

Group EL

(Records Withheld
In Part)

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 11, 2011

Work Order No.: NRC-0366

Pages 1-33

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/2

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 FRIDAY,
8 MARCH 11, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-7Y5{DL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-7Y5}FL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-8FM-(603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-8FOJA-03765094

(CONFERENCE CALL INITIATED)

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

MALE PARTICIPANT: Yes, sir.

CALL MODERATOR: Okay, well we are dialed up on the call. We'll begin momentarily. Just remember to keep your VCC on mute. Thank you.

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

CALL MODERATOR: Thank you, sir.

MR. PLAYER: Michael Player, Virginia-1 DMAT.

CALL MODERATOR: Which agency, sir?

MR. PLAYER: Virginia-1 DMAT.

CALL MODERATOR: Thank you.

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

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

(No response)

CALL MODERATOR: Travel, are you on the call?

(No response)

CMDR ADAM: This is Commander Al Adam,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Joint Regional Medical Plan of FEMA Region 9 and 10.

2 CALL MODERATOR: Thank you. Any other
3 callers, identify yourselves at this time.

4 MR. COLEMAN: Norm Coleman, ASPR.

5 CALL MODERATOR: Thank you.

6 MR. FUEL: Rick Fuel, Region 10, REC.

7 CALL MODERATOR: Thank you.

8 MR. CHRISMAN: Eric Chrisman, Missouri-1
9 DMAT.

10 MR. HOLDMAN: Kevin Holdman, Texas-1
11 DMAT.

12 CALL MODERATOR: Thank you.

13 MR. ZIMM: Brendan Zimm, DTRA.

14 CALL MODERATOR: Thank you.

15 MR. WASSER: Jim Wasser, IRCT.

16 CALL MODERATOR: Thank you.

17 MR. INGSTRAN: Jim Ingstran, National
18 Guard Bureau of Joint Surgeons.

19 CALL MODERATOR: Thank you.

20 MR. PARKER: Lloyd Parker, IRCT.

21 MR. RICH: Chad Rich, NDMF.

22 CALL MODERATOR: Thank you.

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

25 CALL MODERATOR: Roger, thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. AUSTIN: Francesca Austin,
2 Department of Veterans Affairs.

3 CALL MODERATOR: Thank you.

4 MR. SEBASTIAN: Frank Sebastian, DMORT
5 10.

6 CALL MODERATOR: Thank you.

7 MR. WERR: Carl Werr, Region 4, REC.

8 MS. PALONE: Emily Palone, REC Region 3.

9 CALL MODERATOR: Thank you, ma'am.

10 MR. CURRIN: Steve Currin, CIP.

11 CALL MODERATOR: Thank you.

12 MS. MILLER: -- (indiscernible) Miller,
13 IRCT.

14 CALL MODERATOR: Thank you.

15 MS. SILENS: Nadine Silens, acting REC
16 Region 9.

17 CALL MODERATOR: Roger, thank you.

18 MS. ODOM: Janet Odom, REC Region 5.

19 CALL MODERATOR: Thank you.

20 MR. NEILEN: Robert Neilen, Joint Staff
21 J-4.

22 MS. WOOD: April Wood, American Red
23 Cross.

24 MR. MAYER: Harry Mayer, REC Region 3.

25 CALL MODERATOR: Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 MS. TODOCA: Tomorosa Todoca.

2 (indiscernible, possibly DHA)

3 CALL MODERATOR: Thank you.

4 MS. GRACI: Nadine Graci in the

5 (indiscernible, possibly Ash's office).

6 CALL MODERATOR: Thank you.

7 MR. CAGE: Chris Cage, Region 7 REC.

8 CALL MODERATOR: Thank you for calling.

9 MR. TWEEDY: Kevin Tweedy, Missouri-1

10 DMAT.

11 CALL MODERATOR: Thank you.

12 MS. TAYLOR: Amy Taylor, Region 6 REC,

13 ASPR.

14 CALL MODERATOR: Thank you.

15 MS. CATCHEE: Karen Catchee, Florida-4

16 DMAT.

17 CALL MODERATOR: Thank you.

18 MS. BROOKS: Kay Brooks, Florida-1 DMAT.

19 CALL MODERATOR: Thank you.

20 MR. BLENCHED: Glen Blenched REC

21 (indiscernible, possibly NCR).

22 CALL MODERATOR: Thank you.

23 MS. MYERS: Martha Myers, IRCT.

24 CALL MODERATOR: Thank you.

25 MS. KENDRICK: Elizabeth Kendrick,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (indiscernible, possibly IRIS).

2 CALL MODERATOR: Thank you.

3 MALE PARTICIPANT: Is anyone from Travel
4 on the call?

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

6 CALL MODERATOR: Thank you. Okay,
7 callers please remember to mute your phones using *6
8 or the mute button. We will begin momentarily.
9 Thank you.

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

12 DR. SIZEMORE: Good afternoon, Tom
13 Sizemore. Welcome to 2011 Pacific Basin Earthquake-
14 Tsunami Conference Call. If we could have it quiet
15 in the dock, please, and if I could ask everybody to
16 make sure that they put their phones on mute with
17 *6.

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

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

25 MR. SHEEHAN: Good afternoon, Dr.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 Sizemore, this is Kevin Sheehan in Region 9 RRCC.
2 And I'm here with Jerry Fenner, REC from Region 9
3 and Roshadden Young who's a (indiscernible, possibly
4 RIST) team member who's also deployed out here with
5 us locally.

6 I just want to give you an update. We

7 (b)(5)
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

So, maybe an offline discussion after
this, but how you want to have that information to
tell us how to proceed.

MR. SHEEHAN: You know, Mike, that would

(b)(5)

MR. PLAYER: Yes, (b)(5)

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

MALE PARTICIPANT: Kevin, there's going

16

(b)(5)

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)
2

3 MR. SHEEHAN: Yes, sir, we understand

4 (b)(5)
5

6 MALE PARTICIPANT: Say that again? I'm
7 sorry.

8 MR. SHEEHAN: (b)(5)

9 (b)(5)
10
11
12

13 MALE PARTICIPANT: All right, we are.
14 Move on. Thanks.

15 MR. SHEEHAN: Thank you, sir.

16 MALE PARTICIPANT: Pending any questions
17 that concludes my report.

18 DR. SIZEMORE: Okay, any questions for
19 Region 9? We'll move on to Region 10, please.

20 MR. FUEL: Good afternoon, this is Rick
21 Fuel, Region 10 REC.

22 (b)(5)
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

(b)(5)

Thank

you.

DR. SIZEMORE: Thanks. Questions for
Region 10?

Again, for both regions, great, great
work. I appreciate all the hard stuff that you're
getting done out there and you're influencing
strategies.

Let's move onto EMG starting with ops.

MALE PARTICIPANT: Thank you, sir.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

MALE PARTICIPANT: I'm sorry, we are on
another call. What?

MALE PARTICIPANT: Could you just give a
status of traveling staff?

MALE PARTICIPANT: Yes.

(b)(5)

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)
2
3
4
5
6

7 MALE PARTICIPANT: Thank you, sir.

8 (b)(5)
9
10
11
12
13

14 FEMALE PARTICIPANT: Yes, this is field

15 (b)(5)
16
17

18 MALE PARTICIPANT: Afternoon. (b)(5)

19 (b)(5)
20
21
22
23
24

25 MALE PARTICIPANT: Is there anyone out

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 of international operations? Are you online?

2 FEMALE PARTICIPANT: I am. We have no
3 updates beyond what you heard from the SOC who's
4 doing a fabulous job, thank you.

5 MALE PARTICIPANT: Questions for anybody
6 in ops. Move onto log, please.

7 LT DEGRASSIO: Thank you, sir.

8 Lieutenant DeGrassio with the logistics brief.

9 (b)(5)

10 (b)(5)
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 DR. SIZEMORE: Questions for logs? Move
2 onto plans, please.

3 MALE PARTICIPANT: Good afternoon, sir.

4 (b)(5)

5

6 Thanks.

7 DR. SIZEMORE: Thanks. And let me go

8 (b)(5)

9

10 (b)(5)

11 Good work.

12 Let's move onto admin/finance.

13 MALE PARTICIPANT: Hi, this is
14 (indiscernible) from admin/finance. Is there
15 somebody on the SOC as well?

16 MALE PARTICIPANT: David, Tiffany had to
17 step out so --

18 DR. SIZEMORE: You got it.

19 MALE PARTICIPANT: Okay, sorry about
20 that.

21 MALE PARTICIPANT: -- we did get the two
22 mission assignments.

23 MALE PARTICIPANT: We've got -- we saw

24 (b)(5)

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

Pending any questions I think we've got everything that needed to be covered and that's enough.

DR. SIZEMORE: Thanks. Let's move onto fusion.

MS. FUNAMOTO: Good afternoon, sir.
This is Monica Funamoto with fusion. At this time

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 we have nothing to report but we are standing by
2 ready to assist. Thank you.

3 DR. SIZEMORE: Thanks. Anything from
4 the CMO office?

5 MR. GERRADON: Good afternoon. Andy

6 (b)(5)
7
8
9

10 DR. SIZEMORE: Thanks.. Moving to our
11 Health and Human Services partners starting with
12 CDC.

13 MR. MAVEN: Hey Tom, Phil Maven. The

14 (b)(5)
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 DR. SIZEMORE: All right, thank you.

2 We'll get to NRC shortly. Let's move onto FDA.

3 MALE PARTICIPANT: FDA, good afternoon.

4 (b)(5)
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

That's all I have unless there are any questions.

DR. SIZEMORE: Good report, Mark. Any questions for FDA? Move on -- is CMS on?

MS. FIELD: Nothing new here. Is Diane Whittington on?

(No response)

MS. FIELD: Tom, this is Jean Field.

(b)(5)

DR. SIZEMORE: Thank you very much, Jean. SAMHSA, are you on? HRSA, are you on?

MALE PARTICIPANT: We are, sir, and we have nothing to report. Thank you.

DR. SIZEMORE: Thanks very much. ABC, are you on?

MALE PARTICIPANT: Yes, sir, we are. We

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

And that's all we

have to report at this time.

DR. SIZEMORE: Thank you. OSSI, are you on? Anything to report? Okay, nothing to report in the SOC on OSSI. ATF? We'll move onto our supporting agencies starting with NORTHCOM DoD. National Guard?

MR. INGSTRAN: Sir, this is Jim Ingstran with the National Guard Bureau of Joint Surgeons.

(b)(5)

(b)(5)

Otherwise there's no change from our 12 o'clock conference.

DR. SIZEMORE: Great. Thanks very much, Jim. Let's move onto the Department of Veterans Affairs, headquarters and/or regional.

MALE PARTICIPANT: Veterans Affairs has

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)

2
3
4 (b)(5)

And that's all I

5 have to report.

6 MR. WATTS: Sir, this is Greg Watts with
7 the RIM for Region 10.

8 DR. SIZEMORE: Yes, go ahead.

9 MR. WATTS: First off, I want to give
10 kudos to Rick up there for keeping the VA and my
11 office in the loop on situational awareness and
12 reporting. I just want to give you guys kudos and
13 thanks a lot.

14 DR. SIZEMORE: All right, thanks.
15 Moving onto American Red Cross, please. Not hearing
16 anything. Coast Guard, are you on?

17 FEMALE PARTICIPANT: I'm sorry, sir,
18 here I am. For American Red Cross.

(b)(5)

19 (b)(5)

20
21
22
23
24
25
NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

(b)(5)

That concludes my report, thank
you.

DR. SIZEMORE: Great, thank you very
much. Coast Guard, are you on? NRC, are you on
again today?

MALE PARTICIPANT: Yes, Nuclear
Regulatory Commission.

DR. SIZEMORE: Yes, (b)(5)

(b)(5)

MALE PARTICIPANT: Pat Milligan, are you
on the call? We have not received a formal request
that I'm aware of. We've activated our headquarters
--

MS. MILLIGAN: I'm here.

MALE PARTICIPANT: Okay. We've
activated our Region 4 incident response center to
monitor our licensed assets in Hawaii and in
California. And headquarters has taken the lead for
national-level type requests and monitoring what's
going on in Japan.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 To my knowledge, and Trish, correct me
2 if I'm wrong, we've not received a formal request
3 for KI from anybody.

4 FEMALE PARTICIPANT: That's correct, not
5 yet.

6 DR. SIZEMORE: Can you share with us if
7 that was requested where you would get it? Or do
8 you have it, rather? Or would you need some
9 assistance from Health and Human Services?

10 MALE PARTICIPANT: Trish?

11 FEMALE PARTICIPANT: The NRC doesn't
12 stockpile KI. We just recently shipped an order --
13 or had an order shipped to the State of
14 Pennsylvania, or the Commonwealth of Pennsylvania,
15 excuse me. And they would be able to relinquish a
16 chunk of their KI supply upon demand to -- if we
17 needed to borrow it back. So it wouldn't be a
18 problem for us to put our hands on a lot of
19 potassium iodide tablets pretty quickly.

20 DR. SIZEMORE: Okay. So just to let you
21 know if you're interested in Health and Human
22 Services support just give us a call. We're here
23 24/7 through the SOC.

24 FEMALE PARTICIPANT: Okay.

25 MALE PARTICIPANT: Trish, do you have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

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

3 It may not be of much use.

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

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

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

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

20 (b)(5)
21

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

25 DR. SIZEMORE: Great summary, appreciate

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 it.

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

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

9 Okay, going to the SOC here. Public
10 affairs?

11 FEMALE PARTICIPANT: The only update to
12 add is that FEMA and USGS held a press conference at
13 1:45 today for national U.S. press.

14 DR. SIZEMORE: Anybody else in SOC that
15 I've missed?

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

19 MALE PARTICIPANT: We're going to have a
20 7 o'clock shift change briefing, so what about 8
21 o'clock Pacific, 11 o'clock your time?

22 DR. SIZEMORE: 1100.

23 MALE PARTICIPANT: Yes, 1100 Eastern.

24 DR. SIZEMORE: Okay. Watch for it.

25 MALE PARTICIPANT: All right, thank you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 sir.

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

5 (Whereupon, the foregoing matter went
6 off the record)

7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

0-92-97DL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-92-M-603765094

(CALL INITIATED)

MR. GRANT: Hi, this is Jeff Grant.

(b)(5)

(b)(5)

Did you get that?

FEMALE PARTICIPANT: Your name is what?

MR. GRANT: My name is Jeff Grant.

FEMALE PARTICIPANT: Okay.

MR. GRANT: All right? Thanks.

(Whereupon, the foregoing matter went
off the record)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-92EPE-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-92H-3L03765094

(CALL INITIATED)

FEMALE PARTICIPANT: (indiscernible)

MR. GRANT: (b)(5) yes?

FEMALE PARTICIPANT: Yes, it is.

MR. GRANT: This is Jeff Grant. I just
called a few minutes ago (b)(5)

(b)(5)

FEMALE PARTICIPANT: Okay.

MR. GRANT: (b)(5)

(b)(5)

FEMALE PARTICIPANT: Okay.

MR. GRANT: All right?

FEMALE PARTICIPANT: Thanks.

MR. GRANT: Thanks. Bye.

(Whereupon, the foregoing matter went
off the record)**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 12, 2011

Work Order No.: NRC-0366

Pages 1-49

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/2

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 SATURDAY,

8 MARCH 12, 2011

9 + + + + +

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-9}PTI603765094

(CONFERENCE CALL INITIATED)

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

CALL MODERATOR: Thank you, sir.

MALE PARTICIPANT: (indiscernible,
possibly Travel).

MR. ROUSSEAU: Mark Rousseau, FDA.

CALL MODERATOR: Thank you, sir.

MR. PHILLIPS: Jimmy Phillips, logs.

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

CALL MODERATOR: Is Travel on?

MALE PARTICIPANT: (indiscernible)

CALL MODERATOR: Thank you. EMO?

MR. HARPER: Victor Harper.

MR. WALKMAN: Tim Walkman, DMS.

MR. ROGERS: Rogers, field operations.

MS. PLUME: Emily Plume, Region 3 REC.

MS. SANDERS: Hi, this is Melissa
Sanders with the REC IRCT program.

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

MR. HERRERA: Gerald Herrera, ASPR
Region 4.

MALE PARTICIPANT: (indiscernible) NCR.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MALE PARTICIPANT: (indiscernible)
2 public health representative to the Public Health
3 Agency of Canada.

4 CALL MODERATOR: Thank you, sir.

5 DR. SIZEMORE: This is Tom Sizemore.
6 We're going to go ahead and get started with the
7 2011 Pacific Basin Earthquake-Tsunami ESSA
8 Conference Call.

9 (b)(5)

10
11
12
13
14
15
16
17
18
19
20
21
22 (b)(5)

23 Thank

24 you very much.

25 With that we'll go ahead and get a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Region 9 update from the IRCT.

2 MR. SHEEHAN: Good afternoon, everybody.

3 This is Kevin Sheehan from Region 9. The RRCC --

4 (b)(5)

6 (b)(5)

7 That

8 completes my report.

9 Now, Terry Klein will give a report on
10 the IRCT.

11 MR. KLEIN: Thank you. That being said

12 (b)(5)

13
14
15
16
17
18
19 Just looking around the room do any of
20 the section chiefs -- we're good. Thank you.

21 DR. SIZEMORE: Anything else from Region
22 9?

23 MALE PARTICIPANT: No, that concludes
24 our report.

25 DR. SIZEMORE: All right, anybody have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 any questions for Region 9? All right.

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

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

7 Our operations center in Rockville,
8 Maryland is staffed with a full liaison team, a
9 partial executive team. We're on the phone now with
10 our Chairman (b)(5)

11 (b)(5) With a partial reactor safety team and a
12 partial protective measures team who are doing kinds
13 of what-if calculations.

14 (b)(5)
15

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

4 (b)(5)

5 (b)(5)

6
7 (b)(5)

8 And

9 they've evacuated people for a large distance.

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

15 And again, we're not the regulators.
16 The Japanese regulate that so we're not in the
17 position to provide advice or anything. They're
18 perfectly capable of fixing their own plants. So
19 we're just in the monitoring mode at this point.

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

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

25 (b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

15 Again, they have a problem with loss of
16 ac power and they're trying to get diesels in there
17 to restart some pumps. So that's something that
18 we're monitoring as well. (b)(5)

19 (b)(5)
20
21

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 sources and trying to piece it together as best we
2 can.

3 So, we'll be watching it again all night
4 tonight and seeing what we need to do. And hope to
5 get more information tomorrow when we get a couple
6 of guys with boots on the ground.

7 DR. SIZEMORE: All right, great.
8 Questions for Jeff at the NRC?

9 MR. YESKI: Yes, Jeff, this is Kevin
10 Yeski at HHS. You mentioned that there was a

11 (b)(5)

12
13 (b)(5)

14 MR. TEMPLE:

15 (b)(5)

16
17
18
19
20
21
22
23
24
25
NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

DR. SIZEMORE: Other questions?

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 is that they're in a pickle when it comes to trying
2 to get together the resources they need.

3 I think the U.S. military is providing
4 some assistance.

5 MALE PARTICIPANT: And these are
6 generators that are too big for rotor lift?

7 MR. TEMPLE: I think so. And I'm not
8 sure what the full story is on that.

9 MALE PARTICIPANT: Yes, okay.

10 MR. TEMPLE: But at one point they were
11 using some batteries from cars to help keep some
12 valuable pieces of equipment going which is a very
13 good technique. Use what you've got, including car
14 batteries, so.

15 They seem to be getting more resources
16 applied to the thing.

17 DR. SIZEMORE: All right. Other
18 questions, comments?

19 MR. YESKI: A follow-up question, Jeff.
20 Again, Kevin Yeski.

21 So, I mean your impression is -- to be
22 more controlled, or about the same, or getting
23 worse?

24 MR. TEMPLE: Well, at this point from
25 what we've seen over the past several hours it's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 about the same. It may be getting a little bit
2 better, we're not sure.

3 (Interruption from an automated
4 recording)

5 DR. SIZEMORE: This will go on for a
6 second, hang on. It will repeat it. Hang on.

7 MR. TEMPLE: Okay.

8 (Interruption from an automated
9 recording)

10 DR. SIZEMORE: Thank you.

11 MR. TEMPLE: So again because of the
12 scattered information we're getting I don't want to
13 characterize it as better or worse or anything else
14 so please don't quote me.

15 It seems to be that they're getting
16 water to the core which is a good thing. We're not
17 seeing a lot of isotopes out on the ground anywhere
18 and that's probably a good thing too. So we don't
19 have a lot of data and a lot of numbers yet but.

20 MR. DASHMAN: Jeff? Scott Dashman from
21 CDC.

22 MR. TEMPLE: Yes.

23 MR. DASHMAN: If they're pumping
24 seawater and boron chemical into the reactor vessel
25 does that mean they're basically writing off the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 unit?

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

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

11 DR. SIZEMORE: Other questions?

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

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

20 MR. TEMPLE: Yes.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 State, are you on?

2 (No response)

3 DR. SIZEMORE: Has anybody got an update
4 on those, the status of those folks?

5 MR. TEMPLE: NRC again. We haven't
6 heard anything since we talked to the State
7 Department this morning during the call.

8 DR. SIZEMORE: Okay. There's a State
9 Department call tonight so maybe there will be more
10 information then.

11 MR. TEMPLE: What time is that call?

12 DR. SIZEMORE: We've heard I think it
13 was 2100.

14 MR. TEMPLE: Okay.

15 DR. SIZEMORE: Any information on --
16 from anybody on USAID support requests?

17 MR. TEMPLE: We're not aware of any
18 requests and we've got two of our people from our
19 emergency preparedness group at USAID down at
20 Pennsylvania Avenue at the Reagan Building. And we
21 have not heard any requests.

22 Again, we've got liaison people there
23 just to kind of if we do get requests to figure out
24 which kinds of resources we can provide to them.
25 But no requests that I'm aware of yet.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

5 We heard yesterday that potentially that
6 like the NRC folks talked is to let some of their
7 experts in to go in potentially with the DART team.
8 That's the only thing we've heard.

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. TEMPLE: Okay.

2 DR. SIZEMORE: Let's talk a little bit
3 about demobilizing the people out of California.
4 Does anybody see a problem with going ahead and
5 demobilizing them now?

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Room for comments.

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

4 (b)(5)

5
6 (b)(5)

7
8 (b)(5)

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

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

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

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

25 MALE PARTICIPANT: Field ops is on.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

6 FEMALE PARTICIPANT: Mike, this is Pam.
7 I just got off mute. I'm on.

8 MALE PARTICIPANT: Okay, thanks.

9 DR. SIZEMORE: Mike, what that leaves
10 then is a discussion about a call for tomorrow.
11 We're going to hear -- there's going to be two DOS,
12 Department of State calls tonight.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 on by cell phone when they move.

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

5 DR. SIZEMORE: Sure, we can do that.

6 MALE PARTICIPANT: That way it gives
7 people time to get moving, get their business done
8 and their work done. And then we can have the call.

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

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

17 MALE PARTICIPANT: -- just have a --

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. TEMPLE: Sure. I'll plan on being
2 on the call at 12 noon tomorrow. Not a problem.

3 DR. SIZEMORE: Thank you so much.

4 MR. TEMPLE: My pleasure.

5 MALE PARTICIPANT: Hey Tom, before you
6 go I'd like to talk to CDC and maybe Jeff, hang on
7 for a second or two.

8 MR. TEMPLE: Sure. Yes.

9 MALE PARTICIPANT: I just have some
10 questions that we don't need to tie up the whole
11 group for.

12 MR. TEMPLE: Okay.

13 MALE PARTICIPANT: Dr. Sizemore, this is
14 Joe.

15 DR. SIZEMORE: Yes.

16 MALE PARTICIPANT: It's -- given all
17 that's moving along we still probably need an ops-
18 log call. It will be a real quick one tomorrow.
19 And if it just needs to be with the headquarters
20 folks. I'd just like to touch base with everybody
21 to make sure we've got (indiscernible) in place.
22 We'll do it about an hour before the ESSA call. So
23 at 11.

24 DR. SIZEMORE: Eleven o'clock for the
25 ops-log call. Twelve o'clock noon for the ESSA

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 call.

2 Okay, go ahead, Kevin. Dr. Yeski?

3 MR. YESKI: Yes, I'm here. Sorry. You
4 know, the rest of the group can sign off. The
5 questions I just had for CDC, you know, apparently
6 at least through some email traffic I've seen that
7 Department of State has a lot of questions about
8 (indiscernible) Japan and they're looking for travel
9 advice.

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

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

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

19 MALE PARTICIPANT: Is that better?

20 MALE PARTICIPANT: Yes.

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

23 MR. TEMPLE: Jeff Temple, still here.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

13 MR. TEMPLE: Yes.

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

20 MR. TEMPLE: Okay.

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

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

25 MALE PARTICIPANT: You know, we heard

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 today, you know, Department of State said 4 out of
2 the 40.

3 MR. TEMPLE: Okay. Yes. Oh, those are
4 from the GE workers you mean?

5 MALE PARTICIPANT: Yes.

6 MR. TEMPLE: Yes, yes.

7 MALE PARTICIPANT: So that information
8 is likely to come up. I just need to get a read
9 from you guys before 9 o'clock on what, you know,
10 the rules are about that.

11 It seems to me that the common sense
12 approach is if they're not contaminated then they
13 should be able to fly back.

14 MR. TEMPLE: Yes. What I heard I think
15 from the call this morning from the State Department
16 was three people inhaled maybe potential radioactive
17 dust or gas and one person was splashed with
18 something that may have been contaminated.

19 So I'm not sure. That's a good question
20 we'll have to take a look at as to whether we get
21 involved in that or not. My guess is we don't.
22 State Department can call us if they need our help.

23 That might be EPA, I'm not sure. I'll do some
24 checking.

25 MR. WHITCOMB: Kevin, this is Bob

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

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

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

8 MALE PARTICIPANT: Kevin, I'm on too.
9 This is Norm. So, we're involved in this.

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

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

20 (b)(5)
21

22 MR. WHITCOMB: Doesn't to us either.

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

25 MALE PARTICIPANT: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. CONIUM: We were actually told that
2 all 40 employees were examined and that none have
3 exposure. And that they would be permitted to board
4 commercial transport.

5 MALE PARTICIPANT: Okay.

6 MR. WHITCOMB: Excellent. A solution to
7 the problem. Excellent.

8 MALE PARTICIPANT: Love it when it all
9 works out. Thanks, Kimberly, that's great
10 information.

11 DR. SIZEMORE: Kimberly, did you hear
12 that there will be a call tomorrow at noon?

13 MS. CONIUM: No, thank you. I just
14 joined pretty late, so.

15 DR. SIZEMORE: Yes. So we're going to
16 have a call at noon tomorrow. Same call-in number.
17 And we'll get a report from the NRC, from Jeff.
18 And if you can be good enough to call in or have
19 someone call in, find out where we are with State
20 Department issues.

21 MS. CONIUM: That would be great. Thank
22 you.

23 MR. TEMPLE: Kimberly, Jeff Temple from
24 the NRC. You guys are doing a call at 9 o'clock
25 tonight. Is that something we should be on the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 conference call too? Don't need to?

2 MS. CONIUM: You probably should,
3 actually.

4 MR. TEMPLE: Okay.

5 MS. CONIUM: I know that you dispatched
6 some individuals to Japan.

7 MR. TEMPLE: Yes, yes.

8 MS. CONIUM: So I think any updates from
9 you would be helpful.

10 MR. TEMPLE: Okay. Can somebody send us
11 the number to call and the passcode and all that
12 stuff?

13 MS. CONIUM: Yes. What's your email?

14 MR. TEMPLE: Let's see.

15 MS. CONIUM: Or a phone number I could
16 reach you?

17 MR. TEMPLE: Yes, the best thing is to
18 send it to our 24-hour operations center.

19 MS. CONIUM: Okay.

20 MR. TEMPLE: And the phone number is
21 301-816-5100.

22 MS. CONIUM: Okay.

23 MR. TEMPLE: You call them and they'll
24 give you a good email address. We get -- they sent
25 the agenda and the call-in number for this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 conference call to our headquarters operations
2 center. And they just printed it out for me. So,
3 yes, that would be the best thing to do. So, 9
4 o'clock, Department of State.

5 MS. CONIUM: Yes.

6 MR. TEMPLE: Okay, great.

7 DR. SIZEMORE: Questions?

8 MALE PARTICIPANT: Tom, that's all that
9 I had.

10 DR. SIZEMORE: Okay. Anything else from
11 anybody?

12 MR. TEMPLE: Let me -- while we've just
13 got three or four of us on the phone line, my
14 personal cell phone if anybody would like it is --
15 it's a Maine number, 207-441-2727.

16 MALE PARTICIPANT: Thank you.

17 MR. TEMPLE: So anybody that needs me in
18 a heck of a hurry or something, you know, please
19 feel free to use my -- I wouldn't give it out to the
20 whole group of a hundred and something, but tell the
21 folks here in the federal family that's fine.

22 MALE PARTICIPANT: All right, thank you.

23 MR. TEMPLE: Great, thank you. And I'll
24 talk to you guys at noon tomorrow.

25 MALE PARTICIPANT: Quick question for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Kevin.

2 MALE PARTICIPANT: Go ahead.

3 MALE PARTICIPANT: Kevin, with regard to
4 your request about travel information, normally
5 State Department --

6 (Whereupon, the foregoing matter went
7 off the record)

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-9H1)L603765094

(CALL INITIATED)

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

MR. GRANT: Hi, Lieutenant McDonnell.
This is Jeff Grant. I'm in the operations center

(b)(5)

LT MCDONNELL: Okay.

MR. GRANT: All right? Thanks.

(Whereupon, the foregoing matter went
off the record)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-90W--603765094

(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: --(b)(5)

(b)(5)

The key will be here -- will be agricultural issues. So USDA and FDA will be involved in that.

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

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

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

MR. TEMPLE: Okay.

MALE PARTICIPANT: -- it will be an

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 issue most likely in terms of public health --

2 MR. TEMPLE: Yes.

3 MALE PARTICIPANT: -- for USDA and FDA
4 to worry about in terms of food issues.

5 MR. TEMPLE: Okay, gotcha. Okay. And -

6 -

7 MALE PARTICIPANT: I don't see it as an
8 inhalation problem, for example.

9 MR. TEMPLE: Absolutely not.

10 MALE PARTICIPANT: Therefore, KI is not
11 going to be the issue.

12 MR. TEMPLE: Correct. Okay, thank you.

13 DR. SIZEMORE: NRC, thanks for joining.

14 MR. TEMPLE: Sorry I'm late.

15 DR. SIZEMORE: The question that got
16 floated before you came on.

17 MR. TEMPLE: Okay.

18 DR. SIZEMORE: And really thanks for
19 joining.

20 MR. TEMPLE: Certainly.

21 DR. SIZEMORE: Is just trying to get
22 some idea about the possibilities from the Japanese
23 power plant.

24 MR. TEMPLE: We don't have anything to
25 report. We're kind of tracking along like everybody

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 else is. Not sure of the status. Our Chairman is
2 down at the White House in the senior-level
3 executive-level briefing as we speak. We're not
4 sure what's going to come out of that but we're
5 briefing the President and his team as we speak.

6 And we've sent a couple of people, some
7 of our senior reactor, boiling water reactor experts
8 to Japan with the U.S. Agency for International
9 Development. They put together a 70- or 80-person
10 advance team, so.

11 DR. SIZEMORE: And can you address the
12 questions of folks that -- U.S. citizens that were
13 exposed and what's being done with that.

14 MR. TEMPLE: With U.S. citizens who have
15 been exposed in Japan?

16 DR. SIZEMORE: Yes, the -- I think it's
17 been reported that three GE employees.

18 MR. TEMPLE: Oh, yes. I'm not sure.
19 We're in touch with GE. I'm not sure what the
20 outcome of that is going to be, but we are in touch
21 with GE. And I'm not sure what the answer is to
22 that to be honest with you. Are we doing another
23 conference call later today?

