarify, he's talking about the pool.

MS. JONES: I think the question I heard was do we have any research regarding spent fuel pool and resulted in releases or release fractions assuming the pool is drained or empty. Is that correct?

FRENCH MALE PARTICIPANT: Exactly. That can be used to justify any calculation. In France

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we do not have any experimental data in that configuration.

NORTH AMERICAN MALE PARTICIPANT: Okay, we'll just have to look and see how the RASCAL code handles the fuel in the spent fuel pool.

MR. BUNKER: It's Alan Bunker here, NII, again. I was given a paper which I haven't had time to read yet which is a PHEBUS project report. And it was published in Nuclear Engineering and Technology, volume 38, number 2. And it's entitled "Fission Product and Actinide Release from the Debris Bed Test FPT4: Synthesis of the Post Test Analysis of the Revaporisation Testing of the Plenum Samples."

So I'll send it. When we receive your email I'll reply with a link to this. But it does give release fractions from fuel that was deliberately destroyed.

So, for example, it gives numbers for cesium, 84 percent, iodine, 97 percent, right down to plutonium, 0.31 percent.

FRENCH MALE PARTICIPANT: Yes, but the PHEBUS is a representative for the core case, not for the fuel pool case. So we are not sure it can be used for the pool.

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MR. BUNKER: Right, okay.

MS. JONES: What we'll do is we'll check with our Office of Research and see if we have that research information. I believe that we do, I just don't have it handy.

MR. WALKER: Cynthia and others, I note that you haven't yet completed or revised your dose calculations for Tokyo. But have you any feel for what kind of figure you're likely to make public? Because one of the concerns we have in the UK is that we -- we see a few of our politicians running around, or we have today because of discrepancies between figures that our organization has come up with and figures that have been bandied around by other countries.

There was one particular figure today which came from the U.S. Was it NRC? I can't remember the provenance of it now, but we had a projected dose, effective dose for members of the public in Tokyo 400 millisievert.

MS. JONES: Yes, and that's absolute rubbish. We confirmed with DOE after we got that email from you that that is -- that is not from DOE, Department of Energy, it is not from NRC, it is not from any federal agency.

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MR. WALKER: Okay.

MS. JONES: We're not sure where that's from. And the numbers we have for Tokyo are still at background level.

MR. WALKER: Okay, okay. Okay. I just needed to mention it, Cynthia, because I -- like you, I don't know the provenance of this information, but for some reason it managed to find its way to the Prime Minister who was asking immediate questions concerning why our organization was not predicting doses in this worst case situation that were anything like this particular figure. We've managed to scotch this now and sort it out because as you say it's a figure that has been withdrawn.

But I think this just brings into focus, doesn't it, the need for some cooperation. And that's why I'm very pleased that we've had this discussion now and that we've exchanged emails so that we can at least feed to one another our thinking so that we don't upset our politicians either on this side of the water or on your side of the water or elsewhere in Europe by creating a kind of a confused environment.

Those of us who work in this industry

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know that these sorts of problems are pretty much unavoidable given the vagaries of these sorts of assessments. (b)(4),(b)(5)NORTH AMERICAN MALE PARTICIPANT: agree. We spend about 20 percent of our time identifying misinformation that is out there. CANADIAN MALE PARTICIPANT: Yes. 10 (b)(4),(b)(5)11 12 MR. LLOYD: (b)(4),(b)(5)13 CANADIAN MALE PARTICIPANT: (b)(4),(b)(5)14 15 (b)(4),(b)(5)MS. JONES: 16 (b)(4),(b)(5)17 18 CANADIAN MALE PARTICIPANT 19 (b)(4),(b)(5)20 21 MS. JONES 22 23 (b)(4),(b)(5)24 25 **NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS** 1323 RHODE ISLAND AVE., N.W.

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Can I assume therefore that any

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measurements such as they are at sea have been very, very low and that they would indicate that there hasn't yet been a significant release?

NORTH AMERICAN MALE PARTICIPANT: We can say that's true for the early part of the event, but the ships left the area.

MR. WALKER: Okay, okay.

MS. JONES: We can say that with the DOE

FRENCH MALE PARTICIPANT: IRSN here speaking. We have a comment. We are publishing on website in few minutes -- I don't know from now up to 1 o'clock further -- a dissemination of what we have understood of all the events in the last 3 days. So, the hypothesis we made was the inventory.

FRENCH MALE PARTICIPANT: Yes, I can summarize. For the moment we have calculated a (indiscernible, possibly degraded) nuclear point equivalent to reactor 1, 2 and 3 with (indiscernible) and we have performed some long-term calculations of meteorological calculations.

FRENCH MALE PARTICIPANT: So, following all the release we can -- we are able to identify on the measurement onsite. So we do that for the last 3 days and the conclusion --

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1	FRENCH MALE PARTICIPANT: For 8 days.
2	FRENCH MALE PARTICIPANT: For 8 days in
3	total, 3 in past, 5 in the future. You can have on
4	the site a short movie even showing what happens.
5	We are very interesting to have
6	measurement in Tokyo if you have because our
7	assumption is we it's possible to have
8	measurements in Tokyo. We are sure that because we
9	have some indication on people coming from Tokyo to
10	Paris with contamination, body contamination.
11	MR. WALKER: Is that the IRSN or the ASN
12	website?
13	FRENCH MALE PARTICIPANT: IRSN.
14	MS. JONES: IRSN.
15	FRENCH MALE PARTICIPANT: Website.
16	FRENCH MALE PARTICIPANT: It is a
17	realistic case. We are trying to approximate
18	FRENCH MALE PARTICIPANT: Approximate
19	reality.
20	FRENCH MALE PARTICIPANT: what has
21	happened. And for the worst case for us I think it
22	should be quite difficult to communicate because the
23	worst case, this is the whole core on the site would
24	be damaged and the consequences seems to be so huge.
25	NORTH AMERICAN MALE PARTICIPANT: Just

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1	for clarification, you mentioned that you've
2	measured doses on people arriving to France from
3	Japan. Can you quantify that?
4	FRENCH MALE PARTICIPANT: Yes. A
5	negligible fraction of
6	NORTH AMERICAN MALE PARTICIPANT: Then
7	you shouldn't
8	NORTH AMERICAN MALE PARTICIPANT: Please
9	qualify what your measurements are. Negligible
10	meaning nothing, or negligible meaning higher than
11	background?
12	FRENCH MALE PARTICIPANT: Measurable but
13	negligible in terms of doses.
14	MS. JONES: Oh, so the messaging, to be
15	clear, the messaging will be that people traveling
16	from that area are not bringing contamination into
17	the country.
18	FRENCH MALE PARTICIPANT: I concur on
19	that. We're all with you because that's going to
20	create a huge havoc in the media.
21	MS. JONES: Yes, I think we have to be
22	careful.
23	FRENCH MALE PARTICIPANT: No, no, be
24	careful what I say there. What the only thing
25	which is published is the map showing what we think

are the realities. MS. JONES: So, can you clarify, does this simulation that will be on your website later today, does this integrate actual measured data from the French in Japan? Or is this all simulated? FRENCH MALE PARTICIPANT: No. Only simulated. MS. JONES: Okay. FRENCH MALE PARTICIPANT: But your 10 endpoint though. Are you going to be characterizing 11 with the modeling that's been done to date by our 12 colleagues on the phone from the UK and Canada and

FRENCH MALE PARTICIPANT: It's lower, the consequences are lower than source term we have received from the U.S.

FRENCH MALE PARTICIPANT: From U.S.

FRENCH MALE PARTICIPANT: Effective

(indiscernible) I think. But --

FRENCH MALE PARTICIPANT: The only measurement — the only information in terms of contamination, air contamination we have in Japan are not in a position with the simulation.

FRENCH MALE PARTICIPANT: Yes. We are in the order of magnitude of all measurements we

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the U.S.?

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have, but we have so little measurements so that we would like of course to check and to confirm that order of magnitude is correct. FRENCH MALE PARTICIPANT: So to give you what we have with this calculation, the total dose in Tokyo will be between 0.01 to 0.1 millisievert. NORTH AMERICAN MALE PARTICIPANT: Can you share with us just in writing before at least you post it up with respect to the ranges? I mean, 10 if you're giving us a comfort verbally, orally. 11 is that an effective whole body dose? Are you 12 giving any dose to the thyroid? Where are we 13 talking about? FRENCH MALE PARTICIPANT: We have this 14 information for thyroid is 0.1 to 1 millisievert. 15 NORTH AMERICAN MALE PARTICIPANT: As a 16 whole body dose? 17 MS. JONES: Thyroid. 18 19 NORTH AMERICAN MALE PARTICIPANT: Oh, 20 sorry, sorry, thyroid. MS. JONES: Could you repeat that, 21 22 please? Thank you. FRENCH MALE PARTICIPANT: So, dose for 23 thyroid. For young children, 1 year old, is between 24

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0.1 to 1 millisievert. So it's very, very low,

negligible in terms of impact. And total dose is 0.01 and -- between 0.01 and 0.1 millisievert.

NORTH AMERICAN MALE PARTICIPANT: And just to confirm these are simulated numbers.

FRENCH MALE PARTICIPANT: Simulated numbers. All measurement we have.

NORTH AMERICAN MALE PARTICIPANT: For what period of time are you talking about and someone should qualify, especially when you talk about small children, what does 0.1 to 1 millisievert thyroid uptake. Because we have to be extremely careful. And I'm sorry I'm being very blunt, but you've got to be careful here. One millisievert as a committed dose to thyroid for a child is a completely different modeling than as for an adult. And the health impact if you trace it back as a committed dose of 1 millisievert into (indiscernible, possibly background) based on the children is 25 percent, 20-25 percent uptake of thyroid, that's going to probably -- people are going to be asking a lot of questions.

MS. JONES: I think the other thing to think of is, you know, there should be a statement or accreditation for the fact that these individuals, these children are not eating

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1	contaminated foodstuff, contaminated milk.
2	FRENCH MALE PARTICIPANT: No, no, no.
3	No, no, no. No, no. It's the plume. It's the
4	effect of the plume. You have no foodstuff.
5	MS. JONES: This is just from
6	inhalation?
7	NORTH AMERICAN MALE PARTICIPANT: That's
8	a hell of a dose.
9	MS. JONES: That is very high for
10	inhalation.
11	NORTH AMERICAN MALE PARTICIPANT: That's
12	a hell of a dose. You guys
13	FRENCH MALE PARTICIPANT: No, no, no.
14	It's not very high. It's very low.
15	MS. JONES: For inhalation it is, yes,
16	for a child.
17	FRENCH MALE PARTICIPANT: Yes, it's very
18	low.
19	NORTH AMERICAN MALE PARTICIPANT: No, I
20	disagree. Sorry, I mean all due respect. If I'm
21	with Cindy on this one. If getting a committed dose
22	of 1 millisievert from inhalation that's a lot of
23	iodine. Because the iodine, the principal intake of
24	iodine is actually going to be in the the highest

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effectiveness of the ingestion is liquid form.

1	Inhalation is not very effective. That means you're
2	talking a lot of iodine.
3	MR. WALKER: It's a shame you don't have
4	the paper which I will make sure you get after this
5	meeting. But we have projected doses that are a
6	good deal higher than that for Tokyo based on the
7	assumptions that we've made and the source term that
8	we've assumed.
9	MR. BUNKER: But they are very much
10	worst case.
11	MR. WALKER: But they are very much
12	worst case, that's exactly right.
13	One of the things I've been asked to try
14	and achieve internationally is some kind of an
15	agreement on the source term that we're dealing
16	with.
17	NORTH AMERICAN MALE PARTICIPANT: May I
18	just ask quickly what are you taking into account
19	for weather?
20	MR. BUNKER: The dose calculations were
21	done using a very simple model with stability
22	category D, Pasquill's stability category D.
23	MR. WALKER: A wind speed of 5 meters
24	per second.
25	NORTH AMERICAN MALE PARTICIPANT: So

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you're doing straight line (indiscernible) into Tokyo?

MR. BUNKER: Yes.

MR. WALKER: That's right. Category D, wind speed 5, no rain.

MR. BUNKER: We're planning on doing some more sophisticated, or we're planning on asking the Health Protection Agency to do some more sophisticated calculations when we have more information.

CANADIAN MALE PARTICIPANT: I will offer that from Canada's perspective if we do similar sorts of calculations with our current source term we would be coming up with doses of the order of 1 millisievert.

MR. WALKER: Yes. I think we're probably internationally not going to easily be able to align the dose outcome because we'll all make very different assumptions about weather conditions, about release heights, fractional release.

But it would be very beneficial I think for an international statement if we could arrive at some agreement on the source term. In other words, what are the inventories that you start with in the reactor cores and in the ponds.

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MS. JONES: I think that's an excellent idea and we should do that. We will have our joint U.S. NRC and DOE source term agreement today. And I think based on our bilateral agreement we will be able to share that confidentially with -
I have to apologize, we have to get off in about 5 minutes.

MR. WALKER: Okay, Cynthia. You've been very helpful. Thank you very much.

canadian Male Participant: Before you go, Cindy, just so everyone knows from a Canadian perspective that dose that was just quoted is based on a worst case type scenario.

MS. JONES: Yes, and I -- you know, this is Cindy Jones, HP nuclear engineer talking. I personally do not like worst case scenarios. They scare people unnecessarily. And I think we should be trying to use the best information we have. An agreement by different countries for source terms is probably the most important thing we can do for the rest of the world.

MR. WALKER: I think so. And we will share with you our thinking on that, so thank you very much.

MS. JONES: And we'll be in contact by

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email. And then perhaps in a few days or so we can get together on the phone again. MR. WALKER: Yes, yes, thank you very much. MS. JONES: Okay, thank you. (Whereupon, the foregoing matter went off the record) 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

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(CONFERENCE CALL INITIATED)

MR. BRENNER: Brenner. (indiscernible, possibly Eliot Brenner, Director of Public Affairs, NRC).

PARTICIPANT JOSH: Hey, it's Josh.

(indiscernible, possibly

(b)(6)

(b)(6)

MR. BRENNER: Hey, how are you?

PARTICIPANT JOSH: Good. How are you?

MR. BRENNER: Pretty good. I'm a little busy juggling phones with all my usuals calling in about so when is the report going to be ready.

PARTICIPANT JOSH: Tomorrow.

MR. BRENNER: Okay. In fact, I'll put that down.

PARTICIPANT JOSH: You good?

(Laughter)

MR. BRENNER:

(b)(5)

But the language he described it, he used, and I'm sorry, I didn't see it.

PARTICIPANT JOSH: We did. It's okay,

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I'm sorry, I should have shot it to you. But it's fine.

MR. BRENNER: Somebody else, a reporter sent it to me, that the NRC do a comprehensive review of the safety of nuclear plants in light of the disaster in Japan.

(b)(5)PARTICIPANT JOSH: Say it again? MR. BRENNER: (b)(5)PARTICIPANT JOSH: Yes. MR. BRENNER: (b)(5)PARTICIPANT JOSH: (b)(5)

Methodical and systematic review of what happened and whether or not we need to make any changes here.

And the first step of that, the

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Commission will be meeting on Monday to start talking about that, what that means, what that looks like. (b)(5)MR. BRENNER: That's good. (b)(5)PARTICIPANT JOSH: (b)(5)10 MR. BRENNER: Okay. I have, by the way, 11 got the televising of that meeting all under 12 control. PARTICIPANT JOSH: Oh, great. 13 14 Excellent. Thank you. MR. BRENNER: It'll be pulled. 15 It'll be 16 sent out live. PARTICIPANT JOSH: 17 Okay. MR. BRENNER 18 19 (b)(5)20 21 22 23 24 PARTICIPANT JOSH: Okay. 25 MR. BRENNER: -- to discuss **NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS**

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capabilities. PARTICIPANT JOSH: Okay. All right. Let's deal with that when we have time to breathe. MR. BRENNER: Absolutely. PARTICIPANT JOSH: How are your folks doing? MR. BRENNER: They're doing fine. I'm going to start -- I've got some people coming in from FEMA. PARTICIPANT JOSH: Oh, really? Great. 10 MR. BRENNER: And Becky has lent me a 11 12 person, secretarial help. PARTICIPANT JOSH: Awesome. Good. 13 MR. BRENNER: So the agency is pitching 14 15 in. PARTICIPANT JOSH: 16 Okay. (b)(5)17 18 19 MR. BRENNER: I'm working on that as 20 well. 21 PARTICIPANT JOSH: 22 (b)(5)23 24 25

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Then go home. Okay, bye. (Whereupon, the foregoing matter went off the record)

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5 0-GPOZF603765094 (CONFERENCE CALL INITIATED) CALL MODERATOR: (b)(5)MR. JACKSON: Yes, this is Steve Jackson from the PACAREA command center. CALL MODERATOR: 10 (b)(5) 11 MS. DEWEY: -- Dewey from DoD Policy 12 13 (indiscernible, possibly DN IDAR). MR. MALONE: And from Joint Staff J-34 14 15 Stephen Malone. CALL MODERATOR: 16 17 18 (b)(5)19 20 21 22 23 (b)(5)24 25

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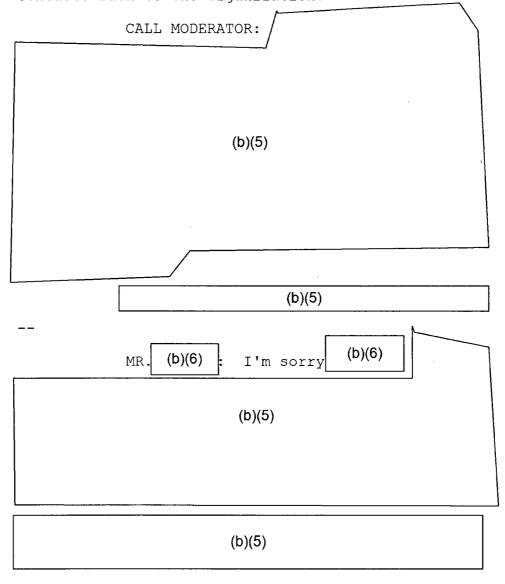
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(b)(5)

MR. MCCLAIN: Chris McClain with NOAA here. We don't quite have an ops center stood up for the nature of this response because of the nature of our portfolio. But I will be on email, phone, whatever folks need and be able to make contacts back to the organization.



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PARTICIPANT MANNY: (b)(6) this is Manny in Homeland Defense. Let me just provide a little bit of an update on the air sampling from a telephone conference that I had -- or telephone conversation I had with a Mr. Mark Fuscato. He's with the Public Health Command, the Army Institute of Public Health.

