## Group 000

# (Records Withheld In Part)

#### Ali, Syed

From:

Diane.JACKSON@oecd.org

Sent:

Friday, March 11, 2011 7:58 AM

Subject: Attachments:

RE: OECD/NEA - Japan Friday 11 March 13:45 UTC - Evacuation order to residents

2011\_03\_11\_(R1)Earthquake(N.Japan).doc

Dear all -

Please find attached, additional articles from Japan.

Best, Diane Jackson

From: GAUVAIN Jean, NEA/SURN

Sent: Friday, March 11, 2011 1:51 PM

To: waponews@oecd-nea.org

Cc: add-cnra@oecd-nea.org; add-cnra-o@oecd-nea.org; add-wgip@oecd-nea.org; add-cnra-wgoe@oecd-nea.org; add-csni@oecd-nea.org; add-csni@oe

NEA/SURN, JACKSON Diane, NEA/SURN; LAMARRE Greg, NEA/SURN; HUERTA Alejandro, NEA/SURN; add-iageseism@oecd-nea.org

Subject: FW: OECD/NEA - WGPC Secretariat - Japan Friday 11 March 13:45 UTC - Evacuation order to residents

WGPC Members

Cc CNRA, CSNI, WGOE, WGIP, IAGE, IAGESEISM Please read below update and correction to previous message

Jean Gauvain - NEA/NSD - Phone +33 1 45 24 10 52 - Mobile #(b)(6)

From: Akihiro YAMAMOTO [mailto:a-yamamoto@houshasen.tsuruga.fukui.jp] -

Sent: Friday, March 11, 2011 13:41\*

Subject: [Yama] Evacuation order to residents

The people of a town near Fukushima Dailichi Units (Within 2 km) were ordered to evacuate their homes

I was mentioned previous emails with regard to ECCS but I think this is very strange that ECCS are really being driven even diesel generators has failed to start.

Please correct that following plants are just in the emergency mode and not in the ECCS mode.

Fukushima 1-1 - State of emergency

Fukushima 1-2 - Call off the emergency

Fukushima 1-3 - State of emergency

Fukushima 2-1 - State of emergency

Fukushima 2-2 - State of emergency

Fukushima 2-4 - State of emergency

Yama

Akihiro YAMAMOTO

Ageing Management Specialist,

Nuclear Safety Measurement Division

Fukui Prefectural Government

ool!

Telephone: +81 (0) 776 20 0314

E-mail: a-yamamoto@houshasen.tsuruga.fukui.jp<mailto:a-yamamoto@houshasen.tsuruga.fukui.jp>

From: Akihiro YAMAMOTO [mailto;a-yamamoto@houshasen.tsuruga.fukui.jp]

Sent: Friday, March 11, 2011 8:00 PM

To: 'Akihiro YAMAMOTO'; Jean GAUVAIN@oecd.org

Cc: Javier.REIG@oecd.org; Luis.ECHAVARRI@oecd.org; Uichiro.YOSHIMURA@oecd.org;

Serge GAS@oecd.org; Axel BREEST@oecd.org; Elisabeth MAUNY@oecd.org; Greg LAMARRE@oecd.org

Radomír.REHACEK@oecd.org; Alejandro.HUERTA@oecd.org; Diane.JACKSON@oecd.org;

Jean GAUVAIN@oecd.org; John NAKOSKI@oecd.org; Philippe.GRESS@oecd.org;

Lawrence.BURKHART@oecd.org; 'Carlo Vitanza'; Abdallah.amri@oecd.org

Subject: [Yama] Situation update (19:45 Japan time)

NISA is now holding a press conference.

Fukushima 1-1 (ECCS mode)

Fukushima 1-2 (ECCS mode) - Call off the emergency Fukushima 1-3 (ECCS mode) Fukushima 2-1 (ECCS mode)

The problem is that they can't monitor water injection (ECCS). It might be a problem of the monitoring system.

In fact, TEPCO called off the emergency of unit 1-2 a while ago because they are able to monitoring the water level in the reactor now.

Yama

Akihiro YAMAMOTO
Ageing Management Specialist,
Nuclear Safety Measurement Division
Fukui Prefectural Government

Telephone: +81 (0) 776 20 0314

E-mail: <u>a-yamamoto@houshasen.tsuruga.fukui.jp</u><mailto:a-yamamoto@houshasen.tsuruga.fukui.jp>

From: Akihiro YAMAMOTO [mailto:a-yamamoto@houshasen.tsuruga.fukui.jp]

Sent: Friday, March 11, 2011 7:30 PM

To: 'Jean.GAUVAIN@oecd.org'

Cc: 'Javier.REIG@oecd.org'; 'Luis.ECHAVARRI@oecd.org'; 'Uichiro.YOSHIMURA@oecd.org';

'Lydie.GUYOT@oecd.org'; 'Marie-Laure.PEYRAT@oecd.org'; 'Serge.GAS@oecd.org';

'Axel.BREEST@oecd.org'; 'Elisabeth.MAUNY@oecd.org'; 'Greg.LAMARRE@oecd.org';

'Radomir, REHACEK@oecd.org'; 'Alejandro. HUERTA@oecd.org'; 'Diane. JACKSON@oecd.org';

'Jean.GAUVAIN@oecd.org'; 'John.NAKOSKI@oecd.org'; 'Philippe.GRESS@oecd.org';

'Lawrence.BURKHART@oecd.org'; 'Nicolina.IANNOLO@oecd.org'; 'Roopa.CHAUHAN@oecd.org';

'christele.tephanympania@oecd.org'; 'Aileen.LITTLE@oecd.org'; 'Carlo Vitanza'; 'Abdallah.amri@oecd.org'

Subject: [Yama] Situation now - ECCS mode

Dear all,

TEPCO (Tokyo Electric Power Company) declared the state of emergency of following NPPs: Fukushima 1-1

Fukushima 1-2

Fukushima 1-3

Fukushima 2-1 (ECCS mode now)

I am trying to get information why DG can't start up (problem of intake sea water for the cooling DG system?)

There is a fire from turbine building (B1 floor) at Onagawa NPP unit 1 but the fire fighting was completely succeded.

http://www.yomiuri.co.jp/dy/national/20110311dy01.htm

A while ago, Fukui (my office located) had also earthquake (M4.1). We have 15 NPPs but no damage to the NPPs.

Yama

Akihiro YAMAMOTO
Ageing Management Specialist,
Nuclear Safety Measurement Division
Fukui Prefectural Government

Telephone: +81 (0) 776 20 0314

Intensity on Japanese seismic scale
at 2:46 p.m. Friday
Aomori Pref. Kamaishi, Iwate Pref. Akita O (1) Upper 6 ( Lower 6 Offunato, Iwate Pref. Kurihara, Miyagi Pief. ) Upper 5 6 Kesennuma, Miyagi Pref. **©**/Senclar **Epicenter** 💍 🔿 Fukushima 🔘 Shirakawa, Fukushima Pref. Utsunomiya 🔾 OHitachi, Ibaraki Pref. Miyashiromachi Saitama Pref. 💍 hiyoda Ward, Tokyo O 🛈 Nàrita, Chiha Pref.

#### The mainichi

http://mdn.mainichi.jp/mdnnews/news/20110311p2g00m0dm0480 ooc.html

### Major tsunami damage in northern Japan after massive quake

TOKYO (AP) -- A magnitude 8.9 earthquake slammed Japan's eastern coast Friday, unleashing a 4-meter tsunami that swept boats, cars, buildings and tons of debris miles inland. Fires triggered by the quake burned out of control up and down the coast, including one at an oil refinery.

At least one person was killed and there were reports of several injuries in Tokyo, hundreds of kilometers away, where buildings shook violently through the main quake and the wave of massive aftershocks that followed. A tsunami warning was issued for dozens of Pacific countries, as far away as Chile.

Japan's meteorological agency said that within two hours, large tsunamis washed ashore into dozens of cities along a 2,100-kilometer stretch of the country's eastern shore -- from the northern island of Hokkaido to central Wakayama prefecture.

Prime Minister Naoto Kan said the quake caused "major damage in broad areas" but nuclear power plants in the area were not affected. The government prepared to send troops to the quake-hit areas.

"This is a rare major quake, and damages could quickly rise by the minute," said Junichi Sawada, an official with Japan's Fire and Disaster Management Agency.

TV footage showed waves of muddy waters sweeping over farmland near the city of Sendai, carrying buildings, some on fire, inland as cars attempted to drive away. Sendai airport, north of Tokyo, was inundated with cars, trucks, buses and thick mud deposited over its runways. Fires spread through a section of the city, public broadcaster NHK reported.

The tsunami also roared over embankments in Sendai city, washing cars, houses and farm equipment inland before reversing directions and carrying them out to sea. Flames shot from some of the houses, probably because of burst gas pipes.

Elsewhere, large fishing boats lay upturned on land, some distance from the sea.

Officials were trying to assess damage, injuries and deaths but had no immediate details. Police said at least one person was killed in a house collapse in Ibaraki prefecture, just northeast of Tokyo.

A large fire erupted at the Cosmo oil refinery in Ichihara city in Chiba prefecture near Tokyo and was burning out of control with 30 meter-high flames whipping into the sky.

NHK showed footage of a large ship being swept away by the tsunami and ramming directly into a breakwater in Kesennuma city in Miyagi prefecture.

In various locations along the coast, footage showed massive damage from the tsunami, with cars, boats and even buildings being carried along by waters.

Partially submerged vehicles were seen bobbing in the water.

The U.S. Geological Survey said the quake was a magnitude 8.9, while Japan's meteorological agency measured it at 8.4. It struck at 2:46 p.m. and was followed by 12 powerful aftershocks, seven of them at least 6.3, the size of the quake that struck New Zealand recently.

A tsunami warning was extended to a number of Pacific, Southeast Asian and Latin American nations, including Japan, Russia, Indonesia, New Zealand and Chile. In the Philippines, authorities said they expect a 1-meter high tsunami.

The quake struck at a depth of 10 kilometers, about 125 kilometers off the eastern coast, the agency said. The area is 380 kilometers northeast of Tokyo.

In downtown Tokyo, large buildings shook violently and workers poured into the street for safety. TV footage showed a large building on fire and bellowing smoke in the Odaiba district of Tokyo.

Several nuclear plants along the coast were partially shut down, but there were no reports of any radioactive leakage.

In central Tokyo, trains were stopped and passengers walked along the tracks to platforms. NHK said more than 4 million buildings were without power in Tokyo and its suburbs.

The ceiling in Kudan Kaikan, a large hall in Tokyo, collapsed, injuring an unknown number of people, NHK said.

Osamu Akiya, 46, was working in Tokyo at his office in a trading company when the quake hit.

It sent bookshelves and computers crashing to the floor, and cracks appeared in the walls.

"I've been through many earthquakes, but I've never felt anything like this," he said. "I don't know if we'll be able to get home tonight."

Footage on NHK from their Sendai office showed employees stumbling around and books and papers crashing from desks. It also showed a glass shelter at a bus stop in Tokyo completely smashed by the quake and a weeping woman nearby being comforted by another woman.

Several quakes had hit the same region in recent days, including a 7.3 magnitude one on Wednesday.

Thirty minutes after the main quake, tall buildings were still swaying in Tokyo and mobile phone networks were not working. Japan's Coast Guard has set up a task force and officials are standing by for emergency contingencies, Coast Guard official Yosuke Oi said.

"I'm afraid we'll soon find out about damages, since the quake was so strong," he said.

In Tokyo, hundreds of people were evacuated from Shinjuku train station, the world's busiest, to a nearby park. Trains were halted.

Tokyo's main airport was closed. A large section of the ceiling at the 1-year-old airport at Ibaraki, about 80 kilometers northeast of Tokyo, fell to the floor with a powerful crash.

Dozens of fires were reported in northern prefectures of Fukushima, Sendai,
Iwate and Ibaraki. Collapsed homes and landslides were also reported in
Miyagi.

Japan's worst previous quake was in 1923 in the Kanto region. That quake killed 143,000 people, according to USGS. An earthquake in Kobe city in 1996 killed 5,502 people.

(Mainichi Japan) March 11, 2011

#### Kock, Andrea

From:

Nieh, Ho

Sent:

Friday, March 11, 2011 7:15 PM

To:

Franovich, Mike, Ostendorff, William

Cc:

Warnick, Greg

Subject:

Re: UPDATE on Fukishima-Daiichi

Good summary. Thanks for the updates Mike.

Ho

Sent via BlackBerry

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6)

(301) 415-1757 (tax)

ho nieh@nrc.gov

----- Original Message -----From: Franovich, Mike To: Ostendorff, William Cc: Nieh, Ho; Warnick, Greg Sent: Fri Mar 11 19:08:01 2011

Subject: UPDATE on Fukishima-Daiichi

Sir,

The TA brief involved the NRC Executive Team (Borchardt, Weber, Virgilio) and others. Basic info as follows but info is still unreliable:

- □ The Chairman, Eric Leeds, and one NRC technical expert from our reactor safety team will be at a deputy Principals meeting at the White House this evening to discuss the Japanese event and U.S. assistance.
- ☐ Chairman's office to provide any key info to other Commissioner offices (messages, etc..) based on meeting at Whitehouse (Monninger needs to check with Josh first).
- □ Fed government response to impact on U.S. may stand down. NRC made itself available to USAID if technical assistance is needed.

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the, units in question and provide technical details on what they believe the designs to be and similarity to US plants. It appears that emergency diesel generators operated for about an hour before they failed. (some believe the Tsunami water damaged the EDGs). The radiation levels are approximately 1000 times above normal (conflicting reports as to where, one source believes those were the readings outside of the Unit 2 control room).
The staff (Bill Ruland, et al.) did a "what if" scenario using a worst case assumption. By using the SOARCA analysis for Peach Bottom (BWR/4 design), the scenario use is a loss of all emergency power, the reactor core cooled using a RCIC pump until station battery power depletes, core damage occurs hours later. The timeline in SOARCA appears to match the timeline of events for Fukishima Unit 2 regarding the time when containment is vented to prevent containment failure. This is simply a worst case scenario if the Chairman is asked the question.
□ Eliot Brenner noted we have much media interested in getting NRC on camera to discuss the event but he is in a holding pattern regarding any further NRC public communication. He noted DOS backed off Secretary Clinton's "coolant remark" that she misspoke. USAF denies that it helped deliver "coolant" to the plant.
□ Marty Virgilio did do an outreach NEI/WANO and INPO. NEI has had contact with Japan industry but they are getting scant info. NEI was informed that contain pressure on Unit 2 was two times design pressure).
□ Cindi Peterson of Region III indicated that Exelon may have been asked by General Electric to run their simulators for Dresden and Quad Cities to model scenarios. These two US plants are similar to Fuki Unit 1 and Unit 2 respectively.
Borchardt cautioned against "what ifing" too much at this time (not an NRC facility).
□ Next TA brief at 23:15. I will call in and give you update.
Mike

#### Ostendorff, William

From:

Ostendorff, William

Sent:

Friday, March 11, 2011 9:16 PM

To:

Nieh, Ho; Franovich, Mike; Warnick, Greg

Subject:

Re: JPN regulator info

Thanks Ho. Just watched UCS' Ed Lyman on Msnbc.

---- Original Message -----

From: Nieh, Ho

To: Ostendorff, William; Franovich, Mike; Warnick, Greg

Sent: Fri Mar 11 20:57:16 2011 Subject: JPN regulator info

http://www.nisa.meti.go.jp/english/files/en20110312-1.pdf

if you're interested, press release from NISA (Japanese regulator)...8th page has info on protective action decisions - 3km evacuate, 10km shelter - might possibly be the first NPP evacuation since Chernobyl, but not sure.

out of curiosity, looked at NSC and NISA sites - perhaps the Japanese versions of the websites are better. TEPCO's English site didn't have much either.

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

00/3

#### Bozin, Sunny

From:

Nieh, Ho

Sent:

Friday, March 11, 2011 6:00 PM.

To:

Ostendorff, William

Cc:

Franovich, Mike; Warnick, Greg

Subject:

Fw: Will will get an upodate on Fikishima at 5:30 TA briefing

You are of course free to call in.

Commissioner's typically have NOT joined the bridge on TA briefs. Could create situations where a Commissioner comment/question may be perceived as direction.

Но

Sent via BlackBerry

ho.nieh@nrc.gov

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission
(301) 415-1811 (office)
(b)(6)
(301) 415-1757 (fax)

From: Franovich, Mike To: Ostendorff, William Cc: Nieh, Ho; Warnick, Greg Sent: Fri Mar 11 17:19:09 2011

Subject: Will will get an upodate on Fikishima at 5:30 TA briefing

If you are interested the bridge number is

1-800-772-3842

Passcode (b)(6)

Mike Franovich

Technical Assistant for Reactors Office of Commissioner Ostendorff

301-415-1784

x/00

#### Boẓin, Sunny

From:

Nieh, Ho

Sent:

Friday, March 11, 2011 4:58 PM

To:

Franovich, Mike

Subject:

Re: USNRC Earthquake/Tsunami Status Update

Oh jeez!

Sent via BlackBerry

Ho Nieh Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

---- Original Message -----From: Franovich, Mike

To: Nieh, Ho

Sent: Fri Mar 11 16:57:19 2011

Subject: RE: USNRC Earthquake/Tsunami Status Update

We and some other offices had a four minute automated call/warning for this telecon. NSIR called just about everyone in our office and no one on the Svinicki office (but Pat did make it to the call). Another TA briefing was ongoing I and Greg were not able to coordinate but we did both wind up on the bridge. Mike Weber wanted this call ASAP but it did cause complications as to who was covering for each office. It also unfairly put OIP under pressure and their message was not coordinated well internally (discrepancies between OIP statements vs. e-mails). Weber got a little bit snotty with me when I asked one basic question if the Japanese folks here at NRC ops center had confirmation that the trouble unit was being cooled. He said there are a lot of questions and we are busy and blew off the question. Apparently I found out afterwards that he complained about another TA's line of questions (which were very appropriate) to the Chairman's office. I gave feedback to the OEDO coordinator that our office need to have a reasonable warning time about a telecon/TA briefs so we may coordinate. Fifteen minutes would be reasonable so we make sure WCO gets the info he needs especially when he is on the Hill during an international event.