24 DR. SIZEMORE: That's -- we're going to
25 talk about that in just a second.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. TEMPLE: Okay. I'll try to have --

2 MS. DRESSER: This is Heather Dresser
3 calling in from the State Department's Task Force.
4 I can speak to that and perhaps we can check that
5 our understandings are matched up.

6 MR. TEMPLE: Okay.

7 DR. SIZEMORE: Please.

8 MS. DRESSER: We understand that the GE
9 folks are -- all 40 of them are headed from the
10 immediate vicinity of the Fukushima reactor down to
11 a hotel closer to Tokyo.

12 We understand that GE chartered a bus to
13 collect them because their vehicles had run out of
14 fuel and that that bus had arrived to the group and
15 the group was then coming en route.

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

17 (b)(4),(b)(5)
18
19
20
21
22
23

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

9 MS. DRESSER: We do not.

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

12 MALE PARTICIPANT: Hey Norm, this is
13 Kevin again. Is this something the RITN could help
14 GE out with?

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 who have some experience in this.

2 Al Wiley from (indiscernible, possibly
3 Re-Ax) has been involved. He may even be on the
4 phone call.

5 And we have guidance available, a thing
6 called Radiation Emergency Medical Management which
7 is online, algorithms for medical management which
8 they can be made aware of.

9 MALE PARTICIPANT: Norm, do you know if
10 that's been translated into Japanese?

11 MALE PARTICIPANT: I don't think it is.
12 But I'm sure most of them could speak English or
13 read the English for medical stuff.

14 MALE PARTICIPANT: Okay.

15 MS. DRESSER: Thank you very much. I
16 have someone from our Bureau of International
17 Security and Non-proliferation Affairs sitting on my
18 task force with me who's been reaching out to the
19 NRC. Are you part of the operations center, or --

20 MR. TEMPLE: Yes, I am.

21 MS. DRESSER: -- way to reach you?

22 MR. TEMPLE: Well, no. Have you been
23 talking with our Office of International Programs
24 people and our liaison team?

25 MS. DRESSER: I have been devolving all

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 of that to my staffers. So, I apologize, I don't
2 have an answer.

3 MR. TEMPLE: Okay. I'm not sure we're
4 getting all that information here in our NRC
5 operations center. Maybe you and I can talk
6 offline.

7 MS. DRESSER: I would love to do that.
8 I'm at 202-647-6611.

9 MR. TEMPLE: 6611. I'll give you a call
10 just as soon as we hang up here.

11 MS. DRESSER: Thank you.

12 MR. TEMPLE: Thank you. Appreciate
13 that.

14 MALE PARTICIPANT: And another follow-up
15 question for State here, ma'am. Did you say four
16 zero individuals on the bus?

17 MS. DRESSER: We believe that there
18 would be 40, yes. Thirty-seven of them are American
19 citizens. I understand the others are other foreign
20 nationals. (b)(5)

21 (b)(5)

22 MALE PARTICIPANT: And you don't know
23 their exposure level, if at all.

24 MS. DRESSER: No, we do not. We know
25 that only four are even concerned -- four, the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 number four, no zero after it -- are even concerned
2 about anything.

3 MALE PARTICIPANT: Okay.

4 MS. DRESSER: Three may have inhaled
5 dust and one had water splashed on them.

6 DR. SIZEMORE: Okay, thank you very
7 much. Kevin?

8 PARTICIPANT KEVIN: I think that covers
9 the question that I had. I agree with you, Tom, I
10 think we need to have another call later this
11 afternoon when some of this is going to be a little
12 bit clearer.

13 But again, we need to hustle to get some
14 more information about the ongoing scenario in
15 Japan. So, I think an afternoon call is worthwhile.

16 DR. SIZEMORE: All right. The USAID
17 call is at 1700 Eastern. Gary, Kevin Sheehan, what
18 would be the best time after 1700, say they get over
19 at 1800 which is 1500 your time, 3 p.m., what time
20 after that would work for you guys? And does
21 anybody feel that that's too late to have a call as
22 far as information-wise?

23 MR. SHEEHAN: Tom, this is Kevin
24 Sheehan. Anytime after that call works for us. We
25 don't have any other operations going on. I would

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 defer to Gary at the IRCT if he concurs with that.

2 PARTICIPANT GARY: Yes, absolutely. We
3 concur, anytime is fine.

4 DR. SIZEMORE: All right. So why don't
5 we do it at 1900, 7 p.m. Eastern time.

6 MR. TEMPLE: Okay, and that will be the
7 same number and passcode?

8 DR. SIZEMORE: We'll send that out.

9 MR. TEMPLE: Okay.

10 DR. SIZEMORE: I'm getting a shake, a
11 nod yes from the operations center watch officers.

12 MR. TEMPLE: And this is an ESSA call?

13 DR. SIZEMORE: Correct.

14 MR. TEMPLE: Gotcha. Okay, good,
15 because we'll also be on the USAID call at 1700.

16 MS. MICHAELS: This is Gretchen
17 Michaels. Can I put a request out to NRC? Can you
18 forward the SOC a contact person for public affairs
19 at the NRC?

20 MR. TEMPLE: Yes, we can. Anybody that
21 needs assistance from the Nuclear Regulatory
22 Commission, please call the following number: 301-
23 816-5100. And then when you get -- that's our
24 headquarters operations center. It's like our 24/7
25 911 center.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 When you get there State Department
2 should ask for the liaison team. And then if you
3 look for PA ask for the public affairs team.

4 MS. MICHAELS: Thank you.

5 MR. TEMPLE: So call that one number and
6 they can connect you with whoever you need to
7 connect to. And again my name is Jeff Temple, T-E-
8 M-P-L-E. I can also be available at that number.

9 MS. MICHAELS: Thank you.

10 MR. TEMPLE: Thank you.

11 DR. SIZEMORE: Thanks very much. I
12 appreciate your help.

13 MR. TEMPLE: Our pleasure. And sorry, I
14 didn't know there was a call. So I will be on the
15 1700 USAID call because I've got some liaison people
16 there. And I'll be on the 1900 HHS ESSA call as
17 well. Thanks. Thank you all.

18 MALE PARTICIPANT: And Tom, let's make
19 sure USDA is on the call later on this afternoon.

20 DR. SIZEMORE: Roger.

21 MALE PARTICIPANT: Okay.

22 DR. SIZEMORE: Will do. Thank you all.

23 (Whereupon, the foregoing matter went
24 off the record)
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-U-03L-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-9UA-5L03765094

(CALL INITIATED)

1 PARTICIPANT ANNETTE: Hello?

2 PARTICIPANT JOSH: Annette?

3 PARTICIPANT ANNETTE: Yes?

4 PARTICIPANT JOSH: It's Josh.

5 PARTICIPANT ANNETTE: Hey.

6 PARTICIPANT JOSH: Hi. I'm going to
7 make you sad.

8 PARTICIPANT ANNETTE: Why?

9 PARTICIPANT JOSH: Can we do it at 3 or
10 3:30?

11 PARTICIPANT ANNETTE: Oh gee.

12 PARTICIPANT JOSH: I know. I'm sorry.
13 He's not sleeping now. He's hoping to maybe do that
14 and then try to get a little bit of sleep.

15 PARTICIPANT ANNETTE: Okay, 3 or 3:30?

16 PARTICIPANT JOSH: Three preferably,
17 3:30 if not.

18 PARTICIPANT ANNETTE: Okay. Well, let
19 me just tell you right now I just -- the only person
20 I actually talked to was Christine Svinicki.
21 Ostendorff, I can probably get a hold of him. But I
22 have not been able to get a hold of Magwood or
23 Apostolakis based on the phone numbers that I have
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 on the emergency card. Either like they're not
2 answering their home phones and their cell phones
3 aren't set up to even take messages.

4 PARTICIPANT JOSH: Okay. You could also
5 ask the (indiscernible, possibly HOOS) to try to
6 help you track them down.

7 PARTICIPANT ANNETTE: Yes, yes, I'm
8 going to call them and see if they have better
9 numbers than what I have.

10 PARTICIPANT JOSH: Okay.

11 PARTICIPANT ANNETTE: You have your
12 card?

13 PARTICIPANT JOSH: Yes, it's in a
14 different room though.

15 PARTICIPANT ANNETTE: Oh, because I was
16 going to ask you if you have, you know, maybe yours
17 is more up to date or something. I'll call the Who
18 Is Center.

19 PARTICIPANT JOSH: Yes, just ask them to
20 track them down there. They love doing that.

21 PARTICIPANT ANNETTE: Okay. So you want
22 me to try for 3 now?

23 PARTICIPANT JOSH: Yes.

24 PARTICIPANT ANNETTE: Okay.

25 PARTICIPANT JOSH: Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 PARTICIPANT ANNETTE: All right, bye.

2 PARTICIPANT JOSH: Bye.

3 (Whereupon, the foregoing matter went
4 off the record)

5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-9YLKJ603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-9Z1J9-03765094

(CALL INITIATED)

(b)(6)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(6)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(6)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 PARTICIPANT JOSH: Bye.

2 (Whereupon, the foregoing matter went
3 off the record)

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-935^9603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-935-A603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 13, 2011

Work Order No.: NRC-0366

Pages 1-3

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/3

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 SUNDAY,
8 MARCH 13, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-I72)603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

0-I730603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 14, 2011

Work Order No.: NRC-0366

Pages 1-61

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/4

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 MONDAY, .

8 MARCH 14, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-AW!V(-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-AW!W0603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-B3W XF-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-B3XJKL03765094

(CONFERENCE CALL INITIATED)

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

MS. SMITH: Hi, yes, it's Brooke Smith. Can you put us on the conference call with the U.S.-UK?

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

MS. SMITH: Great, thank you.

(Automated message)

MALE PARTICIPANT: -- in the UK.

MS. SMITH: Hi, this is Brooke --

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

Are you guys in Canada?

CANADIAN MALE PARTICIPANT: No.

BRITISH MALE PARTICIPANT: You're all --

CANADIAN MALE PARTICIPANT: We have our (indiscernible) CANDUs. Totally different beast. But, no. So I guess the Americans are quite heavily -- I think half their fleet's BWR.

BRITISH MALE PARTICIPANT: There's a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 sprinkling of BWRs across parts of Europe, Spain,
2 Germany, different countries.

3 BRITISH MALE PARTICIPANT: Scandinavia.

4 BRITISH MALE PARTICIPANT: Scandinavia
5 as well. I think Finland's got some. France is all
6 PWRs.

7 NORTH AMERICAN MALE PARTICIPANT: Okay,
8 great. Thanks. That's what I thought but I just
9 wanted to confirm that.

10 BRITISH MALE PARTICIPANT: Okay. Just
11 while we are waiting for our U.S. NRC colleagues one
12 of the --

13 MS. SMITH: Excuse me, this is Brooke
14 Smith from the NRC headquarters operations center.
15 We are on the line.

16 BRITISH MALE PARTICIPANT: Oh, hi
17 Brooke, good to speak to you again.

18 MS. SMITH: Hi.

19 MR. CRESWELL: Glen Creswell here from
20 the UK. There's a fair few extra people with us
21 today. Do you want us to do a roundtable for you?

22 MS. SMITH: I think that would be
23 helpful.

24 MR. CRESWELL: Okay, I'll start off.
25 Glenn Creswell from the (indiscernible, possibly

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 NRI).

2 MR. HALL: Andy Hall.

3 MR. MUSKROF: Will Muskrof.

4 MR. THOMAS: Glen Thomas.

5 MR. SHEPHERD: Dave Shepherd.

6 MR. TERRANI: Andy Terrani.

7 MR. CRESWELL: That's all of us from
8 here.

9 MS. SMITH: Great. Brooke Smith,
10 international liaison, NRC headquarters operations
11 center.

12 MR. ALTER: Peter Alter, reactor safety
13 team, NRC operations center.

14 MS. LAO: Chris Lao, director of
15 protection measures team, NRC operating center.

16 AMERICAN MALE PARTICIPANT: That's it.

17 MR. VANDERBORT: Sorry, Adam Vanderbort.
18 U.S. Embassy, London.

19 CANADIAN MALE PARTICIPANT: Just to
20 repeat from Canada and the CNSC in Ottawa we have
21 Richard Tennant, the international liaison officer
22 and Kenneth Brenasof is joining me. He's the
23 emergency director for EOC today.

24 MR. KASSA: And in Vienna you have Sean
25 Kassa and Anthony Hinton from the Canadian Mission

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 to the IAEA.

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

5 MS. SMITH: Okay.

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

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

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

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

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

25 MR. ALTER: Okay, we'll start at

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Daiichi. Daiichi. Okay, starting at Unit 1. Okay.

2 We know the core is damaged because when the --
3 when the reactor building roof blew off there was
4 cesium and iodine released and detected.

5 MR. CRESWELL: Yes, agreed.

6 MR. ALTER: The reactor water level is
7 below top of active fuel.

8 MR. CRESWELL: Yes, agreed.

9 MR. ALTER: And seawater injection was
10 lost during the evening.

11 MR. CRESWELL: Of Unit 1?

12 MR. ALTER: At Unit 1.

13 MR. CRESWELL: Go ahead.

14 MR. ALTER: Primary containment is still
15 intact.

16 MR. CRESWELL: Yes, agreed.

17 MR. ALTER: And the reactor building or
18 secondary containment is obviously damaged.

19 MR. CRESWELL: Yes, agreed.

20 MR. ALTER: Okay. Moving onto Daiichi
21 Unit 2.

22 MR. HALL: Just one minute. Andy Hall
23 here.

24 MR. ALTER: Yes.

25 MR. HALL: I wanted to -- I'd seen a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

9 MR. HALL: Yes.

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

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

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

25 MR. ALTER: -- know either.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. HALL: Okay, fine.

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

6 MR. ALTER: No, no. The building is
7 kept covered, okay? The corrugated metal that blew
8 off during the explosion, okay, that keeps it
9 covered. And it is at a slightly negative pressure.

10 And the corrugation and the blowout plug on that
11 floor goes at about a half a pound positive
12 pressure, one-half positive pressure.

13 BRITISH MALE PARTICIPANT: Okay.

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

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

19 BRITISH MALE PARTICIPANT: Peter, one
20 other point of confirmation. I thought I'd seen
21 that the seawater cooling was restored after about a
22 2-hour interruption. You were saying you've got
23 confirmation of it being lost last evening?

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

3 BRITISH MALE PARTICIPANT:

4
5 (b)(4),(b)(5)
6
7
8

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

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

17 BRITISH MALE PARTICIPANT: Indeed,
18 indeed. Yes. We're currently -- they're worried
19 about what is currently happening on Unit 2 if they
20 haven't had any cooling into the core for the last
21 6, 7, 8 hours or so.

22 BRITISH MALE PARTICIPANT:

23 (b)(5)
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. ALTER: Yes, please send it to
2 Brooke like you did yesterday.

3 BRITISH MALE PARTICIPANT: Yes, will do.

4 MR. ALTER: Okay. What we know about
5 Unit 3 is that the core -- there is core damage.
6 But we knew this morning that during -- late in the
7 evening seawater injection was lost. But you said
8 that has been recovered.

9 BRITISH MALE PARTICIPANT: I think so.

10 MR. ALTER: The secondary containment
11 failed early this morning. And that the primary
12 containment is intact.

13 BRITISH MALE PARTICIPANT: Yes. Yes,
14 that's agreed, that's how we see it.

15 MR. ALTER: Okay. Unit 2 --

16 BRITISH MALE PARTICIPANT: Yes.

17 MR. ALTER: -- we do not know the status
18 of the core.

19 BRITISH MALE PARTICIPANT: The only
20 information that we have is that the core -- which
21 we thought yesterday evening, or sorry, when we
22 spoke to you last was fully covered.

23 We had some information come in a little
24 while ago to tell us that it was un -- thought to be
25 uncovered.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

5 MR. ALTER: Okay.

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

9 MR. ALTER: Okay.

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

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

16 MR. CRESWELL: Agreed.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. ALTER: Correct.

2 BRITISH MALE PARTICIPANT: The core was
3 uncovered by 2 meters.

4 MR. ALTER: We heard that -- I think I
5 heard that from some Japanese live television report
6 about an hour and a half ago.

7 BRITISH MALE PARTICIPANT: I think TEPCO
8 confirmed that they were down to about 2 meters
9 below top-of-core level last night before they put
10 the seawater cooling back on.

11 MR. ALTER: Okay.

12 MR. CRESWELL: Okay.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 BRITISH MALE PARTICIPANT: Okay.

2 BRITISH MALE PARTICIPANT: Peter, do you
3 know --

4 MR. ALTER: Say again?

5 BRITISH MALE PARTICIPANT: -- to
6 introduce the injectables into the reactor?

7 MR. ALTER: You're going to have to
8 repeat your question.

9 BRITISH MALE PARTICIPANT: Do you know
10 which route they are using to inject this water to
11 the reactor?

12 MR. ALTER: -- we have is guesses over
13 here. We do not know.

14 MR. CRESWELL: Okay. We're at exactly
15 (indiscernible, possibly the same place). Thanks
16 for confirming.

17 (Laughter)

18 BRITISH MALE PARTICIPANT: Well, the
19 uncertainty as regards the injection is that we've
20 heard of course of seawater being injected into the
21 reactor itself. But also it's being injected into
22 other parts of the building.

23 Do you have any views on that as to
24 where they might be injecting it with --

25 MR. ALTER: Injecting it inside primary

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 containment.

2 BRITISH MALE PARTICIPANT: Yes.

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

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

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

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

16 MR. ALTER: Okay.

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

22 MR. ALTER: No, the hydrogen production
23 comes from clad-water interaction, or clad-steam
24 interaction. It's coming right off of the clad.
25 And then eventually the clad gets weak enough that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 it can't hold the fuel.

2 NORTH AMERICAN MALE PARTICIPANT: Yes, I
3 understand that. So --

4 MR. ALTER: The same mechanism as in a
5 PWR or a CANDU reactor.

6 NORTH AMERICAN MALE PARTICIPANT: Okay,
7 so it's zircaloy-cladding interaction.

8 MR. ALTER: Zirc-water interaction,
9 that's right. But it's actually steam, it's not
10 liquid water.

11 NORTH AMERICAN MALE PARTICIPANT: Okay.
12 So it's indicative of fuel -- imminent fuel
13 failure, right?

14 MR. ALTER: Yes.

15 NORTH AMERICAN MALE PARTICIPANT: Okay.
16 The other thing I was going to ask is in terms of
17 decay power for those BWRs do you have a sense of
18 what we're looking at at day 4 after shutdown?

19 MR. ALTER: It's the same decay curve
20 for every reactor, 6 percent immediately, 1 percent
21 within a couple of hours, and then, you know,
22 regular decay after that. So any core decay, power
23 decay chain that you've ever seen, it's the same for
24 all reactors.

25 NORTH AMERICAN MALE PARTICIPANT: Okay,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 great.

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

8 MR. ALTER: Okay, when -- when the
9 pressure builds up into primary containment, the
10 primary containment, it's steam and hydrogen.
11 Because if they're getting (indiscernible, possibly
12 core) and the cladding's been uncovered for any
13 length of time you're going to get steam and
14 hydrogen together.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 stack as fast as possible. But to get there they've
2 got to go through that reactor building somewhere.
3 Okay?

4 So we don't know if the Japanese have
5 had to install what are called those hardened vents,
6 the large hardened vents.

7 Regardless of how they did it the --
8 what they're venting now to primary containment is
9 in the reactor building for awhile.

10 BRITISH MALE PARTICIPANT: Yes, that's -
11 - I'm guessing that's pretty well filled up that --

12 MR. ALTER: Well, it's in the building,
13 but it might be in something as flimsy as a regular
14 ventilation duct work like you have over your head
15 in the building you're in.

16 BRITISH MALE PARTICIPANT: Yes, yes. We
17 all just looked up, yes.

18 (Laughter)

19 MR. ALTER: And depending upon how much
20 pressure was originally in containment when they
21 started to vent and how fast they vent they blew up
22 those vent ducts.

23 BRITISH MALE PARTICIPANT: Yes, sure.

24 MR. ALTER: And it could start -- we
25 feel that the hydrogen and oxygen -- I'm just

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 talking basic design here.

2 BRITISH MALE PARTICIPANT: Sure, sure,
3 yes.

4 MR. ALTER: The hydrogen and steam got
5 into the reactor building at ground level.

6 BRITISH MALE PARTICIPANT: Okay.

7 MR. ALTER: Okay? In one corner of the
8 -- all these reactor buildings is a -- essentially a
9 loading access hatch so they can bring stuff from
10 ground level all the way up to the refuel floor, or
11 stop off at any one of the intermediate floors. And
12 that hatch is about four times the size of a soccer
13 goal.

14 BRITISH MALE PARTICIPANT: Yes.

15 MR. ALTER: Okay? So, wherever the
16 explosion was in the reactor building that brought
17 all that energy immediately up to the refuel floor
18 where this corrugated siding is.

19 BRITISH MALE PARTICIPANT: Ah, okay.
20 So, the explosion may not have been actually
21 primarily in the -- underneath the cladding. It may
22 well have been somewhere else in the building and
23 that was the --

24 MR. ALTER: We suspect it was as low --
25 at least ground level.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 BRITISH MALE PARTICIPANT: Okay, so a
2 kind of shotgun effect going up the -- up that
3 access shaft, yes.

4 MR. ALTER: Yes. Okay?

5 BRITISH MALE PARTICIPANT: That's really
6 useful. We were making some other assumptions.

7 MR. ALTER: What I've been telling you
8 is just basic design. I've only been teaching
9 boilers since 1979.

10 (Laughter)

11 BRITISH MALE PARTICIPANT: Yes. And in
12 a few more years, yes.

13 MALE PARTICIPANT: Can we go back one
14 step? We've been discussing the water being poured
15 into the primary containment in order to prevent
16 damage from the core.

17 Now, but the question of seawater
18 injection into the reactor itself, it still seems to
19 be up for discussion. Is that also taking place?

20 MR. ALTER: The word we had yesterday,
21 when I was here yesterday was that they were sending
22 some water to both places, inside the reactor vessel
23 to below the core and into containment below the
24 reactor itself.

25 MALE PARTICIPANT: Presumably they're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

11 MALE PARTICIPANT: Okay.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 BRITISH MALE PARTICIPANT: Yes.

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 looks to me like just about everything except the
2 reactor buildings has been just swept away in the
3 process.

4 MR. ALTER: Yes, the concrete portion of
5 the reactor buildings are pretty well still intact.

6 BRITISH MALE PARTICIPANT: Yes, agreed.

7 MR. ALTER: Primary containment except
8 vent path is still intact.

9 BRITISH MALE PARTICIPANT: Agreed.

10 MR. ALTER: And the reactor vessels are
11 still intact and hopefully they're able to maintain
12 the release valve open.

13 BRITISH MALE PARTICIPANT: Yes, agree
14 with all that. So the switching yard and all that
15 sort of stuff looks like it's just been swept away
16 with the tsunami.

17 MR. ALTER: Yes, sir. As far as Daini
18 is concerned basically what we know is nothing
19 different than what we discussed yesterday at 3
20 o'clock.

21 BRITISH MALE PARTICIPANT: Yes, yes, we
22 got the same, that all shutdown with --

23 MR. ALTER: Normal makeup and offsite
24 power.

25 BRITISH MALE PARTICIPANT: Yes, there

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

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

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

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

14 BRITISH MALE PARTICIPANT: Same here.
15 There's very little information come out, or that we
16 managed to pick up in the last 20 hours or so.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 We don't think that's near land.

2 BRITISH MALE PARTICIPANT: Understood.

3 MR. ALTER: In the Sea of Japan.

4 BRITISH MALE PARTICIPANT: In the Sea of
5 Japan.

6 MR. ALTER: That's correct.

7 BRITISH MALE PARTICIPANT: We're putting
8 a bit more thought into what's happening in the rest
9 of -- including on aftershocks and stuff.

10 MR. ALTER: Yes, sir.

11 BRITISH MALE PARTICIPANT: Okay.

12 MR. KASSA: Just a couple of questions
13 or issues from Vienna here. The latest IAEA
14 documentation that we found posted on Unit 1 only
15 mentions the injection of seawater interrupted. We
16 can't find anything mentioning that it's been
17 reestablished. So, again, if our UK colleagues do
18 see something we'd like to see that.

19 The second question is about Unit 3.
20 One of our people we spoke to at the agency talked
21 about there being a valve problem which might cause
22 an issue in terms of venting pressure out of there.

23 Have you guys heard anything about that?

24 NORTH AMERICAN MALE PARTICIPANT: I
25 heard something about that just before I came over

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

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

25 BRITISH MALE PARTICIPANT: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 BRITISH MALE PARTICIPANT: Again,
2 talking about the reestablishment of seawater
3 cooling. I'll look to where the source of
4 information was for the valve operation and see if
5 we can share it with you.

6 MR. ALTER: Okay.

7 BRITISH MALE PARTICIPANT: Okay. Have
8 you got an email address in Vienna that we can send
9 stuff to?

10 MR. KASSA: The easiest one is our
11 general email address here at the mission. It's --
12 but VEERM.

13 BRITISH MALE PARTICIPANT: Victor Echo
14 Echo Romeo Mike.

15 MR. KASSA: Yes, okay, sure. Victor
16 Papa Echo Romeo Mike.

17 BRITISH MALE PARTICIPANT: Victor Papa
18 Echo Romeo Mike, okay.

19 MR. KASSA: At international.gc as in
20 Golf Charlie --

21 BRITISH MALE PARTICIPANT: Golf Charlie.

22 MR. KASSA: -- CA as in Charlie Alpha.

23 BRITISH MALE PARTICIPANT: Say again
24 that last part? At? I'll go back to the good old-
25 fashioned technique. VPERM@international.gc.ca.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. KASSA: That's it, yes.

2 BRITISH MALE PARTICIPANT: Thank you.

3 CANADIAN MALE PARTICIPANT: Could you do
4 us a favor as well? Could you add the CNSC external
5 liaison email into that as well? It's Echo Oscar
6 Charlie 2 at CNSC-CCSN.gc.ca.

7 BRITISH MALE PARTICIPANT: Okay. Again,
8 I'll go back to the non-phonetic version of that.
9 So that's EOC2@cnscccsn.gc.ca.

10 CANADIAN MALE PARTICIPANT: Affirmative,
11 thank you.

12 BRITISH MALE PARTICIPANT: Thank you.

13 CANADIAN MALE PARTICIPANT: And I have a
14 question from CNSC. In PWR we have (indiscernible)
15 thermocouple to measure the temperature at the fuel.
16 Do you have that kind of system in BWR?

17 NORTH AMERICAN MALE PARTICIPANT: No.

18 CANADIAN MALE PARTICIPANT: Do you have
19 any severe accident systems or any -- what are you
20 measuring in containment? Any pressure,
21 temperature? What are you going by when you're
22 deciding to vent or not?

23 NORTH AMERICAN MALE PARTICIPANT: We're
24 going by pressure in containment. Yes, it's
25 pressure in containment. You want to stay beyond --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

7 MALE PARTICIPANT: For the TMI, one
8 action plan for the TMI was that you have to have
9 thermocouple to measure the temperature of the fuel.
10 I believe there should be some kind of that system
11 in BWR.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 that they have some remote indication of that.

2 BRITISH MALE PARTICIPANT: Okay. And
3 actually, it's not entirely clear to us either what
4 condition their control rooms are in.

5 NORTH AMERICAN MALE PARTICIPANT: We've
6 not heard word one about the control room. But then
7 initially what rad levels (indiscernible) during the
8 first explosion.

9 BRITISH MALE PARTICIPANT: Yes, they
10 report them to be (indiscernible) intact after the
11 explosion. But whether that means functional is
12 another matter.

13 NORTH AMERICAN MALE PARTICIPANT: Going
14 back to the severe accident management guideline, in
15 the United States we do have severe accident
16 management guidelines. But --

17 NORTH AMERICAN MALE PARTICIPANT: I'm
18 sorry. We have SAMGs but we don't know whether or
19 not the Japanese do.

20 BRITISH MALE PARTICIPANT: We're in the
21 same position. We have the same sort of thing but
22 we don't know -- we've got no idea what the Japanese
23 have.

24 NORTH AMERICAN MALE PARTICIPANT: (b)(4),(b)(5)

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

NORTH AMERICAN MALE PARTICIPANT: Okay.

And that comes from where?

NORTH AMERICAN MALE PARTICIPANT: (b)(4),(b)(5)

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

NORTH AMERICAN FEMALE PARTICIPANT:

That's their emergency center.

NORTH AMERICAN MALE PARTICIPANT: I

understand.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 system in most cases goes directly to the elevated
2 release point or the stack. It's just that while
3 it's going through the reactor building it's any one
4 of a number of different configurations.

5 BRITISH MALE PARTICIPANT: Okay.

6 MALE PARTICIPANT: (indiscernible) on
7 the general question. Do you know what the design
8 basis is on the seismic qualification of the fuel
9 ponds? And whether they've managed to retain the
10 integrity?

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

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

19 NORTH AMERICAN MALE PARTICIPANT: Okay.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 AMERICAN MALE PARTICIPANT: Not in a
2 boiling water reactor.

3 BRITISH MALE PARTICIPANT: Oh, okay.

4 AMERICAN MALE PARTICIPANT: The -- yes.
5 Not in a boiling water reactor.

6 BRITISH MALE PARTICIPANT: Okay.

7 AMERICAN MALE PARTICIPANT: I could --

8 BRITISH MALE PARTICIPANT: Okay. Just a
9 very general thing. We have not made any real
10 concerted attempt to contact the Japanese safety
11 regulator. We think their minds will be fairly well
12 concentrated on what they've got to do within Japan
13 at the moment. I don't know if anybody has spoken
14 to anybody, any of our colleagues in the regulatory
15 agencies in Japan or not. I'm sorry?

16 AMERICAN MALE PARTICIPANT: Since I've
17 been here I have not heard for sure about any of
18 those interactions.

19 BRITISH MALE PARTICIPANT: Okay. I
20 thought as well. Yes. We really don't want to push
21 it too hard because they -- I know where my mind
22 would be focused if I was there.

23 MS. SMITH: This is Brooke Smith. I
24 just wanted to interject just briefly. As an agency
25 our policy, we clearly have our op centers up and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 running 24 hours a day since this occurred.

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

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

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

18 BRITISH MALE PARTICIPANT: Thanks,
19 Brooke. We've taken almost the exact same line.

20 MS. SMITH: Okay.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 it's quite simple advice.

2 MS. SMITH: Yes, and you know, I was
3 here last night and that was being discussed. I
4 just got here this morning again. I don't know if
5 that actually went out or not. So we may have
6 issued the same thing.

7 BRITISH MALE PARTICIPANT: Yes, okay.
8 And the stuff that we're saying generally is just
9 almost word perfect for what you just said.

10 MS. SMITH: Okay. So we're all on the
11 same line of thought. So, you know.

12 BRITISH MALE PARTICIPANT: I think we've
13 had a lot of pressure from Mike Whiteman, our chief
14 inspector, to give some interviews and statements.
15 And he will keep to that end of it without getting
16 drawn into stuff too much. But I think he may feel
17 obliged to answer some questions in describing what
18 he understands has happened.

19 But we'll try and make sure he sticks to
20 facts in evidence and certainly no second-guessing
21 of any of the regulators or anything.

22 MS. SMITH: Yes, okay. Is there
23 anything else?

24 BRITISH MALE PARTICIPANT: Just
25 (indiscernible) from me. That is do you have any

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 views on prognosis of the extent to which they will
2 be able to control the situation, maintain the core
3 within the reactor pressure vessel and prevent a
4 release to the environment?

5 NORTH AMERICAN MALE PARTICIPANT: We'd
6 have to know more about what current conditions are
7 to get -- to forecast. And our forecasts are based
8 on are they able to get water back into the vessel,
9 and are they able to keep water as close as possible
10 to the outside of the vessel inside containment.

