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## Official Transcript of Proceedings

## **NUCLEAR REGULATORY COMMISSION**

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Japan's Fukushima Daiichi ET Audio File

Docket Number:

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#### UNITED STATES OF AMERICA

#### NUCLEAR REGULATORY COMMISSION

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JAPAN'S FUKUSHIMA DAIICHI ET AUDIO FILE

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#### SUNDAY

MARCH 20, 2011

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## (CONFERENCE CALL INITIATED.)

#### (CONFERENCE CALL INITIATED.)

00:00:05/00:04:04

BRIAN McDERMOTT: Jim, this is Brian McDermott.

JIM WIGGINS: Yeah, Brian.

BRIAN McDERMOTT: Two things I wanted to pass on to you this morning. One was from that meeting yesterday. The individual that was there from the Joint Command staff, I provided him with some contact information, so I would just ask, if you see the InfoSec guys today, just to have them check on the if anything came in towards me.

I gave them a card and had some subsequent emails with them just to see if we're getting any additional information on the

JIM WIGGINS: Brian, you gave them your log-on --

BRIAN McDERMOTT: JWICS. I gave them my JWICS email -- InfoSec can check that.

JIM WIGGINS: Okay. Who was it that you gave it to?

BRIAN McDERMOTT: The person I gave it to

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JIM WIGGINS: What's the organization? BRIAN McDERMOTT: The National Military Command Center. JIM WIGGINS: Okay. All right, so we have 5 to, we'll check to see who's in from --BRIAN McDERMOTT: Yeah, they were supposed to have somebody stop at least at some point today, so 8 you might get some information back out of that. 9 just took the opportunity with that Cook that was 10 there -- his last name. JIM WIGGINS: Good. 11 BRIAN McDERMOTT: The other thing that 12 13 we're yesterday that --JIM WIGGINS: Give me a second. Hold on. 14 Okay? 15 16 Okay, go ahead, Brian. BRIAN McDERMOTT: Okay. Yeah, the other 17 thing at that meeting with the folks from industry is 18 they are during that call, and they're tabulating 19 And I'm not sure that our Reactor Safety Team 20 is getting that from INPO but it would be something to 21 22 check. Similar, it sounds similar to what the, 23 we're getting from IAEA, but INPO cobbling together 24 from WANO and other sources. So that's another set of 25

. 1	collected information that we, we might benefit from.	
2	JIM WIGGINS: I got something from Marty,	
3	but I can't tell, I can't read it, so I can't tell.	
4	It looks like tabular form, like an Excel spreadsheet	
5	is what it is. I can't, can't pull it up very well.	
6	BRIAN McDERMOTT: Okay. Yeah, that's what	
7	they kind of indicated. And I know our team's been	
В	talking to INPO but perhaps not exchanging that	
9	information.	
10	JIM WIGGINS: All right, so maybe I should	
11	send this out to	
12	FEMALE PARTICIPANT: RSD01.	
13	JIM WIGGINS: RSDO1 at	
14	FEMALE PARTICIPANT: Yeah, we, we have the	
15	daily status log with INPO but we haven't gotten I	
16	back. We'll let them do a sanity check on the plant	
17	status. They're supposed to call in here at 10.	
18	MALE PARTICIPANT: Ten o'clock.	
19	FEMALE PARTICIPANT: Ten o'clock.	
20	JIM WIGGINS: Who's going to be there?	
21	FEMALE PARTICIPANT: It'll be INPO, it'll	
22	be (inaudible).	
23	Will DOE be on that call?	
24	MALE PARTICIPANT: I have to check to make	
25	sure that	
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1	JIM WIGGINS: More importantly, though,
2	what are we supposed to accomplish?
3	FEMALE PARTICIPANT: A status from INPO
4	and any new information with that they have.
5	JIM WIGGINS: Okay. What's the status
6	MALE PARTICIPANT: (Inaudible) two o'clock
7	call (inaudible).
8	(Off-mic conversation).
9	JIM WIGGINS: All right.
10	All right, Brian, what else do you have?
11	Brian?
12	BRIAN McDERMOTT: That was it, Jim. I was
13	just looking to kind of keep cognizant. I'm off
14	today, so
15	JIM WIGGINS: Well, then take off.
16	BRIAN McDERMOTT: I will.
17	JIM WIGGINS: You're supposed to be off.
18	Be off. Okay. It's going a little easier.
19	BRIAN McDERMOTT: Okay. I'm going to
20	disconnect.
21	JIM WIGGINS: Okay.
22	BRIAN McDERMOTT: Goodbye.
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#### (CONFERENCE CALL INITIATED.)

00:04:11/00:22:16

JIM WIGGINS: I sent both of you, Josh, one-pager on the status. It's kind of a digest of things. Did you, were you able to get that?

JOSH BASKIN: Great. Thank you. I'm doing my email now.

JIM WIGGINS: Okay, well --

JOSH BASKIN: Jim Wiggins. Look at that.

JIM WIGGINS: Yeah.

JOSH BASKIN: March 20th. Great. Thank you.

JIM WIGGINS: Yeah, that's, that's what I was to talk off of. It's better if you have this in front of you. You can do what you want with it.

JOSH BASKIN: Great. Jim, I heard a quick question from you about what the INPO 10 o'clock call was.

JIM WIGGINS: Yeah.

JOSH BASKIN: So the kind of the way Bill left it with them yesterday at the meeting was, you know, just, they were sort of getting geared up to see what activities they might do to assist and so I think this is supposed to be, you know, touching base with them to see the results of their conversations after

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the meeting yesterday.

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JIM WIGGINS: Oh, on the post-meeting

meeting that they had?

The idea was to set JOSH BASKIN: Yeah. up daily calls to start coordinating and seeing kind of what they were going to be doing.

JIM WIGGINS: Okay.

So, they didn't really JOSH BASKIN: commit anything at the meeting yesterday, but they were, they stayed after to talk amongst themselves to see what they were going to be doing.

JIM WIGGINS: All right. Yeah. Good. It would really be helpful if. they, an industry-to-industry connection would take up some of these implementation issues.

> JOSH BASKIN: Yeah. I think so.

JIM WIGGINS: This, this Bechtel thing -there's another question rattling around that, if Tepco wants to enlarge the hole Unit 2 secondary containment.

JOSH BASKIN: Um-hmm.

JIM WIGGINS: And they're looking for a way to do that without risking, and kind of minimize the risk of another explosion.

> JOSH BASKIN: Right.

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1	JIM WIGGINS: They're looking for a way to
2	do it without a lot of arcs and sparks. Yeah, so
3	that's something probably industry could help with.
4	JOSH BASKIN: Yeah.
5	JIM WIGGINS: So they got some sort of a
6	waterjet cutting device that they know they've used
7	somewhere. Some of the stuff may be that they use to
8	cut through containments and stuff when they do these
9	generator replacements.
10	JOSH BASKIN: Right.
11	JIM WIGGINS: That might be helpful.
12	JOSH BASKIN: Yeah.
13	JIM WIGGINS: Hold on a second.
14	Are we calling?
15	MALE PARTICIPANT: They're going to give
16	him one more minute, then they're going to call and
17	get him on the phone.
18	JOSH BASKIN: Yeah, I think I told him we
19	would call him.
20	JIM WIGGINS: All right.
21	Tell them to call him.
22	(Off-mic conversation.)
23	(Chairman Jaczko joins the conference.)
24	CHAIRMAN JACZKO: Good morning.
25	JIM WIGGINS: Good morning, Chairman.
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CHAIRMAN JACZKO: How are you? JIM WIGGINS: Fine. This is Jim Wiggins. We've got the day watch in here. We sent you electronically a status. 5 sort of a digest of stuff that's in the larger report. We figured that might be more useful. CHAIRMAN JACZKO: Yeah. That was great. JIM WIGGINS: And we did include some 9 information that we're getting, that we got from --10 the source is an NEI source and they seem to be, you 11 know, have a connection in country also. 12 CHAIRMAN JACZKO: Okay. Good. 13 JIM WIGGINS: But, but we, you know, we labeled it based on NEI information, so you, you'd 14 know what the source was. 15 16 CHAIRMAN JACZKO: Yep. Okay. It looks like 1, 2, 17 JIM WIGGINS: and 3 reactors are pretty stable, as for the reactors 18 themselves. Five and six, you knew what the story was 19 before. 20 BRIAN McDERMOTT: 21 Yeah. JIM WIGGINS: And there's not much on the 22 reactor side at 4. 23 Three and 4, they're still looking at to 24 25 dump water into the reactor building. It's, Tepco **NEAL R. GROSS** 

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seems to be more optimistic about the success of Unit 3 than we would be. CHAIRMAN JACZKO: Okay. JIM WIGGINS: You know, based on just some visuals you see on the news reporting, it looks like 5 what might be getting in there is nothing more than a 6 mist. You know, they're, they're using this kind of a water cannon shot, you know, and by the time it goes up over the top and then back down again, it's sort of 10 misty. CHAIRMAN JACZKO: Uh-huh. JIM WIGGINS: But they're, they're, Tepco 13 is, they think they're actually getting water, they may even be getting it into the pool. 14 CHAIRMAN JACZKO: How are we, how would we describe our information flow at this point? 16 17 better or worse than it's been? I'm not saying, it's not JIM WIGGINS: 18 19 saying much. Okay, so it's still 20 CHAIRMAN JACZKO: overall limited? 21 22 The absolute value is, I JIM WIGGINS: would rate it as -- I guess I would -- to be truthful, 23 24 it would be 4.

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CHAIRMAN JACZKO:

Okay.

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JIM WIGGINS: Okay, and to be gracious, it would be barely acceptable. CHAIRMAN JACZKO: Okay. But it's, it's, you know, JIM WIGGINS: of, we're getting conflicting lot you get information. We're answering questions that people who are getting off of, you know, the Japanese TV broadcast that they're watching. And then we, we get, spend time trying to refute or affirm that kind of stuff. 10 CHAIRMAN JACZKO: Yeah. 11 12 JIM WIGGINS: So it, it's not, you know, it's nowhere near what it looks like when we do the 13 drills and exercises here --14 15 CHAIRMAN JACZKO: Yeah. 16 JIM WIGGINS: -- and actual events that 17 we've done on this side. 18 But, you know, they're -- I guess you've got understand, too, it's a fairly dramatic event and 19 20 they just don't have a lot of instrumentation, so --BRIAN McDERMOTT: Right. 21 JIM WIGGINS: So a lot of it is human, you 22 know? 23 24 They've got generators running in Units 5 25 and 6 like they've had before. **NEAL R. GROSS** 

CHAIRMAN JACZKO: Okay.

JIM WIGGINS: But they also got a power line in here. They got an RHR pump going in Unit 5.

CHAIRMAN JACZKO: Okay.

JIM WIGGINS: And that's progress.

They're working, they're installing a, electric cables in Units 1 and 2 today; probably 3 and 4 perhaps by Monday. And we'll see what success though have there. You know, when you start looking at some of these significantly damaged units, you don't know quite what utility that would be.

CHAIRMAN JACZKO: Yeah.

JIM WIGGINS: They might be able to get power to it but not be able to get anything to work. But, you know, if they can get stuff to work, that's certainly on the good side.

Any update on dose rates seems to suggests that things are, as we heard some others, you know, consistent with other information we have, they seem to be dropping in the immediate vicinity of the units.

They're still at the tens of R per hour range though. It's not, it's not trivial.

CHAIRMAN JACZKO: At, at this point, what is your best understanding of the source of the high dose rates?

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1	JIM WIGGINS: You mean pool versus
2	reactor?
3	CHAIRMAN JACZKO: Well, just in general.
4	Is it essentially, we think I mean, essentially,
5	direct
6	JIM WIGGINS: It's shine.
7	MALE PARTICIPANT: It's shine.
8	CHAIRMAN JACZKO: It's shine?
9	JIM WIGGINS: it's shine dose, not, not a
10	yeah, it's shine. I don't think it's like that an
11	airborne thing. It's the deposition or the source is
12	coming from where they are, the pools.
13	CHAIRMAN JACZKO: Okay.
14	JIM WIGGINS: Okay. Speaking of
15	deposition and things like that, a couple, news.
16	We got, we reached agreement with NARAC on
17	what let me also say the president's source term,
18	the one that, you know, you had agreed to
19	CHAIRMAN JACZKO: Yes.
20	JIM WIGGINS: And it's, it's been a bit
21	challenging to get runs from NARAC, but we understand
22	the running those now.
23	CHAIRMAN JACZKO: Okay.
24	JIM WIGGINS: And, you know, it took some
25	cajoling with them. They had some issues with how the

1	source term was, was stated.
2	CHAIRMAN JACZKO: Okay.
3	JIM WIGGINS: But, again, I've seen
4	(inaudible). They've agreed to run it.
5	CHAIRMAN JACZKO: Okay. Good. And remind
6	me again what that is at this point. There's been so
7	many back-and-forths on this.
8	JIM WIGGINS: Yeah. I, you know, I still
9	won't let anybody use the word "worst case" in the
10	room here
11	CHAIRMAN JACZKO: Yeah.
12	JIM WIGGINS: because there's about
13	five worst cases.
14	CHAIRMAN JACZKO: Right.
15	JIM WIGGINS: What, what's the, the
16	president's case?
17	MALE PARTICIPANT: It's, it's bounding.
18	It includes the, the fuel in the three reactors, the
19	fuel in four spent fuel pools. It does not include
20	the common spent fuel pool around Unit 4 nor reactors
21	5 and 6 or any spent fuel pools there. And it's
22	assumed, a release based over a four- to five-day day
23	period
24	CHAIRMAN JACZKO: Okay.
25	MALE PARTICIPANT: for each of the
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1	units and has a little bit of, of, I'll save realism
2	on what we know is in each of the pools and based on
3	melt core runs.
4	CHAIRMAN JACZKO: Okay, and it's based on
5	melt core. Okay. Good.
6	JIM WIGGINS: It's a percent of the total.
7	MALE PARTICIPANT: A percent of the total.
8	JIM WIGGINS: Okay.
. 9	CHAIRMAN JACZKO: Okay. Good.
10	JIM WIGGINS: And the, the saga of the
11	Bechtel equipment continues.
12	CHAIRMAN JACZKO: Okay.
13	JIM WIGGINS: The information is it's
14	still on the plane in Perth, but I guess last night
15	the funding got resolved. You know, you were informed
16	yesterday that AID with having a problem with a, with
17	the cost, that the cost went up to \$2-1/2 per train.
18	CHAIRMAN JACZKO: Yeah.
19	JIM WIGGINS: We put a, we, we persuaded
20	AID to run a conference call last night at six, and it
21	had AID and State Department, Naval Reactors and is
22	that's what it should have had.
23	CHAIRMAN JACZKO: Okay.
24	JIM WIGGINS: And we talked through what,
25	the merits of having this one train, at least,
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transported to Japan. The information I got on turnover was that one today, that there was a funding source identified. DOD stepped up to pay that rate. But right now, I guess there's some normal logistical issues, rolling it out, getting it in the airplane, getting a crew, that kind of thing.

CHAIRMAN JACZKO: Okay.

JIM WIGGINS: But Bechtel indicated that they would expect it to arrive in Yakota within 13 hours.

CHAIRMAN JACZKO: Okay.

JIM WIGGINS: And the Reactor Safety Team, our guys in Japan, Tepco and others, had some calls early this morning talking about further logistics -- how to get it from Yakota to the facility; once you get it there, any special requirements that you have to consider. You know, Tepco was concerned that you might not just be able to drop the pumps on the ground. You might have to stabilize things a bit.

CHAIRMAN JACZKO: Yeah.

JIM WIGGINS: And so we're into the details of implementation.

CHAIRMAN JACZKO: Okay.

JIM WIGGINS: This is an opportunity for the industry types to, to contribute on this, too,

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because they know more about how to implement something like this. CHAIRMAN JACZKO: Yeah. 3 JIM WIGGINS: But the, on the other side, on the more, also on the positive side of the ledger, if you recall -- I don't know if Josh mentioned this to you -- but the shipment came complete with two techs. 8 CHAIRMAN JACZKO: Okay. Good. JIM WIGGINS: There's two technicians that 10 are being shipped. And I think that's from the 11 12 vendor, not Bechtel. 13 CHAIRMAN JACZKO: Oh, good. 14 JIM WIGGINS: And the technicians are 15 there to provide assistance and instruction in how to, 16 how to put the thing together and use it. CHAIRMAN JACZKO: Good. 17 18 JIM WIGGINS: But I, I sort of heard they're not too willing to go up to the site to do it. 19 20 So, you know, they'll help but, you know, it's a question of where they're going to help. 21 CHAIRMAN JACZKO: Okay. 22 JIM WIGGINS: I believe it'll all get 23 worked out through the day. 24 25 · CHAIRMAN JACZKO: Okay.

JIM WIGGINS: And there's 2 CHAIRMAN JACZKO: Okay. JIM WIGGINS: I think that summarizes it. We tried to give you just a bulleted list to sort of focus things. CHAIRMAN JACZKO: Okay. That's good. Well, I appreciate it. And, yeah, I think that's it 8 for now, so thanks. And, you know, there was one other 10 question on top of my mind, but I can't remember it now. JIM WIGGINS: Well, we can say that, you 12 know, the PAR still looks good. 13 CHAIRMAN JACZKO: Yeah, okay. That's always an important JIM WIGGINS: 16 thing. CHAIRMAN JACZKO: Okay. JIM WIGGINS: The PAR looks good, 18 we'll let you know what these NARAC, what president's run results in, in California, Hawaii, and 20 those places. We'll make sure you know that. 22 CHAIRMAN JACZKO: Okay. Good. JIM WIGGINS: And we'll then have figure out how -NEAL R. GROSS **COURT REPORTERS AND TRANSCRIBERS** 

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CHAIRMAN JACZKO: Okay.

JIM WIGGINS: They're the ones who asked for it, and you know, we'll see how that works.

CHAIRMAN JACZKO: Okay. Great. Thanks, everybody. Keep up the good work.

JIM WIGGINS: Hey, you know where we are if you've got any other questions.

CHAIRMAN JACZKO: Okay. Good. Perfect.

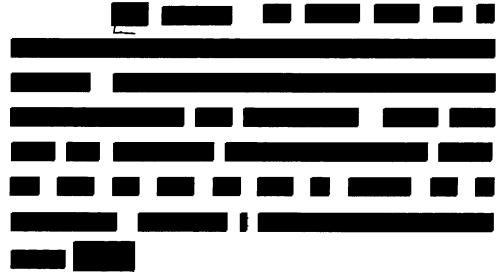
JIM WIGGINS: All right.

Josh, are you okay? Josh, anything from you?

JOSH BASKIN: Yeah, I'll stay on and ask one question.

JIM WIGGINS: Yeah, go ahead.

JOSH BASKIN: What, what's the timing for the getting the results of the runs back?



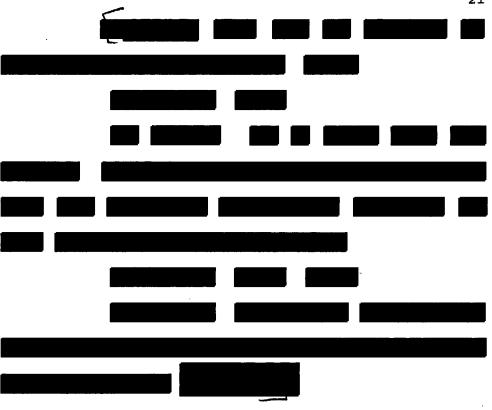
JOSH BASKIN: So today or maybe tomorrow

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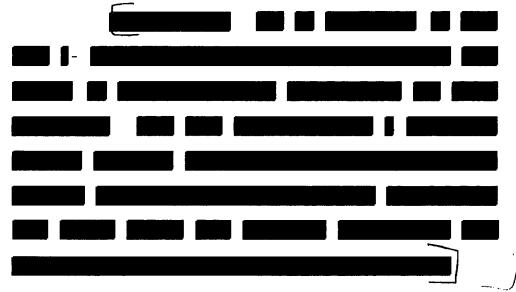
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1	after they look at it.
2	JIM WIGGINS: Ten hours, 12 hours.
3	MALE PARTICIPANT: Right.
4	JIM WIGGINS: Yeah. It may get it here
5	tomorrow.
6	MALE PARTICIPANT: Right. If they start
7	running it right away, they'll probably have
8	JIM WIGGINS: Start today, get it
9	tomorrow.
10	MALE PARTICIPANT: it, they'll probably
11	have some discussion about what comes of the first
12	one, and tweaking it, and use that this week.
13	JOSH BASKIN: Great. Okay, and then I
14	lost the bubble a little bit on the Bechtel stuff.
15	But did we so we had another call last night. Were
16	we the ones pushing to get it there, or we, did our
17	position change on the necessity of getting it there?
18	Or did we just kind of support finding a solution to
19	get it there?
20	JIM WIGGINS: I wasn't on the call. I
21	tell you what I gave (inaudible) as we were leaving.
22	JOSH BASKIN: Okay.
23	JIM WIGGINS: But I told
24	And if you guys were around, if you heard
25	anything about and know any more, you can chime in.

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JOSH BASKIN: Exactly.



JOSH BASKIN: Right.

JIM WIGGINS: And the Naval Reactors people brought forward a good point, too, about, you know, even if it's not technically needed now, it provides a defense in depth measure.