----Original Message----

From: Nieh, Ho

Sent: Friday, March 11, 2011 4:15 PM

To: Franovich, Mike

Subject: Re: USNRC Earthquake/Tsunami Status Update

What happened?!?

Sent via BlackBerry

Ho Nieh Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6) (mobile) (301) 415-1757 (fax)

00/5

#### ho\_nieh@nrc\_gov

---- Original Message -----From: Franovich, Mike

To: Nieh, Ho; Ostendorff, William

Cc: Warnick, Greg

Sent: Fri Mar 11 16:14:34 2011

Subject: RE: USNRC Earthquake/Tsunami Status Update

Will do. On Monday, we will need to discuss some unfortunate matters regarding the TA briefs issues affecting our office and other offices on 18.

----Original Message----

From: Nieh, Ho

Sent: Friday, March 11, 2011 4:02 PM To: Franovich, Mike; Ostendorff, William

Cc: Warnick, Greg

Subject: RE: USNRC Earthquake/Tsunami Status Update

Thanks Mike - please continue to pass along information from any TA briefs that occur this weekend.

Ho

Ho Nieh Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission

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(b)(6)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

From: Franovich, Mike

Sent: Friday, March 11, 2011 3:59 PM

To: Ostendorff, William Cc: Warnick, Greg: Nieh, Ho.

Subject: FW: USNRC Earthquake/Tsunami Status Update

Sir.

Attached is some additional information from NSIR. The TA's were briefed at 1:00 pm. I understand Greg gave you an update while I was in another TA brief (unrelated to the earthquake).

Mike

From: Mroz (Sahm), Sara

Sent: Friday, March 11, 2011 2:58 PM

To: Batkin, Joshua; Pace, Patti; Bubar, Patrice; Sosa, Belkys; Nieh, Ho; Sharkey, Jeffry;

Thomas. Hipsch@nrc.gov; Marshall, Michael; Batkin, Joshua; Castleman, Patrick; Snodderly, Michael; Orders, William; Bubar, Patrice; Franovich, Mike; Wittick, Brian; Andersen, James; Trapp, James; Leeds, Eric; Brenner,

Eliot; Miller, Charles; James Wiggins@nrc.gov; Johnson, Michael; Sheron, Brian; Schmidt, Rebecca;

Catherine. Hainey@nrc.gov

Cc: LIA12 Hoc; LIA01 Hoc; HOO Hoc

Subject: USNRC Earthquake/Tsunami Status Update

Importance: High

Attached, please find a status update from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami on March 11, 2011.

Please call the Headquarters Operations Officer at 301-816-5100 with questions.
-Sara

Sara K. Mroz
Communications and Outreach
Office of Nuclear Security and Incident Response US Nuclear Regulatory Commission
<a href="mailto:sara.mroz@nrc.gov">sara.mroz@nrc.gov</a>>

#### Bozin, Sunny

From:

Nieh, Ho

Sent:

Friday, March 11, 2011 2:49 PM

To:

Ostendorff, William

Cc:

Warnick, Greg; Franovich, Mike

Subject:

FYI - excerpt from notification issued by Region 4 @ 1421 EST - you may already know most

of this.

Importance:

High

The agency entered Monitoring Mode at 9:46 a.m. EST, on March 11, 2011, in response to a tsunami warning at Diablo Canyon Power Plant, located near San Luis Obispo, California, as a result of the magnitude 8.9 earthquake in Japan. Diablo Canyon declared a Notification of Unusual Event at 4:23 a.m. EST, based on receipt of a tsunami warning from West California Emergency Management. Diablo Canyon anticipates a wave surge of approximately 3 feet at the intake structure. Diablo Canyon is designed to withstand tsunamis to a wave height of 35 feet. The licensee intends to keep both units at full power through the event. The NRC resident inspectors are on site and monitoring plant conditions and licensee actions from the control room.

The effects of the tsunami at San Onofre Nuclear Generating Station are expected to be less severe than at Diablo Canyon. San Onofre is under a tsunami advisory and has not reached any emergency action levels. Both units continue to operate.

The NRC is contacting Program Directors for states impacted by the tsunami. There are no known tsunami impacts to nuclear materials licensees in the affected states or U.S. territories. The NRC is also monitoring the Humboldt Bay spent fuel storage facility. The agency will continue to monitor the situation.

The State of California has been informed. This information has been discussed with licensee management and is current as of 12:19 p.m. EST.

This preliminary notification is issued for information only, and will be updated as more information becomes available.

Ho Nieh Chief of Staff Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission (301) 415-1811 (office)

(b)(6)

(301) 415-1757 (fax) ho.nieh@nrc.gov

#### Thadani, Mohan

From:

Sent:

ANS.HOC@nrc.gov Friday, March 11, 2011 7:30 PM

To:

Thadani, Mohan

Subject:

ACTION: Commissioner's Assistant Briefing Notification

There will be a Commissioner's Assistant Briefing given by Headquarters at 2315 EST concerning the Japan Tsunami event. Call 1-800-772-3842 approximately 5 minutes before the scheduled start time. When prompted, enter security code (b)(6) You may call 301-816-5164 at this time and follow the voice prompts if you do not wish to receive this notification from our Automatic Notification System.

#### Thadani, Mohan

From:

Sent:

ANS.HOC@nrc.gov Friday, March 11, 2011 7:24 PM

Subject:

ACTION: Commissioner's Assistant Briefing Notification

Categories:

Red Category

There will be a Commissioner's Assistant Briefing given by Headquarters at 2315 EST concerning the Japan Tsunami event. Call 1-800-772-3842 approximately 5 minutes before the scheduled start time. When prompted, enter security code (b)(6) You may call 301-816-5164 at this time and follow the voice prompts if you do not wish to receive this notification from our Automatic Notification System.

#### Thadani, Mohan

From:

Sent:

ANS.HOC@nrc.gov Friday, March 11, 2011 12:54 PM

Subject:

ACTION: Commissioner's Assistant Briefing Notification

There will be a Commissioner's Assistant Briefing given by Region4/HQ at 1300 concerning the event Tsunami from Japan. Call 1-800-772-3842 approximately 5 minutes before the scheduled start time. When prompted, enter security code ((b)(6) You may call 301-816-5164 at this time and follow the voice prompts if you do not wish to receive this notification from our Automatic Notification System.

From:

Braisted, Jonathan

To:

Miller, Geoffrey

Cc:

Collins, Elmo; Kennedy, Kriss; Pruett, Troy; Howell. Linda; Wang, Alan; Deese, Rick; Denissen, Christie; Trapp,

James; Dricks, Victor; Uselding, Lara; Polickoski, James; Markley, Michael; Kammerer, Annie; Howell, Art;

Farnholtz, Thomas; Vegel, Anton; Peck, Michael

Subject:

RE: Update - Diablo Canyon UE Following Tsunami Warning

Date:

Friday, March 11, 2011 6:52:57 PM

#### Geoff,

At 1512 hours, DCPP received notice that the tsunami warning for the central California coast had been downgraded to an advisory. At 1528 hours, DCPP made the announcement that they had exited the unusual event. Both units 1 and 2 are currently stable and operating at full power.

Regards,

Jon

From: Braisted, Jonathan

Sent: Friday, March 11, 2011 11:12 AM

To: Miller, Geoffrey

Cc: Collins, Elmo; Kennedy, Kriss; Pruett, Troy; Howell, Linda; Wang, Alan; Deese, Rick; Denissen, Christie; Trapp, James; Dricks, Victor; Uselding, Lara; Polickoski, James; Markley, Michael; Kammerer,

Annie; Howell, Art; Farnholtz, Thomas; Vegel, Anton; Peck, Michael Subject: Update - Diablo Canyon UE Following Tsunami Warning

Α₩,

Update as of 1100 hours PST: The licensee remains in an unusual event for the tsunami warning. Both units are currently stable and operating at full power. The licensee has permitted the night shift to leave via the north access road. The south (Avila Beach) access road remains closed. The licensee has resumed normal watch of the intake building. The attached document shows a plot of predicted and observed water level versus time. The licensee anticipates the tsunami warning will be lifted around noon PST and would then exit the unusual event.

Regards,

Jon

Jonathan D. Braisted Diablo Canyon Resident Office U.S. Nuclear Regulatory Commission (805) 595-2354 - Office

(805) 595-2355 - Fax

From: Peck, Michael

Sent: Friday, March 11, 2011 7:10 AM

To: Miller, Geoffrey

**Cc:** Collins, Elmo; Kennedy, Kriss; Pruett, Troy; Howell, Linda; Wang, Alan; Deese, Rick; Denissen, Christie; Braisted, Jonathan; Trapp, James; Dricks, Victor; Uselding, Lara; Polickoski, James; Markley,

Michael; Kammerer, Annie; Howell, Art; Farnholtz, Thomas; Vegel, Anton **Subject:** FYI: Update - Diablo Canyon UE Following Tsunami Warning

Geoff.

(Update as of 0700 hours PST): The Tsunami is expected to arrive at Diablo Canyon at 0803 hours (PST). The licensee anticipates about a 3 foot wave surge at the plant intake. The Shift Manager decided to maintain both units at full power during the event. The Shift Manager expects about 3 feet NPSH margin for the condenser circulating pumps and about 15 feet margin for the auxiliary saltwater pumps (ultimate heat sink). The Shift Manager has release all non-essential personnel from the site.

County authorities are evacuating low lying coastal areas, including Port St. Luis, Avila Beach, parts of Moore Bay and Pismo Beach.

Michael Peck,

SRI .

From: Peck, Michael

Sent: Friday, March 11, 2011 4:12 AM

To: Miller, Geoffrey

Cc: Collins, Elmo; Kennedy, Kriss; Pruett, Troy; Howell, Linda; Wang, Alan; Deese, Rick; Denissen,

Christie; Braisted, Jonathan; Trapp, James; Dricks, Victor; Uselding, Lara

Subject: FYI: Diablo Canyon - UE Following Tsunami Warning

Geoff,

(Update as of 0400 hours PST): The Diablo Canyon Shift Manager declared an Unusual Event at 0123 hours (PST) on March 11, 2011, after receiving a Tsunami Warning from the West California Emergency Management Agency. The Tsunami Warning was generated after an estimated 8.9 M earthquake occurred off the eastern Japanese coast. The Pacific Gas and Electric Geosciences Department is monitoring reports from ocean buoys and Pacific locations as the Tsunami travels across the Pacific Ocean. Geosciences personnel have concluded that the Tsunami is unlikely to cause damage at either Diablo Canyon or Humboldt Bay facilities. The Shift Manager implemented the station casualty procedure for a Tsunami Warning. These actions included:

- Evacuation of personnel from the station inlet structure (except minimum security watch)
- Briefed control operators on the rapid shutdown procedure
- Established commutations with the San Luis Obispo Emergency Operations Center
- Established Fire Brigade and local command center

The resident inceptors responded to the site following the declaration of the Unusual Event.

Michael Peck, Ph.D. Senior Resident Inspector Diablo Canyon Power Plant Office: (805) 595-2354\_ Cell : (b)(6)

From:

Trapp, James

To:

Wilson, Peter; Barr, Steve

Subject:

FW: Update - Diablo Canyon UE Following Tsunami Warning

Date:

Friday, March 11, 2011 3:21:00 PM

Attachments:

Document.pdf

From: Braisted, Jonathan

**Sent:** Friday, March 11, 2011 2:12 PM

**To:** Miller, Geoffrey

**Cc:** Collins, Elmo; Kennedy, Kriss; Pruett, Troy; Howell, Linda; Wang, Alan; Deese, Rick; Denissen, Christie; Trapp, James; Dricks, Victor; Uselding, Lara; Polickoski, James; Markley, Michael; Kammerer,

Annie; Howell, Art; Farnholtz, Thomas; Vegel, Anton; Peck, Michael **Subject:** Update - Diablo Canyon UE Following Tsunami Warning

All,

Update as of 1100 hours PST: The licensee remains in an unusual event for the tsunami warning. Both units are currently stable and operating at full power. The licensee has permitted the night shift to leave via the north access road. The south (Avila Beach) access road remains closed. The licensee has resumed normal watch of the intake building. The attached document shows a plot of predicted and observed water level versus time. The licensee anticipates the tsunami warning will be lifted around noon PST and would then exit the unusual event.

Regards,

Jon

Jonathan D. Braisted Diablo Canyon Resident Office U.S. Nuclear Regulatory Commission (805) 595-2354 - Office (805) 595-2355 - Fax

From: Peck, Michael

Sent: Friday, March 11, 2011 7:10 AM

To: Miller, Geoffrey

Cc: Collins, Elmo, Kennedy, Kriss; Pruett, Troy; Howell, Linda; Wang, Alan; Deese, Rick; Denissen, Christie; Braisted, Jonathan; Trapp, James; Dricks, Victor; Uselding, Lara; Polickoski, James; Markley,

Michael; Kammerer, Annie; Howell, Art; Farnholtz, Thomas; Vegel, Anton **Subject:** FYI: Update - Diablo Canyon UE Following Tsunami Warning

Geoff,

(Update as of 0700 hours PST): The Tsunami is expected to arrive at Diablo Canyon at 0803 hours

(PST). The licensee anticipates about a 3 foot wave surge at the plant intake. The Shift Manager decided to maintain both units at full power during the event. The Shift Manager expects about 3 feet NPSH margin for the condenser circulating pumps and about 15 feet margin for the auxiliary saltwater pumps (ultimate heat sink). The Shift Manager has release all non-essential personnel from the site.

County authorities are evacuating low lying coastal areas, including Port St. Luis, Avila Beach, parts of Moore Bay and Pismo Beach.

Michael Peck,

SRI

From: Peck, Michael

Sent: Friday, March 11, 2011 4:12 AM

**To:** Miller, Geoffrey

Cc: Collins, Elmo; Kennedy, Kriss; Pruett, Troy; Howell, Linda; Wang, Alan; Deese, Rick; Denissen,

Christie: Braisted, Jonathan; Trapp, James; Dricks, Victor; Uselding, Lara

Subject: FYI: Diablo Canyon - UE Following Tsunami Warning

Geoff,

(Update as of 0400 hours PST): The Diablo Canyon Shift Manager declared an Unusual Event at 0123 hours (PST) on March 11, 2011, after receiving a Tsunami Warning from the West California Emergency Management Agency. The Tsunami Warning was generated after an estimated 8.9 M earthquake occurred off the eastern Japanese coast. The Pacific Gas and Electric Geosciences Department is monitoring reports from ocean buoys and Pacific locations as the Tsunami travels across the Pacific Ocean. Geosciences personnel have concluded that the Tsunami is unlikely to cause damage at either Diablo Canyon or Humboldt Bay facilities. The Shift Manager implemented the station casualty procedure for a Tsunami Warning. These actions included:

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Michael Peck, Ph.D. Senior Resident Inspector Diablo Canyon Power Plant

Office: (805) 595-2354

 $\frac{1}{2}$ (b)(6)

#### Quitter, Michael

From:

Sent:

Lindsey, John C Friday, March 11, 2011 10:30 AM Quitter, Michael; Gerfen, Paula

To: Cc:

Ginn, Michael A. (DCPP)

Subject:

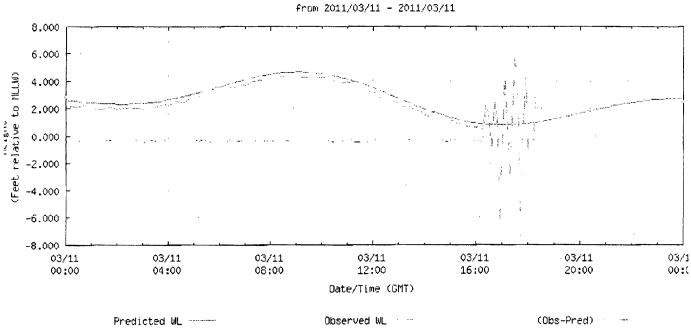
It look's like we may be passed the peak

Attachments:

Picture (Device Independent Bitmap)

It look's like we may be pass the peak

NOAA/NOS/CO-OPS Preliminary Water Level (A1) vs. Predicted Plot 9412110 Port San Luis, CA



From:

Brenner, Eliot

To:

Brenner, Eliot; Sharkey, Jeffry

Cct

Batkin, Joshua; Jaczko, Gregory; Loyd, Susan; Weber, Michael; Schmidt, Rebecca; Powell, Amy; Svinicki, Kristine; Apostolakis, George; Sosa, Belkys; Ostendorff, William; Nieh, Ho; Magwood, William; Bubar, Patrice; Akstulewicz, Brenda; Chandrathil, Prema; McIntyre, David; Screnci, Diane; Harrington, Holly; Couret, Ivonne; Janbergs, Holly; Ledford, Joey; Sheehan, Neil; Hannah, Roger; Burnell, Scott; Uselding, Lara; Shannon,

Valerie; Dricks, Victor; Mitlyng, Viktoria

Subject:

current talking points

Date: Attachments: Friday, March 11, 2011 11:48:13 AM

03 11 QUAKE talk pts3.docx

These talking points are the most current. They will be updated and retransmitted as warranted. A press release is going out shortly regarding the NRC status, and a blog from OPA will be posted.

#### Eliot

Eliot Brenner
Director, Office of Public Affairs
Nuclear Regulatory Commission
Rockville, Md.