11 BRITISH MALE PARTICIPANT: Yes. Do you
12 have any analyses, for example, of the cooling of
13 the outside of the vessel which would indicate that
14 it could maintain its integrity?

15 NORTH AMERICAN MALE PARTICIPANT: Our
16 national lab, the Department of Energy national lab
17 has done a lot of research on that. And there is a
18 NUREG if you know what a NUREG is --

19 BRITISH MALE PARTICIPANT: Yes, sure.

20 NORTH AMERICAN MALE PARTICIPANT: -- on
21 that. But I don't know the number. I'd have to
22 search for that.

23 BRITISH MALE PARTICIPANT: Okay, that's
24 fine.

25 BRITISH MALE PARTICIPANT: Don't worry

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 about that.

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

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

9 BRITISH MALE PARTICIPANT: Thank you
10 very much.

11 BRITISH MALE PARTICIPANT: Okay, thanks
12 very much indeed.

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

17 MS. SMITH: Yes. It's Brooke again.
18 Yes, we can make arrangements maybe tentatively for
19 the same time, 9:30 Eastern Standard Time here. And
20 we'll coordinate that.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 coordinate that. And hopefully Peter is here
2 tomorrow or we'll find out who's here from the
3 Reactor Safety Team.

4 MR. ALTER: I'll be in the building.

5 MS. SMITH: You'll be in the building.

6 BRITISH MALE PARTICIPANT: Yes, I know
7 the feeling.

8 MS. SMITH: Okay. But, yes. So let's
9 just tentatively, you know, plan for something and
10 maybe later, I guess it's later in the day there.
11 We'll try to set something up through email
12 communication.

13 BRITISH MALE PARTICIPANT: Yes, that's
14 good.

15 MS. SMITH: Okay.

16 MR. TENNANT: Richard Tennant here, the
17 external liaison for CNSC right now.

18 Just a couple of questions. Have you
19 guys done any plume modeling about any kind of plume
20 that's going to affect your western shoreline?

21 MR. ALTER: Okay, we have to get our
22 protective measures person back. She got bored
23 listening to me.

24 (Laughter)

25 MR. TENNANT: Apples and oranges. Okay,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 we've done some projections but we've had trouble
2 with projecting based on a 72-hour continuous inject
3 of radioactive material into the atmosphere versus
4 the actual problem that occurred. So, our numbers
5 indicate that it's minimal, or less than minimal,
6 but we would, like you say, we've been holding back
7 information on that aspect because our projection
8 showed that it might affect your shoreline as well.

9 So we wouldn't want to put numbers out that are in
10 conflict. So maybe perhaps we could touch base
11 later on that.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

3 FEMALE PARTICIPANT: Right.

4 MR. TENNANT: All right.

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 BRITISH MALE PARTICIPANT: Okay, good
2 point. We -- our environment agency guys just were
3 doing it just to get an order of magnitude view on
4 just what the -- any possible scenarios might be.

5 FEMALE PARTICIPANT: Okay. Well --

6 BRITISH MALE PARTICIPANT: No attempt to
7 predict, just in terms of scenarios. But it would
8 be good if this is stuff that we're passing around,
9 if we could be kept in the loop.

10 NORTH AMERICAN MALE PARTICIPANT:
11 Brooke, can I just confirm your email? You said
12 LIA02?

13 MS. SMITH: 02.hoc@nrc.gov. And then
14 let me -- there's two international desks. The
15 other one is LIA03, zero three, sorry. We say oh
16 and zero. So, LIA02.hoc@NRC.gov and then
17 LIA03.hoc@nrc.gov.

18 NORTH AMERICAN MALE PARTICIPANT: The 02
19 is the main line or the equivalent?

20 MS. SMITH: They're the equivalent.
21 There's somebody staffing both of those computer
22 terminals.

23 NORTH AMERICAN MALE PARTICIPANT: Okay.
24 And can I get -- do you have an external liaison
25 officer at the UK?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. SMITH: I think we have Charlie
2 Temple's email address.

3 BRITISH MALE PARTICIPANT: Yes, that's
4 because our equivalents of your LIA02 had broken
5 down on us. But we've now got our correct one
6 working.

7 What I'll do, I'll get the guys to just
8 send you an email to confirm what that is.

9 MS. SMITH: Okay, fantastic.

10 CANADIAN MALE PARTICIPANT: All right.
11 And Brooke, we were supposed to have a CNSC-U.S. NRC
12 teleconference at 10:30. I'm hoping we're going to
13 cancel that and we'll just --

14 MS. SMITH: Yes, we wanted to bring us
15 all together at one time just because of resources.
16 And I think it would, you know, having a trilateral
17 exchange of information has been helpful.

18 BRITISH MALE PARTICIPANT: Yes,
19 absolutely agree. It's been really useful.

20 MS. SMITH: Okay, great. I'm happy.
21 Good.

22 BRITISH MALE PARTICIPANT: And thanks
23 for your indulgence and the time you've spent on it.

24 MS. SMITH: Oh, no problem. We're happy
25 to have done it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 BRITISH MALE PARTICIPANT: Okay.

2 MR. KASSA: Vienna here. Can we just
3 jump in with one last point? Sorry.

4 You had discussed earlier your advice to
5 your citizens in Japan. I just wanted to confirm
6 that Canada has also provided the same advice to our
7 staff at the embassy and consulates as well as their
8 families and other Canadians to follow the advice of
9 the local authorities.

10
11
12 (b)(4),(b)(5)
13
14

15 MS. SMITH: Okay. That's good to know.

16 BRITISH MALE PARTICIPANT: Okay.

17 NORTH AMERICAN MALE PARTICIPANT:
18 Tomorrow at 0930 Eastern Standard Time we'll do this
19 again?

20 MS. SMITH: Yes.

21 CANADIAN MALE PARTICIPANT: Excellent.
22 At CNSC we're finished.

23 BRITISH MALE PARTICIPANT: Okay. Thanks
24 guys, goodbye.

25 MS. SMITH: Okay. Bye bye.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (Whereupon, the foregoing matter went
2 off the record)
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-B6SZ9603765094

(CONFERENCE CALL INITIATED)

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

MR. WHITCOMB: Bob Whitcomb, radiation study, CDC on the line.

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

MR. HIMMLER: This is Bernell Himmler from OPP.

CALL MODERATOR: Thank you.

MS. MYERS: Jennifer Horstein Myers, NIOSH.

MS. BADER: Judy Bader, ASPR.

MS. PASSMAN: Tina Passman, ASPR.

CALL MODERATOR: Thank you.

MS. HASTINGS: Cathy Hastings, OHA.

CALL MODERATOR: Thank you.

MR. CAGE: Chris Cage, Region 7 REC.

CALL MODERATOR: Thank you.

MR. KIRCHNER: David Kirchner, Region 10 REC.

CALL MODERATOR: Thank you.

MR. ESPINOZA: Greg Espinoza, NOC

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 liaison.

2 CALL MODERATOR: Thank you.

3 MS. TAYLOR: -- Taylor Region 6 REC.

4 CALL MODERATOR: Thank you.

5 CMDR DEE: Commander Mark Dee, National
6 operations center.

7 CALL MODERATOR: Thank you. All
8 callers, please remember to mute your phones using
9 *6 and/or the mute button. Again, we will mute your
10 phones if you have an open mike. We will begin
11 immediately. At this time is EPA on the call?
12 Okay, thank you. Dr. Sizemore.

13 DR. SIZEMORE: Good morning. This is
14 Tom Sizemore in the Secretary's operation center.
15 Welcome to the 2011 Pacific Basin Earthquake-Tsunami
16 ESSA Conference Call, objective being to discuss the
17 current response operations and future actions and
18 update on the reactor situation and any public
19 health issues.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 today. Thank you.

2 DR. SIZEMORE: Thank you. And from logs
3 with regard to the equipment that we deployed, can
4 we get a status update, please?

5 MALE PARTICIPANT: All right. At 1530
6 last night Eastern Standard Time all the caches are
7 back in (indiscernible, possibly Maryland up in the
8 rack) ready to go.

9 MALE PARTICIPANT: Please use your mike.

10 DR. SIZEMORE: Thanks very much. I'd
11 like to move now to, if FDA is on, to get an update
12 on situations regarding Alaskan shellfish and
13 finfish with regard to any kind of problems that you
14 may be seeing or planning for. Over. FDA, are you
15 on?

16 MR. KERRINGTON: Well, this is Clark
17 Kerrington. Am I the only one on?

18 DR. SIZEMORE: Tag, you're it, buddy.

19 MR. KERRINGTON: Okay. We wouldn't have
20 seen any problems at this point. We don't regularly
21 monitor for -- so if there is a problem we wouldn't
22 know it. But we don't have any reason to think that
23 there is one.

24 DR. SIZEMORE: Okay. And with regard to
25 other foodstuff, USDA. What about the stuff that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 we're importing from Japan?

2 MS. MORRISON: Tom?

3 DR. SIZEMORE: Go ahead.

4 MS. MORRISON: Okay, can you hear?

5 DR. SIZEMORE: FDA?

6 MS. MORRISON: Yes, this is Ellen
7 Morrison, Tom.

8 DR. SIZEMORE: Hi.

9 MS. MORRISON: Hi. I just wanted to say
10 we're meeting with our centers this afternoon to
11 discuss strategy here, including food.

12 I think one of the bigger concerns would
13 be if a plume was to come to the U.S. on the
14 (indiscernible, possibly cultural side) is the --
15 Clark Kerrington already said we're not so concerned
16 about the fish in the water and the dilution factor.

17 We have to date seen no plume data
18 coming out of Department of Energy, FRMAC, or
19 anything that would indicate what, if any, state --
20 concerned. I see Washington and Oregon are doing
21 some air sampling, but we really don't have a lot of
22 data to base what we would do.

23 However, we are having a strategy
24 meeting and have today (indiscernible) talk about
25 possibilities of what we might do should plume data

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 come to the U.S. And also, to look at imports that
2 we see coming in from Japan on a regular basis.

3 DR. SIZEMORE: Okay. Thanks, Ellen.
4 And USDA, do you look at imports also? Pardon my
5 ignorance on this, but who monitors the meat
6 products from Japan?

7 MALE PARTICIPANT: It's the Food Safety
8 Inspection Service out of USDA. There's very little
9 that does come in, but there are a few things that
10 come in. And we haven't talked to those folks yet
11 on this.

12 DR. SIZEMORE: Okay. We'd be interested
13 for tomorrow if you would be able to give us an
14 update on at least a way forward or what thoughts
15 you have.

16 MALE PARTICIPANT: Yes, we can do that.

17 FEMALE PARTICIPANT: No problem.

18 DR. SIZEMORE: All right. Thank you
19 very much. Let's go on then and go -- Department of
20 State, are you on, please? Can we get an update?
21 State, we're not hearing you if you're on mute. All
22 right, let's -- we'll give them a call. But, NRC,
23 Jeff? Thanks for being on again.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Nuclear Regulatory Commission.

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

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

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

14 We have two people on the ground that
15 are basically attached to the Ambassador's hip.
16 We've been asked to send another team of anywhere
17 from six to eight people, so we're mobilizing them.
18 We'll have them on a plane this afternoon en route
19 to Japan.

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

23 DR. SIZEMORE: And, thanks Jeff.

24 MR. TEMPLE: Sure.

25 DR. SIZEMORE: Can you talk about the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 (indiscernible, possibly pods) on this call? Where
2 we are with that or anything?

3 MR. TEMPLE: With the what? I'm sorry.

4 DR. SIZEMORE: The Las Vegas pods.

5 MR. TEMPLE: Oh, from what I understand,
6 and I can't speak for them, but I believe that the
7 aerial monitoring assets from Nevada have been
8 dispatched. But I'm not sure, don't quote me on
9 that. They've been dispatched to Japan is what I
10 heard this morning.

11 DR. SIZEMORE: Okay.

12 MR. TEMPLE: I'm not sure. But that's
13 what I heard in a conference call earlier. And
14 again, that's a DOE asset so we'd have to check with
15 DOE. But from what I've heard they've been
16 dispatched to Japan.

17 DR. SIZEMORE: And so far it appears
18 that Japan has been pretty lucky in the direction of
19 the wind blowing any steam release or anything off
20 to sea.

21 MR. TEMPLE: Yes. And there's also --

22 DR. SIZEMORE: -- change.

23 MR. TEMPLE: Well, there's also rain
24 and/or snow predicted in the forecast for the next
25 day or two, so that's going to cut us a little bit

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

2 We have a full liaison team staffed. We
3 have people at USAID 24/7 now coordinating requests.

4 We've received a lot of equipment requests from
5 Japan and from the Ambassador. So we're mobilizing
6 to kind of find those resources, some of which will
7 be military. Because we can't get stuff there fast
8 enough from the domestic U.S. supplies.

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

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

19 MALE PARTICIPANT: Roger that.

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

23 MR. TEMPLE: My pleasure, Tom.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

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

22 PUBLIC AFFAIRS PARTICIPANT:

23 (b)(5)
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. LEPRAIRIE: Hi, it's Andre
2 LePrairie. And so far no comments or concerns, but
3 we're asking to see if there's any messages from
4 Canada on imports from food supplies. And maybe
5 we'll have those by tomorrow.

6 MR. TEMPLE: Again -- Tom, Jeff Temple
7 again from the NRC. We found I think yesterday or
8 the day before a plume plot on the Dredge Report
9 with the NRC logo on it. That did not come from us.
10 We called them, we asked them to remove it.

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

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

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

23 DR. SIZEMORE: Thanks, Jeff.

24 MR. LAYMAN: Tom Sizemore, Phil Layman.
25 Just a quick question. Do we have any known truth

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 as far as exposure Navy vessels? We understand they
2 relocated based on potential exposures and certainly
3 there's some news reports. Do we have truth from
4 DoD on that one?

5 DR. SIZEMORE: DoD are you on?
6 NORTHCOM?

7 MR. TEMPLE: We at the NRC continue to
8 receive information from Naval reactors about what
9 they're monitoring on the Ronald Reagan. So we're
10 continuing to get air sample data, rad data and so
11 forth from them.

12 So I don't have that and I don't think
13 we're prepared to release that because that's
14 military information, but there is a line of
15 communication from Naval reactors to the NRC.

16 MALE PARTICIPANT: We'll check on that
17 too.

18 MR. TEMPLE: Okay. They could release
19 it to you potentially, but I don't feel comfortable
20 doing that, so.

21 MALE PARTICIPANT: Right.

22 MR. TEMPLE: It's not my data, so.

23 MR. LAYMAN: Tom Sizemore, Phil Layman.

24 Thanks. Yes, if you can get somebody on the DoD
25 Joint Staff that would be helpful.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 DR. SIZEMORE: Yes, and -- thank you.
2 So, EPA, are you on? State, have you signed on?

3 MS. HENDERSON: This is Lindsey
4 Henderson from the Bureau of Consular Affairs. I am
5 on the State Department Task Force. I'm here.

6 DR. SIZEMORE: Thanks. I read part of
7 the situation report, the unclass portion of the
8 situation report on dead and without electricity and
9 so forth. But can you give us any update on any
10 kind of public health concerns or requests for
11 assistance that Health and Human Services could help
12 with? Do you copy? Department of State, are you
13 still on?

14 MS. HENDERSON: Yes, I'm here.

15 DR. SIZEMORE: Can you give us any
16 information on public health requests for assistance
17 that Health and Human Services can help with?

18 MS. HENDERSON: To my knowledge we have
19 not had any health requests for assistance.

20 DR. SIZEMORE: All right, thank you. I
21 appreciate you getting on.

22 MS. HENDERSON: It's not a problem.
23 Sorry for the delay.

24 DR. SIZEMORE: Dr. Yeski, do you have
25 any comments or questions?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 DR. YESKI: No, I don't. I think our
2 concerns here are the weather shifting as we talked
3 about a little bit before, that if there's releases
4 and this weather shifts and starts blowing the stuff
5 back over population centers we'd have some concerns
6 about that. But I think we've covered all the areas
7 of concern today. Thanks, Tom.

8 DR. SIZEMORE: Anymore questions,
9 concerns, or comments? All right. We'll meet again
10 on call here at 11 o'clock Eastern time tomorrow. I
11 appreciate you getting on, State. Thanks for
12 getting on. We hope to have you on again tomorrow.

13 MS. HENDERSON: Not a problem. Is this
14 going to be the same call-in information as this
15 time?

16 DR. SIZEMORE: Yes.

17 MS. HENDERSON: Great, we'll be there.
18 Thank you.

19 MR. TEMPLE: Thanks, Tom, I appreciate
20 it. Jeff Temple.

21 DR. SIZEMORE: All right.

22 MR. TEMPLE: See you.

23 (Whereupon, the foregoing matter went
24 off the record)
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-BGV42-03765094

(CALL INITIATED)

FEMALE PARTICIPANT: Hello?

MALE PARTICIPANT: Hi.

FEMALE PARTICIPANT: Hi.

MALE PARTICIPANT: Heading through to
the Metro.

FEMALE PARTICIPANT: Okay.

MALE PARTICIPANT: Okay?

FEMALE PARTICIPANT: All right.

MALE PARTICIPANT: Everything all right?

FEMALE PARTICIPANT: Yes.

MALE PARTICIPANT: All right.

FEMALE PARTICIPANT: Okay.

MALE PARTICIPANT: Call you when I call
you.FEMALE PARTICIPANT: All right. When
are you getting on the bus?MALE PARTICIPANT: When the bus starts
to move.

FEMALE PARTICIPANT: Okay.

MALE PARTICIPANT: Okay, bye.

FEMALE PARTICIPANT: Bye.

(Whereupon, the foregoing matter went
off the record)**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 15, 2011

Work Order No.: NRC-0366

Pages 1-3

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/5

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 TUESDAY,

8 MARCH 15, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-C1!S7-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-C1!TE603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 16, 2011

Work Order No.: NRC-0366

Pages 1-23

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/6

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 WEDNESDAY,

8 MARCH 16, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-DGSSS-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-DGS-(603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-DMAZNL03765094

(CALL INITIATED)

ANNE MARIE: Hello, Anne Marie speaking.

MR. BRANDON: Hello. This is Lou
Brandon, NRC.

ANNE MARIE: Oh, hello.

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

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

2 Ours was just regarding the source term.

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

6 MR. BRANDON: Okay.

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

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

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

18 MR. BRANDON: Yes.

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

23 MR. BRANDON: Yes. So, it sounds like -
24 - it sounds like that's a technical question for our
25 contractor. He's done the work to characterize all

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

6 ANNE MARIE: Okay. Well, that one --

7 MR. BRANDON: I might be -- go ahead.

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

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

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

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

25 MR. BRANDON: The rationale for what's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 going on.

2 ANNE MARIE: Yes.

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

6 ANNE MARIE: Right.

7 MR. BRANDON: RASCAL doesn't.

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

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

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

20 MR. BRANDON: Okay.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 permits.

2 MR. BRANDON: Okay.

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

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

8 ANNE MARIE: Okay, great.

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

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

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

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

22 MR. BRANDON: Okay, very good.

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

25 MR. BRANDON: Good talking with you,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Anne Marie.

2 ANNE MARIE: Yes, have a good night,
3 Lou. Hopefully it's a slow night.

4 MR. BRANDON: So far it's steady.
5 Thanks, bye bye.

6 ANNE MARIE: Yes, it does seem that way.
7 Goodnight.

8 (Whereupon, the foregoing matter went
9 off the record)

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-DMJS3-03765094

(CONFERENCE CALL INITIATED)

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

MR. BRANDON: Hello, this is Lou Brandon, NRC. I didn't understand your question.

CALL MODERATOR: I just asked who you were and you answered.

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

MR. MORGAN: He is indeed. How you doing, Lou?

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

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

MR. BRANDON: My phone number is 301-816-5410. But I don't think he can call into this number here. I think you can call into 301 -- hold on, I'll get you a number you can call back on. Okay, you can call me back at 301-816-5195.

CALL MODERATOR: 5195.

MR. BRANDON: Yes.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. MORGAN: Lou, my number is area code

2 (b)(6)

3 MR. BRANDON: Okay. Say that one more
4 time, please?

5 MR. MORGAN:

(b)(6)

6 MR. BRANDON: I got

(b)(6)

7 MR. MORGAN:

(b)(6)

8 MR. BRANDON:

(b)(6)

okay.

9 MR. MORGAN:

(b)(6)

10 MR. BRANDON:

(b)(6)

you're cutting

11 out a little bit.

(b)(6)

12 MR. MORGAN: Correct.

13 MR. BRANDON:

(b)(6)

okay. All right.

14 I'll just call you back, Ron, and we can talk off
15 the bridge line on your questions. Okay?

16 (Whereupon, the foregoing matter went
17 off the record)

18
19
20
21
22
23
24
25
NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-DMNB-603765094

(CALL INITIATED)

1
2
3 MR. MORGAN: Lou.

4 MR. BRANDON: Ron, all right.

5 MR. MORGAN: Hey, are you tired enough
6 this morning or what?

7 MR. BRANDON: Am I tired?

8 MR. MORGAN: Yes.

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

13 MR. MORGAN: Yes?

14 MR. BRANDON: How about you?

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

16 MR. BRANDON: You're Mountain time,
17 right?

18 MR. MORGAN: Yes.

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

20 MR. MORGAN: Yes, it is. I'm fading
21 fast. So, you got my -- my first --

22 MR. BRANDON: Question?

23 MR. MORGAN: -- comment on your RASCAL
24 file, right? Meaning that I tried to --

25 MR. BRANDON: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. MORGAN: -- go through that
2 procedure that was in that email about three times
3 this and plus that.

4 So, I did it by saving the file
5 initially under a different name and then
6 manipulating it using Excel manipulations.

7 MR. BRANDON: Okay.

8 MR. MORGAN: I did everything within the
9 file and I didn't -- so I didn't change -- I don't
10 think I changed anything. And I tried about three
11 ways to make sure that I didn't change anything
12 within the file except for just the pure numbers.

13 MR. BRANDON: Okay.

14 MR. MORGAN: And it still won't load for
15 me.

16 MR. BRANDON: I tried it once with the
17 old version of RASCAL before we went to 4.0. And I
18 was able to import a source term and look at. When
19 we went to --

20 MR. MORGAN: In -- format?

21 MR. BRANDON: In Turbo FRMAC, yes.

22 MR. MORGAN: Okay.

23 MR. BRANDON: When we went to RASCAL 4.0
24 we increased the number of radionuclides and they
25 also worked out which radionuclides had the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 daughters built in. And we put an asterisk on all
2 those radionuclides.

3 So if you look at that spreadsheet and
4 look at cesium if it has an asterisk behind it then
5 our doses (indiscernible) sent you a file that's
6 going to be difficult to import into Turbo FRMAC.

7 So RASCAL is now set up, when we export
8 that CVS source term file it asks you a question do
9 you want to strip off all the asterisks. And
10 everybody should say yes, but we've got a lot of new
11 staff here who may not be aware of that. So.

12 MR. MORGAN: Well, I don't think that's
13 the problem.

14 MR. BRANDON: Okay.

15 MR. MORGAN: I don't think that's the
16 problem.

17 MR. BRANDON: If that's not the problem
18 then I'm not sure what it might be.

19 MR. MORGAN: I have two files. Have you
20 seen the email that I'm referring to, what I'm --
21 when I talk about the procedure that it's asking me
22 to go through to build a source term? Okay --

23 MR. BRANDON: Is it something we sent
24 out?

25 MR. MORGAN: Actually, I'm not sure.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Let me have a -- I'll look at it as we're talking.

2 Basically it is asking the -- in the
3 body of the email it asks for -- okay. So an email
4 was sent out. In the body of an email there's a
5 procedure and then there are attachments. And the
6 attachments include two RASCAL files. One file has
7 the activity for seven --

8 MR. BRANDON: Seven batches of fuel?

9 MR. MORGAN: Yes. And those seven are
10 all spent fuel, meaning that they're old fuel.

11 MR. BRANDON: Old spent fuels, yes.

12 MR. MORGAN: And then one batch is new
13 spent fuel.

14 MR. BRANDON: Okay.

15 MR. MORGAN: But it's based on the one-
16 third core load. So the procedure in the email says
17 multiply this one batch by three.

18 MR. BRANDON: Oh, okay.

19 MR. MORGAN: A third time --

20 MR. BRANDON: Yes, yes.

21 MR. MORGAN: -- a full core load because
22 that's what four did. And then add to that the
23 activity from the seven -- the sum of those seven
24 batches.

25 MR. BRANDON: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. MORGAN: So I took one source term,
2 multiplied everything in it by three.

3 MR. BRANDON: Got it, okay.

4 MR. MORGAN: And saved that. And then I
5 saved it again in a different file name and added in
6 the activities from the seven batches --

7 MR. BRANDON: Okay.

8 MR. MORGAN: -- the sum of the seven
9 batches. And I saved that.

10 MR. BRANDON: Okay.

11 MR. MORGAN: And I can run the original
12 files, the one batch and the seven batch files, I
13 can run them.

14 MR. BRANDON: They'll go into Turbo
15 FRMAC? Okay.

16 MR. MORGAN: Yes, they'll come in fine,
17 but I can't run the summed file.

18 MR. BRANDON: The original file is
19 comma-delimited text file.

20 MR. MORGAN: Correct, as is --

21 MR. BRANDON: So that's -- is that what
22 -- is that what's being imported into Turbo FRMAC, a
23 comma-delimited text file?

24 MR. MORGAN: That's right. That's
25 correct.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. BRANDON: So after you do your
2 gyrations and manipulations is it -- are you getting
3 it back into that format?

4 MR. MORGAN: Yes. I saved it as a
5 comma-delimited text file.

6 MR. BRANDON: Okay. So what could it
7 be? What's changing here?

8 MR. MORGAN: Well, you know what?
9 (indiscernible) I'm going to give up on this for
10 tonight. Let's go to something else where I might
11 have more luck.

12 And that is that Unit 3 is MOX, is
13 running MOX.

14 MR. BRANDON: Are you sure it's running
15 MOX? They've been approved to run MOX, but I'm not
16 sure they actually were running it.

17 MR. MORGAN: I can send you an article,
18 and I think it's Nuclear News or something, I can't
19 remember what the source is, but it's an article and
20 it's an open press article. It's in the open
21 literature article. Unit 3 of Fukushima Daiichi.

22 MR. BRANDON: Okay.

23 MR. MORGAN: That says that it was going
24 to load MOX in I think it's October or November of
25 last year.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. BRANDON: Okay. So they may be
2 using it.

3 MR. MORGAN: I'm reasonably sure that
4 there is MOX.

5 MR. BRANDON: Okay.

6 MR. MORGAN: But even if there's -- and
7 there's been a couple of references to MOX on Unit 3
8 over the last day that I've been looking at this.
9 So, I'm reasonably sure that they're running MOX.
10 At least people are under the impression that it's
11 running MOX.

12 MR. BRANDON: Okay.

13 MR. MORGAN: And so my question is do
14 you have a RASCAL file --

15 MR. BRANDON: No.

16 MR. MORGAN: -- which has --

17 (Laughter)

18 MR. BRANDON: No.

19 MR. MORGAN: I just struck out twice.

20 (Laughter)

21 MR. BRANDON: Yes. The assessment of
22 the folks around here who considered that was, well,
23 it probably won't make much difference. But RASCAL
24 is not set up to provide a source term based on MOX
25 fuel. We would have to build that in in the future

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 and it hasn't been an issue for all of the licensees
2 here, so.

3 MR. MORGAN: Okay.

4 MR. BRANDON: It hasn't been done.

5 MR. MORGAN: Okay. Well, that's all I
6 needed.

7 MR. BRANDON: All right.

8 MR. MORGAN: -- going to run MOX if you
9 happen to have it and evidently you don't so I'm not
10 going to worry about it.

11 MR. BRANDON: So, from your expert
12 opinion what do you think? If there was MOX in
13 there.

14 MR. MORGAN: I would be astonished if it
15 made, you know, even a 1 percent difference.

16 MR. BRANDON: Really?

17 MR. MORGAN: Yes.

18 MR. BRANDON: Okay.

19 MR. MORGAN: I can't imagine, you know,
20 if we're talking about dose within the first year of
21 someone outside of the plant boundary, either
22 inhalation or external, there's just no way it's
23 going to make any difference.

24 MR. BRANDON: Okay.

25 MR. MORGAN: But the question was raised

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 because somebody thought that the press would be
2 interested in that subject.

3 And in fact, I heard -- one of the press
4 reports that I heard was some guy made a comment on
5 reactor number 3 actually has plutonium in the fuel.
6 You know, that would --

7 MR. BRANDON: Yes, yes.

8 MR. MORGAN: -- really scare you.

9 MR. BRANDON: That would scare you?

10 MR. MORGAN: That was supposed to be a
11 joke, sorry.

12 MR. BRANDON: Oh, sorry, I got
13 distracted. A guy was coming through I was talking
14 to.

15 MR. MORGAN: Yes.

16 MR. BRANDON: Okay, so what you're
17 saying is not much difference, but the fact that
18 there's plutonium in there blows things out of
19 proportion.

20 MR. MORGAN: Yes.

21 MR. BRANDON: From a public perspective.

22 MR. MORGAN: Yes. But not my job, not
23 my problem. We'll leave that to the PR folks.

24 MR. BRANDON: Yes.

25 MR. MORGAN: Yes. Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. BRANDON: Okay, Ron.

2 MR. MORGAN: Appreciate it.

3 MR. BRANDON: Nice to cross paths during
4 this response here.

5 MR. MORGAN: Yes, yes.

6 MR. BRANDON: So, are you working up the
7 source terms for NARAC to run? Are you assisting?
8 Is that what's going on here?

9 MR. MORGAN: I'm running Turbo FRMAC and
10 I'm acting as the consequence management home team
11 with Sara Hoover.

12 MR. BRANDON: Okay.

13 MR. MORGAN: There's three pairs of
14 assessment scientists who are -- who are manning the
15 home team 24/7.

16 MR. BRANDON: Okay.

17 MR. MORGAN: Me and Sara are one pair
18 and the other two are from Sandia.

19 MR. BRANDON: Did some of those guys get
20 sent out, actually deployed to Japan?

21 MR. MORGAN: There's one assessment
22 scientist did, yes. Well, I guess a couple of that
23 you could consider to be qualified as assessment
24 scientists. Rich Thorum and Kirsten Ryland.

25 MR. BRANDON: Okay. So then it sounds

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 like Tony's still around. I mean, Terry Krauss is
2 still around?

3 MR. MORGAN: Krauss is one of -- Krauss
4 and Bryan Hunt is one team. And then Tom Leish and
5 Art Shanks is the third.

6 MR. BRANDON: Got it.

7 MR. MORGAN: So. There's somebody
8 manning the home team 24/7 and most of it is
9 answering silly questions. But we are running Turbo
10 FRMAC to at least have solid numbers to give people
11 when they want it.

12 MR. BRANDON: Okay, so Terry worked
13 through some of those problems, incorporating a
14 RASCAL source term into Turbo FRMAC.

15 MR. MORGAN: Yes.

16 MR. BRANDON: If you know a time when
17 he's around and awake he might be able to give you
18 insight.

19 MR. MORGAN: Yes, I'm going to do a
20 turnover and ask them to turn that over to Terry as
21 something that if he wants to play with it --

22 MR. BRANDON: Okay.

23 MR. MORGAN: -- suggest that he might
24 play with it. But I'm not going to spend anymore
25 time on it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. BRANDON: Okay, Ron. Good talking
2 with you.

3 MR. MORGAN: I think I'm going to lay
4 down here on the floor and take a nap.

5 (Laughter)

6 MR. MORGAN: I tell you, I'm beat. All
7 right, well --

8 MR. BRANDON: All right, we'll talk to
9 you next time.

10 MR. MORGAN: Bye now.

11 (Whereupon, the foregoing matter went
12 off the record)

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 17, 2011

Work Order No.: NRC-0366

Pages 1-73

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/7

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 THURSDAY,

8 MARCH 17, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-EW#}H603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-EW\$!J603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-F-2Y-L03765094

(CONFERENCE CALL INITIATED)

MR. MORGAN: HAZMAT, Morgan.