And what he told me this morning was that there are two air samplers that are on the ground at Camp Zama. That's what I reported yesterday.

They also have two personnel from the Institute of Public Health on the ground that was sent out there.

Zama also has two 72-alpha health physicists already assigned there so they're participating. The two samplers that they have do not apparently do well with noble gases so they're - - they've ordered some samplers that can measure the noble gases, that can sample and detect those. Those are going to be shipped out sometime hopefully this weekend to send those out to Zama.

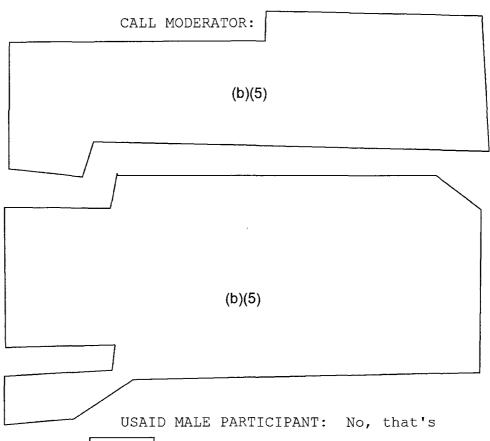
And then also they're going to have seven more personnel out of the Public Health

Command that will be deploying out to Japan probably

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to Zama to assist in the efforts there.

Don't know right now if there's any changes or plans to take those samplers and operate them in any other locations on the island. All the indication I got right now is that they're at Zama. And if there's any change to that -- I'm staying in contact with the Public Health Command's ops center and I'll get that information from them.



current, (b)(6) We've got some good guidance in from CBP and that was utilized to generate a document that was a response to some questions that CBP had suggested. And so a document has been

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created in support of that.

And we believe that that will be effective for Delta as well.

CALL MODERATOR: Okay.

MALE PARTICIPANT: -- at HHS. I just got off the phone with CDC. They are actually drafting with CBP some guidance as to protocol and other things regarding screening of passengers.

And there was a question of legal authority for isolation, quarantine, or decontamination of passengers. So that is forthcoming, but it's underway.

CALL MODERATOR: (b)(5)

MALE PARTICIPANT: I think it's making its way. There was some question whether or not it was already covered under some of the influenza quarantine or other transmissible disease quarantine authorities that already exist.

And really the concern being can radioactive contamination be treated as a transmissible disease, or does there need to be an executive order or something that clarifies that.

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But I think as far as it stands there's probably not a need to move yet on your part because those persons in motion are already pushing that.

DR. SETRON: This is Dr. Setron, the director of global migration and quarantine at CDC. Let me just kind of clarify a couple of things.

The incoming passenger screening strategy right now based on the current threat assessment is basically to educate at ports of entry broadly with electronic messaging.

And then for some individual who happens to have a level of contamination that trips a CDC sensor but does not represent a public health threat to be given very specific advice on how to follow up state and locally with the state rad coordinators and other services.

There is no plan for interrupting the flow of that individual, or detaining, and there's no existing current legal authority under CDC's statutory quarantine authority and isolation authority which is limited to nine specified communicable diseases.

It could be changed down the road in a contingency plan, but FAA and DOT indicated that they may have other authorities and they will be

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looking at it. So that's an issue.

The longer -- the bigger issue is a preparedness and contingency planning that if the threat assessment changes and the level of radiation exposure to departing people is much higher and it crosses some threshold that I understand this group is really determining, you know, what that looks like. And that individuals contaminated represent a public health threat to others on the plane or beyond, and compulsory action needs to be taken, that type of contingency planning is ongoing. It's much more complicated.

It involves looking at options for both exit screening from the source area as well as entry screening, you know, on arrival. And that needs to be worked extensively in the interagency over the next several days to be able to deal with such a contingency.

But the current plan is based on the current risk assessment.

MALE PARTICIPANT: I'd just like to add

CALL MODERATOR:

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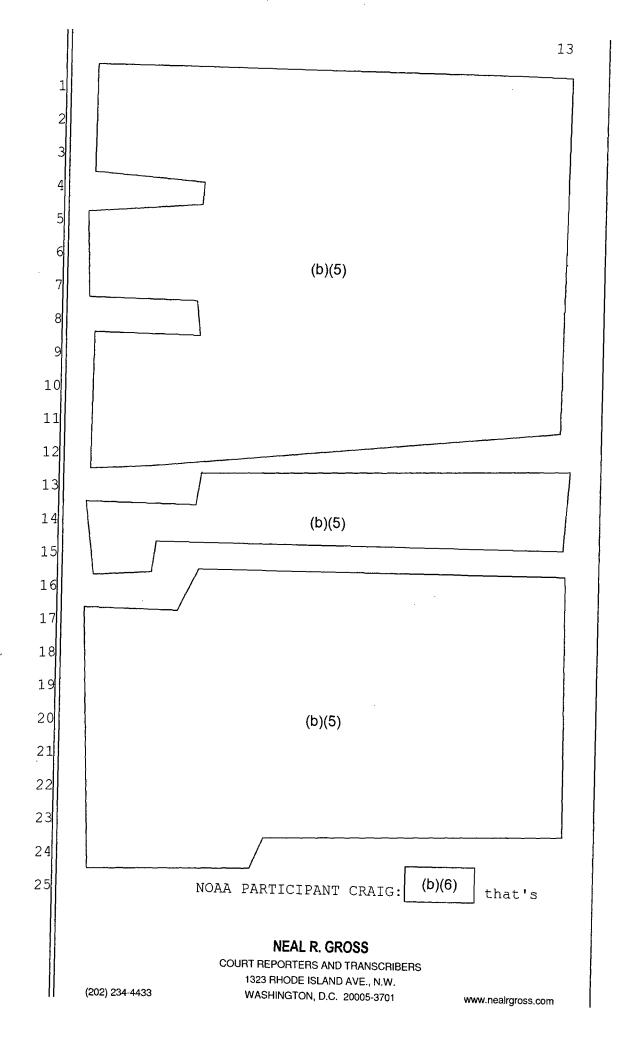
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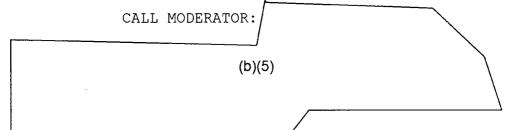
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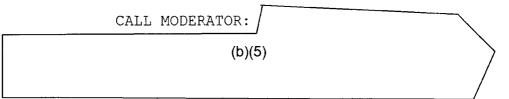
correct. Thank you. Our expertise does not go into the kind of nuclear sciences that are represented on this call. We're more just for traditional atmospheric and oceanic measurements.

But the AUV platform that we're talking about is very directable and it can be steered from a PDA or a laptop quite remotely.

And then the balloon technology we're talking about are largely meteorological. They're WISDOM balloons. But I would love to engage offline so that we could further our potential development here with folks who could acquaint us with the kind of sensors that would be useful in acquiring and making the measurements that would be of value to both our community and our Japanese friends.



NOAA PARTICIPANT CRAIG: I don't believe there's control issues on the glider, but I'll check that. We're not aware of that right now.



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(b)(5)(b)(6)MR. BOWMAN: this is Dave Bowman. I did not have a chance to review. (b)(5)CALL MODERATOR: (b)(5)MR. BOWMAN: -- hope that you'd give me like -- sorry, if you'd give me a brief synopsis maybe I can speak to it. CALL MODERATOR: (b)(5) 10 MR. BOWMAN: 11 Okay. 12 CALL MODERATOR: (b)(5) 13 MR. BOWMAN: 14 Okay. 15 CALL MODERATOR: Pardon? 16 NOAA PARTICIPANT CRAIG: I say thank (b)(6)and thank you, Dave. 17 CALL MODERATOR: 18 19 (b)(5)20 21 (b)(6)this is John 22 MR. FERRIS: Hey Ferris from OSHA. What's being brought up to us is 23 24 sort of the media reports in airports and such of 25 the hits.

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 Is there any way to sort of ground truth these things as we hit it? Is there any central repository for confirmation or information as to go against that it is a false positive?

CALL MODERATOR:

(b)(5)

MR. FERRIS: Yes, kind of like yesterday it was reported in the media that Dallas-Ft. Worth had a hit. We heard sort of through the grapevine that that was due to medical equipment.

And I guess that's what we're just trying to get in touch of because we're getting the contacts from the workers saying are we at risk.

And what we're trying to do is stay on top of it.

So it's sort of like as these things get out in the media is there anyplace that, you know, any federal agency can go and say oh no, that Dallas-Ft. Worth hit, we were told that that was a false positive.

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taking is that if it's not higher than what they
routinely get from patients that may be undergoing a
medical procedure they interpret that not to be a
problem.

And so again, but they send it back to
LSS. We can try and keep informed. Normally we
wouldn't if it doesn't go further from LSS

CALL MODERATOR:

CALL MODERATOR:

(b)(5)

MR. STERN: Yes, CBP. I'm sorry.

CALL MODERATOR: (b)(5)

MR. STERN: The radiation levels are no higher than they routinely get, then everything is fine.

CALL MODERATOR: Right.

MR. STERN: Basically. But they're circulating and I believe they have or they will very shortly their protocol for interagency blessings.

CALL MODERATOR:

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 $$\operatorname{MR}.$ STERN: Let me check with Rich Chavez in ops and I will send out an email shortly.

MR. REESE: This is Ira Reese from CBP.

I believe those protocols were sent up this morning through the interagency CAT or something like that.

CALL MODERATOR:

(b)(5)

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MR. REESE: Just to add on a little bit more what Dr. Stern said. What CBP has been doing is that basically at this time, and this is not ready for public consumption.

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There haven't been any hits on persons coming off the airlines yet, but there have been hits in the cargo arena. And what we've been doing is segregating out the things that have been contaminated such as the shrink wrap, and letting the other things go on its way.

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And what's happening is right now there's some shrink wrap awaiting the decay to see

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if it goes down below background.

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So, basically we're separating out in cargo anything that's good that isn't contaminated.

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And we're seeing very little contamination. We're finding it's very, very, very low. And as Dr. Stern said it's basically -- the stuff we're finding is not hazardous whatsoever. But we are letting people go since we're not finding anything and the cargo is being separated out, the pieces that are contaminated from not contaminated.

And the stuff that's contaminated -
CALL MODERATOR:

(b)(5)

MR. REESE: Well, I mean again, it was sent up through the interagency through the CAT teams. So I mean anybody out there should already have the protocols, at least in DHS.

CALL MODERATOR: /
(b)(5)

DHS PARTICIPANT: Will do.

CALL MODERATOR: Thanks. All right, any other --

MALE PARTICIPANT: Is the NOC going to distribute it to the other federal agencies? Or who would send it to the other federal agencies?

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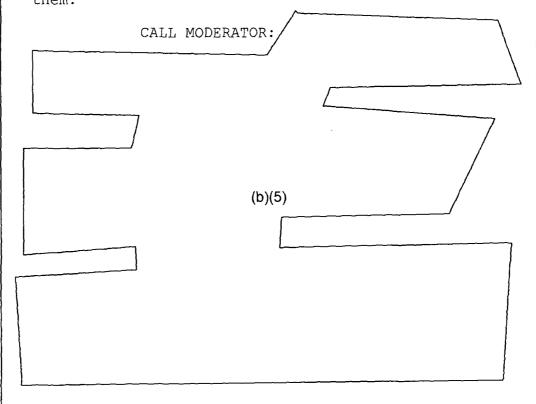
CALL MODERATOR: (b)(5)MR. STERN: (b)(6)let me send out a few emails and figure out how it went out. And then I will send that answer to you. CALL MODERATOR: 10 (b)(5)11 12 13 14 MR. STERN: Yes. CALL MODERATOR: 15 16 17 18 (b)(5)19 20 21 22 23 FEMALE PARTICIPANT: (b)(6) Joint Staff was going to check into what dosimeters were located 24 for U.S. Forces Japan and what was being shipped out 25 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS

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1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 to ensure that we have TLDs that they also have the ability with either having teams, independent squads or teams equipped with capabilities to take dose rate and total dose as well.

CALL MODERATOR:
(b)(5)

MR. MALONE: This is Stephen Malone. We sent that down last night and we were supposed to —the guys down in the basement were going to query the J-4 on that. I don't have feedback on that yet. As soon as we're done here I'll go down and ask them.



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(b)(5)

MALE PARTICIPANT: That's correct.

CALL MODERATOR:

(b)(5)

MALE PARTICIPANT: No, it's still in interagency clearance among the key partner groups. So CBP, DOT, FAA right now are the ones looking at the draft. And we're hoping that by the end of the day or certainly by tomorrow the sort of plan on how to deal with low-level individual contamination will be sort of approved and be able to be implemented.

CALL MODERATOR:
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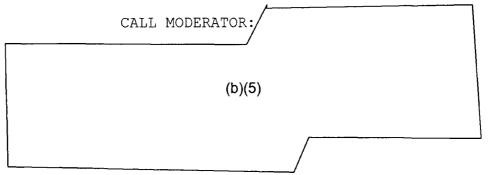
MALE PARTICIPANT: Well, there will be some information posted as well. But -- and FAQs on what's going on and messages to travelers in terms of what they can expect.

But mostly the people that will really be needing the information are those that happen to set off, you know, returning from the area that set off a CBP detector when they clear customs. And they will be given something specifically in their hand on how to follow up.

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CALL MODERATOR: Okay, so specific handouts. Okay.

MALE PARTICIPANT: Yes. So there's a general electronic messaging at ports so that everybody kind of knows what to expect. It will be mimicked on the website so people can anticipate before they travel. But the real targeted messaging about what you have, what to (indiscernible) what to do will go only to the individuals who happen to trip the CBP detector. But again, below some threshold in which they need to do — anything needs to be done beyond that individual.



MALE PARTICIPANT: No. I think that's outside the lane of CDC's determination alone. And I guess when I was sent this message to join along with Dr. Whitcomb here from the rad SME it was that this work group is actually pulling the interagency discussion together about what that limit is, that safety limit.

CALL MODERATOR: Okay.

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MALE PARTICIPANT: Can I offer another bit of information that might be helpful in this too as far as discussion?

Let's take an example for Atlanta

Hartsfield here in Atlanta because I just talked

with our CRCPD representative from Atlanta to get

that background information.

In addition to the screening that's going on with those pagers for people all baggage that comes back through Hartsfield, a lot of passengers come back from Tokyo through Hartsfield and then are transferred to domestic flights to their home base.

As such, when they come back through the customs their bags are also monitored through portal monitors at Hartsfield. And if those bags end up being contaminated both the bag, and then they have to tag that bag to the passenger, may require some type of explanation as to why their bag is radioactive.

You know, I don't know what type of hold will be on that passenger since their bag was contaminated, but it's reasonable to assume if their bag is contaminated they are too. So there's another level of detection going on outside of the

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1 person.

CALL MODERATOR:

(b)(5)

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MR. REESE: Are you talking about interdiction of contaminated articles? Or just resolution?

CALL MODERATOR: Resolution.

MR. REESE: Okay. So usually what customs does is it will interdict. And as you said so for people, if there is a level of contamination we do seek guidance from CDC.

But on the cargo issue what we're doing at the airports is we're not allowing the baggage into the federal inspections areas without screening

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outside the inspection areas. And if anything is found to be contaminated they're withheld and put in storage. And the airline is taking custody of it back and the rest of the cargo is going in. That's personal baggage.

But -- also in the same way the baggage is.

MALE PARTICIPANT: And mail is handled the same way, is that correct?

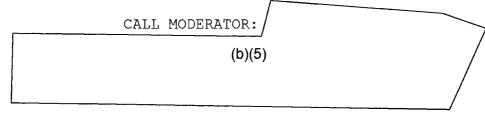
MR. REESE: Yes, mail would, again, would basically be -- international mail would be screened by U.S. Customs, by Customs and Border Protection for radioactive contamination, yes.

CALL MODERATOR: (b)(5)

There's not much

contamination coming in right now.

MR. REESE:



MR. REESE: Basically what we're seeing is air cargo coming in with some contamination and they're extremely low levels of contamination.

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MR. REESE: There's no above -- there's no -- there is no threshold right now. What we're doing is a case-by-case basis as to how hot the material is.

What we've done on several cargo packages is that the contamination has been on the outer shrink wrap, and that shrink wrap is being separated from the cargo and being held by the airline. And the cargo is moved on without the contamination.

But by and large the contamination is extremely low. And there's basically no reason to basically hold back this cargo from moving on.

Unless we have guidance from anybody else.

MALE PARTICIPANT: I wanted to make a point on some of the messaging that we have. I've noted that a lot of people are mixing up exposure to contamination. And people talk about how, do we need to quarantine somebody who has been exposed to

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radiation which of course is not the case.

And I'm hoping that in our messaging we make those things very clear. Because it's going to be -- I can expect a number of cases where we'll have cargo contamination. Very occasionally there may be some person who manages to get contaminated and get out of a hot zone.

But you know, people who have been exposed just don't pose any risk to the public. And that doesn't come through in a lot of the things that we say.

(b)(5)

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(b)(5)

MALE PARTICIPANT: NOAA has no authority in that matter.

Right.

FEMALE PARTICIPANT: The Maritime

Administration also does not have authority on that,
but we are interested in information that we could
give to both mariners and airmen regarding safety
guidance for them.

CALL MODERATOR: (b)(5)

FEMALE PARTICIPANT:

MALE PARTICIPANT: I can offer from NOAA the responsibility we have to provide notice to mariners and notice to airmen. And if there is information we could use those mechanisms as a dissemination method.

CALL MODERATOR:

(b)(5)

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31 (b)(5)What specifically are you MR. REESE: looking for? CALL MODERATOR: 10 (b)(5)11 12 13 14 15 16 17 MR. BOYD: Lee is not on the phone. This is Mike Boyd. I'm monitoring the call. 18 19 CALL MODERATOR: 20 21 22 (b)(5)23 24 25 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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MR. BOYD: Well, I know that the reentry group is meeting and I don't have the information right now on how much progress they've made. But I know that they're well along in that.

If I may I wanted to point out to the group, and many of you know this, that under the Federal Radiological Emergency Response Plan and I think that's part of the Nuc/Rad Annex now there is an entity called the Advisory Team on Environment, Food and Health. Standing members are CDC, Department of Agriculture, EPA and FDA. And the advisory team has been activated and they're actually on call right now so we might be getting some information out of that.