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JOSH BASKIN: Right. And, and I think we also JIM WIGGINS: 3 realized that the fact that we were moving forward on this over the last several days, we must have provided some impetus to the Japanese side to get moving too. JOSH BASKIN: Right. JIM WIGGINS: So, so the intent was to just let all the parties talk together and share their, their interest and see what came out of it. JOSH BASKIN: Great. 10 it 11 JIM WIGGINS: And just, what understood is DOD stepped up and said, we'll, you 12 know, we'll come up with the \$2-1/2 mill. 13 JOSH BASKIN: Okay, so the compromise was 14 15 to send one train? JIM WIGGINS: Yeah. 16 17 JOSH BASKIN: Okay. JIM WIGGINS: It's one train at a time. 18 So we got the deal for one, and if we need the next 19 ones, we'll have to go through the same problems then. 20 JOSH BASKIN: Okay, so we still, we still 21 think it's a third option and we didn't, we weren't 22 saying we absolutely technically have to have it on 23 the ground now? 24

JIM WIGGINS:

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That's, that's the current

view. JOSH BASKIN: But the discussion came around to DOD stepping up and getting one there. 3 JIM WIGGINS: Yeah. JOSH BASKIN: Okay. Great. JIM WIGGINS: It's, it's, I think it's really, it is satisfying the defense in depth. JOSH BASKIN: Absolutely. Yes. And do 9 from USAID was involved in you know if 10 that conversation? 11 JIM WIGGINS: I don't know who was on the She was going to be invited was my information. 12 call. 13 JOSH BASKIN: Okay. But it was DOD that 14 came up with the funding? 15 JIM WIGGINS: That's my guess. I was told 16 that too. 17 JOSH BASKIN: Okay. Great. 18 FEMALE PARTICIPANT: Jim, they're ready to 19 pay it. JIM WIGGINS: Josh, I've just been told 20 that the DOD volunteered the whole \$9.6 million. 21 JOSH BASKIN: 22 Whoa. JIM WIGGINS: I think it's still safe to 23 24 do it one at the time. 25 JOSH BASKIN: Okay, but that's what the

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1	plan is, one at a time?
2	JIM WIGGINS: Yeah.
3	JOSH BASKIN: Okay.
4	JIM WIGGINS: But we've got one in a
5	plane.
6	JOSH BASKIN: Right.
7	JIM WIGGINS: That's, that's, there'll be
8	a hump up to get the next one. You know, you've got
9	to identify a plane and a crew and all that stuff.
10	JOSH BASKIN: Okay.
11	JIM WIGGINS: All right.
12	JOSH BASKIN: Okay. Great. All right.
13	Thank you very much. I appreciate it.
14	JIM WIGGINS: See you.
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긔	(CONFERENCE CALL INITIATED.)
2	00:22:27/00:49:12
3	JIM WIGGINS: Okay, I believe Bill's just
4	going to listen in.
5	BILL BORCHARDT: This is Bill Borchardt.
6	Jim, are you on?
7	JIM WIGGINS: Yes, Bill we're here.
8	BILL BORCHARDT: Okay. I was just
9	checking to see if we were, if I was still on line,
10	we're still setting up for the 10 o'clock call.
11	JIM WIGGINS: Yes. We're just waiting for
12	them to call in I guess.
13	BILL BORCHARDT: Okay. Thank you.
14	(Standby 00:23:14 to 00:25:07.)
15	JIM WIGGINS: Good morning. This is Jim
16	Wiggins. I'm the Executive Team director this morning
17	at the NRC's ops center. We have a number of members
18	of the Emergency Response Team here plus one
19	individual, Tom
20	TOM HAVOSA (phon): Havosa.
21	JIM WIGGINS: Havosa from Naval
22	Reactors is here on the call.
23	Could you identify yourselves?
- 1	

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(Standby.)

JIM WIGGINS:

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Has anyone just joined us?

4	BILL BORCHARDT: I'm still on here, Jim,		
2	but I think I'm just on the regular ET bridge.		
3	JIM WIGGINS: Yeah, they should have		
4	joined the bridges though.		
5	BILL BORCHARDT: Okay.		
6	JIM WIGGINS: And we're going over to the		
7	ops center to find where the rest of the people are.		
8	(Standby.)		
9	BOB COCHRAN: Keith, this is Bob Cochran.		
10	Can you call my cell real quickly after this call?		
11	KEITH: Sure. Yes.		
12	(Standby.)		
13	The industry support team's		
14	on the call here, Jim.		
15	JIM WIGGINS: Okay, and who is this		
16	speaking?		
17	Oh, Bill, great. Good		
18	morning. I guess we'll go around to make sure		
19	everybody knows who's all on the line.		
20	Like I said, Jim Wiggins. I'm in the ops		
21	center. I'm the Executive Team director this morning,		
22	and we have the, the rest of the NRC team leads and		
23	also Tom Havosa from Naval Reactors here in the ops		
24	center.		
25	Could you go around and say who else is		

l	27	1
1	around?	
2	are you, is it you from industry, or	(
3	are there others?	
4	We have the on this	
5	call, it's me and I have the full team here listening	
6	in on this call.	
7	JIM WIGGINS: All right. Great. And then	
8	we have Pete Lyons. Right?	:
9	PETE LYONS: Correct. Lyons is on.	ļ
10	JIM WIGGINS: Okay. Any other individuals	
11	want to identify themselves?	
12	Yeah. Yeah is on, CEO of	
13	INPO.	
14	JIM WIGGINS: Okay. Good morning,	
15	How are you?	
16	Fine. Thank you.	
17	(phon):	
18	I'm at INPO emergency response center with some of our	
19	staff.	
20	BILL BORCHARDT: Bill Borchardt, EDO.	
21	MATT GOODE: Matt Goode, manager, Joint	ļ
22	staff.	
23	Babcock &	1
24	Wilcox president, GSG.	
25	: Good morning,	
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just get going. We'll try to keep this agenda tight and quick and move real quickly. I'll just give a basic overview of NRC and probably go over some current status at the site that I think you're well aware of through your own sources. And then we can shift it over to industry, and industry can give us the, the current status of their plans and what came out of yesterday's meeting.

As you know, the NRC has been in 24/7 with team in Japan supporting the coverage а team in the ops center ambassador and the Rockville. The following activities and our principal role has been to support our team in Japan and to do some other communication and outreach efforts here stateside.

Basically, the, as you probably well know, the facility status is it seems to be on a positive There, there's nothing new to report with trend. regard to degradation of the reactors or the spent fuel pools, and in fact, there are certain recovery under way and some steps that are have been There is, there's power to, they had some successful. power lines run to Units 1 and 2. There's going to be power lines run to Units 3 and 4, expected Monday,

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Japan time. The dose rates around, in and around the facility appear to be lower than they were initially, and that's a good sign.

And there doesn't seem to be any current problems with the pools, although when you look at Units 3 and 4, it's still subject to conjecture about how much cooling or how much water may be need in the pools. The water streams in Unit 3, Tepco is pretty positive about those things being effective in putting water back in the pools. We haven't been able to confirm that using what sources we have here.

We've been running dose calculations. Not a, there doesn't appear to be any significant new information coming out of it. There is a, a, a hotter area of deposition that runs northwest of the facility. That was consistent with the wind direction that existed at the beginning of the event. The wind, most of the time in the event, has been blowing easterly, so offshore. Now, today, it swung down toward the south, but it's expected to be oscillating between the east and the south through the day.

We have had several over-flights of the aerial monitoring system, gotten data, and part of the process is analyzing these runs as we get them. We're also still working with the Department of Energy to

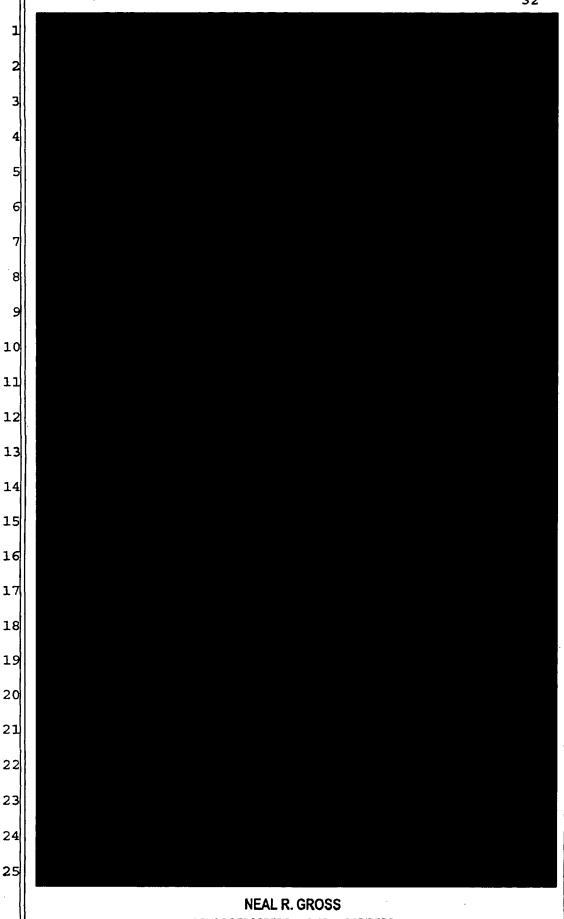
make sure we have a, a handle on it possible impact on US territories (i.e., Hawaii, Alaska and the West Coast of the United States). We're using DOE's NARAC operation in order to run those extended projections. Our NRC projections are, are limited to 50 miles around the facility, so we've been focusing on in-country, in Japan, dose assessments.

As you know, we have still in place a protective action decision for US personnel, and that was to evacuate US personnel 50 miles around the facility. That went in, I believe, on Friday and that, that still stands.

I believe you, the industry, has access and has a lot more data for the rest of the plant status. So with that, I think it's helpful to go directly to, to the industry. Maybe, you might want to start off with a discussion of your status and what directions you think industry will be going.



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10 11 12 13 14 15 16 17 this is BILL BORCHARDT: 18 Bill Borchardt. Have you identified anything, any 19 interface support or any other kind of support, you 20 need from the US government? 21 22 23 24

Not at this point, Bill, but I think that's going to become more apparent here in the next 24 hours.

> BILL BORCHARDT: All right. Thank you.

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That's, that's great.

help us if you can identify a single or a set of points of contact that we might be able to use to set up any kind of future meetings and maybe have a dialogue on things to kind of keep you apprised of what we're up to you. You can keep us apprised of what you're up to.

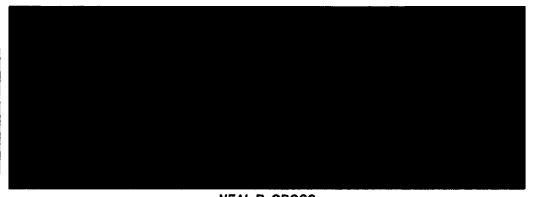
Jim, I'll call you separately, we can set that up.

JIM WIGGINS: Okay.

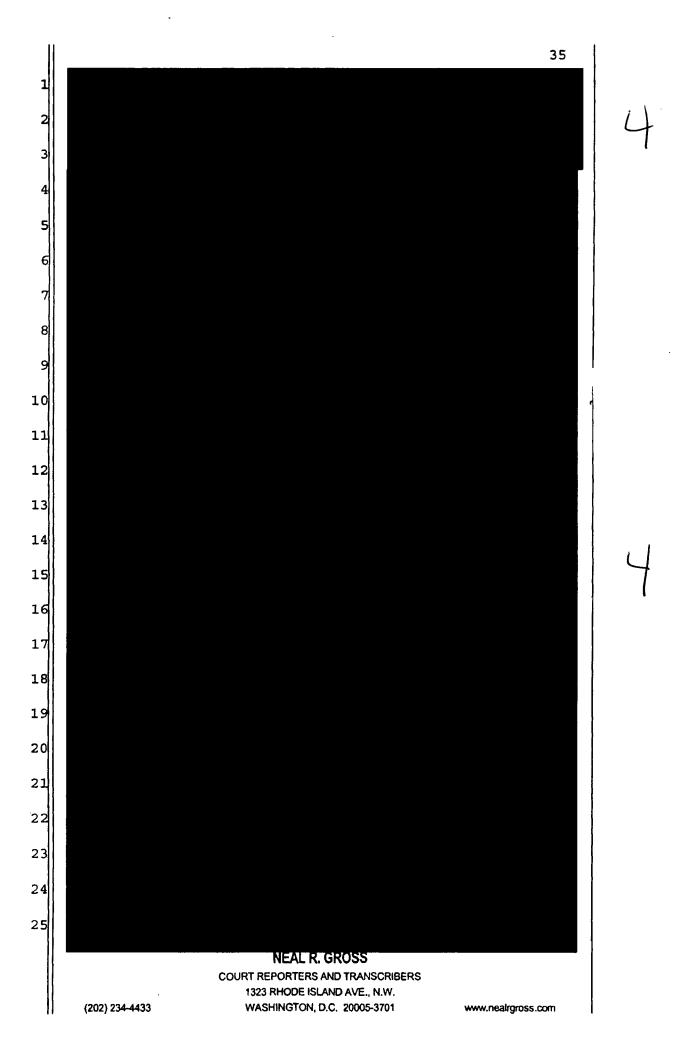
individuals to provide that support.

STEVE LYONS: Steve Lyons. I think it would be useful for the industry group to define the kinds of capabilities that you would like in any sort of a federal liaison or federal role. That would help us identify the best agency and the best, the best

And then, while I'm talking, another question would be, how soon do you hope to have one or two, at least, senior-level people on the ground in Japan to interface with Tepco?



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(No response.)

JIM WIGGINS: Hearing none, do we have an idea that we might want to talk again and we could preliminarily set a time for a subsequent discussion so we can understand how things are progressing?

BILL BORCHARDT: Yeah, Jim, this is Bill Borchardt. At yesterday's meeting, I believe we

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1	established that we would do a phone call at 10
2	o'clock every morning. What's going to be a little
3	unusual about tomorrow is that, at 10 o'clock tomorrow
4	morning, we'll be in the middle of a public Commission
5	meeting, which
6	I don't know if you're still
7	going to be in Rockville, but I'd certainly welcome
8	you to that Commission meeting. I, I think it would
9	be good background if nothing else.
10	And then I believe we were still working
11	to set up a phone call, including the principals, if
12	you will, of the various entities at 2:00 p.m.
13	tomorrow afternoon.
14	Have we established call-in
15	numbers, protocols, for the 2:00 p.m. call?
16	BILL BORCHARDT: I think that's still
17	working.
18	I appreciate that, Bill.
19	Just so you're aware, we'll be here in, in the
20	Marriott at least through Tuesday to get this initial
21	work done.
22	BILL BORCHARDT: Okay. Thank you.
23	This is and then I
24	understand there will not be at 10:00 a.m. call
25	tomorrow, and it's essentially replaced by the 2:00
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That certainly makes sense JIM WIGGINS: to me for Monday only. MALE PARTICIPANT: Yes.

think that some of this ought to be covered in daily phone calls.

what would happen is the shift's beginning to get off the ground, and as I understand it from Tom and the industry people, their, their first steps are to establish protocols for interactions with the Japanese. And I think those things, let's presume they will be successful in getting them in place. Once those things are in place, I think it will become much more orderly on who's doing what and who needs to do what.

I could foresee a lot of these tactical types of, of support requests would likely end up on the industry-to-industry side of this because they have, they have the materials, they have the capability, they have the know-how that the government side -- at least the NRC side -- is a little short on.

It may be a bit premature to, to expect that we'd have a solution today, but I think we, you're, you're right. We'll have, over the next couple days, the phone calls. In the next couple days, we'll see if things get a little clearer.

TOM HAVOSA: Which is why we wanted the point contact we had discussed here, as to what

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information needs to go to what part of the MOD team as opposed to the 10 o'clock call to establish the clear purpose for this call. JIM WIGGINS: Yeah, and Bill, Bill will call. Bill, you'll you can just call the ops center again. BILL BORCHARDT: Yeah, I'll give you a I mean, what Tom just described and what time call. just described there, I mean that's the crux of the problem. JIM WIGGINS: Yeah. But that's, that's what BILL BORCHARDT: we're working. JIM WIGGINS: Yeah. And what we, what we have now, our needs that have come up, and it was, you know, frankly with the NRC team in the place out there, it's about the only US government team in the field that had any technical bent to it. this industry process mounting up, there's actually a different, and maybe better, avenue for, for Tepco to get some of the things they think they need. So let's see how that plays out.

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It's going to take some number of days --



Now, with

JIM WIGGINS: Yeah.

protocols, and in the interim, the problem is still with us. So we need to --

Do we, do we have a full understanding of who with the US government is, is, is

#### JIM WIGGINS:

weighing in that don't have a technical understanding.

I'm just trying to get it sense for who really is the, the single point of contact on all this. The industry can do wonderful things, but if they're not allowed to ship this stuff into country, that really makes the issue problematic.

JIM WIGGINS: That was Right?

That's correct.

JIM WIGGINS: Yeah, the hang-up was on money, That got resolved last night. There's, there's -- a phone call happened. A, a number of sides on the government side had a, had a view as to -- I think most of the technical side would agree that

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They might as well put OMB in

charge.

JIM WIGGINS: No, I don't know that that'll be it.

I think, I think you're probably talking among the folks on the call. Likely, it's one of those organizations in the end.

do you want to comment on that at this point?

Yeah, I don't have any comments beyond what's been made,

JIM WIGGINS: I mean Bill Borchardt.

BILL BORCHARDT: Yeah, that's, the US government lead, I think, needs to transition to an organization that has more of project management/logistics background. We're still working that.

You know, the official answer is it's

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USAID, but we're certainly playing this unique interface role.

TOM HAVOSA: But that's inadequate from a technical standpoint. There needs to be a US government technical oversight role.

JIM WIGGINS: That was Tom from Naval Reactors.

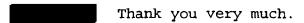
So I think that Tom is, is agreeing with

I think we're all in agree; that we need
to sort this out.

Okay. Any, anything else for this call?
(No response.)

JIM WIGGINS: Okay, hearing nothing, well, thank you, gentlemen, for your efforts. It sounds like you've made a lot of progress overnight, or at least you got the beginnings to this thing started. Maybe it's not the beginning of the end; right? It's like the end of the beginning, like Churchill said.

So we'll talk at two o'clock tomorrow.



JIM WIGGINS: Hey, \_\_\_\_\_, you can call us back and give us some contacts so we can do some, do some other types of work with those contacts.

give you a call here as soon as this call is complete.

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JIM WIGGINS: All right. Thank you.

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1	45
1	(CONFERENCE CALL INITIATED.)
2	00:49:28/00:52:00
3	JIM WIGGINS: Hey, Jim Wiggins on
4	the group are here.
5	Hey, Jim. Hey, I wanted to
6	follow up with the action items for the call and give
7	you a number that you can reach us 24/7.
8	JIM WIGGINS: Okay.
9	And the number
10	JIM WIGGINS: As if we don't want to run
11	across the street. Right?
12	Yeah. Well, if you need
13	us, just call. We can walk across the street.
14	JIM WIGGINS: Yeah.
15	You know where we are.
16	The number is
17	JIM WIGGINS:
18	That is correct.
19	JIM WIGGINS: Okay, it sounds like a cell
20	phone.
21	It is.
22	JIM WIGGINS: Okay. Is, is there a name
23	there, we should be shooting for? We have some,

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a lot of, there's a lot of pent-up desires that we

have to try to control ourselves not to flood you with

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JIM WIGGINS: Yeah, because it goes right 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 www.nealrgross.com

Okay. I'11 --You might want to try him JIM WIGGINS: before he bails. He was just sitting around waiting for the call. Okay. I'll, I'll see if I can grab him before he goes. JIM WIGGINS: All right, We'll have our guys talk to and establish contact. Okay? Very good. All right, thank you, Jim. JIM WIGGINS: Thanks, Goodbye.

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# . (CONFERENCE CALL INITIATED.)

00:52:02/00:54:41

BILL BORCHARDT: Jim? Hi, Bill.

JIM WIGGINS: What's up?

BILL BORCHARDT: Yeah, I just got off the phone with

JIM WIGGINS: Yeah, I, I knew he was going to call you. I gave him your number.

BILL BORCHARDT: Okay. And he's agreed to, that the industry is going to send two people over to Japan either tonight or tomorrow.

JIM WIGGINS: Okay.

BILL BORCHARDT: I told him that, that he can call, you know, x5100. We'll orchestrate talking with Chuck so that he can do introductions with these two people to Tepco.

JIM WIGGINS: Yeah.

BILL BORCHARDT: As best as he can orchestrate. And I also said, you know, we'll, I'm, I'm confident the ambassador would help put a high political hat on this as well.

JIM WIGGINS: Yeah.

BILL BORCHARDT: They're going to send over some more logistics types to begin the engagement. So I think that was, that's a good step

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JIM WIGGINS: I think it is too. You know, at least get the assets over there.

BILL BORCHARDT: Yeah.

JIM WIGGINS: It's wise to get the assets over there and had them toward the Embassy. We can put Chuck and the ambassador try to get the guys toward Tepco that way.

BILL BORCHARDT: Yeah.

JIM WIGGINS: But at the least, Chuck's people would have access to these guys, and as we shake out the roles and responsibilities. I mean, they could almost start fielding some of these requests that Tepco's those making of Chuck's people.