O: 301-415-8200

C: (b)(6)

000/12

From:

Burnell, Scott

To:

Brenner, Eliot; Jaczko, Gregory

Cc:

Screnci, Diane; Sheehan, Neil; Hannah, Roger; Ledford, Joey; Mitlyng, Viktoria; Chandrathil, Prema; Uselding,

Lar

Lara; Dricks, Victor; Weil, Jenny; Weber, Michael; Harrington, Holly; McIntyre, David; Couret, Ivonne

Subject: Date: RE: Federal and public communication Friday, March 11, 2011 9:57:57 AM

Attachments:

3 11 QUAKE talk pts2.docx

#### Updated with design requirement info

-----Original Message-----From: Brenner, Eliot

Sent: Friday, March 11, 2011 9:52 AM

To: Jaczko, Gregory Cc: Burnell, Scott

Subject: Re: Federal and public communication

Yes. Fyi: region 4 has gone top monitoring. I have directed issuance of a press release to that effect.

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment 301 415 8200

C:(b)(6)

Sent from my Blackberry

----- Original Message -----From: Jaczko, Gregory To: Brenner, Eliot

Sent: Fri Mar 11 09:45:32 2011

Subject: Re: Federal and public communication

Can you provide me a set of periodically updated set of points because I am getting calls

---- Original Message -----From: Brenner, Eliot

To: Weber, Michael; Jaczko, Gregory

Cc: Batkin, Joshua; Mamish, Nader; Virgilio, Martin; Collins, Elmo; Leeds, Eric

Sent: Fri Mar 11 09:42:10 2011

Subject: RE: Federal and public communication

Our talking points are distributed for use agencywide, and there is a government-wide communicators conference call in a few minutes that OPA will monitor.

----Original Message-----From: Weber, Michael

Sent: Friday, March 11, 2011 9:41 AM To: Jaczko, Gregory; Brenner, Eliot

Cc: Batkin, Joshua; Mamish, Nader; Virgilio, Martin; Collins, Elmo; Leeds, Eric

Subject: Response - Federal and public communication

We're on it. I'm in the Ops Center. We have completed Federal agency notifications and are coordinating with the NRCC.

----- Original Message -----From: Jaczko, Gregory

To: Weber, Michael; Brenner, Eliot

Cc: Batkin, Joshua

Sent: Fri Mar 11 09:25:49 2011

Subject: Federal and public communication

I would like a written update by 10 for the status of us licensees and our best and accurate info for japan that could be distributed to public and fed family. Also I need a 1 page set of talking points with the most important points as soon as possible.

Thanks

#### **OPA**

#### TALKING POINTS

## MARCH 11, 2011 JAPAN EARTHQUAKE AND WEST COAST TSUNAMI As of 4/26/2011 2:56 PM R

- The Nuclear Regulatory Commission is following events on the U.S. West
   Coast and U.S. Pacific interests in the wake of the March 11 earthquake in
   Japan and associated tsunami.
- The NRC resident inspector at the Diablo Canyon nuclear power plant on the central California coast is on site and keeping track of the plant's response to the tsunami warning for that area. The plant is operating normally but has declared an Unusual Event; plant employees are taking preplanned actions to prepare for the predicted tsunami effects. The licensee continues to monitor the event to assess whether additional planned actions,

#### **OPA**

#### TALKING POINTS

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- The NRC resident inspector at the Diablo Canyon nuclear power plant on the central California coast is on site and keeping track of the plant's response to the tsunami warning for that area. The plant is operating normally but has declared an Unusual Event; plant employees are taking preplanned actions to prepare for the predicted tsunami effects. The licensee continues to monitor the event to assess whether additional planned actions,

to include plant shutdown, are appropriate. NRC resident inspector staff is on site monitoring the licensee's activities.

- The San Onofre nuclear power plant on the southern California coast is operating normally and is in the tsunami advisory area.
- The Humboldt Bay spent fuel storage site on the northern California coast is
  in the tsunami warning area; site personnel have informed the NRC they are
  prepared for possible effects.
- The tsunami is expected to miss NRC-regulated nuclear materials sites in Hawaii and Alaska; the NRC remains in contact with these facilities.
- The NRC has regulations in place that require licensees to design their plants to withstand the effects of tsunamis.
   (10CFR 50, Appendix A, Criterion 2, "Design bases for protection against natural phenomenon" requires licensees to designs structures, systems, and components important to safety to withstand the effects of natural phenomenon, including tsunamis.)
- At Diablo Canyon, the plant is safe from a tsunami. The plants ability to
  withstand large waves and the maximum wave height at the intake structure
  were determined through extensive and detailed scaled model wave testing.
  To prevent water from entering the intake structure and affecting the pump
  motors, the structure is equipped with a snorkel valve that can close.
- Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas

with extensive seismic activity are designed for safety in the event of such a natural disaster.

• The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy. In other words, the licensing bases for existing nuclear power plants are based on historical data from the area's maximum credible earthquake, with an additional margin included.

#### **OPA**

#### TALKING POINTS

## MARCH 11, 2011 JAPAN EARTHQUAKE AND WEST COAST TSUNAMI As of 4/26/2011 2:54 PM

- The Nuclear Regulatory Commission is following events on the U.S. West Coast and U.S. Pacific interests in the wake of the March 11 earthquake in Japan and associated tsunami.
- The NRC resident inspector at the Diablo Canyon nuclear power plant on the central California coast is on site and keeping track of the plant's response to the tsunami warning for that area. The plant is operating normally but has declared an Unusual Event; plant employees are taking preplanned actions to prepare for the predicted tsunami effects.
- The San Onofre nuclear power plant on the southern California coast is operating normally and is in the tsunami advisory area.

### **OPA**

### TALKING POINTS

# MARCH 11, 2011 JAPAN EARTHQUAKE AND WEST COAST TSUNAMI As of 4/21/2011 10:25 AM

- The Nuclear Regulatory Commission is following events on the U.S. West
  Coast and U.S. Pacific interests in the wake of the March 11 earthquake in
  Japan and associated tsunami.
- The NRC resident inspector at the Diablo Canyon nuclear power plant on the central California coast is on site and keeping track of the plant's response to the tsunami warning for that area. The plant is operating normally but has declared an Unusual Event; plant employees are taking preplanned actions to prepare for the predicted tsunami effects. The licensee continues to monitor the event to assess whether additional planned actions,

Raiston, Michelle

To:

Harrington, Holly

Cc:

Mroz (Sahm), Sara; Horwitz, Steve; Wright, Lisa (Gibney); Sherwood, Harry; Horwitz, Steve

Subject:

RE: NRC Bloc

Date:

Friday, March 11, 2011 11:22:50 AM

We in Tech Hazards will not be speaking out....only preparing for questions which may come from leadership and sharing information with our partners (NRC/FEMA OPA/FEMA RIX).

Thank you for taking a moment for us. It is appreciated.

Respectfully,

Michelle Ralston

From: prvs=044fe438e=Holly.Harrington@nrc.gov [mailto:prvs=044fe438e=Holly.Harrington@nrc.gov]

On Behalf Of Harrington, Holly

Sent: Friday, March 11, 2011 11:20 AM

To: Ralston, Michelle

Cc: Mroz (Sahm), Sara; Horwitz, Steve; Wright, Lisa (Gibney)

Subject: RE: NRC Blog

As soon as we issue our press release (hopefully soon), I'll get it to you. We'll also get it to FEMA public affairs to get incorporated into whatever large federal response release they're doing

We are, of course, staying in our lane when speaking to the media and will not be speaking for anyone else and hoping no one else speaks for us . . .

For now, we good. (well, as least as good as we can be!)

Thank you,

Holly

From: Raiston, Michelle [mailto:Michelle.Raiston@dhs.gov]

Sent: Friday, March 11, 2011 11:11 AM

To: Harrington, Holly

Cc: Mroz (Sahm), Sara; Horwitz, Steve; Wright, Lisa (Gibney)

Subject: RE: NRC Blog

Hi Holly,

We know that you all are very busy (as are we). I spoke with Sara and Seamus and I believe that we are set-up to share any information that we have.

Is there anything we can do to assist you or is there any information that we may provide?

Thanks.

Respectfully,

Michelle Ralston, MS, PMI
Public Affairs, Stakeholder Outreach & Campaign Planning
Professional Services & Integration
Technological Hazards Division
Protection & National Preparedness
DHS/FEMA
1800 South Bell Street, Rm. 828
Arlington, VA 22202
(202) 212-2310 desk
(202) (b)(6)
(703) 305-0837 facsimile

From: prvs=044fe438e=Holly.Harrington@nrc.gov [mailto:prvs=044fe438e=Holly.Harrington@nrc.gov]

On Behalf Of Harrington, Holly

Sent: Friday, March 11, 2011 10:33 AM

To: Ralston, Michelle

Cc: Mroz (Sahm), Sara; Horwitz, Steve; Wright, Lisa (Gibney)

Subject: RE: NRC Blog

301-415-8203

From: Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]

Sent: Friday, March 11, 2011 9:58 AM

To: Harrington, Holly

Cc: Mroz (Sahm), Sara; Horwitz, Steve; Wright, Lisa (Gibney)

Subject: RE: NRC Blog

Hi Holly,

What is your contact number, please? Thanks.

Respectfully,

Michelle Ralston, MS, PMI
Public Affairs, Stakeholder Outreach & Campaign Planning
Professional Services & Integration
Technological Hazards Division
Protection & National Preparedness
DHS/FEMA
1800 South Bell Street, Rm. 828
Arlington, VA 22202
(202) 212-2310 desk
(202) (b)(6)
(703) 305-0837 facsimile

From: prvs=988ff25ff=Holly.Harrington@nrc.gov [mailto:prvs=988ff25ff=Holly.Harrington@nrc.gov] On

Behalf Of Harrington, Holly

**Sent:** Friday, January 14, 2011 2:08 PM **To:** Ralston, Michelle; Gibney, Lisa **Cc:** Mroz (Sahm), Sara; Horwitz, Steve

Subject: RE: NRC Blog

OPA is managing the blog, yes.

From: Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]

**Sent:** Friday, January 14, 2011 12:24 PM

To: Gibney, Lisa

Cc: Mroz (Sahm), Sara; Harrington, Holly; Horwitz, Steve

Subject: NRC Blog

Hi Lisa,

I just got word that the NRC will be starting a blog. Will your team be involved?

Thanks.

Respectfully,

Michelle Ralston, MS, PMI
Public Affairs, Stakeholder Outreach & Campaign Planning
Professional Services & Integration
Technological Hazards Division
Protection & National Preparedness
DHS/FEMA

1800 South Bell Street, Rm. 828 Crystal City, VA 22202 (202) 212-2310 desk

(2(12) (b)(6)

(703) 305-0837 facsimile

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#### **OIP ITServices Resource**

From:

Breskovic, Clarence

Sent:

Friday, March 11, 2011 1:07 PM

To:

Dembek, Stephen

Subject:

RE: ACTION: Commissioner's Assistant Briefing Notification

Thanks. This is EXACTLY the kind of information I need.

From: Dembek, Stephen

Sent: Friday, March 11, 2011 12:54 PM

To: Breskovic, Clarence; (b)(6)

Subject: FW: ACTION: Commissioner's Assistant Briefing Notification

FYI, just wanted you to be aware of this briefing.

From: ANS.HOC@nrc.gov [mailto:ANS.HOC@nrc.gov]

Sent: Friday, March 11, 2011 12:54 PM

Subject: ACTION: Commissioner's Assistant Briefing Notification

There will be a Commissioner's Assistant Briefing given by Region4/HQ at 1300 concerning the event Tsunami from Japan. Call 1-800-772-3842 approximately 5 minutes before the scheduled start time. When prompted, enter security code (b)(6) You may call 301-816-5164 at this time and follow the voice prompts if you do not wish to receive this notification from our Automatic Notification System.

00/1X

#### Couret, Ivonne

From:

Manoly, Kamal

Sent:

Friday, March 11, 2011 12:47 PM

To:

Couret, Ivonne

Subject:

RE: Reply Requested Media Inquiry - Seismic Issues

Attachments:

image001.qif

If I am not in my office for any reason, call my personal cell  $(b)(\bar{b})$ and I will get on an NRC phone to call you right back.

From: Couret, Ivonne

Sent: Friday, March 11, 2011 12:42 PM

To: Manoly, Kamal

Subject: RE: Reply Requested Media Inquiry - Seismic Issues

Got your message I had just stepped out to get a sandwich here now I did not call you again. Waiting to hear from reporter. Scott might have tried. Ivonne

Ivonne L. Couret Public Affairs Officer Office of Public Affairs



ivonne.couret@nrc.gov

Visit our online photo galiery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

From: Manoly, Kamal

Sent: Friday, March 11, 2011 12:42 PM

To: Couret, Ivonne

Subject: RE: Reply Requested Media Inquiry - Seismic Issues

Ivonne,

I am in my office. I tried to reach you by phone and left a message.

From: Couret, Ivonne

Sent: Friday, March 11, 2011 12:24 PM

To: Hiland, Patrick

Cc: Manoly, Kamal; McGinty, Tim; Leeds, Eric

Subject: RE: Reply Requested Media Inquiry - Seismic Issues

Thanks I'm working on the follow up interviews and I'm support Scott Burnell he is point. Ivonne

Harrington, Holly

To:

McIntyre, James

Subject:

RE: Information on DCPP evacuations

Date:

Friday, March 11, 2011 12:25:00 PM

You're welcome, my dear. Hope all is well with you!

**From:** McIntyre, James [mailto:james.mcintyre1@dhs.gov]

Sent: Friday, March 11, 2011 12:24 PM

To: Harrington, Holly

Subject: RE: Information on DCPP evacuations

Hi Holly,

Thanks

James McIntyre Director, Disaster Operations Division Office of External Affairs Federal Emergency Management Agency Phone: 202-646-3922 Cell: (b)(6)

Email: james.mcintyre1@dhs.gov

From: prvs=044fe438e=Holly.Harrington@nrc.gov [mailto:prvs=044fe438e=Holly.Harrington@nrc.gov]

On Behalf Of Harrington, Holly

**Sent:** Friday, March 11, 2011 12:17 PM

To: Ralston, Michelle; O'Boyle, Seamus; Wright, Lisa (Gibney); Mroz (Sahm), Sara; McIntyre, James

Cc: Barnes, Joshua

Subject: RE: Information on DCPP evacuations

From: Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]

Sent: Friday, March 11, 2011 11:38 AM

To: O'Boyle, Seamus; Harrington, Holly; Wright, Lisa (Gibney); Mroz (Sahm), Sara

Cc: Barnes, Joshua

Subject: FW: Information on DCPP evacuations

ALCON:

Please see the information below. This may be helpful for local CA information.

Respectfully,

Michelle Ralston

From: Sherwood, Harry

Sent: Friday, March 11, 2011 11:12 AM

To: Quinn, Vanessa; Coons, Albert; Fiore, Craig; Ralston, Michelle; Kish, James, Greten, Timothy;

Horwitz, Steve

**Subject:** Information on DCPP evacuations

Here's what I have on evacuation information in the vicinity of Diablo Canyon Power Plant. Waves should be affecting the area by this time.

Areas of Morro Bay have been added to the evacuation list. Those that need to evacuate immediately are:

#### SBA steps in with disaster aid

San Luis Obispo County residents, including homeowners and renters, and businesses affected by the December storms will be able to apply for low-interest federal loans.

Disaster loans of up to \$200,000 are available to homeowners to repair or replace damaged or destroyed real estate, according to officials with the U.S. Small Business Administration, who acted on their own authority to declare a disaster after the state's denial of a request for a major disaster declaration for individual assistance.

Homeowners and renters are eligible for up to \$40,000 to repair or replace damaged or destroyed personal property.

- The 200 to 300 blocks of Atascadero Road;
- All of the Embarcadero, including Tidelands Park and the boat launch.

Areas of coastal San Luis Obispo County are being evacuated this morning due to the possibility of a tsunami causing major flooding in low-lying areas.

Residents, visitors and businesses in Port San Luis, Avila Beach, Pismo Beach, Oceano and Cayucos are being advised by the County Office of Emergency Services to evacuate to high ground immediately.

Specific areas that need to evacuate are:

- All areas of Port San Luis, including the pier, beaches and parking lot;
- All of downtown Avila Beach, including the beach;
- All residents and properties along creeks that flood, including Sycamore Hot Springs, Avila Valley Barn, Avila Hot Springs, Ocean Canyon Pines Resorts and Avila Beach Drive;
- Hidden Creek Canyon Road and Bellevue Orchard Drive residents and Bellevue-Santa Fe school.
- Pismo Coast Village(a temporary evacuation center is being opened in the rear parking lot of the Five Cities Center behind Marshall's);
- All areas of Oceano west of Highway 1 from Grand Avenue south to 24th Street.(a

- temporary evacuation center is being opened in the rear parking lot of the Five Cities Center behind Marshall's);
- Cayucos areas west of the ocean from Old Creek North to Lucerne at Highway 1 (a temporary evacuation center is being opened at St. Joseph's Church)

The County Office of Emergency Services plans to provide more information as soon as possible.

Harry E. Sherwood
Professional Services Branch
Technological Hazards Division

(b)(6) Blackberry

Burnell, Scott

To:

Brenner, Eliot; Hayden, Elizabeth; Harrington, Holly; Couret, Ivonne

Subject:

Fw: HOO HIGHLIGHT - DIABLO CANYON UNUSUAL EVENT

Date:

Friday, March 11, 2011 5:44:35 AM

I heard about the quake shortly after getting up, and I've taken an earlier train to get in to the office as soon as I can. I've suggested to the HOOs they can refer any calls (none yet) to me for the time being. I'm expecting calls similar to last time -- will NRC be assissting, etc.

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

From: HOO Hoc To: HOO Hoc

Sent: Fri Mar 11 05:09:33 2011

Subject: HOO HIGHLIGHT - DIABLO CANYON UNUSUAL EVENT

Diablo Canyon declared a Notice of Unusual Event at 0123 PST due to a Tsunami Warning for the coastal areas of California as a result of a 8.9 magnitude earthquake off the coast of Japan. The Agency remains in the NORMAL response mode as of 0452 EST.