But the advisory team's role is to provide a lot of the information that you've asked for on this agenda, things about contamination levels and decontamination, you know, when something

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needs to be decontaminated, when food might need to activate the FDA food interdiction levels and whatever. There's people on this call that know a lot more about this than I do, but I think that advisory team is the place to go for a lot of the information that you're asking for. And they, you know, along with the four standing member agencies other agencies are welcome to join as appropriate. And I do believe that they'll be 10 providing some of this information for this event. 11 They don't set policy obviously but they do make 12 13 recommendations based on the standing guidance. As for the reentry team and the deputy-14 level exercise I can find out more about that and 15 get back to you. 16 17 CALL MODERATOR: I would appreciate --MR. This is 18 (b)(6)(b)(6)(b)(6)19 So, that standing advisory team, let's see. 20

How do we get a hold of them? And are they in a position to answer questions sort of as we go along now?

MR. BOYD: Yes, I think so.

DR. WHITCOMB: This is Bob Whitcomb, CDC. The focal point for the advisory team per the

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Nuc/Rad Incident Annex of the National Response Framework is CDC's hotline at 770-488-7100. We'll get you plugged in. CALL MODERATOR: DR. WHITCOMB: They are in the next room across from me and I'm missing that call now, but that's okay. I'm letting my team handle it. CALL MODERATOR: 9 10 11 (b)(5)12 13 14 DR. WHITCOMB: I don't know but I will 15 check to make sure. 16 CALL MODERATOR: 17 (b)(5)18 19 20 21 22 23 24 25 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS

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0-GQNBO-03765094

(CONFERENCE CALL INITIATED)

PARTICIPANT ANTHONY: Hi, this is Anthony. Can I help you?

MS. BROCK: Hi Anthony. This is Cathy Brock calling from the NRC operations center. Can you please patch me to the (indiscernible, possibly NIT)?

PARTICIPANT ANTHONY: Sure, Cathy. Hold on one second.

MS. BROCK: Thanks.

PARTICIPANT ANTHONY: Okay, you're connected.

MS. BROCK: Thank you very much.

PARTICIPANT ANTHONY: You're welcome.

MR. GERALD: Hello, this is Bob Gerald.

MS. BROCK: Hi, Bob. This is Cathy

Brock calling from NRC. I was hoping to talk to somebody about the DOE SITREP report. Do you know who I would talk with?

MR. GERALD: What's your question on that?

MS. BROCK: There was one item that we're hoping that you guys can strike from it because it's not consistent with something NRC has a

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lead on. MR. GERALD: Okay. All right. Can you tell me what page it is and everything? MS. BROCK: Well, I have it in an email and so it's the first page under "Fukushima Daiichi Nuclear Issues." MR. GERALD: Under issues. Okay. MS. BROCK: Yes. MR. GERALD: Okay. 10 MS. BROCK: You got it? 11 MR. GERALD: No, I don't have it right 12 in front of me. MS. BROCK: Okay, well, I'll tell you 13 what it is then. It says, "Based on measurements 14 from March 17th flights DOE assesses Japan's 20-mile 15 16 evacuation and 30 or 18-mile shelter as adequate." 17 And the NRC has the lead for determining protective actions within Japan and we have expanded 18 the evacuation area to 50 miles. So the two are in 19 20 conflict. 21 MR. GERALD: Okay, I will pass 22 that onto a guy who does that. 23 MS. BROCK: Okay. 24 MR. GERALD: You expanded the zone to 50 25 miles?

1	MS. BROCK: Yes.
2	MR. GERALD: Fifty miles.
3	MS. BROCK: So it's probably best to
4	just strike the whole thing. If you have to comment
5	on the evacuation zones you can refer to the NRC
6	protective action recommendation to evacuate to 50
7	miles.
8	MR. GERALD: Okay. NRC recommendation.
9	Okey-doke. I will do that.
10	MS. BROCK: Okay. What was your last
11	name again so I can
12	MR. GERALD: Gerald.
13	MS. BROCK: Gerald? Thank you. And I
14	think I have one other question if it's okay with
15	you. And I only have one more. The AMS data. So,
16	are we still getting that? I had heard yesterday
17	that NRC was going to be getting that at 6 o'clock
18	a.m. and 6 o'clock p.m. every day.
19	MR. GERALD: Well, it's included in the
20	SITREP I believe.
21	MS. BROCK: Okay. All right. I'll look
22	around a little bit to make sure I didn't overlook
23	something.
24	MR. GERALD: Okay.
25	MS. BROCK: So. All right. Hey,

1	thanks.
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MR. GERALD: Okay.

MS. BROCK: All right, bye.

(Whereupon, the foregoing matter went

off the record)

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NUCLEAR REGULATORY COMMISSION

Title:

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Docket Number:

N/A

Location:

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Date:

March 19, 2011

Work Order No.:

NRC-0366

Pages 1-11

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0-HT-4-603765094

(CALL INITIATED)

PARTICIPANT TONY: Hello?

MR. NORRIS: Hey, Tony. Mike Norris.

PARTICIPANT TONY: Yes, Mike.

MR. NORRIS: All right, I had swapped Randy out for me.

PARTICIPANT TONY: Very good. You've got Greg and you've got -- most important you've got Lou Brandon on that shift.

MR. NORRIS: Exactly. And that was -- when I saw Lou and Greg and Cathy I was like okay, no problem.

PARTICIPANT TONY: Okay, real good.

MR. NORRIS: All right?

PARTICIPANT TONY: I appreciate it,

Mike. Thank you very much. Are you working then as the PAD for the rest of the week?

MR. NORRIS: I'm doing a coordinator spot so Lou can work with the RASCAL guys.

PARTICIPANT TONY: Oh, all right.

MR. NORRIS: And I've got that on Tuesday night, Wednesday night, Thursday night, Friday night.

PARTICIPANT TONY: Appreciate it, Mike.

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Thanks. That's fine. I'll go on into the -- the EST coordinators need to change? Or the admin team? MR. NORRIS: Yes, I had them made to change. PARTICIPANT TONY: Real good. Thanks, Mike. Have a great day. MR. NORRIS: Okay, bye. PARTICIPANT TONY: Thanks. (Whereupon, the foregoing matter went 10 off the record) 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

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(CONFERENCE CALL INITIATED)

MR. PARKER: (indiscernible) Division, Willie Parker.

MR. COOL: Hi, Willie. This is Donald Cool at the Nuclear Regulatory Commission's operations center. This is a recorded line I'm calling you on.

MR. PARKER: Hello, Donald. It has been years since I have talked to you.

MR. COOL: It's been a long time, hasn't it?

MR. PARKER: Yes.

MR. COOL: Good to talk to you again. Following up on your call that Michelle was talking to you just a few minutes ago. Let me tell you what we know and what we don't know. The latter is the much larger category.

MR. PARKER: I understand. We're in the same boat, you know.

MR. COOL: We've got little bits of data. Most of the data that we've got coming in is surveys up much closer around the facility. That's where AMS has been flying. That's where we have some data from the Japanese and various ground

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monitoring assets that DOE has started to put in.

But that doesn't particularly help you in Narita nor does it give you anything of a concentration that might be up in the air.

Now, I assume that your pilots are all behaving the notifications about areas to avoid east and south of the reactor and that band where's the possibility of the Japanese equivalent of the NOTAMs.

MR. PARKER: I presume they are because at that point they're under Japanese air traffic control and so they don't have much choice.

MR. COOL: Right, right. Well, making that assumption there's not much else I can actually tell you that would be of any use in terms of what might get onto the aircraft or in their filters as they're coming in.

I've got a data point from somewhere
which was a measurement in Tokyo of background rates
yesterday --

MR. PARKER: We've got a plethora of data. In fact, if you want to I'll be happy to pass it onto you.

MR. COOL: Well, you know, knowing what your monitors are saying doesn't hurt.

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MR. PARKER: It's not our monitor but actually this is a Japanese site that we're -- I'm tapping into for background information throughout Japan.

MR. COOL: Oh, okay. I think our folks may have that.

MR. PARKER: Okay.

MR. COOL: But we're -- the thing that we were looking at in Tokyo. I don't know the exact

MR. COOL: But we're -- the thing that we were looking at in Tokyo, I don't know the exact location of it, did have a little -- about a factor of two variation. No particular trending. It was going up and down.

MR. PARKER: Right.

MR. COOL: We know that there's been little bits of stuff, but it's down in the 0.03 to 0.08 microsievert per hour range. And I understand that that's just about the level because you're probably running your alarms on your detectors so that it alarms at 2x background. So it's probably giving you fits.

MR. PARKER: Well, that's about right.

MR. COOL: Well, I can understand that.

MR. PARKER: We have -- but we have increased that. I'll be honest with you, one of the things I've been trying to figure out that's still

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perplexing me, Donald, is the fact that on the raw count from our portal monitors down there we're seeing anywhere from two to two and a half times increase in Narita particularly.

The trouble is that we also have handhelds cesium iodide detectors and we're not seeing any difference there. And I've been trying to work with the people figuring out why in the hell. Surely those damn handhelds would see. The only thing I can think about, I can find would be are the handhelds energy compensated or not. It's the only thing I can think of and that doesn't totally make sense of. At any rate.

MR. COOL: Yes, can't help you with that one either.

MR. PARKER: So at any rate, that's one of the sort of perplexing things we've got.

MR. COOL: Yes. Okay. So, basically that's all that I've got. I can't really give you a nice answer to what kind of concentrations are you seeing. We're monitoring what trickle of information we're getting. But as I said, most of the data we've got is ground a whole lot closer than 150 miles south that your planes are coming into.

MR. PARKER: Yes, Narita, correct.

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I'm going to give you a little side piece of information that amuses me. MR. COOL: Sure. (b)(5)MR. PARKER: (b)(5) 10 11 12 13 14 15 16 MR. COOL: And did he find anything? 17 MR. PARKER: No. 18 (Laughter) MR. COOL: Well, that's okay. 19 20 MR. PARKER: Which --MR. COOL: Good. 21 (b)(5)22 MR. PARKER: (b)(5)23 So, but I understand. Anyway, I appreciate the call, Donald. 24 25 MR. COOL: Okay. **NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS**

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MR. PARKER: Good to talk to you. MR. COOL: Thanks. Bye bye. MR. PARKER: Thank you. (Whereupon, the foregoing matter went off the record) 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

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Japan's Fukushima Daiichi

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(CALL INITIATED)

PARTICIPANT HOWIE: NRC operations center, this is a recorded line. How may I help you?

MS. BROCK: Hey, Howie, it's Cathy Brock.

PARTICIPANT HOWIE: Hey, Cathy.

MS. BROCK: You're probably going to kill me because I thought --

PARTICIPANT HOWIE: I'll never kill you.

MS. BROCK: You might.

PARTICIPANT HOWIE: Okay.

MS. BROCK: The fellows are giving me a long explanation about how to get on this 2 o'clock call with the Brits and France and whoever else.

PARTICIPANT HOWIE: Right.

MS. BROCK: They gave me -- I was supposed to call the bridge line they gave me, right?

PARTICIPANT HOWIE: Right. Well, you're supposed to -- yes. Okay, go ahead.

MS. BROCK: I called 800-772-3842 and I (b)(6) dialed in the longer PIN, so that I could be the administrator and nothing happened.

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1	PARTICIPANT HOWIE: Okay. Now, it's
2	okay. For her to be administrator the moderator
3	is (b)(6)
4	MS. BROCK: That's what I did.
5	PARTICIPANT HOWIE: Okay. So, what did
6	it do?
7	MS. BROCK: Nothing.
8	PARTICIPANT HOWIE: Nothing. And you
9	hit the pound and it didn't
10	MS. BROCK: Yes. It's 800-772-3842.
11	PARTICIPANT HOWIE: Yes. You were on
12	they said you were on the bridge. We saw you pop
13	up.
14	MS. BROCK: But nothing happened. It
15	didn't say you are caller one of one and you
16	PARTICIPANT HOWIE: No, our bridge
17	doesn't do that.
18	MS. BROCK: All right. Then nobody else
19	was there.
20	PARTICIPANT HOWIE: Our bridge, yes,
21	there's nobody else there. We just put it just
22	puts you guys in and that's it.
23	Oh wait, hold on, Steve can change that.
24	He can give you an announcement. You want to do
25	that?

1	MS. BROCK: That's fine. So nobody else
2	is there right now?
3	PARTICIPANT HOWIE: No, nobody else is
4	up there right now.
5	MS. BROCK: Is there any way you can
6	call us at the PMT table and tell us if somebody
7	pops on? And then we'll get right on it.
8	PARTICIPANT HOWIE: Okay, yes. You can
9	try to go back up and it'll give you a count.
10	MS. BROCK: It's only 2:01.
11	PARTICIPANT HOWIE: Yes, but there is
12	nobody up there for the bridge at this time.
13	MS. BROCK: All right, but now I'll get
14	an announcement if they do?
15	PARTICIPANT HOWIE: Yes.
16	MS. BROCK: All right.
17	PARTICIPANT HOWIE: You'll get an entry
18	tone.
19	MS. BROCK: Thank you.
20	PARTICIPANT HOWIE: Okay, so it's going
21	to say state your organization followed by the pound
22	sign. So then you'll be able to do that *8 roster
23	playback and everybody if they announce will be
24	there.
25	MS. BROCK: All right, when they get

there.

PARTICIPANT HOWIE: That's correct, but right now there is nobody on that bridge.

MS. BROCK: All right. Maybe we'll get lucky and they won't call in.

(Laughter)

PARTICIPANT HOWIE: I hear you.

MS. BROCK: All right, thanks.

PARTICIPANT HOWIE: All right, bye.

MS. BROCK: Bye.

(Whereupon, the foregoing matter went off the record)

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(CONFERENCE CALL INITIATED)

MS. BROCK: Hey, who's on the line?

MR. WILTON: Hi, it's Steve Wilton here

from the UK. Who's speaking, please?

MS. BROCK: Cathy Brock.

DR. VIKTOROV: And that's CNSC here too.

MR. WILTON: Okay, just so we're all on the same page this is a teleconference to talk about the radiological issues, yes?

MS. BROCK: Yes. Okay. So was there anybody else besides NRC and the UK?

MR. WALKER: No, we're on our own.

DR. VIKTOROV: There is Canada as well.

Can you hear us?

MS. BROCK: I can hear whoever just said that. So you're Canada?

DR. VIKTOROV: Yes, we are.

MS. BROCK: All right, what's your name?

DR. VIKTOROV: Alex Viktorov. But

there's sort of a lot here.

MS. BROCK: All right, we'll just say

Alex. How about that?

DR. VIKTOROV: That's fine.

MS. BROCK: Okay. So did somebody want

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to kick off?

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 $$\operatorname{MR}.$$ THOMAS: Well, we can. Hello, this is Greg Thomas here from the UK.

MS. BROCK: Okay, hi.

MR. THOMAS: Hi. We have been asking our Health Protection Agency for estimates of potential doses from one or two scenarios. And we haven't had a chance to look at the details of that yet, but it's not causing a significant concern at the moment.

MS. BROCK: Okay.

MR. THOMAS: I mean we don't know what the position is in Canada and the U.S. as to whether you've done any modeling of this type based on your latest data.

MS. BROCK: In the U.S. we've been working with some other federal government employees in a different agency to try to do some modeling.

And I don't know, we're trying.

But I can't offer you too much. But I think what I can do is I can give you the thinking behind what we put out in our March 16 press release.

MR. THOMAS: Okay.

MS. BROCK: Which is not really what

we're working on right now, but we're, you know,
we're going through that. But I wanted to at least
be able to share something with you about where our
line of thinking has come from.
MR. THOMAS: Yes.
MS. BROCK: So if you want I have a one-
page document that somebody here wrote up and I can
just read through it.
MR. THOMAS: Is that something you could
email to us?
MS. BROCK: I can't because it's
official use only and it's
MR. THOMAS: Okay. Yes, okay.
MS. BROCK: distribute it. So it
might be easier if I can is that okay? It
probably will take a minute or two, but.
MR. THOMAS: Okay.
MS. BROCK: All right. So, again, look
up our press release from the 16th.
So there's two dose assessments attached
to the March 16 press release. Both are worst case
and hypothetical from releases from the Fukushima
site. Okay?
The first assessment assumed a Unit 2

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reactor 100 percent core melt, unfiltered release

from a totally failed containment with actual meteorological conditions during the early morning hours of the date indicated. So whatever data we put on the report, okay? MR. THOMAS: Yes. MS. BROCK: The load dispersion characteristics included low wind speeds, relatively stable air and light precipitation. Okay? So that's that. The second assessment represented multiple unit failures. Okay? MR. THOMAS: Yes. MS. BROCK: Unit 2, the 33 percent reactor core damage is an unfiltered release from a totally failed containment. Unit 3 spent fuel pool was 50 percent damage and in that we had of spent fuel discharged 105 days ago. MR. THOMAS: Just for my own clarification what do you call a bundle? How many is that in terms of assemblies? MS. BROCK: I'm not positive, I'm sorry. Then the third one was Unit 4 spent fuel pool with 100 percent damage and that was (b)(4) of spent

MR. THOMAS: Okay.

fuel discharged 30 days ago.

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MS. BROCK: All right. To account for the combined inventories of the three units the staff adjusted the reactor power level, fuel burnup and number of assemblies in the calculation.

The meteorological conditions for the second assessment also assumed actual conditions but no precipitation, greater wind speed, and less stable atmospheric conditions. So overall it's worse meteorological conditions than the first one.

Okay? So we got greater atmospheric dispersion.

Also, the source term included two additional dates of decay before the release. Okay? For this multi-unit assessment the increased decay time before release and the greater atmospheric dispersion significantly reduced the resultant dose estimate.

And the reason we put that statement in there is because we were getting so many questions from within the U.S. here about, wait a minute, how can the one unit calculation have higher doses than the multi-unit. So basically it was the difference in meteorological conditions.

MR. THOMAS: Yes.

MS. BROCK: Okay. And then again we have our statement both assessments are highly

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speculative given the lack of actual data. MR. THOMAS: Well, yes, we're all in that position, aren't we? MS. BROCK: Yes, it's terrible. MR. THOMAS: Yes. MS. BROCK: So that's what I have to share with you. And I hope that it's helpful to see where we were a few days ago. Like I was saying yesterday we're trying 10 to get more realistic but it's really difficult 11 because there's not too much to go on. MR. THOMAS: Yes. I mean, obviously I 12 mean there's sort of roughly -- the models -- sorry, 13 14 the scenarios about your modeling are different than 15 ours in terms of assumptions that are being made. We've gone for a slightly different 16 17 approach in considering the release of, you know, from one reactor with a sort of say a 10 percent 18 release fraction so that when data becomes more firm 19 20 that we can just apply a sort of scaling to that in 21 order to get perhaps a more appropriate result. 22 And then we've also begun to assess the 23 release from a pond. 24 MS. BROCK: Right.