BILL BORCHARDT: Yeah, exactly.

JIM WIGGINS: Okay. And, you know, they're able to deliver probably more efficiently than we can. That may motivate Tepco to use their guys too. You know?

BILL BORCHARDT: Yeah.

JIM WIGGINS: Incentivize it.

BILL BORCHARDT: Okay. Have you heard from the Chairman recently? I haven't, I haven't been able to get a hold of him?

JIM WIGGINS: He called in at eight

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o'clock for a status. BILL BORCHARDT: Okay. JIM WIGGINS: And that was the last we heard. Okay. Well, I'll keep BILL BORCHARDT: I'll send him an e-mail. I'll cc you on your trying. personal email -- I mean, your work, but under your name. JIM WIGGINS: Yeah, my name. That's what I'm, that's what I monitoring. 10 BILL BORCHARDT: Okay. 11 All right, but I'll just JIM WIGGINS: 12 13 tell you, we're filing every email for, you know, 14 potential later FOIA. 15 BILL BORCHARDT: Yes. Yes. JIM WIGGINS: You know that. 16 17 BILL BORCHARDT: Yep, absolutely. JIM WIGGINS: All right. Bye. 18 19 20 21 22 23 24

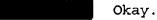
ļ	51
1	(CONFERENCE CALL INITIATED.)
2	00:54:41/00:57:37
3	JIM WIGGINS: Hello,, it's
4	Jim Wiggins.
5	BILL BORCHARDT: Yeah, Jim.
6	JIM WIGGINS: What's up Bill?
7	BILL BORCHARDT: Nothing that I know of.
8	I, I didn't call you.
9	JIM WIGGINS: was supposed to
10	come on the line.
11	BILL BORCHARDT: Oh, wrong
12	JIM WIGGINS: Yeah.
13	on the line.
14	JIM WIGGINS: You were looking for me,
15	It's is Jim Wiggins.
16	Yeah, I just wanted to
17	follow up with you on the conversation that Bill
18	Borchardt and I had about looking to see what the
19	mechanism might be for putting two industry people
20	with the Chuck Casto in
21	order to get them in the, embedded with Tepco so that
22	we could better understand and coordinate their needs
23	
24	JIM WIGGINS: Okay.
25	and trying to do this as

a more urgent action as opposed to trying to wait for kind of the broader protocol that we're putting in place. That really is probably going to be later in the week, but we could probably be moving people as early as tomorrow.

JIM WIGGINS: Yeah.

And I want to be assured, or not -- assured is probably the wrong word -- but just looking for the mechanism that we could have them as part of the discussions with Tepco and coordinating with DC and, back here.

JIM WIGGINS: We had envisioned that our liaison team would work with your point of contact and would put the point of contact in touch with Chuck Casto, who's our guy there.



JIM WIGGINS: And what I think's going to happen is, you know, it takes 14 hours to get there anyhow, so while you're guys are in flight, Chuck would be able to do more of the detail after he -- you know, we ought to check with him and make sure there, these guys are going to be, you know, not turned around once they get there. I'm not saying that's going to happen, but you want to assure yourself of that.

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But, but in the right place

Yeah, well, I really hope you do get to the emergency center because we haven't been able to.

(Laughter.)

JIM WIGGINS: Chuck thought he was on his way to the emergency center and he ended up in a meeting with like a senior guy at Tepco. So that kind of crossed wires.

Yeah.

JIM WIGGINS: But that was a couple days ago. I think that's the best way to do it though.

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Okay. Well, I'm going to go ahead and get some people, you know -okay. JIM WIGGINS: -- moving that way. JIM WIGGINS: And we'll have the liaison team talk to your guy, Right? Yes. JIM WIGGINS: Yeah. Okay? Thank you very much, Jim. All right. 10 JIM WIGGINS: 11 All right, 12 JIM WIGGINS: Thanks. Goodbye. 13 14 15 16 17 18 19 20 21 22 23 24

#### (CONFERENCE CALL INITIATED.)

00:57:43/01:10:30

CHAIRMAN JACZKO: Hello, everybody.

FEMALE PARTICIPANT: Hi. We're here, Chairman.

CHAIRMAN JACZKO: What I'd like to try and do -- hopefully you got the messages -- is just kind of remind me what our priorities were since the last turnover, what our priorities are going to be going forward, and then any updates.

We don't have to do them in that order.

If you want to start with the updates, that would be fine.

BRIAN SHERON: Okay. Chairman, this is Brian Sheron. The top priorities at units --

Continue the steps with radiological conditions, dose projections, and the protection actions recommendation.

Obviously, we're trying provide to technical assistance to the US ambassador in Japan. We've been working closely with Chuck Casto and his team in terms of the requests that they've had from us, you know, to try and provide them with some just information as well as some, you brainstorming on some ideas.

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You know, for example, last night, the Japanese were concerned about continued seawater circulation through the reactors because that basically turns the reactors into a big desalinization The water boils off but leaves a residual plant. salt. And the concern was that if they do that for too long, you get a big salt buildup, which could either affect heat transfer in the core through to the fuel, or even perhaps start to partially plug of panels.

CHAIRMAN JACZKO: Um-hmm.

Japanese had was how can we get fresh water in. And they were concerned that they couldn't access the reactor because of the high dose rates. And so they asked us if we had any ideas on how they might reduce those rates in order to get closer and maybe try to access the primary system to get some fresh water supplies, although we still don't know if they even have any freshwater supplies that are available should they get access.

I've asked the question of Chuck to find out -- because they are injecting seawater into the reactor, and the real question is -- where are they getting the seawater from? Obviously, from the sea,

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1	but how is it getting into the reactor? They must
2	have some sort of a path that they were able to make.
3	And the question is, is that path available so that
4	they could hook up a freshwater supply.
5	CHAIRMAN JACZKO: Okay.
6	BRIAN SHERON: But that's still an ongoing
7	issue.
8	CHAIRMAN JACZKO: Well, let me hey,
9	Brian?
10	BRIAN SHERON: Yes?
11	CHAIRMAN JACZKO: Let's just go back.
12	Let's just try and stick, first, at high level for
13	what the priorities are going to be, so we make sure
14	we have the alignment.
15	BRIAN SHERON: Sure.
16	CHAIRMAN JACZKO: And then we'll go
17	through any specific updates and details on just the
18	status of the reactors.
19	BRIAN SHERON: Okay. The last one is just
20	to continue coordination with other departments and
21	agencies, including INPO and Bechtel.
22	CHAIRMAN JACZKO: Okay. So I'm sorry?
23	BRIAN SHERON: That's really what the
24	priorities are right now.
25	CHAIRMAN JACZKO: So let me go I,
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sounds like I heard three. Let me just repeat them back to you. Number one is continued, essentially, assessment of the situation and any dose projections and protective action recommendations. BRIAN SHERON: That's correct. CHAIRMAN JACZKO: Number two is providing 8 technical support as issues arise to help give input. BRIAN SHERON: Yes. CHAIRMAN JACZKO: And number three is the 10 coordination with the interagency and the INPO, the 11 INPO group. 12 13 BRIAN SHERON: Yes, and also with Tepco. CHAIRMAN JACZKO: And Tepco, okay. Do we 14 have what I've originally kind of talked about as a 15 project management team or some executive group, which 16 was largely built around this INPO group. Is that 17 getting ready to mobilize at this point? 18 My understanding is BRIAN SHERON: Yes. 19 that that group, yesterday they came in and they met 20 at two o'clock with Bill Borchardt. I was there. We 21 finished at --22 FEMALE PARTICIPANT: Ten. 23 BRIAN SHERON: Sorry -- well, anyway, when 24 we finished the meeting at 3:30, they stayed after and 25 **NEAL R. GROSS** 

met internally among themselves. They said that they were going to be acting, as they used the term, within days rather than weeks. CHAIRMAN JACZKO: Good. BRIAN SHERON: And I think they're also meeting, this is at 10 o'clock today. CHAIRMAN JACZKO: Okay. Okay. Good. Maybe by the next call this evening, if you can, have an update for me about how that ten o'clock went. BRIAN SHERON: We'll see what we Sure. can find out. CHAIRMAN JACZKO: Okay. Well, good. So those are priorities. Those are our priorities going forward then? BRIAN SHERON: That is correct. CHAIRMAN JACZKO: Okay. And maybe you can just walk me through the status of the plant and issues, anything you want me through there. Sure. BRIAN SHERON: Units 1, 2, and 3 to be in stable condition with seawater injection continuing. The containments are believed to be intact in Units 1, 2, and 3. Containment pressure in Unit 3 is believed to have stabilized and venting is not expected.

believes that the water they've sprayed on the Unit 3

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spent fuel pool has had some effect on reducing the dose rates. So they went from 3.4 mSv to 2.75 mSv 500 meters north of the reactor.

And their focus right now is on the Unit 4 spent fuel pool.

CHAIRMAN JACZKO: Okay.

BRIAN SHERON: So the Japanese self-defense forces, their fire department, plans to resume water injection to the Unit 4 spent fuel pool from the ground level today.

CHAIRMAN JACZKO: Okay.

BRIAN SHERON: They've got two diesel generators running and supplying AC power to Units 5 and 6. Unit 5 residual heat removal pump, which is powered by one of the Unit 6 diesel generators, was started and is providing cooling to the Unit 5 spent fuel pool.

CHAIRMAN JACZKO: Okay. Good.

BRIAN SHERON: Tepco's right now installing high-voltage cables near the transmission line to Units 1 and 2. Priority is being given to restoring power to the RHR and cooling water pumps.

CHAIRMAN JACZKO: Okay. Do they have an estimate of when is the earliest that could be done?

BRIAN SHERON: It says Units 1 and 2 have

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temporary power to a 6.9 kV panel and Tepco is working to have temporary cables run to necessary equipment. CHAIRMAN JACZKO: Okay. BRIAN SHERON: Power to Units 3 and 4 is planned for later, perhaps by Monday. And that's really about all we know right now in terms of where they are with the electric hookup. CHAIRMAN JACZKO: Okay. SHERON: We're BRIAN still awaiting 10 results from NARAC on the bounding worst-case source term's potential effects on the US. 11 12 CHAIRMAN JACZKO: Okay. The Protective Measures 13 BRIAN SHERON: Team here has drafted a more realistic worst-case 14 source term that is still being evaluated and is 15 focusing efforts on this scenario. 16 The wind direction right now is primarily 17 from the south for the next 12 hours, and then it's 18 expected to shift to the southeast, which would be, 19 again, off shore. 20 21 CHAIRMAN JACZKO: Okay. Do we have an update on the Bechtel equipment from Australia? 22 BRIAN SHERON: I don't. I apologize. 23 I'm was not given any new information. We can find out --24

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I'm sorry.

Do you have it?

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DAVE SKEEN: I have something.

BRIAN SHERON: Yeah, Dave Skeen has it.

CHAIRMAN JACZKO: Okay. Great.

DAVE SKEEN: Hey, Chairman, I just got it in turnover here for the Reactor Safety Team. The plan is for the first plane to leave Perth tonight at 11:00 p.m. Eastern Daylight Time, and the second plane would be followed the next day about the same time, at about 11:00 p.m.

CHAIRMAN JACZKO: Okay. Good.

DAVE SKEEN: That's the plans right now.

CHAIRMAN JACZKO: Okay. Good.

DAVE SKEEN: So they're bringing one train tonight. The second plane will have a second train on it when they get that up and towards Japan.

CHAIRMAN JACZKO: Okay. Good. And I know there was some discussion earlier about whether or not we thought that was necessary, and then I guess there was further discussion and we're comfortable with them sending it. Is that correct?

BRIAN SHERON: Yes. What we included was that, based on our discussions, I think, with Chuck Casto, was that the pumps and the equipment, while it was not a primary -- in other words, it would not be

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1	their first line of defense; they already had
2	equipment there it would serve as a backup or a
3	tertiary set of equipment in case something did fail.
4	CHAIRMAN JACZKO: Got it. Good. Well,
5	and just to be clear, I'm okay with that, and I'm in
6	agreement that that is the case. If we, if we need to
7	change that assessment, either it's more urgent or
8	less urgent, make sure you run that by me before we
9	do.
10	BRIAN SHERON: Okay. Will do.
11	CHAIRMAN JACZKO: Good.
12	LARRY CAMPER: Chairman, Larry Camper. I
13	have a couple more pieces of information.
14	CHAIRMAN JACZKO: Hey, Larry, is this your
15	first shift?
16	LARRY CAMPER: Oh, no, no.
17	(Laughter.)
18	CHAIRMAN JACZKO: I've missed you.
19	(Laughter.)
20	LARRY CAMPER: And by the way, you did a
21	great job downtown the other day. I wanted to tell
22	you that.
23	CHAIRMAN JACZKO: Oh, thanks.
24	LARRY CAMPER: In looking at my hand-off
25	notes here, a few things - is the point

has been appointed as logistics guys. We have phone numbers for both of those players.

CHAIRMAN JACZKO: Good.

LARRY CAMPER: They're still working out of the Marriott over here. They've moved into 24/7 support role.

CHAIRMAN JACZKO: Good.

LARRY CAMPER: Their priorities are protocol to establish for dealing with Tepco, what can actually be done through commitment to Tepco. Develop a product to offer to Tepco officials. You know, what will be brought to bear and when. And establish a process and logistics for the US to move more effectively in engaging with Japan.

CHAIRMAN JACZKO: Good.

LARRY CAMPER: They're trying to get these three things done this week.

CHAIRMAN JACZKO: Good.

LARRY CAMPER: Okay? There is a daily call that takes place with IMPO at 10:00 a.m. Except, tomorrow, it won't be a 10:00 a.m. call because of the Commission meeting. It will be at two o'clock tomorrow.

CHAIRMAN JACZKO: Okay. Good.

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LARRY CAMPER: So it sounds like the progress is taking place there.

CHAIRMAN JACZKO: Good. Good. Yeah, and I think on that, the continued thing to emphasize is some sense of urgency with that, actions that. You know, the situation seems to be stabilizing but it's not yet what I would call long-term stability, and that, in my mind, is essentially off-site power restored and at least some degree of more normal circulation in, in, for the reactors and then stable water level in the pools.

BRIAN SHERON: Yes, sir. What we don't know right now, and I think Chuck Casto has expressed concern, and that is that, even though they've gotten off-site power back onto the site and are in the process of hooking it up, we really don't know whether this equipment is going to, is going to run once it's hooked up.

CHAIRMAN JACZKO: Yeah. Yeah. Well, are we thinking ahead, if that were to happen, about, you know, alternate pumps and other, other ways can we bring in portable pumps that you could --

BRIAN SHERON: Well, that's what's coming in from, from Australia.

CHAIRMAN JACZKO: Okay. Okay. Good. So

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that would deal with all that.

BRIAN SHERON: Yes.

CHAIRMAN JACZKO: Okay. Good.

BRIAN SHERON: But the problem, one of the problems was trying to find places to hook up to.

CHAIRMAN JACZKO: Yeah. Got it.

Okay, other updates the status you have for me?

BRIAN SHERON: Just -- updates -- we've asked Jack foster over in Tokyo on our site team to find out what he knows, what the Japanese know, about increased radiation levels that they're seeing in food products.

CHAIRMAN JACZKO: Okay.

BRIAN SHERON: And we're looking right now

at at a large and a large at a la

CHAIRMAN JACZKO: Okay. Good.

BRIAN SHERON: And I think that is about it unless you have any questions.

CHAIRMAN JACZKO: No. That sounds good.

And then in terms of notifications to me, have a low threshold for my engagement if we get hung up in any interagency issues or kind of this work with the INPO team. If there's any slowdowns or anything like that

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where that sense of urgency gets lost, let me know and 2 I will engage to, to restore it. 3 And, of course, if there's any significant worsening of the situation, notify me. 5 And finally, if we need, would need to 6 make changes to what we believe are the appropriate 7 protective action recommendations for what we do here 8 in the US, if you can notify me of that as well. 9 BRIAN SHERON: Will do. 10 CHAIRMAN JACZKO: Okay. Good. Thanks, everybody. Appreciate it. 11 BRIAN SHERON: Okay. Thank you. 12 CHAIRMAN JACZKO: Talk to you soon. 13 Goodbye. 14 15 16 17 18 19 20 21 22 23 24

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1	(CONFERENCE CALL INITIATED.)	
2	01:10:39/02:12:33	
3	JOHN MONNINGER: Hey, Brian:	
4	BRIAN SHERON: Hey, John.	
5	JOHN MONNINGER: How are you doing this	
6	BRIAN SHERON: One of the guys in the	
7	back, see a se	
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11	JOHN MONNINGER: Okay.	
12	BRIAN SHERON:	
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23	JOHN MONNINGER: Okay.	
24	BRIAN SHERON: He says that they're not	
25	seeing any steam coming off of that pool, which to	
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them implies it's dry,

The, the plan was that they were going to send the, the one pump. One of the four pumps was going to be sent from Australia, and they were going to bring it on site, I guess, and hook it up and make sure that it even worked before they went off and made a decision on bringing the other three, because there's apparently a lot of money involved.

So now I've got the guy

JOHN MONNINGER: Okay. Are you ready?

BRIAN SHERON: Yes.

JOHN MONNINGER: So we agree that Unit 4

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is definitely a priority also. Several days ago, our number one priority with Unit 3, and then they were going to move to Unit 4. They had done some rough calcs several days ago showing that Unit 3 was empty, and everything we have seen out here, we generally agree with their assessment that Unit 3 should be the priority.

We did not perform -- pardon me?

BRIAN SHERON: The spent fuel pool or the primary containment?

JOHN MONNINGER: The spent fuel pool.

BRIAN SHERON: Okay.

JOHN MONNINGER: Okay. So that was back on 3/18. It was Tepco who had performed a calculation with regard to six days being left, but they said those calculations have large uncertainty in them and they have no clear indications, you know, what the level is in the buildings. They've been trying aerial photography and all kinds of stuff but, you know, they really don't know.

They've also been doing the infrared detection and they say, you know, all pools show at or less than 100 degrees Celsius. But, you know, with the amount of rubble and stuff on top, it, it's very difficult to, to be able to rely on any of those

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indications.

BRIAN SHERON: Well, the -- yeah, go ahead. Go ahead.

JOHN MONNINGER: We out here, we have been concerned about spent fuel pool reactor 4 for a very long time also.

You know, the stuff they're doing, you know, initially, the fire trucks and now, then they had the, the riot spray pumps, and then yesterday or, you know, probably about 36 hours ago, they brought in that airport super high-capacity remote unmanned pumper truck --

BRIAN SHERON: Yeah.

JOHN MONNINGER: -- and also the, the helicopters. All those systems are really not highly effective, or actually just marginally effective. And, you know, the problem is, I mean, we're shooting from so far away, you have incredible losses.

BRIAN SHERON: Right.

JOHN MONNINGER: I mean, just with that powdering, the dropout, et cetera. So that's, so that's all that. So, yes, we've been concerned with Unit 4 all along.

And I think Unit 4 is the one we got in a little bit of trouble with, with, you know, the

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assessments of structural integrity to the side of the spent fuel pool wall. I think that's the one that has the damage further down on the sides. So we had had some questions from right on asking whether one entire wall of the spent fuel pool had been taken out.

They later came back with some drawings and some photos showing their, our concerned with the wall. Yes, that was a major exterior concrete wall, but the spent fuel wall was a different wall that was further in. But, okay.

DAVE SKEEN: Hey, John, this is Dave Skeen. I'm sorry. I just caught the last part of your conversation there. I, I thought it was 3, we were concerned about, the wall and the spent fuel pool, because that was the one that had the largest explosion, and that looked like it blew out of blew out a pretty big piece of concrete wall.

JOHN MONNINGER: Yes.

DAVE SKEEN: The concern with 4 was always it should have about 10 times the decay heat in there of 3 because they had to have full core offload in there.

JM: Right.

DS: Yet, when we see pictures, we never see any steam coming out of 4, which would lead you to

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believe that there's no steam. There must not be any water to steam out of there. JOHN MONNINGER: Right. DAVE SKEEN: And so it seems like it must 5 dry. JOHN MONNINGER: Right. BRIAN SHERON: John, what we're looking 8 what right now is -- you know, the, the fellow from 9 Naval Reactors made a recommendation that we should get the rest of those pumps and associated equipment 10 that's in Australia on airplanes and over to, to the 11 12 site. 13 The question is -- I have no idea -- you 14 know, you know, it's nice they now, they say it's a wonderful thing to do, but I have no idea. 15 16 JOHN MONNINGER: Right. 17 BRIAN SHERON: You know, that's got to be coordinated with Tepco. 18 JOHN MONNINGER: Yeah. 19 20 BRIAN SHERON: I have no idea whether they want those pumps, you know, if they have the same 21 priority, if, if they have the means to hook them up 22 and spray, use them to spray the Unit 4 pool et 23

JOHN MONNINGER: Right.

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cetera, et cetera.

74 So I'm looking for some BRIAN SHERON: guidance. JOHN MONNINGER: Okay. So the status of the reactor and the knowledge of the reactor is actually much 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 **NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS** 

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MALE PARTICIPANT: Yes.