#### Joe O'Hara

Headquarters Operations Officer U.S. Nuclear Regulatory Commission

Phone: 301-816-5100

Fax:

301-816-5151

email: hoo.hoc@nrc.gov

secure e-mail: hool@nrc.sgov.gov



Brenner, Eliot

To:

Hayden, Elizabeth; Akstulewicz, Brenda; Chandrathil, Prema; McIntvre, David; Screnci, Diane; Harrington, Holly; Couret, Ivonne; Janbergs, Holly; Ledford, Joey; Sheehan, Neil; Hannah, Roger; Burnell, Scott; Uselding,

Lara; Shannon, Valerie; Dricks, Victor; Mitlyng, Viktoria

Subject:

update on strategy

Date:

Friday, March 11, 2011 1:54:57 PM

1: we will aim for a 3 p.m. press release making the transition from leaving monitoring in R4 to keeping an eye on things from HQ and standing prepared to assist the Japanese if asked. It will include an expression of condolences from the chairman. We will similarly update the blog. Scott is drafting the release.

- 2: we are looking at the television requests. If we do anything, and it would not be today, it would not be the chairman but more likely someone like Borchardt to discuss how U.S. plants are prepared.
- 3: While one reporter knows or has guessed there are Japanese here in our Ops center in communication with their home authorities, we will NOT make the available and we will NOT volunteer their presence. If anyone knows they are here and wants to talk with them, they will have to make the request through the embassy to have it relayed to these folks.
- 4: NRR is getting tasked with making an overlay of the Japanese conditions (8.9 and whatever the height of the wave was) to see how west coast plants stack up against it, we think preliminarily Diablo would have had no trouble with a wave that size. 8.9 we're not so sure about, but again we are not talking about that.
- 5: It is OK to describe to reporters how reactors work ... but please avoid being quoted even as an NRC person not involved in the Japan thing. Tell folks they can write of their own knowledge (based on what you tell them) and/or point them to pages 34/325 of the Info Digest.

Great work so far. Eliot Brenner Director, Office of Public Affairs Nuclear Regulatory Commission Rockville, Md.

O: 301-415-8200

C: (b)(6)

81/00

#### Uselding, Lara

From:

Uselding, Lara

Sent: To: Friday, March 11, 2011 8:54 AM Burnell, Scott; Harrington, Holly

Subject:

RE: We've entered monitoring mode....Re: IMpact of Japan Quake

I;m on call. Will start on press release.

Lara

----Original Message-----From: Burnell, Scott

Sent: Friday, March 11, 2011 8:51 AM

To: Uselding, Lara; Harrington, Holly; Uselding, Lara

Subject: Re: We've entered monitoring mode....Re: IMpact of Japan Quake

Just sent call details -- yes on press release, you handle that.

#### Sent from an NRC Blackberry

Scott Burnell

(b)(6)

---- Original Message -----

From: Uselding, Lara

To: Burnell, Scott; Harrington, Holly Sent: Fri Mar 11 09:49:34 2011

Subject: We've entered monitoring mode....Re: IMpact of Japan Quake

Do we want to issue release? Decison to come in minutes from plant on their actions.

What call did Eliot mention? How can I get on?

Lara Uselding

NRC Region 4 Public Affairs

(b)(6)

---- Original Message -----

From: Burnell, Scott To: Uselding, Lara

Sent: Fri Mar 11 09:46:20 2011 Subject: Re: IMpact of Japan Quake

Sorry, just missed your call.

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

---- Original Message -----

From: Uselding, Lara

To: Harrington, Holly; Burnell, Scott; Dricks, Victor; Brenner, Eliot

Sent: Fri Mar 11 08:50:17 2011 Subject: RE: IMpact of Japan Quake alia

#### I will do that now-hold tight

----Original Message-----From: Harrington, Holly

Sent: Friday, March 11, 2011 7:47 AM

To: Uselding, Lara; Burnell, Scott; Dricks, Victor; Brenner, Eliot

Subject: RE: IMpact of Japan Quake

Lara -- I sent out generic earthquake talking points. It would be good to have something similar for tsunamis. Do you have access to/have time to pull that together or do you want HQ to do that?

----Original Message----From: Uselding, Lara

Sent: Friday, March 11, 2011 8:46 AM

To: Harrington, Holly; Burnell, Scott; Dricks, Victor; Brenner, Eliot

Subject: Re: IMpact of Japan Quake

I don't mind calling him- just left scott message- let me know! Lara Uselding NRC Region 4 Public Affairs

(b)(6)

---- Original Message -----From: Harrington, Holly

To: Burnell, Scott; Uselding, Lara; Dricks, Victor

Sent: Fri Mar 11 08:28:48 2011 Subject: RE: IMpact of Japan Quake

Call him on his cell, not office number BTW

----Original Message-----From: Burnell, Scott

Sent: Friday, March 11, 2011 8:27 AM

To: Harrington, Holly, Uselding, Lara; Dricks, Victor

Subject: Re: IMpact of Japan Quake

Importance: High

I can respond if lara and victor are occupied.

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

---- Original Message -----From: Harrington, Holly

To: Burnell, Scott; Uselding, Lara; Dricks, Victor

Sent: Fri Mar 11 08:24:29 2011 Subject: FW: IMpact of Japan Quake

Does anyone have into to give him?

----Original Message-----From: OPA Resource

Sent: Friday, March 11, 2011 8:24 AM

To: Harrington, Holly

Subject: FW: IMpact of Japan Quake

----Original Message-----

From: Tracy, Ryan [mailto:Ryan.Tracy@dowjones.com]

Sent: Friday, March 11, 2011 8:23 AM

To: OPA Resource

Subject: IMpact of Japan Quake

GOod morning,

I'm a reporter with Dow Jones. Trying to get information on an immediate deadline about possible shutdowns and nuclear plants on the West Coasts as a result of this earthquake and tsunami.

Was there any shutdown/other action at the Diablo Canyon plant in central California or any other West Coast facilities as a result of the earthquake? If so, what was the reason for the shutdown and how long can we expect it to continue?

Best, Ryan

Ryan Tracy | Reporter

Dow Jones Newswires | The Wall Street Journal
office 202.862.9245 | cell (b)(6) | ryan.tracy@dowjones.com

#### Uselding, Lara

From:

Uselding, Lara

Sent:

Friday, March 11, 2011 1:23 PM

To:

outreach@ans.org

Subject:

NRC - INCORRECT NEWS ITEM ON YOUR SITE!

Attachments:

11-042FINAL.docx

Importance:

High

Hello: Attached is the NRC press release from earlier stating that both California plants remain on line and have been so since the Japanese earthquake and subsequent tsunami. The ELP link is incorrect on your nuclear café site. The plants have not shutdown today.

Lara Uselding
NRC Public Affairs
Cell: (b)(6)

No. 11-042

March 11, 2011

## NRC MONITORS NOTICE OF UNUSUAL EVENT AT DIABLO CANYON POWER PLANT, TSUNAMI ISSUES

The U.S. Nuclear Regulatory Commission, through its regional office in Arlington, Tex., is monitoring a notice of unusual event (NOUE) at the Diablo Canyon Power Plant, located near San Luis Obispo, Calif. Senior NRC officials are working at the agency's Rockville, Md., headquarters to coordinate NRC activities with respect to the Japanese earthquake and subsequent tsunami.

"The NRC is closely monitoring this situation as it unfolds with respect to nuclear facilities within the United States. NRC staff is working closely with its resident inspectors who are on site to ensure safe operations," said NRC Chairman Gregory Jaczko.

Pacific Gas and Electric Co. (PG&E), operator of the Diablo Canyon two-reactor plant, declared a precautionary NOUE Unusual Event at 4:23 a.m. EST today after receiving a tsunami warning from the West California Emergency Management Agency. The tsunami warning was generated after an estimated 8.9 magnitude earthquake occurred off the eastern Japanese coast.

The licensee reported the Diablo Canyon plant is stable and both units remain on line. The plant is well protected against tsunami conditions as required by NRC regulations. The NRC has staff at the plant keeping track of the plant's response.

Nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area.

In addition to the Diablo Canyon plant, the NRC is also monitoring the San Onofre nuclear power plant, the Humboldt Bay spent fuel storage site and NRC-regulated nuclear materials sites in Hawaii and Alaska to name a few. Site personnel have informed the NRC they are prepared for possible tsunami effects.

News releases are available through a free *listserv* subscription at the following Web address: <a href="http://www.nrc.gov/public-involve/listserver.html">http://www.nrc.gov/public-involve/listserver.html</a>. The NRC homepage at <a href="http://www.nrc.gov">www.nrc.gov</a> also offers a SUBSCRIBE link. E-mail notifications are sent to subscribers when news releases are posted to NRC's Web site.

Harrington, Holly

10;

Burnell, Scott; Brenner, Eliot; Hayden, Elizabeth

Subject:

RE: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

Date:

Friday, March 11, 2011 8:23:00 AM

Diane called and asked for generic earthquake talking points. I've pulled this from our seismic backgrounder. Scott -- any problem with me getting this to the regions as an initial talking point to be expanded with whatever info you've gotten?

Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.

The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy.

The licensing bases for existing nuclear power plants are based on historical data at each site. This data is used to determine design basis loads from the area's maximum credible earthquake, with an additional margin included.

----Original Message-----

From: Burnell, Scott

Sent: Friday, March 11, 2011 8:21 AM

To: Brenner, Eliot, Harrington, Holly; Hayden, Elizabeth

Subject: Re: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

Nader says the japanese are taking us up on the offer to "host" the folks here in Ops Ctr. I'll discuss possible press release after briefing.

Sent from an NRC Blackberry

Scott Burnell (b)(6)

----- Original Message -----

From: Mamish, Nader

To: Burnell, Scott; Brenner, Eliot; Harrington, Holly; Hayden, Elizabeth

Cc: Weber, Michael; Sheron, Brian; Uhle, Jennifer

Sent: Fri Mar 11 07:35:21 2011

Subject: RE: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

Yes; I have reached out to the NRC OPS center to work it out ...

-----Original Message-----

From: Burnell, Scott

Sent: Friday, March 11, 2011 7:33 AM

To: Mamish, Nader; Brenner, Eliot; Harrington, Holly; Hayden, Elizabeth

Cc: Weber, Michael; Sheron, Brian; Uhle, Jennifer

Subject: Re: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

Are we offering video/teleconferencing to help them stay in contact?

Sent from an NRC Blackberry

Scott Burnell

(b)(6

00/2/

---- Original Message -----From: Mamish, Nader

To: Brenner, Eliot; Harrington, Holly; Burnell, Scott; Hayden, Elizabeth

Cc: Weber, Michael; Sheron, Brian; Uhle, Jennifer

Sent: Fri Mar 11 07:27:46 2011

Subject: FW: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

#### FYI

----Original Message-----

From: Foggie, Kirk

Sent: Friday, March 11, 2011 5:15 AM To: Doane, Margaret; Mamish, Nader

Cc: Abrams, Charlotte

Subject: Fw: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

FYI. I will send any additional information to you via email.

There are about 5 NISA/JNES seismic specialist in D.C. meeting with RES today. I hope RES allows them to postpone the meeting and offers to provide assistance where possible.

Kirk

Sent from Blackberry.

---- Original Message -----

From: bannai-toshihiro@meti.go.jp <bannai-toshihiro@meti.go.jp>

To: Foggie, Kirk

Cc: Hidehiko Yamachika <yamachika-hidehiko@jnes-usa.org>

Sent: Fri Mar 11 03:15:12 2011

Subject: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

Dear Kirk-san,

Sorry for my frequent e-mail.

10 NPPs in Japan were automatically shut down in consequence of an earthquake occurring at 14:46 on 11th of March JST.

Attached is a prompt report from NISA sent diplomatically.

FYI.

Toshihiro

Burnell, Scott

Brenner, Eliot; Harrington, Holly; Hayden, Elizabeth; Mamish, Nader

Subject:

Re: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

Date:

Friday, March 11, 2011 7:43:16 AM

Of course, this won't be shared outside the building for now.

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

---- Original Message -----From: Mamish, Nader

To: Burnell, Scott; Brenner, Eliot; Harrington, Holly; Hayden, Elizabeth

Cc: Weber, Michael; Sheron, Brian; Uhle, Jennifer

Sent: Fri Mar 11 07:35:21 2011

Subject: RE: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

Yes; I have reached out to the NRC OPS center to work it out ...

----Original Message----

From: Burnell, Scott

Sent: Friday, March 11, 2011 7:33 AM

To: Mamish, Nader; Brenner, Eliot; Harrington, Holly; Hayden, Elizabeth

Cc: Weber, Michael; Sheron, Brian; Uhle, Jennifer

Subject: Re: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

Are we offering video/teleconferencing to help them stay in contact?

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

---- Original Message -----From: Mamish, Nader

To: Brenner, Eliot; Harrington, Holly; Burnell, Scott; Hayden, Elizabeth

Cc: Weber, Michael; Sheron, Brian; Uhle, Jennifer

Sent: Fri Mar 11 07:27:46 2011

Subject: FW: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

FYI

----Original Message----

From: Foggie, Kirk

Sent: Friday, March 11, 2011 5:15 AM To: Doane, Margaret; Mamish, Nader

Cc: Abrams, Charlotte

Subject: Fw: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

FYI. I will send any additional information to you via email.

There are about 5 NISA/JNES seismic specialist in D.C. meeting with RES today. I hope RES allows them to postpone the meeting and offers to provide assistance where possible.

Kirk

Sent from Blackberry.

---- Original Message -----

From: bannai-toshihiro@meti.go.jp <bannai-toshihiro@meti.go.jp>

To: Foggie, Kirk

Cc: Hidehiko Yamachika <yamachika-hidehiko@jnes-usa.org>

Sent: Fri Mar 11 03:15:12 2011

Subject: Effect of the earthquake on the Nuclear Facilities in North-east area of Japan

Dear Kirk-san,

Sorry for my frequent e-mail.

10 NPPs in Japan were automatically shut down in consequence of an earthquake occurring at 14:46 on 11th of March JST.

Attached is a prompt report from NISA sent diplomatically.

FYI.

Toshihiro

Uselding, Lara

To:

Harrington, Holly; Burnell, Scott; Hayden, Elizabeth; Brenner, Eliot

Cc:

Dricks, Victor

Subject:

Re: [wgpcnews] FW: OECD/NEA - WGPC Secretariat - Japan Friday 11 March 13:45 UTC - Evacuation order to

residents

Date:

Friday, March 11, 2011 8:38:07 AM

As of right now, DC remains at full power but that could change pending what's happening now with tsunami hitting coast

RIV RA has decided to remain as has HQ that we are in NORMAL mode

Avila beach road (leads into plant) has been closed so only essential personnel are on site County is currently evacuating low rise areas

The licensee is currently assesing what the impact could be from an expected 1-2 meter rise Lara Uselding

NRC Region 4 Public Affairs

(b)(6)

From: Harrington, Holly

To: Burnell, Scott; Hayden, Elizabeth; Brenner, Eliot

Cc: Uselding, Lara

Sent: Fri Mar 11 08:16:26 2011

Subject: RE: [wgpcnews] FW: OECD/NEA - WGPC Secretariat - Japan Friday 11 March 13:45 UTC -

Evacuation order to residents

Scott – Pls make talking points ASAP for use by the regions.

We have received no media calls as yet here in HQ.

We'll wait for Lara to give us talking points regarding West Coast plants

From: Burnell, Scott

**Sent:** Friday, March 11, 2011 8:08 AM

**To:** Hayden, Elizabeth; Brenner, Eliot; Harrington, Holly

Subject: Re: [wgpcnews] FW: OECD/NEA - WGPC Secretariat - Japan Friday 11 March 13:45 UTC -

Evacuation order to residents

Yes -- I'm in Ops Ctr for briefing.

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

From: Hayden, Elizabeth

To: Brenner, Eliot: Harrington, Holly; Burnell, Scott

Sent: Fri Mar 11 08:07:05 2011

Subject: Fw: [wgpcnews] FW: OECD/NEA - WGPC Secretariat - Japan Friday 11 March 13:45 UTC -

Evacuation order to residents

Assume we have our TPs on west coast plant protection against tsunami/earthquakes ready.

From: Jean.GAUVAIN@oecd.org < Jean.GAUVAIN@oecd.org>

**To**: wgpcnews@oecd-nea.org <wgpcnews@oecd-nea.org>

**Cc**: add-cnra@oecd-nea.org <add-cnra@oecd-nea.org>; add-cnra-o@oecd-nea.org <add-cnra-o@oecd-nea.org>; add-wgip@oecd-nea.org <add-cnra-wgoe@oecd-nea.org>; add-cnra-wgoe@oecd-nea.org>; add-csni@oecd-nea.org <add-csni@oecd-nea.org>; add-csni@oecd-nea.org>; add-csni@oecd-

o@oecd-nea.org <add-csni-o@oecd-nea.org>; add-iage@oecd-nea.org <add-iage@oecd-nea.org>;

Javier.REIG@oecd.org <Javier.REIG@oecd.org>; Diane.JACKSON@oecd.org

<Diane.JACKSON@oecd.org>; Greg.LAMARRE@oecd.org <Greg.LAMARRE@oecd.org>;

Alejandro.HUERTA@oecd.org <Alejandro.HUERTA@oecd.org>; add-iageseism@oecd-nea.org <add-

iageseism@oecd-nea.org>

**Sent**: Fri Mar 11 07:51:59 2011

Subject: [wgpcnews] FW: OECD/NEA - WGPC Secretariat - Japan Friday 11 March 13:45 UTC -

Evacuation order to residents

WGPC Members

Cc CNRA, CSNI, WGOE, WGIP, IAGE, IAGESEISM

Please read below update and correction to previous message

Jean Gauvain - NEA/NSD - Phone +33 1 45 24 10 52 - (b)(6)

From: Akihiro YAMAMOTO [mailto:a-yamamoto@houshasen.tsuruga.fukui.jp]

**Sent:** Friday, March 11, 2011 13:41

Subject: [Yama] Evacuation order to residents

The people of a town near Fukushima Daiiichi Units (Within 2 km) were ordered to evacuate their homes.