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MR. THOMAS: But we've applied a couple

of more representative release fractions and sort of gleaned what that would give us. And then the sort of permutation and combination of which reactors, which ponds, you know. I suppose that's -- there's a number of options, isn't there? MS. BROCK: So, can you share what kind of release fractions you were using for the ponds? MR. THOMAS: No. I mean, I don't have 10 that raw hand to hand unfortunately. But that's all -- that 10 percent figure for a reactor is typical. 11 12 But the specific release factors for the ponds I'm 13 not in a position to sort of give them at the 14 moment. 15 MS. BROCK: All right, that's fine. couldn't do it either and we're working on that too 16 17 around here. 18 MR. THOMAS: Yes. So I think we're in 19 sort of a situation where information is sort of scant. But I think between us we're all doing the 20 21 sort of sensible options. 22 Perhaps when information becomes that 23 much more clear, you know, we'll then be in a 24 situation where we can sort of swap information.

MS. BROCK: Yes, I'd love to share more.

1	You know, I asked this question yesterday and I'll
2	ask it again today. Are you guys still comfortable
3	with the protective action recommendations you had
4	for 88 kilometers?
5	MR. THOMAS: I mean, at the moment we're
6	content with the advice that's being offered by the
7	Japanese government. And we're remaining consistent
8	with that. We're not saying anything to the
9	contrary.
10	MS. BROCK: Okay. Yes, we wouldn't be
11	ready to say anything to the contrary either.
12	MR. THOMAS: Yes.
13	MS. BROCK: But if you run enough
14	terrifying situations you can get to any number you
15	want. You know?
1.6	MR. THOMAS: Yes. It's trying to sort
17	the picture of what is realistically pessimistic.
18	MS. BROCK: I know. We're throwing
19	terms like that around here too and then we'll say
20	realistically pessimistic number two.
21	MR. THOMAS: Yes.
22	MS. BROCK: It's horrible. Okay. Very
23	good.
24	MR. THOMAS: So when do you think you'll
25	be in position to sort of share a little bit more of

the information?

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MS. BROCK: I'm really not sure and I'm sorry for that. I'm really not. But I will pledge that we'll continue these calls.

MR. THOMAS: Yes. I mean, are we due to speak again in 24 hours time on this topic? Because we have the earlier --

MS. BROCK: Let's do it.

MR. THOMAS: Yes.

MS. BROCK: Let's do it. We'll just keep it going. Oh, and you remind me. I'm supposed to tell you some information on the bridge because evidently our headquarters operations officers want us to call in differently. So why don't I give you that information now.

MR. THOMAS: Yes, okay.

MS. BROCK: Before I forget. All right, there's two different call-in numbers and I'll give you both in case one is better for you. The first is 800-772-3842. And if you have trouble calling an 800 number you can use 301-816-5120. And with both numbers will get you the same place. And then the code is (b)(6)

MR. THOMAS: What was that last word? Pound?

MS. BROCK: Pound, yes, the pound key. MR. THOMAS: Oh, hash key. MS. BROCK: Yes, sorry. We call it the pound. MR. THOMAS: Okay. MS. BROCK: Okay. So that will be for tomorrow at 2 o'clock or 1400 Eastern time. MR. THOMAS: Okay. MS. BROCK: Correct? 10 MR. THOMAS: Yes. And in a nutshell the 11 information that you've conveyed to us this afternoon was based on the modeling that you've 12 carried out 2 or 3 days ago effectively? 13 MS. BROCK: Yes. 14 15 MR. THOMAS: Yes, okay. MS. BROCK: Yes. 16 17 MR. THOMAS: And we have a little bit more up-to-date information but we haven't had time 18 to assimilate it all. So we're a little bit 19 20 reluctant to put any detail on that at the moment. 21 MS. BROCK: Okay. Well, you can -- we can take a look at it if you have time and you can -22 23 - if you look at the press release and now you know 24 sort of what our thinking was behind it you can see

how we've --

MR. THOMAS: Yes, that's really helpful. Yes, thanks. MS. BROCK: Okay. All right. Well, I guess do we have anything else? MR. CARR: This is Robert Carr speaking from the UK. One of the concerns that we had earlier which I believe we may have spoken to some of your colleagues about both in Canada and the U.S. was the idea of a source term that we think may have 10 originated from TEPCO but we can't actually prove 11 its provenance. 12 MS. BROCK: We tried to look that up on the TEPCO website. We couldn't find the source. 13 MR. CARR: Right. This is just to check 14 15 that we've got the same number in our heads. We've got 6.5 times 10¹⁸ becquerels. 16 17 MS. BROCK: Yes. MR. CARR: Okay. Now, we don't have any 18 19 -- the only information we have is the source term. 20 We don't have any isotopic --21 MS. BROCK: Right. 22 MR. CARR: -- for that or indeed how it 23 would be released or anything. But this thing has 24 appeared and we don't know where it's from so we're 25 having difficulty in killing it dead. Are you in

the same position? MS. BROCK: We're not actually in the same position because I first heard this information from the folks that were on the 9 o'clock call with you guys. MR. CARR: Right. MS. BROCK: We're not battling back this number right now. DR. VIKTOROV: It's Canada here. We 10 tried to confirm the number, checked the 11 (indiscernible) website, couldn't find the number. 12 And from what we know about the core inventory it 13 seems too high. So we really have doubts on the 14 number. 15 MS. BROCK: Yes, I think it's pretty 16 high too. 17 MR. CARR: So, I mean between the three 18 of us, or three nations we're treating that number 19 with caution. 20 MS. BROCK: Yes. 21 MR. CARR: Okay. 22 MS. BROCK: Yes. In fact I'm not even 23 going to do anything with it. 24 DR. VIKTOROV: Yes, we considered that 25 we need to adjust our source term, but we don't

think so.

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MS. BROCK: Okay. Yes. We agree.

MR. THOMAS: I think from the UK perspective that's the conclusion we came to, that we keep it in our minds but we treat it with great skepticism and we don't act on it at this point.

MS. BROCK: Great.

DR. VIKTOROV: I agree.

MS. BROCK: Now, France hasn't been on this call in the last 2 days. Is there -- do they still know that we're having the call, do you know?

MR. THOMAS: That's a good question.

They didn't join us. The call that we were on today, this -- apologies, this is UK time, but the call, the 1:30 call for us basically was postponed an hour till 2:30. I don't know whether France got that message or not.

MS. BROCK: Okay, so you're in contact with them on this?

MR. THOMAS: Well, not really, no. The 1:30 call went to 2:30, and the fact that at 2:30 we talked about having this meeting at 6 o'clock means that today the French may well be out of the loop.

So what I suggest is that going back to the bridge number, if people dial the old bridge

number tomorrow, if the French dial in on the old number will they still be able to get through? MS. BROCK: I think the answer would be that they would get to our operations officers and they would be able to tell them what to do. MR. THOMAS: Okay. MS. BROCK: Yes, I don't think they'll be lost. And I'll confirm that. MR. THOMAS: What I suggest we do then 10 is at the conference tomorrow morning at 1:30 UK 11 time hopefully France will join us. If not, we'll 12 see if we can track them down. Okay? 13 MS. BROCK: Very good. MR. THOMAS: And then we just kind of 14 15 apologize for not engaging with them today. But I'm 16 sure they want to join. 17 MS. BROCK: Okay. Fantastic. MR. THOMAS: Okay. And so from our end 18 19 that's the UK. I think that's all the information 20 that we can convey at the moment. Is there anything else from yourselves? 21 MS. BROCK: Not from the U.S. 22 23 DR. VIKTOROV: Nothing from Canada. MR. THOMAS: Okay. So, if we look 24 25 forward to speaking with you in 24 hours time.

1	MS. BROCK: Great. See you then.
2	DR. VIKTOROV: All right.
3	MS. BROCK: Bye bye.
4	MR. THOMAS: Bye.
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0-KK!G3-03765094 (CONFERENCE CALL INITIATED) FRENCH FEMALE PARTICIPANT: (Answers in French). MS. SCHWARTZMAN: Yes, good afternoon. My name is Jennifer Schwartzman. I'm calling from the U.S. Nuclear Regulatory Commission's operations center. FEMALE PARTICIPANT: Yes. 10 MS. SCHWARTZMAN: -- scheduled. 11 FRENCH FEMALE PARTICIPANT: Yes. Do you 12 want to speak with -- with a person in particular? 13 MS. SCHWARTZMAN: We were told to call 14 this number for a call that was scheduled earlier 15 today. 16 FRENCH FEMALE PARTICIPANT: Hold on, 17 please. 18 MS. SCHWARTZMAN: -- Japan. FRENCH FEMALE PARTICIPANT: Yes, hold 19 20 on, please. Could you give me your name? I don't

understand English. Speak no so quickly, please.

MS. SCHWARTZMAN: Oh, okay. My name is Jennifer.

FRENCH FEMALE PARTICIPANT: Jennifer? Jennifer?

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1	MS. SCHWARTZMAN: Yes.
2	FRENCH FEMALE PARTICIPANT: And your
3	name is?
4	MS. SCHWARTZMAN: My name is Jennifer
5	Schwartzman.
6	FRENCH FEMALE PARTICIPANT: Schwartzman.
7	Could you spell your name, please?
. 8	MS. SCHWARTZMAN: Yes. It's S-C-H-W-A-
9	R-T-Z-M-A-N. Schwartzman.
10	FRENCH FEMALE PARTICIPANT: Yes. And
11	you are from?
12	MS. SCHWARTZMAN: I am from the U.S.
13	Nuclear Regulatory Commission.
14	FRENCH FEMALE PARTICIPANT: Yes. And at
15	which do you want to speak?
16	MS. SCHWARTZMAN: I'm sorry, I don't
17	know I believe that the call was requested by
18	Tomas Musee. But I don't know for sure.
19	FRENCH FEMALE PARTICIPANT: Ah yes, yes.
20	Hold on.
21	MS. SCHWARTZMAN: Okay.
22	(Whereupon, the foregoing matter went
23	off the record)
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(CONFERENCE CALL INITIATED) FRENCH FEMALE PARTICIPANT: (Answers in French). MS. SCHWARTZMAN: Bonjour. Good afternoon. May I please speak with Carine Elvue? FRENCH FEMALE PARTICIPANT: Yes, hold on. What's your name, please? MS. SCHWARTZMAN: Jennifer Schwartzman. FRENCH FEMALE PARTICIPANT: Yes. Hold 10 on, please. 11 FRENCH FEMALE PARTICIPANT: Hello? MS. SCHWARTZMAN: Hello? 12 13 FRENCH FEMALE PARTICIPANT: 14 Emergency Centre here. 15 MS. SCHWARTZMAN: Hello. This is the 16 U.S. NRC's Emergency Operations Center. 17 FRENCH FEMALE PARTICIPANT: Okay. 18 MS. SCHWARTZMAN: I'm going to put you 19 on speaker phone so my colleague can also hear. 20 FRENCH FEMALE PARTICIPANT: Okay. 21 MS. SCHWARTZMAN: Can you hear us? 22 FRENCH FEMALE PARTICIPANT: Yes, 23 perfect. 24 MS. SCHWARTZMAN: Okay.

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FRENCH FEMALE PARTICIPANT: Did you

1	receive the two documents we sent to you?
2	MS. SCHWARTZMAN: I don't believe we
3	did.
4	FRENCH FEMALE PARTICIPANT: Okay. So we
5	
6	FRENCH MALE PARTICIPANT: Maybe you can
7	check in your email box? It will make more
8	efficient I think.
9	MS. SCHWARTZMAN: Do you know what email
10	address you sent the documents to?
11	FRENCH MALE PARTICIPANT: It was L-I-A-
12	0-2.
13	MS. SCHWARTZMAN: Okay. If you can hold
14	on one moment I'll go retrieve those documents from
15	that inbox. I'll let you speak with my colleague in
16	the meantime. She can introduce herself.
17	FRENCH MALE PARTICIPANT: Yes, okay.
18	MS. HART: Hello, my name is Michelle
19	Hart.
20	FRENCH MALE PARTICIPANT: Okay.
21	MS. HART: And I'm the radiological
22	assessment officer.
23	FRENCH MALE PARTICIPANT: Okay, so you
24	are the (indiscernible) from the system analysis
25	team I would say?

MS. HART: I'm -- the dose analysis. FRENCH MALE PARTICIPANT: We are waiting for you before starting this. MS. HART: Okay. FRENCH MALE PARTICIPANT: Okay. MS. SCHWARTZMAN: Okay, we have returned with the document printed out. FRENCH MALE PARTICIPANT: Okay. Yes, we just tied together a connection with the French 10 (indiscernible) authority with ASN. So we'll try to connect with them and then we will start the 11 12 discussion. MS. SCHWARTZMAN: Okay, thanks. 13 14 FRENCH MALE PARTICIPANT: So maybe we 15 can start. We don't know what they are doing. 16 MS. SCHWARTZMAN: Okay. 17 FRENCH MALE PARTICIPANT: Okay, so let's go. So you wanted to ask -- extend your information 18 19 on the source term assistance by IOHN? So, how you 20 can proceed? Maybe we can commence what has been 21 done here. 22 MS. HART: Yes, why don't you give me an 23 explanation as to the assumptions that were used and 24 the reasons behind them.

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FRENCH MALE PARTICIPANT: Okay.

what has been done, so it has been done a few days ago now.

So as you know, in France we have no BWR. So in fact we have built a so-called approximation of the reactor cutting from what we know from the French PWR. So we adapt French PWR model which is equivalent to the three BWR, Japanese BWR. So in terms of power, residual power, fission product and core inventory, and so on.

And we have assumed a release corresponding for this global reactor to 45 percent of core damage or core fission.

 $\label{eq:french} \mbox{FRENCH FEMALE PARTICIPANT: For the} \\ \mbox{three BWR.}$

FRENCH MALE PARTICIPANT: Okay. And then we have built the source term saying that the release will be continued during 4 days period.

Okay?

And then we have adapted the release kinetics with some steam release that corresponds to the containment venting. So, the source term is built on the period which (indiscernible) that corresponds to the containment venting.

And this is how we (indiscernible) with it. So we have taken into consideration the fact

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that the containment is very small. So each containment is below 10,000 cubic meter. So far it's very small in comparison with the French PWR. So in fact we've assumed that with a very small deposition of (indiscernible, possibly IOSR) inside the reactor building or containment. So in comparison with what we know of our PWR. So this is maybe the main assumption in fact.

So it has been calculated and it has been compared to the zirc measurements environment.

And we have the feeling because it's not very precise that the source term we have obtained is a little too big in comparison with the measurements.

But no more than one order of magnitude. So a factor of 10 maximum. So it in fact seems to be not so large in comparison with the measurement.

So we do not -- now we do not intend to update this because it seems to be sufficient for people -- for the work of people on the environment side.

MS. HART: So, just so I understand, that with your modified PWR models to model these three BWRS you're showing that your source term is about a factor of 10 too high for the dose measurement near the site.

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FRENCH FEMALE PARTICIPANT: The dose rate measurements near the site. MS. HART: Right. FRENCH MALE PARTICIPANT: Dose rate. FRENCH FEMALE PARTICIPANT: And we have also checked according to (indiscernible) activities we received some measurements results. And check also that either the composition was not so far from what has been measured. So it hasn't -- as was said 10 all the time we have a factor of 10 above what has been measured with our calculation. So we consider 11 12 this quite good estimation that -- we are just 13 looking for order of magnitude of the source term. 14 MS. HART: Say that again? I'm sorry. 15 The last part. 16 FRENCH MALE PARTICIPANT: Yes, we 17 consider that the order -- we are in a good order of magnitude and of the release. So the comparison 18 with measurement is good enough to avoid any updates 19 20 of the source term. 21 MS. HART: Okay, thank you. 22 FRENCH MALE PARTICIPANT: Yes. And so 23 maybe -- so important point is that we do not 24 consider (indiscernible) retention but I think it a

rather important point.

And second point, of course we do not consider any release from the pool. MS. HART: Right. FRENCH MALE PARTICIPANT: We consider that the pool is underwater during all the accident. MS. HART: Okay. FRENCH FEMALE PARTICIPANT: We were not sure about the release pathway. In fact, we did not consider any retention through the pool's cladding 10 (indiscernible). 11 MS. HART: Okay, so no pool scrubbing 12 either. 13 FRENCH FEMALE PARTICIPANT: No, no pool 14 scrubbing. So maybe this is the reason of this 15 factor of 10 regarding the measurements. 16 MS. HART: Okay, thank you. 17 FRENCH MALE PARTICIPANT: Yes. 18 think that there were some events where maybe there 19 was in reactor 3 I think, 2 or 3. Reactor 2 was --20 to one event where with direct venting from the gas 21 part of the containment. So this is the situation 22 for us. 23 MS. HART: All right. I think I 24 understand what you have done. Do you have anything

else you would like to?

FRENCH MALE PARTICIPANT: We have in the main -- so what we have sent, we have sent you -- it is in French, but there is a paper with the (indiscernible) of the reactor. Diagnostic qualities is what we used to follow the situation. At the end of the document you have the source term corresponding to the pool, pool dewatering. 8 MS. HART: Yes, I do see that. 10 FRENCH MALE PARTICIPANT: Which is the 11 last page. So it has been calculated with the 12 inventory in each pool and with information we got. 13 MS. HART: Okay. And this information was probably through the same channels that we have. 14 15 FRENCH MALE PARTICIPANT: Yes. And you 16 see the sheltering distance, like very huge 17 consequences. 18 MS. HART: Right. On page 5 of 7, the 19 third from last page --20 FRENCH FEMALE PARTICIPANT: Page 7. The 21 number of pools? 22 MS. HART: Right. 23 FRENCH FEMALE PARTICIPANT: You see the 24 pools. So pool number 1, 2 through 6. And we have 25 made a source term calculation in case of dewatering

of each of these.

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MS. HART: Okay. So you do have what's in the pool, but you have not modeled what's being released. Okay.