JOHN MONNINGER: Yeah. This truck has a boom that goes at least 58 meters out. So they wanted to know, you know, when it could be there, et cetera, and we had to this big disconnect in communications, and we said, no, we're not bringing that. And, you know, Tepco was like -- I said that was a system that was based on the concrete pumping trucks with Tepco's system -- and they were using the company's name is

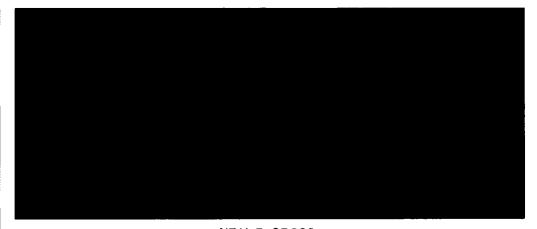
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SAMY. And they give the model number, yada, yada, yada -- and they told us there were two of those in the country.

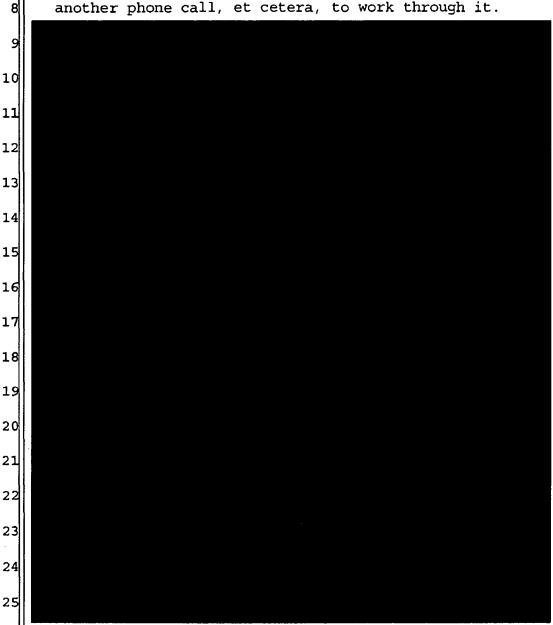
So there was the Tepco system that was based on the SAMY concrete pumping trucks and then there was, the Bechtel/NRC system was based on the water cannons. And we had a big call, you know, a couple nights ago and everyone, you know, a bunch of engineers gave the pros and cons of each system. And we tweaked their some and they tweaked ours. And that they had any of the questions, they were to get back to us.

So that was a meeting that was at Tepco -actually, it's getting more clear to me because I'm
still waking up -- but that was two o'clock, well, two
o'clock our time yesterday, which, I guess, was your
guys' one o'clock. And Jennifer pulled together all
the forces from industry together for the one o'clock
call. So we ended that meeting.



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country, we have talked with the Japanese Self-Defense Forces. It's being flown from Australia to the Air Force Base -- I forget the name -- and then, once it arrives at the air force base, the Japanese Self-Defense Forces were going to move it up to the site. So then Jennifer had all these questions, and she said, you know, once we get answers, we'll have another phone call, et cetera, to work through it.

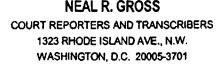


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directly to another meeting with the Ministry of Defense, which is a different meeting. Our prior meeting was with Tepco and the Ministry of Foreign Affairs. So, and it's a big meeting at the Ministry of Defense, who was actually in charge of on-site operations there.

You know, we had a lot of questions back and forth, back and forth, and the guys from the State Department said, okay, you know, if we get this here, are you going to use on site? And basically the conversation digressed to the point that they say, you know, we have not accepted this equipment to come into the country, so, let alone allowing it to come to the site. So, you know, it is extremely unclear where this approval needs to come from. So that was said, you know, at the meeting.







So they gave the go-ahead there, you know, with, you know, with the Air Force for the plane to take off. So I'm not sure if it took off or not. But it supposedly is, but --

DAVE SKEEN: The latest word we have,
John, the latest word we have, 11 o'clock Eastern
Daylight Time tonight. So that's about six or seven
hours.

JOHN MONNINGER: Yeah. So, you know, have -- not him -- I have no idea what side or how many people from the government has said yes. And then you just hear, no, we don't accept it. And in one meeting, we hear from all the Tepco Corporation that they got all these questions, et cetera. The next meeting the Tepco individual says, we will not use the system.



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So, you know, I, I'm giving you the context., so, you know, if you try to discuss the spray system 2, 3, and 4, you know, right now, one, one train -- it is incredibly unclear what will happen with this one system when it lands in the country.

BRIAN SHERON: All right. So I guess I'm gathering from this that you don't need any more pumps right now.

JOHN MONNINGER: Right.

BRIAN SHERON: But the concern, I guess, that was expressed over here, and I don't know if you guys looked at it independently, is if the, is it the spent fuel pool in Number 4 is dry --

JOHN MONNINGER: Right.

BRIAN SHERON: -- and, you know, apparently has a, a full-core offload on there, you know, is this, is it a molten mass that's starting to head into, you know, starting to interact into the concrete?

JOHN MONNINGER: Right. We are, we actually think the steaming is good, and we've raised the concerns, you know, multiple times when the steaming stopping. You know, they're, they're at a loss what to do. They are at a loss what to do. You know, the helicopter overflights, you know, it's

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reported out, and you go to the meetings, and they say, you know, so many -- not hundreds -- but so many tens of tons of water have been dropped, you know, or hundreds of tons of water have been dropped.

And then you look at TV and you're like, well, that cannot be, like less than 10-percent effective due to the speed of the helicopter, the winds, et cetera. And they acknowledge, and you're -- you know, so the one thing is being reported in the media that these fire trucks are going in and out, the helicopters are doing this, the super capacity pumping system. But then, when you get actually down into Tepco and start talking to the engineers, you find out that it really isn't that effective.

So we, you know, in terms of, you know, that pool or even Unit 3 -- I mean, Unit 3 was, you know, they believe Unit 3 was, you now, they believed Unit 3 was dry, and it was multiple days before, you know, they got those, even those first fire trucks in, so that's why they put their priority on Unit 3. And they believed they had some time on Unit 4.

They had moved some, some equipment over to Unit 4. I just -- you know, so they are working both Unit 3 and Unit 4. But, you know, we've pushed on very significantly to, to -- you know, what is

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your assessment? Why do you believe what you're doing is effective given this huge spray range? And they come back and say, well,

And (inaudible), I said, well, if that's the case, why are you relying upon it? They say, you know, if anything was hotter,

I said it was our understanding through out discussions with you guys that the Unit 1 roof did not explode outwards and all the debris go all over the place, but essentially dropped down on, on the slab onto the pool in the refueling floor.

I said, if that's the case

more or less, for all four sites, how can you say that? You know, one, because the roof, you know, is three inches or so of concrete. You know, you're not comparing apples to apples. You know, if you had a clear view of the spent fuel pool through the water, that would be fine, but one of them, you may have an entire concrete roof sitting on top. Others, you have varying amounts of debris. And, you know, there's really no response.

You know, then, then they're telling us all these volumes of water that have been put in. I

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said, hey, all right, that's fine, but I've seen it on TV. I saw the helicopters on TV. I said, had you done any back-of -- They want to say, we put 100 tons of water on because that's what, what has been pumped.

I said, have you done any back-of-the-envelope calculations? What would it take to fill that thing and throw in your losses for spraying and throw in some type of estimated losses for what may potentially be getting through this debris? No response.

You know, then the other thing is, all right, so your fire trucks are going in; your fire trucks are going out; your fire trucks are going in; your fire trucks are going out. You're telling us the number of fire truck runs, these tons of water that have gone in there. Do the fire trucks have rad monitors on them? You should be seeing, when you get close to that reactor building, incredible shine from the spent fuel pool. Have the rad monitors changed from truck to truck to truck that would show some level of shielding from the pool being filled? You know, some level that you could assess that what you're doing is doing some good? The answer is no, we have not been looking -- or, no. They said, first they look back and forth, and in the one guy said, no, there has been no change.

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So, so I said, you know, at this meeting here, you have told us that you been effective and successful in these helicopter runs, in the fire truck runs, et cetera, and the measures you're using is this thing. You know, some of the units are still, nothing coming down. You know,

You know, the ones that you're doing rad monitoring for, there's no change due to the potential shielding and the water coming off.

So, you know. So --

BRIAN SHERON: Okay. Well, I think you answered my question.

JOHN MONNINGER: Yeah. Yeah.

Well, with that, and so Jennifer -- well, the Reactor Safety Team and Bechtel, et cetera -- they're running through all these issues, and the biggest issue for the pumping, for the Bechtel/NRC system, if it comes on site, there's a good chance they won't use it. But even if they did use it, they don't think it will be effective.

So, now, what we're doing is we're looking at that concrete pumper truck that, they have two of them in Japan, and they are saying they're getting

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them to the site. The concrete pumping truck -- you know, the notion is to get the boom and the hose, you know, 10 feet, 20 feet, 30 feet, you know, whatever, right over top of the reactor building, right over top of the spent fuel pool, and the water's just going to drop straight down. It's not a spray pattern or anything.

BRIAN SHERON: Right.

JOHN MONNINGER: So, one, one of the things that you guys back there are doing, Bechtel and company, is looking at, hey, how can we use 90 percent of this system that is coming up from Australia and hook it into the concrete pumping truck? I mean, there's, you know, probably six-inch or eight inch pipe there. You've got the boom for the concrete pumping truck and then you've got the steel piping that actually carries the concrete. You know, what can be done to put the T in there, you know, some type of connect, into the concrete pumping truck?

You know, one of our things, potential concerns, with the concrete pumping truck, which was the Tepco system, is the notion that, you know, is that really a system that is rated for continuous 24 hours a day, seven days a week, 365 days a year operations. We want it -- and that's one, one of the

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design concepts or philosophy things was for the Bechtel system. Put together a commercial industrial system, these pumps that are designed for continuous operation versus the concrete pumping trucks, so, and versus the need for an operator or whatever to have to get right up close there, you know, for refueling operations, et cetera.

So, you know, that's what our system with the rocket cannon, the guys put a huge diesel storage tank on the back of the flatbed trailer.

So, so we agree, you know, that Unit 4, you know, there's no idea what's going on with Unit 4. There's no, we have don't have any clear idea that Unit 3 has gotten any better. And, you know, we've gotten in a little bit of trouble out here, you know, passing on or just even discussing assessments, you know?

And, you know, if you guys want to talk what you're talking about before, you know, the spent fuel pool, you know, going through the floor -- which is in my mind, too, and I've mentioned it to several people -- what's that going to do? Right now, the rad levels at the site are high as hell. Okay? You know, several of us have talked about, if that happens, are the rad levels at the site somehow going to skyrocket?

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Skyrocket -- I mean, they're already 10 to 30 R per hour in areas. If it goes through the spent fuel pool floor, what is that going to do to access to your site to continue to do anything for Unit 1 spent fuel pool, Unit 2 spent fuel pool, Unit 4 spent fuel pool, or the three reactors?

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that's, that's the concern. You understand that?

DAVE SKEEN: Yeah. We got you, John. We'll take a look at that.

right. JOHN MONNINGER: All So, SO there's some pretty significant discussions going on still with just being able to get train 1, you know, into the country and up, up to the site. You know, we are bringing it onto the Air Force base. You know, we are allowed to -- I'm not sure how it works, US military property or whatever -- but it is coming onto the Air Force base. And our push, our proposal is to take one or two Tepco engineers down to the Air Force base and show them this equipment, you know, and somehow hopefully get the blessing that it can now move from the Air Force base onto their country's transported up to the site, and property, be potentially be considered for use.

But I mean, there are large, or, there are

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large hurdles to be passed for the notion of, you know, proceeding with trains 2, 3, and 4 when you've got these huge hurdles with train one. They're crazy.

DAVE SKEEN: Yeah, I understand, John.

At one time, at one time, GE Hitachi had offered have them bring the system over here so that they could do some training of whoever's going to operate and install this system. Do you know that's still being worked, or are you now talking about taking the system directly to the site?

JOHN MONNINGER: Yeah, I -- you know, I'm only involved in the spent fuel project maybe five percent of the time, so I could be mistaken here.

BRIAN SHERON: Okay.

JOHN MONNINGER: Well, no, with that said, I understand that on this airlift, Air Force airlift from Australia, there are two or three people that are coming on that plane. But what was mentioned to me was they were the vendor's reps or whatever for these pumps and hoses, et cetera. So, whether the vendor is actually GE -- but it's the people who really know these pumps that are supposedly on this airplane.

DAVE SKEEN: Okay.

JOHN MONNINGER: And whether it's, yeah, so whether it's GE or that some other pump and engine

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and pipe, I don't know. But they're supposed to have the people that know what's on it.

But the other thing is, all right, so we're flying all those people up. Are they going to be sitting here for the next several days and just fly back? You know, will they even (audio interference)?

DAVE SKEEN: Yeah, good question. I mean, you can't help people if they won't take help. Right? JOHN MONNINGER: Right. Right. And, okay, so, so that's, you know, a summary of the spent

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fuel pool.

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And I, I talked to the guys, you know, tonight about, what do you want me to do with this list? I mean, you see where we are on the pumping system, and we have all you guys at Headquarters

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working on this pumping system, and I know Bechtel's been involved in it, INPO's been involved in it, and GE's been involved in it.



But, you know, so I'll move onto another topic. We also, or myself and Jim Trapp, we went to the Tepco building. We eventually went to the Tepco building when there was the final request to have us embedded within Tepco. They, they took us to their emergency command center, which we were thinking would be something akin to NRC's ops center or a licensee's EOF or something like that. This place was massive.

I mean, it was massive. I mean, they probably have the center where all the decisions are making, probably 20, 30 individuals around it, and it just tiers out with rows and rows and rows of tables with engineers or, you know, support help, whatever.

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And then behind that, teams of people working on projects, issues, whatever. There's probably 250, 300 people in that room.

Then they took me to at least one floor on the, in the Tepco building. It was a Saturday, and they were, you know, there were a lot of engineers running all over the place. They had these breakout rooms. You know, lead for that issue, lead for this issue, lead for that issue.

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So, you know, Tepco did not want to talk to us. It wasn't until probably past day and a half that we just started having our first interactions with Tepco, and actually, they significantly increased, but -- you know, they've increased by orders of magnitude

orders of magnitude

BRIAN SHERON: Well, yeah, that sounds pretty obvious.

JOHN MONNINGER: Yeah.

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BRIAN SHERON: I mean, I won't speculate at this point why, but --

JOHN MONNINGER: Yep. Yep.

BRIAN SHERON: You know, I mean, we just, we do the best we can.

JOHN MONNINGER: Yeah. So, yeah, I mean it's, we would have loved for all four systems to come into the country and to be used and to be effective, but

DAVE SKEEN: Well, John, our understanding is that the second system is headed your way tomorrow about the same time as this one today, so --

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JOHN MONNINGER: I would, I would put that at highly unlikely; it could be. So the question is, was an earlier flight for the second system scheduled for that time, or was the go-ahead?

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DAVE SKEEN: Okay.

JOHN MONNINGER: So we've got, we've got to get it into the country, and hopefully they'll look at it and say, ah, we need that.

DAVE SKEEN: Yeah, I think the Bechtel system, even if you use a concrete pumper truck to boost your --

JOHN MONNINGER: Yeah.

DAVE SKEEN: -- and whatever, (inaudible) fire cannon and hook it into the concrete pumper truck. So it's going to get you the capacity that you need.

JOHN MONNINGER: Right. Right.

So, so Chuck has had two meetings with the CEO, the CNO of Tepco. Yesterday, he, the CEO, the CNO told Chuck, the two areas that are most concern to him, where he really needs the most help with, is this

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issue of salt accumulation in the reactor and help with determining what the hell they should do with the, with their radiation fields on site. So that went to Chuck --

BRIAN SHERON: John?

JOHN MONNINGER: Yo.

BRIAN SHERON: One of the questions I've been asking, and I think everybody's scratching their head, and that is that they've found a way to pump seawater into the reactors. Right?

JOHN MONNINGER: Yep. Yep.

BRIAN SHERON: Well, where are they, where is that hookup from? Where is, where is the function coming from? And can they access it to get to, to put -- if they had freshwater supplies, could they access the suction point and hook up a freshwater supply?

JOHN MONNINGER: Yeah, and that's, that's what we said. You know, you just, it's being sucked from the, from the ocean, and they'd never said whether there are stationary diesel pumps down there or if it's a daisy chain of fire trucks, whatever. But, yeah, it's, you just switch the suction. You just pull the hose from that damn source to this tanker over here. You know, so we, it's, it's -- you know, it seems so obvious what the solution is.

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You know, and not only that, you know, the thoughts among the team is, you know, so you've had this evaporating for all these days. Well, you once you have the freshwater, you don't want to continue this, the boiling in there if there's a current concern with the salt. Do you want to consider upping the game on the pump and start flushing out the system to start to pleading the salt out of the primary system? And after you've done that for so many hours or whatever, you throttle it back to what, you know, steaming for decay heat.

BRIAN SHERON: Right.

DAVE SKEEN: Right.

JOHN MONNINGER: But, but with that, you know, they told Chuck that's his number one issues. We need help on these two issues.

Very shortly after that, went to a meeting with the Ministry of Defense. They wanted a status report on our efforts and recommendations for those two topics. They wanted our assessment for those two topics. We're like, you did guys just informed us that these are two concerns you have. You know, so that was yesterday.

Then Chuck met -- there's a problem with the days back and forth there -- but then Chuck,

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probably about 18 hours later, 12 hours later, met with the CEO and the CNO and he said, we are in need of significant dire help on these two issues.

So, Chuck is, five seconds before Chuck's strolling in, the lead engineer, or my interface from Tepco, has me on the phone. How quickly can I come down here to discuss these two issues? And Chuck's like, you've got to get down there. We've got a be working on these issues. You know, if the CNO is pushing, they have to know something. If their CNO is pushing us, actually asking for our help, they have to know something. It has to be more severe for them to really be (inaudible).

So I'm arranging these meetings with these guys. I called back to Jennifer. I get Jennifer to get, you know, so this is Sunday night, midnight -- Saturday night, midnight for you guys -- Sunday night midnight, 1:00 a.m., 2:00 a.m.

DAVE SKEEN: Right.

JOHN MONNINGER: I get Jennifer to get all these guys from GE, Exelon, INPO, et cetera on the phone for this discussion on salt. What the hell should we do with it? We get in the meeting and, and got all Jennifer's team on the web, and what do they want to do? They want to talk about the pumping

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BRIAN SHERON: All right.

DAVE SKEEN: All right. So, John, you say you going to try to set up another call to talk about salt, maybe tonight on the midnight shift again?

JOHN MONNINGER: I have told those guys, we are ready. We will meet with them whenever you want, anytime you want. I've said we would get the people back in Washington on the phone because we can always pull the Reactor Safety Team in. Whether we can get the expanded team with INPO and all that kind of stuff, you know, who knows? But I said any time of day, we will come down to your building. We will meet anyplace you want. You know, I'll let you know.

DAVE SKEEN: Okay.

JOHN MONNINGER: I mean, yeah. The other thing is we go down to the meetings now. We have to take the taxi cab into the basement garage. There's huge protesters, cameras, cops surrounding the Tepco facility.

(Off-mic conversation.)

JOHN MONNINGER: So, so that's where we

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We agree with your concerns with the Unit 4 spent fuel pool, but right now, our equipment, there's too many uncertainties to, to say go forward with the other three trains.

DAVE SKEEN: Okay. Well, we'll go take a look at the, how can we use the Bechtel system to tie into a concrete pumper truck. I really don't think that's going to be a big concern because we were tie into a fire, rocket launcher anyway.

JOHN MONNINGER: So, yeah, and they're like, how do you do that? How do you do that? I say, you put a freaking T in the system. It's a pipe. It's no big deal. I said to them, this, this system is nothing. This is basic hardware; this is basic piping. There's nothing commercial grade here. It's just industrial piping.

DAVE SKEEN: Have you seen a copy of the Bechtel system? I mean, they, they made a little engineering drawing of the whole system tied together.

Did they send that to you?

JOHN MONNINGER: There, so there was, I think that was maybe -- I've seen three different renditions. There was the original Joe Williams cartoon of it.

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DAVE SKEEN: Yeah.

JOHN MONNINGER: Then there -- yeah, then there was one, there was actually a, a spec sheet, you know --

DAVE SKEEN: Right. (Inaudible) drawing, yeah.

JOHN MONNINGER: Yeah. Yeah. The Engineering drawing, yeah. We had that out. We have shared that with them, et cetera. But they, when they came to us, you know, today in the meeting with Tapco, they said, they're talking, you know, this boom truck, boom truck; 58 meters.

Well, what happened is they, you know, they were like can this shoot up 50 meters versus 58? I said, well, yeah, it's no big deal. I said we'll, we'll check into it, but the design specs for the water cannons were 50 meters high and, I think, 100 meters out with 500 GPMs. I said, you know, if you're not telling us the 58, we think we'll be able to throttle the nozzle down to reach the 58 meters. We'll have Bechtel and all run it down. But you may not get 500 GPMs in there. But we said, we through a margin in there anyway, so we said we didn't think it was an issue.

But the whole issue with the 50 versus 58

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 wasn't for the fire rockets to reach that high. It was what they said they believed we were bringing, that they said they believed was on this flight from Australia, these super concrete pumping agitator pumps. They said, no, that was your system. There was, that was one of the options in the Bechtel drawing, but all of our discussions with you have been on the fire rocket system.

They said, well, no, we had believed you were bringing the concrete pumping truck. I said you already told us you guys have two of them in Japan.