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

MR. MORGAN: Lou, this is Ron. How are you doing?

MR. BRANDON: Did I make 15 minutes?

MR. MORGAN: You did.

MR. BRANDON: We've got a complex situation. We sent out a RASCAL source term where we had one unit and the source term activity ended up being about the same activity released as multiple units which we teamed up in one RASCAL run.

And the dose projections from the single unit ended up being higher than the dose projections from contributions from three different units so we needed to explain that. It was a mess.

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

MR. MORGAN: Right.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. BRANDON: So there's a lot of
2 scrutiny on that. Okay. Anyway, now my attention
3 is with you and I'm listening.

4 MR. MORGAN: Do you know when the fuel
5 bundle -- at what temperature it will degrade, at
6 what temperature it will fail, at what temperature
7 the zirconium will burn?

8 MR. BRANDON: Oh, yes.

9 MR. MORGAN: Do you know who I can talk
10 to about that?

11 MR. BRANDON: Yes. We -- here at the
12 NRC headquarters we have an Assessment Team,
13 Protective Measures Team, and right next door is the
14 Reactor Safety Team.

15 MR. MORGAN: Okay.

16 MR. BRANDON: So those guys are the
17 engineers who keep up with all those stats. So I
18 can tell you approximately maybe 2,400 degrees
19 Fahrenheit or Centigrade you get that zirconium
20 fire. But I can hook you up with a guy who probably
21 can give you specific details here.

22 MR. MORGAN: Okay. Who is that guy?

23 MR. BRANDON: Well, hang on for 2
24 minutes. I'll walk over there and see if anyone has
25 that knowledge at their fingertips. Then they can

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 talk to you right now, or maybe if they need to get
2 their notes together they can call you back.

3 MR. MORGAN: Okay.

4 MR. BRANDON: So hold on just for a
5 minute. I might get you a response right now.

6 MR. MORGAN: Okay.

7 MR. BRANDON: Still there?

8 MR. MORGAN: Yes.

9 MR. BRANDON: Yes, we've got a guy who's
10 got some notes here.

11 MR. MORGAN: Okay.

12 MR. BRANDON: I'll pass him onto you.

13 MR. MORGAN: Okay. Who am I talking to?

14 MR. SALAY: Hey, Ron Morgan, this is
15 Mike Salay.

16 MR. MORGAN: Can you tell me your last
17 name, please?

18 MR. SALAY: S as in Sam A-L-A-Y.

19 MR. MORGAN: Okay.

20 MR. SALAY: And --

21 MR. MORGAN: I'm in the consequence
22 management home team and I'm just trying to get a --
23 sort of a -- sort of numbers to pass the
24 (indiscernible, possibly ho-ho) test for the
25 different sorts of scenarios in the fuel pool as far

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

11 MR. MORGAN: That it did what?

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 for awhile. And, yes.

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

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

8 MR. SALAY: Yes. So they had
9 thermocouples along the whole thing and they had
10 oxygen centers at the top and the bottom. And
11 pretty much the oxygen concentration at the top
12 which would go down gradually, but then as it
13 approached the burning point where it would escalate
14 a lot it would just -- it dropped completely and
15 then it would just go. And it had happened at about
16 1,150k.

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

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

24 MR. MORGAN: Right, okay.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MR. MORGAN: So that's when temperatures
2 started rising is what you're saying.

3 MR. SALAY: Well, the temperatures were
4 rising gradually by electrically heated. That's
5 when the zirc reaction was --

6 MR. MORGAN: Was driving the rise.

7 MR. SALAY: Yes, yes.

8 MR. MORGAN: Okay.

9 MR. SALAY: Yes, a big jump.

10 MR. MORGAN: Do you have any idea in the
11 sort of racks that are in the spent fuel pool for
12 Unit Number 4. And first, I guess, do you have any
13 idea whether or not those are close-packed racks?

14 MR. SALAY: I've heard conflicting
15 information on that. We've heard they -- we have a
16 presentation where it said they've gone to close-
17 packed but there's also been engineers on the news,
18 Japanese engineers on the news saying that it's not
19 close-packed. They have about, I think almost two
20 and a half cores so they don't have to be close-
21 packed. So.

22 MR. MORGAN: Okay. Do you know, do you
23 have any idea whether a zirconium fire like that
24 would propagate over the -- would things just sort
25 of start happening like Alka Seltzer in a cup, or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

8 MR. SALAY: I don't know. I wouldn't --

9 MR. MORGAN: You don't know?

10 MR. SALAY: Yes.

11 MR. MORGAN: Okay.

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

16 MR. MORGAN: Right.

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

20 MR. MORGAN: It wouldn't propagate.

21 MR. SALAY: Yes.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 uncovered, at what age would you say well, it will
2 survive by itself?

3 MR. SALAY: I've heard about 3 years
4 out.

5 MR. MORGAN: So, it would self-fail in
6 air until it was 3 years old?

7 MR. SALAY: That's what I heard.

8 MR. MORGAN: Okay.

9 MR. SALAY: Yes, it's not --

10 MR. MORGAN: Yes, it's not -- not
11 definite, but something along those lines?

12 MR. SALAY: Yes.

13 MR. MORGAN: Okay. Well thank you, sir,
14 I sure appreciate it.

15 MR. SALAY: All right.

16 MR. MORGAN: Can I talk to Lou again?
17 Is he around?

18 MR. SALAY: Lou? I can't remember what
19 he looks like. Lou?

20 MR. MORGAN: Okay. Hey, Mike, thank
21 you, I appreciate it.

22 MR. SALAY: All right. Yes, sorry I
23 couldn't give you more.

24 MR. MORGAN: No, that's -- that's what I
25 needed.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. SALAY: He's coming.

2 MR. BRANDON: Hello, Ron.

3 MR. MORGAN: Hey, Lou. Yes, if need be
4 I think I got a feel for where the problems come in
5 so I'm good.

6 We -- that spent fuel source term that
7 you had that went out in that 50-mile radius, is
8 that being modified, do you know? Are you --

9 MR. BRANDON: Well --

10 MR. MORGAN: -- working with a new
11 source term?

12 MR. BRANDON: Let me try and describe
13 what's happening here. We have in RASCAL a spent
14 fuel pool module and we can run that for one unit.
15 So if we're talking about one spent fuel pool
16 basically it asks you for the date of the freshest
17 fuel, I mean the date of the last bundle that was
18 put into the spent fuel pool. So you've got one
19 fresh bundle in there and then every other bundle is
20 18 months older than the one before it.

21 MR. MORGAN: You're talking bundle or
22 batch?

23 MR. BRANDON: I meant batch. Batch,
24 batch, batch.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 is an 18-month cycle.

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

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

6 MR. BRANDON: I'm sorry?

7 MR. MORGAN: That's a RASCAL default.
8 It doesn't necessarily say that this plant is on an
9 18-month cycle, that it's a RASCAL default, right?

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

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

19 MR. MORGAN: Right.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 So when you ask about are we going to
2 rerun that spent fuel pool run there have been a
3 bunch of them that have been created and sent out.
4 So, I'm not sure which one you're talking about
5 here.

6 MR. MORGAN: Okay. Well, we're -- we're
7 here and available to you if you have any questions
8 about. And I can get plume plots and this and that
9 for you if you're interested.

10 MR. BRANDON: Okay.

11 MR. MORGAN: I guess --

12 MR. BRANDON: Most of what's gone out is
13 the worst case scenario where we just try and
14 characterize how much fuel is likely to be present.
15 And then you melt it all and then you release it
16 pretty fast. So it's all extreme situations that
17 are not very characteristic of what you'd really
18 expect to see out there.

19 MR. MORGAN: Right. Are you also
20 releasing your non-volatile?

21 MR. BRANDON: Well, not --

22 MR. MORGAN: Like your zirconium and
23 stuff like that.

24 MR. BRANDON: It's -- no, it's just the
25 regular, I think the NUREG/1465 radionuclides. So

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

3 MR. MORGAN: Okay.

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

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

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

18 MR. MORGAN: The design basis.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 exploded into a puff.

2 MR. MORGAN: Right. Okay. All right.
3 Well, thank you. I sure appreciate it. Good
4 information.

5 MR. BRANDON: I hope that helps. What
6 we're trying to get is something we can tie in to
7 give it more characteristic RASCAL runs based on how
8 fast this stuff is being really released out there.

9 MR. MORGAN: Right, right. Yes. Okay.
10 I wish you luck. We're all going to need that in
11 the next couple of days.

12 MR. BRANDON: All right, well stay in
13 touch. You've got our number and I've got yours.
14 And --

15 MR. MORGAN: Yes, yes, indeed. Thank
16 you.

17 MR. BRANDON: We'll talk to you next
18 time.

19 MR. MORGAN: All right.

20 MR. BRANDON: Thanks. All right.

21 (Whereupon, the foregoing matter
22 went off the record)

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FBSDB603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FBSGFL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FBSJD-03765094

(CALL INITIATED)

FEMALE PARTICIPANT: Good afternoon, Ops New Reactors.

MR. LOMBARD: You sound so professional.

FEMALE PARTICIPANT: Thank you.

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

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

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

FEMALE PARTICIPANT: Okay.

MR. LOMBARD: It should be from Jim Anderson or maybe from some weird address here in the operations center.

FEMALE PARTICIPANT: Okay. How many pages?

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. LOMBARD: Oh.

2 FEMALE PARTICIPANT: I guess they all
3 don't have to see a copy.

4 MR. LOMBARD: Yes, I don't know. He's
5 not going to go through every piece of that, it's
6 just kind of background information when he needs to
7 refer to it.

8 FEMALE PARTICIPANT: He knows it's
9 coming?

10 MR. LOMBARD: Yes.

11 FEMALE PARTICIPANT: Okay. Thank you,
12 sir.

13 MR. LOMBARD: Okay, you're welcome.

14 FEMALE PARTICIPANT: Bye.

15 MR. LOMBARD: Bye.

16 (Whereupon, the foregoing matter
17 went off the record)
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FC(F7-03765094

(CALL INITIATED)

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

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

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

MS. JONES: Thank you.

MALE PARTICIPANT: Cindy?

MS. JONES: Yes.

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

MS. JONES: Sure, no problem.

MALE PARTICIPANT: All right, thanks.

(Whereupon, the foregoing matter went off the record)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FC) FLL03765094

(CALL INITIATED)

MALE PARTICIPANT: NRC?

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

MALE PARTICIPANT: All right, stand by.

MS. JONES: Nothing's happening.

(Whereupon, the foregoing matter
went off the record)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FCOE (L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FCOK-L03765094

(CONFERENCE CALL INITIATED)

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

MALE PARTICIPANT: Hello, is anybody there?

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

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

MS. SCHWARTZMAN: Hey, Cindy.

MS. JONES: Do we have our guests online?

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

MS. JONES: Okay.

MS. SCHWARTZMAN: Stand by. Hello?

MS. CLOS: Hello. I am Adeline Clos from ASN.

MS. SCHWARTZMAN: Hi. You've got Jennifer Schwartzman and Cindy Jones from the NRC on the line. We're awaiting our UK and Canadian colleagues.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. SCHWARTZMAN: Oh --

2 (Whereupon, the foregoing matter
3 went off the record)

4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FC247603765094

(CONFERENCE CALL INITIATED)

MS. JONES: Hello?

MS. CLOS: Hello?

MS. JONES: Yes, okay.

MS. CLOS: We lost them I think.

MS. JONES: Hi, this is Cindy Jones.

I'm also at the NRC.

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

MS. JONES: Hey, Eveline. Very good to talk with you. How have you been?

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

MS. JONES: Very good.

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

MS. CLOS: Okay.

MS. JONES: So I saw the press releases, Eveline, about the French prediction of (indiscernible, possibly in a) scale at level 6.

MS. CLOS: Yes.

MS. JONES: For this.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 the national officer, no.

2 MS. CLOS: No. Yes, it was a topical
3 context during an exchange with the media. So it
4 has been (indiscernible, possibly predated) at level
5 6 on the NSK but it was not our initial report, so.
6 Yes. And it's not up to us to write such news.

7 MS. JONES: Exactly.

8 MS. CLOS: To come from (indiscernible).

9 MS. JONES: Yes.

10 MS. CLOS: I know. I (indiscernible,
11 possibly overhear).

12 MR. WALKER: Hello, can you hear me?

13 MS. JONES: Yes, we can.

14 MR. WALKER: Hello. So what is it, it's
15 good afternoon in the U.S. I think? Yes.

16 MS. JONES: Yes.

17 MR. WALKER: It's evening here and we're
18 losing sense of time. Hello. I'm Steve Walker.
19 I'm an inspector with the Nuclear Installations
20 Inspectorate and I'm joined here by my colleague
21 Alan Bunker. We're going to try and the best we can
22 to get some joined-up thinking going concerning
23 aspects of source terms and the like.

24 Can you just confirm that you have
25 received from us a summary of what we've been doing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 with source terms and dose calculations? I'm afraid
2 this document doesn't have a title other than to say
3 it's version 0.1E.

4 MS. CLOS: No, we've got nothing. I
5 didn't (indiscernible). I didn't receive any
6 documents.

7 MR. WALKER: Okay.

8 MS. JONES: No, and this is Cynthia
9 Jones, director of the Protective Measures Team in
10 the Ops Center. We have not received it either.

11 MR. WALKER: Okay. Well, I apologize
12 for that. We'll get this sent to you.

13 Can I have your email address? First of
14 all, Cynthia. You're NRC, are you, Cynthia?

15 MS. JONES: Yes.

16 MR. WALKER: And your email address?

17 MS. JONES: Let me see. The best --
18 Jen, you're on the line, correct?

19 MS. SCHWARTZMAN: Yes, I am.

20 MS. JONES: The best thing to do is to
21 get it through our Operations Center.

22 MR. WALKER: Okay. I've got an email
23 address here that was used today, LIA02.hoc@nrc.gov.

24 MS. SCHWARTZMAN: That would be fine.
25 If you send it there we'll make sure it gets to the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 others here at NRC.

2 MR. WALKER: Okay. I do apologize for
3 your not having received the document.

4 MS. JONES: No problem.

5 MR. WALKER: So Cynthia Jones at NRC.
6 And who else have we got?

7 MS. CLOS: Adeline Clos from ASN.

8 MR. WALKER: Are you the person --

9 MS. CLOS: Adeline -- yes. I'm not
10 actually at the emergency center. I am in my office
11 inside the (indiscernible). I know it's so hard to
12 confirm. So could you please give me essentially
13 the document directly on my email address?

14 MR. WALKER: Okay, and your email
15 address is?

16 MS. CLOS: Is Adeline A-D-E-L-I-N-E dot
17 Clos.

18 MR. WALKER: Clos -- C?

19 MS. CLOS: Clos. C-L-O-S.

20 MR. WALKER: Yes.

21 MS. CLOS: At ASN.fr.

22 MR. WALKER: ASN.sr.

23 MS. CLOS: F, F like France.

24 MR. WALKER: Sorry, sorry. So, okay.

25 MS. CLOS: You should have my email

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 address (indiscernible) information with your
2 emergency center today and yesterday.

3 MR. WALKER: Who else -- do we have
4 anybody else in this conference?

5 MS. SCHWARTZMAN: I don't believe our
6 Canadian colleagues have joined us.

7 MR. WALKER: Okay, right.

8 FRENCH MALE PARTICIPANT: Yes, and are
9 you with NSO? (indiscernible) part of the
10 (indiscernible).

11 MR. WALKER: Which organization is this?

12 FRENCH MALE PARTICIPANT: ARSN.

13 MR. WALKER: IRS?

14 MS. CLOS: IRSN. IRSN, supporting the
15 organization from ASN.

16 MR. WALKER: And what was -- I'm sorry,
17 I didn't catch your name.

18 FRENCH PARTICIPANT RAINOND: Jimo.

19 MR. WALKER: Can you spell that for me?

20 FRENCH PARTICIPANT RAINOND: So R-A-I-N-
21 O-N-D.

22 MR. WALKER: Do you have an email
23 address?

24 FRENCH PARTICIPANT RAINOND: Yes, it's
25 with the center of IRSN. So it's C-E-I --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. WALKER: C-E-I dot?

2 FRENCH MALE PARTICIPANT: Not dot.

3 Sorry, minus.

4 MR. WALKER: Oh, minus. Okay.

5 FRENCH PARTICIPANT RAINOND: Minus. So,
6 minus C-E-C.

7 MR. WALKER: C-E-C.

8 FRENCH PARTICIPANT RAINOND:

9 (indiscernible) A-R-S-N-I-N. --

10 MR. WALKER: I'm awfully sorry, I'll try
11 again. C-E-I hyphen, or minus as you say, C-E-C and
12 then what?

13 MS. JONES: I think it's then the at
14 symbol.

15 MR. WALKER: At.

16 FRENCH PARTICIPANT RAINOND: C-E-C minus
17 C-E-C@irsn.fr.

18 MR. WALKER: I-R-S-N.FR.

19 MS. CLOS: F-R like France.

20 MR. WALKER: Thank you very much. There
21 are many reasons why we wanted to make contact with
22 these overseas agencies involved in commentary on
23 the efforts going on in Japan.

24 MS. JONES: We're starting to have a big
25 echo here.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. WALKER: Okay.

2 MR. LLOYD: Hi, there. Bob Lloyd,
3 Canadian Nuclear Safety Commission has just -- and
4 staff has just joined the phone call. And, yes.
5 And so thank you for setting this up.

6 MR. WALKER: Mr. Lloyd? Bob Lloyd?

7 MR. LLOYD: Yes, that's right. That's
8 me, thank you.

9 MR. WALKER: And which organization do
10 you represent, Mr. Lloyd?

11 MR. LLOYD: Canadian Nuclear Safety
12 Commission.

13 MR. WALKER: And your email address if I
14 may?

15 MR. LLOYD: Yes. What we're going to
16 give you right now is the email of our contact, Mr.
17 Viktorov, who will be taking over my role in the
18 technical lead here at the emergency operations
19 center in the next couple of days. So, I'll pass
20 you over to Dr. Victorov, okay?

21 MR. WALKER: Thank you. Hello, Doctor.

22 DR. VIKTOROV: Okay, so you can hear me?
23 Alex, A-L-E-X, dot Viktorov, V-I-K-T-O-R-O-V,
24 Viktorov.

25 MR. WALKER: Sorry, V-I-K?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 DR. VIKTOROV: T as in Thomas O-R-O-V at
2 CNSC, C-N-S-C dash --

3 MR. WALKER: CMSC, Charlie Mother Sierra
4 --

5 MR. LLOYD: Canadian Nuclear Safety
6 Commission.

7 MR. WALKER: Okay.

8 DR. VIKTOROV: At CESN.gc.ca.

9 MR. WALKER: I'm sorry, the line is
10 rather poor. I'll say this again. So it's at CNSC-
11 TCSN.

12 MR. LLOYD: At the end it's system
13 nuclear. Dot GC for government of Canada dot CA for
14 Canada.

15 MR. WALKER: Oh, dear. The line is
16 awful. What comes after the dash, G?

17 MR. LLOYD: GC as in --

18 MR. WALKER: Yes, GC.

19 MR. LLOYD: Dot CA.

20 MR. WALKER: CA. Okay, thank you. I
21 think that's the most difficult bit over, isn't it?

22 MR. LLOYD: Sorry. I hate to -- I
23 apologize because Dr. Viktorov, we have a common
24 address here that doesn't show up. If I can
25 possibly give you the common address it may be a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 little bit simpler. And that email will be all one
2 word operationsreviewteam.eocl4@ and then it's cns-
3 tcsn.gc.ca. Or perhaps if you give us your email
4 and we'll just email you and you can have it.

5 MR. WALKER: Yes, I think my -- I always
6 thought my email was hard enough but it's actually
7 quite easy. My email is Steve -- yes, we'll give
8 them the ND version. I'll give you the
9 communications email is NSC --

10 MR. LLOYD: Yes.

11 MR. WALKER: Dot emergency.

12 MR. LLOYD: Yes.

13 MR. WALKER: At HSE.GSI.

14 MR. LLOYD: Right.

15 MR. WALKER: Gov.uk.

16 MR. LLOYD: GSS@gsi.?

17 MR. WALKER: Dot gov, G-O-V.

18 MR. LLOYD: Yes. Dot UK. Okay, so
19 NSB.emergency@hse.gsi.gov.uk, right?

20 MR. WALKER: That's it.

21 MR. LLOYD: Perfect. You'll have an
22 email in a second.

23 MR. WALKER: Thank you very much.

24 MR. LLOYD: Thank you.

25 MR. WALKER: Yes, we -- I mean we have a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

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

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

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

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

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

19 MR. WALKER: Yes.

20 MS. JONES: Okay.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

7 MR. LLOYD: Excellent.

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

17 MR. WALKER: That's fine.

18 MR. LLOYD: Perfect, yes.

19 MS. CLOS: Okay.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

5 MS. JONES: We don't know but we can
6 negotiate that at the end, how about that?

7 MR. WALKER: Yes, that's fine.

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 top of that sheet. Flow dispersion characteristics
2 included low wind speeds, stable air, some light
3 precipitation.

4 The second assessment represented
5 multiple unit failures, and I think this is where
6 we'll be interested in both the Canadian and UK
7 information as well as France if you have that.

8 The first was for Unit 2 assuming 33
9 percent reactor core damage. The second was for
10 Unit 3 spent fuel pool, 50 percent damage. About
11 180 bundles of newly discharged spent fuel.

12 NORTH AMERICAN MALE PARTICIPANT: The
13 bundles were discharged about 100 days ago, 105 days
14 ago.

15 FRENCH PARTICIPANT RAINOND: Sorry, are
16 you talking about the pool?

17 MS. JONES: Yes.

18 FRENCH PARTICIPANT RAINOND: And that's
19 Unit 4?

20 MS. JONES: No, Unit 3 was the spent
21 fuel pool 50 percent of damage with 180 bundles of
22 newly discharged spent fuel. About 105 days ago.

23 NORTH AMERICAN MALE PARTICIPANT: 105
24 days old.

25 NORTH AMERICAN MALE PARTICIPANT: So,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 just to belabor the point one more time, there's 180
2 bundles of spent fuel in the pool of Unit 3.

3 NORTH AMERICAN MALE PARTICIPANT:
4 There's more than that, but these -- the dose is
5 predominated by the 180 newly discharged fuel
6 bundles.

7 NORTH AMERICAN MALE PARTICIPANT: And
8 100 days ago they were discharged.

9 NORTH AMERICAN MALE PARTICIPANT: Yes.

10 MS. JONES: And we're assuming 50
11 percent damage.

12 MR. LLOYD: It's Unit 3, not 4, right?

13 NORTH AMERICAN MALE PARTICIPANT: Yes,
14 3.

15 MS. JONES: Unit 3.

16 MR. WALKER: When you say 50 percent
17 damage, you're talking about 50 percent fractional
18 release, are you?

19 NORTH AMERICAN MALE PARTICIPANT: We're
20 talking about the top half of the fuel has melted
21 and whatever (indiscernible) is released during that
22 event.

23 MS. JONES: And we haven't gotten into
24 release fractions yet.

25 MR. WALKER: So what do you mean -- when

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 you talk about 50 percent damage, you mean 50
2 percent of it is melted.

3 NORTH AMERICAN MALE PARTICIPANT: Right.

4 MR. WALKER: Okay.

5 MS. JONES: And then for Unit 4 assume
6 100 percent damage Unit 4 spent fuel pool.

7 NORTH AMERICAN MALE PARTICIPANT: We're
8 assuming we have complete loss of water and there's
9 550 bundles of newly discharged spent fuel in that
10 pool probably within the last 30 days since they had
11 just emptied the core.

12 NORTH AMERICAN MALE PARTICIPANT: In the
13 email that I have in front of me that was sent this
14 morning it said 100 percent melt.

15 NORTH AMERICAN MALE PARTICIPANT: Yes.

16 NORTH AMERICAN MALE PARTICIPANT: Making
17 a distinction between melt and damage?

18 NORTH AMERICAN MALE PARTICIPANT: Yes,
19 not really. We're just saying we melted them.

20 NORTH AMERICAN MALE PARTICIPANT: Okay.

21 MS. JONES: And it's important to note
22 that that is not confirmed. That again goes back to
23 the worst case hypothetical estimate that we have.
24 These are not confirmed. I can't emphasize that
25 enough.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

10 NORTH AMERICAN MALE PARTICIPANT: Yes.
11 And coincident with what we believe was the
12 initiating event to drain the pool, we had a report
13 from the site that adjacent to the Unit 4 reactor
14 building they had a dose rate reading of 40 rem per
15 hour at ground level.

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

20 FRENCH PARTICIPANT RAINOND: Yes, IRSN.
21 In fact we have -- imagine another scenario for the
22 exclusion of building 4. We have -- imagine that
23 hydrogen could be produced by water facilities. And
24 so today we think that maybe the fuel, that there is
25 some water in the fuel pool of the reactor 4. So

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 it's very different function. And we have the
2 feeling that Japanese are sometimes --
3 (indiscernible, possibly little) times to put again
4 some water in the pool. Very different in terms of
5 situation.

6 MR. WALKER: Can I just ask Cynthia,
7 this information you've just given us, unfortunately
8 before this meeting I didn't have time to read a
9 whole lot of emails which have come through in
10 relation to this meeting. Do I take it that you've
11 already sent this information to us, Cynthia?

12 MS. JONES: We have shared this with no
13 one.

14 MR. WALKER: Okay.

15 MS. JONES: Except for you we have
16 shared this with Department of Energy who we are
17 working on --

18 MR. WALKER: Okay.

19 MS. JONES: -- to get agreement on these
20 values. And we will have that by early tonight. We
21 differ very little in the estimates for this site.

22 MR. WALKER: Okay, that --

23 MS. JONES: We're refining that today
24 and we will have an agreed-upon value both for U.S.
25 NRC and U.S. Department of Energy by tonight.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. WALKER: Okay. And provided that we
2 give you the assurance that we don't share it
3 outside our organization are you able to confirm
4 that you can send that to us?

5 MS. JONES: Yes, I can.

6 MR. WALKER: Thank you very much.

7 MR. BUNKER: It's Alan Bunker here, NII,
8 with Steve. I was told earlier today that the
9 shortest cooled fuel in any of the spent fuel pools
10 was discharged on the 30th of November which would
11 make it 3 months old. I wasn't aware that there was
12 any discharge 30 days ago.

13 MS. JONES: That's the information we
14 have.

15 MR. BUNKER: Right, okay. I need to
16 follow that up then.

17 FRENCH PARTICIPANT RAINOND: It was
18 discharged from reactor 4 3 months ago.

19 MS. JONES: Do you have the same
20 information, Emanuel? From France?

21 FRENCH PARTICIPANT RAINOND: Yes. We
22 have this information from a Japanese document
23 explaining the management of the fuel for all
24 Japanese sites.

25 MS. JONES: And it mentions this time

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 frame?

2 FRENCH PARTICIPANT RAINOND: Yes.

3 MS. JONES: Of 3 months?

4 FRENCH PARTICIPANT RAINOND: Three
5 months. It was in November. November.

6 MS. JONES: Can you send that to us?

7 FRENCH PARTICIPANT RAINOND: It's a
8 large document, but yes, we can try to send --

9 MS. JONES: Or just the page or two that
10 refers to the time period.

11 FRENCH PARTICIPANT RAINOND: Yes, we can
12 try to send you something. Yes.

13 MR. WALKER: Could you copy it to
14 everyone, please?

15 FRENCH PARTICIPANT RAINOND: Yes. Maybe
16 you should send me an email with the address email
17 of all participants and it will be easier for us.

18 MS. JONES: Okay. Jen, do you have all
19 the emails?

20 MS. SCHWARTZMAN: Yes.

21 MS. JONES: Okay, great. We can do
22 that.

23 MR. WALKER: We have used for releases
24 from reactor fuel we've used -- because we don't
25 have any better figures at the moment we've used a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 general release fraction of 10 percent.

2 MR. BUNKER: From within the core.

3 MR. WALKER: From within the core.

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 using?

2 MS. JONES: 4.0 or 4.1.

3 CANADIAN MALE PARTICIPANT: 4.1?

4 Thanks.

5 MS. JONES: We'll verify that.

6 CANADIAN MALE PARTICIPANT: Yes. That's
7 the verison we're using in Canada.

8 MS. JONES: Okay.

9 FRENCH MALE PARTICIPANT: At IRSN we use
10 for the fuel, for the pool, the release fraction we
11 obtain for the (indiscernible). So we send
12 (indiscernible, possibly written transaction) except
13 for plutonium where we have increased the release of
14 plutonium due to the interaction with oxygen.

15 MR. WALKER: Is RASCAL a bespoke
16 software package used by your agency, or is this a
17 commercially available product?

18 FRENCH MALE PARTICIPANT: No, we have
19 our own developed modeling for really the fraction
20 calculation. So it has been done for PWR, French
21 PWR, but we consider that it was applicable for BWR.

22 MR. WALKER: So who is the author of
23 RASCAL?

24 MS. JONES: Actually it's DOE is my
25 understanding. And we had it configured and used

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 for the applications that we would have for
2 licensees, whether it's for reactors, for material
3 licensees, fuel cycle, gaseous diffusion, and then
4 more recently it was revised for an RDD for a dirty
5 bomb.

6 MR. WALKER: Right, okay. Thank you.

7 MS. JONES: I do not believe it's
8 commercially available but one of the contractors is
9 here. We're checking.

10 MR. WALKER: Okay. Could we -- our
11 computations are being done by our Health Protection
12 Agency who use similar sorts of code. But they
13 require a separate specification of release
14 fractions. Their software, we have to specify what
15 the source term is for release through atmosphere.
16 And then they compute from there on.

17 It sounds as though RASCAL is more
18 nuclear industry-based and has some release
19 fractions programmed into it.

20 MS. JONES: Yes.

21 MR. WALKER: Okay. Is there anything
22 else you want to?

23 MS. JONES: I think what would be
24 helpful is we will get the information from you.

25 MR. WALKER: Yes. I will make sure

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 that's sent to you, Cynthia, and to others on the --

2 MS. JONES: Great. And I just got a
3 note passed to me, we do have a NUREG which is on
4 our external website. It's a document 1465. We can
5 provide the reference link in the email. And the
6 source term core unrecovered release fractions are
7 in there.

8 MR. WALKER: Oh, right. Okay.

9 MS. JONES: So that's been plugged into
10 the code RASCAL.

11 MR. WALKER: So you could send us the
12 link to that, could you?

13 MS. JONES: Yes.

14 MR. WALKER: Okay, that's good. Thank
15 you.

16 MR. LLOYD: Can I get that NUREG number
17 again, please?

18 MS. JONES: It's NUREG/1465. And I've
19 just been corrected, it's an NRC code.

20 MR. WALKER: Oh, okay.

21 MS. JONES: Not DOE.

22 FRENCH MALE PARTICIPANT: It's IRSN
23 here, Emanuel. So may I ask a general question on
24 the dimensions of fuel pool. Do you have some
25 research showing that the release should be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 we do not have any experimental data in that
2 configuration.

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. BUNKER: Right, okay.

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. WALKER: Okay.

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

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

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

25 Those of us who work in this industry

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 know that these sorts of problems are pretty much
2 unavoidable given the vagaries of these sorts of
3 assessments.

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

6 NORTH AMERICAN MALE PARTICIPANT: We
7 agree. We spend about 20 percent of our time
8 identifying misinformation that is out there. So.