FRENCH FEMALE PARTICIPANT: Yes. We have the number of (indiscernible, possibly casualties) and also the duration of storage inside the pool. So we calculate radioactivity and define the source term according to the radiological consequence. We assumed the isotopes with high dose ((indiscernible, possibly calculation).

FRENCH MALE PARTICIPANT: On the page 6 you have the release factor we have applied to this.

MS. HART: Oh, to this pool. Okay.

FRENCH MALE PARTICIPANT: So we are not very confident on these release factors, but the people of research are working with us and for the moment we consider that we have to conserve some very pessimistic assumptions.

MS. HART: Okay. So what is the first column and the second column and the third column on this sixth page. The first column is -- do you have a pool fire?

FRENCH MALE PARTICIPANT: So, first column, this is release from the fuel in the pool.

Second column is retention in the pool, in the structure of the pool and the (indiscernible, possibly rock) and so on. And last columns, this is a release from the fuel to the environment. MS. HART: Okay. So, okay. I see how it works, yes. FRENCH FEMALE PARTICIPANT: applied to the inventories. FRENCH MALE PARTICIPANT: This is 10 applied to the, yes, total inventory. 11 FRENCH FEMALE PARTICIPANT: Inventory of 12 the pool. 13 FRENCH MALE PARTICIPANT: So you see, 14 for example, we have very pessimistic assumption on 15 (indiscernible, possibly plutonium) due to 16 possibility of oxidation and so on. 17 MS. HART: Okay. So, yes, that's -- you 18 just assumed that value. Okay. I think I understand. Yes, I do understand. 19 20 And then the fifth page has your dose results. 21 FRENCH FEMALE PARTICIPANT: Yes. We 22 23 made some short distance, long-distance calculation 24 for radiological consequences. So this is given for 25 the pool under stage 7 and for the last source term

estimation for the reactors 1, 2, 3 on the page 6 -page 5.

MS. HART: Okay.

FRENCH FEMALE PARTICIPANT: So the radiological consequence estimation here is made from meteorological (indiscernible, possibly survey).

MS. HART: Okay.

FRENCH MALE PARTICIPANT: Yes, and you have impact on Tokyo on a long-distance calculation.

MS. HART: Okay, thank you.

MS. SCHWARTZMAN: Does ISN have any questions for U.S. NRC at the moment?

FRENCH MALE PARTICIPANT: Yes. Maybe we could discuss on the present situation since it would be interesting to have your opinion. Because we are not very confident on the logic of the different parameters we have here. Especially the — how the residual power is evacuate. We are not very confident of the methodology used now because it seems they used the instrumentation of containment pressure, level in the vessel, and so on. And we are really wondering how precise can these — (indiscernible, possibly the sensor) in the conditions they are now.

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And we -- so of course we know that
there was some release of steam or maybe radioactive
materials this morning. But in fact we do not
understand really well the strategy of TEPCO on how
to manage the situation. And we, yes. We have many
questions on these things.

MS. HART: We have a lot of similar
questions so I don't know that I have a whole lot

I can say that some of the air measurements we have seen in the area indicate that it's coming -- it doesn't seem to be coming from the spent fuel pool with the (indiscernible, possibly

FRENCH MALE PARTICIPANT: It has been modeled, yes? It has been seen.

aged fuel) because we are seeing some iodine-131.

MS. HART: Yes.

extra information on that myself.

FRENCH MALE PARTICIPANT: Yes, okay.

MS. HART: So it's either coming from the Unit 4 spent fuel pool or it's coming from the reactor. But it looks more likely to be coming from the reactor because it is — the ratio of that to the other iodine isotopes or the other isotopes seen indicates it may be coming from a reactor.

FRENCH MALE PARTICIPANT: Okay.

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MS. HART: We don't know which unit it may be.

FRENCH MALE PARTICIPANT: Yes. And do you think it's possible that the reactor, the building itself is full of water and then it could make the venting more difficult due to the pressure of water in the building?

MS. HART: That is one of the concerns. That's not -- we have two different teams here and so we're not -- in this team with the dose analysis we're not paying as close attention to that particular part of it. But of course that is a concern and of course all that salt water affecting the components in those containments is another concern.

AMERICAN FEMALE PARTICIPANT: May I ask if you had a representative on the call that we had with our reactor safety team at 9:30 this morning our time? Because they may have discussed that issue on that call. I know ASN and IRSN have both participated in those calls in the past.

FRENCH MALE PARTICIPANT: Yes.

MS. SCHWARTZMAN: I just don't know whether you had someone on that call this morning. It took place earlier this morning.

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FRENCH FEMALE PARTICIPANT: No, we had no contact. FRENCH MALE PARTICIPANT: No, we had no contact with Japanese team. MS. SCHWARTZMAN: No, not with the Japanese team. With --FRENCH FEMALE PARTICIPANT: With NRC. MS. SCHWARTZMAN: -- operations center. FRENCH FEMALE PARTICIPANT: No. 10 FRENCH MALE PARTICIPANT: No. We have tried, at the very beginning you have tried to 11 12 contact and NRC. We choose at this period to 13 discuss for technical discussion with us at the very beginning of the accident. 14 15 MS. SCHWARTZMAN: That's interesting 16 because we have a standing call with UK and Canada 17 and France every morning at 9:30 here that I know 18 ASN has participated in. So, I would recommend perhaps talking with ASN about that. 19 20 FRENCH FEMALE PARTICIPANT: Okay, we'll 21 do this. 22 FRENCH MALE PARTICIPANT: Okay, 9:30 in 23 the morning. 24 FRENCH FEMALE PARTICIPANT: For your 25 time.

FRENCH MALE PARTICIPANT: For your time. MS. SCHWARTZMAN: It's 9:30 our time. So I guess that's 2:30 by you. FRENCH MALE PARTICIPANT: Yes. MS. SCHWARTZMAN: But you know, I can certainly ask them that question and see if there's any information we can provide you. But I know for a fact because I've been on that call previous days that ASN has participated. So you may want to speak 10 with them about --FRENCH FEMALE PARTICIPANT: 11 12 FRENCH MALE PARTICIPANT: Yes. We have 13 participated one time I think on discussion on the 14 work source term I think, which is --15 MS. SCHWARTZMAN: Right, and that was a 16 separate call that we had set up with those same 17 countries but obviously with a different set of experts. But we've been happy to speak with all of 18 19 our counterparts as much as we can. So you know, I 20 would find out if there's a way that you can 21 participate in that call as well. 22 FRENCH MALE PARTICIPANT: Okay, thank 23 you. 24 FRENCH FEMALE PARTICIPANT: 25 FRENCH MALE PARTICIPANT: Okay, so on

source term assessments on your side, do you have some results or something which could validate what has been done by IRSN?

MS. HART: We do have lots and lots of analyses. Of course as you know we do have BWRs in this country and so we do have some BWR models that we have adjusted to model Units 1, 2 and 3.

We've done some analyses where we have really bad releases from all of the units including all the spent fuel pools. We've also done more realistic analyses and we're still working on those. And we are trying also to verify some of those readings we're seeing in the area using some of these analyses.

We did one analysis where we looked at Unit 2 being the one that was releasing and we assumed 40 -- no, 33 percent of that reactor had fuel damage. And it was released directly to the environment.

There was some holdup in the containment. There was some holdup in the system itself as it was being released. So we have some models that we have here that kind of do that automatically for you.

We've also tried to look at some

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1	releases from the spent fuel pools (b)(5)
2	(b)(5)
3	the amount of water lost in those pools, or cooling
4	lost in those pools.
5	And as you have probably seen on the TV
6	we've also seen the steaming coming out of those
7	buildings, damaged buildings. So we're unsure as to
8	the damage. However, we do have some approximations
9	that perhaps Unit 3 spent fuel pool may have as much
10	as 5 percent fuel damage in that pool. And Unit 4
11	may have as much as 30 percent damage.
12	FRENCH MALE PARTICIPANT: What percent -
13	
14	MS. HART: We're running analyses on
15	that.
16	FRENCH MALE PARTICIPANT: Five percent
17	for Unit 3 you say?
18	MS. HART: What's that? Yes, 5 percent
19	for Unit 3 spent fuel pool was one of the
20	FRENCH MALE PARTICIPANT: And 30 for
21	Unit 4.
22	MS. HART: Thirty percent for Unit 4
23	spent fuel pool.
24	FRENCH MALE PARTICIPANT: So you yes,
25	it was core dewatering the fuel dewatering in the

pool.

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MS. HART: That's correct. The water level (indiscernible) and there's fluctuating levels to say the very least. So we were running those as kind of like a best estimate assumption based on the indications we had at the time.

FRENCH MALE PARTICIPANT: So you think, because for us we deemed that in case of fuel damage that that means zirconium acceleration. And so we -

MS. HART: I don't think we have indication of that. One of the reasons that we have a much higher damage in pool 4 of course is that you have a lot higher heat load, you have a lot more of the freshly discharged fuel than you do in the other spent fuel pools.

And we are also working with our research organization to try to model those spent fuel pools because that's not an automatic model that we have easily here.

FRENCH FEMALE PARTICIPANT: And so in terms of order of magnitude of the release I suppose you have much higher than us.

MS. HART: Yes, we do have some that are not -- not matching up. But we keep -- we have lots

and lots of different analyses. We're running different cases, try to bound what we think we know at the time. But we have not found any, I don't think, that match exactly with what's happening yet. Considering we don't know exactly what's happening in the first place.

FRENCH MALE PARTICIPANT: Okay. And do you have people working on reactivity in the fuel pool? Because we have question here on this. But it's not very clear in fact. Because there is some failure on the reactor 4 with a lot, a lot of steam which was evacuated from the pool. And we imagine that it could be reactivity phase, a reactivity -- a criticality, yes, phase.

MS. HART: Yes. I'm not aware. I don't know if somebody in the reactor safety team is working on criticality or not. It was not something that we had been discussing on the protective measures team on my side.

FRENCH FEMALE PARTICIPANT: Okay.

FRENCH MALE PARTICIPANT: Okay. Okay, so it's clear. Have I understand, so you are more pessimistic results as we have for the moment. And you tried to fit a little better with the measurements. I think this is the situation for

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you. MS. HART: That is correct. FRENCH MALE PARTICIPANT: Okay. FRENCH FEMALE PARTICIPANT: Okay. FRENCH MALE PARTICIPANT: Okay, so it's clear. So. MS. HART: Any further questions? FRENCH MALE PARTICIPANT: No, no. FRENCH FEMALE PARTICIPANT: No further 10 questions. MS. HART: Okay. I don't have any for 11 12 you either. 13 FRENCH MALE PARTICIPANT: Okay, so. 14 MS. SCHWARTZMAN: Well, we can stay in 15 contact with one another. You have our LIA02 email 16 address in the operations center. 17 FRENCH FEMALE PARTICIPANT: Yes. MS. SCHWARTZMAN: Feel free to contact 18 19 us with any additional questions you have. We'll do 20 our best to answer them. 21 And as I said, I would suggest you speak 22 with ASN about that other call to see if they can 23 share information with you or get you connected to 24 it.

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FRENCH FEMALE PARTICIPANT: Okay.

MS. SCHWARTZMAN: Okay? Thank you very much. FRENCH MALE PARTICIPANT: Thank you very much. FRENCH FEMALE PARTICIPANT: Bye bye. MS. SCHWARTZMAN: Bye bye. FRENCH MALE PARTICIPANT: Goodbye. (Whereupon, the foregoing matter went off the record) 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

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(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Nuclear Regulatory Commission, this is a recorded line. May I help you?

MS. HART: Yes, this is Michelle Hart in the PMT. I would like to be put on the call with the French, Canadian and UK regulators.

MALE PARTICIPANT: What call is that?

MS. HART: There's supposed to be a call at 2 p.m. with France, Canada and the British.

MALE PARTICIPANT: Are you talking about the consortium call?

MS. HART: I believe so.

MALE PARTICIPANT: Okay. The -- I'm going to transfer you up. The passcode is (b)(6)MS. HART: (b)(6) okay.

MR. WEBSTER: Phil Webster in the industry support team.

MR. COZOL: Jason Cozol, Nuclear Regulatory Commission.

MS. GARWITZ: Nancy Garwitz, BSCA.

MR. PORTERS: Ed Porters, operations

officer.

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MR. RYAN: Kevin Ryan, Institute of Nuclear Power Operators.

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 MR. CONCLAN: Brad Conclan, Department of Homeland Security.

MR. ELLIS: Jim Ellis, INPO.

CALL MODERATOR: Thank you very much for joining us. I think we've dialed down the status information that we're providing over these calls because my understanding is that the industry and the other partners are already getting that information through other channels. So unless there's a pressing need for that information what I would suggest we do is talk about what's on our first agenda item and that's the decision on which agency has the lead going forward.

Some of us were on a call that preceded this conference call. And my understanding of the current status is that we have not yet determined which lead would serve that lead role, but it's being actively worked by the Chairman and by other high-level officials.

We understand the importance -
(Whereupon, the foregoing matter went off the record)

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(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Nuclear Regulatory Commission, this is a recorded line. May I help you?

MS. HART: Yes, this is Michelle Hart in the PMT. I need to be put on the call with France, Canada and the UK.

MALE PARTICIPANT: Password is (b)(6)

MS. HART: Okay.

CANADIAN MALE PARTICIPANT: Hello, this is Canada on the line.

MS. HART: Hello, the NRC is here.

 $\label{eq:canadian male participant: I think} % \end{substitute} % \$

MS. HART: Is anybody still there?

CANADIAN MALE PARTICIPANT: Canada is still on the line.

MS. HART: U.S. is still on the line. Do we have anything to say?

CANADIAN MALE PARTICIPANT: Actually, one of my colleagues does. Go ahead, Caroline.

MS. PURVIS: Hi, it's Caroline Purvis, Canada. I'm just curious, we had read some reports that the U.S. was doing aerial dose rate surveys.

Do you have any information on that?

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1	MS. HART: Yes, we do have a military
2	plane that is flying over and taking some ground
3	contamination readings in the area. They are not
4	flying today, however.
5	MS. PURVIS: Okay. And your readings,
6	can they be shared?
7	MS. HART: I do not believe so. I can
8	check on that though.
9	MS. PURVIS: Okay.
LO	CANADIAN MALE PARTICIPANT: Well, if
1	that's the case from a health physics point of view
12	Canada has nothing to add. I don't know if there's
L3	anything new you can share with us.
4	MS. HART: Yes, Caroline, this is
L 5	Michelle Hart with the U.S. Nuclear Regulatory
L 6	Commission. We'll
L 7	MS. PURVIS: Hi.
L 8	MS. HART: double-check and see if we
L 9	can get you those values. We need to ask some
20	people on further up the line because they are not
21	coming directly from us.
22	MS. PURVIS: Okay, great. That would be
23	appreciated. Thanks a lot.
24	MS. HART: And if share them we will.
25	CANADIAN MALE PARTICIPANT: Do you have

뷔	an email address from us that you can send to?
2	MS. HART: We may but give it to me
3	again, please.
4	CANADIAN MALE PARTICIPANT: Okay.
5	EOC2@CNSC-CCSN.GC.CA.
6	MS. HART: Okay, I have EOC2@CNSC-
7	CCSN.GC.CA.
8	CANADIAN MALE PARTICIPANT: Correct,
9	thank you.
10	MS. HART: Thank you.
11	CANADIAN MALE PARTICIPANT: We have
12	nothing else to add. And if we can get those
13	numbers it would be much appreciated.
14	MS. HART: Okay.
15	CANADIAN MALE PARTICIPANT: I guess we
16	can end the call?
17	MS. HART: If nobody else is showing up
18	I guess we can. I didn't have anything further.
19	CANADIAN MALE PARTICIPANT: Neither do
20	we. All right, thank you.
21	MS. HART: Thank you. Bye bye.
22	(Whereupon, the foregoing matter went
23	off the record)
24	
25	

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Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title:

Japan's Fukushima Daiichi

PMT Counterpart Audio Files

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
+ + + +
JAPAN'S FUKUSHIMA DAIICHI
PMT COUNTERPART AUDIO FILES
+ + + +
TUESDAY,
MARCH 22, 2011
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0-M-Q63-03765094

(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Nuclear Regulatory Commission, this is a recorded line. May I help you?

MR. LEBINSKI: Yes, John Lebinski with the PMT. We're expecting a call to be set up with members from the UK, Canada and France at 2 o'clock.

MALE PARTICIPANT: Yes. Right.

MR. LEBINSKI: And what we'd like to do is we want to be patched into that call. Should we call you or are you going to call us? We're back in the PMT area.

MALE PARTICIPANT: You can get on that bridge right now by dialing 6108.

MR. LEBINSKI: 6108. That's 301-816?

MALE PARTICIPANT: No, just 6108.

You're in the PMT.

MR. LEBINSKI: Right, okay. All right, thanks.

MALE PARTICIPANT: And what that does is put you straight onto the bridge. But right now nobody else is on that bridge.

MR. LEBINSKI: Okay, thanks.

MALE PARTICIPANT: Okay, bye bye.

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0-M-RK5L03765094

(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Yes, this is headquarters operations officer. You are on the bridge and it opened up but nobody else has called in yet.

MR. LEBINSKI: Thank you, appreciate it. We'll go on mute and see who comes in. Thanks.

MALE PARTICIPANT: Okay, bye bye.

(Pause)

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MALE PARTICIPANT: Canada, you are on the bridge.

MR. LEBINSKI: Hi, this is John Lebinski from NRC, U.S.

MS. ABRAMS: And Charlotte Abrams from NRC, U.S.

MR. LEBINSKI: Canada joined the call?

MS. RICHARDS: Yes, I'm right here.

Melanie Richards, CNSC.

MR. LEBINSKI: How are you doing,
Melanie? John Lebinski and Charlotte. I think
yesterday you guys had to call and we were the only
two participants, correct?

MS. RICHARDS: Yes, that's correct.

MR. LEBINSKI: Okay. And we've been waiting a little while here. We haven't heard

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anyone else come on. So I'd say -- I've got 6 minutes after the hour. Do you just want to get started? MS. RICHARDS: Sure. MR. LEBINSKI: Okay. MS. RICHARDS: That would be great. MR. LEBINSKI: All right. So, I guess the purpose of the call is just to exchange 8 information on where we are. So I'm going to let 10 you go first. 11 I'm not sure what MS. RICHARDS: Okay. 12 you would like to hear but the number one I'd just 13 like to get off my plate is yesterday we had mentioned that we were wondering if the U.S. NRC 14 15 could share with us the U.S. aerial data that had been collected. Does anyone know if that's been 16 17 looked into, if we can get that data? 18 MR. LEBINSKI: Yes, we have been looking 19 into that. Now, they have not flown in the last 2 20 days. 21 MS. RICHARDS: Okay. 22 MR. LEBINSKI: So we are looking at data 23 from a couple of days ago, whether we can share it

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agencies. We need to get approval from them on

The problem is it's one of our sister

with you.