DAVE SKEEN: Okay. Well, do the best you can. It's frustrating. It's frustrating for you. It's frustrating for us on this end too, so we understand.

JOHN MONNINGER: Yeah. Well, they got -you know, maybe it will help. Supposedly, a guy from
Naval Reactors was going to show up here yesterday. I
assume he's going to be stationed here at the Embassy.
I really do believe it will be better when, you know,
once he's, you know, potentially embedded -- I'm not
sure if he'll be embedded with the team -- but when
he, they can have more direct access to us. We can
then -- and they can really understand the situation

on the ground.

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I think it will alleviate, you know, some of the confusion or mixed messages, you know, back over there.

DAVE SKEEN: Yeah, I guess you're right. That would help.

JOHN MONNINGER: Yeah. The meetings we go -- yeah -- the meetings we go to, you know, a lot of them, we're, well, the ones we go to, we're the lead with the NRC: But you've got a huge contingent of people from the Department of the Defense going with us, Air Force, Navy. You know, DOE guys are following us around, you know, whatever. It, it's actually pretty good to have us all in the same room there.

So, and the DOE guys, they're filling detail reports, you know, summarizing all the interactions and shipping it back to, you know, to their people in Washington.

DAVE SKEEN: All right. Well, I'll let you get back to whatever you're doing there, John.

JOHN MONNINGER: All right. I'm getting ready to jump in the shower.

BRIAN SHERON: Okay.

JOHN MONNINGER: I mean, it's, besides the ops center, is the normal staff working weekends?

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FEMALE PARTICIPANT: No, but the ops center's got like 40 people in it around the clock, so, you know.

JOHN MONNINGER: Yeah.

DAVE SKEEN: If we know if we need something, if we need seismic or mechanical or structural, people will come in when we need them, but

FEMALE PARTICIPANT: Yeah, we have staff on call. We have all the experts on call.

BRIAN SHERON: You know, when I'm not in the ops center, John, I'm sitting out, I'm on a team, I'm one of four guys right now who goes around briefing congressmen and congressional staff and Lord knows who.

JOHN MONNINGER: Right. No, the reason -- and actually, we've gotten phenomenal support from you guys. I mean, all my interactions have been dealing with the ET or the Reactor Safety Team and it's just incredible support.

The only reason I, I was asking is because I get some emails from normal staffers, you know, staffers up in the Chairman's office, you know, working on various issues and they're not, you know, and I wasn't sure if the entire agency is operating

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because I'm getting these normal emails not on the Japanese issue over here but just on normal business stuff. BRIAN SHERON: Well, obviously, there's a lot of -- I mean, there's normal business going on. We haven't shut down or anything. JOHN MONNINGER: No, I'm in over the weekend. Over the weekend. I'm getting --FEMALE PARTICIPANT: No, but it's least, we're having like two, twice-a-day briefings with like all the TAs and all the EDO staff and stuff. So people who might not otherwise be thinking about work are talking to us at last twice a day too, so I think that might be part of it too, you know, from our perspective.

JOHN MONNINGER: Right.

FEMALE PARTICIPANT: So we've (inaudible) out to everybody most of the day, so I think that's sort of some of the other email traffic.

I mean, yeah. JOHN MONNINGER: mean, I don't want, I don't want to send any messages that would alarm people, but, you know, if there were any insights out there as to what would happen if, you know, the spent fuel pool does go through on the floor, you know, those insights would be interesting.

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We'd have to be extremely careful because, you know what's below the spent fuel pool. Right?

JOHN MONNINGER: The torus. The torus.

And you're going to lose all that.

BRIAN SHERON: Yeah, the torus.

So the biggest thing is what we really think the source term would be. If they're going to have a considerable source term release just from the destructive forces of everything flying, you know, what would it do to the access to the site?

DAVE SKEEN: Hey, John, one question on the source term on that, on 4, do we know when they offload the core, do they offload it in a checkerboard pattern in the spent fuel pool like the US does, or we have no idea? Would Tepco have that information they could provide us?

JOHN MONNINGER: With, without a doubt, Tepco has that information. Can we get it is, is very uncertain. Whatever the, the, however they loaded it, they are saying they need 72 tons of water per day in that one for evaporation losses. So that's the one that needs the highest capacity a day, 72 tons of water, versus Unit 2 spent fuel pool at 20 tons a day versus Unit 3 at 10 tons a day versus Unit 1 at five tons a day.

So whether that's in a checkerboard pattern or what, that gives you some insight on, on the water pool.

DAVE SKEEN: Yeah, the only thought was, we were talking about this the other day. And if it were a checkerboard pattern, you know, it may help determine whether you would have a zirc fire or continue on the loading of how they did, they did the pool, did they put all the hot fuel in one corner? Did they spread it out among the cold fuel? That was the discussion we were having here, so I was just wondering if they had that information.

It sounds like it would be hard for you to get that kind of information for us.

JOHN MONNINGER: It's easy for us to ask it, but it's whether we'll get something back. Let me write that down and we'll take it and see if we can get something.

MALE PARTICIPANT: Yeah, if there's anybody there could tell you, that would be helpful.

JOHN MONNINGER: Okay. Our team of two guys were asking, we were talking about it yesterday and we were trying to figure out whether they might know.

LARRY GELDENBERG (phon): Hey, John?

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JOHN MONNINGER: Yeah?

LARRY GOLDENBERG: Larry Geldenberg. How are you doing?

JOHN MONNINGER: Good. Good. How are you doing, Larry?

LARRY GOLDENBERG: Okay. Thanks for the briefing. Very thorough. Listen, we're sitting here talking about this situation you're describing in Unit 4, the spent fuel pool, spent fuel cooling into the core and all that.

JOHN MONNINGER: Right.

LARRY GOLDENBERG: We did an analysis called Super Core, and I'm just talking to Don Cool here, who's my PMT director at the moment. And, you know, listening to this conversation, he believes these assumptions that you're (inaudible) with are consistent with those in the super core analysis. So we have some idea of what the doses would be. I'll be honest with you, they'd be very high.

DON COOL: The calculation that we did -this was the calculation done back on Wednesday with
everybody grumbling at us about, oh, you're being
unrealistic, you're crazy, why don't you do 100
percent of the fuel in pool number 4 being melted?
But that sounds like what you're describing to me.

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Now, maybe we don't (inaudible) some of the other components. JOHN MONNINGER: Right. But the component of Unit 4 DON COOL: that we included was 100-percent fuel destruction on ଶ the Unit 4 pool if the pool was right, so you'd have an unfiltered, unfiltered release. JOHN MONNINGER: Right. 8 And then we assumed you had 9 DON COOL: 50-percent damage on the Unit 2 spent fuel pool and 10 then we had 33 percent of the Unit 2 reactor core with 11 some things. 12 So we might back out a couple of those 13 components, but what you're telling me is that the 14 assumption on 4, unfortunately, it's still too close 15 to real. 16 JOHN MONNINGER: Well --17 DON COOL: I didn't, and I didn't hear all 18 the conversation. I walked in towards the end of it. 19 20 JOHN MONNINGER: There, there is no information that we have been given that gives us a 21 22 clear assessment or insights on water levels in the 23 unit. The best thing you see is the steaming on TV. DON COOL: And no steam on 4? 24 25 JOHN MONNINGER: No steam on 4. And they

had, they had said, you know, several days ago Unit 3, they believed, was dry back on March 18 -- actually, dry? JOHN MONNINGER: Right. DAVE SKEEN: for days. JOHN MONNINGER: Right.

prior to March 18 -- but actually March 18 out here in the morning, you know, which is about 48 hours ago, has been dry. DON COOL: As of 48 hours ago? JOHN MONNINGER: Greater than 48 because that's when they would have told us. NO. DAVE SKEEN: And that's why they wanted to spray Unit 3, because they thought it may have been

But what they don't say anything about is there's been no steam off of Unit 4

Right. And they're, they told us that they're working Unit 4 also, you know, with the fire trucks and the spray systems, et cetera.

But the big thing is, you know, they can work them but they're not very effective. I mean, so why they, they've finally come that's the conclusion that the success path is this concrete auger truck that has the hose directly over top of the spent fuel pool. You know, I mean, they can shoot

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tens of tons of water per hour, but if only five or 10 percent is getting in there, it's going up (inaudible).

Well, one of the concerns is they turn the site into a swamp, but the other is just the contamination and the runoff from all this water that's not going into the spent fuel pool.

DON COOL: Well, if those pools are dry and they go to spray water down on top of spray water down on top of them, think of the steam and what you're going to release when you start hitting that dry fuel.

JOHN MONNINGER: Yep. Yep.

DON COOL: You may get rad fields so high that they can't even use the pumper trucks.

JOHN MONNINGER: Right. So I, I think -you know, I mean, Japan, they, they for years have had
a very good, you know, nuclear industry base, a very
good nuclear research program, safety program, et
cetera. My belief is they know all these issues.



They just haven't figured it all out yet, and they're waiting until they figure it all out before they were really let people know. That's my, my

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assessment.

DAVE SKEEN: Okay. John, let's let us let you go get a shower and get ready for the day. Don and I are going to go talk about this a little bit on what we think the Rad levels might be if it melts through.

And maybe if we -- you get with Chuck, and if you guys get a chance later to talk, maybe we can get back on the phone with you. Do you think you get a chance to do that?

JOHN MONNINGER: Yeah. But we've got to be very careful with that because we got in trouble before by passing up that information saying our assessment was that Unit 4 was dry because the wall's been knocked out. And then there was a big issue in the press and in the papers, the disagreement between the United States government and the Japanese government and the status of the reactor. I mean that issue, you know, it is a major issue in the press.

And then, every single meeting we went to with the Japanese, they just grilled us nonstop on the issue. And then, meeting after meeting, we would say, you know, the basis for that was we were assuming that wall was coming out. We understand that is not the case.

And five

minutes later, during that meeting, a different senior official would ask us the same damn question.

DAVE SKEEN: Yeah. Well, I'm still going to go back to we haven't seen any steaming coming out of Unit 4 since early in the event, which leads us to believe that there's no water there to steam.

JOHN MONNINGER: Yep. We agree with you. So the only thing I'm saying is, you know, we would be interested in the calculations but we've got to be extremely careful what we do with them.

DAVE SKEEN: Yeah. We'll leave that up to you, but we'll get that information for you guys to have in your pocket anyway.

JOHN MONNINGER: Yeah. Yeah.

DAVE SKEEN: All right. Thanks, guys.

BRIAN SHERON: Thanks, John.

DAVE SKEEN: Thank you.

JOHN MONNINGER: Good bye.

#### (CONFERENCE CALL INITIATED.)

02:12:51/02:37:55

(Standby.)

(Roster playback.)

BRIAN McDERMOTT: This is Brian McDermott.

I joined the bridge it separately.

JIM WIGGINS: Good morning. Jim Wiggins from the ET room. Just a quick update. Nothing negative actually happened over the night. There's a real positive statement for you.

Things, conditions seem to be fairly stable in Units 1, 2, and 3 at least in the reactors.

Five and 6 have been stable all along, so there isn't much exciting going on there.

For Unit 3 and Unit 4, it's still, they're still adding water or trying to add water to the buildings where the spent fuel pools are, the spent fuel pools are. It's arguable how successful they've been in doing that. The Tepco people using a water cannon approach on Unit 3. You get different views about its effectiveness. We haven't confirmed that that's actually been effective in adding any appreciable amount of water to the pool area. What we can see in visual is a spray that moves toward building.

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We should start seeing the Ministry of Defense folks and Self-Defense Forces resume adding water to the Unit 4 reactor building area later today.

A tertiary supply for water, the so-called Bechtel system, is, remains in an airplane in Perth, Australia. Some type of logistical issues associated with, I guess, the load-out of it are impeding its leaving Perth. We had an issue yesterday to solve that had to do with how much it cost, and that got worked through last night through another source of funding, not NRC but another source of funding at least one train of this Bechtel lashup.

So we would expect, Bechtel expects the plane to take off somewhere this calendar day, maybe within the next 12 hours or so. It would have to arrive in Yakota and get picked up by the defense forces, and they have to get it to the station. They'd have to get it erected. There's some training necessary in order to assure that the forces are able to use this. The, the equipment is coming along with two techs -- two techs are accompanying the equipment; I guess maybe I should put it that way -- to assist the forces in how to set it up and get it working. That's still, that's still in progress.

The Reactor Safety Team and the Site Team

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in Japan and Tepco and some others were talking last, through the evening about some concerns Tepco has that are basically how you set conditions in the facility via this system. Things like how stable does the ground need to be? How to put in pumps? Things like that. So that's, that's -- and they may need some other equipment, like a crane or something like that. That's still working on the Japanese end.

Tepco is making progress in getting power back to the facility. Yesterday, they got power into Unit 5 and they were able to start an RHR pump in Unit 5.

They, their priority now is getting -they got a line into Units 1 and 2. They're going to
see what they can get out of that, and they're going
to run cables to 3 and 4 and see what they can get out
of that. We don't want to put too much hope in those
things because you may be able to get power to the
building, but particularly when you talk about 3 and
4, with a lot of the destruction in the building, it's
not clear what is usable in the building. There is
some hope, though, that the power might at least
provide some additional instrumentation and get a
better look at what's actually happening. More to
come on that as the days move on.

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We got some dose rate information. We got this from NEI, so this, there appears to be some pretty reasonable industry connections that we've been able to get some information from. They're reporting dose rates around the facility are generally trending down. So the measurements at the gate area and things like that are all dropping.

the off-site. In terms of we've constructed a, a source term with some assumptions that are, are being run that right now by NARAC, and it's responsive to the White House request that followed the president's speech in the Rose Garden the There, there was a request for a, a other day. So we've agreed on what worst-case worst-case run. We have a source term that both DOE, NARAC, means. and NRC agreed to, and that's being run now. intent is to get the results and send it up to the White House,

I believe the president's statement was more general, like, I wouldn't expect levels -- he

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 didn't say you would get nothing. He said that you wouldn't get levels that would be harmful, more along that area. So I, I think that this should come out okay in that regard.

The weather is, the wind direction is changing. It's moving down towards south. It had been to the Southwest, so we're going to keep an eye on that. That was part of a forecast that we knew as early as yesterday that the wind direction was moving down towards the south.

We're continuing to support our guys in Japan. The principal focus of the discussions has been on this so-called Bechtel system and the logistics and the setup required for that. There's also been a couple of the questions -- it looks like Tepco's been interested in enlarging the hole in the Unit 2 secondary containment, and our guys are working on a request from Tepco to figure out a way to enlarge the hole without causing sparks and things like that. So they're looking at some potentially other ways of cutting. I heard tell of a water jet or something like that. But that's being worked.

And we had a meeting yesterday with a number of industry representatives to look at the standing up of an industry consortium, is how it's how

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this.

they're being referred to, that would provide an industry-to-industry support to the Japanese. That meeting seemed to be viewed as successful from our side. It does look like there is some interest from industry in doing particularly out of INPO. And it looks like INPO is taking or trying to take a, a lead role in the, organizing this consortium activity. If that could come to fruition, it would be helpful because it would actually put people who are in, who are experienced in implementation of things in the field and engaged. doj about We a good engineering and deciding whether it's safe or unsafe, but where a little short on skills when it comes down to logistics and actually what does it take to put this stuff in place. So that would be a good, a good addition to the overall US strategy to help, to help Japan get, get out of this situation or at stabilize it. And that is it for this morning. questions? FRANOVICH: Jim, this MIKE Franovich. Good morning. JIM WIGGINS: Hi, Mike. MIKE FRANOVICH: I've got one question on **NEAL R. GROSS** 

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Unit 3. We're hearing some reports about, containment pressure has been going up and Tepco has been interested in venting the containment. pressure supposedly is near 50 pounds, but it's, they apparently have a need or some urgency to vent. Do we have any more on that? JIM WIGGINS: I think we, I don't know where, where -- what's your sources so we can check the sources? MIKE FRANOVICH: This morning, reported on NHK News directly from Tepco, wasn't clear why they, why they need to vent other than the mention about pressure. So --JIM WIGGINS: Yeah, we something of that too. you know, checking that out. MIKE FRANOVICH: Yeah,

have heard The Safety Team is on that,

it would make because of the weather conditions, that you wouldn't want to vent at this time, but --

JIM WIGGINS: That's, I don't, we could get into a debate on that. Right? It depends on the It depends on why they're doing it. pressure. have to decide whether you want, can you save the containment or whatever. But probably more to come.

MIKE FRANOVICH: Exactly.

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CHRIS MILLER: There's also a news -- this is Chris Miller -- there's also a competing news source that's saying that they've decided they didn't need to vent. And so we're still trying to track down the ground truth on what they're doing over there.

MIKE FRANOVICH: Right. Thanks, Chris. I appreciate that.

CHRIS MILLER: Sure.

Struggle, Mike, through this whole evolution. Part of it is somewhat connected to the time difference when we can actually get to our people. It's not the same as, as the, it's not the same emergency response that we drill. You know, typically, even if you have three time zone differences, you're still in the same ballpark. But having people awake and asleep on different cycles impedes our ability somewhat to communicate the team. It forces us either to do work on night shifts or wake up the team.

We've also had continual challenge getting reliable information from Tepco over the course of this. That's why it seemed to me pretty interesting that NEI has been able to get stuff. They may be using some type of an industry connection that is, that the spigot is further open on than for us. You

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know, we, we might be hearing something from Tepco or getting stuff from NISA, and industry might have a more direct route. So we'll see that where that comes up.

MIKE SNYDER: Jim, this is Mike Snyder.

Could you please let me know the dose rates that -you said they were lower at, at the gate. Do you have
what those lower rates are on that?

JIM WIGGINS: All I have is what NEI is reporting. It's very important to understand that this is from NEI. I'll just read you this paragraph about it.

"NEI reports that dose rates around the Units 3 and 4 are reducing. It was 40 REM per hour. It's now 15 REM per hour around the units immediately. Dose rates around 5 and 6 are about 100 MR/hour. Dose rates near the power block range from 1 to 5 R/hour. The site access gate was reading 60 MR/hour," which is about 4,000 feet from the plant.

"Winds continue blow the to from northwest, so the plume is going up to sea." So, as we said, that's swinging around. "A dose rate was recorded to be 12 MR/hour at 0.20 kilometers inland All other dose rates 20 to 40 from the plant. kilometers from the plant are marginally above

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background." That seems to work with our aerials too.

So, and there was a report of low-level radioactive materials detected in spinach and milk, depending on wind direction.

MIKE SNYDER: Thanks, Jim. That sounds. really helpful. I saw from this morning's updates that, that I guess you got -- this talked about that there was a higher level in the northwest quad, then

JIM WIGGINS: Yeah. At the beginning of the event, the wind was blowing toward the northwest. So, if you look at the AMS, the aerial monitoring system stuff, you see this pattern of higher, higher deposition essentially going northwest from the facility. But, you know, when the winds screwed around a blew westerly, it started blowing offshore and that stopped.

Yeah, that, that's how I understand, that's what the PMT people said has been going on over time. So what you see up in the northwest is a result of the initial part of the event.

MIKE SNYDER: And on last night's phone call, they said they were hoping to get some more data from the DOE. There, I guess there was supposed to be another flyover yesterday, which was last night our

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1	time. Do you think you can, I guess confirming
2	those dose rates or, or it's slightly lower too?
3	JIM WIGGINS: PMT says we haven't gotten
4	additional information yet. We'll check it out.
5	MIKE SNYDER: That, that would be great
6	for this evening's call because, if you could get
7	that, that's something my Commissioner was asking
8	about.
9	JIM WIGGINS: I think, yeah, but you
10	should certainly alert your principles about the wind
11	change: That's something they need to be, need to be
12	cognizant because that, you know, for a large part of
13	this event, it's been blowing offshore.
14	MIKE SNYDER: Right.
15	JIM WIGGINS: So now that things are
16	changing a bit, let's see what the effect is.
17	Luckily, though, I think the, there's not
18	a lot of motive force for the release now. Things
19	are, you know, substantially calming down. Nothing's
20	blowing up a steaming as we speak.
21	MIKE SNYDER: Yeah. I guess, then, as
22	Mike brought up, there may be a potential that there
23	may be some venting today on Unit 3.
24	JIM WIGGINS: Yeah. Yeah, I think if they
25	were our licensee, you would go through am, their
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severe accident management guidelines. And you would at some point vent when you have problems, you know, if you decide to vent to save the containment, rather, do it in a controlled way to stop it, rather than have the containment fail in an uncontrolled way and you can never stop it. That's generally, as I understand it, the management guidelines approach.

I don't know that Tepco has in mind.

MIKE SNYDER: Thanks, Jim.

LARRY CAMPER: Hey, Jim, Larry Camper.

Good morning.

JIM WIGGINS: Hey.

LARRY CAMPER: Yesterday afternoon, on this wind issue, the forecast was for it to go clockwise blowing south, perhaps southwest, but then there was a 12-hour cycle and it was supposed to go out to sea. Is that still the same?

JIM WIGGINS: Do you know about that?

FEMALE PARTICIPANT: We just, we have information on the wind forecast at Fukushima. It's beyond shore. Wind direction is primarily from the southeast between 7:00 a.m. and 7:00 p.m. today. So it appears that it's moving -- it's going towards the south currently, but it's on shore during the day and off shore at night, so it's alternating.