9 CANADIAN MALE PARTICIPANT: Yes.

10 (b)(4),(b)(5)
11

12
13 MR. LLOYD: (b)(4),(b)(5)

14 CANADIAN MALE PARTICIPANT: (b)(4),(b)(5)

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

16 MS. JONES:

17 (b)(4),(b)(5)
18

19 CANADIAN MALE PARTICIPANT:

20 (b)(4),(b)(5)
21

22 MS. JONES:

23 (b)(4),(b)(5)
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 FRENCH MALE PARTICIPANT:

2
3 (b)(4),(b)(5)
4
5

6 MS. JONES: Yes.

7 FRENCH MALE PARTICIPANT:

8 (b)(4),(b)(5)
9

10 MS. JONES:

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

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

12 NORTH AMERICAN MALE PARTICIPANT:

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

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

14 MS. JONES:

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

15 MR. WALKER: Can I -- on this issue of

16 having a capability to do some environmental
17 monitoring, I note and I'm very pleased that the
18 U.S. has got some ability to do some radiation
19 assessment.

20 Thus far the weather has been very
21 favorable, hasn't it, and if there had been any
22 release to atmosphere it would have gone out across
23 the ocean. The situation is likely to change in the
24 next few days as the wind moves in towards Tokyo.

25 Can I assume therefore that any

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

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

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

7 MR. WALKER: Okay, okay.

8 MS. JONES: We can say that with the DOE

9 --

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

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

22 FRENCH MALE PARTICIPANT: So, following
23 all the release we can -- we are able to identify on
24 the measurement onsite. So we do that for the last
25 3 days and the conclusion --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 FRENCH MALE PARTICIPANT: For 8 days.

2 FRENCH MALE PARTICIPANT: For 8 days in
3 total, 3 in past, 5 in the future. You can have on
4 the site a short movie even showing what happens.

5 We are very interesting to have
6 measurement in Tokyo if you have because our
7 assumption is we -- it's possible to have
8 measurements in Tokyo. We are sure that because we
9 have some indication on people coming from Tokyo to
10 Paris with contamination, body contamination.

11 MR. WALKER: Is that the IRSN or the ASN
12 website?

13 FRENCH MALE PARTICIPANT: IRSN.

14 MS. JONES: IRSN.

15 FRENCH MALE PARTICIPANT: Website.

16 FRENCH MALE PARTICIPANT: It is a
17 realistic case. We are trying to approximate --

18 FRENCH MALE PARTICIPANT: Approximate
19 reality.

20 FRENCH MALE PARTICIPANT: -- what has
21 happened. And for the worst case for us I think it
22 should be quite difficult to communicate because the
23 worst case, this is the whole core on the site would
24 be damaged and the consequences seems to be so huge.

25 NORTH AMERICAN MALE PARTICIPANT: Just

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 for clarification, you mentioned that you've
2 measured doses on people arriving to France from
3 Japan. Can you quantify that?

4 FRENCH MALE PARTICIPANT: Yes. A
5 negligible fraction of --

6 NORTH AMERICAN MALE PARTICIPANT: Then
7 you shouldn't --

8 NORTH AMERICAN MALE PARTICIPANT: Please
9 qualify what your measurements are. Negligible
10 meaning nothing, or negligible meaning higher than
11 background?

12 FRENCH MALE PARTICIPANT: Measurable but
13 negligible in terms of doses.

14 MS. JONES: Oh, so the messaging, to be
15 clear, the messaging will be that people traveling
16 from that area are not bringing contamination into
17 the country.

18 FRENCH MALE PARTICIPANT: I concur on
19 that. We're all with you because that's going to
20 create a huge havoc in the media.

21 MS. JONES: Yes, I think we have to be
22 careful.

23 FRENCH MALE PARTICIPANT: No, no, no, be
24 careful what I say there. What -- the only thing
25 which is published is the map showing what we think

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 are the realities.

2 MS. JONES: So, can you clarify, does
3 this simulation that will be on your website later
4 today, does this integrate actual measured data from
5 the French in Japan? Or is this all simulated?

6 FRENCH MALE PARTICIPANT: No. Only
7 simulated.

8 MS. JONES: Okay.

9 FRENCH MALE PARTICIPANT: But your
10 endpoint though. Are you going to be characterizing
11 with the modeling that's been done to date by our
12 colleagues on the phone from the UK and Canada and
13 the U.S.?

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

17 FRENCH MALE PARTICIPANT: From U.S.

18 FRENCH MALE PARTICIPANT: Effective
19 (indiscernible) I think. But --

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 have, but we have so little measurements so that we
2 would like of course to check and to confirm that
3 order of magnitude is correct.

4 FRENCH MALE PARTICIPANT: So to give you
5 what we have with this calculation, the total dose
6 in Tokyo will be between 0.01 to 0.1 millisievert.

7 NORTH AMERICAN MALE PARTICIPANT: Can
8 you share with us just in writing before at least
9 you post it up with respect to the ranges? I mean,
10 if you're giving us a comfort verbally, orally. And
11 is that an effective whole body dose? Are you
12 giving any dose to the thyroid? Where are we
13 talking about?

14 FRENCH MALE PARTICIPANT: We have this
15 information for thyroid is 0.1 to 1 millisievert.

16 NORTH AMERICAN MALE PARTICIPANT: As a
17 whole body dose?

18 MS. JONES: Thyroid.

19 NORTH AMERICAN MALE PARTICIPANT: Oh,
20 sorry, sorry, thyroid.

21 MS. JONES: Could you repeat that,
22 please? Thank you.

23 FRENCH MALE PARTICIPANT: So, dose for
24 thyroid. For young children, 1 year old, is between
25 0.1 to 1 millisievert. So it's very, very low,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 negligible in terms of impact. And total dose is
2 0.01 and -- between 0.01 and 0.1 millisievert.

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 contaminated foodstuff, contaminated milk.

2 FRENCH MALE PARTICIPANT: No, no, no.

3 No, no, no. No, no. It's the plume. It's the

4 effect of the plume. You have no foodstuff.

5 MS. JONES: This is just from

6 inhalation?

7 NORTH AMERICAN MALE PARTICIPANT: That's

8 a hell of a dose.

9 MS. JONES: That is very high for

10 inhalation.

11 NORTH AMERICAN MALE PARTICIPANT: That's

12 a hell of a dose. You guys --

13 FRENCH MALE PARTICIPANT: No, no, no.

14 It's not very high. It's very low.

15 MS. JONES: For inhalation it is, yes,

16 for a child.

17 FRENCH MALE PARTICIPANT: Yes, it's very

18 low.

19 NORTH AMERICAN MALE PARTICIPANT: No, I

20 disagree. Sorry, I mean all due respect. If -- I'm

21 with Cindy on this one. If getting a committed dose

22 of 1 millisievert from inhalation that's a lot of

23 iodine. Because the iodine, the principal intake of

24 iodine is actually going to be in the -- the highest

25 effectiveness of the ingestion is liquid form.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Inhalation is not very effective. That means you're
2 talking a lot of iodine.

3 MR. WALKER: It's a shame you don't have
4 the paper which I will make sure you get after this
5 meeting. But we have projected doses that are a
6 good deal higher than that for Tokyo based on the
7 assumptions that we've made and the source term that
8 we've assumed.

9 MR. BUNKER: But they are very much
10 worst case.

11 MR. WALKER: But they are very much
12 worst case, that's exactly right.

13 One of the things I've been asked to try
14 and achieve internationally is some kind of an
15 agreement on the source term that we're dealing
16 with.

17 NORTH AMERICAN MALE PARTICIPANT: May I
18 just ask quickly what are you taking into account
19 for weather?

20 MR. BUNKER: The dose calculations were
21 done using a very simple model with stability
22 category D, Pasquill's stability category D.

23 MR. WALKER: A wind speed of 5 meters
24 per second.

25 NORTH AMERICAN MALE PARTICIPANT: So

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

3 MR. BUNKER: Yes.

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. JONES: I think that's an excellent
2 idea and we should do that. We will have our joint
3 U.S. NRC and DOE source term agreement today. And I
4 think based on our bilateral agreement we will be
5 able to share that confidentially with --

6 I have to apologize, we have to get off
7 in about 5 minutes.

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

10 CANADIAN MALE PARTICIPANT: Before you
11 go, Cindy, just so everyone knows from a Canadian
12 perspective that dose that was just quoted is based
13 on a worst case type scenario.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 email. And then perhaps in a few days or so we can
2 get together on the phone again.

3 MR. WALKER: Yes, yes, thank you very
4 much.

5 MS. JONES: Okay, thank you.

6 (Whereupon, the foregoing matter
7 went off the record)

8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FH2X!L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-FH3-C-03765094

(CONFERENCE CALL INITIATED)

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

PARTICIPANT JOSH: Hey, it's Josh.

(indiscernible, possibly (b)(6)

(b)(6)

MR. BRENNER: Hey, how are you?

PARTICIPANT JOSH: Good. How are you?

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

PARTICIPANT JOSH: Tomorrow.

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

PARTICIPANT JOSH: You good?

(Laughter)

MR. BRENNER:

(b)(5)

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

PARTICIPANT JOSH: We did. It's okay,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

7
8
9 (b)(5)
10
11
12

13 PARTICIPANT JOSH: Say it again?

14 MR. BRENNER:

15 (b)(5)
16

17 PARTICIPANT JOSH: Yes.

18 MR. BRENNER:

19 (b)(5)
20

21 PARTICIPANT JOSH:

22 (b)(5)

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

25 And the first step of that, the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Commission will be meeting on Monday to start
2 talking about that, what that means, what that looks
3 like.

4 MR. BRENNER: That's good.

(b)(5)

5 (b)(5)

6 PARTICIPANT JOSH:

7 (b)(5)
8
9

10 MR. BRENNER: Okay. I have, by the way,
11 got the televising of that meeting all under
12 control.

13 PARTICIPANT JOSH: Oh, great.
14 Excellent. Thank you.

15 MR. BRENNER: It'll be pulled. It'll be
16 sent out live.

17 PARTICIPANT JOSH: Okay.

18 MR. BRENNER:

19
20 (b)(5)
21
22

23 --

24 PARTICIPANT JOSH: Okay.

25 MR. BRENNER: -- to discuss

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 capabilities.

2 PARTICIPANT JOSH: Okay. All right.
3 Let's deal with that when we have time to breathe.

4 MR. BRENNER: Absolutely.

5 PARTICIPANT JOSH: How are your folks
6 doing?

7 MR. BRENNER: They're doing fine. I'm
8 going to start -- I've got some people coming in
9 from FEMA.

10 PARTICIPANT JOSH: Oh, really? Great.

11 MR. BRENNER: And Becky has lent me a
12 person, secretarial help.

13 PARTICIPANT JOSH: Awesome. Good.

14 MR. BRENNER: So the agency is pitching
15 in.

16 PARTICIPANT JOSH: Okay.

17 (b)(5)
18

19 MR. BRENNER: I'm working on that as
20 well.

21 PARTICIPANT JOSH: Great.

22 (b)(5)
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)

2
3
4 (b)(5)

5
6
7 MR. BRENNER:

(b)(5)

8 (b)(5)

9 PARTICIPANT JOSH: Good. Okay.

10 MR. BRENNER: Okay. Onward and upward.

11 PARTICIPANT JOSH:

12 (b)(5)

13
14
15 MR. BRENNER: I will do that.

16 (b)(5)

17
18 PARTICIPANT JOSH: Okay. Yes, that's
19 probably a good idea.

20 MR. BRENNER: Okay.

21 PARTICIPANT JOSH: Probably a good one
22 to do.

23 MR. BRENNER:

(b)(5)

24 (b)(5)

25 PARTICIPANT JOSH: Yes, absolutely. All

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 right. Then go home. Okay, bye.

2 (Whereupon, the foregoing matter
3 went off the record)
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 18, 2011

Work Order No.: NRC-0366

Pages 1-38

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/8

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 FRIDAY,
8 MARCH 18, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-G1-5M-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-G1-60-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-GPOU-L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-GPOZF603765094

(CONFERENCE CALL INITIATED)

CALL MODERATOR:

(b)(5)

MR. JACKSON: Yes, this is Steve Jackson
from the PACAREA command center.

CALL MODERATOR:

(b)(5)

MS. DEWEY: -- Dewey from DoD Policy
(indiscernible, possibly DN IDAR).

MR. MALONE: And from Joint Staff J-34
Stephen Malone.

CALL MODERATOR:

(b)(5)

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

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

CALL MODERATOR:

(b)(5)

(b)(5)

--

MR.

(b)(6)

: I'm sorry

(b)(6)

(b)(5)

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

CALL MODERATOR: Thanks, (b)(6)

(b)(5)

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

23 And then also they're going to have
24 seven more personnel out of the Public Health
25 Command that will be deploying out to Japan probably

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 to Zama to assist in the efforts there.

2 Don't know right now if there's any
3 changes or plans to take those samplers and operate
4 them in any other locations on the island. All the
5 indication I got right now is that they're at Zama.

6 And if there's any change to that -- I'm staying in
7 contact with the Public Health Command's ops center
8 and I'll get that information from them.

9 CALL MODERATOR:

10
11 (b)(5)
12
13

14
15
16
17 (b)(5)
18
19

20
21 USAID MALE PARTICIPANT: No, that's
22 current, (b)(6) We've got some good guidance in
23 from CBP and that was utilized to generate a
24 document that was a response to some questions that
25 CBP had suggested. And so a document has been

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 created in support of that.

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

4 CALL MODERATOR: Okay.

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

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

13 CALL MODERATOR:

14 (b)(5)
15
16

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

4 DR. SETRON: This is Dr. Setron, the
5 director of global migration and quarantine at CDC.

6 Let me just kind of clarify a couple of things.

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 looking at it. So that's an issue.

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

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

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

21 MALE PARTICIPANT: I'd just like to add

22 --

23 CALL MODERATOR:

24 (b)(5)
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

(b)(5)

(b)(5)

(b)(5)

NOAA PARTICIPANT CRAIG:

(b)(6)

that's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

16 CALL MODERATOR:

17 (b)(5)
18
19

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

23 CALL MODERATOR:

24 (b)(5)
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)

2 MR. BOWMAN: (b)(6) this is Dave Bowman.

3 I did not have a chance to review.

4 CALL MODERATOR: (b)(5)

5 (b)(5)

6 MR. BOWMAN: -- hope that you'd give me
7 like -- sorry, if you'd give me a brief synopsis
8 maybe I can speak to it.

9 CALL MODERATOR:

10 (b)(5)

11 MR. BOWMAN: Okay.

12 CALL MODERATOR:

13 (b)(5)

14 MR. BOWMAN: Okay.

15 CALL MODERATOR: Pardon?

16 NOAA PARTICIPANT CRAIG: I say thank
17 you, (b)(6) and thank you, Dave.

18 CALL MODERATOR:

19 (b)(5)

22 MR. FERRIS: Hey (b)(6) this is John

23 Ferris from OSHA. What's being brought up to us is
24 sort of the media reports in airports and such of
25 the hits.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Is there any way to sort of ground truth
2 these things as we hit it? Is there any central
3 repository for confirmation or information as to go
4 against that it is a false positive?

5 CALL MODERATOR:

6
7
8 (b)(5)
9
10
11
12

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

17 And I guess that's what we're just
18 trying to get in touch of because we're getting the
19 contacts from the workers saying are we at risk.
20 And what we're trying to do is stay on top of it.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 CALL MODERATOR:

2
3
4 (b)(5)
5
6
7

8
9 (b)(5)
10
11

12 CBP MALE PARTICIPANT: This is Ira Reese
13 from CBP --

14 CALL MODERATOR:

15 (b)(5)
16

17 MR. STERN: Good morning. Their
18 protocol for these sources is a hit.

19 CALL MODERATOR:

20 (b)(5)

21 (b)(5)

22 MR. STERN: The fact that there is a hit
23 doesn't mean there is any risk. And so what they do
24 is when they have a hit which they have occasionally
25 regardless of this accident, they send back to their
LSS.

And I think the basic approach they're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

8 CALL MODERATOR:

9
10 (b)(5)
11
12

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

14 CALL MODERATOR:

15 (b)(5)
16

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

20 CALL MODERATOR: Right.

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

25 CALL MODERATOR:

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)

2 MR. STERN: Let me check with Rich
3 Chavez in ops and I will send out an email shortly.

4 MR. REESE: This is Ira Reese from CBP.
5 I believe those protocols were sent up this morning
6 through the interagency CAT or something like that.

7 CALL MODERATOR:

8 (b)(5)
9
10

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

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

21 And what's happening is right now
22 there's some shrink wrap awaiting the decay to see
23 if it goes down below background.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

8 And the stuff that's contaminated --

9 CALL MODERATOR:

10 (b)(5) .
11
12
13

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

18 CALL MODERATOR:
19 (b)(5)

20 DHS PARTICIPANT: Will do.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 CALL MODERATOR:

2 (b)(5)

3
4
5 MR. STERN: (b)(6) let me send out a few
6 emails and figure out how it went out. And then I
7 will send that answer to you.

8 CALL MODERATOR:

9
10 (b)(5)

11
12
13
14 MR. STERN: Yes.

15 CALL MODERATOR:

16
17
18 (b)(5)

19
20
21
22
23 FEMALE PARTICIPANT: (b)(6) Joint Staff

24 was going to check into what dosimeters were located
25 for U.S. Forces Japan and what was being shipped out

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 to ensure that we have TLDs that they also have the
2 ability with either having teams, independent squads
3 or teams equipped with capabilities to take dose
4 rate and total dose as well.

5 CALL MODERATOR:

6 (b)(5)
7
8

9 MR. MALONE: This is Stephen Malone. We
10 sent that down last night and we were supposed to --
11 the guys down in the basement were going to query
12 the J-4 on that. I don't have feedback on that yet.

13 As soon as we're done here I'll go down and ask
14 them.

15 CALL MODERATOR:

16 (b)(5)
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)

2 MALE PARTICIPANT: That's correct.

3 CALL MODERATOR:

4 (b)(5)

5
6 MALE PARTICIPANT: No, it's still in
7 interagency clearance among the key partner groups.

8 So CBP, DOT, FAA right now are the ones looking at
9 the draft. And we're hoping that by the end of the
10 day or certainly by tomorrow the sort of plan on how
11 to deal with low-level individual contamination will
12 be sort of approved and be able to be implemented.

13 CALL MODERATOR:

14 (b)(5)

15
16 MALE PARTICIPANT: Well, there will be
17 some information posted as well. But -- and FAQs on
18 what's going on and messages to travelers in terms
19 of what they can expect.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 CALL MODERATOR: Okay, so specific
2 handouts. Okay.

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

13 CALL MODERATOR:

14
15 (b)(5)
16
17

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

25 CALL MODERATOR: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

4 Let's take an example for Atlanta
5 Hartsfield here in Atlanta because I just talked
6 with our CRCPD representative from Atlanta to get
7 that background information.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 person.

2 CALL MODERATOR:

3
4
5
6
7
8 (b)(5)
9
10
11
12
13
14

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

18 CALL MODERATOR: Resolution.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

14 CALL MODERATOR:

15 (b)(5)
16
17

18 MR. REESE: There's not much
19 contamination coming in right now.

20 CALL MODERATOR:

21 (b)(5)
22

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 CALL MODERATOR:

2 (b)(5)

3 MR. REESE: Yes, we are.

4 CALL MODERATOR:

5 (b)(5)

6
7 MR. REESE: There's no above -- there's
8 no -- there is no threshold right now. What we're
9 doing is a case-by-case basis as to how hot the
10 material is.

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

17 But by and large the contamination is
18 extremely low. And there's basically no reason to
19 basically hold back this cargo from moving on.
20 Unless we have guidance from anybody else.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 radiation which of course is not the case.

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

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

12 CALL MODERATOR:



13
14
15
16
17
18 (b)(5)
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

MALE PARTICIPANT: NOAA has no authority in that matter.

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

CALL MODERATOR:
(b)(5)

FEMALE PARTICIPANT: Right.

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

CALL MODERATOR:

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 [REDACTED]
2 (b)(5)

3 MR. REESE: What specifically are you
4 looking for?

5 CALL MODERATOR: [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]

(b)(5)

17 MR. BOYD: Lee is not on the phone.
18 This is Mike Boyd. I'm monitoring the call.

19 CALL MODERATOR: [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 needs to be decontaminated, when food might need to
2 activate the FDA food interdiction levels and
3 whatever.

4 There's people on this call that know a
5 lot more about this than I do, but I think that
6 advisory team is the place to go for a lot of the
7 information that you're asking for. And they, you
8 know, along with the four standing member agencies
9 other agencies are welcome to join as appropriate.

10 And I do believe that they'll be
11 providing some of this information for this event.
12 They don't set policy obviously but they do make
13 recommendations based on the standing guidance.

14 As for the reentry team and the deputy-
15 level exercise I can find out more about that and
16 get back to you.

17 CALL MODERATOR: I would appreciate --

18 MR. (b)(6): This is (b)(6)

19 (b)(6) So, that standing advisory team, let's see.

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

23 MR. BOYD: Yes, I think so.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Nuc/Rad Incident Annex of the National Response
2 Framework is CDC's hotline at 770-488-7100. We'll
3 get you plugged in.

4 CALL MODERATOR:

(b)(5)

6 DR. WHITCOMB: They are in the next room
7 across from me and I'm missing that call now, but
8 that's okay. I'm letting my team handle it.

9 CALL MODERATOR:

11 (b)(5)

15 DR. WHITCOMB: I don't know but I will
16 check to make sure.

17 CALL MODERATOR:

18 (b)(5)

21
22
23
24
25
NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-GQNBO-03765094

(CONFERENCE CALL INITIATED)

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

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

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

MS. BROCK: Thanks.

PARTICIPANT ANTHONY: Okay, you're connected.

MS. BROCK: Thank you very much.

PARTICIPANT ANTHONY: You're welcome.

MR. GERALD: Hello, this is Bob Gerald.

MS. BROCK: Hi, Bob. This is Cathy Brock calling from NRC. I was hoping to talk to somebody about the DOE SITREP report. Do you know who I would talk with?

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 lead on.

2 MR. GERALD: Okay. All right. Can you
3 tell me what page it is and everything?

4 MS. BROCK: Well, I have it in an email
5 and so it's the first page under "Fukushima Daiichi
6 Nuclear Issues."

7 MR. GERALD: Under issues. Okay.

8 MS. BROCK: Yes.

9 MR. GERALD: Okay.

10 MS. BROCK: You got it?

11 MR. GERALD: No, I don't have it right
12 in front of me.

13 MS. BROCK: Okay, well, I'll tell you
14 what it is then. It says, "Based on measurements
15 from March 17th flights DOE assesses Japan's 20-mile
16 evacuation and 30 or 18-mile shelter as adequate."

17 And the NRC has the lead for determining
18 protective actions within Japan and we have expanded
19 the evacuation area to 50 miles. So the two are in
20 conflict.

21 MR. GERALD: Okay. Okay, I will pass
22 that onto a guy who does that.

23 MS. BROCK: Okay.

24 MR. GERALD: You expanded the zone to 50
25 miles?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. BROCK: Yes.

2 MR. GERALD: Fifty miles.

3 MS. BROCK: So it's probably best to
4 just strike the whole thing. If you have to comment
5 on the evacuation zones you can refer to the NRC
6 protective action recommendation to evacuate to 50
7 miles.

8 MR. GERALD: Okay. NRC recommendation.
9 Okey-doke. I will do that.

10 MS. BROCK: Okay. What was your last
11 name again so I can --

12 MR. GERALD: Gerald.

13 MS. BROCK: Gerald? Thank you. And I
14 think I have one other question if it's okay with
15 you. And I only have one more. The AMS data. So,
16 are we still getting that? I had heard yesterday
17 that NRC was going to be getting that at 6 o'clock
18 a.m. and 6 o'clock p.m. every day.

19 MR. GERALD: Well, it's included in the
20 SITREP I believe.

21 MS. BROCK: Okay. All right. I'll look
22 around a little bit to make sure I didn't overlook
23 something.

24 MR. GERALD: Okay.

25 MS. BROCK: So. All right. Hey,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 thanks.

2 MR. GERALD: Okay.

3 MS. BROCK: All right, bye.

4 (Whereupon, the foregoing matter went
5 off the record)

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 19, 2011

Work Order No.: NRC-0366

Pages 1-11

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/9

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 SATURDAY,
8 MARCH 19, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-HG-3H-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-HG-4JL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-HT-4-603765094

(CALL INITIATED)

PARTICIPANT TONY: Hello?

MR. NORRIS: Hey, Tony. Mike Norris.

PARTICIPANT TONY: Yes, Mike.

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

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

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

PARTICIPANT TONY: Okay, real good.

MR. NORRIS: All right?

PARTICIPANT TONY: I appreciate it,
Mike. Thank you very much. Are you working then as
the PAD for the rest of the week?

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

PARTICIPANT TONY: Oh, all right.

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

PARTICIPANT TONY: Appreciate it, Mike.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Thanks. That's fine. I'll go on into the -- the
2 EST coordinators need to change? Or the admin team?

3 MR. NORRIS: Yes, I had them made to
4 change.

5 PARTICIPANT TONY: Real good. Thanks,
6 Mike. Have a great day.

7 MR. NORRIS: Okay, bye.

8 PARTICIPANT TONY: Thanks.

9 (Whereupon, the foregoing matter went
10 off the record)

0-14-Q!-03765094

(CONFERENCE CALL INITIATED)

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

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

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

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

MR. PARKER: Yes.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 monitoring assets that DOE has started to put in.
2 But that doesn't particularly help you in Narita nor
3 does it give you anything of a concentration that
4 might be up in the air.

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

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

7 MR. PARKER: Okay.

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

13 MR. PARKER: Right.

14 MR. COOL: We know that there's been
15 little bits of stuff, but it's down in the 0.03 to
16 0.08 microsievert per hour range. And I understand
17 that that's just about the level because you're
18 probably running your alarms on your detectors so
19 that it alarms at 2x background. So it's probably
20 giving you fits.

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

22 MR. COOL: Well, I can understand that.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

18 MR. COOL: Yes. Okay. So, basically
19 that's all that I've got. I can't really give you a
20 nice answer to what kind of concentrations are you
21 seeing. We're monitoring what trickle of
22 information we're getting. But as I said, most of
23 the data we've got is ground a whole lot closer than
24 150 miles south that your planes are coming into.

25 MR. PARKER: Yes, Narita, correct.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Okay. I'm going to give you a little side piece of
2 information that amuses me.

3 MR. COOL: Sure.

4 MR. PARKER: (b)(5)

5 (b)(5)
6
7
8
9
10
11
12
13
14
15

16 MR. COOL: And did he find anything?

17 MR. PARKER: No.

18 (Laughter)

19 MR. COOL: Well, that's okay.

20 MR. PARKER: Which --

21 MR. COOL: Good.

22 MR. PARKER: (b)(5)

23 (b)(5)

24 So, but I understand. Anyway,

25 I appreciate the call, Donald.

MR. COOL: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. PARKER: Good to talk to you.

2 MR. COOL: Thanks. Bye bye.

3 MR. PARKER: Thank you.

4 (Whereupon, the foregoing matter went
5 off the record)

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 20, 2011

Work Order No.: NRC-0366

Pages 1-25

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/10

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 SUNDAY,
8 MARCH 20, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-IW-17L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-IW-29603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-JBQ-G603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-JC!1-603765094

(CALL INITIATED)

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

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

PARTICIPANT HOWIE: Hey, Cathy.

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

PARTICIPANT HOWIE: I'll never kill you.

MS. BROCK: You might.

PARTICIPANT HOWIE: Okay.

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

PARTICIPANT HOWIE: Right.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 PARTICIPANT HOWIE: Okay. Now, it's --
2 okay. For her to be administrator -- the moderator
3 is (b)(6)

4 MS. BROCK: That's what I did.

5 PARTICIPANT HOWIE: Okay. So, what did
6 it do?

7 MS. BROCK: Nothing.

8 PARTICIPANT HOWIE: Nothing. And you
9 hit the pound and it didn't --

10 MS. BROCK: Yes. It's 800-772-3842.

11 PARTICIPANT HOWIE: Yes. You were on --
12 they said you were on the bridge. We saw you pop
13 up.

14 MS. BROCK: But nothing happened. It
15 didn't say you are caller one of one and you --

16 PARTICIPANT HOWIE: No, our bridge
17 doesn't do that.

18 MS. BROCK: All right. Then nobody else
19 was there.

20 PARTICIPANT HOWIE: Our bridge, yes,
21 there's nobody else there. We just put -- it just
22 puts you guys in and that's it.

23 Oh wait, hold on, Steve can change that.
24 He can give you an announcement. You want to do
25 that?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. BROCK: That's fine. So nobody else
2 is there right now?

3 PARTICIPANT HOWIE: No, nobody else is
4 up there right now.

5 MS. BROCK: Is there any way you can
6 call us at the PMT table and tell us if somebody
7 pops on? And then we'll get right on it.

8 PARTICIPANT HOWIE: Okay, yes. You can
9 try to go back up and it'll give you a count.

10 MS. BROCK: It's only 2:01.

11 PARTICIPANT HOWIE: Yes, but there is
12 nobody up there for the bridge at this time.

13 MS. BROCK: All right, but now I'll get
14 an announcement if they do?

15 PARTICIPANT HOWIE: Yes.

16 MS. BROCK: All right.

17 PARTICIPANT HOWIE: You'll get an entry
18 tone.

19 MS. BROCK: Thank you.

20 PARTICIPANT HOWIE: Okay, so it's going
21 to say state your organization followed by the pound
22 sign. So then you'll be able to do that *8 roster
23 playback and everybody if they announce will be
24 there.

25 MS. BROCK: All right, when they get

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 there.

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

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

6 (Laughter)

7 PARTICIPANT HOWIE: I hear you.

8 MS. BROCK: All right, thanks.

9 PARTICIPANT HOWIE: All right, bye.

10 MS. BROCK: Bye.

11 (Whereupon, the foregoing matter went
12 off the record)

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-JC-I8-03765094

(CONFERENCE CALL INITIATED)

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

MR. WILTON: Hi, it's Steve Wilton here
from the UK. Who's speaking, please?

MS. BROCK: Cathy Brock.

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

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

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

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

DR. VIKTOROV: There is Canada as well.
Can you hear us?

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

DR. VIKTOROV: Yes, we are.

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

DR. VIKTOROV: Alex Viktorov. But
there's sort of a lot here.

MS. BROCK: All right, we'll just say
Alex. How about that?

DR. VIKTOROV: That's fine.

MS. BROCK: Okay. So did somebody want

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 to kick off?

2 MR. THOMAS: Well, we can. Hello, this
3 is Greg Thomas here from the UK.

4 MS. BROCK: Okay, hi.

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

11 MS. BROCK: Okay.

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

16 MS. BROCK: In the U.S. we've been
17 working with some other federal government employees
18 in a different agency to try to do some modeling.
19 And I don't know, we're trying.

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

24 MR. THOMAS: Okay.

25 MS. BROCK: Which is not really what

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 we're working on right now, but we're, you know,
2 we're going through that. But I wanted to at least
3 be able to share something with you about where our
4 line of thinking has come from.

5 MR. THOMAS: Yes.

6 MS. BROCK: So if you want I have a one-
7 page document that somebody here wrote up and I can
8 just read through it.

9 MR. THOMAS: Is that something you could
10 email to us?

11 MS. BROCK: I can't because it's
12 official use only and it's --

13 MR. THOMAS: Okay. Yes, okay.

14 MS. BROCK: -- distribute it. So it
15 might be easier if I can -- is that okay? It
16 probably will take a minute or two, but.

17 MR. THOMAS: Okay.

18 MS. BROCK: All right. So, again, look
19 up our press release from the 16th.

20 So there's two dose assessments attached
21 to the March 16 press release. Both are worst case
22 and hypothetical from releases from the Fukushima
23 site. Okay?

24 The first assessment assumed a Unit 2
25 reactor 100 percent core melt, unfiltered release

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 from a totally failed containment with actual
2 meteorological conditions during the early morning
3 hours of the date indicated. So whatever data we
4 put on the report, okay?