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1	whether they can do that or not. And we're waiting
2	for a response on that at this point.
3	MS. RICHARDS: Okay, perfect. I guess
4	one other thing is have you guys seen the
5	information that was put out by the Australian
6	government?
7	MR. LEBINSKI: No, we're looking for it.
8	That was going to be one of the items we had. Have
9	you seen it?
10	MS. RICHARDS: Yes, we've seen it.
11	MR. LEBINSKI: Okay. And do you have a
12	hard copy? Is there a website we can go to?
13	MS. RICHARDS: I do not know exactly
14	oh, go ahead.
15	MR. ODAY: Hi, Ali Oday, Canadian
16	Nuclear Safety Commission. I can send it to your
17	liaison email.
18	MR. LEBINSKI: Great, we'd appreciate
19	that. Our liaison team came over this morning, told
20	us it existed, tried to call Australia and could not
21	get a copy of it.
22	MR. ODAY: I think it's basically
23	radiation (indiscernible) protocol for Australian
24	nationals in Japan. I don't think it gives anything
25	in terms of hard numbers or calculations. But it's

interesting to look at. So I'll have that forwarded to your LIA02 email. MR. LEBINSKI: Okay. MS. RICHARDS: Yes, basically it's just what to do if. That's what it is. So we -- I'm not sure, do you know if any of the -- basically has anything similar like that been done on your end? MR. LEBINSKI: We didn't do a what to do if. I mean, of course you know our protective 10 action guideline where we've advised people within the 50-mile zone evacuate that area. We've done 11 12 nothing beyond that and we have not done any what to 13 do if type scenarios and provided any guidance. 14 With respect to outside that 50-mile 15 zone we have still been instructing U.S. citizens to 16 follow any guidelines put out by Japan outside of 17 the 50-mile evacuation zone. 18 MS. RICHARDS: Okay, yes, that's on par 19 basically with our position as well, so. 20 MR. LEBINSKI: Okay. You've told your 21 folks evacuate to 50 miles also? 22 MS. RICHARDS: Eighty kilometers, yes. 23 MR. LEBINSKI: Okay, great. 24 MS. RICHARDS: Yes, that's the same. So 25 it's consistent.

not seeing this data you're emailing in yet, did you have any concerns with what the Australians were saying? MS. RICHARDS: No, not particularly. mean, it's difficult though because we're not exactly sure what -- like they don't really have a nuclear like program, right? So, they -- it's interesting. I don't know what they're really 10 basing it on per se. But no, there was nothing that 11 was of concern. No. 12 MR. LEBINSKI: Okay, great, thanks. 13 we appreciate hearing that. The first word we got this morning is that it sounded like what the 14 15 Australians said may have been a little bit extreme. 16 And having not seen it --MS. RICHARDS: Well --17 18 MR. LEBINSKI: -- want to go there. 19 I'm glad to hear you guys don't think so. Okay? 20 MS. RICHARDS: Yes, no, understood. 21 MR. LEBINSKI: Unfortunately I asked you 22 to go first because we don't have a whole lot new to 23 report you this afternoon. I think yesterday 24 Michelle Hart was on the call and told you the exact 25 scenarios we used to come up with our 50-mile

MR. LEBINSKI: Do you have any other --

evacuation zone.

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What we're still doing is we're not the lead agency in the U.S., Department of Energy is, for determining a more bounding scenario. And they're playing with a couple of scenarios.

And what I can share with you is given the stability of the Units 4 and 5 right now we don't look like we're considering anything with Units 4 and 5. But we're trying to look at the current conditions of reactor Units 1, 2 and 3 and the spent fuel pools for Units 1, 2, 3 and 4 to determine if we were to do a bounding scenario what we would consider as far as damage to each unit as well as the percentage of damage to the fuel that would be into that type of scenario.

MS. RICHARDS: Just one thing. You meant 5 and 6, not 4 and 5, right?

MR. LEBINSKI: Thank you, 5 and 6, yes.

Thanks for that clarification. Yes, 5 and 6, we're not considering those based on the current conditions. But the first four units. And that's about all we have.

MS. RICHARDS: Okay, well that's -- it's the same here. I don't think we have anything new to add either. But we'll continue to call.

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1	MR. LEBINSKI: Okay, yes. As long as
2	we're being efficient, we had a 4-minute call today,
3	we'll do the same tomorrow.
4	MS. RICHARDS: Okay.
5	MR. LEBINSKI: I hope to have more
6	information.
7	MS. RICHARDS: Just one more thing. Do
8	you think the UK and France know that we're having
9	the calls every day?
10	MR. LEBINSKI: I'm going to ask
11	Charlotte, our liaison team, to make sure she can
12	get that back.
13	MS. ABRAMS: We'll double-check that.
14	MS. RICHARDS: Okay, because it could be
15	that they don't realize that. I'm not sure.
16	MR. LEBINSKI: Thanks. Appreciate that
17	idea.
18	MS. RICHARDS: Okay, thanks so much.
19	MR. LEBINSKI: All right, have a great
20	day. Bye.
21	MS. RICHARDS: Bye.
22	(Whereupon, the foregoing matter went
23	off the record)
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(CONFERENCE CALL INITIATED)

MR. LEBINSKI: NRC joined the call.

MR. WALKER: Hello?

MR. LEBINSKI: Hello.

 $$\operatorname{MR}.$$ WALKER: Hello, this is Steve Walker in the UK.

MR. LEBINSKI: Hi, Steve. John Lebinski.

MR. WALKER: Hello, John. This -- I've been off for a day on a day's rest. I came on at lunchtime today. We've been having these 6 o'clock GMT meetings, 2 o'clock for you to discuss some of the health physics.

But if there aren't a sufficient number of people here now it doesn't matter. We can defer until tomorrow.

MR. LEBINSKI: Well, Steve, let me give you a quick update. Actually we did have the call. We knew you weren't on the call yesterday and about 5 minutes after the hour Canada and myself were the only two on the call so we just had a very quick call because there was not much to update.

MR. WALKER: Okay.

MR. LEBINSKI: But let me just tell you

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what we did discuss is apparently the Australian government has put out some guidelines for its people in Japan. MR. WALKER: Right. MR. LEBINSKI: And we do not have that yet but Canada did and they are forwarding that information to us. MR. WALKER: Do you know if they're going to send it to the UK? 10 MR. LEBINSKI: They did not say they 11 were going to. I don't think it would be a problem 12 for us to hit the forward button. Do we have your 13 email address? 14 MR. WALKER: Our central com's email is 15 NSD.emergency --16 MR. LEBINSKI: Emergency. 17 MR. WALKER: -- @hse --18 MR. LEBINSKI: H-S-C? 19 MR. WALKER: H-S-E, Hotel Sierra Echo 20 dot Golf Ontario Victor. 21 MR. LEBINSKI: Okay. 22 MR. WALKER: Oscar Victor. 23 MR. LEBINSKI: Got it, okay. Dot gov, 24 got it. So what we'll do is Charlotte Abrams has 25 just joined me.

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MR. WALKER: Oh right, okay.

MR. LEBINSKI: And what we're going to do is we will forward the information we get from Canada on the Australian information and forward that over to you.

MR. WALKER: Okay, all right.

MR. LEBINSKI: Another action item we had, and it was a request from Canada I believe occurred yesterday. And you may have a similar request is our federal government, not the NRC but the Department of Energy has been doing flyovers near the plant. They're not in the plume but they're outside the plume getting some dose readings. And -- or dose rates.

We got some data and the last 2 days they have not flown so we don't have any recent data. But we're trying to get approval from the Department of Energy to provide that information to you.

MR. WALKER: Oh, that's lovely. Thank
you very much. I think we're slowly changing our
emphasis now from modeling worst case release
situations to trying to get a grip on the current
situation which is obviously that there is a chronic
release going on now into the environment. We're

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beginning to get information concerning ground deposition of cesium and iodine at quite some significant distance from the plant.

MR. LEBINSKI: Right. I can share with you from a data standpoint from the AMS that the deposition we're seeing is to the northwest quadrant. It's very clear they have a -- the graphic is very nice that it shows kind of the -- a color-coded of the dose rates. And there's a very narrow band that goes almost dead northwest from the site, from the site towards the northwest. And it's relatively narrow when you consider the 360 degrees that has the higher deposition in it.

And based on our knowledge of what we believe the plant conditions were and the wind direction, there was about a 12-hour wind that went towards the northwest. That correlate pretty nicely to what we're seeing there.

MR. WALKER: Okay. What sort of levels are you getting?

MR. LEBINSKI: From the flyover it's ranging and the problem is I don't have the distance. I want to say it was somewhere about 12 miles out they were getting 20 to 40 mr per hour.

MR. WALKER: Okay.

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MR. LEBINSKI: And I believe that was
backed up by some land measurements, about 18 mr per
hour in selected areas as well. So, I mean that's
still in the range of 20 to 40 mr per hour.

MR. WALKER: That is gamma dose rate.

MR. LEBINSKI: Yes.

MR. WALKER: All right, okay. Okay.

MR. LEBINSKI: So, the other request we
had is we as NRC are where you are as far as our

MR. LEBINSKI: So, the other request we had is we as NRC are where you are as far as our focus right now is on the current conditions of the plant and whether that would change our protective action recommendations.

We have no information right now that would have us change those protective action recommendations and that is the evacuation out to 50 miles.

Data that we're getting from these flyovers is corresponding to the conditions we had at the plant at the time. And we think it aligns appropriately enough that we would not change those protective action recommendations.

Also, the current conditions of the plant aren't getting worse to the point where we see expanding those out at all.

MR. WALKER: Okay.

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MR. LEBINSKI: The question we got from Canada was from a more bounding worst case scenario what would we use as a source term. We do not have the lead for that. It's our Department of Energy. We're working with them.

MR. WALKER: Oh, okay.

MR. LEBINSKI: What I can share with you is what I shared with them is -- because we're still trying to come up with what we would use. But our focus right now would be on the first four units, not Units 5 and 6 because of the stable condition of those two units.

MR. WALKER: Yes, okay.

MR. LEBINSKI: Units 1 through 4 we were looking at both the three reactor units as well as the four spent fuel pools and trying to determine which of those we would include and what the level of damage would be in this bounding scenario.

MR. WALKER: Right, okay. Okay. We've taken -- we've characterized source terms for one core and worst case pond which as you've said is Unit 4. So we've got modeling that we can use either for single core, single pond, pond and core, or any combination of that now. So I think we've pretty much bottomed the modeling scenario.

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beginning to take a bit more of an interest now in the situation as it exists right now. And we have a (b)(5)So what you've told me about flyover dose rates is useful, but it's going to be very difficult to piece it together, isn't it? MR. LEBINSKI: Yes, it is. And in fact, on that case what we did is we looked at that narrow band out to the northwest, tried to look at some deposition and went to some back calculations to see if it correlated with the source term we were using and the 12-hour wind in that direction. And again, it's in an order of magnitude. So you really can't get much closer than that. MR. WALKER: No, no. Okay. Can I just give you my -- can I just check that you've got the right email address? MR. LEBINSKI: Sure, if you could repeat that again. MR. WALKER: It was November Sierra Delta dot Emergency at Hotel Sierra Echo dot GSI.gov.uk.

And as I've said, I think we're

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MR. LEBINSKI: Okay, we didn't have the GSI. Thank you. MR. WALKER: Okay, thanks very much indeed. Right, well I think we're having two teleconferences a day, one to discuss fuel and inventory issues. I've just sat in on that about half an hour ago. MR. LEBINSKI: Steve, Steve, I'm going to interrupt you again. I'm sorry. That was at 10 HSE.gsi.gov? 11 MR. WALKER: Dot gov dot UK. 12 MR. LEBINSKI: Okay. All right. 13 MR. WALKER: So we'll make this a 14 standing arrangement, shall we, that we'll call in 15 at 6 o'clock GMT tomorrow. 16 MR. LEBINSKI: Yes, that would be 17 perfect. And what we had to take away from the 18 earlier call is we also did not have France on the 19 call yesterday or today. So we are having to take 20 away to coordinate with France to see if they can 21 participate tomorrow as well. 22 MR. WALKER: Right, okay. Thanks very 23 much indeed. 24 MR. LEBINSKI: Thank you. Bye. 25 MR. WALKER: Thank you, bye.

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0-M-VHK-03765094

(CONFERENCE CALL INITIATED)

MR. OLDEWAGE: Consequence management home team, Sandia.

MR. LAVIE: Yes, my name is Steve Lavie, that's L-A-V-I-E with the U.S. Nuclear Regulatory Commission at the protective measures team.

Earlier today the people here were talking with a Hans Holsage I guess it is?

MR. OLDEWAGE: Oldewage, I'm here.

MR. LAVIE: Okay, that's you?

Excellent. I'm following up on the discussions you had with them earlier. It was turned over to me that you were drafting an email to explain the assumptions that were made in the runs for the

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MR. OLDEWAGE: Yes. I sent that to -- I sent that email. Let's see. I sent it to -- I've got to find my notes. The HOC 12 I think it was.

MR. LAVIE: PMT 12?

MR. OLDEWAGE: PMT 12.

 $$\operatorname{MR.\ LAVIE:}$$ Okay, and what time of the day was that sent?

MR. OLDEWAGE: Let me look.

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MR. LAVIE: Okay. MR. OLDEWAGE: I had to send it from my inbox. That was sent at 7:21 a.m. Mountain time so it should be 9:21 yours. MR. LAVIE: 9:21, okay that gives me a range to find it. Tend to get overlooked. MR. OLDEWAGE: Do you -- well, take a quick look. If you don't see it, let me know. I can send it again. 10 MR. LAVIE: Okay, let me go do that because I understand you're trying to get out of 11 12 there. MR. OLDEWAGE: Oh no, we've got an hour 13 14 and a half left. 15 MR. LAVIE: Okay. 16 MR. OLDEWAGE: We're in no hurry. You 17 want to just stay on the line? 18 MR. LAVIE: No, why don't you let me 19 call you back. 20 MR. OLDEWAGE: Okey-doke. 21 MR. LAVIE: Okay? Thank you. 22 (Whereupon, the foregoing matter went 23 off the record) 24

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NUCLEAR REGULATORY COMMISSION

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NUCLEAR REGULATORY COMMISSION
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PMT COUNTERPART AUDIO FILES
+ + + +
WEDNESDAY,
MARCH 23, 2011
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0-NC133-03765094

(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Nuclear Regulatory Commission, this is a recorded line. May I help you?

MS. SCHWARTZMAN: Hi, can you please connect me to the daily call with the UK, France and Canada?

MALE PARTICIPANT: And you are?

MS. SCHWARTZMAN: I am Jen Schwartzman from the international liaison team and I'm sitting back in the PMT hoping one of them will join me in a minute.

MALE PARTICIPANT: Okay, I'll connect you right now.

MS. SCHWARTZMAN: Thanks very much.

MS. RICHARDS: Is the U.S. on the line?

MS. SCHWARTZMAN: Yes, half of the U.S.

is on the line. The international liaison is on the line. Our technical expert has been called away by our executive team for a moment and he should be joining us in just a few minutes.

MS. RICHARDS: Okay, sorry about that.

MS. SCHWARTZMAN: No, that's fine,

that's fine. I didn't want to interrupt.

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MS. RICHARDS: Okay, thanks. Nothing's -- I don't think anything's going on so we'll just wait.

MS. SCHWARTZMAN: Ladies and gentlemen, our technical expert here at NRC appears to have been delayed a few more minutes. I don't want to hold up the call getting started. So if you would all like to begin please feel free and we'll pick up with him when he gets here.

BRITISH MALE PARTICIPANT: Okay. I don't know how we want to do this. We had a call this morning and we didn't have any changes on the plant status. It's been rather quiet the last few hours sort of.

We've seen source term circulated from the Canadians and we've seen something from IRSN.

We've also had something from Germany. We've compared them side by side and there are some differences but nothing significantly different in the source terms assumed by different nations.

We've got our (indiscernible, possibly roof) set up so we're regularly calculating doses over various cities in Japan depending on the weather. I think we're doing that on 4-hour intervals. And so it's a bit of handle-turning at

the moment for us.

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MS. SCHWARTZMAN: With regard to the source terms from Canada and Germany, have those been sent to NRC? I don't believe I've seen either.

BRITISH MALE PARTICIPANT: I don't know where we've got those actually. We got them from a number of sources. I think the Germans we got through talking -- because they were also doing some work for us on other projects.

I think the Canadian source terms, I think Canada was talking to my colleague Steve Sloan so that might have been bilateral as well.

And I don't recall where the IRSN calculation came from.

MS. SCHWARTZMAN: We have the IRSN calculations. They were provided to us. We certainly don't want to ask you to share anything that was provided through bilateral channels, but perhaps if the Canadians are on the line they would be willing to consider sharing that with NRC.

CANADIAN MALE PARTICIPANT: Absolutely.

I'll run it up my line.

MS. SCHWARTZMAN: Thank you, thank you.

And I know we're still working on trying to share

ours with you as well. So we don't look one-sided.

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1	CANADIAN MALE PARTICIPANT: No, I think
2	at some point we should come to some sort of
3	understanding about the source term amongst the
4	group. Otherwise we're going to keep getting asked
5	questions by our various higher-ups about why is our
6	source term different from anybody else's.
7	FRENCH MALE PARTICIPANT: Excuse me, the
8	French speaking. If you can provide access to the
9	Canadian source term as well.
LO	CANADIAN MALE PARTICIPANT: I'll check.
L1	Is your liaison email with Canada's liaison email?
L2	FRENCH MALE PARTICIPANT: I think so.
L3	We have provide our email to the NRC people. So.
L 4	CANADIAN MALE PARTICIPANT: Okay. I'll
15	double-check. I'll be right back. One second.
16	FRENCH MALE PARTICIPANT: Okay, thank
L7	you.
L 8	MS. SCHWARTZMAN: I have a couple of
L9	questions as well. Are the source terms the only
20	things being shared, or are the dose results being
21	shared as well? The dose results from the source
22	terms.
23	BRITISH MALE PARTICIPANT: I'm not aware
24	that we received any actual dose. I mean the
25	results that we're getting are not a simple figure.