I was mentioned previous emails with regard to ECCS but I think this is very strange that ECCS are really being driven even diesel generators has failed to start.

Please correct that following plants are just in the emergency mode and not in the ECCS mode.

Fukushima 1-1 - State of emergency

Fukushima 1-2 - Call off the emergency

Fukushima 1-3 - State of emergency

Fukushima 2-1 - State of emergency

Fukushima 2-2 - State of emergency

Fukushima 2-4 - State of emergency

#### Yama

#### Akihiro YAMAMOTO

Ageing Management Specialist, Nucleas Safety Measurement Division Fakui Prefectoral Government

Telephone: +81 (0) 776 20 0314

E-mail: a-yamamoto@houshasen.tsuruga.fukui.jp

**From:** Akihiro YAMAMOTO [mailto:a-yamamoto@houshasen.tsuruga.fukui.jp]

Sent: Friday, March 11, 2011 8:00 PM

To: 'Akihiro YAMAMOTO'; Jean.GAUVAIN@oecd.org

Cc: Javier.REIG@oecd.org; Luis.ECHAVARRI@oecd.org; Uichiro.YOSHIMURA@oecd.org;

Serge.GAS@oecd.org; Axel.BREEST@oecd.org; Elisabeth.MAUNY@oecd.org; Greg.LAMARRE@oecd.org;

Radomir.REHACEK@oecd.org; Alejandro.HUERTA@oecd.org; Diane.JACKSON@oecd.org;

Jean.GAUVAIN@oecd.org; John.NAKOSKI@oecd.org; Philippe.GRESS@oecd.org;

Lawrence.BURKHART@oecd.org; 'Carlo Vitanza'; Abdallah.amri@oecd.org Subject: [Yama] Situation update (19:45 Japan time)

NISA is now holding a press conference.

Fukushima 1-1 (ECCS mode)

Fukushima 1-2 (ECCS mode) - Call off the emergency

Fukushima 1-3 (ECCS mode)

Fukushima 2-1 (ECCS mode)

The problem is that they can't monitor water injection (ECCS). It might be a problem of the monitoring system.

In fact, TEPCO called off the emergency of unit 1-2 a while ago because they are able to monitoring the water level in the reactor now.

#### Yama

#### Akihiro YAMAMOTO

Againg Management Specialist Nuclear Safety Measurement Division. Eukui Prefectural Government

Telephone: +81 (0) 776 20 0314

E-mail: a-yamamoto@houshasen.tsuruga.fukui.jp 

From: Akihiro YAMAMOTO [mailto:a-yamamoto@houshasen.tsuruga.fukui.jp]

Sent: Friday, March 11, 2011 7:30 PM

To: 'Jean.GAUVAIN@oecd.org'

**Cc:** 'Javier.REIG@oecd.org'; 'Luis.ECHAVARRI@oecd.org'; 'Uichiro.YOSHIMURA@oecd.org'; 'Lydie.GUYOT@oecd.org'; 'Marie-Laure.PEYRAT@oecd.org'; 'Serge.GAS@oecd.org'; 'Axel.BREEST@oecd.org'; 'Elisabeth.MAUNY@oecd.org'; 'Greg.LAMARRE@oecd.org';

'Radomir.REHACEK@oecd.org'; 'Alejandro.HUERTA@oecd.org'; 'Diane.JACKSON@oecd.org';

'Jean.GAUVAIN@oecd.org'; 'John.NAKOSKI@oecd.org'; 'Philippe.GRESS@oecd.org';

'Lawrence.BURKHART@oecd.org'; 'Nicolina.IANNOLO@oecd.org'; 'Roopa.CHAUHAN@oecd.org';

'christele.tephanympania@oecd.org'; 'Aileen.LITTLE@oecd.org'; 'Carlo Vitanza'; 'Abdallah.amri@oecd.org'

Subject: [Yama] Situation now - ECCS mode

Dear all,

TEPCO (Tokyo Electric Power Company) declared the state of emergency of following NPPs:

Fukushima 1-1

Fukushima 1-2

Fukushima 1-3

Fukushima 2-1 (ECCS mode now)

am trying to get information why DG can't start up (problem of intake sea water for the cooling DG system?)

There is a fire from turbine building (B1 floor) at Onagawa NPP unit 1 but the fire fighting was completely succeded.

http://www.vomiuri.co.jp/dv/national/20110311dy01.htm

A while ago, Fukui (my office located) had also earthquake (M4.1). We have 15 NPPs but no damage to the NPPs.

#### Yama

<del></del>

#### Akihiro YAMAMOTO

Againg Management Specialist, Nuclear Safety Measurement Division Fukui Prefectival Government

Telephone: +81 (0) 776 20 0314

E-mail: a-yamamoto@houshasen.tsuruga.fukui.jp

Uselding, Lara

To:

Burnell, Scott; Harrington, Holly; Brenner, Eliot

Subject:

RE: Updated with a couple of talkers on tsunami and DC specifically 3\_11\_QUAKE\_talk\_pts.docx

Date:

Friday, March 11, 2011 9:53:34 AM

I have not sent anything up to HQ, merely mentioning that NSIR is looking for something and if you allwant to share ours, letting you know if the request. Linda has a copy of what you sent me just she is in the loop on our messaging. Once again, below are additional talkers as you requested if you want to add to your docuemtn.

- The NRC has regulations in place that require licensees to design their plants to withstand the effects of tsunamis.
   (10CFR 50, Appendix A, Criterion 2, "Design bases for protection against natural phenomenon" requires licensees to designs structures, systems, and components important to safety to withstand the effects of natural phenomenon, including tsunamis.)
- At Diablo Canyon, the plant is safe from a tsunami. The plants ability to withstand large waves and the maximum wave height at the intake structure were determined through extensive and detailed scaled model wave testing. To prevent water from entering the intake structure and affecting the pump motors, the structure is equipped with a snorkel valve that can close.
- Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.
- The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy. In other words, the licensing bases for existing nuclear power plants are based on historical data from the area's maximum credible earthquake, with an additional margin included.

00/22

#### Lara

From: Burnell, Scott

**Sent:** Friday, March 11, 2011 8:49 AM

To: Uselding, Lara; Harrington, Holly; Brenner, Eliot

Subject: Re: Updated with a couple of talkers on tsunami and DC specifically

3\_11\_QUAKE\_talk\_pts.docx

Chairman's office already had our talking points. I'm coordinating talking pts -- Pls suggest added items to me in future.

Sent from an NRC Blackberry Scott Burnell

(b)(6)

From: Uselding, Lara

To: Burnell, Scott; Harrington, Holly Sent: Fri Mar 11 09:45:21 2011

Subject: Updated with a couple of talkers on tsunami and DC specifically 3\_11\_QUAKE\_talk\_pts.docx

Linda Howell got a call from NSIR looking for something to give the Chairman. I shared the attached talkers (I included my few bullets on tsunami and DC) with Linda. She was asked by NSIR if she had anything she could give them.

Do you all want to send a copy to Jane Marshall at NSIR? Linda mentioned that we at OPA had some prepared. I mentioned that OPA was coordinating with the Chairman's office with our message.

Let me know,

Lara

From: To: Harrington, Holly Stahl, Eric

Subject:

RE: Blog post comment

Date:

Friday, March 11, 2011 8:40:00 AM

Great. I'll get that up this morning.

From: Stahl, Eric

Sent: Friday, March 11, 2011 8:40 AM

To: Harrington, Holly

Subject: RE: Blog post comment

Holly -

I think your response is fine. Slight tweak:

The NRC is very involved in nonproliferation activities and works with other federal agencies in this area. For more information on what the NRC is doing, please see: <a href="http://www.nrc.gov/about-nrc/ip/intl-safeguards.html">http://www.nrc.gov/about-nrc/ip/intl-safeguards.html</a>.

From: Harrington, Holly

Sent: Thursday, March 10, 2011 2:22 PM

To: Stahl, Eric

Subject: RE: Blog post comment

Do you want me to put up my suggested response or wait? Tomorrow would be OK, too . . .

From: Stahl, Eric

Sent: Thursday, March 10, 2011 9:29 AM

To: Harrington, Holly

Subject: Re: Blog post comment

I forwarded your earlier email to other staff in my office asking for help. If they can put something together this morning I will pass it along. If not, then what you put together should be fine.

Thanks, Eric

Eric Stahl
Office of International Programs
U.S. Nuclear Regulatory Commission

Sent from NRC Blackberry

00/23

From: Harrington, Holly

To: Stahl, Eric

**Sent**: Thu Mar 10 09:25:05 2011 **Subject**: RE: Blog post comment

What if we do something easy like this:

The NRC is very involved in nonproliferation activities, in addition to many other federal agencies active in this area. More information on what the NRC is doing, please go here: http://www.nrc.gov/about-nrc/ip/intl-safeguards.html

From: Stahl, Eric

Sent: Thursday, March 10, 2011 9:19 AM

To: Harrington, Holly

Subject: Re: Blog post comment

Holly -

I am totally tied up with the RIC and bilateral meetings all day. I don't think I can write a response until tomorrow afternoon at the earliest. Can it wait until then? If not, I'll see if I can get someone else to put something together sooner.

Eric

Eric Stahl
Office of International Programs
U.S. Nuclear Regulatory Commission

Sent from NRC Blackberry

From: Harrington, Holly

To: Stahl, Eric

Sent: Thu Mar 10 09:13:35 2011 Subject: Blog post comment

Later today, I'm going to post this comment to your post:

so what action have you taken against nuclear proliferates .. just nothing so what is the need for this

obviously not very literate, but it gives us an opportunity to answer the question – how does the NRC contribute to nonproliferation. Can you work on an answer and then I can put them up roughly at the same time.

Thank you!!!

From: To:

Harrington, Holly Akstulewicz, Brenda RE: NRC press release

Subject:

Friday, March 11, 2011 11:34:00 AM

Date:

Can you tell me when this goes out and provide me a copy with yellow?? gracias

From: Akstulewicz, Brenda

Sent: Friday, March 11, 2011 11:30 AM

To: Akstulewicz, Brenda; Brenner, Eliot; Jaczko, Gregory

Cc: Hayden, Elizabeth; Batkin, Joshua; Loyd, Susan; Weber, Michael; james.mcintyre1@dhs.gov; Powell, Amy; Schmidt, Rebecca; Chandrathil, Prema; McIntyre, David; Screnci, Diane; Harrington, Holly; Couret, Ivonne; Janbergs, Holly; Ledford, Joey; Sheehan, Neil; Hannah, Roger; Burnell, Scott; Uselding,

Lara; Shannon, Valerie; Dricks, Victor; Mitlyng, Viktoria

**Subject:** RE: NRC press release

Please note – change "tusnamis" changed to tsunamis.

From: Akstulewicz, Brenda

Sent: Friday, March 11, 2011 11:24 AM

To: Akstulewicz, Brenda; Brenner, Eliot; Jaczko, Gregory

Cc: Hayden, Elizabeth; Batkin, Joshua; Loyd, Susan; Weber, Michael; 'james.mcintyre1@dhs.gov'; Powell, Amy; Schmidt, Rebecca; Chandrathil, Prema; McIntyre, David; Screnci, Diane; Harrington, Holly; Couret, Ivonne; Janbergs, Holly; Ledford, Joey; Sheehan, Neil; Hannah, Roger; Burneii, Scott; Useiding,

Lara; Shannon, Valerie; Dricks, Victor; Mitlyng, Viktoria

Subject: RE: NRC press release

Attached contains minor corrections.

From: Akstulewicz, Brenda

Sent: Friday, March 11, 2011 11:14 AM To: Brenner, Eliot; Jaczko, Gregory

Cc: Hayden, Elizabeth; Batkin, Joshua; Loyd, Susan; Weber, Michael; james.mcintyre1@dhs.gov; Powell, Amy; Schmidt, Rebecca; Chandrathil, Prema; McIntyre, David; Screnci, Diane; Harrington, Holly; Couret, Ivonne; Janbergs, Holly; Ledford, Joey; Sheehan, Neil; Hannah, Roger; Burnell, Scott; Uselding,

Lara; Shannon, Valerie; Dricks, Victor; Mitlyng, Viktoria

Subject: RE: NRC press release

With attachment!

From: Brenner, Eliot

Sent: Friday, March 11, 2011 11:12 AM

To: Jaczko, Gregory

Cc: Hayden, Elizabeth; Batkin, Joshua; Loyd, Susan; Weber, Michael; james.mcintyre1@dhs.gov; Powell, Amy; Schmidt, Rebecca; Akstulewicz, Brenda; Chandrathil, Prema; McIntyre, David; Screnci, Diane; Harrington, Holly; Couret, Ivonne; Janbergs, Holly; Ledford, Joey; Sheehan, Neil; Hannah, Roger; Burnell, Scott: Uselding, Lara; Shannon, Valerie; Dricks, Victor; Mitlyng, Viktoria

**Subject:** NRC press release

Following will be transmitted from NRC in about 10 minutes.

Holly: Pls use this and talking points to assemble a short blog post.

00/24

OPA is coordinating with other federal players at our level.

Eliot Brenner Director, Office of Public Affairs **Nuclear Regulatory Commission** Rockville, Md. O: 301-415-8200

C: (b)(6)



## NRC NEWS

#### U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Telephone: 301/415-8200
Washington, D.C. 20555-0001
E-mail: opa.resource@nrc.gov Site: www.nrc.gov
Blog: http://public-blog.nrc-gateway.gov

No. 11-042 March 11, 2011

## NRC MONITORS NOTICE OF UNUSUAL EVENT AT DIABLO CANYON POWER PLANT, TSUNAMI ISSUES

The U.S. Nuclear Regulatory Commission, through its regional office in Arlington, Tex., is monitoring a notice of unusual event (NOUE) at the Diablo Canyon Power Plant, located near San Luis Obispo, Calif. Senior NRC officials are working at the agency's Rockville, Md., headquarters to coordinate NRC activities with respect to the Japanese earthquake and subsequent tsunami.

"The NRC is closely monitoring this situation as it unfolds with respect to nuclear facilities within the United States. NRC staff is working closely with its resident inspectors who are on site to ensure safe operating," said NRC Chairman Gregory Jaczko.

Pacific Gas and Electric Co. (PG&E), operator of the Diablo Canyon two-reactor plant, declared a precautionary NOUE Unusual Event at 4:23 a.m. EST today after receiving a tsunami warning from the West California Emergency Management Agency. The tsunami warning was generated after an estimated 8.9 magnitude earthquake occurred off the eastern Japanese coast.

The licensee reported the Diablo Canyon plant is stable and both units remain on line. The plant is well protected against tsunami conditions as required by NRC regulations. The NRC has staff at the plant keeping track of the plant's response.

Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area.

In addition to the Diablo Canyon plant, the NRC is also monitoring the San Onofre nuclear power plant, the Humboldt Bay spent fuel storage site and NRC-regulated nuclear materials sites in Hawaii and Alaska to name a few. Site personnel have informed the NRC they are prepared for possible tsunami effects.

#### ###

News releases are available through a free *listserv* subscription at the following Web address: <a href="http://www.nrc.gov/public-involve/listserver.html">http://www.nrc.gov/public-involve/listserver.html</a>. The NRC homepage at <a href="www.nrc.gov">www.nrc.gov</a> also offers a SUBSCRIBE link. E-mail notifications are sent to subscribers when news releases are posted to NRC's Web site.



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Burnell, Scott

To:

Uselding, Lara; Harrington, Holly; Uselding, Lara

Subject:

Re: We"ve entered monitoring mode....Re: IMpact of Japan Quake

Date:

Friday, March 11, 2011 9:51:02 AM

Just sent call details -- yes on press release, you handle that.

Sent from an NRC Blackberry Scott Burnell

(b)(6)

---- Original Message -----From: Uselding, Lara

To: Burnell, Scott; Harrington, Holly Sent: Fri Mar 11 09:49:34 2011

Subject: We've entered monitoring mode....Re: IMpact of Japan Quake

Do we want to issue release? Decison to come in minutes from plant on their actions.

What call did Eliot mention? How can I get on?

Lara Uselding

NRC Region 4 Public Affairs

(b)(6)

---- Original Message -----From: Burnell, Scott

To: Uselding, Lara

Sent: Fri Mar 11 09:46:20 2011 Subject: Re: IMpact of Japan Quake

Sorry, just missed your call.

Sent from an NRC Blackberry

Scott Burnell

---- Original Message -----From: Uselding, Lara

To: Harrington, Holly; Burnell, Scott; Dricks, Victor; Brenner, Eliot

Sent: Fri Mar 11 08:50:17 2011 Subject: RE: IMpact of Japan Quake

I will do that now-hold tight

----Original Message-----From: Harrington, Holly

Sent: Friday, March 11, 2011 7:47 AM

To: Uselding, Lara; Burnell, Scott; Dricks, Victor; Brenner, Eliot

Subject: RE: IMpact of Japan Quake

Lara -- I sent out generic earthquake talking points. It would be good to have something similar for tsunamis. Do you have access to/have time to pull that together or do you want HQ to do that?

----Original Message-----

From: Uselding, Lara

Sent: Friday, March 11, 2011 8:46 AM

00/25

To: Harrington, Holly; Burnell, Scott; Dricks, Victor; Brenner, Eliot

Subject: Re: IMpact of Japan Quake

I don't mind calling him- just left scott message- let me know!

Lara Uselding

NRC Region 4 Public Affairs

(b)(6)

---- Original Message ----- From: Harrington, Holly

To: Burnell, Scott; Uselding, Lara; Dricks, Victor

Sent: Fri Mar 11 08:28:48 2011 Subject: RE: IMpact of Japan Quake

Call him on his cell, not office number BTW

----Original Message-----From: Burnell, Scott

Sent: Friday, March 11, 2011 8:27 AM

To: Harrington, Holly; Uselding, Lara; Dricks, Victor

Subject: Re: IMpact of Japan Quake

Importance: High

I can respond if lara and victor are occupied.