5 MR. THOMAS: Yes.

6 MS. BROCK: The load dispersion
7 characteristics included low wind speeds, relatively
8 stable air and light precipitation. Okay? So
9 that's that.

10 The second assessment represented
11 multiple unit failures. Okay?

12 MR. THOMAS: Yes.

13 MS. BROCK: Unit 2, the 33 percent
14 reactor core damage is an unfiltered release from a
15 totally failed containment. Unit 3 spent fuel pool
16 was 50 percent damage and in that we had (b)(4)
17 of spent fuel discharged 105 days ago.

18 MR. THOMAS: Just for my own
19 clarification what do you call a bundle? How many
20 is that in terms of assemblies?

21 MS. BROCK: I'm not positive, I'm sorry.
22 Then the third one was Unit 4 spent fuel pool with
23 100 percent damage and that was (b)(4) of spent
24 fuel discharged 30 days ago.

25 MR. THOMAS: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

10 Okay? So we got greater atmospheric dispersion.

11 Also, the source term included two
12 additional dates of decay before the release. Okay?

13 For this multi-unit assessment the increased decay
14 time before release and the greater atmospheric
15 dispersion significantly reduced the resultant dose
16 estimate.

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

23 MR. THOMAS: Yes.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 speculative given the lack of actual data.

2 MR. THOMAS: Well, yes, we're all in
3 that position, aren't we?

4 MS. BROCK: Yes, it's terrible.

5 MR. THOMAS: Yes.

6 MS. BROCK: So that's what I have to
7 share with you. And I hope that it's helpful to see
8 where we were a few days ago.

9 Like I was saying yesterday we're trying
10 to get more realistic but it's really difficult
11 because there's not too much to go on.

12 MR. THOMAS: Yes. I mean, obviously I
13 mean there's sort of roughly -- the models -- sorry,
14 the scenarios about your modeling are different than
15 ours in terms of assumptions that are being made.

16 We've gone for a slightly different
17 approach in considering the release of, you know,
18 from one reactor with a sort of say a 10 percent
19 release fraction so that when data becomes more firm
20 that we can just apply a sort of scaling to that in
21 order to get perhaps a more appropriate result.

22 And then we've also begun to assess the
23 release from a pond.

24 MS. BROCK: Right.

25 MR. THOMAS: But we've applied a couple

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 of more representative release fractions and sort of
2 gleaned what that would give us.

3 And then the sort of permutation and
4 combination of which reactors, which ponds, you
5 know. I suppose that's -- there's a number of
6 options, isn't there?

7 MS. BROCK: So, can you share what kind
8 of release fractions you were using for the ponds?

9 MR. THOMAS: No. I mean, I don't have
10 that raw hand to hand unfortunately. But that's all
11 -- that 10 percent figure for a reactor is typical.

12 But the specific release factors for the ponds I'm
13 not in a position to sort of give them at the
14 moment.

15 MS. BROCK: All right, that's fine. We
16 couldn't do it either and we're working on that too
17 around here.

18 MR. THOMAS: Yes. So I think we're in
19 sort of a situation where information is sort of
20 scant. But I think between us we're all doing the
21 sort of sensible options.

22 Perhaps when information becomes that
23 much more clear, you know, we'll then be in a
24 situation where we can sort of swap information.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 You know, I asked this question yesterday and I'll
2 ask it again today. Are you guys still comfortable
3 with the protective action recommendations you had
4 for 88 kilometers?

5 MR. THOMAS: I mean, at the moment we're
6 content with the advice that's being offered by the
7 Japanese government. And we're remaining consistent
8 with that. We're not saying anything to the
9 contrary.

10 MS. BROCK: Okay. Yes, we wouldn't be
11 ready to say anything to the contrary either.

12 MR. THOMAS: Yes.

13 MS. BROCK: But if you run enough
14 terrifying situations you can get to any number you
15 want. You know?

16 MR. THOMAS: Yes. It's trying to sort
17 the picture of what is realistically pessimistic.

18 MS. BROCK: I know. We're throwing
19 terms like that around here too and then we'll say
20 realistically pessimistic number two.

21 MR. THOMAS: Yes.

22 MS. BROCK: It's horrible. Okay. Very
23 good.

24 MR. THOMAS: So when do you think you'll
25 be in position to sort of share a little bit more of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 the information?

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

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

8 MS. BROCK: Let's do it.

9 MR. THOMAS: Yes.

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

16 MR. THOMAS: Yes, okay.

17 MS. BROCK: Before I forget. All right,
18 there's two different call-in numbers and I'll give
19 you both in case one is better for you. The first
20 is 800-772-3842. And if you have trouble calling an
21 800 number you can use 301-816-5120. And with both
22 numbers will get you the same place. And then the
23 code is (b)(6)

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. BROCK: Pound, yes, the pound key.

2 MR. THOMAS: Oh, hash key.

3 MS. BROCK: Yes, sorry. We call it the
4 pound.

5 MR. THOMAS: Okay.

6 MS. BROCK: Okay. So that will be for
7 tomorrow at 2 o'clock or 1400 Eastern time.

8 MR. THOMAS: Okay.

9 MS. BROCK: Correct?

10 MR. THOMAS: Yes. And in a nutshell the
11 information that you've conveyed to us this
12 afternoon was based on the modeling that you've
13 carried out 2 or 3 days ago effectively?

14 MS. BROCK: Yes.

15 MR. THOMAS: Yes, okay.

16 MS. BROCK: Yes.

17 MR. THOMAS: And we have a little bit
18 more up-to-date information but we haven't had time
19 to assimilate it all. So we're a little bit
20 reluctant to put any detail on that at the moment.

21 MS. BROCK: Okay. Well, you can -- we
22 can take a look at it if you have time and you can -
23 - if you look at the press release and now you know
24 sort of what our thinking was behind it you can see
25 how we've --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. THOMAS: Yes, that's really helpful.

2 Yes, thanks.

3 MS. BROCK: Okay. All right. Well, I
4 guess do we have anything else?

5 MR. CARR: This is Robert Carr speaking
6 from the UK. One of the concerns that we had
7 earlier which I believe we may have spoken to some
8 of your colleagues about both in Canada and the U.S.
9 was the idea of a source term that we think may have
10 originated from TEPCO but we can't actually prove
11 its provenance.

12 MS. BROCK: We tried to look that up on
13 the TEPCO website. We couldn't find the source.

14 MR. CARR: Right. This is just to check
15 that we've got the same number in our heads. We've
16 got 6.5 times 10^{18} becquerels.

17 MS. BROCK: Yes.

18 MR. CARR: Okay. Now, we don't have any
19 -- the only information we have is the source term.

20 We don't have any isotopic --

21 MS. BROCK: Right.

22 MR. CARR: -- for that or indeed how it
23 would be released or anything. But this thing has
24 appeared and we don't know where it's from so we're
25 having difficulty in killing it dead. Are you in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 the same position?

2 MS. BROCK: We're not actually in the
3 same position because I first heard this information
4 from the folks that were on the 9 o'clock call with
5 you guys.

6 MR. CARR: Right.

7 MS. BROCK: We're not battling back this
8 number right now.

9 DR. VIKTOROV: It's Canada here. We
10 tried to confirm the number, checked the
11 (indiscernible) website, couldn't find the number.
12 And from what we know about the core inventory it
13 seems too high. So we really have doubts on the
14 number.

15 MS. BROCK: Yes, I think it's pretty
16 high too.

17 MR. CARR: So, I mean between the three
18 of us, or three nations we're treating that number
19 with caution.

20 MS. BROCK: Yes.

21 MR. CARR: Okay.

22 MS. BROCK: Yes. In fact I'm not even
23 going to do anything with it.

24 DR. VIKTOROV: Yes, we considered that
25 we need to adjust our source term, but we don't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 think so.

2 MS. BROCK: Okay. Yes. We agree.

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

7 MS. BROCK: Great.

8 DR. VIKTOROV: I agree.

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

12 MR. THOMAS: That's a good question.
13 They didn't join us. The call that we were on
14 today, this -- apologies, this is UK time, but the
15 call, the 1:30 call for us basically was postponed
16 an hour till 2:30. I don't know whether France got
17 that message or not.

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

20 MR. THOMAS: Well, not really, no. The
21 1:30 call went to 2:30, and the fact that at 2:30 we
22 talked about having this meeting at 6 o'clock means
23 that today the French may well be out of the loop.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 number tomorrow, if the French dial in on the old
2 number will they still be able to get through?

3 MS. BROCK: I think the answer would be
4 that they would get to our operations officers and
5 they would be able to tell them what to do.

6 MR. THOMAS: Okay.

7 MS. BROCK: Yes, I don't think they'll
8 be lost. And I'll confirm that.

9 MR. THOMAS: What I suggest we do then
10 is at the conference tomorrow morning at 1:30 UK
11 time hopefully France will join us. If not, we'll
12 see if we can track them down. Okay?

13 MS. BROCK: Very good.

14 MR. THOMAS: And then we just kind of
15 apologize for not engaging with them today. But I'm
16 sure they want to join.

17 MS. BROCK: Okay. Fantastic.

18 MR. THOMAS: Okay. And so from our end
19 that's the UK. I think that's all the information
20 that we can convey at the moment. Is there anything
21 else from yourselves?

22 MS. BROCK: Not from the U.S.

23 DR. VIKTOROV: Nothing from Canada.

24 MR. THOMAS: Okay. So, if we look
25 forward to speaking with you in 24 hours time.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. BROCK: Great. See you then.

2 DR. VIKTOROV: All right.

3 MS. BROCK: Bye bye.

4 MR. THOMAS: Bye.

5 (Whereupon, the foregoing matter went
6 off the record)

7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-K- (E (-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-K-(F)-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 21, 2011

Work Order No.: NRC-0366

Pages 1-35

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/11

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 MONDAY,
8 MARCH 21, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-KK!G3-03765094

(CONFERENCE CALL INITIATED)

FRENCH FEMALE PARTICIPANT: (Answers in French).

MS. SCHWARTZMAN: Yes, good afternoon. My name is Jennifer Schwartzman. I'm calling from the U.S. Nuclear Regulatory Commission's operations center.

FEMALE PARTICIPANT: Yes.

MS. SCHWARTZMAN: -- scheduled.

FRENCH FEMALE PARTICIPANT: Yes. Do you want to speak with -- with a person in particular?

MS. SCHWARTZMAN: We were told to call this number for a call that was scheduled earlier today.

FRENCH FEMALE PARTICIPANT: Hold on, please.

MS. SCHWARTZMAN: -- Japan.

FRENCH FEMALE PARTICIPANT: Yes, hold on, please. Could you give me your name? I don't understand English. Speak no so quickly, please.

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

FRENCH FEMALE PARTICIPANT: Jennifer?
Jennifer?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. SCHWARTZMAN: Yes.

2 FRENCH FEMALE PARTICIPANT: And your
3 name is?

4 MS. SCHWARTZMAN: My name is Jennifer
5 Schwartzman.

6 FRENCH FEMALE PARTICIPANT: Schwartzman.
7 Could you spell your name, please?

8 MS. SCHWARTZMAN: Yes. It's S-C-H-W-A-
9 R-T-Z-M-A-N. Schwartzman.

10 FRENCH FEMALE PARTICIPANT: Yes. And
11 you are from?

12 MS. SCHWARTZMAN: I am from the U.S.
13 Nuclear Regulatory Commission.

14 FRENCH FEMALE PARTICIPANT: Yes. And at
15 which do you want to speak?

16 MS. SCHWARTZMAN: I'm sorry, I don't
17 know -- I believe that the call was requested by
18 Tomas Musee. But I don't know for sure.

19 FRENCH FEMALE PARTICIPANT: Ah yes, yes.
20 Hold on.

21 MS. SCHWARTZMAN: Okay.

22 (Whereupon, the foregoing matter went
23 off the record)

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-KK8#5-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-KKL}NL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-KKLTJ603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-KKNM7603765094

(CONFERENCE CALL INITIATED)

FRENCH FEMALE PARTICIPANT: (Answers in French).

MS. SCHWARTZMAN: Bonjour. Good
afternoon. May I please speak with Carine Elvue?

FRENCH FEMALE PARTICIPANT: Yes, hold
on. What's your name, please?

MS. SCHWARTZMAN: Jennifer Schwartzman.

FRENCH FEMALE PARTICIPANT: Yes. Hold
on, please.

FRENCH FEMALE PARTICIPANT: Hello?

MS. SCHWARTZMAN: Hello?

FRENCH FEMALE PARTICIPANT: IRSN
Emergency Centre here.

MS. SCHWARTZMAN: Hello. This is the
U.S. NRC's Emergency Operations Center.

FRENCH FEMALE PARTICIPANT: Okay.

MS. SCHWARTZMAN: I'm going to put you
on speaker phone so my colleague can also hear.

FRENCH FEMALE PARTICIPANT: Okay.

MS. SCHWARTZMAN: Can you hear us?

FRENCH FEMALE PARTICIPANT: Yes,
perfect.

MS. SCHWARTZMAN: Okay.

FRENCH FEMALE PARTICIPANT: Did you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 receive the two documents we sent to you?

2 MS. SCHWARTZMAN: I don't believe we
3 did.

4 FRENCH FEMALE PARTICIPANT: Okay. So we
5 --

6 FRENCH MALE PARTICIPANT: Maybe you can
7 check in your email box? It will make more
8 efficient I think.

9 MS. SCHWARTZMAN: Do you know what email
10 address you sent the documents to?

11 FRENCH MALE PARTICIPANT: It was L-I-A-
12 0-2.

13 MS. SCHWARTZMAN: Okay. If you can hold
14 on one moment I'll go retrieve those documents from
15 that inbox. I'll let you speak with my colleague in
16 the meantime. She can introduce herself.

17 FRENCH MALE PARTICIPANT: Yes, okay.

18 MS. HART: Hello, my name is Michelle
19 Hart.

20 FRENCH MALE PARTICIPANT: Okay.

21 MS. HART: And I'm the radiological
22 assessment officer.

23 FRENCH MALE PARTICIPANT: Okay, so you
24 are the (indiscernible) from the system analysis
25 team I would say?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 MS. HART: I'm -- the dose analysis.

2 FRENCH MALE PARTICIPANT: We are waiting
3 for you before starting this.

4 MS. HART: Okay.

5 FRENCH MALE PARTICIPANT: Okay.

6 MS. SCHWARTZMAN: Okay, we have returned
7 with the document printed out.

8 FRENCH MALE PARTICIPANT: Okay. Yes, we
9 just tied together a connection with the French
10 (indiscernible) authority with ASN. So we'll try to
11 connect with them and then we will start the
12 discussion.

13 MS. SCHWARTZMAN: Okay, thanks.

14 FRENCH MALE PARTICIPANT: So maybe we
15 can start. We don't know what they are doing.

16 MS. SCHWARTZMAN: Okay.

17 FRENCH MALE PARTICIPANT: Okay, so let's
18 go. So you wanted to ask -- extend your information
19 on the source term assistance by IOHN? So, how you
20 can proceed? Maybe we can commence what has been
21 done here.

22 MS. HART: Yes, why don't you give me an
23 explanation as to the assumptions that were used and
24 the reasons behind them.

25 FRENCH MALE PARTICIPANT: Okay. So,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

13 FRENCH FEMALE PARTICIPANT: For the
14 three BWR.

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 FRENCH FEMALE PARTICIPANT: The dose
2 rate measurements near the site.

3 MS. HART: Right.

4 FRENCH MALE PARTICIPANT: Dose rate.

5 FRENCH FEMALE PARTICIPANT: And we have
6 also checked according to (indiscernible) activities
7 we received some measurements results. And check
8 also that either the composition was not so far from
9 what has been measured. So it hasn't -- as was said
10 all the time we have a factor of 10 above what has
11 been measured with our calculation. So we consider
12 this quite good estimation that -- we are just
13 looking for order of magnitude of the source term.

14 MS. HART: Say that again? I'm sorry.
15 The last part.

16 FRENCH MALE PARTICIPANT: Yes, we
17 consider that the order -- we are in a good order of
18 magnitude and of the release. So the comparison
19 with measurement is good enough to avoid any updates
20 of the source term.

21 MS. HART: Okay, thank you.

22 FRENCH MALE PARTICIPANT: Yes. And so
23 maybe -- so important point is that we do not
24 consider (indiscernible) retention but I think it a
25 rather important point.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 And second point, of course we do not
2 consider any release from the pool.

3 MS. HART: Right.

4 FRENCH MALE PARTICIPANT: We consider
5 that the pool is underwater during all the accident.

6 MS. HART: Okay.

7 FRENCH FEMALE PARTICIPANT: We were not
8 sure about the release pathway. In fact, we did not
9 consider any retention through the pool's cladding
10 (indiscernible).

11 MS. HART: Okay, so no pool scrubbing
12 either.

13 FRENCH FEMALE PARTICIPANT: No, no pool
14 scrubbing. So maybe this is the reason of this
15 factor of 10 regarding the measurements.

16 MS. HART: Okay, thank you.

17 FRENCH MALE PARTICIPANT: Yes. But we
18 think that there were some events where maybe there
19 was in reactor 3 I think, 2 or 3. Reactor 2 was --
20 to one event where with direct venting from the gas
21 part of the containment. So this is the situation
22 for us.

23 MS. HART: All right. I think I
24 understand what you have done. Do you have anything
25 else you would like to?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 FRENCH MALE PARTICIPANT: We have in the
2 main -- so what we have sent, we have sent you -- it
3 is in French, but there is a paper with the
4 (indiscernible) of the reactor. Diagnostic
5 qualities is what we used to follow the situation.

6 At the end of the document you have the
7 source term corresponding to the pool, pool
8 dewatering.

9 MS. HART: Yes, I do see that.

10 FRENCH MALE PARTICIPANT: Which is the
11 last page. So it has been calculated with the
12 inventory in each pool and with information we got.

13 MS. HART: Okay. And this information
14 was probably through the same channels that we have.

15 FRENCH MALE PARTICIPANT: Yes. And you
16 see the sheltering distance, like very huge
17 consequences.

18 MS. HART: Right. On page 5 of 7, the
19 third from last page --

20 FRENCH FEMALE PARTICIPANT: Page 7. The
21 number of pools?

22 MS. HART: Right.

23 FRENCH FEMALE PARTICIPANT: You see the
24 pools. So pool number 1, 2 through 6. And we have
25 made a source term calculation in case of dewatering

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 of each of these.

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

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

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

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

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

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Second column is retention in the pool, in the
2 structure of the pool and the (indiscernible,
3 possibly rock) and so on. And last columns, this is
4 a release from the fuel to the environment.

5 MS. HART: Okay. So, okay. I see how
6 it works, yes.

7 FRENCH FEMALE PARTICIPANT: This is
8 applied to the inventories.

9 FRENCH MALE PARTICIPANT: This is
10 applied to the, yes, total inventory.

11 FRENCH FEMALE PARTICIPANT: Inventory of
12 the pool.

13 FRENCH MALE PARTICIPANT: So you see,
14 for example, we have very pessimistic assumption on
15 (indiscernible, possibly plutonium) due to
16 possibility of oxidation and so on.

17 MS. HART: Okay. So, yes, that's -- you
18 just assumed that value. Okay. I think I
19 understand. Yes, I do understand.

20 And then the fifth page has your dose
21 results.

22 FRENCH FEMALE PARTICIPANT: Yes. We
23 made some short distance, long-distance calculation
24 for radiological consequences. So this is given for
25 the pool under stage 7 and for the last source term

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

3 MS. HART: Okay.

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

8 MS. HART: Okay.

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

11 MS. HART: Okay, thank you.

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

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

7 MS. HART: We have a lot of similar
8 questions so I don't know that I have a whole lot
9 extra information on that myself.

10 I can say that some of the air
11 measurements we have seen in the area indicate that
12 it's coming -- it doesn't seem to be coming from the
13 spent fuel pool with the (indiscernible, possibly
14 aged fuel) because we are seeing some iodine-131.

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

17 MS. HART: Yes.

18 FRENCH MALE PARTICIPANT: Yes, okay.

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

25 FRENCH MALE PARTICIPANT: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

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

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

22 FRENCH MALE PARTICIPANT: Yes.

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 FRENCH FEMALE PARTICIPANT: No, we had
2 no contact.

3 FRENCH MALE PARTICIPANT: No, we had no
4 contact with Japanese team.

5 MS. SCHWARTZMAN: No, not with the
6 Japanese team. With --

7 FRENCH FEMALE PARTICIPANT: With NRC.

8 MS. SCHWARTZMAN: -- operations center.

9 FRENCH FEMALE PARTICIPANT: No.

10 FRENCH MALE PARTICIPANT: No. We have
11 tried, at the very beginning you have tried to
12 contact and NRC. We choose at this period to
13 discuss for technical discussion with us at the very
14 beginning of the accident.

15 MS. SCHWARTZMAN: That's interesting
16 because we have a standing call with UK and Canada
17 and France every morning at 9:30 here that I know
18 ASN has participated in. So, I would recommend
19 perhaps talking with ASN about that.

20 FRENCH FEMALE PARTICIPANT: Okay, we'll
21 do this.

22 FRENCH MALE PARTICIPANT: Okay, 9:30 in
23 the morning.

24 FRENCH FEMALE PARTICIPANT: For your
25 time.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 FRENCH MALE PARTICIPANT: For your time.

2 MS. SCHWARTZMAN: It's 9:30 our time.

3 So I guess that's 2:30 by you.

4 FRENCH MALE PARTICIPANT: Yes.

5 MS. SCHWARTZMAN: But you know, I can
6 certainly ask them that question and see if there's
7 any information we can provide you. But I know for
8 a fact because I've been on that call previous days
9 that ASN has participated. So you may want to speak
10 with them about --

11 FRENCH FEMALE PARTICIPANT: Okay.

12 FRENCH MALE PARTICIPANT: Yes. We have
13 participated one time I think on discussion on the
14 work source term I think, which is --

15 MS. SCHWARTZMAN: Right, and that was a
16 separate call that we had set up with those same
17 countries but obviously with a different set of
18 experts. But we've been happy to speak with all of
19 our counterparts as much as we can. So you know, I
20 would find out if there's a way that you can
21 participate in that call as well.

22 FRENCH MALE PARTICIPANT: Okay, thank
23 you.

24 FRENCH FEMALE PARTICIPANT: Okay.

25 FRENCH MALE PARTICIPANT: Okay, so on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

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

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

8 We've done some analyses where we have
9 really bad releases from all of the units including
10 all the spent fuel pools. We've also done more
11 realistic analyses and we're still working on those.

12 And we are trying also to verify some of those
13 readings we're seeing in the area using some of
14 these analyses.

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

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

25 We've also tried to look at some

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 releases from the spent fuel pools (b)(5)

2 (b)(5)

on

3 the amount of water lost in those pools, or cooling
4 lost in those pools.

5 And as you have probably seen on the TV
6 we've also seen the steaming coming out of those
7 buildings, damaged buildings. So we're unsure as to
8 the damage. However, we do have some approximations
9 that perhaps Unit 3 spent fuel pool may have as much
10 as 5 percent fuel damage in that pool. And Unit 4
11 may have as much as 30 percent damage.

12 FRENCH MALE PARTICIPANT: What percent -

13 -

14 MS. HART: We're running analyses on
15 that.

16 FRENCH MALE PARTICIPANT: Five percent
17 for Unit 3 you say?

18 MS. HART: What's that? Yes, 5 percent
19 for Unit 3 spent fuel pool was one of the --

20 FRENCH MALE PARTICIPANT: And 30 for
21 Unit 4.

22 MS. HART: Thirty percent for Unit 4
23 spent fuel pool.

24 FRENCH MALE PARTICIPANT: So you -- yes,
25 it was core dewatering the -- fuel dewatering in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 pool.

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

7 FRENCH MALE PARTICIPANT: So you think,
8 because for us we deemed that in case of fuel damage
9 that that means zirconium acceleration. And so we -
10 -

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

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

21 FRENCH FEMALE PARTICIPANT: And so in
22 terms of order of magnitude of the release I suppose
23 you have much higher than us.

24 MS. HART: Yes, we do have some that are
25 not -- not matching up. But we keep -- we have lots

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 and lots of different analyses. We're running
2 different cases, try to bound what we think we know
3 at the time. But we have not found any, I don't
4 think, that match exactly with what's happening yet.

5 Considering we don't know exactly what's happening
6 in the first place.

7 FRENCH MALE PARTICIPANT: Okay. And do
8 you have people working on reactivity in the fuel
9 pool? Because we have question here on this. But
10 it's not very clear in fact. Because there is some
11 failure on the reactor 4 with a lot, a lot of steam
12 which was evacuated from the pool. And we imagine
13 that it could be reactivity phase, a reactivity -- a
14 criticality, yes, phase.

15 MS. HART: Yes. I'm not aware. I don't
16 know if somebody in the reactor safety team is
17 working on criticality or not. It was not something
18 that we had been discussing on the protective
19 measures team on my side.

20 FRENCH FEMALE PARTICIPANT: Okay.

21 FRENCH MALE PARTICIPANT: Okay. Okay,
22 so it's clear. Have I understand, so you are more
23 pessimistic results as we have for the moment. And
24 you tried to fit a little better with the
25 measurements. I think this is the situation for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 you.

2 MS. HART: That is correct.

3 FRENCH MALE PARTICIPANT: Okay.

4 FRENCH FEMALE PARTICIPANT: Okay.

5 FRENCH MALE PARTICIPANT: Okay, so it's
6 clear. So.

7 MS. HART: Any further questions?

8 FRENCH MALE PARTICIPANT: No, no.

9 FRENCH FEMALE PARTICIPANT: No further
10 questions.

11 MS. HART: Okay. I don't have any for
12 you either.

13 FRENCH MALE PARTICIPANT: Okay, so.

14 MS. SCHWARTZMAN: Well, we can stay in
15 contact with one another. You have our LIA02 email
16 address in the operations center.

17 FRENCH FEMALE PARTICIPANT: Yes.

18 MS. SCHWARTZMAN: Feel free to contact
19 us with any additional questions you have. We'll do
20 our best to answer them.

21 And as I said, I would suggest you speak
22 with ASN about that other call to see if they can
23 share information with you or get you connected to
24 it.

25 FRENCH FEMALE PARTICIPANT: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. SCHWARTZMAN: Okay? Thank you very
2 much.

3 FRENCH MALE PARTICIPANT: Thank you very
4 much.

5 FRENCH FEMALE PARTICIPANT: Bye bye.

6 MS. SCHWARTZMAN: Bye bye.

7 FRENCH MALE PARTICIPANT: Goodbye.

8 (Whereupon, the foregoing matter went
9 off the record)

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-KS!NP603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-KS#1--03765094

(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Nuclear Regulatory Commission,
this is a recorded line. May I help you?

MS. HART: Yes, this is Michelle Hart in
the PMT. I would like to be put on the call with
the French, Canadian and UK regulators.

MALE PARTICIPANT: What call is that?

MS. HART: There's supposed to be a call
at 2 p.m. with France, Canada and the British.

MALE PARTICIPANT: Are you talking about
the consortium call?

MS. HART: I believe so.

MALE PARTICIPANT: Okay. The -- I'm
going to transfer you up. The passcode is (b)(6)

MS. HART: (b)(6) okay.

MR. WEBSTER: Phil Webster in the
industry support team.

MR. COZOL: Jason Cozol, Nuclear
Regulatory Commission.

MS. GARWITZ: Nancy Garwitz, BSCA.

MR. PORTERS: Ed Porters, operations
officer.

MR. RYAN: Kevin Ryan, Institute of
Nuclear Power Operators.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. CONCLAN: Brad Conclan, Department
2 of Homeland Security.

3 MR. ELLIS: Jim Ellis, INPO.

4 CALL MODERATOR: Thank you very much for
5 joining us. I think we've dialed down the status
6 information that we're providing over these calls
7 because my understanding is that the industry and
8 the other partners are already getting that
9 information through other channels. So unless
10 there's a pressing need for that information what I
11 would suggest we do is talk about what's on our
12 first agenda item and that's the decision on which
13 agency has the lead going forward.

14 Some of us were on a call that preceded
15 this conference call. And my understanding of the
16 current status is that we have not yet determined
17 which lead would serve that lead role, but it's
18 being actively worked by the Chairman and by other
19 high-level officials.

20 We understand the importance --

21 (Whereupon, the foregoing matter went
22 off the record)

23
24
25
NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-KS1!M-03765094

(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Nuclear Regulatory Commission,
this is a recorded line. May I help you?

MS. HART: Yes, this is Michelle Hart in
the PMT. I need to be put on the call with France,
Canada and the UK.

MALE PARTICIPANT: Password is (b)(6)

MS. HART: Okay.

CANADIAN MALE PARTICIPANT: Hello, this
is Canada on the line.

MS. HART: Hello, the NRC is here.

CANADIAN MALE PARTICIPANT: I think
we're waiting for the Brits.

MS. HART: Is anybody still there?

CANADIAN MALE PARTICIPANT: Canada is
still on the line.

MS. HART: U.S. is still on the line.
Do we have anything to say?

CANADIAN MALE PARTICIPANT: Actually,
one of my colleagues does. Go ahead, Caroline.

MS. PURVIS: Hi, it's Caroline Purvis,
Canada. I'm just curious, we had read some reports
that the U.S. was doing aerial dose rate surveys.
Do you have any information on that?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. HART: Yes, we do have a military
2 plane that is flying over and taking some ground
3 contamination readings in the area. They are not
4 flying today, however.

5 MS. PURVIS: Okay. And your readings,
6 can they be shared?

7 MS. HART: I do not believe so. I can
8 check on that though.

9 MS. PURVIS: Okay.

10 CANADIAN MALE PARTICIPANT: Well, if
11 that's the case from a health physics point of view
12 Canada has nothing to add. I don't know if there's
13 anything new you can share with us.

14 MS. HART: Yes, Caroline, this is
15 Michelle Hart with the U.S. Nuclear Regulatory
16 Commission. We'll --

17 MS. PURVIS: Hi.

18 MS. HART: -- double-check and see if we
19 can get you those values. We need to ask some
20 people on further up the line because they are not
21 coming directly from us.

22 MS. PURVIS: Okay, great. That would be
23 appreciated. Thanks a lot.

24 MS. HART: And if -- share them we will.

25 CANADIAN MALE PARTICIPANT: Do you have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 an email address from us that you can send to?

2 MS. HART: We may but give it to me
3 again, please.

4 CANADIAN MALE PARTICIPANT: Okay.
5 EOC2@CNSC-CCSN.GC.CA.

6 MS. HART: Okay, I have EOC2@CNSC-
7 CCSN.GC.CA.

8 CANADIAN MALE PARTICIPANT: Correct,
9 thank you.

10 MS. HART: Thank you.

11 CANADIAN MALE PARTICIPANT: We have
12 nothing else to add. And if we can get those
13 numbers it would be much appreciated.

14 MS. HART: Okay.

15 CANADIAN MALE PARTICIPANT: I guess we
16 can end the call?

17 MS. HART: If nobody else is showing up
18 I guess we can. I didn't have anything further.

19 CANADIAN MALE PARTICIPANT: Neither do
20 we. All right, thank you.

21 MS. HART: Thank you. Bye bye.

22 (Whereupon, the foregoing matter went
23 off the record)

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-LE (B@L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-LE(CAL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 22, 2011

Work Order No.: NRC-0366

Pages 1-24

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/12

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 TUESDAY,
8 MARCH 22, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-M-Q63-03765094

(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Nuclear Regulatory Commission, this is a recorded line. May I help you?

MR. LEBINSKI: Yes, John Lebinski with the PMT. We're expecting a call to be set up with members from the UK, Canada and France at 2 o'clock.

MALE PARTICIPANT: Yes. Right.

MR. LEBINSKI: And what we'd like to do is we want to be patched into that call. Should we call you or are you going to call us? We're back in the PMT area.