We're getting values for different cities and it changes from hour to hour depending on which way the wind's blowing. So we get a sheet per scenario.

We're getting them on a regular basis.

I don't think we've actually shared those results with anybody.

MS. SCHWARTZMAN: Okay, all right.

Thanks. I have a couple of other questions that

aren't directly related to the source term but this

might be the right forum.

The first is we've been seeing media reports, and I'm sure you have as well, from NHK website that are quoting that I-131 in tap water and ground deposition for cesium-137.

I'm wondering if any of you have any more reliable sources for this type of information, or if you're just getting it from the same place that we are.

BRITISH MALE PARTICIPANT: Not in the UK. We're getting it from the same place as yourself, principally from the appropriate Japanese ministries.

The iodine-131 tap water result in Tokyo has been an area of great interest for us today.

NORTH AMERICAN MALE PARTICIPANT: We

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received confirmation of that from the Japanese Ministry of -- I think it's Culture. It's MEST which is --BRITISH MALE PARTICIPANT: Education, Culture, Sports Science and Technology. NORTH AMERICAN MALE PARTICIPANT: it's a unique combination. BRITISH MALE PARTICIPANT: 9 NORTH AMERICAN MALE PARTICIPANT: This 10 is at NRC. 11 MS. SCHWARTZMAN: Thanks very much. 12 BRITISH MALE PARTICIPANT: 13 certainly from the UK we're intrigued too. 14 Certainly, the Tokyo tap water results were curious 15 that result has manifested itself shall we say. And 16 we'd be keen to sort of explore that area further. 17 MS. SCHWARTZMAN: Yes, we're on the same 18 page. 19 BRITISH MALE PARTICIPANT: Good. But in 20 terms of our -- the UK position, our Health 21 Protection Agency has looked at that and compared 22 what our advice would be with what the Japanese 23 standards and advice would be. And our position is 24 that we are broadly comfortable with the advice the 25 Japanese are giving in the Tokyo area.

1	MS. SCHWARTZMAN: May I ask what the
2	UK's drinking water guideline is for I-131?
3	BRITISH MALE PARTICIPANT: Off the top
4	of my head I don't have it, but if you give me a sec
5	I'll give it to you. It's 500 becquerels per
6	kilogram for liquid.
7	MS. SCHWARTZMAN: Okay, thanks.
8	AMERICAN MALE PARTICIPANT: Steve, we're
9	finding we had to do some conversions but we're
10	finding ours is a bit higher than Japan's as well.
11	We have we're coming out at 170 becquerels.
12	MS. SCHWARTZMAN: Okay.
13	NORTH AMERICAN FEMALE PARTICIPANT: And
14	that's the U.S.?
15	AMERICAN MALE PARTICIPANT: Per liter.
16	MS. RICHARDS: Yes. Ours is
17	substantially lower in case you're curious. Ours is
18	actually like we're in the province of Ontario so
19	I'm comparing to the Ontario guideline. Ours is 6
20	becqs per liter.
21	NORTH AMERICAN MALE PARTICIPANT: Just
22	to confirm everybody is talking about adult
23	guidelines.
24	NORTH AMERICAN MALE PARTICIPANT: No,
25	we're talking child.

NORTH AMERICAN MALE PARTICIPANT: Child. oh. MS. RICHARDS: I don't know if -- I'm not certain if ours is calculated out that way, but I can follow -- I mean, if you're curious I can bring that to the table tomorrow. BRITISH MALE PARTICIPANT: UK it was adult. For child it was 150 becquerels per 9 kilogram. 10 NORTH AMERICAN MALE PARTICIPANT: Well, 11 that's approximately the U.S. 12 BRITISH MALE PARTICIPANT: So 13 consistent. MS. SCHWARTZMAN: Okay, thank you. 14 15 BRITISH MALE PARTICIPANT: Just off the 16 topic was talking about a few minutes ago on sharing 17 source terms. Agreeing. I don't think from our end we've got a problem with that from a technical point 18 19 of view. However, we have had after some uncertainty a week or so back we've had pressure not 20 21 to change our source term now. So that we can tell 22 the politicians when something changes relative to 23 another point in time. 24 So, and when we did the three-step

process with three organizations to generate our

calculation which is a bit unwieldy. But it means we can sort of have parallel calculations where we can quickly do ourselves. And so we can talk with you on the same level.

So, we can compare -- I've done that myself. I've put side by side the source terms and they're not too different. And there are some differences, and we think we can explain those away. Certainly between the Canadian and the UK results.

But it may be more difficult for us to change our source term in terms of presentation.

But again, if it's agreed that we should all have the same across the different nations that also may be appealing to the people higher up.

CANADIAN MALE PARTICIPANT: Canada has no intention of changing its source terms, especially since the plant information that we have now is somewhat circumspect. And until we have more verifiable information we see no reason to change the postulated source terms from the original conservative credible scenario.

AMERICAN MALE PARTICIPANT: Yes, that's a similar stance here in the U.S. with the NRC.

Given, you know, the way we view it is now the cores are -- what's released is released. And we've just

got to stand by the best postulated assumptions that we made last week. We are looking at that -- we're refining it a little to make sure that the age of the spent fuel pools was appropriate. But other than that we're going to stick with those initial assumptions. CANADIAN MALE PARTICIPANT: Does France have anything to add? FRENCH MALE PARTICIPANT: No, nothing to 10 add. 11 BRITISH MALE PARTICIPANT: Anything else 12 around the table in the UK? No, I've got nothing 13 from the UK actually to add. 14 CANADIAN MALE PARTICIPANT: So, Canada 15 here. I'm going to try to get the information to 16 the U.S. and France with respect to source terms 17 with the hopes that I'll receive similar information 18 from you guys soon. 19 And I'm in agreement with the UK, I 20 think a consolidated source term, or at least an 21 agreement on the severity and the description of the accident amongst the four countries would be a good 22 23 idea when we're going to our higher-ups. 24 BRITISH MALE PARTICIPANT: I think we 25 should have an understanding of the prospective

source terms each country is using. That then helps us to understand should more severe events happen what the predicted consequences would be.

And if there's not significant difference difference. Or if there is significant difference then it would help us to understand the different advice that is given. Certainly from the UK we'd not be in a position at this stage to sort of move away from our current source term, but it would be helpful to understand fully the differences in assumptions. So I think we're converging on that and we support that.

FRENCH MALE PARTICIPANT: French nation speaking. I would like to ask a question. We have received this morning from result of observations from several different values of measurements. One — several from Sacramento. Do you have this information?

BRITISH MALE PARTICIPANT: Do you have this information?

FRENCH MALE PARTICIPANT: Yes?

MR. REESE: Hi, this is Terry Reese with the NRC. We're still working within the federal family to make sure that we have the appropriate common understanding of the source term and the

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assumptions that went into that.

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Once we have that my understanding is that we did commit to share it with our friends. So we intend to do that. But it's still going to be a few days before we get this resolved and get the appropriate assumptions, a common understanding amongst the federal family. But we're moving in that direction.

Yes, by the federal family I mean it's us, you know, we're looking at it. We give them the source term and then DOE has -- Department of Energy has operations that run these sophisticated models more than -- more sophisticated than what we have with our local RASCAL models. And so we're just refining the assumptions and the output among those parties. Okay?

FRENCH MALE PARTICIPANT: Okay.

BRITISH MALE PARTICIPANT: Same time

tomorrow then?

NORTH AMERICAN MALE PARTICIPANT: Same time. Two o'clock every day we're doing this?

FRENCH MALE PARTICIPANT: A question.

Do you have -- NRC or in Canada, do you have the result of -- a (indiscernible) measurement? Can you evaluate the correlation between the estimation that

you have made and the measurement that have been done in the last hour from then? Because I come into information, the cloud has gone through the North America. you have some measurement results? NORTH AMERICAN MALE PARTICIPANT: Oh, do we have measurements in North America? FRENCH MALE PARTICIPANT: AMERICAN MALE PARTICIPANT: Not to my 10 knowledge. CANADIAN MALE PARTICIPANT: We're not 11 aware -- at least I'm not aware of any measurements 12 13 that have been taken in North America on Canada's side anyway that would allow me to compare to my 14 15 source term just yet. That data may be coming but 16 it hasn't come across my desk. 17 FRENCH MALE PARTICIPANT: Okay. BRITISH MALE PARTICIPANT: Okay. 18 Same 19 time tomorrow? 20 NORTH AMERICAN MALE PARTICIPANT: Yes, 21 same time tomorrow. 22 I mean, let me correct myself somewhat. 23 I mean we have had reports you know on the 24 California coast that there were detectable levels, 25 but they were minimally detectable.

1	Okay, same time tomorrow?
2	CANADIAN MALE PARTICIPANT: IS U.S. NRC
3	liaison on the line?
4	MS. SCHWARTZMAN: Yes.
5	CANADIAN MALE PARTICIPANT: Hi, is this
6	Jennifer?
7	MS. SCHWARTZMAN: Yes, it is.
8	CANADIAN MALE PARTICIPANT: Hi,
9	Jennifer. I sent an email to LIA02 yesterday about
LO	Australian papers. The IGs have asked us to tell
L1	you to keep those confident.
12	MS. SCHWARTZMAN: Yes, we will.
13	CANADIAN MALE PARTICIPANT: You'll do
L4	that?
15	MS. SCHWARTZMAN: We'd do that unless
16	told otherwise. So we haven't done anything with
17	them except share them internally.
18	CANADIAN MALE PARTICIPANT: Okay, thank
19	you.
20	MS. SCHWARTZMAN: We'll make sure that's
21	noted. Thanks.
22	BRITISH MALE PARTICIPANT: Okay, UK is
23	going to sign off.
24	MS. SCHWARTZMAN: Thank you very much,
25	everyone.

FRENCH MALE PARTICIPANT: Thank you. MS. RICHARDS: Thank you. (Whereupon, the foregoing matter went off the record) 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

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0-OS!J9-03765094 edited (CONFERENCE CALL INITIATED) OPERATIONS CENTER: Sir, this is recorded line. How may I help you? MR. ENGLISH: Yes. Hello, this is Lance, 1400 telephone calling from the PMT for the conference with the British, French, and Canadians. OPERATIONS CENTER: Okay, (inaudible). MR. ENGLISH: Oh, okay. Thank you. OPERATIONS CENTER: Uh-huh. 10 11 OPERATOR: This call may be recorded. 12 After the tone please state your name and organization followed by the pound key. 13 Lance English, Nuclear 14 MR. ENGLISH: 15 Regulatory Commission. 16 FEMALE PARTICIPANT: Hi, there. Canada is 17 on the line. 18 MR. BUNKER: Hi, it's Alan Bunker here, 19 UK Nuclear Installations Inspectorate. 20 FEMALE PARTICIPANT: Is the U.S. on the line? 21 22 MS. WALKER: Yes, this is Sandra Walker 23 at the NRC Operations Center. Perfect, 24 FEMALE PARTICIPANT: and 25 France on the line? I guess not. I guess we'll wait

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a few more minutes, should we? MR. ENGLISH: Yes. FEMALE PARTICIPANT: Hi, there. Canada on the line. I'm just wondering -- I think we have everybody on line now, so whoever is chairing can probably start, if I may suggest. MALE PARTICIPANT: Yes, I am on the line, the French Authority. FEMALE PARTICIPANT: Thank you. Is the U.S. -- are you going to chair the meeting, as 10 11 usual? MS. WALKER: Okay. Well, what you've got 12 is two first timers on the call. We were waiting and 13 14 kind of hoping that somebody --FEMALE PARTICIPANT: Would like to take 15 the lead? 16 17 MS. WALKER: That's right. FEMALE PARTICIPANT: Okay. Canada 18 19 take the lead. 20 WALKER: No problem. I'm not sure what the usual protocol is. 21 22 FEMALE PARTICIPANT: Okay, that's fine. 23 Usually, actually, the calls are pretty quick right 24 now. Maybe does the UK have anything to add, or any 25 questions?

MR. BUNKER: Well, no significant further information from what I gather has been given to you before. I've done one of these before; that was on Thursday last week so, obviously, things have progressed since then.

What we have asked our meteorological office to do is to run the dispersion codes using the Canadian and the French source terms to see whether using our dispersion modeling and dose assessment modeling produces any different countermeasures depending on which source term we use, but I don't have the results of that yet.

FEMALE PARTICIPANT: Okay. That's fine.

MALE PARTICIPANT: From Canada's point of view, we've been asked to redefine our source term, or refine our source term I should say. Our initial source term was based on what we knew early last week in terms of what the plant condition was and what assumptions we needed to make. And it was a fairly conservative one.

We've now been asked to try to determine the amount that's gone into the water, the amount that's gone into the air, and the amount that has stayed in the reactor system, let's say.

I don't know if the other nations have

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plans to do so. Any comments are welcome.

MS. WALKER: This is the U.S. We are also refining, shall we say, the source term, but as yet we are not able to share those source terms. I believe that was what Terry indicated yesterday, and that is still the case today.

MALE PARTICIPANT: No, I think at this point if everyone is refining the source term, I don't think any of us are ready to share. But what I provided to the UK was our initial assessment from our most credible worst case scenario. Moving forward the refinement will take a little bit longer, obviously, but we certainly plan to share this with you once it's done.

MS. WALKER: Thanks very much for that clarification.

MELANIE: Hi, there. This is Melanie from the CNSC from Canada, as well. My question actually doesn't directly relate to the source term, but just more of a general RP question. We're seeing, and I'm sure you are, as well, we're getting reports from NISA and IAEA, et cetera which are showing ground deposition values, for example. I'm just wondering if you guys are doing any assessments, any dose-type assessments sort of forward thinking with that kind

of data at this point based on the air and ground values that we're seeing? Real measurement.

MR. BUNKER: Well, I -- this is Alan Bunker, again, UK. I spoke to our Health Protection Agency earlier today together with our meteorological office do the modeling, and I asked them about whether there might be some possibility of working back from the ground deposition to release amounts so far, actual releases, not worst case. (b)(5)

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I don't think we have sufficient data on things like Japanese agriculture and so on, so at best it would be a simple -- simply multiplying a dose rate, gamma dose rate expressed as a fraction of time. But, again, not knowing what contributes to the dose rates you don't know how quickly it's going to change. You know, the relationship between the iodine and the cesium will, obviously, determine how quickly the dose rates go down. So, we don't have anything, certainly, in process at the moment.

MELANIE: Okay, thank you. And just so you know, we don't either, but we're starting -- at this is starting to kind of in some ways stabilize,

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we're just looking forward and thinking about what's going to be coming at us and trying to gauge if anyone had been thinking along those lines, as well. But we haven't really done much, either.

MS. WALKER: Yes, this is Sandra Walker again in the U.S. Now, I mean, we've gotten some of the data and I think we've looked at a little bit, but we really haven't focused on it.

MELANIE: Perfect. And then if that changes, I mean, just -- you know, we'll talk about that as the conference calls continue. We can, obviously, bring that to the table if that changes.

MR. ENGLISH: Going back to my earlier question, does either the UK or France intend on refining their source terms?

MALE PARTICIPANT: For France, I don't have the answer right now because the -- we have, in fact, currently there is an exchange between us and (inaudible) Organization, so I think I should be able to give you the answer tomorrow.

MALE PARTICIPANT: Great, thank you.

MR. BUNKER: Okay. One question I'd like to ask is about continuing these conference calls. We're probably not going to be here working at this time over the weekend. We did have a suggestion that

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perhaps we could move the time to around midday UK
time, about 1:00, but I don't know how that would
suit anybody else.

MALE PARTICIPANT: On the weekend?

MALE PARTICIPANT: Midday UK time.

MALE PARTICIPANT: Midday UK time, there's another plant installation telecon at the same time at 9:30 Eastern, so that would be roughly 1:30 UK. So, those two calls, unless they're combined, would conflict.

MR. BUNKER: Okay.

MALE PARTICIPANT: At this point, what does everybody think about skipping this call over the weekend? I don't think the situation on the ground is changing -- is as fluid as it was before, so perhaps going over the weekend without calling each other --

MELANIE: Might be okay.

MALE PARTICIPANT: Might be okay.

MR. ENGLISH: Yes, this is Lance from the U.S. NRC. Does this impact in any way the Reactor Safety Team's conference call at 0930?

MALE PARTICIPANT: Well, that -- I'm on that call, and I think on that one we agreed to continue.

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MR. ENGLISH: Correct. But was wondering, perhaps, that you could combine the two for the weekend. That might be --MALE PARTICIPANT: Well, that's another option. If both teams want to get together and combine the two calls, we're happy with that. MR. ENGLISH: Is that amenable to everybody? MR. BUNKER: I don't think that's really a good option for the UK because there's different 10 11 people involved. MR. ENGLISH: I see. Well, I'll bring it 12 13 up tomorrow with the Reactor Safety team tomorrow 14 morning and then we'll see what they say. We'll move 15 from there. If we have to keep them separate, so be 16 it. 17 MR. BUNKER: Other than that, I'm quite 18 easy about skipping this over the weekend, yes. 19 MALE PARTICIPANT: Okay. 20 MELANIE: Well, should we meet again 21 tomorrow then at the same time and just make final 22 decisions on the weekend? 23 MS. WALKER: Yes, why don't we do that. 24 This is Sandra Walker again in the U.S. 25 MELANIE: Okay.

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MS. WALKER: Why don't we do that? That way we'll be able to find out what would be the best. for the people that'll be on the ground --MELANIE: Exactly. MS. WALKER: -- at each of our locations. I mean, we've got the Op Center manned so we can do either one. But, you know, as was said, it seems like the situation is, I hesitate to stay stabilizing, but calming down a little bit that maybe over the weekend we might not need it. 10 MELANIE: Exactly. 11 MS. WALKER: And we could always use the 12 13 Reactor Safety team as a mechanism if something does 14 come up. MELANIE: Yes, absolutely. 15 16 MS. WALKER: And that's also an option. 17 MR. ENGLISH: I'll be sure to bring that up tomorrow with the Reactor Safety team. 18 19 MR. BUNKER: Yes, that's great. MR. ENGLISH: Just to belabor the point 20 one more time, from the UK, do you know if you plan 21 22 on refining your source term? I've been in contact 23 Steve Saunders (phonetic) and he 24 indicated otherwise. I was wondering if you had any 25 information.