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

---- Original Message -----From: Harrington, Holly

To: Burnell, Scott; Uselding, Lara; Dricks, Victor

Sent: Fri Mar 11 08:24:29 2011 Subject: FW: IMpact of Japan Quake

Does anyone have into to give him?

----Original Message-----From: OPA Resource

Sent: Friday, March 11, 2011 8:24 AM

To: Harrington, Holly

Subject: FW: IMpact of Japan Quake

----Original Message----

From: Tracy, Ryan [mailto:Ryan.Tracy@dowjones.com]

Sent: Friday, March 11, 2011 8:23 AM

To: OPA Resource

Subject: IMpact of Japan Quake

GOod morning,

I'm a reporter with Dow Jones. Trying to get information on an immediate deadline about possible shutdowns and nuclear plants on the West Coasts as a result of this earthquake and tsunami.

Was there any shutdown/other action at the Diablo Canyon plant in central California or any other West Coast facilities as a result of the earthquake? If so, what was the reason for the shutdown and how long can we expect it to continue?

Best, Ryan

Ryan Tracy | Reporter

Dow Jones Newswires | The Wall Street Journal office 202.862.9245 | (b)(6) | ryan.tracy@dowjones.com

Burnell, Scott

To:

Uselding, Lara; Brenner, Eliot; Harrington, Holly

Cc: Subject: <u>Dricks, Victor</u>
RE: Tsunami, etc

Date:

Friday, March 11, 2011 7:09:16 AM

Nader Mamish just wandered by and said there's a briefing at 8, led by R IV -- as I said, I'll be in the Ops Ctr by then.

----Original Message-----

From: Uselding, Lara

Sent: Friday, March 11, 2011 6:50 AM

To: Burnell, Scott; Brenner, Eliot; Harrington, Holly

Cc: Dricks, Victor

Subject: Re: Tsunami, etc

I'm headed in to be in the IRC when the tsunami hits west coast in the next 90 minutes

Lara Uselding

NRC Region 4 Public Affairs

(b)(6)

---- Original Message -----

From: Burnell, Scott

To: Brenner, Eliot; Uselding, Lara; Harrington, Holly

Sent: Fri Mar 11 06:43:10 2011 Subject: Re: Tsunami, etc

Almost into the office -- we may go ahead with what??

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

---- Original Message -----

From: Brenner, Eliot

To: Uselding, Lara; Burnell, Scott; Harrington, Holly

Sent: Fri Mar 11 06:42:05 2011

Subject: Tsunami, etc.

Got your call. I may come in for a while fter physical therapy. I will check in at 830. Also, holly and

scott, we may go ahead with ). Stff today.

Eliot Brenner

Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment

301 415 8200

(b)(6)

Sent from my Blackberry

00/26

Brenner, Eliot

10;

Burnell, Scott; Uselding, Lara; Harrington, Holly

Cc: Subject: <u>Dricks, Victor</u> Re: Tsunami, etc

Date:

Friday, March 11, 2011 6:57:45 AM

I will come in from PT as a precaution. Should make I a little after 9am.

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment

301 415 8200

C(b)(6)

Sent from my Blackberry

---- Original Message -----

From: Burnell, Scott

To: Uselding, Lara; Brenner, Eliot; Harrington, Holly

Cc: Dricks, Victor

Sent: Fri Mar 11 06:52:19 2011 Subject: Re: Tsunami, etc

I'll be in Ops Ctr by 8

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

---- Original Message -----

From: Uselding, Lara

To: Burnell, Scott; Brenner, Eliot; Harrington, Holly

Cc: Dricks, Victor

Sent: Fri Mar 11 06:49:54 2011 Subject: Re: Tsunami, etc

I'm headed in to be in the IRC when the tsunami hits west coast in the next 90 minutes

Lara Uselding

NRC Region 4 Public Affairs

(b)(6)

---- Original Message -----

From: Burnell, Scott

To: Brenner, Eliot; Uselding, Lara; Harrington, Holly

Sent: Fri Mar 11 06:43:10 2011 Subject: Re: Tsunami, etc

Almost into the office -- we may go ahead with what??

Sent from an NRC Blackberry

Scott Burnell

(b)(6

---- Original Message -----

From: Brenner, Eliot

To: Uselding, Lara; Burnell, Scott; Harrington, Holly

Sent: Fri Mar 11 06:42:05 2011

From: Sent: To: Cc: Subject: Attachments:	OST01 HOC Thursday, April 28, 2011 3:54 AM Tracy, Glenn; Hoc, PMT12; RST01 Hoc FOIA Response.hoc Resource FW: Radiation data by MEXT (Japanese)20110428_14.pdf; (unofficial)(Japanese)20110428_14 (Japanese)20110428_15.pdf	.pdf;	
Original Message From: HOO Hoc Sent: Thursday, April 28, 2011 3:5 To: LIA07 Hoc; LIA08 Hoc; OST01 Subject: FW: Radiation data by M	HOC		
Headquarters Operations Officer U.S. Nuclear Regulatory Commiss Phone: 301-816-5100 Fax: 301-816-5151 email: <a href="mailto:hoo.hoc@nrc.gov">hoo.hoc@nrc.gov</a> secure e-mail: <a href="mailto:hoo1@nrc.sgov.gov">hoo1@nrc.sgov.gov</a>	•	·	
Original Message From: eda@mext.go.jp [mailto:ed Sent: Thursday, April 28, 2011 3:5			
(b)(6)			

1

000/27

Subject: Radiation data by MEXT

Dear Sirs and Madams,

Please see attached the document.

Sincerely yours, Kei EDA EOC, Ministry of Education, Culture, Sports, Science & Technology (MEXT), Japan

# 福島第一原子力発電所の20km以遠のモニタリング結果について

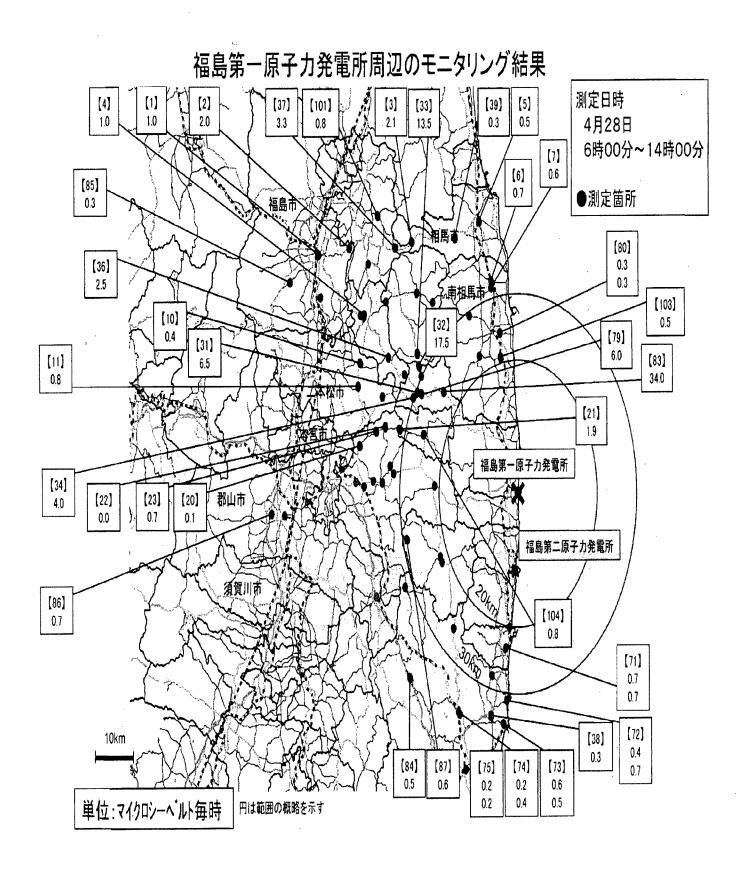
平成23年4月28日 16時00分現在 文 部 科 学 省

○文部科学省が集計した結果

注)太下線データが今回追加分

\*1 GM(ガイガーミューラー計数管)における値 \*2 電超箱における値 \*3 Nai(ヨウ化ナトリウム)シンチレータにおける値 \*4 消突時間内における消定値の変動範囲

	<ul><li>4 測定時間内における測定値の変動範囲</li></ul>						
(福島)	測定場所 8一発電所からの距離)	潮定日時	数値 (マイクロシーベルト/)時1 (記載のない限り歴外)	游定位置	瀬定包置の備考	天候	実施者
消定エリア 【1】	福島市杉姜町 (62km北西)	4月28日8時24分	1.0 *2	N: 37 ou 12.6 E 140 28 02.9	20110426距離のみ修正	輝雨なし	文部科学省
測定エリア [2]	福島市大波湾/入 (56km北西)	4月28日98422分	2.0 **	N: 37 41 12.7 E: 140 33 29.3 "	20110426距離のみ修正	降雨なし	日本原子力研究開発機構
測定エリア [3]	伊達市营山町石田彦平 (46km北西)	4月28日10時30分	2.1 *2	N. 37 41 12.7 E: 140 33 29.3	20110426距離のみ修正	陸雨なし	日本原子力研究開免機構
湖定エリア 【4】	伊達郡川俣町大字鶴沢字川蛸 (47km北西)	4月28日9時12分	1.0 +2	N: 37 39 30.0 E: 40 35 54.0	20110426距離のみ修正	降雨なし	文部科学省
意定エリア (5)	担属市中野奇前 (42km北北西)	4月28日11時22分	0.5 **	N: 37 45 08.7 2 E 140 41 29.2	20110428距離・方位のみ修正	養繭なし	日本属子力研究關免禮德
<b>測定エリア [8]</b>	南极暴市度島区西町 (32km北)	4月28日11時47分	Q.7. <sup>12</sup>	N: 37 29 242 E 140 34 542	20110426至差のみ後正	整備なし	日本原子力研究關稅機構
別定エリア 【2】	斯松區市底島区寺内本規數 (32km北北西)	4月28日12時10分	D.6 💆	N: 37 28 24.2 2 E: 140 34 54.2	20110428距離・方位のみ修正	養預なし	日本漢子力研究開免機械
高定工リア [10]	二本松市計道中島 (44km西北西)	4月28日13時05分	0.4 💆	N: 37 33 03.2 E 140 44 250	20110428距離・方位のみ告正	時間なし	文部科学省
<b>建定工97</b> 【11】	二本松市太田字下田 (43km西北西)	4月28日13月11分	Q.B. <del>**</del>	N: 17 13 03.2 1 E: 140 44 25.0	20110426臣禮・方位のみ後正	野原なし	文册科学省
瀬皮エリア [20]	田村市船引町新館下 (4ikm西)	4月28日12時47分	6T <del>7</del>	N: 37 29 24.2 E: 140 34 54.2	20110426距離・方位のみ告正	時間なし	文部科学省
<b>創定エリア [21]</b>	双套限基度柱上野川 (32km西北西)	4月28日12時23分	1.9 💆	N: 17 45 04.7 1 E: 140 41 29.2	20110426距離のみ後正	陸東なし	文部科学省
測定エリア [22]	田村市船引斯上辖李建田 (35km西北西)	4月28日12時35分	Q.Q <u>**</u>	N: 37 45 06.7 E 140 41 29.2 T	20110426方位・距差のみ確認 (修正不要でした)	降層なし	文部科学省
謝定エリア [23]	田村市船引町南移水中内 (19km西北西)	4月28日12時40分	9.7 °	N: 17, 45, 00.7 = E: 140, 41, 29.2	20110426距離のみ修正	終展なし	文册料学鉴
湖定エリア【31】	双葉郡沿江町津島仲沖 (30km西北西)	4月28日9時49分	6.5 <sup>12</sup>	N: 37 41 12.7" E: 140 33 29.3"	20110426方位・距離のみ確認 (修正不要でした)	路雨なし	文部科学省
測定エリア【32】	双葉都浪江町赤字木手七郎 (31km北西)	4月28日10時07分	17.5 *2	N: 37 35 42.0 " E: 140 14.5 "	20110428距離のみ修正	降雨なし	文部科学省
測定エリア [33]	相馬郡飯館村長泥 (33km北西)	4月28日10時19分	13.5 '2	N: 37 36 34.6 E: 140 45 09.1	20110426距離のみ修正	降雨なし	文部科学省
謝定エリア [34]	双层影泊江町海島大高木 (39km西北西)	4月28日11時56分	4.0 🕶	N: 37 45 06.7 E: 140 29.2	20110428方位のみ修正	砂原なし	文部科学省
瀬定エリア [36]	伊達郡川俣町山木屋大洪 (40km西北西)	4月28日9時37分	2.5 *2	N: 37 41 12.7" E: 140 33 29.3"	20110426方位・距離のみ確認 (修正不要でした)	路雨なし	文部科学省
測定エリア [37]	伊達市富山町石田宝司沢 (48km北西)	4月28日10時15分	33 *2	N 37 41 12.7 " E: 140 33 29.3 "	20110428距離のみ降正	降雨なし	日本原子力研究開発機構
謝定エリア [38]	いわき市四倉町白岩保木田 (34km薬用西)	4月28日   1時34分	2.3 7	Nt 37 33 03.2 1 E: 140 44 25.0	20110426距離のみ修正	無用なし	日本原子力研究開発機構
謝定エリア [39]	相馬市山上上資本 (41km北北西)	4月28日10時56分	03"	N: 37 41 12.7" E: 140 33 29.3"	70110428方位·距離修正	経雨なし	日本原子力研究關発機構
<b>設定エリア [71]</b>	70 M 05 A 83 Py 77 Jy 10 45 49 46 (24-)	4月28日12時31分	Q.Z <u>**</u>	N: 37 23 93.2 E 140 44 25.0	20110426距離のみ後正	陸原なし	日本原子力研究開発機構
選及デスト 「八丁	双策划広野町下北泊苗代費 (注)	4月28日8時25分	Q.7 <u>"</u>	N 37 33 03.2 E 140 44 25.0	201)0426距離のみ修正	降雨なし	(凝硫酸铵OBN) 密置
<b>憲定エリア [72]</b>	いわき市久之派町久之派字北荒藤	4月28日12〒10分	Q.4 <u>*</u>	Nt 37 33 03.2 2 E 140 44 25.0	20110426距離のみ修正	西田なし	日本漢子力研究開発機器
測定エリア [72]	いわき市久之浜町久之浜字北荒藤 (31km南)	4月28日9時00分	0.7 💆	N: 37 33 032 2 E 140 44 250	20110428距離のみ修正	陸原なし	養寶(NBC対策部隊)
選定エリア [73]	いわき市四倉町 (35km南)	4月28日11時55分	0.0 **	Nt 37 33 032 E 140 44 25.0	20110426方位・距離のみ確認 (修正不要でした)	幾度なし	日本原子力研究開発機構
選定エリア 【73】	<u>いわき市四倉町</u> (35km南)	4月28日8第18分	0.5 ⁴		20110426方位·距離のみ確認 (修正不製でした)	健原なし	養育(NBC対策部隊)
<b>遊穿エリア [74]</b>	いわき市小川町高蔵 (36km南南西)	4月28日11時02分	9.2 💆		20110426距離のみ修正	時間なし	日本原子力研究開発維機
直定エリア [24]	いわき市小川町高級 (38km南南西)	4月28日10時35分	0.4 ™	N: 37 33 012 E 140 44 25.0	20110426距離のみ後正	勝頭なし	董褒(NBC対後無難)
測定エリア 【75】	いわき市内機御殿町 (43km南南西)	4月28日108年40分	0.2 *	N: 37 33 03.2 E: 140 44 25.0 "	20110426方位・距離のみ修正	降雨なし	日本原子力研究開発機構
DRIVE [75]	いわき市内銀御屋町 (43km南南西)	4月28日9時47分	0.2 14		20110426方位・距離のみ修正	陸南なし	董寶(NBC対策部隊)
謝定エリア [79]	双葉都浪江町下津島登深 (29km西北西)	4月28日10時46分	60 °³	N: 37 33 03.2 E: 140 44 25.0 T	20110426方位・距離のみ蜂正	降雨なし	・ 文都科学省
測定エリア [80]	南相馬市原則区高見的 (24km北)	4月28日13時17分	0.3 💆	N: 37 33 03.2 5 E: 140 44 25.0	20110426距離のみ修正	降原なし	日本原子力研究開発機構
別金エジア [80]	<u>期相應市原町区富見町</u> (24km北)	4月28日8第10分	0.1 <u></u>	N: 37 33 03.2 1 F: 140 44 250	20110426距離のみ修正	強調なし	· 養務(NBC対策部隊)
別定エリア [83]	20 美国达尔斯丰本主播型	4月28日11時01分	34.0 ∞	N: 37 33 03.2 2 E 140 44 25.0	20110426距離のみ修正	発展なし	文部科学省
測定エリア [84]	いわき市三和町差塩 (39km南西)	4月28日9時54分	0.5 *2	N: 37 33 03.2 ° E: 140 44 25.0 °	20110426距離のみ修正	路南なし	日本原子力研究開発機構
測定エリア [85]	福島市荒井原宿 (88km西北西)	4月28日6時00分	0.3 *2	N. 37 33 03.2 E: 140 44 25.0	20110428方位・距離のみ修正	降限あり	防衛省
測定エリア [88]	郡山市大槻町長右エ門林 (63km西)	4月28日6時00分	0.7 *2	N. 37 23 57.0 E: 140 19 35.0	20110426距離のみ修正	降雨あり	防衛省
謝定エリア [87]	双翼郡川内村上川内花/内 (29km西南西)	4月28日6時00分	0.6 -2	N: 37 23 57.0 E: 140 19 35.0	20110425距離のみ修正	降雨あり	防衛省
源定エリア (101)	月) 速度型 (1977年22分元 7 <b>6</b> 6	4月28日9時50分	08.3	N: 37 41 12.7 E: 140 33 29.3 T	20110425方位・距離のみ確認 (修正不要でした)	蜂雨なし	日本原子力研究開発機構
<b>測定工リア [103]</b>	南相異市區町区電字大豆構內 (20km.主)	4月28日13時41分	0.5 💆		20110426方位・距離のみ確認 (施正不要でした)	降雨なし	日本原子力研究開発機構
<b>測定エリア</b> [104]	刀类数数目付业金数企会基本	4月28日12時12分	0.8 💆	N: 31 33 03.2 E: 140 44 25.0		陰器なし	文部哲学省