MALE PARTICIPANT: You can get on that bridge right now by dialing 6108.

MR. LEBINSKI: 6108. That's 301-816?

MALE PARTICIPANT: No, just 6108. You're in the PMT.

MR. LEBINSKI: Right, okay. All right, thanks.

MALE PARTICIPANT: And what that does is put you straight onto the bridge. But right now nobody else is on that bridge.

MR. LEBINSKI: Okay, thanks.

MALE PARTICIPANT: Okay, bye bye.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (Whereupon, the foregoing matter went
2 off the record)
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-M-RK5L03765094

(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Yes, this is headquarters operations officer. You are on the bridge and it opened up but nobody else has called in yet.

MR. LEBINSKI: Thank you, appreciate it.

We'll go on mute and see who comes in. Thanks.

MALE PARTICIPANT: Okay, bye bye.

(Pause)

MALE PARTICIPANT: Canada, you are on the bridge.

MR. LEBINSKI: Hi, this is John Lebinski from NRC, U.S.

MS. ABRAMS: And Charlotte Abrams from NRC, U.S.

MR. LEBINSKI: Canada joined the call?

MS. RICHARDS: Yes, I'm right here. Melanie Richards, CNSC.

MR. LEBINSKI: How are you doing, Melanie? John Lebinski and Charlotte. I think yesterday you guys had to call and we were the only two participants, correct?

MS. RICHARDS: Yes, that's correct.

MR. LEBINSKI: Okay. And we've been waiting a little while here. We haven't heard

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 anyone else come on. So I'd say -- I've got 6
2 minutes after the hour. Do you just want to get
3 started?

4 MS. RICHARDS: Sure.

5 MR. LEBINSKI: Okay.

6 MS. RICHARDS: That would be great.

7 MR. LEBINSKI: All right. So, I guess
8 the purpose of the call is just to exchange
9 information on where we are. So I'm going to let
10 you go first.

11 MS. RICHARDS: Okay. I'm not sure what
12 you would like to hear but the number one I'd just
13 like to get off my plate is yesterday we had
14 mentioned that we were wondering if the U.S. NRC
15 could share with us the U.S. aerial data that had
16 been collected. Does anyone know if that's been
17 looked into, if we can get that data?

18 MR. LEBINSKI: Yes, we have been looking
19 into that. Now, they have not flown in the last 2
20 days.

21 MS. RICHARDS: Okay.

22 MR. LEBINSKI: So we are looking at data
23 from a couple of days ago, whether we can share it
24 with you. The problem is it's one of our sister
25 agencies. We need to get approval from them on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 whether they can do that or not. And we're waiting
2 for a response on that at this point.

3 MS. RICHARDS: Okay, perfect. I guess
4 one other thing is have you guys seen the
5 information that was put out by the Australian
6 government?

7 MR. LEBINSKI: No, we're looking for it.
8 That was going to be one of the items we had. Have
9 you seen it?

10 MS. RICHARDS: Yes, we've seen it.

11 MR. LEBINSKI: Okay. And do you have a
12 hard copy? Is there a website we can go to?

13 MS. RICHARDS: I do not know exactly --
14 oh, go ahead.

15 MR. ODAY: Hi, Ali Oday, Canadian
16 Nuclear Safety Commission. I can send it to your
17 liaison email.

18 MR. LEBINSKI: Great, we'd appreciate
19 that. Our liaison team came over this morning, told
20 us it existed, tried to call Australia and could not
21 get a copy of it.

22 MR. ODAY: I think it's basically
23 radiation (indiscernible) protocol for Australian
24 nationals in Japan. I don't think it gives anything
25 in terms of hard numbers or calculations. But it's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 interesting to look at. So I'll have that forwarded
2 to your LIA02 email.

3 MR. LEBINSKI: Okay.

4 MS. RICHARDS: Yes, basically it's just
5 what to do if. That's what it is. So we -- I'm not
6 sure, do you know if any of the -- basically has
7 anything similar like that been done on your end?

8 MR. LEBINSKI: We didn't do a what to do
9 if. I mean, of course you know our protective
10 action guideline where we've advised people within
11 the 50-mile zone evacuate that area. We've done
12 nothing beyond that and we have not done any what to
13 do if type scenarios and provided any guidance.

14 With respect to outside that 50-mile
15 zone we have still been instructing U.S. citizens to
16 follow any guidelines put out by Japan outside of
17 the 50-mile evacuation zone.

18 MS. RICHARDS: Okay, yes, that's on par
19 basically with our position as well, so.

20 MR. LEBINSKI: Okay. You've told your
21 folks evacuate to 50 miles also?

22 MS. RICHARDS: Eighty kilometers, yes.

23 MR. LEBINSKI: Okay, great.

24 MS. RICHARDS: Yes, that's the same. So
25 it's consistent.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 MR. LEBINSKI: Do you have any other --
2 not seeing this data you're emailing in yet, did you
3 have any concerns with what the Australians were
4 saying?

5 MS. RICHARDS: No, not particularly. I
6 mean, it's difficult though because we're not
7 exactly sure what -- like they don't really have a
8 nuclear like program, right? So, they -- it's
9 interesting. I don't know what they're really
10 basing it on per se. But no, there was nothing that
11 was of concern. No.

12 MR. LEBINSKI: Okay, great, thanks. And
13 we appreciate hearing that. The first word we got
14 this morning is that it sounded like what the
15 Australians said may have been a little bit extreme.
16 And having not seen it --

17 MS. RICHARDS: Well --

18 MR. LEBINSKI: -- want to go there. So,
19 I'm glad to hear you guys don't think so. Okay?

20 MS. RICHARDS: Yes, no, understood.

21 MR. LEBINSKI: Unfortunately I asked you
22 to go first because we don't have a whole lot new to
23 report you this afternoon. I think yesterday
24 Michelle Hart was on the call and told you the exact
25 scenarios we used to come up with our 50-mile

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 evacuation zone.

2 What we're still doing is we're not the
3 lead agency in the U.S., Department of Energy is,
4 for determining a more bounding scenario. And
5 they're playing with a couple of scenarios.

6 And what I can share with you is given
7 the stability of the Units 4 and 5 right now we
8 don't look like we're considering anything with
9 Units 4 and 5. But we're trying to look at the
10 current conditions of reactor Units 1, 2 and 3 and
11 the spent fuel pools for Units 1, 2, 3 and 4 to
12 determine if we were to do a bounding scenario what
13 we would consider as far as damage to each unit as
14 well as the percentage of damage to the fuel that
15 would be into that type of scenario.

16 MS. RICHARDS: Just one thing. You
17 meant 5 and 6, not 4 and 5, right?

18 MR. LEBINSKI: Thank you, 5 and 6, yes.
19 Thanks for that clarification. Yes, 5 and 6, we're
20 not considering those based on the current
21 conditions. But the first four units. And that's
22 about all we have.

23 MS. RICHARDS: Okay, well that's -- it's
24 the same here. I don't think we have anything new
25 to add either. But we'll continue to call.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 MR. LEBINSKI: Okay, yes. As long as
2 we're being efficient, we had a 4-minute call today,
3 we'll do the same tomorrow.

4 MS. RICHARDS: Okay.

5 MR. LEBINSKI: I hope to have more
6 information.

7 MS. RICHARDS: Just one more thing. Do
8 you think the UK and France know that we're having
9 the calls every day?

10 MR. LEBINSKI: I'm going to ask
11 Charlotte, our liaison team, to make sure she can
12 get that back.

13 MS. ABRAMS: We'll double-check that.

14 MS. RICHARDS: Okay, because it could be
15 that they don't realize that. I'm not sure.

16 MR. LEBINSKI: Thanks. Appreciate that
17 idea.

18 MS. RICHARDS: Okay, thanks so much.

19 MR. LEBINSKI: All right, have a great
20 day. Bye.

21 MS. RICHARDS: Bye.

22 (Whereupon, the foregoing matter went
23 off the record)
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

0-M(FY6-03765094

(CONFERENCE CALL INITIATED)

MR. LEBINSKI: NRC joined the call.

MR. WALKER: Hello?

MR. LEBINSKI: Hello.

MR. WALKER: Hello, this is Steve Walker
in the UK.

MR. LEBINSKI: Hi, Steve. John
Lebinski.

MR. WALKER: Hello, John. This -- I've
been off for a day on a day's rest. I came on at
lunchtime today. We've been having these 6 o'clock
GMT meetings, 2 o'clock for you to discuss some of
the health physics.

But if there aren't a sufficient number
of people here now it doesn't matter. We can defer
until tomorrow.

MR. LEBINSKI: Well, Steve, let me give
you a quick update. Actually we did have the call.

We knew you weren't on the call yesterday and about
5 minutes after the hour Canada and myself were the
only two on the call so we just had a very quick
call because there was not much to update.

MR. WALKER: Okay.

MR. LEBINSKI: But let me just tell you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 what we did discuss is apparently the Australian
2 government has put out some guidelines for its
3 people in Japan.

4 MR. WALKER: Right.

5 MR. LEBINSKI: And we do not have that
6 yet but Canada did and they are forwarding that
7 information to us.

8 MR. WALKER: Do you know if they're
9 going to send it to the UK?

10 MR. LEBINSKI: They did not say they
11 were going to. I don't think it would be a problem
12 for us to hit the forward button. Do we have your
13 email address?

14 MR. WALKER: Our central com's email is
15 NSD.emergency --

16 MR. LEBINSKI: Emergency.

17 MR. WALKER: -- @hse --

18 MR. LEBINSKI: H-S-C?

19 MR. WALKER: H-S-E, Hotel Sierra Echo
20 dot Golf Ontario Victor.

21 MR. LEBINSKI: Okay.

22 MR. WALKER: Oscar Victor.

23 MR. LEBINSKI: Got it, okay. Dot gov,
24 got it. So what we'll do is Charlotte Abrams has
25 just joined me.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. WALKER: Oh right, okay.

2 MR. LEBINSKI: And what we're going to
3 do is we will forward the information we get from
4 Canada on the Australian information and forward
5 that over to you.

6 MR. WALKER: Okay, all right.

7 MR. LEBINSKI: Another action item we
8 had, and it was a request from Canada I believe
9 occurred yesterday. And you may have a similar
10 request is our federal government, not the NRC but
11 the Department of Energy has been doing flyovers
12 near the plant. They're not in the plume but
13 they're outside the plume getting some dose
14 readings. And -- or dose rates.

15 We got some data and the last 2 days
16 they have not flown so we don't have any recent
17 data. But we're trying to get approval from the
18 Department of Energy to provide that information to
19 you.

20 MR. WALKER: Oh, that's lovely. Thank
21 you very much. I think we're slowly changing our
22 emphasis now from modeling worst case release
23 situations to trying to get a grip on the current
24 situation which is obviously that there is a chronic
25 release going on now into the environment. We're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 beginning to get information concerning ground
2 deposition of cesium and iodine at quite some
3 significant distance from the plant.

4 MR. LEBINSKI: Right. I can share with
5 you from a data standpoint from the AMS that the
6 deposition we're seeing is to the northwest
7 quadrant. It's very clear they have a -- the
8 graphic is very nice that it shows kind of the -- a
9 color-coded of the dose rates. And there's a very
10 narrow band that goes almost dead northwest from the
11 site, from the site towards the northwest. And it's
12 relatively narrow when you consider the 360 degrees
13 that has the higher deposition in it.

14 And based on our knowledge of what we
15 believe the plant conditions were and the wind
16 direction, there was about a 12-hour wind that went
17 towards the northwest. That correlate pretty nicely
18 to what we're seeing there.

19 MR. WALKER: Okay. What sort of levels
20 are you getting?

21 MR. LEBINSKI: From the flyover it's
22 ranging and the problem is I don't have the
23 distance. I want to say it was somewhere about 12
24 miles out they were getting 20 to 40 mr per hour.

25 MR. WALKER: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 MR. LEBINSKI: And I believe that was
2 backed up by some land measurements, about 18 mr per
3 hour in selected areas as well. So, I mean that's
4 still in the range of 20 to 40 mr per hour.

5 MR. WALKER: That is gamma dose rate.

6 MR. LEBINSKI: Yes.

7 MR. WALKER: All right, okay. Okay.

8 MR. LEBINSKI: So, the other request we
9 had is we as NRC are where you are as far as our
10 focus right now is on the current conditions of the
11 plant and whether that would change our protective
12 action recommendations.

13 We have no information right now that
14 would have us change those protective action
15 recommendations and that is the evacuation out to 50
16 miles.

17 Data that we're getting from these
18 flyovers is corresponding to the conditions we had
19 at the plant at the time. And we think it aligns
20 appropriately enough that we would not change those
21 protective action recommendations.

22 Also, the current conditions of the
23 plant aren't getting worse to the point where we see
24 expanding those out at all.

25 MR. WALKER: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. LEBINSKI: The question we got from
2 Canada was from a more bounding worst case scenario
3 what would we use as a source term. We do not have
4 the lead for that. It's our Department of Energy.
5 We're working with them.

6 MR. WALKER: Oh, okay.

7 MR. LEBINSKI: What I can share with you
8 is what I shared with them is -- because we're still
9 trying to come up with what we would use. But our
10 focus right now would be on the first four units,
11 not Units 5 and 6 because of the stable condition of
12 those two units.

13 MR. WALKER: Yes, okay.

14 MR. LEBINSKI: Units 1 through 4 we were
15 looking at both the three reactor units as well as
16 the four spent fuel pools and trying to determine
17 which of those we would include and what the level
18 of damage would be in this bounding scenario.

19 MR. WALKER: Right, okay. Okay. We've
20 taken -- we've characterized source terms for one
21 core and worst case pond which as you've said is
22 Unit 4. So we've got modeling that we can use
23 either for single core, single pond, pond and core,
24 or any combination of that now. So I think we've
25 pretty much bottomed the modeling scenario.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 And as I've said, I think we're
2 beginning to take a bit more of an interest now in
3 the situation as it exists right now. And we have a

4 (b)(5)
5

6 So what you've told me about flyover
7 dose rates is useful, but it's going to be very
8 difficult to piece it together, isn't it?

9 MR. LEBINSKI: Yes, it is. And in fact,
10 on that case what we did is we looked at that narrow
11 band out to the northwest, tried to look at some
12 deposition and went to some back calculations to see
13 if it correlated with the source term we were using
14 and the 12-hour wind in that direction.

15 And again, it's in an order of
16 magnitude. So you really can't get much closer than
17 that.

18 MR. WALKER: No, no. Okay. Can I just
19 give you my -- can I just check that you've got the
20 right email address?

21 MR. LEBINSKI: Sure, if you could repeat
22 that again.

23 MR. WALKER: It was November Sierra
24 Delta dot Emergency at Hotel Sierra Echo dot
25 GSI.gov.uk.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 MR. LEBINSKI: Okay, we didn't have the
2 GSI. Thank you.

3 MR. WALKER: Okay, thanks very much
4 indeed. Right, well I think we're having two
5 teleconferences a day, one to discuss fuel and
6 inventory issues. I've just sat in on that about
7 half an hour ago.

8 MR. LEBINSKI: Steve, Steve, I'm going
9 to interrupt you again. I'm sorry. That was at
10 HSE.gsi.gov?

11 MR. WALKER: Dot gov dot UK.

12 MR. LEBINSKI: Okay. All right.

13 MR. WALKER: So we'll make this a
14 standing arrangement, shall we, that we'll call in
15 at 6 o'clock GMT tomorrow.

16 MR. LEBINSKI: Yes, that would be
17 perfect. And what we had to take away from the
18 earlier call is we also did not have France on the
19 call yesterday or today. So we are having to take
20 away to coordinate with France to see if they can
21 participate tomorrow as well.

22 MR. WALKER: Right, okay. Thanks very
23 much indeed.

24 MR. LEBINSKI: Thank you. Bye.

25 MR. WALKER: Thank you, bye.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 (Whereupon, the foregoing matter went
2 off the record)
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-MOFL3-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-MU) OBL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-MU) PCL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-M-VHK-03765094

(CONFERENCE CALL INITIATED)

MR. OLDEWAGE: Consequence management home team,
Sandia.

MR. LAVIE: Yes, my name is Steve Lavie,
that's L-A-V-I-E with the U.S. Nuclear Regulatory
Commission at the protective measures team.

Earlier today the people here were
talking with a Hans Holsage I guess it is?

MR. OLDEWAGE: Oldewage, I'm here.

MR. LAVIE: Okay, that's you?
Excellent. I'm following up on the discussions you
had with them earlier. It was turned over to me
that you were drafting an email to explain the
assumptions that were made in the runs for the

(b)(5)

MR. OLDEWAGE: Yes. I sent that to -- I
sent that email. Let's see. I sent it to -- I've
got to find my notes. The HOC 12 I think it was.

MR. LAVIE: PMT 12?

MR. OLDEWAGE: PMT 12.

MR. LAVIE: Okay, and what time of the
day was that sent?

MR. OLDEWAGE: Let me look.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 MR. LAVIE: Okay.

2 MR. OLDEWAGE: I had to send it from my
3 inbox. That was sent at 7:21 a.m. Mountain time so
4 it should be 9:21 yours.

5 MR. LAVIE: 9:21, okay that gives me a
6 range to find it. Tend to get overlooked.

7 MR. OLDEWAGE: Do you -- well, take a
8 quick look. If you don't see it, let me know. I
9 can send it again.

10 MR. LAVIE: Okay, let me go do that
11 because I understand you're trying to get out of
12 there.

13 MR. OLDEWAGE: Oh no, we've got an hour
14 and a half left.

15 MR. LAVIE: Okay.

16 MR. OLDEWAGE: We're in no hurry. You
17 want to just stay on the line?

18 MR. LAVIE: No, why don't you let me
19 call you back.

20 MR. OLDEWAGE: Okey-doke.

21 MR. LAVIE: Okay? Thank you.

22 (Whereupon, the foregoing matter went
23 off the record)

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 23, 2011

Work Order No.: NRC-0366

Pages 1-18

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/13

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 WEDNESDAY,
8 MARCH 23, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-NC133-03765094

(CONFERENCE CALL INITIATED)

MALE PARTICIPANT: Nuclear Regulatory Commission, this is a recorded line. May I help you?

MS. SCHWARTZMAN: Hi, can you please connect me to the daily call with the UK, France and Canada?

MALE PARTICIPANT: And you are?

MS. SCHWARTZMAN: I am Jen Schwartzman from the international liaison team and I'm sitting back in the PMT hoping one of them will join me in a minute.

MALE PARTICIPANT: Okay, I'll connect you right now.

MS. SCHWARTZMAN: Thanks very much.

MS. RICHARDS: Is the U.S. on the line?

MS. SCHWARTZMAN: Yes, half of the U.S. is on the line. The international liaison is on the line. Our technical expert has been called away by our executive team for a moment and he should be joining us in just a few minutes.

MS. RICHARDS: Okay, sorry about that.

MS. SCHWARTZMAN: No, that's fine, that's fine. I didn't want to interrupt.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. RICHARDS: Okay, thanks. Nothing's
2 -- I don't think anything's going on so we'll just
3 wait.

4 MS. SCHWARTZMAN: Ladies and gentlemen,
5 our technical expert here at NRC appears to have
6 been delayed a few more minutes. I don't want to
7 hold up the call getting started. So if you would
8 all like to begin please feel free and we'll pick up
9 with him when he gets here.

10 BRITISH MALE PARTICIPANT: Okay. I
11 don't know how we want to do this. We had a call
12 this morning and we didn't have any changes on the
13 plant status. It's been rather quiet the last few
14 hours sort of.

15 We've seen source term circulated from
16 the Canadians and we've seen something from IRSN.
17 We've also had something from Germany. We've
18 compared them side by side and there are some
19 differences but nothing significantly different in
20 the source terms assumed by different nations.

21 We've got our (indiscernible, possibly
22 roof) set up so we're regularly calculating doses
23 over various cities in Japan depending on the
24 weather. I think we're doing that on 4-hour
25 intervals. And so it's a bit of handle-turning at

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 the moment for us.

2 MS. SCHWARTZMAN: With regard to the
3 source terms from Canada and Germany, have those
4 been sent to NRC? I don't believe I've seen either.

5 BRITISH MALE PARTICIPANT: I don't know
6 where we've got those actually. We got them from a
7 number of sources. I think the Germans we got
8 through talking -- because they were also doing some
9 work for us on other projects.

10 I think the Canadian source terms, I
11 think Canada was talking to my colleague Steve Sloan
12 so that might have been bilateral as well.

13 And I don't recall where the IRSN
14 calculation came from.

15 MS. SCHWARTZMAN: We have the IRSN
16 calculations. They were provided to us. We
17 certainly don't want to ask you to share anything
18 that was provided through bilateral channels, but
19 perhaps if the Canadians are on the line they would
20 be willing to consider sharing that with NRC.

21 CANADIAN MALE PARTICIPANT: Absolutely.
22 I'll run it up my line.

23 MS. SCHWARTZMAN: Thank you, thank you.
24 And I know we're still working on trying to share
25 ours with you as well. So we don't look one-sided.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 CANADIAN MALE PARTICIPANT: No, I think
2 at some point we should come to some sort of
3 understanding about the source term amongst the
4 group. Otherwise we're going to keep getting asked
5 questions by our various higher-ups about why is our
6 source term different from anybody else's.

7 FRENCH MALE PARTICIPANT: Excuse me, the
8 French speaking. If you can provide access to the
9 Canadian source term as well.

10 CANADIAN MALE PARTICIPANT: I'll check.
11 Is your liaison email with Canada's liaison email?

12 FRENCH MALE PARTICIPANT: I think so.
13 We have provide our email to the NRC people. So.

14 CANADIAN MALE PARTICIPANT: Okay. I'll
15 double-check. I'll be right back. One second.

16 FRENCH MALE PARTICIPANT: Okay, thank
17 you.

18 MS. SCHWARTZMAN: I have a couple of
19 questions as well. Are the source terms the only
20 things being shared, or are the dose results being
21 shared as well? The dose results from the source
22 terms.

23 BRITISH MALE PARTICIPANT: I'm not aware
24 that we received any actual dose. I mean the
25 results that we're getting are not a simple figure.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 We're getting values for different cities and it
2 changes from hour to hour depending on which way the
3 wind's blowing. So we get a sheet per scenario.

4 We're getting them on a regular basis.
5 I don't think we've actually shared those results
6 with anybody.

7 MS. SCHWARTZMAN: Okay, all right.
8 Thanks. I have a couple of other questions that
9 aren't directly related to the source term but this
10 might be the right forum.

11 The first is we've been seeing media
12 reports, and I'm sure you have as well, from NHK
13 website that are quoting that I-131 in tap water and
14 ground deposition for cesium-137.

15 I'm wondering if any of you have any
16 more reliable sources for this type of information,
17 or if you're just getting it from the same place
18 that we are.

19 BRITISH MALE PARTICIPANT: Not in the
20 UK. We're getting it from the same place as
21 yourself, principally from the appropriate Japanese
22 ministries.

23 The iodine-131 tap water result in Tokyo
24 has been an area of great interest for us today.

25 NORTH AMERICAN MALE PARTICIPANT: We

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 received confirmation of that from the Japanese
2 Ministry of -- I think it's Culture. It's MEST
3 which is --

4 BRITISH MALE PARTICIPANT: Education,
5 Culture, Sports Science and Technology.

6 NORTH AMERICAN MALE PARTICIPANT: Yes,
7 it's a unique combination.

8 BRITISH MALE PARTICIPANT: Yes.

9 NORTH AMERICAN MALE PARTICIPANT: This
10 is at NRC.

11 MS. SCHWARTZMAN: Thanks very much.

12 BRITISH MALE PARTICIPANT: Yes,
13 certainly from the UK we're intrigued too.
14 Certainly, the Tokyo tap water results were curious
15 that result has manifested itself shall we say. And
16 we'd be keen to sort of explore that area further.

17 MS. SCHWARTZMAN: Yes, we're on the same
18 page.

19 BRITISH MALE PARTICIPANT: Good. But in
20 terms of our -- the UK position, our Health
21 Protection Agency has looked at that and compared
22 what our advice would be with what the Japanese
23 standards and advice would be. And our position is
24 that we are broadly comfortable with the advice the
25 Japanese are giving in the Tokyo area.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. SCHWARTZMAN: May I ask what the
2 UK's drinking water guideline is for I-131?

3 BRITISH MALE PARTICIPANT: Off the top
4 of my head I don't have it, but if you give me a sec
5 I'll give it to you. It's 500 becquerels per
6 kilogram for liquid.

7 MS. SCHWARTZMAN: Okay, thanks.

8 AMERICAN MALE PARTICIPANT: Steve, we're
9 finding -- we had to do some conversions but we're
10 finding ours is a bit higher than Japan's as well.
11 We have -- we're coming out at 170 becquerels.

12 MS. SCHWARTZMAN: Okay.

13 NORTH AMERICAN FEMALE PARTICIPANT: And
14 that's the U.S.?

15 AMERICAN MALE PARTICIPANT: Per liter.

16 MS. RICHARDS: Yes. Ours is
17 substantially lower in case you're curious. Ours is
18 actually -- like we're in the province of Ontario so
19 I'm comparing to the Ontario guideline. Ours is 6
20 becqs per liter.

21 NORTH AMERICAN MALE PARTICIPANT: Just
22 to confirm everybody is talking about adult
23 guidelines.

24 NORTH AMERICAN MALE PARTICIPANT: No,
25 we're talking child.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 NORTH AMERICAN MALE PARTICIPANT: Child,
2 oh.

3 MS. RICHARDS: I don't know if -- I'm
4 not certain if ours is calculated out that way, but
5 I can follow -- I mean, if you're curious I can
6 bring that to the table tomorrow.

7 BRITISH MALE PARTICIPANT: UK it was
8 adult. For child it was 150 becquerels per
9 kilogram.

10 NORTH AMERICAN MALE PARTICIPANT: Well,
11 that's approximately the U.S.

12 BRITISH MALE PARTICIPANT: So
13 consistent.

14 MS. SCHWARTZMAN: Okay, thank you.

15 BRITISH MALE PARTICIPANT: Just off the
16 topic was talking about a few minutes ago on sharing
17 source terms. Agreeing. I don't think from our end
18 we've got a problem with that from a technical point
19 of view. However, we have had after some
20 uncertainty a week or so back we've had pressure not
21 to change our source term now. So that we can tell
22 the politicians when something changes relative to
23 another point in time.

24 So, and when we did the three-step
25 process with three organizations to generate our

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 calculation which is a bit unwieldy. But it means
2 we can sort of have parallel calculations where we
3 can quickly do ourselves. And so we can talk with
4 you on the same level.

5 So, we can compare -- I've done that
6 myself. I've put side by side the source terms and
7 they're not too different. And there are some
8 differences, and we think we can explain those away.

9 Certainly between the Canadian and the UK results.

10 But it may be more difficult for us to
11 change our source term in terms of presentation.
12 But again, if it's agreed that we should all have
13 the same across the different nations that also may
14 be appealing to the people higher up.

15 CANADIAN MALE PARTICIPANT: Canada has
16 no intention of changing its source terms,
17 especially since the plant information that we have
18 now is somewhat circumspect. And until we have more
19 verifiable information we see no reason to change
20 the postulated source terms from the original
21 conservative credible scenario.

22 AMERICAN MALE PARTICIPANT: Yes, that's
23 a similar stance here in the U.S. with the NRC.
24 Given, you know, the way we view it is now the cores
25 are -- what's released is released. And we've just

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 got to stand by the best postulated assumptions that
2 we made last week.

3 We are looking at that -- we're refining
4 it a little to make sure that the age of the spent
5 fuel pools was appropriate. But other than that
6 we're going to stick with those initial assumptions.

7 CANADIAN MALE PARTICIPANT: Does France
8 have anything to add?

9 FRENCH MALE PARTICIPANT: No, nothing to
10 add.

11 BRITISH MALE PARTICIPANT: Anything else
12 around the table in the UK? No, I've got nothing
13 from the UK actually to add.

14 CANADIAN MALE PARTICIPANT: So, Canada
15 here. I'm going to try to get the information to
16 the U.S. and France with respect to source terms
17 with the hopes that I'll receive similar information
18 from you guys soon.

19 And I'm in agreement with the UK, I
20 think a consolidated source term, or at least an
21 agreement on the severity and the description of the
22 accident amongst the four countries would be a good
23 idea when we're going to our higher-ups.

24 BRITISH MALE PARTICIPANT: I think we
25 should have an understanding of the prospective

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 source terms each country is using. That then helps
2 us to understand should more severe events happen
3 what the predicted consequences would be.

4 And if there's not significant
5 difference. Or if there is significant difference
6 then it would help us to understand the different
7 advice that is given. Certainly from the UK we'd
8 not be in a position at this stage to sort of move
9 away from our current source term, but it would be
10 helpful to understand fully the differences in
11 assumptions. So I think we're converging on that
12 and we support that.

13 FRENCH MALE PARTICIPANT: French nation
14 speaking. I would like to ask a question. We have
15 received this morning from result of observations
16 from several different values of measurements. One
17 -- several from Sacramento. Do you have this
18 information?

19 BRITISH MALE PARTICIPANT: Do you have
20 this information?

21 FRENCH MALE PARTICIPANT: Yes?

22 MR. REESE: Hi, this is Terry Reese with
23 the NRC. We're still working within the federal
24 family to make sure that we have the appropriate
25 common understanding of the source term and the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 assumptions that went into that.

2 Once we have that my understanding is
3 that we did commit to share it with our friends. So
4 we intend to do that. But it's still going to be a
5 few days before we get this resolved and get the
6 appropriate assumptions, a common understanding
7 amongst the federal family. But we're moving in
8 that direction.

9 Yes, by the federal family I mean it's
10 us, you know, we're looking at it. We give them the
11 source term and then DOE has -- Department of Energy
12 has operations that run these sophisticated models
13 more than -- more sophisticated than what we have
14 with our local RASCAL models. And so we're just
15 refining the assumptions and the output among those
16 parties. Okay?

17 FRENCH MALE PARTICIPANT: Okay.

18 BRITISH MALE PARTICIPANT: Same time
19 tomorrow then?

20 NORTH AMERICAN MALE PARTICIPANT: Same
21 time. Two o'clock every day we're doing this?

22 FRENCH MALE PARTICIPANT: A question.
23 Do you have -- NRC or in Canada, do you have the
24 result of -- a (indiscernible) measurement? Can you
25 evaluate the correlation between the estimation that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 you have made and the measurement that have been
2 done in the last hour from then?

3 Because I come into information, the
4 cloud has gone through the North America. So, do
5 you have some measurement results?

6 NORTH AMERICAN MALE PARTICIPANT: Oh, do
7 we have measurements in North America?

8 FRENCH MALE PARTICIPANT: Yes.

9 AMERICAN MALE PARTICIPANT: Not to my
10 knowledge.

11 CANADIAN MALE PARTICIPANT: We're not
12 aware -- at least I'm not aware of any measurements
13 that have been taken in North America on Canada's
14 side anyway that would allow me to compare to my
15 source term just yet. That data may be coming but
16 it hasn't come across my desk.

17 FRENCH MALE PARTICIPANT: Okay.

18 BRITISH MALE PARTICIPANT: Okay. Same
19 time tomorrow?

20 NORTH AMERICAN MALE PARTICIPANT: Yes,
21 same time tomorrow.

22 I mean, let me correct myself somewhat.

23 I mean we have had reports you know on the
24 California coast that there were detectable levels,
25 but they were minimally detectable.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Okay, same time tomorrow?

2 CANADIAN MALE PARTICIPANT: Is U.S. NRC
3 liaison on the line?

4 MS. SCHWARTZMAN: Yes.

5 CANADIAN MALE PARTICIPANT: Hi, is this
6 Jennifer?

7 MS. SCHWARTZMAN: Yes, it is.

8 CANADIAN MALE PARTICIPANT: Hi,
9 Jennifer. I sent an email to LIA02 yesterday about
10 Australian papers. The IGs have asked us to tell
11 you to keep those confident.