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1	LARRY CAMPER: Yeah, I thought it was
2	going to cycle back around for 12 hours and then go
3	back to sea. I was just curious.
4	JIM WIGGINS: Yeah, it sounds like what's
5	happening, Larry.
6	LARRY CAMPER: Um-hmm. I
7	JIM WIGGINS: You know, like yesterday,
8	you should have fixed while you were here.
9	LARRY CAMPER: I'll try to do it today.
10	Okay?
11	MALE PARTICIPANT: Okay. Not from a
12	remote control. You have to be on watch.
13	LARRY CAMPER: Thank you.
14	JIM WIGGINS: All right. Anything else?
15	PAT CASTLEMAN: The SITREP says that
16	there's steam coming from Unit 2 secondary
17	containment. It also says that the spent fuel pool is
18	under a hundred degrees C, so it makes me wonder where
19	that steam's coming from. Is it coming from the RCS?
20	Do we have any idea?
21	JIM WIGGINS: We'll check it out.
22	PAT CASTLEMAN: Thanks.
23	JIM WIGGINS: Yeah, (inaudible) update is
24	right. We'll check it out.
25	DAVE SKEEN: There had, there had been
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4	reports of an RCS breach on all three of those units,
2	and it was difficult to get that information. This is
3	from several days ago, so I
4	JIM WIGGINS: Yeah, but not a containment
5	breach. The only containment problem in Unit 2 is
6	that loud noise down in the torus area that we
7	DAVE SKEEN: Yeah.
8	JIM WIGGINS: it's real speculative as
9	to whether that's actually anything at all. 's,
LO	again, we're in this void of information.
11	All right, we'll check. Sometimes these
L2	updates, we met some things when we update them.
13	PAT CASTLEMAN: Yeah. The next question I
L4	have, where is our team in Japan? Where are they
L 5	located? Are they all together or are they dispersed
ιe	in various places?
١7	JIM WIGGINS: Who? The Japan team?
18	PAT CASTLEMAN: Yeah.
۱9	JIM WIGGINS: Well, my understanding is
20	they're all in the Tokyo area.
21	PAT CASTLEMAN: Okay.
22	JIM WIGGINS: I, I haven't heard of anyone
23	taking an excursion up to the facility or anything
24	like that.
25	PAT CASTLEMAN: Okay. And then last
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question I have regarding that NEI statement about radiation levels, I've gone on NEI's website. I can't find it. Could you send us the link to it?

JIM WIGGINS: This, I got this in an email from this morning from Virgilio, who got it from NEI, so it may not be a link to anything.

PAT CASTLEMAN: Oh, okay. Okay. If it would be possible, could we have a copy of that? It sounds pretty comprehensive.

JIM WIGGINS: Okay. We'll, we'll work on that.

PAT CASTLEMAN: Okay. Thanks.

JIM WIGGINS: We'll have to figure out how to -- I've got one sheet here that we can send to, but we'll have to get the liaison people to figure out who "all you" are. But we'll do it. We'll do it. We'll figure it out and forward it to the offices.

PAT CASTLEMAN: Okay. Thanks.

JIM WIGGINS: Okay? But, yeah, it's got to, this is the best available information, and it may change. We may get more refinement and trying to put enough caveats in here to -- you know, we've got to be careful about swearing on a stack of Bibles about some of this stuff because the sources, the sources are a bit insecure if you know what I mean.

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PAT CASTLEMAN: Oh, yeah. Understood.

JIM WIGGINS: Okay. But we are hearing from the team, any information that things aren't what, you know, are way different than the understanding -- if you catch my drift -- the team doesn't seem to be raising concerns about Tepco having it way off or anything like that.

The last debate had to do with -- and it's almost not a, not a big difference. It's whether there was water, whether there was water in the spent fuel pool in 4 several days ago. When you're talking about water, they're not talking about a full pool, they're about some water.

This was around the time when the 5-mile PAR for US citizens came about. We could not, we could, we weren't comfortable taking a position that there was any water in it. And if there is any water, it's so low that it doesn't make a damn difference. So, you know, that's the only real deviation that I've heard through this whole thing that the team has pointed out.

So, we'll get you this thing and you can, you can, you can look at it.

BRIAN McDERMOTT: Hey, Jim, this is Brian McDermott. I think one of the things that folks are

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1	seeing when they're looking at the status sheet
2	remotely is they say things on here that we've put
3	down, information like from the team, and people
4	should understand, that's what the counterparts on the
5	ground are telling our team. Our team has no way to
6	really validate that information, such as the hundred
7	degrees Celsius. There's no independent element to
8	that information.
9	PAT CASTLEMAN: That makes sense. That's
10	very helpful. Thanks.
11	JIM WIGGINS: All right. Anything else?
12	(No response.)
13	Okay, hearing none, thanks a lot. We'll
14	get this sheet to you guys.
15	MALE PARTICIPANT: Thanks, Jim.
16	JIM WIGGINS: We'll send it at least to
17	the four offices. Okay.
18	PAT CASTLEMAN: Thank you.
19	MALE PARTICIPANT: Eight o'clock tonight?
20	JIM WIGGINS: I presume so, yes.
21	MALE PARTICIPANT: Okay. Thanks.
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#### (CONFERENCE CALL INITIATED.)

02:38:29/02:58:02

(Standby.)

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(Roster playback.)

BRIAN SHERON: Good evening. This is Brian Sheron from the ET director for the evening shift here. I'm going to go through real quick just an overview of where we are with everything, and then I'm going to let the two team directors give you a more detailed briefing in terms of the work they've been doing. And then we'll open it up to questions.

First off, our priorities remain about the same, which is continued assessments of the radiological conditions, dose projections, protective action recommendations going on over there. We're providing technical assistance to the US ambassador to Japan as well as the Japanese government, NISA. And then we're coordinating with a number of other agencies as well as the industry in their initiative to help the Japanese cope with this event.

With regard to the status of the units, it's pretty much the same. I'm not going to go through in detail. They've got seawater cooling to Units 1, 2, and 3, the reactors.

The spent fuel pool in Unit 1 -- right

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They've been spraying water on a number of the units.

The pools that we're worried about right now or on.

Units 3 and 4. In Unit 4, we, we do not see any steam coming off of the pool from the top of the building, which would imply that the pool is dry and there is no water. We just heard on the news that Tepco was focusing now on Unit 4, and I think they had four attempts or something today to put water, to spray water into it.



The utility right now is still trying to hook up electricity, off-site power to the units.

They've been working on that. They've got, I think

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off-site coming into one side of -- what was it, a switch gear room or something? MALE PARTICIPANT: Yeah, I think so. BRIAN SHERON: But they still need to run some more tests and everything. And it's not clear that this off-site power that the equipment supposed to energize isn't damaged and whether it's even operable. So there's a big question mark there. Let's see. I think we're, we're chasing a couple items. One is we're, we had got some reports today that there was some contamination measured in Japanese tap water and so we're going to try and contact Jack Foster over with the NRC team in Japan to try and track that down and find out what the details

And we've got some new AMS data, finally, they came in this afternoon, and Don Cool's going to talk a little bit about that.

I think that's probably about it. Let me turn it over to Dave Skeen real quick.

DAVE SKEEN: Yeah, thanks, Brian.

As Brian said, as far as the status on the plant goes, we think Unit 1, 2, and even Unit 3 reactors are fairly stable at this point. fuel pool that we're concerned about on Units 3 and 4.

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are.

Unit 3 spent fuel pool has been our priority 1 for some time now. However, it seems they've had some impact by spraying water there for the last few days, and they've now switched over to Unit 4.

Unit 4 is probably a close second if not our first priority tea at this point. The spent fuel pools there -- as Brian said, we've seen no evidence of steaming there for some time, and we believe that the event that they had, that they characterized as a lube oil fire in Unit 4 to us, still appears to be more of a hydrogen explosion in that building to, to cause the damage that it did.

And so we've asked with the PMT and we worked with them this afternoon. We correlated some data that Don can talk to you a little bit more about. But it seems like there was some material released shortly around this supposed lube oil fire that was reported in, in Unit 4.

So it's becoming more of a concern for us at this point. If that's been dry all this time and there's no water there, it, it is a concern.

What we're going to try to do over this evening and probably to the midnight shift is look at potential concrete core reaction kind of calculations

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to see what that might do if it melts through the fuel pool in Unit 4 and what the consequences that would be.

I think Brian did mention when he talked about the pumps from Bechtel, you'll recognize that, as a pumping system that they designed, if it's not single pump, it is three pumps per system. And one system is on the plane, so those are going to leave for Australia at 11 p.m. this evening our time in route to Japan.

The plan, at least as far as we've heard so far, was that a second train of cooling systems from Bechtel could be ready tomorrow evening to leave about the same time, 11:00 p.m. There was some conversation with folks on the ground in Japan from our NRC team that said they may not want to ship that one right away. But we said we would leave it to them and the State Department to figure out if they wanted that second system or not.

So I think, with that, that's about all from the Reactor Safety Team. I'll turn it over to Don from the Protective Measures Team.

DON COOL: From the Protective Measures

Team, as was noted a minute ago, we have now gotten an

updated plot of aerial measurement data. They have

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been flying at least one or two sorties every day. At this point, some 12 flights over the last few days have been taken.

So you have lots of cross-links back and forth, both the surfacing pattern and the lat-long, north-south runs. That continues to show a band of higher contamination stretching northwest from the plant with dose levels measured, which would be in the 20 to 30 MR per hour range, meaning that the evacuation PAG level of 1 R over four days is exceeded in those areas.

There are a few others spots which would have some elevated area, but for the most part, the other ones are at levels which are below any of the protective action guideline's dose rates. So, in essence, the radiological conditions have not changed that significantly the last day or two. Those remain about the same.

We understand from the data that we cannot confirm from NISA, reported through DOE, a situation report that some of the dose rates around Unit 3 have come down a little bit, perhaps also supporting that the water they've been spraying on the Unit 3 pool has been helping, bringing it down from -- let me find the right page there -- I don't have that at the moment.

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But it's still very significant dose rates, close to 300 MR per hour, but instead of 400 MR per hour, 300 MR per hour. So it's still a statistically significant drop over that period of time.

As was mentioned a minute ago, we are trying to follow-up on double reports, the reports in the media associated with iodine being in the tap water in Tokyo, some iodine in milk samples in some of Fukushima, and levels the areas west of contamination in some of the spinach. They say that those measurements exceeded their action level, but we don't know what they measured, we don't know what their action level is, and we don't know what their So we are attempting to follow up on actions are. those points to see if we can get a bit more information on that.

And that concludes this report.

BRIAN SHERON: Okay, so that's our status summary now. So I'll open it up to questions.

BILL ORDERS: Brian, are you entertaining questions now?

JIM WIGGINS: Yes.

BILL ORDERS: This is Bill orders. Just a couple questions. I noticed on Unit 2 that it looks like, containment pressure looks like 1.25 atmosphere.

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That would indicate it's intact; right? I would think.

DAVE SKEEN: Yes, that's what we're hearing right now, that they do believe that containments are, I mean the primary containments on 1, 2, and 3 are intact and holding pressure.

BILL ORDERS: That's good news. On Unit 4, when they spray, are they getting any steam when they spray, or any water getting in?

DAVE SKEEN: We haven't seen any video of what they're doing on 4. I know when they spray on 3, you can see steam coming off, off of there when they were spraying, so we thought that was a good sign. But I haven't seen any video of what they're trying to do on Unit 4 right now.

BRIAN SHERON: We don't, we don't know very much about the status is of the pool in Unit 4. You know, as they were saying before, you know, if it went dry -- and Unit 4 had a full-core offload on it, so it was fairly, still fairly hot fuel.

If that fuel melted after the pool went dry and started interacting with the, with the concrete on the floor, you know, the worst situation is it goes through, and then it's going to fall down to the rooms below, which is where I think the torus

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1	is. So it's, it's really hard to tell.
2	but we can't really discern
3	anything from, from that either.
4	BILL ORDERS: What about the dose rates on
5	4?
6	BRIAN SHERON: I'm sorry. The what?
7	BILL ORDERS: Dose rates.
8	BRIAN SHERON: Oh. We don't have any.
9	DON COOL: We don't have any particular
10	information on Unit 4, so.
11	BILL ORDERS: All right. I'll stop with
12	just one more question. Units 5 and 6, for a while,
13	they were reported as offloaded and now they appear to
14	have cores on board and increased well, at least
15	pressure inside the vessel. Are we concerned about
16	that?
17	DAVE SKEEN: No. I think, in 5 and 6,
18	they've restored power. Word is they're getting
19	power. And they, they didn't seem to have a problem
20	with either Unit 5 or 6 right now as far as being in
21	danger.
22	BRIAN SHERON: Yeah, remember, they had a

BRIAN SHERON: Yeah, remember, they had a diesel on those units, which was powering both 5 and 6.

BILL ORDERS: When did they get that, I

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I, I think

diesel back in service? I don't recall. I don't recall either. DAVE SKEEN: (inaudible). I can find out, Bill. If you want to know that, I can try to get that. That's okay. If it, if it BILL ORDERS: comes out in another report, that's fine. DAVE SKEEN: Okay. No problem. BILL ORDERS: But we're not concerned about 5 or 6. DAVE SKEEN: Not at this time. our biggest problem right now is the Unit 3 and 4 fuel pools. And if it's true, what we believe, on 4 could have happened, 4 might be our number one concern, even over number 3 right now. BILL ORDERS: I would think if your worst fears, meaning that the, the spent fuel pool is dry and melted, we would have a big heat force signature and a huge radiation source. Well, they're getting high DAVE SKEEN: I mean, you know, again, we don't have rad levels. specifics other than reports we see coming out of And they won't tell us the Tepco down there. radiation levels. But, yeah, you know, we're just doing the best we can to follow the information we

think was the Unit 6 diesel, when did they get that

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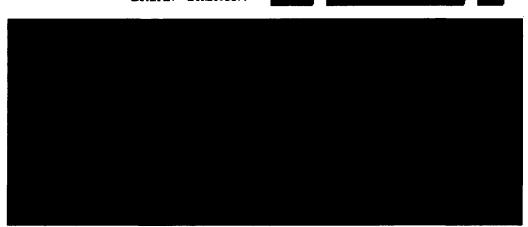
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BILL ORDERS: I understand. I'll stop now.

MIKE FRANOVICH: Hey, this is Mike Franovich. Just to bring closure to the pool issue on Unit 4, I heard yesterday that the Japanese were doing their own thermal imaging and had done some type of flyover while thermal imaging each of the four units -- I don't think the 5 and 6 were done -- but the four units in question.

Are they sharing that info with the in-country team? Are we actually seeing those results, or are we just relying on their summary of it?

BRIAN SHERON:



MIKE FRANOVICH: Okay. Thank you.

BRIAN SHERON: Any other questions?

MIKE FRANOVICH: This is Mike Franovich

again. Just one more question for Don Cool.

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The aerial monitoring that, the data stream that's coming in now, the stream that's coming in, does that capture the time when the wind shifted onshore?

DON COOL: Yes, it does. Yes, it does. What we are getting is sort of a continuously built-up accumulation of surveys. So what you have is a survey which shows you the deposition that's accumulated over time. It very clearly has that plume of increased deposition to the northwest of the facility, which correlates, we believe, actually very nicely, to the time of the lube oil fire -- I will put that in quotes; that's what Skeen was saying moment ago -- and the damage at the Unit 4 secondary containment in the spent fuel pool.

Without going to too-far speculation at the moment, it would appear that a good amount of the volatile radioactive material that might have been in that spent fuel pool is now laying on the ground in the 13-plus miles northwest of the facility.

Part of what we're trying to understand a little bit more is whether there's any other correlation to weather data. As you probably are aware, the weather did not blow in that direction too often, and it's quite remarkable that you had that

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event starting at 6:00 a.m. and you had the wind blowing in that direction at 6:00 a.m. for about the next six hours, and then it was switched back out to sea and the dose rate went down after that.

MIKE FRANOVICH: All right. Thank you very much. I appreciate that.

BRIAN SHERON: Okay, if there's no further questions, then, you know, I want to thank everybody for, for calling in. And, and we'll sign off now.

MALE PARTICIPANT: Thank you.

MALE PARTICIPANT: Thank you.

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1	(CONFERENCE CALL INITIATED.)
2	02:58:04/03:29:00
3	MARTY VIRGILIO: Charlie Miller, are you
4	there?
5	CHARLIE MILLER: This is he.
6	MARTY VIRGILIO: Okay, Charlie, we're just
7	waiting for Mike to join the bridge.
8	CHARLIE MILLER: Okay.
9	MARTY VIRGILIO: The short story is we
10	have a meeting down at the White House tomorrow
11	morning at 8:30, and I'm thinking that either you or
12	Mike ought to represent us based on my conversations
13	with the Chairman's office.
14	Mike has got the duty here tomorrow on day
15	shift and of
16	CHARLIE MILLER: So am I.
17	MARTY VIRGILIO: Oh, our logs show that
18	Mike is on at 7:00 a.m.
19	CHARLIE MILLER: No, I'm the ET. We'll
20	have two people on at once.
21	MARTY VIRGILIO: What you mean we have
22	I'm sorry; I'm confused.
23	CHARLIE MILLER: Okay, Mike
24	FEMALE PARTICIPANT: He's doing it and

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Mike is on --

MARTY VIRGILIO: Okay. Okay. (Simultaneous conversation.) MARTY VIRGILIO: All right. All right. Well, good. So you're already aligned to be here on dayshift. CHARLIE MILLER: Right. MARTY VIRGILIO: So it's a matter of whether we have you here at the table or we send you 8 g downtown and find somebody else to sit at the table. 10 CHARLIE MILLER: Okay. MARTY VIRGILIO: And as soon as we get 11 12 Weber on the line, we'll talk to him too. 13 (Standby.) MIKE WEBER: Mike Weber's here. 14 15 MARTY VIRGILIO: Michael, good evening. 16 CHARLIE MILLER: Hey, Mike. 17 MARTY VIRGILIO: Hey, sorry to bother you. 18 And Charlie's on the line too. 19 CHARLIE MILLER: Hey, Mike. MIKE WEBER: Hi, Charlie. 20 21 MARTY VIRGILIO: Based on my discussions 22 this afternoon, as I was coming in with the Chairman's office and Josh Baskin in particular, Josh has 23 24 expressed, on behalf of the Chairman, an interest that 25 we engage at a high level -- and I'm thinking that's

either the Office of the Director or DO level, at a White House-hosted meeting tomorrow at 8:30 to discuss what are or what should be the assumptions that we're using for the calculations on, on consequence.

And I just wanted to --

MIKE WEBER: In terms of the source terms or the --

MARTY VIRGILIO: Yeah. And we've been working for the last couple of shifts just trying to figure out how to approach this. I think we've on an approach now where we're giving sort of a realistic worst case given the situation in spent fuel 2, spent fuel pools 3 and 4 and then the bounding worst case, which could include reactors if things go wrong.

> MIKE WEBER: Right

#### MARTY VIRGILIO

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And Don read me the long list of people that are going to be there.

Right now we're lined up to send technical expert, but the Chairman's office is asking if we can -- plus, you know, the technical experts plus a senior level management to go nose to nose with Aoki on a position that we believe is the right

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position in initial conditions and assumptions for the analysis.

Let me let John give you just a little bit more what we're doing on the approach.

JOHN: Hi, Charlie, Mike.

CHARLIE MILLER: Good evening.

MARTY VIRGILIO: We've been in this ongoing back-and-forth where we've have had -- dare I say criticism; I'm trying to be nice -- some real angst apparently by folks about what went into the source term, why we made that assumption, and while we have tried to patiently explain it back and forth, there seems to be at least still some mixing of what we did as a realistic worst case, which has some of reactor 2, all of spent fuel 4 and half of spent fuel 3 in order to try and do our protective action. That was the base for the press release that went out on Wednesday.

And then what our answer was

which was, we nicknamed the melt-core setup, which included contributions from reactors 1, 2, 3 and all four of the spent fuel pools.

Now every shift that I coming here, I keep thinking I'm going to be told that NARAC will have run

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 the melt-core worst-case model

for the trans-Atlantic calculation, to see what the deposition might be in the United States.

And every time I come in here, they're asking us questions and they haven't run it yet.

JIM WEBER: Gee.

MARTY VIRGILIO: While we have been in the TA bridge until a little while ago, my folks back in the Protective Measures Team have been engaged in yet another conversation, and I don't know where it actually stands at this moment.

But the call that, the meeting tomorrow is to talk about

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ships. EPA and others want to know what to expect on the West Coast. HHS wants to know what kind of levels in order to make recommendations on whether or not they should actually recommend potassium iodide at

DOD wants to know where to move their

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some point. And it goes sort of on and on.

I would hope that

success would be that in the end, there is a (inaudible) agreement high enough up that my folks wouldn't continue to bang their heads against the telephone back and forth with folks at our level about what assumptions are, and they would actually do some calculations for us.

That's, that model of success was exactly what was communicated to me by Josh from the Chairman.

MIKE WEBER: Marty, have we, has anybody spoken to Steve?

MARTY VIRGILIO: Aoki? No, not since, not -- I don't know when the last time -- Aoki has been on a couple of the calls that we have been on from the Protective Measures Team area as we have explained what we were doing and the process that we were going through.