# 福島第一原子力発電所の20km以遠のモニタリング結果について

平成23年4月28日 16時00分現在 文 部 科 学 省

〇文部科学省が集計した結果

注)太下線データが今回追加分

- \*1 GM(ガイガーミューラー計数管)における値 \*2 電離箱における値 \*3 Nal(ヨウ化ナトリウム)シンチレータにおける値 \*4 測定時間内における測定値の変動範囲

* 4 測定時間内における測定値の変動範囲			る測定値の変動範囲	
測定場所 (福島第一発電所からの距離)	測定日時	数値 (マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定エリア [1] 福島市杉寮町 (62km北西)	4月28日8時24分	1.0 *2	降雨なし	文部科学省
測定エリア 【2】 福島市大波滝ノ入 (56km北西)	4月28日9時22分	2.0 **?	降雨なし	日本原子力研究開発機構
測定エリア [3] 伊達市蟹山町石田彦平 (46km北西)	4月28日10時30分	2.1 *2	降雨なし	日本原子力研究開発機構
測定エリア [4] 伊達郡川俣町大字鶴沢字川端 (47km北西)	4月28日9時12分	1.0 *2	降雨なし	文部科学省
<u>測定エリア [5] 相馬市中野寺前 (42km北北西)</u>	4月28日11時22分	<u>0.5 *²</u>	降雨なし	日本原子力研究開発機構
選定エリア [6] 南相馬市底島区西町 (32km北)	4月28日11時47分	0.7 *2	隆雨なし	日本原子力研究開発機構
測定エリア 【7】 南相黒市鹿島区寺内本屋敷 (32km北北西)	4月28日12時10分	<u>0.6 *²</u>	降雨なし	日本原子力研究開発機構
<u> </u>	4月28日13時05分	0.4 *2	降雨なし	文部科学省
<u> 温定エリア 【11】                                  </u>	· 4月28日13時11分	<u>0.8 *²</u>	降雨なし	文部科学省
<u> 選定エリア【20】                                    </u>	4月28日12時47分	0.1 **2	隆雨なし	文部科学省
測定エリア【21】   双葉郡墓尾村上野川 (32km西北西)	4月28日12時23分	1.9 *2	隆雨なし	文部科学省
測定エリア【22】 <u>田村市船引町上移字後田</u> (35km西北西)	4月28日12時35分	0.0 *2	降雨なし	文部科学省
測定エリア【23】 <u>田村市船引町南移水中内</u> (39km西北西)	4月28日12時40分	0.7 *2	降雨なし	文部科学省
測定エリア【31】 双葉郡浪江町津島仲沖 (30km西北西)	4月28日9時49分	6.5 * <sup>2</sup>	降雨なし	· 文部科学省
測定エリア【32】 双葉郡浪江町赤宇木手七郎 (31km北西)	4月28日10時07分	17.5 *2	降雨なし	文部科学省
測定エリア【33】 相馬郡飯舘村長泥 (33km北西)	4月28日10時19分	13.5 *2	降雨なし	文部科学省
測定エリア【34】 双葉郡浪江町津島大高木 (30km西北西)	4月28日11時56分	4.0 *2	陸雨なし	文部科学省
測定エリア【36】 伊達郡川侯町山木屋大洪 (40km西北西)	4月28日9時37分	2.5 *²	降雨なし	文部科学省
測定エリア【37】 伊達市霊山町石田宝司沢 (48km北西)	4月28日10時15分	3.3 *²	降雨なし	日本原子力研究開発機構
測定エリア【38】 いわき市四倉町白岩保木田 (34km南南西)	4月28日11時34分	0.3 *2	降雨なし	日本原子力研究開発機構
測定エリア【39】 相馬市山上上並木 (41km北北西)	4月28日10時56分	0.3 *2	降雨なし	日本原子力研究開発機構
<u>測定エリア</u> 【71】 双葉郡広野町下北迫苗代替(注) (23km南)	4月28日12時31分	0.7 *2	隆雨なし	日本原子力研究開発機構
測定エリア【71】 双葉郡広野町下北迫笛代替(注) (23km南)	4月28日8時25分	0.7 *2	降雨なし	警察(NBC対策部隊)
測定エリア 【72】 いわき市久之浜町久之浜宇北荒藤 (31km南)	1	0.4 *?	降雨なし	日本原子力研究開発機構
測定エリア【72】 いわき市久之浜町久之浜宇北荒藤 (31km南)	4月28日9時00分	0.7 *2	降雨なし	警察(NBC対策部隊)
<u>測定エリア [73] いわき市四倉町 (35km南)</u>	4月28日11時55分	0.6 *2	陸雨なし	日本原子力研究開発機構
<u>測定エリア</u> [73] いわき市四倉町 (35km南)	4月28日9時18分	0.5 *2	降雨なし	警察(NBC対策部隊)
<u>測定エリア [74] いわき市小川町高萩 (36km南南西)</u>	4月28日11時02分	0.2 *2	降雨なし	日本原子力研究開発機構
測定エリア【74】 いわき市小川町高荻 (36km南南西)	4月28日10時35分	0.4 *2	降雨なし	警察(NBC対策部隊)

\*1 GM(ガイガーミューラー計数管)における値
 \*2 電離箱における値
 \*3 Nal(ヨウ化ナトリウム)シンチレータにおける値
 \*4 測定時間内における測定値の変動範囲

(福島第-	測定場所 一発電所からの距離)	測定日時	数値 (マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定エリア【75】	いわき市内郷御厩町 (43km南南西)	4月28日10時40分	0.2 *2	降雨なし	日本原子力研究開発機構
測定エリア 【75】	<u>いわき市内郷御厩町</u> <u>(43km南南西)</u>	4月28日9時47分	0.2 *2	陸雨なし	警察(NBC対策部隊)
測定エリア【79】	双葉郡浪江町下津島萱深 (29km西北西)	4月28日10時46分	6.0 *²	降雨なし	文部科学省
測定エリア [80]	<u>南相属市原町区高見町</u> <u>(24km北)</u>	4月28日13時17分	<u>0.3 <sup>-2</sup> </u>	降雨なし	日本原子力研究開発機構
測定エリア [80]	<u>南相馬市原町区高見町</u> (24km北)	4月28日8時10分	0.3 *2	陸雨なし	警察(NBC対策部隊)
測定エリア [83]	双葉郡浪江町赤宇木椚平 <u>(24km北西)</u>	4月28日11時01分	<u>34.0 *²</u>	陸南なし	文部科学省
測定エリア 【84】	いわき市三和町差塩 (39km南西)	4月28日9時54分	0.5 *2	降雨なし	日本原子力研究開発機構
測定エリア【85】	福島市荒井原宿 (66km西北西)	4月28日6時00分	0.3 *2	降雨あり	防衛省
測定エリア【86】	郡山市大槻町長右工門林 (63km西)	4月28日6時00分	0.7 *2	降雨あり	防衛省
測定エリア【87】	双葉郡川内村上川内花ノ内 (29km西南西)	4月28日6時00分	0.6 *2	降雨あり	防衛省
測定エリア【101】	伊達市霊山町大石字三ノ輪 (55km北西)	4月28日9時50分	0.8 *2	降雨なし	日本原子力研究開発機構
測定エリア【103】	南相馬市原町区高字大豆柄内 (20km北)	4月28日13時41分	0.5 *2	降雨なし	日本原子力研究開発機構
謝定エリア【104】	双葉郡墓尾村大字落合字落合 (25km北西)	4月28日12時12分	<u>0.8 *²</u>	降雨なし	文部科学省

<sup>(</sup>注) 【71】 同じ地区であるが数百メートル離れた地点である。

Harrington, Holly

To:

Ralston, Michelle

Subject:

RE: Unusual Event related to Tsunami Warning 8.9 EQ Japan

Date: Attachments: Friday, March 11, 2011 12:50:00 PM 3-11-11 UE News Release FINAL.docx

This might also be useful to you. Issued earlier, but we just got it . . .

**From:** Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]

Sent: Friday, March 11, 2011 12:48 PM

To: O'Boyle, Seamus; Harrington, Holly; Wright, Lisa (Gibney); Mroz (Sahm), Sara

Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

**FYI** 

Respectfully,

Michelle Ralston, MS, PMI

Public Affairs, Stakeholder Outreach & Campaign Planning

Professional Services & Integration Technological Hazards Division Protection & National Preparedness

DHS/FEMA

1800 South Bell Street, Rm. 828

Arlington, VA 22202 (202) 212-2310 desk

(202) (b)(6)

(703) 305-0837 facsimile

From: Quinn, Vanessa

Sent: Friday, March 11, 2011 12:47 PM

To: Ralston, Michelle; Sherwood, Harry; Fiore, Craig; Horwitz, Steve Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

fyl

From: FEMA-NRCC-reslead

Sent: Friday, March 11, 2011 12:47 PM

To: Kish, James

Cc: Quinn, Vanessa; Eberst, William; Sherwood, Harry

Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

From: FEMA-NRCC-planchief

Sent: Friday, March 11, 2011 12:23 PM

To: FEMA-NRCC-doclead; FEMA-NRCC-reslead; FEMA-NRCC-plandeputy; FEMA-NRCC-curopsplana; FEMA-NRCC-curopspland; FEMA-NRCC-curopsplanb; FEMA-NRCC-assistant; FEMA-NRCC-curopsplanc; FEMA-NRCC-doclead; FEMA-NRCC-docrpts; FEMA-NRCC-sitstatinfoa; FEMA-NRCC-sitstatinfob; FEMA-

NRCC-sitstatinfoc; FEMA-NRCC-sitstatinfod; FEMA-NRCC-sitstatinfoe; FEMA-NRCC-sitstatlead; FEMA-NRCC-sitstatinfoe; FEMA-NRCC-si

NRCC-restracking

Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

From: FEMA-R10-RRCC-DOCL

Sent: Friday, March 11, 2011 12:22:27 PM

To: Axton, Charles; Bakke, Phillip; Beck, Gordon; Biasco, Lon;

Brand. Kimberley; Brockmeyer, Lori; Burke, Leonard; Burton, Dennis;

Cacanindin, Vince; Caesar, Matthew; Carey, Mark; Carson, Tracy; Cisneros, Jessaca; Cox, Kathleen; Daggett, Anna; Dahl, Chris;

Deir, Richard; Dewar, James; Donovan, Richard; Durst, Kelly;

Edwards, John; Ellingsen, Marianne; Engstfeld, Amanda;

Fearnehough, Michael; FEMA-MOC-BOTHELL; FEMA-NRCC-planchief;

FEMA-R10-RRCC-AdAsst; FEMA-R10-RRCC-DCO; FEMA-R10-RRCC-DCU;

FEMA-R10-RRCC-DOCL; FEMA-R10-RRCC-ESBD; FEMA-R10-RRCC-ESF1;

FEMA-R10-RRCC-ESF10; FEMA-R10-RRCC-ESF11; FEMA-R10-RRCC-ESF12;

FEMA-R10-RRCC-ESF13; FEMA-R10-RRCC-ESF14; FEMA-R10-RRCC-ESF15;

FEMA-R10-RRCC-ESF2; FEMA-R10-RRCC-ESF3; FEMA-R10-RRCC-ESF4;

FEMA-R10-RRCC-ESF6; FEMA-R10-RRCC-ESF7; FEMA-R10-RRCC-ESF8;

FEMA-R10-RRCC-ESF9; FEMA-R10-RRCC-FASC; FEMA-R10-RRCC-GIU;

FEMA-R10-RRCC-IABD; FEMA-R10-RRCC-LSC; FEMA-R10-RRCC-OFA;

FEMA-R10-RRCC-OpsMAM; FEMA-R10-RRCC-OSC; FEMA-R10-RRCC-PABD;

FEMA-R10-RRCC-PSC; FEMA-R10-RRCC-RESL; FEMA-R10-RRCC-RSTL;

FEMA-R10-RRCC-SBA; FEMA-R10-RRCC-SITL; FEMA-R10-RRCC-StRep;

FEMA-R10-RRCC-VAL; FEMA-R10-RRCC-Watch; FEMA-R10-SPOC; FEMA-R9IPCHIEF;

FEMA-R9IPPLAN; FEMA-R9IPSIT2; FEMA-R9OPSCHIEF; FEMA-R9RRCCDIR;

FEMA-R9Watchofficer; Forgit, Robert; Gladish, Jackie; Goudreau, Laura;

Grant, Christy; Graves, John; Hall, Thom; Hampton, Dianna;

Harrison, Bryant; Hartwell, Aaron; Haubrich, Gail; Herford, Nika;

Howard, Mike; Ike, Ryan; Jackson, Lisa M; Jaklitsch, Chris;

Keller, Charissa; Keller, Joshua; Knight, Terry; Krikava, Richard;

Little, Robert; Lopez, Lois; Mahlik, Sarah; Manner, Timothy;

Marcham, Patrick; Martinsen, Gretchen; Massey, Patrick;

Maykovich, Vincent; Medina, John; Morea, Anthony; Oleary, Marybeth;

Penfold, Kimberly: R10-RRCC-Planning: Tagavilla, Leroy; Walborn, Anthony;

Webb, Joe; White, Paul; Wilder, Thomas; Yandle, Denise; Zaffram, Scott D;

Zuber, Ronald

Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

Auto forwarded by a Rule

FYI

From: FEMA-R10-RRCC-DOCL

Sent: Friday, March 11, 2011 9:06 AM

To: Axton, Charles; Bakke, Phillip; Beck, Gordon; Biasco, Lon; Brand, Kimberley; Brockmeyer, Lori; Burke, Leonard; Burton, Dennis; Cacanindin, Vince; Caesar, Matthew; Carey, Mark; Carson, Tracy; Cisneros, Jessaca; Cox, Kathleen; Daggett, Anna; Dahl, Chris; Deir, Richard; Dewar, James; Donovan, Richard; Durst, Kelly; Edwards, John; Ellingsen, Marianne; Engstfeld, Amanda; Fearnehough, Michael; FEMA-MOC-BOTHELL; FEMA-NRCC-planchief; FEMA-R10-RRCC-AdAsst; FEMA-R10-RRCC-DCO; FEMA-R10-RRCC-DCU; FEMA-R10-RRCC-ESF1; FEMA-R10-RRCC-ESF1; FEMA-R10-RRCC-ESF1; FEMA-R10-RRCC-ESF13; FEMA-R10-RRCC-ESF14; FEMA-R10-RRCC-ESF15; FEMA-R10-RRCC-ESF3; FEMA-R10-

RRCC-ESF4; FEMA-R10-RRCC-ESF6; FEMA-R10-RRCC-ESF7; FEMA-R10-RRCC-ESF9; FEMA-R10-RRCC-ESF9; FEMA-R10-RRCC-FASC; FEMA-R10-RRCC-GIU; FEMA-R10-RRCC-IABD; FEMA-R10-RRCC-LSC; FEMA-R10-RRCC-OFA; FEMA-R10-RRCC-OFA; FEMA-R10-RRCC-OFA; FEMA-R10-RRCC-OFA; FEMA-R10-RRCC-OFA; FEMA-R10-RRCC-PABD; FEMA-R10-RRCC-PABD; FEMA-R10-RRCC-PABD; FEMA-R10-RRCC-PABD; FEMA-R10-RRCC-SITL; FEMA-R10-RRCC-SBA; FEMA-R10-RRCC-SITL; FEMA-R10-RRCC-SITL; FEMA-R10-RRCC-SITL; FEMA-R10-RRCC-SITL; FEMA-R9IPCHIEF; FEMA-R9IPPLAN; FEMA-R9IPSIT2; FEMA-R9OPSCHIEF; FEMA-R9RRCCDIR; FEMA-R9Watchofficer; Forgit, Robert; Gladish, Jackie; Goudreau, Laura; Grant, Christy; Graves, John; Hall, Thom; Hampton, Dianna; Harrison, Bryant; Hartwell, Aaron; Haubrich, Gail; Herford, Nika; Howard, Mike; Ike, Ryan; Jackson, Lisa M; Jaklitsch, Chris; Keller, Charissa; Keller, Joshua; Knight, Terry; Krikava, Richard; Little, Robert; Lopez, Lois; Mahlik, Sarah; Manner, Timothy; Marcham, Patrick; Martinsen, Gretchen; Massey, Patrick; Maykovich, Vincent; Medina, John; Morea, Anthony; Oleary, Marybeth; Penfold, Kimberly; R10-RRCC-Planning; Tagavilla, Leroy; Walborn, Anthony; Webb, Joe; White, Paul; Wilder, Thomas; Yandle, Denise; Zaffram, Scott D; Zuber, Ronald Subiect: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