12 MS. SCHWARTZMAN: Yes, we will.

13 CANADIAN MALE PARTICIPANT: You'll do
14 that?

15 MS. SCHWARTZMAN: We'd do that unless
16 told otherwise. So we haven't done anything with
17 them except share them internally.

18 CANADIAN MALE PARTICIPANT: Okay, thank
19 you.

20 MS. SCHWARTZMAN: We'll make sure that's
21 noted. Thanks.

22 BRITISH MALE PARTICIPANT: Okay, UK is
23 going to sign off.

24 MS. SCHWARTZMAN: Thank you very much,
25 everyone.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 FRENCH MALE PARTICIPANT: Thank you.

2 MS. RICHARDS: Thank you.

3 (Whereupon, the foregoing matter went
4 off the record)

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-O-) IN-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

0-O-)JN-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 24, 2011

Work Order No.: NRC-0366

Pages 1-14

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/14

1 . UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 THURSDAY,

8 MARCH 24, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-OS!J9-03765094 edited

(CONFERENCE CALL INITIATED)

OPERATIONS CENTER: Sir, this is a recorded line. How may I help you?

MR. ENGLISH: Yes. Hello, this is Lance, calling from the PMT for the 1400 telephone conference with the British, French, and Canadians.

OPERATIONS CENTER: Okay, (inaudible).

MR. ENGLISH: Oh, okay. Thank you.

OPERATIONS CENTER: Uh-huh.

OPERATOR: This call may be recorded. After the tone please state your name and organization followed by the pound key.

MR. ENGLISH: Lance English, Nuclear Regulatory Commission.

FEMALE PARTICIPANT: Hi, there. Canada is on the line.

MR. BUNKER: Hi, it's Alan Bunker here, UK Nuclear Installations Inspectorate.

FEMALE PARTICIPANT: Is the U.S. on the line?

MS. WALKER: Yes, this is Sandra Walker at the NRC Operations Center.

FEMALE PARTICIPANT: Perfect, and is France on the line? I guess not. I guess we'll wait

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 a few more minutes, should we?

2 MR. ENGLISH: Yes.

3 FEMALE PARTICIPANT: Hi, there. It's
4 Canada on the line. I'm just wondering -- I think we
5 have everybody on line now, so whoever is chairing
6 can probably start, if I may suggest.

7 MALE PARTICIPANT: Yes, I am on the line,
8 the French Authority.

9 FEMALE PARTICIPANT: Thank you. Is the
10 U.S. -- are you going to chair the meeting, as
11 usual?

12 MS. WALKER: Okay. Well, what you've got
13 is two first timers on the call. We were waiting and
14 kind of hoping that somebody --

15 FEMALE PARTICIPANT: Would like to take
16 the lead?

17 MS. WALKER: That's right.

18 FEMALE PARTICIPANT: Okay. Canada can
19 take the lead.

20 MS. WALKER: No problem. I'm not sure
21 what the usual protocol is.

22 FEMALE PARTICIPANT: Okay, that's fine.
23 Usually, actually, the calls are pretty quick right
24 now. Maybe does the UK have anything to add, or any
25 questions?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. BUNKER: Well, no significant further
2 information from what I gather has been given to you
3 before. I've done one of these before; that was on
4 Thursday last week so, obviously, things have
5 progressed since then.

6 What we have asked our meteorological
7 office to do is to run the dispersion codes using
8 the Canadian and the French source terms to see
9 whether using our dispersion modeling and dose
10 assessment modeling produces any different
11 countermeasures depending on which source term we
12 use, but I don't have the results of that yet.

13 FEMALE PARTICIPANT: Okay. That's fine.

14 MALE PARTICIPANT: From Canada's point of
15 view, we've been asked to redefine our source term,
16 or refine our source term I should say. Our initial
17 source term was based on what we knew early last
18 week in terms of what the plant condition was and
19 what assumptions we needed to make. And it was a
20 fairly conservative one.

21 We've now been asked to try to determine
22 the amount that's gone into the water, the amount
23 that's gone into the air, and the amount that has
24 stayed in the reactor system, let's say.

25 I don't know if the other nations have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 plans to do so. Any comments are welcome.

2 MS. WALKER: This is the U.S. We are also
3 refining, shall we say, the source term, but as yet
4 we are not able to share those source terms. I
5 believe that was what Terry indicated yesterday, and
6 that is still the case today.

7 MALE PARTICIPANT: No, I think at this
8 point if everyone is refining the source term, I
9 don't think any of us are ready to share. But what I
10 provided to the UK was our initial assessment from
11 our most credible worst case scenario. Moving
12 forward the refinement will take a little bit
13 longer, obviously, but we certainly plan to share
14 this with you once it's done.

15 MS. WALKER: Thanks very much for that
16 clarification.

17 MELANIE: Hi, there. This is Melanie from
18 the CNSC from Canada, as well. My question actually
19 doesn't directly relate to the source term, but just
20 more of a general RP question. We're seeing, and I'm
21 sure you are, as well, we're getting reports from
22 NISA and IAEA, et cetera which are showing ground
23 deposition values, for example. I'm just wondering
24 if you guys are doing any assessments, any dose-type
25 assessments sort of forward thinking with that kind

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 of data at this point based on the air and ground
2 values that we're seeing? Real measurement.

3 MR. BUNKER: Well, I -- this is Alan
4 Bunker, again, UK. I spoke to our Health Protection
5 Agency earlier today together with our
6 meteorological office do the modeling, and I asked
7 them about whether there might be some possibility
8 of working back from the ground deposition to
9 release amounts so far, actual releases, not worst
10 case. (b)(5)

11 (b)(5)

12 (b)(5)

13 I don't think we have sufficient data on
14 things like Japanese agriculture and so on, so at
15 best it would be a simple -- simply multiplying a
16 dose rate, gamma dose rate expressed as a fraction
17 of time. But, again, not knowing what contributes to
18 the dose rates you don't know how quickly it's going
19 to change. You know, the relationship between the
20 iodine and the cesium will, obviously, determine how
21 quickly the dose rates go down. So, we don't have
22 anything, certainly, in process at the moment.

23 MELANIE: Okay, thank you. And just so
24 you know, we don't either, but we're starting -- at
25 this is starting to kind of in some ways stabilize,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 we're just looking forward and thinking about what's
2 going to be coming at us and trying to gauge if
3 anyone had been thinking along those lines, as well.
4 But we haven't really done much, either.

5 MS. WALKER: Yes, this is Sandra Walker
6 again in the U.S. Now, I mean, we've gotten some of
7 the data and I think we've looked at a little bit,
8 but we really haven't focused on it.

9 MELANIE: Perfect. And then if that
10 changes, I mean, just -- you know, we'll talk about
11 that as the conference calls continue. We can,
12 obviously, bring that to the table if that changes.

13 MR. ENGLISH: Going back to my earlier
14 question, does either the UK or France intend on
15 refining their source terms?

16 MALE PARTICIPANT: For France, I don't
17 have the answer right now because the -- we have, in
18 fact, currently there is an exchange between us and
19 (inaudible) Organization, so I think I should be
20 able to give you the answer tomorrow.

21 MALE PARTICIPANT: Great, thank you.

22 MR. BUNKER: Okay. One question I'd like
23 to ask is about continuing these conference calls.
24 We're probably not going to be here working at this
25 time over the weekend. We did have a suggestion that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 perhaps we could move the time to around midday UK
2 time, about 1:00, but I don't know how that would
3 suit anybody else.

4 MALE PARTICIPANT: On the weekend?

5 MR. BUNKER: Yes.

6 MALE PARTICIPANT: Midday UK time,
7 there's another plant installation telecon at the
8 same time at 9:30 Eastern, so that would be roughly
9 1:30 UK. So, those two calls, unless they're
10 combined, would conflict.

11 MR. BUNKER: Okay.

12 MALE PARTICIPANT: At this point, what
13 does everybody think about skipping this call over
14 the weekend? I don't think the situation on the
15 ground is changing -- is as fluid as it was before,
16 so perhaps going over the weekend without calling
17 each other --

18 MELANIE: Might be okay.

19 MALE PARTICIPANT: Might be okay.

20 MR. ENGLISH: Yes, this is Lance from the
21 U.S. NRC. Does this impact in any way the Reactor
22 Safety Team's conference call at 0930?

23 MALE PARTICIPANT: Well, that -- I'm on
24 that call, and I think on that one we agreed to
25 continue.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. ENGLISH: Correct. But I was
2 wondering, perhaps, that you could combine the two
3 for the weekend. That might be --

4 MALE PARTICIPANT: Well, that's another
5 option. If both teams want to get together and
6 combine the two calls, we're happy with that.

7 MR. ENGLISH: Is that amenable to
8 everybody?

9 MR. BUNKER: I don't think that's really
10 a good option for the UK because there's different
11 people involved.

12 MR. ENGLISH: I see. Well, I'll bring it
13 up tomorrow with the Reactor Safety team tomorrow
14 morning and then we'll see what they say. We'll move
15 from there. If we have to keep them separate, so be
16 it.

17 MR. BUNKER: Other than that, I'm quite
18 easy about skipping this over the weekend, yes.

19 MALE PARTICIPANT: Okay.

20 MELANIE: Well, should we meet again
21 tomorrow then at the same time and just make final
22 decisions on the weekend?

23 MS. WALKER: Yes, why don't we do that.
24 This is Sandra Walker again in the U.S.

25 MELANIE: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MS. WALKER: Why don't we do that? That
2 way we'll be able to find out what would be the best
3 for the people that'll be on the ground --

4 MELANIE: Exactly.

5 MS. WALKER: -- at each of our
6 locations. I mean, we've got the Op Center manned so
7 we can do either one. But, you know, as was said, it
8 seems like the situation is, I hesitate to stay
9 stabilizing, but calming down a little bit that
10 maybe over the weekend we might not need it.

11 MELANIE: Exactly.

12 MS. WALKER: And we could always use the
13 Reactor Safety team as a mechanism if something does
14 come up.

15 MELANIE: Yes, absolutely.

16 MS. WALKER: And that's also an option.

17 MR. ENGLISH: I'll be sure to bring that
18 up tomorrow with the Reactor Safety team.

19 MR. BUNKER: Yes, that's great.

20 MR. ENGLISH: Just to belabor the point
21 one more time, from the UK, do you know if you plan
22 on refining your source term? I've been in contact
23 with Steve Saunders (phonetic) and he hasn't
24 indicated otherwise. I was wondering if you had any
25 information.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. BUNKER: Well, we have people working
2 on it, but I don't think we're going to be changing
3 it for the purposes of what we're recommending for -
4 - what we're consuming for countermeasures.

5 MR. ENGLISH: Okay.

6 MR. BUNKER: So, we may have a better
7 source term but we're not necessarily going to use
8 it for the model. But, certainly, once we have this,
9 I'll be intending to share it.

10 MELANIE: Okay. So, is everybody ready to
11 close?

12 MS. WALKER: I don't have anything else.
13 This is the U.S.

14 MELANIE: It's good on our end. Canada
15 speaking here. Okay. So, shall we reconvene again
16 tomorrow at 2 then?

17 MS. WALKER: Yes, that sounds like a
18 plan.

19 MELANIE: Thank you very much.

20 MR. ENGLISH: All right.

21 MR. BUNKER: Okay.

22 MELANIE: Have a good afternoon.

23 MR. BUNKER: Thank you.

24 MELANIE: Bye-bye.

25 MR. BUNKER: Bye.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MS. WALKER: (b)(5)

2 (b)(5)

3 MALE PARTICIPANT: (b)(5)

4 MS. WALKER: (b)(5)

5 MALE PARTICIPANT: I guess the only do
6 out is to see if we want to continue.

7 MS. WALKER: Tomorrow is --

8 MALE PARTICIPANT: And I'll just come
9 over because I'm going to be working tomorrow. I'll
10 just come over and sit in.

11 MS. WALKER: Find out whether they want
12 to continue it or not.

13 MALE PARTICIPANT: Yes, so whoever you'll
14 have to find out from -- thanks, Sandy.

15 MS. WALKER: Sure.

16 (Inaudible).

17 MALE PARTICIPANT: What I can do
18 basically quickly, say like right now I do not
19 (inaudible).

20 MALE PARTICIPANT: Communications I think
21 we should make, and I think we should include some
22 (inaudible) from the conditions we're in now, which
23 kind of go along with what (inaudible) last night.
24 Can you restore and hold reactor pressure in a
25 projection above the (inaudible) retention curve in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Figure Z. That's on here. And we're saying the
2 pressure is low down here, and you can't. The fire
3 hoses are much lower than that.

4 MALE PARTICIPANT: Right. That's correct.

5 MALE PARTICIPANT: So, the answer is no.
6 So, the three units are either in this condition.
7 For Units 2 and 3 I believe we're in this path
8 because we can -- inside pressure suppression,
9 Figure L, in 2 and 3 we're still within this curve
10 here, so we'd be going down this path.

11 MALE PARTICIPANT: Okay.

12 MALE PARTICIPANT: The priorities on this
13 path (inaudible) water level below 17 feet --

14 MALE PARTICIPANT: Right.

15 MALE PARTICIPANT: -- which is the spray
16 head. That's what we've got --

17 MALE PARTICIPANT: Okay.

18 MALE PARTICIPANT: Roughly 17.

19 MALE PARTICIPANT: Okay.

20 MALE PARTICIPANT: That water on the
21 drywell floor, restore injection above the minimum
22 debris retention grates and try and build this up if
23 you can and inject into the primary containment from
24 external sources. And that means they're trying to
25 fill up the containment.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 For Unit 1, we can't maintain it with
2 any certainty, so we're in here. So, these are the
3 priorities I would recommend. Have water on the
4 drywell floor, maximize injection from all sources.

5 MALE PARTICIPANT: Anything you get to go
6 in there. Maximize direct primary containment
7 direction from external sources. Water going
8 directly in the containment. Do it. You want to get
9 water up to that bottom head before that --

10 MALE PARTICIPANT: Right. Okay.

11 MALE PARTICIPANT: So, I think we should
12 borrow from this and make that the recommendation.

13 MALE PARTICIPANT: I ran it by you.

14 MALE PARTICIPANT: Get on the phone with
15 GE, or somebody. Tell them, you know, you went back
16 over looked at the (indiscernible, possibly
17 "SAMGEES") and this is what you say, and why aren't
18 we recommending this?

19 MALE PARTICIPANT: All right.

20 (Inaudible - Continuous banging in background)
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 25, 2011

Work Order No.: NRC-0366

Pages 1-19

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/15

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 THURSDAY,
8 MARCH 25, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-Q-T-O-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-Q(!DL603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-Q(- (EL03765094

(CONFERENCE CALL INITIATED)

MR. BOYD: This is Mike Boyd. I'm going to be running the call today because -- go to another meeting at NASA.

And it's my understanding that the main agenda topic, maybe the only agenda topic today other than to update is this draft for -- we're putting out for CBP use and others for the trigger for what pre-release or detaining potentially contaminated material.

And let me start. Here at EPA it's me, Mike Boyd. We have Daryl Liles and Scott Hudson and Jeff Ing who just came in from Region 2 on the line.

I think the way Ed does this is to go by agency. So let's -- I heard Mike Noska so we'll start with FDA.

MS. JONES: Terry Jones.

MR. CUNNINGHAM: Bill Cunningham.

MR. HARGRAVE: Scotty Hargrave.

MR. ALLEN: George Allen.

MR. SIMCEK: Jeff Simcek.

MR. BOYD: Okay. And Mike, you're there. And CDC?

MR. SIMMONS: Yes, Pat Simmons here from

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Officer of Field Operations.

2 MS. EVANS: Lynn Evans, CDC.

3 MR. STRACK: Ben Strack, CDC.

4 MR. BROOKS: Mike Brooks (indiscernible,
5 possibly ESER) ..

6 MR. RICHARDS: John Richards, EPA.

7 MR. TENNANT: Mike Tennant at CDC.

8 MR. SHARP: John Sharp, CDC.

9 MS. HINSON: Jody Hinson, NIOSH.

10 MR. BOYD: Okay, so (indiscernible)

11 Epstein and John Richards also with EPA.

12 And NIOSH we have Gary. So, is -- do we
13 have DOT on the line?

14 MR. LYMAN: Yes, this is Jim Lyman at
15 DOT.

16 MR. BOYD: Okay, great.

17 MR. CORDARELLI: This is John Cordarelli
18 from EPA.

19 MR. BOYD: Hey, John.

20 MR. CORDARELLI: Hey, Mike. Finally
21 made it in.

22 MR. BOYD: Great. John's now left the
23 (indiscernible, possibly ESC) and in transit. And
24 we have USDA?

25 MR. THATCH: Pete Thatch

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 (indiscernible).

2 MR. GRAHAM: Ron Graham, SSIS.

3 MR. BOYD: Okay, John Jenson on the
4 line? Lynn Evans, you're an old hand at running
5 these meetings and I'm a newbie, so tell me who I'm
6 missing.

7 MALE PARTICIPANT: Hey Mike, Mike Noska
8 is here.

9 MALE PARTICIPANT: Sam Keith too.

10 MR. BOYD: Great.

11 MS. EVANS: Well, you've reached -- or
12 you've mentioned all the advisory team member
13 agencies. There may be other agencies on the line
14 that haven't spoken yet.

15 MS. BROCK: Cathy Brock, NRC.

16 MR. BOYD: Oh, great. Hi Cathy.

17 MS. BROCK: Hello.

18 MR. WARD: Paul Ward at FEMA REP
19 program.

20 MS. CAPENTARIS: We have Carolyn
21 Capentaris with DOE.

22 MALE PARTICIPANT: Okay, you've also got
23 Tim Greton and Mike Howe from FEMA REP.

24 MALE PARTICIPANT: You've got Tom Lash
25 and Sara Gotee from -- team assessment.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. FERRIS: John Ferris from OSHA.

2 MR. BOYD: Okay, anybody else just
3 joined us?

4 MR. JENSON: Yes, Mike. John Jenson
5 from USDA.

6 MR. BOYD: Welcome, John.

7 MS. EVANS: Mike, are you all able to
8 get all of these names? Especially the non-advisory
9 team agency names. I think it would be important to
10 kind of keep track of that.

11 MR. BOYD: Yes, we do have someone in
12 the room who's much better at that than I am and
13 she's taking down all the -- so yes. We're
14 capturing that I think.

15 The topic today is of course continuing
16 on this draft. And we've been in some sidebar
17 conversations earlier this morning with Jim Williams
18 at DOT.

19 But I think the best way to proceed is
20 I'm going to let Daryl Liles here tell us where we
21 are at this point in the draft.

22 MR. LILES: I apologize, we just sent
23 the draft out just a few minutes ago. So if you
24 haven't got it yet you should be getting it.

25 But and correct me if I'm wrong here,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 Jim, but I think we need to pull off the reference
2 to DOT regs.

3 MALE PARTICIPANT: Yes, we started off
4 with what I proposed originally would be used was

5 (b)(5)
6
7
8
9
10
11
12
13
14
15
16
17
18

19 MALE PARTICIPANT: I don't think that's

20 (b)(5)
21
22

23 MALE PARTICIPANT: (b)(5)

24 (b)(5)
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 on that.

2 MALE PARTICIPANT: I have Ira Reese in

3 (b)(5)

4
5 MR. REESE:

(b)(5)

6 (b)(5)

7 MR. LILES: Well, that's very good to
8 know. I mean, I think we were just sort of using a

9 (b)(5)

10
11
12
13
14 MALE PARTICIPANT: Okay, was anybody
15 else on the other call that we just had with the
16 NSS? Jim, I know you were on it. Others?

17 Okay,

(b)(5)

18 (b)(5)

19
20 MALE PARTICIPANT: No, that was our --

21 MALE PARTICIPANT: Okay.

22 MALE PARTICIPANT:

(b)(5)

23 (b)(5)

24
25 MALE PARTICIPANT: No, I agree with that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 and I agreed with that on the last call. So can we
2 just make the minor adjustments to the document that
3 need to be made, (b)(5)
4 whatever, and take "draft" off it, and let's get
5 this thing out? I thought that was the reason for
6 this call.

7 MR. BOYD: That is the reason for this
8 call.

9 MALE PARTICIPANT: Okay, great.

10 MR. BOYD: And if you have an NSS
11 concurrence or consistence on that we're good with
12 it.

13 MALE PARTICIPANT: We do have it.

14 MR. BOYD: All right. End of story I
15 think.

16 MALE PARTICIPANT: Great. So can we
17 send it out, take "draft" off it? Take any

18 (b)(5)

19 that, out of it. And then just send it out to the
20 agencies and we can all be done with this.

21 MR. GRANT: Yes, this is Ron Grant from
22 (indiscernible, possibly USGI). I agree because we
23 need to get this out to our --

24 MALE PARTICIPANT: Absolutely. I'm

25 (b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)

2

3

MR. BOYD: Yes. If we don't -- this is

4

Mike.

(b)(5)

5

(b)(5)

6

7

MALE PARTICIPANT: That's true. I mean,

8

(b)(5)

9

10

MALE PARTICIPANT: Take anything with

11

(b)(5)

12

(b)(5)

I think that

13

keeps everybody clean.

14

MALE PARTICIPANT: So what we're saying

15

(b)(5)

16

17

MALE PARTICIPANT: I have no idea what

18

you just said.

19

MR. BOYD: Guys, Daryl started this

20

conversation by saying we had just sent you a draft

21

out. We will immediately after this call scrub that

22

draft, (b)(5)

The numbers

23

will remain as they are and we'll get it back out as

24

fast a turnaround as we can.

25

MALE PARTICIPANT: Outstanding.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. BOYD: Okay. And that should be
2 minutes, not hours.

3 MALE PARTICIPANT: Got it. This is CBP
4 jumping off. Thank you.

5 MR. BOYD: I should -- I assume that
6 that NSS concurrence means that all of our agencies
7 are okay with this. If there's anyone on the line
8 that has anything they'd like to say contrary to
9 that please say so now.

10 MALE PARTICIPANT: The only thing I'd

11 (b)(5)
12
13
14
15

16 MR. BOYD: And I think we're all sort of
17 on the assumption now that if the predominant
18 contributor to the dose rate or the reading, the
19 exposure reading is iodine then it's probably going
20 to be gone before you catch it anyway, so.

21 MR. NOSKA: Mike, it's Mike Noska. Was
22 there FDA or HHS representation on that NSS call?
23 You said something about agency concurrence on this
24 call.

25 MR. BOYD: I wasn't on the call. I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 don't think -- when he asked if anybody on this call
2 was on that call no one except Jim Williams piped
3 up. (b)(5)

4 (b)(5) But is
5 that not a safe assumption?

6 MALE PARTICIPANT: I have no idea who,
7 if anybody, from FDA was on it. I just don't know
8 about -- CDC, did you have anybody on that?

9 MALE PARTICIPANT: No. This was really
10 a call between mostly CBP and DOT. There was
11 somebody from NSS on there but that was -- I mean,

12 (b)(5)

13
14 MALE PARTICIPANT: Oh, it wasn't an
15 interagency meeting.

16 MALE PARTICIPANT: No, not fully. It
17 was kind of an ad hoc thing right after an earlier
18 one we had this morning.

19 MALE PARTICIPANT: Oh, oh, oh, okay.
20 I'm sorry.

21 MR. BOYD: (b)(5)

22 (b)(5)

23
24 MALE PARTICIPANT: No.

25 MALE PARTICIPANT: Well, (b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(b)(5)

MALE PARTICIPANT: Well, I think that,

yes, (b)(5)

(b)(5)

(b)(5)

Yes, Linda?

MS. EVANS: But Mike, the advisory team

was also asked --

(b)(5)

So, it needs

to be made.

(b)(5)

(b)(5)

(b)(5)

MR. BOYD:

(b)(5)

MS. EVANS: And we don't have access to

that. Where we are right --

MR. BOYD: We just sent out it. Yes,

you'll have it. And we're going to do a quick

turnaround of what was just sent out to make sure

(b)(5)

But

other than that.

MS. EVANS: Okay. Because we've been

saying here at CDC that the advisory team is

covering --

(b)(5)

(b)(5)

So, again, that just needs to be made very

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 clear.

2 MR. BOYD: (b)(5)

3 (b)(5)

4 MALE PARTICIPANT: (b)(5)

5 (b)(5)

6
7
8
9 MR. BOYD: Yes, I don't think -- we're
10 not making that distinction.

11 MALE PARTICIPANT: Okay.

12 MS. EVANS: I think that may have been
13 covered in a document that CDC put out talking about

14 (b)(5)

15
16 MR. BOYD: Yes, (b)(5)

17 (b)(5)

18
19
20 MR. GRETON: Yes, this is Tim from FEMA.
21 Just reading through the statement here, to be
22 clear, this pretty much says hey, this is the -- you
23 know, you have a problem, it's above this level. If
24 you do not and it's below this you don't have a
25 problem.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

MALE PARTICIPANT:

(b)(5)

(b)(5)

MALE PARTICIPANT: And I guess my other question with this, and it still sounds like that first question is a little unanswered, but has somebody actually run this guidance that we're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)
2
3
4
5
6

7 MR. BOYD: Well, we've had Customs on
8 this line and they've said that this does work for
9 them.

10 MALE PARTICIPANT: Okay. Thank you very
11 much.

12 MR. BOYD: Any other comments?

13 MALE PARTICIPANT: Mike, this is Sam. I
14 was just going over what was sent out and looking at
15 that table. (b)(5)

16 (b)(5)
17
18
19
20
21

22 (Whereupon, the foregoing matter went
23 off the record)
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-QU-X--03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-QU-Y2603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 26, 2011

Work Order No.: NRC-0366

Pages 1-3

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/16

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 FRIDAY,
8 MARCH 26, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-S--VS-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

0-S--W) 603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 27, 2011

Work Order No.: NRC-0366

Pages 1-18

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/17

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 SATURDAY,
8 MARCH 27, 2011

9 + + + + +

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SKDF-L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SKDRN603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SKDUIL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SKE2K-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SKEF-L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SKEJOL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SKEV1L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SYOE (603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SYON(603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SYOYF603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SY1P-L03765094

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

FEMALE PARTICIPANT: NRC, ops

(indiscernible) Maya.

MR. DODMEAD: Yes, this is Jim Dodmead.

(b)(5)

FEMALE PARTICIPANT: Is this the same
person?

MR. DODMEAD: Yes.

FEMALE PARTICIPANT: Oh, Dodme. Okay.

MR. DODMEAD: All right.

FEMALE PARTICIPANT: Okay, bye.

MR. DODMEAD: Bye.

(Whereupon, the foregoing matter went
off the record)**NEAL R. GROSS**COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-SY9-1-03765094

1
2 FEMALE PARTICIPANT: NRC, Judy Maya.

3 MR. DODMEAD: Yes, this is Jim Dodmead.

4 (b)(5)

5 FEMALE PARTICIPANT: Thanks so much.

6 MR. DODMEAD: Sure.

7 (Whereupon, the foregoing matter went
8 off the record)

9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-TEST-L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealgross.com

0-TESYCL03765094

1
2 FEMALE PARTICIPANT: Security, can I help you?

3 MR. GRANT: Hi, this is Jeff Grant. I'm

4 (b)(5)

5 FEMALE PARTICIPANT: Okay,

(b)(5)

6 that?

7 MR. GRANT:

(b)(5)

8 FEMALE PARTICIPANT: Okay. What's your

9 last name?

10 MR. GRANT: Grant, G-R-A-N-T.

11 FEMALE PARTICIPANT: Okay.

12 MR. GRANT: All right, thanks.

13 FEMALE PARTICIPANT: Thanks.

14 (Whereupon, the foregoing matter went
15 off the record)

16
17
18
19
20
21
22
23
24
25
NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-TE1(7603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-TE1) 9L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-TF-ZA603765094

MALE PARTICIPANT: NRC, central.

MR. GRANT: Hi, this is Jeff Grant from
the ops center.

MALE PARTICIPANT: Yes.

MR. GRANT: (b)(5) and

I'm -- we're done with that now.

MALE PARTICIPANT: Okay, (b)(5)
up?

MR. GRANT: Yes, (b)(5)

MALE PARTICIPANT: Okay, thank you much.

MR. GRANT: Bye.

MALE PARTICIPANT: Bye.

(Whereupon, the foregoing matter went
off the record)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 28, 2011

Work Order No.: NRC-0366

Pages 1-13

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/18

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 SUNDAY,
8 MARCH 28, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-T^KUKL03765094

(CONFERENCE CALL INITIATED)

MR. REILLY: Hello, this is Tim Reilly.

MR. COOL: Hey, Tim. This is Don Cool
in the NRC operations center.

MR. REILLY: How are you doing this
morning?

MR. COOL: Okay. This is a recorded
line. I'm following up on the email string Spiros,
I guess, and then you sent the question to Bryan
Sharon who sent it over to the operations center.
I'm guessing, I don't have the entire string but one
of the staffers down in Markey's office asked a

(b)(5)

MR. REILLY: Yes.

MR. COOL: Okay? So I wanted to --
rather than trying to send you an email back I just
wanted to talk to you briefly about this.

(b)(5)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 (b)(5)

2

3

4

5

MR. REILLY: Okay.

(b)(5)

6

(b)(5)

7

MR. COOL:

(b)(5)

8

(b)(5)

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

(b)(5)

MR. REILLY: Okay. Okay.

MR. COOL: Okay? Quite frankly we think that there's a pathway out, but you can't know it. So the status is as reported in our situation report which is damage suspected.

MR. REILLY: Okay.

MR. COOL: But, you know, we suggest that we be very careful about what we know and don't know because we don't know a lot more than we do know.

MR. REILLY: I appreciate that.

MR. COOL: All right? So, I wanted to get back to you on that string so that you could take care of the --

MR. REILLY: Information reply?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 MR. COOL: -- the information reply.

2 All right?

3 MR. REILLY: Thank you so much, sir.

4 MR. COOL: You're welcome.

5 MR. REILLY: I appreciate the direct
6 communication. Thanks.

7 MR. COOL: Bye.

8 (Whereupon, the foregoing matter went
9 off the record)

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-T^W-0603765094

(CALL INITIATED)

MALE PARTICIPANT: U.S. NRC security, how may I help
you today?

MR. MARSHALL: Yes, this is Jay
Marshall. Just wanted to let you know I've locked
up T4 B27.

MALE PARTICIPANT: Okay, thank you.

MR. MARSHALL: Thank you.

(Whereupon, the foregoing matter went
off the record)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-TYJK1L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-TYKFJ603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-TYL!-L03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-TYLF3-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-TYMED603765094

(Timothy Reilly's voicemail answers)

MR. COOL: Tim, this is Donald Cool in
the NRC operations center. This is a recorded line.

I am the PMT director for the day shift
today and wanted to follow up with you on the email
you sent to Bryan Sharon about the (indiscernible,
possibly NECA) reported compositions of water in the
basements buildings.

I'd like to try and explain to you what
we know and don't know. Probably best for you to
call me on my Blackberry, (b)(6) Bye.

(Whereupon, the foregoing matter went
off the record)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-UU1#NL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-UU1-!603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 29, 2011

Work Order No.: NRC-0366

Pages 1-3

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/119

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 MONDAY,
8 MARCH 29, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-W-243-03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

0-W-295603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title: Japan's Fukushima Daiichi
PMT Counterpart Audio Files

Docket Number: N/A

Location: N/A

Date: March 30, 2011

Work Order No.: NRC-0366

Pages 1-3

NEAL R. GROSS AND CO., INC.
Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

EL/20

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION

3 + + + + +

4 JAPAN'S FUKUSHIMA DAIICHI
5 PMT COUNTERPART AUDIO FILES

6 + + + + +

7 TUESDAY,
8 MARCH 30, 2011

9 + + + + +

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-XE21K603765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

0-XE22LL03765094

(No audio to transcribe)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25