> MIKE WEBER: And Don,

We have provided him at MARTY VIRGILIO: least three and four times that I've been personally

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involved in.

CHARLIE MILLER: Mike,

MIKE WEBER:

CHARLIE MILLER: Yes.

MIKE WEBER: So he knows about that request.

CHARLIE MILLER: Right. Now, but as I remember, he was, he was waffling on what they wanted him to do there. Waffling is not the right word. He seemed to have angst about doing that. So maybe that's what's holding this up. I don't know.

MIKE WEBER: Yeah. Yeah.

MARTY VIRGILIO:

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Can we just get

one worst-case and put it on the shelf?

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MARTY VIRGILIO: Right. Right. CHARLIE MILLER: Right? MARTY VIRGILIO: Right. if CHARLIE MILLER: And something's changed and that's not what they want, okay, but we all need to be aligned on what it is we're trying to achieve. MIKE WEBER: When was the last time we spoke to Steve? John? MARTY VIRGILIO: Steve may well have been 10 on the call that my PMT folks have been on for the 11 last hour. 12 MARTY VIRGILIO: Oh, okay. 13 He was on the email that set up JOHN: 14 that call that started at 7:30. I've been in here 15 with the ET as we did the press and the TA brief, so I 16 have not had a chance to find out from my folks what 17 the latest was in that phone call. 18 19 CHARLIE MILLER: If, if you're getting 20 angst about moving naval ships and things like that, 21 the worst-case scenario isn't necessarily the one you 22 want to run. MARTY VIRGILIO: Right, Charlie. 23 what we're all thinking, that there's, you know, you 24 run at least two cases. 25 **NEAL R. GROSS** 

CHARLIE MILLER: Yeah. MARTY VIRGILIO: Where, where are you 3 today with Units 3 and 4 spent fuel pools. CHARLIE MILLER: Right. 5 MARTY VIRGILIO: And what if that goes bad? And then the other worst-case, then that would rap in the reactors as well, notwithstanding the fact 8 that those reactors appear stable at this point in 9 time. 10 CHARLIE MILLER: Right. So I quess the question is what, you know, what is it that they want 11 I mean, do they still want this worst 12 13 worst-case? If they want to scrap that, that's fine. You know, we just need to know where we're headed 14 15 because it doesn't seem like we can ever get this 16 worst-case run. 17 JOHN: Yeah, it's not only what is it they 18 want but it's almost as if we want to influence what 19 it is they want. 20 CHARLIE MILLER: Yeah. 21 MIKE WEBER: Well, we ought to be able to 22 agree on worst-case is. MARTY VIRGILIO: Yeah, I would think so. 23 It would situation right now. 24

MIKE WEBER: Yeah.

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긔	MALE PARTICIPANT: We have Bruce Watson		
2	scheduled to go down tomorrow morning as a technical		
3	expert. He's been here during the day with a bunch of		
4	us when much of this was developed going back for to		
5	three or four days ago when we did the worst-case		
6	scenario. So he's prepared to go. He will be going.		
7	MIKE WEBER: Charlie, are you on shift		
8	tomorrow?		
9	CHARLIE MILLER: Yeah, I'm on, I think,		
10	with you at 7:00 a.m., Mike.		
11	MARTY VIRGILIO: You're both on the, the		
12	dayshift, so it sort of works out in a way.		
13	MIKE WEBER: How so?		
14	MARTY VIRGILIO: Well, we don't have to		
15	pull one of you out of bed in order to do it.		
16	MIKE WEBER: Oh, yeah, yeah.		
17	CHARLIE MILLER: Yeah, that's encouraging.		
18	Yeah.		
19	MIKE WEBER: Charlie, you have the		
20	continuity on this. Are you comfortable going down?		
21	CHARLIE MILLER: I don't mind going. Oh,		
22	what I would need, though, by morning is when I get		
23	in, I'd have to get, you know, a quick brief on what		
24	it is that the PMT wants me to present, having the		
25	work that they've done over the weekend.		

And then I could carry the water for what we think also is what we would tell -- we've given them what we think is the worst case. Right? Don?

DON COOL: I'm sorry. What?

CHARLIE MILLER: We have given, we have given NARAC what we think is the very conservative worst case

We gave them the input parameters; right?

MARTY VIRGILIO: That is correct. him And that's the one that -- so I could take that one and I could take anything you want me to have with me with regard to realistically what we think we should be doing for a run to meet those other needs with regard to real protective actions.

MIKE WEBER: Yes.

MARTY VIRGILIO: Yes. That's quite correct. We can, we can set up a set of things that you can describe to them. None of that will be new in terms of the two sets of cases that we have provided to NARAC. We are also meeting tonight with the RST trying to look at whether there's a slightly more realistic, where we back out the reactor, whether we would make any modifications to our assumptions on spent fuel 3 and 4.

CHARLIE MILLER: Right.

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MARTY VIRGILIO: But that's pulling on the piece of what was part of it. It's not, it's not a substantial drawback of the case because quite frankly we still think 4 is a melt on the floor in there.

CHARLIE MILLER: Right.

MIKE WEBER: And Charlie, did you see the point paper that I think Kathy Gibson worked on overnight?

CHARLIE MILLER: No. I haven't seen any of that.

MIKE WEBER: Yeah. That, as I recall reading it on my BlackBerry, has a whole series of different scenarios and it.

DON COOL: Yeah. Let me, let me explain that quickly. That got started when we said, if they, if NARAC runs the melt-core worst case, can you get big numbers on the West Coast? And what might be a more realistic way to model what might happen? And Kathy Gibson put together three different possible options for how you would do that.

There's a one-pager on that we have here, Charlie, that you could very quickly be able to go through. Kathy Gibson will be on duty from 11 to seven, so you would be able to interface with her and get the details from her on her thoughts on that if

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1	you needed to back off from the worst case that had			
2	been given to them several days ago.			
3	DON COOL: That was developed for this			
4	meeting, not knowing when this meeting was going to			
5	occur.			
6	CHARLIE MILLER: Okay. I'm comfortable,			
7	I'm comfortable going if the team is willing to send			
8	me.			
9	MIKE WEBER: Oh, yeah.			
10	MARTY VIRGILIO: Yeah. Do you want a car,			
11	Charlie?			
12	CHARLIE MILLER: I'm going to need a			
13	driver. And then something special has to be done to			
14	get access into the White House. Right?			
15	MALE PARTICIPANT: Well, what we will do			
16	is we'll have, after this call, we've got to provide			
17	certain information on you.			
18	CHARLIE MILLER: Okay.			
19	MALE PARTICIPANT: In fact, what we need			
20	to do is			
21	MIKE WEBER: Name, date of birth, and			
22	social.			
23	CHARLIE MILLER: All right.			
24	MALE PARTICIPANT: It's your state of			
25	residence, birth, country of birth, where you're			
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1	living, and date of birth and social. We'll do that		
2	on another line. We'll do that afterwards, Charlie.		
3	CHARLIE MILLER: Not on a recorded line.		
4	MALE PARTICIPANT: Yeah. And then we'll		
5	send an email down to get you on the list.		
6	CHARLIE MILLER: All right. So you'll		
7	just give me a call back on a non-recorded line and I		
8	can give you that info.		
9	MARTY VIRGILIO: I'll call you, Charlie.		
10	CHARLIE MILLER: Okay.		
11	MARTY VIRGILIO: All right, we'll arrange		
12	for a car. Let's see. The meeting is at 8:30, so		
13	what do you think? 7:15?		
14	CHARLIE MILLER: I'm sure (audio		
15	interference).		
16	MIKE WEBER: Is there also a deputies call		
17	tomorrow?		
18	MARTY VIRGILIO: That's not clear, but I		
19	assume so.		
20	MIKE WEBER: Yeah, I thought		
21	MARTY VIRGILIO: Mary Jane is looking at		
22	her notes right now.		
23	MIKE WEBER: I thought they do it at eight		
24	o'clock, except they did at 7:30 on Friday.		
25	MARY JANE: Yeah, I was thinking maybe		
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they were going to change that one because of the Commissioners briefing tomorrow.

Hang on. I'm trying to see if I've got -oh, no, that's the consortium call -- so, yeah, there will still be a deputies call tomorrow. I haven't heard that that was change for tomorrow.

MALE PARTICIPANT: All right. Charlie, we'll do all this for you, of course, but just so you could be thinking about it a little bit, the agenda is

I have it eight o'clock -sorry, Mike -- I have a deputies, deputy secretaries call, White House lead, eight o'clock your morning.

CHARLIE MILLER: Okay.

MALE PARTICIPANT: The agenda, as I was saying, is a little benign, but there's more to it, of

Marty mentioned to you that we've another a number of suggested participants. I'll just

MARTY VIRGILIO: We'll, we'll put together

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a folder for you, Charlie. CHARLIE MILLER: Okay. MARTY VIRGILIO: So when you come in, you'll have that email with a list of participants and Kathy's prefix sheet as it evolves in the next shift tonight. CHARLIE MILLER: Okay, and then I guess who's the point of contact at the White House when I get there, you know? 10 MARTY VIRGILIO: It's going to be Mosting the meeting. 11 CHARLIE MILLER: 12 Okay, but MIKE WEBER: staffer, 13 Is the coordinating this? 14 MALE PARTICIPANT is the recipient 15 of an email, Mike, from to 16 17 MIKE WEBER: Because you want whoever the staffer's name is to get it. If you get down there 18 and your clearance is goofed up and --19 20 MALE PARTICIPANT: We're sending to --MALE PARTICIPANT: 21 We're sending the information to 22 Then he's 23 MIKE WEBER: the point of contact, so you want his telephone number. 24 25 CHARLIE MILLER: Yeah, get that on there. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	(inaudible) hear the status, is it okay you need to	
2	have a rationale for that, too, for me.	
3	MARTY VIRGILIO: Yeah, that, if they're,	
4	if they're stable and cool.	
5	CHARLIE MILLER: Yeah.	
6	MARTY VIRGILIO: At least for the moment.	
7	CHARLIE MILLER: Okay, so I, I would go,	
8	and Bruce would come at my technical support. Right?	
9	MALE PARTICIPANT: That's correct,	
10	Charlie.	
11	MARTY VIR GILIO: Yeah.	
12	CHARLIE MILLER: Okay.	
13	MARTY VIRGILIO: What time would you come	
14	in here? Because it would be best to make sure Bruce	
15	was in here at that same time with you.	
16	MALE PARTICIPANT: He's in here early. He	
17	tends to get here early, I mean like 5:30 or	
18	something.	
19	CHARLIE MILLER: I can try to get in there	
20	at 6:30, Marty, around 6:30, 25 of seven.	
21	MARTY VIRGILIO: That, that should be	
22	plenty of time.	
23	CHARLIE MILLER: Okay.	
24	MARTY VIRGILIO: We'll call you around	
25	then.	
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1	CHARLIE MILLER: Okay. All right, thanks,
2	guys. Sorry to have disturbed you.
3	CHARLIE MILLER: All right, so you'll call
4	me right back on another line, right, on a BlackBerry?
5	MARTY VIRGILIO: Will do.
6	CHARLIE MILLER: Okay. Thank you.
7	MIKE WEBER: Anything significant new
8	developments?
9	CHARLIE MILLER: No. I'm going up, Mike.
0	Okay?
1	MIKE WEBER: Thanks, Charlie.
.2	MARTY VIRGILIO: Not much, Mike. I think,
١3	just for your awareness you'll get this tomorrow
4	when you come in at 11 o'clock tonight, one train
.5	of the Bechtel-designed system will be flying out of
.6	Australia on its way to Japan.
רו	MIKE WEBER: Huh.
8	MARTY VIRGILIO: And they still need that,
.9	right, because they only have a temporary fix in place
20	now?
21	MARTY VIRGILIO: We think they need it,
22	but it's not clear what they think they need. We're
23	going to ship one train at a time, it looks like.
24	We've got one stage to fly out tonight; one stage to
25	fly out tomorrow night.

1	MIKE WEBER: Okay. Did you see I don't
2	know how closely all are monitoring your email but
3	we get an email from Josh.
4	Apparently, he spoke to the deputy
5	administrator of AID. And the question posed is
6	whether we've been able to embed somebody from our
7	team in the Tepco team.
8	MARTY VIRGILIO: That's the next phone
9	call because we were there, but my sense is that our
10	team got frustrated and are of the mind that it's not
11	value added. So we'll check again. That was one of
12	the things we were going to do.
13	MIKE WEBER: Okay. It seemed to me from
14	the way the email is phrased, that the question was,
15	are we being, experiencing a barrier to getting
16	somebody in, rather than do we don't want somebody in?
17	MARTY VIRGILIO: No, I think, I think the
18	barriers are down. I think the frustration is around
19	are we getting any useful insights from, from being
20	there.
21	MIKE WEBER: Right. Right. Okay.
22	Anything else I can help you with?
23	MARTY VIRGILIO: I think that's it. We
24	look forward to seeing you tomorrow.
25	MIKE WEBER: I bet you do.

(Laughter.)

MIKE WEBER: You all take care.

MARTY VIRGILIO: All right. Get a good night's sleep. You're going to need it.

MIKE WEBER: All right. Goodbye.

MARTY VIRGILIO: Good night.

(Partially inaudible content omitted.)

(Extraneous conversation omitted.)

MALE PARTICIPANT: Then be aware that we can take super core -- in fact, when super core is run, if not run it, they (inaudible) source term most of the time because then you have to model it all on the reactor.

MALE PARTICIPANT: Right.

MALE PARTICIPANT: But we actually run it in a couple of components, the pool and the reactor. So, if we want to just take the cooling part, we've already got that working in the machine to.

MALE PARTICIPANT: Oh, that's great.

MALE PARTICIPANT: For, for us. I don't know if we've advertised the number separately, although I believe that in the process of trying to get NARAC aligned around source terms, that they have those individual component source terms as well. So there's not much secret.

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1	MALE PARTICIPANT: Yeah.
2	MALE PARTICIPANT: If we decide that more
3	realistic is to factor a reactor out of this and we
4	need half of 3 and all of 4, so be it. Then, I said
5	the thing now, looking at the correlation of wind
6	and time and contamination on the ground, is when they
7	run the system, should we tell them to go ahead and
8	run it for an event which originally happened on
9	MALE PARTICIPANT: On March 14.
10	MALE PARTICIPANT: on March 14. And
11	so, what would happen next as a bunch of volatiles is
12	no longer present either because they have decayed and
13	it's been a week or because they're laying on the
14	ground northwest of the site.
15	MALE PARTICIPANT: Right.
16	MALE PARTICIPANT: In terms of what might
17	now eventually come, should that melt core get into
18	the concrete and do something else.
19	MALE PARTICIPANT: Yeah.
20	MALE PARTICIPANT: And I'm beyond my level
21	of knowledge as the radiation biologist.
22	MALE PARTICIPANT: Yeah, I read that with
23	the radiation chemistry there or something.
24	(Off-mic conversation.)
25	FEMALE PARTICIPANT: (Inaudible)
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contaminated produce.

MALE PARTICIPANT: Yeah, I saw that, but we, but we have no idea what they measured or what their action level was.

FEMALE PARTICIPANT: Yeah.

MALE PARTICIPANT: So it might be really conservative thing. They might have found a blip on the counter and said stop. I have no idea if that's the problem. We have no idea what it was.

MALE PARTICIPANT: Directional --

FEMALE PARTICIPANT: We're just trying to correlate Unit 3 with the -- (inaudible) on Unit 3?

MALE PARTICIPANT: We think so. I've actually asked my folks to correlate each of the events with the meteorology at the time so I have, we have all of it (audio interference) for each of them

(Simultaneous conversation.)

(Extraneous content omitted.)

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#### (CONFERENCE CALL INITIATED.)

03:29:14/03:57:15

MARTY VIRGILIO: John?

DAN DORMAN: And Dan Dorman, both of us.

MARTY VIRGILIO: Oh, Dan.

Hang on a second.

John and Dan, good. Let's see, almost good morning. This is Marty.

We got a note from Josh Baskin, who was getting input from

and she asked whether we had successfully embedded somebody in Tepco, and if not, do we believe it's important and would we want the Chairman to call the Japanese ambassador and ask him his help in making that happen.

My recollection is that several days ago we got the green light to embed somebody in Tepco, and we have dispatched one of our staff, in fact, to their offices. Could you all update us on where we are?

JOHN MONNINGER: Yes. You're correct, Marty. Several days ago, we had the option to go down Tepco, and it was one of our first, you know, real interactions with them. Myself attended, and Jim Trapp.

The first thing we went to was their Tepco

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emergency operations command center, which is a very wide open, enormous, enormous room, probably double the (audio interference) entire One White Flint or even double that. And they, you know, have a center, command center with 20 managers around it. And behind that, there's rows and rows and rows of engineers and (audio interference) people and TR people, et cetera. And behind that, they had these (audio interference).

It was very, extremely busy. They had status boards but apparently nothing up on the status board (audio interference). But when you look at that, you know, we would need a full-time interpreter by our side, and the notion that to how we would actually work in there, you know, where our interface would be (inaudible) ground in there.

I mean, it was interesting to see but we didn't believe we could just drift around from table to table and, you know, and assert ourselves, you know, ask for information, plans, activities, et cetera. So that was one thing.

Then, from that, they took us up into one of the engineering floors. And this was late Saturday afternoon and they were staffed up pretty heavily in this engineering floor we were on. In addition, they had engineer at their desks all over the place. They

had these major -- not major -- multiple conference rooms for, you know, projects actually being worked on, projects (audio interference), you know, reactor pressure vessel, all that kind of stuff. And they were, they had significant ongoing activities.

The, the language barrier, and I think the lack of -- not the lack of -- the language barrier coupled with our lack of authority over here, I don't see how we could really be, you know, gain good information over there. You know, would we, you know, interrupt their team? You know, I, I don't see how it would work. So, so that with what our assessment, and that was Trapp's assessment.

they did provide a tour of the facility, and we believe tour of the facility (audio interference) operations center. I think if we had asked to be embedded, they would have accepted. our thought now is we don't see how we could really effectively that and collect do the information we want. You know, we don't have regulatory authority over here. They had a huge table of the regulators there, NISA. So that, that was really our first introduction to Tepco. And the meetings have increased, and our interactions have increased.

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172 Now we're having focused meetings For example, yesterday we had a particular topics. two-and-a-half-hour meeting (audio interference) on the spray system being transported up from Australia today or tomorrow. We, we expect, you know, another, well, today we're going to have another meeting on the But then subsequent, we're going to spray system. have these meetings with them on that salt issue and meetings with them on this Rad control access to the facility type of thing. You know, given the size of our team, et and the potential benefits οf someone embedding, I, I don't see the payback.

MARTY VIRGILIO: You're, you're comfortable about the periodic meetings that you have, it's serving the purpose and may be even more effective than just having somebody stand around the center?

JOHN MONNINGER: Oh, more effective and more efficient in terms of the use of our (audio interference).

MARTY VIRGILIO: Yeah.

JOHN MONNINGER: There's probably a lot of stuff flying around in that center which, due to the language barrier and organization, we just would not

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MARTY VIRGILIO: Yeah.

JOHN MONNINGER: And communication barriers are pretty significant. You have to go back and forth, back and forth, you know, before you're both sure that you're talking RCS pressure versus, you know, containment pressure.

So, you know, if we floated around there with an interpreter and asked questions, then she, then, you know, the interpreter may tell us one thing, but we would really need to have the authority to ask direct questions to them, to interrupt teams, to sit in wherever they, they are operating. And we don't have that authority.

If it was, you know, everything was conducted in English, I think we could be a fly on the wall and learn a lot.

MALE PARTICIPANT: Yeah. Yeah.

MARTY VIRGILIO: Okay. But -- all right.

I get it. We've got the access, but it's not very helpful.

MR. KU: It's not helpful.

MARTY VIRGILIO: Okay.

JOHN MONNINGER: That's, that's not their fault. It's the speech.

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1	MARTY VIRGILIO: Right.			
2	JOHN MONNINGER: (Audio interference).			
3	DAN DORMAN: Yeah, I would, I would be			
4	careful how we communicate that back, Marty. I			
5	wouldn't say it's not helpful. I think access is			
6	helpful. It's how we best manage that access. I			
7	think embedding is probably not the most efficient and			
8	effective way to avail ourselves of the access that			
9	we're starting to get.			
10	JOHN MONNINGER: Yeah.			
11	DAN DORMAN: Yeah.			
12	MARTY VIRGILIO: All right. Good.			
13	Okay, anything we can do for you all?			
14	JOHN MONNINGER: I don't think so. I			
15	think, I personally am very, very pleased that Dan's			
16	here. So, you know, not to stroke him or anything			
17				
18	think			
19	DAN DORMAN: That's their way of saying I			
20	haven't done anything yet.			
21	JOHN MONNINGER: But I think we have some			
22	master plans, you know, working on the management of			
23	the team. And, you know, so I it's significant			
24	vision.			
25	BRIAN McDERMOTT: Hey, John, this is Brian.			

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The, if you guys could find out, you know, maybe from
Tepco or whoever, NISA, what's the status, what is
their best estimate of the status of the spent fuel
pool in Unit 4? We talked about this earlier today.
I think it's causing some angst around
here because, you know, there's no steam that's been
seen coming out of there. And, you know, people are
worrying that that stuff has maybe melted through that
concrete floor.
JOHN MONNINGER: Right.
BRIAN McDERMOTT: And the next stop is the
top of the torus.
JOHN MONNINGER: Right.
BRIAN McDERMOTT: I'm sorry.
JOHN MONNINGER: And it's going to bust
through that torus.