1	MR. BUNKER: Well, we have people working
2	on it, but I don't think we're going to be changing
3	it for the purposes of what we're recommending for -
4	- what we're consuming for countermeasures.
5	MR. ENGLISH: Okay.
6	MR. BUNKER: So, we may have a better
7	source term but we're not necessarily going to use
8	it for the model. But, certainly, once we have this,
9	I'll be intending to share it.
10	MELANIE: Okay. So, is everybody ready to
11	close?
12	MS. WALKER: I don't have anything else.
13	This is the U.S.
14	MELANIE: It's good on our end. Canada
15	speaking here. Okay. So, shall we reconvene again
16	tomorrow at 2 then?
17	MS. WALKER: Yes, that sounds like a
18	plan.
19	MELANIE: Thank you very much.
20	MR. ENGLISH: All right.
21	MR. BUNKER: Okay.
22	MELANIE: Have a good afternoon.
23	MR. BUNKER: Thank you.
24	MELANIE: Bye-bye.
25	MR. BUNKER: Bye.
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(b)(5)MS. WALKER: (b)(5) MALE PARTICIPANT: (b)(5) MS. WALKER: MALE PARTICIPANT: I guess the only do out is to see if we want to continue. MS. WALKER: Tomorrow is --MALE PARTICIPANT: And I'll just come over because I'm going to be working tomorrow. I'll just come over and sit in. MS. WALKER: Find out whether they want to continue it or not. MALE PARTICIPANT: Yes, so whoever you'll have to find out from -- thanks, Sandy. MS. WALKER: Sure. (Inaudible). MALE PARTICIPANT: What Ι basically quickly, say like right now I do not (inaudible). MALE PARTICIPANT: Communications I think we should make, and I think we should include some (inaudible) from the conditions we're in now, which kind of go along with what (inaudible) last night. Can you restore and hold reactor pressure in a projection above the (inaudible) retention curve in

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Figure Z. That's on here. And we're saying pressure is low down here, and you can't. The fire hoses are much lower than that. MALE PARTICIPANT: Right. That's correct. MALE PARTICIPANT: So, the answer is no. So, the three units are either in this condition. For Units 2 and 3 I believe we're in this path can -- inside pressure suppression, we Figure L, in 2 and 3 we're still within this curve 10 here, so we'd be going down this path. 11 MALE PARTICIPANT: Okay. 12 MALE PARTICIPANT: The priorities on this path (inaudible) water level below 17 feet --13 MALE PARTICIPANT: Right. 14 15 MALE PARTICIPANT: -- which is the spray 16 head. That's what we've got --17 MALE PARTICIPANT: Okay. MALE PARTICIPANT: Roughly 17. 18 19 MALE PARTICIPANT: Okay. 20 PARTICIPANT: That water MALE on the 21 drywell floor, restore injection above the minimum 22 debris retention grates and try and build this up if 23 you can and inject into the primary containment from 24 external sources. And that means they're trying to

fill up the containment.

For Unit 1, we can't maintain it with any certainty, so we're in here. So, these are the priorities I would recommend. Have water on the drywell floor, maximize injection from all sources.

MALE PARTICIPANT: Anything you get to go in there. Maximize direct primary containment direction from external sources. Water going directly in the containment. Do it. You want to get water up to that bottom head before that --

MALE PARTICIPANT: Right. Okay.

MALE PARTICIPANT: So, I think we should borrow from this and make that the recommendation.

MALE PARTICIPANT: I ran it by you.

MALE PARTICIPANT: Get on the phone with GE, or somebody. Tell them, you know, you went back over looked at the (indiscernible, possibly "SAMGEES") and this is what you say, and why aren't we recommending this?

MALE PARTICIPANT: All right.

(Inaudible - Continuous banging in background)

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(CONFERENCE CALL INITIATED)

MR. BOYD: This is Mike Boyd. I'm going to be running the call today because -- go to another meeting at NASA.

And it's my understanding that the main agenda topic, maybe the only agenda topic today other than to update is this draft for -- we're putting out for CBP use and others for the trigger for what pre-release or detaining potentially contaminated material.

And let me start. Here at EPA it's me,
Mike Boyd. We have Daryl Liles and Scott Hudson and
Jeff Ing who just came in from Region 2 on the line.

I think the way Ed does this is to go by agency. So let's -- I heard Mike Noska so we'll start with FDA.

MS. JONES: Terry Jones.

MR. CUNNINGHAM: Bill Cunningham.

MR. HARGRAVE: Scotty Hargrave.

MR. ALLEN: George Allen.

MR. SIMCEK: Jeff Simcek.

MR. BOYD: Okay. And Mike, you're

there. And CDC?

MR. SIMMONS: Yes, Pat Simmons here from

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1	Officer of Field Operations.
2	MS. EVANS: Lynn Evans, CDC.
3	MR. STRACK: Ben Strack, CDC.
4	MR. BROOKS: Mike Brooks (indiscernible,
5	possibly ESER).
6	MR. RICHARDS: John Richards, EPA.
7	MR. TENNANT: Mike Tennant at CDC.
8	MR. SHARP: John Sharp, CDC.
9	MS. HINSON: Jody Hinson, NIOSH.
10	MR. BOYD: Okay, so (indiscernible)
11	Epstein and John Richards also with EPA.
12	And NIOSH we have Gary. So, is do we
13	have DOT on the line?
14	MR. LYMAN: Yes, this is Jim Lyman at
15	DOT.
16	MR. BOYD: Okay, great.
17	MR. CORDARELLI: This is John Cordarelli
18	from EPA.
19	MR. BOYD: Hey, John.
20	MR. CORDARELLI: Hey, Mike. Finally
21	made it in.
22	MR. BOYD: Great. John's now left the
23	(indiscernible, possibly ESC) and in transit. And
24	we have USDA?
25	MR. THATCH: Pete Thatch

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(indiscernible). MR. GRAHAM: Ron Graham, SSIS. MR. BOYD: Okay, John Jenson on the line? Lynn Evans, you're an old hand at running these meetings and I'm a newbie, so tell me who I'm missing. MALE PARTICIPANT: Hey Mike, Mike Noska is here. MALE PARTICIPANT: Sam Keith too. 10 MR. BOYD: Great. MS. EVANS: Well, you've reached -- or 11 12 you've mentioned all the advisory team member 13 agencies. There may be other agencies on the line that haven't spoken yet. 14 15 MS. BROCK: Cathy Brock, NRC. MR. BOYD: Oh, great. Hi Cathy. 16 17 MS. BROCK: Hello. 18 MR. WARD: Paul Ward at FEMA REP 19 program. 20 MS. CAPENTARIS: We have Carolyn 21 Capentaris with DOE. MALE PARTICIPANT: Okay, you've also got 22 23 Tim Greton and Mike Howe from FEMA REP. 24 MALE PARTICIPANT: You've got Tom Lash and Sara Gotee from -- team assessment. 25

MR. FERRIS: John Ferris from OSHA. MR. BOYD: Okay, anybody else just joined us? MR. JENSON: Yes, Mike. John Jenson from USDA. MR. BOYD: Welcome, John. MS. EVANS: Mike, are you all able to get all of these names? Especially the non-advisory team agency names. I think it would be important to 10 kind of keep track of that. MR. BOYD: Yes, we do have someone in 11 12 the room who's much better at that than I am and 13 she's taking down all the -- so yes. We're capturing that I think. 14 15 The topic today is of course continuing on this draft. And we've been in some sidebar 16 17 conversations earlier this morning with Jim Williams 18 at DOT. But I think the best way to proceed is 19 20 I'm going to let Daryl Liles here tell us where we 21 are at this point in the draft. 22 MR. LILES: I apologize, we just sent 23 the draft out just a few minutes ago. So if you 24 haven't got it yet you should be getting it.

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But and correct me if I'm wrong here,

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Jim, but I think we need to pull off the reference to DOT regs. MALE PARTICIPANT: Yes, we started off with what I proposed originally would be used was (b)(5) 10 11 12 13 14 15 16 17 18 MALE PARTICIPANT: I don't think that's 19 (b)(5)20 21 22 (b)(5)23 MALE PARTICIPANT: (b)(5) 24 25 **NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS** 1323 RHODE ISLAND AVE., N.W.

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	MALE PARTICIPANT: I have Ira Reese in
(b)(5)	
<u> </u>	MD DEFICE: [(b)(5)
(b)(5)	MR. REESE: (C)
	MR. LILES: Well, that's very good to
know.	I mean, I think we were just sort of using
(b)(5)	
	MALE PARTICIPANT: Okay, was anybody
else or	n the other call that we just had with the
	Jim, I know you were on it. Others?
Noo: ((b)(5)
(b)(5)	Okay,
	MALE PARTICIPANT: No, that was our
	MALE PARTICIPANT: Okay.
	MALE PARTICIPANT: (b)(5)
(b)(5)	
	MALE PARTICIPANT: No, I agree with the
	. 3 ====

and I agreed with that on the last call. So can we just make the minor adjustments to the document that need to be made, (b)(5)whatever, and take "draft" off it, and let's get this thing out? I thought that was the reason for this call. MR. BOYD: That is the reason for this call. MALE PARTICIPANT: Okay, great. 10 MR. BOYD: And if you have an NSS concurrence or consistence on that we're good with 11 12 it. 13 MALE PARTICIPANT: We do have it. 14 MR. BOYD: All right. End of story I 15 think. 16 MALE PARTICIPANT: Great. So can we 17 send it out, take "draft" off it? Take any (b)(5)18 that, out of it. And then just send it out to the 19 20 agencies and we can all be done with this. 21 MR. GRANT: Yes, this is Ron Grant from 22 (indiscernible, possibly USGI). I agree because we 23 need to get this out to our --24 MALE PARTICIPANT: Absolutely. I'm (b)(5)25

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Mike. (b)(5) MALE PARTICIPANT: That's true. I mean (b)(5) MALE PARTICIPANT: Take anything with (b)(5) (b)(5) I think that keeps everybody clean. MALE PARTICIPANT: So what we're saying (b)(5) MALE PARTICIPANT: I have no idea what you just said. MR. BOYD: Guys, Daryl started this	·
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draft, (b)(5) Will remain as they are and we'll get it back out	conversation by saying we had just sent you a draf
draft, (b)(5) Will remain as they are and we'll get it back out	
will remain as they are and we'll get it back out	
and a sufficient as no sum.	
MALE PARTICIPANT: Outstanding.	

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MR. BOYD: Okay. And that should be minutes, not hours. that please say so now. 10 (b)(5)11 12 13 14 15 16 17 18 19 20 21 22

MALE PARTICIPANT: Got it. This is CBP

jumping off. Thank you.

MR. BOYD: I should -- I assume that that NSS concurrence means that all of our agencies are okay with this. If there's anyone on the line that has anything they'd like to say contrary to

MALE PARTICIPANT: The only thing I'd

MR. BOYD: And I think we're all sort of on the assumption now that if the predominant contributor to the dose rate or the reading, the exposure reading is iodine then it's probably going to be gone before you catch it anyway, so.

MR. NOSKA: Mike, it's Mike Noska. Was there FDA or HHS representation on that NSS call? You said something about agency concurrence on this call.

MR. BOYD: I wasn't on the call. I

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1	don't think when he asked if anybody on this call
2	was on that call no one except Jim William's piped
3	up. (b)(5)
4	(b)(5) But is
5	that not a safe assumption?
6	MALE PARTICIPANT: I have no idea who,
7	if anybody, from FDA was on it. I just don't know
8	about CDC, did you have anybody on that?
9	MALE PARTICIPANT: No. This was really
10	a call between mostly CBP and DOT. There was
11	somebody from NSS on there but that was I mean,
12	(b)(5)
13	
1 4	MALE PARTICIPANT: Oh, it wasn't an
15	interagency meeting.
16	MALE PARTICIPANT: No, not fully. It
17	was kind of an ad hoc thing right after an earlier
18	one we had this morning.
19	MALE PARTICIPANT: Oh, oh, okay.
20	I'm sorry.
21	MR. BOYD: (b)(5)
22	(b)(5)
23	
24	MALE PARTICIPANT: No.
25	MALE PARTICIPANT: Well, (b)(5)
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(b)(5) MALE PARTICIPANT: Well, I think that, (b)(5)yes, (b)(5)(b)(5)Yes, Linda? MS. EVANS: But Mike, the advisory team (b)(5)was also asked -So, it needs (b)(5)to be made. (b)(5)10 (b)(5)11 MR. BOYD: (b)(5)12 13 14 15 MS. EVANS: And we don't have access to 16 Where we are right -that. 17 MR. BOYD: We just sent out it. Yes, 18 you'll have it. And we're going to do a quick 19 turnaround of what was just sent out to make sure (b)(5)20 But other than that. 21 22 MS. EVANS: Okay. Because we've been 23 saying here at CDC that the advisory team is (b)(5)24 covering -(b)(5)25 So, again, that just needs to be made very **NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS**

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1	clear.
2	MR. BOYD: (b)(5)
3	(b)(5)
4	MALE PARTICIPANT: (b)(5)
5	(b)(5)
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7	
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9	MR. BOYD: Yes, I don't think we're
10	not making that distinction.
11	MALE PARTICIPANT: Okay.
12	MS. EVANS: I think that may have been
13	covered in a document that CDC put out talking about
14	(b)(5)
15	(b)(5)
16	MR. BOYD: Yes,
17	(b)(5)
18	
19	
20	MR. GRETON: Yes, this is Tim from FEMA.
21	Just reading through the statement here, to be
22	clear, this pretty much says hey, this is the you
23	know, you have a problem, it's above this level. If
24	you do not and it's below this you don't have a
25	problem.

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	(b)(5)	_
14	MALE PARTICIPANT: (b)(5)	_
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19		
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22	MALE PARTICIPANT: And I guess my other	
23	question with this, and it still sounds like that	
24	first question is a little unanswered, but has	

first question is a little unanswered, but has somebody actually run this guidance that we're

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7	MR. BOYD: Well, we've had Customs on
8	this line and they've said that this does work for
9	them.
10	MALE PARTICIPANT: Okay. Thank you very
11	much.
12	MR. BOYD: Any other comments?
13	MALE PARTICIPANT: Mike, this is Sam. I
14	was just going over what was sent out and looking at
15	that table. (b)(5)
16	(b)(5)
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22	(Whereupon, the foregoing matter went
23	off the record)
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0-SY1P-L03765094 FEMALE PARTICIPANT: NRC, ops (indiscernible) Maya. MR. DODMEAD: Yes, this is Jim Dodmead. (b)(5)Is this the same FEMALE PARTICIPANT: person? MR. DODMEAD: Yes. FEMALE PARTICIPANT: Oh, Dodme. Okay. 10 MR. DODMEAD: All right. 11 FEMALE PARTICIPANT: Okay, bye. 12 MR. DODMEAD: Bye. 13 (Whereupon, the foregoing matter went 14 off the record)

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FEMALE PARTICIPANT: NRC, Judy Maya.

MR. DODMEAD: Yes, this is Jim Dodmead.

(b)(5)

FEMALE PARTICIPANT: Thanks so much.

MR. DODMEAD: Sure.

(Whereupon, the foregoing matter went off the record)

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0-TESYCL03765094 FEMALE PARTICIPANT: Security, can I help you? MR. GRANT: Hi, this is Jeff Grant. (b)(5)(b)(5)FEMALE PARTICIPANT: Okay that? (b)(5)MR. GRANT: FEMALE PARTICIPANT: Okay. What's your last name? MR. GRANT: Grant, G-R-A-N-T. 10 11 FEMALE PARTICIPANT: Okay. MR. GRANT: All right, thanks. 12 FEMALE PARTICIPANT: Thanks. 13 14 (Whereupon, the foregoing matter went off the record) 15 16 17 18 19 20 21 22 23 24 25

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18 0-TF-ZA603765094 MALE PARTICIPANT: NRC, central. MR. GRANT: Hi, this is Jeff Grant from the ops center. MALE PARTICIPANT: Yes. (b)(5)MR. GRANT: and I'm -- we're done with that now. MALE PARTICIPANT: Okay, up? (b)(5)10 MR. GRANT: Yes, 11 MALE PARTICIPANT: Okay, thank you much. 12 MR. GRANT: Bye. 13 MALE PARTICIPANT: Bye. (Whereupon, the foregoing matter went 14 15 off the record) 16 17 18 19 20 21 22 23

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(CONFERENCE CALL INITIATED)

MR. REILLY: Hello, this is Tim Reilly.

MR. COOL: Hey, Tim. This is Don Cool

in the NRC operations center.

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MR. REILLY: How are you doing this morning?

MR. COOL: Okay. This is a recorded line. I'm following up on the email string Spiros, I guess, and then you sent the question to Bryan Sharon who sent it over to the operations center.

I'm guessing, I don't have the entire string but one of the staffers down in Markey's office asked a (b)(5)

(b)(5)

MR. REILLY: Yes.

MR. COOL: Okay? So I wanted to -rather than trying to send you an email back I just
wanted to talk to you briefly about this.

(b)(5)

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(b)(5) 10 11 MR. REILLY: Okay. Okay. 12 MR. COOL: Okay? Quite frankly we think that there's a pathway out, but you can't know it. 13 So the status is as reported in our situation report 14 15 which is damage suspected. 16 MR. REILLY: Okay. 17

MR. COOL: But, you know, we suggest that we be very careful about what we know and don't know because we don't know a lot more than we do know.

MR. REILLY: I appreciate that.

MR. COOL: All right? So, I wanted to get back to you on that string so that you could take care of the --

MR. REILLY: Information reply?

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1	MR. COOL: the information reply.
2	All right?
3	MR. REILLY: Thank you so much, sir.
4	MR. COOL: You're welcome.
5	MR. REILLY: I appreciate the direct
6	communication. Thanks.
7	MR. COOL: Bye.
8	(Whereupon, the foregoing matter went
9	off the record)
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(CALL INITIATED)

MALE PARTICIPANT: U.S. NRC security, how may I help you today?

MR. MARSHALL: Yes, this is Jay

Marshall. Just wanted to let you know I've locked up T4 B27.

MALE PARTICIPANT: Okay, thank you.

MR. MARSHALL: Thank you.

(Whereupon, the foregoing matter went off the record)

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(Timothy Reilly's voicemail answers)

MR. COOL: Tim, this is Donald Cool in the NRC operations center. This is a recorded line.

I am the PMT director for the day shift today and wanted to follow up with you on the email you sent to Bryan Sharon about the (indiscernible, possibly NECA) reported compositions of water in the basements buildings.

I'd like to try and explain to you what we know and don't know. Probably best for you to call me on my Blackberry, (b)(6) Bye.

(Whereupon, the foregoing matter went off the record)

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