BRIAN McDERMOTT: Right, and then you've got potential steam explosions with this melting into the water in the torus. And then after that, who knows where it goes.

JOHN MONNINGER: Right. There was a news release on NTK NKP this morning that they just started or initiated cooling down Unit 4 spent fuel pool but some type of spray. We assume it's the fire trucks, et cetera. But, you know, those things that limited

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success.

They will come back, and I'll tell you (audio interference). They'll come back and they'll say the infrared detectors that they have show that the temperatures for all four spent fuel pools are at or less than 100°o Celsius. I mean, they're relying on that, which think they can't.

I mean, there's a tremendous amount of it debris, steel, concrete, superstructure on top of the spent fuel pool, and whatever is on the pool is significantly different from Units 1, 2, 3, and 4. So, and then they say, you know, they've flown over the helicopters and, you know, they've shot movie cameras in there.

Chuck saw the pictures. He can't -- I mean, all you see is a bunch of debris (audio interference) in that. You can't see no spent fuel pool. You can't see any water.

So, you know, the information they will give us will not be sufficient to confirm that it is uncovered, covered, or Like.

DAN DORMAN: Brian, this is Dan. In the

JOHN MONNINGER: But we'll follow that issue up and we'll ask again.

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1	DAN DORMAN: Brian, I think the last,	
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6	But compared with some of the plumes that	
7	we've seen coming out of Unit 3, I guess in the last	
8	48 hours, have you guys	M
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10	DAVE SKEEN: This is Dave Skeen. From	
11	everything we've seen from TV and whatever video we	
12	can look at, we've never seen any, any kind of steam	
13	or vapor coming out of Unit 4.	
14	DAN DORMAN: Have you, have you	15
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16	DAVE SKEEN:	
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20	JIM WIGGINS: Well, some of	5
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23	DAN DORMAN: Yeah, that's some	
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25	I mean, I'm just going back a couple days now	
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but if you look at it, you've got, at that point, you
      had a fairly, you know, a definitely
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                  But again, it's light vent of vapor.
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      that's the only thing that I've seen that I would put
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any weight on that would counter the position that we've been taking that that pool is most likely dry.

MARTY VIRGILIO: Yeah, I appreciate that.

And so let's get back to -- that pool probably has the 10 times the decay heat of Unit 3 has in it. And if there's been no cooling for there for a prolonged period of time, I don't see how there could be possibly water left in there. And from the evidence that we've seen, you might see a light mist or something there, but I don't how you have water in the pool, unless it's maybe down at the very bottom.

MALE PARTICIPANT: They don't.

MARTY VIRGILIO: I don't see it.

DAVE WELLER: This is Dave Weller from the NR Team. The other supposition had looking at those is there's a potential that as the core is in a dry pool or in a dry area, it is interacting with concrete and other materials, and you can be seen some interaction there that generates a little bit of smoke. And that might be what we're seeing.

MIKE WEBER: Yeah, there's where the gasses would come off when that core hits the concrete.

MARTY VIRGILIO: All right, guys. That's all -- just that you're aware.

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DAN DORMAN: The other, the other piece to factor into that is there's also

So one of my questions that I'm, that I have here is, is, is that system active at all? Because they may be getting water in there that we're just not aware of.

MARTY VIRGILIO: Yeah, that's a good question.

LARRY CAMPER: Hey, John and Dan, Larry. Listen, this, this question of contamination in food, milk and spinach, we had sent a message over some time ago, not on this shift, before this shift, to Jack Foster to see if he could interact with, you know, the folks over there to try to see what he can learn about this, this question of contamination of food and the resulting radiation. Now, we've never heard any action limits, so when they say this food is

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contaminated, we don't know exactly what that means, of course.

Then the other thing that's come up, we talked a little bit ago during our CA briefing, was supposedly there's some contaminated water supplies, tap water, and we're going to send another message to Jack around that particular point. But if you can put that on your scope, and anything that you guys can, you know, learn about that would be helpful if that issue does come up again.

JOHN MONNINGER: Yeah. So they, so, you know, I'm not sure (audio interference) and they are picking it up in they (audio interference) cabbage, et (audio interference) cetera. And they have an prefecture or whatever they call it, and they talked about it, about seven and a half percent of country's production.

wondering what iust would differently if we knew what those action limits were if they decided to, you know, make the decision to can the cheese the cows. What would we do different?

MARTY VIRGILIO:



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JOHN MONNINGER: Yeah.

MARTY VIRGILIO: And try to understand, if we can get, if there's contamination in the tap water, if we can get some sense of that picocuries per liter, and then we can bounce it off, you know --

(Interference from ringing telephone.)

MARTY VIRGILIO: -- here in the United States.

JOHN MONNINGER: Now, at the Embassy here, they've been monitoring it and reporting back, and they were -- What did they say today? The percentage of -- you know, it's exceedingly low in terms of, you know, the maximum permissible limit. So, you know, it is measurable, but we're, we can try to see what we can get.

DAN DORMAN: Yeah, the medical officer characterized it this morning and tours of magnitude below the permissible level.

JOHN MONNINGER: But you've got to get the equipment out there.

MARTY VIRGILIO: All right. Good. Our interest is in protecting you all and anticipating a question that might come in from the Ambassador.

DAN DORMAN: Well, we're drinking bottled

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water and eating canned tuna fish, so.

(Laughter.)

JIM WIGGINS: A real feast.

JOHN MONNINGER: But what's the latest AMS data that you guys have? I think what I got handed when I got in here was the last thing that we had on Friday morning and it (audio interference) after yesterday's wind shift.

LARRY CAMPER: Yeah, we got that would have been about 3:45 pm our time. You know, it shows the serpentine pattern and then need due north, due south. You know, you're still seeing that deposition of material that traveled north, north-northwest from the site. The last values, measured values, do not exceed 30 MR per hour.

DAN DORMAN: Yeah, that's okay. I've seen that. I, I asked Jim Trapp to work back with the PMT and see if we can correlate back Tuesday, Wednesday time frame -- my recollection is that the low-pressure system came through; the wind rotated all the way around the compass -- and see if we can correlate that to one of the signal events, like on Unit 3 or Unit 4 and see if --

LARRY CAMPER: You got it. You're on it. We're starting to think the same thing. If you go

back to the -- the event you're referring to is, occurred between 3/14, midnight 3/14 and 1:22 on 3/15. That's when you had a spike that occurred with 30 R per hour. And frankly, we're, we're reasonably beginning to believe that the so-called -- how did they characterize it? --

MALE PARTICIPANT: Lube oil fire.

MARRY CAMPER: -- yeah, the lube oil fire may very well have been, you know, something far more significant coming out of uniform because what we're now beginning to think, at least Don Cool and I, talking with the PMTs, you know, it may well be that that was a seminal event in which the volatiles were deposited out there on soil to the north-northwest of the site. And if that's the case, the good news is that the volatiles are already out there. The bad news is, the thing we're all trying to chew on, is what's going on in Unit 4 now in terms of any future consequences from interaction of melted spent fuel material with concrete and so forth.

DAN DORMAN: It's, it's interesting to me you're focusing on that lube oil fire because Jim, Jim and I when we were talking this morning were focusing on the Unit 4 explosion, but I'm fuzzy in my recollection of which came first.

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LARRY CAMPER: Well, I, I think we're saying we're skeptical that it was a lube oil fire.

DAN DORMAN: Yeah, I'm -- we --

LARRY CAMPER: We know it wasn't a lube oil fire. We know that. They can take that off the table.

DAN DORMAN: Yeah. I guess, I guess if -yeah, I'll be interested to see an analysis that lines
up the time sequence of events compared to that wind
shift because I think that, obviously, that wind
shift, to me, is the only -- the only, you know, Jim
kind of said, well, maybe the explosion drove this big
plume out there or it was a directional explosion out
to the northwest.

Well, I could understand that even out to a mile or two. But if, if you had an explosion that with, the wind was still blowing up fee, you get a little bit of wind from the explosion it back, but not 30 kilometers. So, so I'm thinking that that, whatever, whatever was happening during that wind shift is what put that deposition out there.

LARRY CAMPER: Yeah, we're thinking the exact same thing. We're all in the same place. We're ruling out lube oil fire. I don't think any of us are buying that.

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is food, conclusion. 16 one thing -concerns.

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MARTY VIRGILIO: Relative the to protective action guidelines type of guidance coming from Japan is, people, the other thing to keep in mind is they have hundreds of thousands of people who displaced who need food, water, and shelter, and food so they might have to have different priorities than what we consider normal.

MALE PARTICIPANT: Yeah.

DAN DORMAN: I think that's a fair

LARRY CAMPER: Yeah, that's a great point, and the problem is we just don't know what their action levels are at all.

MARTY VIRGILIO: I understand that.

LARRY CAMPER: I mean, we certainly -just don't know, you know. That's just my personal observation, not any professional position, but it's

MARTY VIRGILIO: But, as we consider what we would do, they certainly have an overarching set of

DAN DORMAN: (Inaudible) RST or the PMT a position or a conclusion regarding the, the salt crystallization concern? We're getting some other stuff from DOE, but have you guys come up with a

position	on	that?

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MARTY VIRGILIO: They're still working that in the RST room right now.

JOHN MONNINGER: We're, we're thinking most likely today or tomorrow, you know, we'll have a call with Tepco to run through that.

MARTY VIRGILIO: Okay.

JOHN MONNINGER: So, so that's --

DAN DORMAN: That's a priority.

JOHN MONNINGER: Yeah, the CNO, his, you know, number-one priority is the salt issue.

DAVE HERMAN: This is Dave Herman again.

One of the things I heard was Tepco had expressed that they wanted to switch to using fresh water. Do we have any understanding of their ability to generate water?

CHUCK CASTO: They -- they'll have to put in the desalinization process.

JOHN MONNINGER: They, they've also talked about bringing in, you know, trucks. And then yesterday they said there's some dam 10 kilometers away that, the piping down to the plant is still intact. But we're not, you know, sure what it would be, of those three.

CHUCK CASTO: This is Casto.

On the protective measures, I think the ambassador it's getting most, a lot of information from DOE and AMS, and they meet when we meeting. That's the meeting I just came back from.

So it was, it would be helpful if we work with DOE and come up with a consolidated viewpoint. And that has been -- DOE, you know, they had information at that meeting that I didn't have. And I, I would prefer the two teams work together to come up with a single -- so that we know what DOE's going to provide them every morning.

MARTY VIRGILIO: All right. So are you guys (audio interference).

LARRY CAMPER: Just for your awareness,

Tony just handed me a couple of articles from the Wall

Street Journal. It's amazing how people know this

staff and we can't seem to get it. But it is what it

is.

But it says that one spinach sample collected in the city Hitachinaka located about 120 kilometers south of the plant contained 8,420 Becquerel's per kilogram of iodine 131, according to the health administrator. The normal amount set by Japanese law is 2000 Becquerel's per kilogram, so roughly a factor of four over their legal limit.

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And then in a separate article, it talks about in a raw, in raw milk samples, implying more than one, from a farm in a town of Kawamata in the Fukushima Prefecture, up to 1,510 Becquerel's per kilogram of iodine 131 were detected, about five times the limit of 300 Becquerel's per kilogram set by law.

JOHN MONNINGER: What I think is maybe can have Jack Foster call the PMT to run through all this stuff.

CHUCK CASTO: Yeah, I mean the preferable method I tried to establish the other day was to get Jack Foster, the PMT, and DOE together and provide a consolidated input and, you know, PowerPoint briefing ready for the ambassador.

DOE goes in there every day with a PowerPoint and, you know, it's not always like I'm armed with the same information. So we got to get, we've got to get those groups, three groups working together and make sure we get one consolidated input to it.

FEMALE PARTICIPANT: Chuck, can you let them for an action? I'm sorry. Are you asking for our help in making sure that the same information that's getting to DOE is getting to you?

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JOHN MONNINGER: Well, I think it's, I think it's first to make sure the teams are communicating well together and they come up with their assessments or recommendations that may be different. But, and then once that occurs then, yeah, it's communicated with Chuck or the team there at the same time DOE does.

FEMALE PARTICIPANT: Okay, so we need to figure out who in DOE is doing what and who they're sending their information to?

JOHN MONNINGER: Have the PMT talk to Jack Foster because he knows who at DOE is getting this stuff. So --

LARRY CAMPER: It's Brian somebody or other on the fourth floor.

MALE PARTICIPANT: So let's get, let's get where it's coming in through DOE married up with the PMT and with Jack, and then they can feed us so that when Chuck's going into these meetings with the ambassador, it's, we're not trying to look over DOE's shoulder and see what they've got.

FEMALE PARTICIPANT: Okay. I'll talk to the PMT director and try to get that working through Jack.

MALE PARTICIPANT: Thank you.

Not,

JOHN MONNINGER: Good for now, guys? JIM WIGGINS: Yeah. Anything else? JOHN MONNINGER: I don't think so. not on this end. We're just trying to get organized for Dan in here this morning. JIM WIGGINS: Okay. All right. We'll let you guys go. Thanks a lot.

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192 (CONFERENCE CALL INITIATED.) 3:57:31/4:07:55 MIKE THOMPSON: John? JOHN MONNINGER: Yeah. MIKE THOMPSON: This is Mike Thompson, and we've got Marty Virgilio and others on the team. JOHN MONNINGER: Hey. Okay, so are you guys ready? MIKE THOMPSON: Yes. 10 JOHN MONNINGER: 11 12 13 14 15 16 17 18 19 20 21 22 So, we're faxing it back to you guys now, 23 to the PMT, et cetera. I think Jack Foster's on the 24 25 phone too. But my thought is, if you could look at **NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS** 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

it, try to understand somewhat what the heck it says, and then we get in touch with whatever Navy facility so that they get a good understanding.

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You understand?

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MARTY VIRGILIO:



JIM WIGGINS: Have they been venting? We need to know. Unit 3.

JOHN MONNINGER: Well, yes. Okay, so I can definitely get to Tepco and get the venting. But, regardless of venting or not, you guys, you've got to try to engage the PMT, try to understand what the access stuff says with silver iodine equivalent. And we've got to get you guys in touch with the Navy to make sure people are talking apples to apples.

MARTY VIRGILIO: Agreed.

JOHN MONNINGER: But we will, you know, our recommendation if we got in there would have been

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1	we received the information. We're engaging our
2	experts back at headquarters. Once we have an
3	understanding of that, we'll return to the Navy to
4	make sure, you know, we're on the same page. So, but
5	that's not you know.
6	MARTY VIRGILIO: Can we get our Naval
7	Reactors folks in? Are they still out there?
8	(Off mic.)
9	JOHN MONNINGER: So our Naval
10	JIM WIGGINS: No, we're talking
11	internally.
12	MARTY VIRGILIO: Yeah, we've got NR folks
13	that have been here around the clock. We can work
14	them on this issue too.
15	JOHN MONNINGER: Okay.
16	MARTY VIRGILIO: Hang on just a second.
17	JOHN MONNINGER: All right.
18	MALE PARTICIPANT: You mentioned 150
19	millirem per hour.
20	JOHN MONNINGER: The are you ready?
21	They took some samples, and the sample is in
22	microcuries per milliliter, and they say that's the
23	equivalent of 150 millirem per hour.
24	MARTY VIRGILIO: Okay, so it's an air
25	sample and they converted into (inaudible) hour.

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1	JOHN MONNINGER: Yeah.
2	MARTY VIRGILIO: Okay. All right.
3	JIM WIGGINS: And where did you say they
4	caught these samples?
5	JOHN MONNINGER: It's either
6	MALE PARTICIPANT: Yokohama?
7	JOHN MONNINGER: pronouncing it
8	correctly Yokashawa or Yokohama.
9	JIM WIGGINS: Well, there's Yakota Air
10	Force Base and there's Yokuska Submarine Base.
11	JOHN MONNINGER: Yeah. I don't know which
12	one, but we, you know, the thought is to get in touch
13	with the Navy and figure out where they took the
14	sample and what this write-up means.
15	MALE PARTICIPANT: Did you mention some
16	Navy Admiral?
17	JOHN MONNINGER: Admiral Thomas. The
18	information is from 11:30 a.m. out here, which is
19	approximately an hour and a half ago.
20	JIM WIGGINS: Okay.
21	MARTY VIRGILIO: Okay. John?
22	JOHN MONNINGER: Yeah.
23	MARTY VIRGILIO: We've invited our Naval
24	Reactors folks into the meeting.
25	JOHN MONNINGER: Okay.

MARTY VIRGILIO: And could you just review what you've got one more time? Sorry to run you through this, but I want to make sure he hears it first hand.

JOHN MONNINGER: Okay, so we can review it, but what I'd recommend is -- we faxed it out within the past 5 minutes to the PMT -- so the PMT should be able to pull it off and you'll see the write-up. It's notes from an individual in the Navy. They handed it to us.

MARTY VIRGILIO: Okay, so it's Admiral Thomas. We're not exactly sure

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KATHY: We have 1.5 millirem per hour.

(Off-mic conversation.)

MARTY VIRGILIO: John?

JOHN MONNINGER: Yes.

MARTY VIRGILIO: Go ahead, Kathy.

KATHY: We got information -- I just wrote down here "Navy guy."

MARTY VIRGILIO: Admiral Thomas was the Navy guy.

KATHY: Okay.

MARTY VIRGILIO: Go ahead.

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 KATHY: And they took a sample. The sample point they gave us, the latitude and longitude, is an area south of Tokyo.

JOHN MONNINGER: So thyroid dose, okay.

KATHY: Yeah. And they asked us if we can back-calculate a dose in Tokyo. We wanted to try to do that. RASCAL won't do it. It will be have to be hand-calculated. But then we got a (inaudible) from Bill Cook. Is he with you, John?

JOHN MONNINGER: Yes, Bill Cook's with us.

KATHY: Okay, so we'll just talk to him if they're concerned about (inaudible) number 2.

MARTY VIRGILIO: Yeah, I didn't hear the last -- I, they're concerned about evacuating the embassy, or US citizens?

KATHY: Yeah. What, what we want to do is get, get in touch with the people that actually pulled their samples so we can get more information on how they pulled the sample.

JOHN MONNINGER: Right. And we concur 100 percent in that, the notion that we talk to the Navy, come to a complete understanding, and maybe there's

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recommendations out of that; maybe there isn't. KATHY: Okay. JOHN MONNINGER: We're going to --MARTY VIRGILIO: But with these data, make sure you heard her. Kathy's data does not say 150. 10 11 It's 01.5, 1.5 millirem per hour. MALE PARTICIPANT: But the source term we 12 13 (inaudible) from that was 1.6 10-6 microcuries per 14 milliliter. MARTY VIRGILIO: Which is clearly a level 15 of interest. It's higher than the numbers I've heard 16 17 from the more --KATHY: I have E-7. 18 MALE PARTICIPANT: That was about -- I'm 19 repeating your numbers, so I repeated --20 KATHY: 1.6E^-7. 21 MALE PARTICIPANT: Okay. That's still 22 significant but, but not --23 KATHY: No, we haven't checked them I 24 25 have.

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1	MARTY VIRGILIO: Typically, the Navy take
2	the types of readings using filter paper (inaudible)
3	water samples.
4	KATHY: This is silver zeolite sample.
5	MALE PARTICIPANT: Okay. So it's a silver
6	cartridge and the same type of unit, then, for, which
7	was sensitive to iodine and those type of thing?
8	JOHN MONNINGER: So can you guys repeat
9	what you believe that equivalent, is?
10	KATHY: We haven't done the calculations.
11	We're just repeating what we were told.
12	JOHN MONNINGER: So what were you told
13	about the equivalent thyroid?
14	KATHY: 1.5 millirem per hour.
15	JOHN MONNINGER: So that's a factor of 100
16	different than what's being reported here.
17	MALE PARTICIPANT: Yeah.
18	JOHN MONNINGER: They're saying 150
19	millirem per hour.
20	(Simultaneous conversation.)
21	JOHN MONNINGER: And that's what's being
22	briefed to the ambassador right now.
23	MARTY VIRGILIO: I think it's important
24	that
25	(Simultaneous conversation.)
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ı	KATHY: Whether they have any other
2	sample.
3	MALE PARTICIPANT: We need to be clear on
4	where that sample is collected.
5	KATHY: We, we have a latitude and
6	longitude.
7	MARTY VIRGILIO: Can, can you read that to
8	me?
9	KATHY: 36.11.46 N.
10	MARTY VIRGILIO: 36.11.46 N.
11	KATHY: 120.16.87 E. We're told that it's
12	south of Tokyo.
13	MARTY VIRGILIO: Okay, John, if you'll
14	engage Tepco John, are you there?
15	JIM WIGGINS: John?
16	JOHN MONNINGER: Yes, sir.
17	MARTY VIRGILIO: If you'll engage Tepco on
18	any recent venting
19	JOHN MONNINGER: Yes. We'll if you
20	guys let us go, we'll call Tepco and you guys will run
21	this down, and you'll get in with the Navy and, and
22	pull your heads together.
23	MARTY VIRGILIO: Okay. Got it, John.
24	JOHN MONNINGER: Got it? Okay, you got
25	the Navy. We've got Tepco. All right. Thanks.
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