FYI

From: FEMA-R10-RRCC-SITL

Sent: Friday, March 11, 2011 8:07 AM

To: FEMA-R10-RRCC-DOCL; R10-RRCC-Planning

Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

From: FEMA-MOC-BOTHELL

Sent: Friday, March 11, 2011 7:54 AM

To: FEMA-R10-RRCC-SITL; !MGMT COOP-CAO; Axton, Charles; Biasco, Lon; Biasco, Tamra; Bonnema, Brad; Casey, Patrick; Caudron, Dominic; Champagne, Lee; Cox, Kathleen; David boughton@us.army.mil; Deir, Richard; Dennis Hunsinger; Derek.remington@us.army.mil; Diemont, Dolph; Edwards, EricL; Fearnehough, Michael; FEMA NWC; FEMA OPERATIONS CENTER; FEMA-MOC-BOTHELL; Flaten, Duane; focwfemareports@sba.gov; Forgit, Robert; Gladish, Jackie; Goudreau, Laura; Hall, Michael-FCO; Hampton, Dianna; Harrison, Bryant; Hendrickson, Andrew; Hoegemeyer, David; Ike, Ryan; Johnson, AJ; Johnson, Dean; Jones, Dale; Jonientz-Trisler, Chris; Loper, Sharon; Manner, Timothy; Marcham, Patrick; Massey, Patrick; Maykovich, Vincent; McCormick, Michael A; Miller, Laurie; Monroe, Logan; Murphy, Kenneth; NORTHCOM (OGA); O'Halloran, Catlin; Remington, Derek; Robinson, Walt; Rodgers, Tom; Sessner, Debra; Sneed, John; Startt, Patrick; Steven.obrien@us.army.mil; Zuber, Ronald Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

**FYSA** 

Bothell MERS Operations Center - MOC

Mobile Emergency Response Support Det., DHS-FEMA Bothell, WA, (425) 487-4448, fax (425) 487-4404 fema-moc-bothell@dhs.gov

From: FEMA OPERATIONS CENTER Sent: Friday, March 11, 2011 7:53 AM

To: Sherwood, Harry; Hammond, Mike (Mike.Hammond@fema.gov); Fenton, Robert; Brooks, Marc; Buckingham, Ann; Carwile, William; Coble, Rex; Conklin, Craig; FEMA NRCC; FEMA-R9Watchofficer; Fiore, Craig; Greten, Timothy; Gruber, Corey; Kish, James; Matia, Matthew; nuclearSSA@hq.dhs.gov; Penn, Damon; Quinn, Vanessa; Woodard, Steven; FEMA-MOC-BOTHELL; FEMA-MOC-DENTON; FEMA-MOC-DENVER; FEMA-MOC-FREDERICK; FEMA-MOC-MAYNARD; FEMA-MOC-THOMASVILLE; FEMA-R2-Watch; FEMA-R3-Watch; FEMA-R4-Watch; FEMA-R5-Watch; FEMA-R9Watchofficer Subject: Unusual Event related to Tsunami Warning 8.9 EQ Japan

#### Notification of Nuclear Power Plant Event

Actual or Exercise: Actual Event Event Classification: Unusual Event Plant/Facility: Diablo Canyon Location: Avila Beach, CA

Date/Time Declared: 3/11/2011, 1028EST

Date/Time Cancelled:

**Description of Event:** Due to the Tsunami Warning for the West Coast of the United States, NRC has entered Monitoring Mode for the plants located on the West Coast. There is no specific threat to any power plant. Per their

procedures for tsunami warnings, Diablo Canyon NPP, has entered Unusual Event Mode.

NRC Response Mode: Monitoring Release or Potential Release? No

Considerable Public or Congressional Interest? No

Required Action: None

Note: A federal agency representative should be automatically dispatched to the Ops Center if NRC response mode

is "Activation" or "Expanded Activation".

Date/Time of Notification: 03/11/2011, 1028EST

NRC Caller: Mr. Pete Synder Received By: Kevin Biscoe

#### Definitions:

UNUSUAL EVENT: events are in process or have occurred which indicate potential degradation in the level of safety of the plant

ALERT: events are in process or have occurred which involve an actual or potential substantial degradation in the level of safety of the plant

SITE AREA EMERGENCY: events in process or which have occurred that result in actual or likely major failures of plant functions needed for protection of the public.

GENERAL EMERGENCY: actual or imminent substantial core damage or melting of reactor fuel with the potential for loss of containment integrity

External Communications Department 77 Beale Street San Francisco, CA 94105 415/973-5930

NFWS

FOR IMMEDIATE RELEASE:

March 11, 2011 8:15 a.m.

CONTACT: External Communications Department (415) 973-5930

# UNUSUAL EVENT DECLARED AT DIABLO CANYON POWER PLANT DUE TO TSUNAMI WARNING

SAN LUIS OBISPO, Calif. – Pacific Gas and Electric Company (PG&E) today responded to a tsunami warning by declaring an Unusual Event at its Diablo Canyon Power Plant Unit 1 and Unit 2 near San Luis Obispo, Calif. All plant safety systems and components remain in normal operating condition and both units are currently operating at 100 percent power. There is no threat to the health and safety of the public from Diablo Canyon Power Plant.

The Unusual Event was declared at approximately 1:23 a.m., Friday, March 11, 2011. As defined by the Nuclear Regulatory Commission, an Unusual Event is any other-than-normal plant-related condition that does not require any emergency action by the general public or any government authorities. An Unusual Event is the lowest of four levels of emergency classification.

PG&E will continue to monitor the situation and work with local authorities throughout the county. DCPP personnel undergo extensive emergency preparedness training and participate in various exercises throughout the year to ensure they are always ready to safely, swiftly and effectively mange emergency events.

The utility is also assisting with local emergency response efforts. In response to a county declaration for Avila Beach residents to relocate to higher elevation, PG&E has opened its Energy Education Center at 6588 Ontario Road off of Highway 101 in San Luis Obispo.

High swell estimates at Port San Luis may cause flooding near the Avila Beach gate entrance. Diablo Canyon has implemented a plan which allows us to continue to operate the facility safely in the event that access to Diablo Canyon Power Plant is restricted.

Ralston, Michelle

10;

Harrington, Holly

Subject:

RE: Unusual Event related to Tsunami Warning 8.9 EQ Japan

Date:

Friday, March 11, 2011 12:51:13 PM

Thanks.

Respectfully,

Michelle Ralston, MS, PMI
Public Affairs, Stakeholder Outreach & Campaign Planning
Professional Services & Integration
Technological Hazards Division
Protection & National Preparedness
DHS/FEMA
1800 South Bell Street, Rm. 828
Arlington, VA 22202
(202) 212-2310 desk
(202) (b)(6)

**From:** prvs=044fe438e=Holly.Harrington@nrc.gov [mailto:prvs=044fe438e=Holly.Harrington@nrc.gov]

On Behalf Of Harrington, Holly

Sent: Friday, March 11, 2011 12:51 PM

To: Ralston, Michelle

(703) 305-0837 facsimile

Subject: RE: Unusual Event related to Tsunami Warning 8.9 EQ Japan

This might also be useful to you. Issued earlier, but we just got it . . .

From: Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]

Sent: Friday, March 11, 2011 12:48 PM

To: O'Boyle, Seamus; Harrington, Holly; Wright, Lisa (Gibney); Mroz (Sahm), Sara

Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

FYI

Respectfully,

Michelle Ralston, MS, PMI
Public Affairs, Stakeholder Outreach & Campaign Planning
Professional Services & Integration
Technological Hazards Division
Protection & National Preparedness
DHS/FEMA
1800 South Bell Street, Rm. 828
Arlington, VA 22202
(202) 212-2310 dcsk

(202)(b)(6)

From: Quinn, Vanessa

Sent: Friday, March 11, 2011 12:47 PM

To: Ralston, Michelle; Sherwood, Harry; Fiore, Craig; Horwitz, Steve Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

fyl

From: FEMA-NRCC-reslead

**Sent:** Friday, March 11, 2011 12:47 PM

To: Kish, James

Cc: Quinn, Vanessa; Eberst, William; Sherwood, Harry

Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

From: FEMA-NRCC-planchief

Sent: Friday, March 11, 2011 12:23 PM

To: FEMA-NRCC-doclead; FEMA-NRCC-reslead; FEMA-NRCC-plandeputy; FEMA-NRCC-curopsplana; FEMA-NRCC-curopspland; FEMA-NRCC-curopsplanb; FEMA-NRCC-assistant; FEMA-NRCC-curopsplanc; FEMA-NRCC-doclead; FEMA-NRCC-docrpts; FEMA-NRCC-sitstatinfoa; FEMA-NRCC-sitstatinfob; FEMA-NRCC-sitstatinfoc; FEMA-NRCC-sitstatinfod; FEMA-NRCC-sitstatinfoe; FEMA-NRCC-sitstatlead; FEMA-

NRCC-restracking

Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

From: FEMA-R10-RRCC-DOCL

Sent: Friday, March 11, 2011 12:22:27 PM

To: Axton, Charles; Bakke, Phillip; Beck, Gordon; Biasco, Lon; Brand, Kimberley; Brockmeyer, Lori; Burke, Leonard; Burton, Dennis; Cacanindin, Vince; Caesar, Matthew; Carey, Mark; Carson, Tracy; Cisneros, Jessaca; Cox, Kathleen; Daggett, Anna; Dahl, Chris; Deir, Richard; Dewar, James; Donovan, Richard; Durst, Kelly; Edwards, John; Ellingsen, Marianne; Engstfeld, Amanda; Fearnehough, Michael; FEMA-MOC-BOTHELL; FEMA-NRCC-planchief; FEMA-R10-RRCC-AdAsst; FEMA-R10-RRCC-DCO; FEMA-R10-RRCC-DCU;

FEMA-R10-RRCC-DOCL; FEMA-R10-RRCC-ESBD; FEMA-R10-RRCC-ESF1;

FEMA-R10-RRCC-ESF10; FEMA-R10-RRCC-ESF11; FEMA-R10-RRCC-ESF12;

FEMA-R10-RRCC-ESF13; FEMA-R10-RRCC-ESF14; FEMA-R10-RRCC-ESF15; FEMA-R10-RRCC-ESF2; FEMA-R10-RRCC-ESF3; FEMA-R10-RRCC-ESF4;

FEMA-R10-RRCC-ESF6; FEMA-R10-RRCC-ESF7; FEMA-R10-RRCC-ESF8;

FEMA-R10-RRCC-ESF9; FEMA-R10-RRCC-FASC; FEMA-R10-RRCC-GIU; FEMA-R10-RRCC-IABD; FEMA-R10-RRCC-LSC; FEMA-R10-RRCC-OFA;

FEMA-R10-RRCC-OpsMAM; FEMA-R10-RRCC-OSC; FEMA-R10-RRCC-PABD;

FEMA-R10-RRCC-PSC; FEMA-R10-RRCC-RESL; FEMA-R10-RRCC-RSTL;

FEMA-R10-RRCC-SBA; FEMA-R10-RRCC-SITL; FEMA-R10-RRCC-StRep;

FEMA-R10-RRCC-VAL; FEMA-R10-RRCC-Watch; FEMA-R10-SPOC; FEMA-R9IPCHIEF;

FEMA-R9IPPLAN; FEMA-R9IPSIT2; FEMA-R9OPSCHIEF; FEMA-R9RRCCDIR;

FEMA-R9Watchofficer; Forgit, Robert; Gladish, Jackie; Goudreau, Laura;

Grant, Christy; Graves, John; Hall, Thom; Hampton, Dianna; Harrison, Bryant; Hartwell, Aaron; Haubrich, Gail; Herford, Nika; Howard, Mike; Ike, Ryan; Jackson, Lisa M; Jaklitsch, Chris; Keller, Charissa; Keller, Joshua; Knight, Terry; Krikava, Richard; Little, Robert; Lopez, Lois; Mahlik, Sarah; Manner, Timothy; Marcham, Patrick; Martinsen, Gretchen; Massey, Patrick; Maykovich, Vincent; Medina, John; Morea, Anthony; Oleary, Marybeth; Penfold, Kimberly; R10-RRCC-Planning; Tagavilla, Leroy; Walborn, Anthony; Webb, Joe; White, Paul; Wilder, Thomas; Yandle, Denise; Zaffram, Scott D; Zuber, Ronald

**Subject:** FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan **Auto forwarded by a Rule** 

Auto forwarded by a Kule

FYI

From: FEMA-R10-RRCC-DOCL

Sent: Friday, March 11, 2011 9:06 AM

To: Axton, Charles; Bakke, Phillip; Beck, Gordon; Biasco, Lon; Brand, Kimberley; Brockmeyer, Lori; Burke, Leonard; Burton, Dennis; Cacanindin, Vince; Caesar, Matthew; Carey, Mark; Carson, Tracy; Cisneros, Jessaca; Cox, Kathleen; Daggett, Anna; Dahl, Chris; Deir, Richard; Dewar, James; Donovan, Richard; Durst, Kelly; Edwards, John; Ellingsen, Marianne; Engstfeld, Amanda; Fearnehough, Michael; FEMA-MOC-BOTHELL; FEMA-NRCC-planchief; FEMA-R10-RRCC-AdAsst; FEMA-R10-RRCC-DCO; FEMA-R10-RRCC-DCU; FEMA-R10-RRCC-DOCL; FEMA-R10-RRCC-ESBD; FEMA-R10-RRCC-ESF1; FEMA-R10-RRCC-ESF10; FEMA-R10-RRCC-ESF11; FEMA-R10-RRCC-ESF12; FEMA-R10-RRCC-ESF13; FEMA-R10-RRCC-ESF14; FEMA-R10-RRCC-ESF15; FEMA-R10-RRCC-ESF2; FEMA-R10-RRCC-ESF3; FEMA-R10-RRCC-ESF4; FEMA-R10-RRCC-ESF6; FEMA-R10-RRCC-ESF7; FEMA-R10-RRCC-ESF8; FEMA-R10-RRCC-ESF9; FEMA-R10-RRCC-FASC; FEMA-R10-RRCC-GIU; FEMA-R10-RRCC-IABD; FEMA-R10-RRCC-LSC; FEMA-R10-RRCC-OFA; FEMA-R10-RRCC-OpsMAM; FEMA-R10-RRCC-OSC; FEMA-R10-RRCC-PABD; FEMA-R10-RRCC-PSC; FEMA-R10-RRCC-RESL; FEMA-R10-RRCC-RSTL; FEMA-R10-RRCC-SBA; FEMA-R10-RRCC-SITL; FEMA-R10-RRCC-StRep; FEMA-R10-RRCC-VAL; FEMA-R10-RRCC-Watch; FEMA-R10-SPOC: FEMA-R9IPCHIEF: FEMA-R9IPPLAN: FEMA-R9IPSIT2: FEMA-R9OPSCHIEF: FEMA-R9RRCCDIR: FEMA-R9Watchofficer; Forgit, Robert; Gladish, Jackie; Goudreau, Laura; Grant, Christy; Graves, John; Hall, Thom; Hampton, Dianna; Harrison, Bryant; Hartwell, Aaron; Haubrich, Gail; Herford, Nika; Howard, Mike; Ike, Ryan; Jackson, Lisa M; Jaklitsch, Chris; Keller, Charissa; Keller, Joshua; Knight, Terry; Krikava, Richard; Little, Robert; Lopez, Lois, Mahlik, Sarah; Manner, Timothy; Marcham, Patrick; Martinsen, Gretchen; Massey, Patrick; Maykovich, Vincent; Medina, John; Morea, Anthony; Oleary, Marybeth; Penfold, Kimberly; R10-RRCC-Planning; Tagavilla, Leroy; Walborn, Anthony; Webb, Joe; White, Paul; Wilder, Thomas; Yandle, Denise; Zaffram, Scott D; Zuber, Ronald Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

FYI

From: FEMA-R10-RRCC-SITL

**Sent:** Friday, March 11, 2011 8:07 AM

To: FEMA-R10-RRCC-DOCL; R10-RRCC-Planning

Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

From: FEMA-MOC-BOTHELL

Sent: Friday, March 11, 2011 7:54 AM

**To:** FEMA-R10-RRCC-SITL; !MGMT COOP-CAO; Axton, Charles; Biasco, Lon; Biasco, Tamra; Bonnema, Brad; Casey, Patrick; Caudron, Dominic; Champagne, Lee; Cox, Kathleen; David.boughton@us.army.mil; Deir, Richard; Dennis Hunsinger; Derek.remington@us.army.mil; Diemont, Dolph; Edwards, EricL; Fearnehough, Michael; FEMA NWC; FEMA OPERATIONS CENTER; FEMA-MOC-BOTHELL; Flaten, Duane;

focwfemareports@sba.gov; Forgit, Robert; Gladish, Jackie; Goudreau, Laura; Hall, Michael-FCO; Hampton, Dianna; Harrison, Bryant; Hendrickson, Andrew; Hoegemeyer, David; Ike, Ryan; Johnson, AJ; Johnson, Dean; Jones, Dale; Jonientz-Trisler, Chris; Loper, Sharon; Manner, Timothy; Marcham, Patrick; Massey, Patrick; Maykovich, Vincent; McCormick, Michael A; Miller, Laurie; Monroe, Logan; Murphy, Kenneth; NORTHCOM (OGA); O'Halloran, Catlin; Remington, Derek; Robinson, Walt; Rodgers, Tom; Sessner, Debra; Sneed, John; Startt, Patrick; Steven.obrien@us.army.mil; Zuber, Ronald Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

**FYSA** 

#### **Bothell MERS Operations Center - MOC**

Mobile Emergency Response Support Det., DHS-FEMA Bothell, WA, (b)(6) fax (425) 487-4404 fema-moc-bothell@dhs.gov

From: FEMA OPERATIONS CENTER Sent: Friday, March 11, 2011 7:53 AM

**To:** Sherwood, Harry; Hammond, Mike (Mike.Hammond@fema.gov); Fenton, Robert; Brooks, Marc; Buckingham, Ann; Carwile, William; Coble, Rex; Conklin, Craig; FEMA NRCC; FEMA-R9Watchofficer; Fiore, Craig; Greten, Timothy; Gruber, Corey; Kish, James; Matia, Matthew; nuclearSSA@hq.dhs.gov; Penn, Damon; Quinn, Vanessa; Woodard, Steven; FEMA-MOC-BOTHELL; FEMA-MOC-DENTON; FEMA-MOC-DENVER; FEMA-MOC-FREDERICK; FEMA-MOC-MAYNARD; FEMA-MOC-THOMASVILLE; FEMA-R2-Watch; FEMA-R3-Watch; FEMA-R4-Watch; FEMA-R5-Watch; FEMA-R7-Watch; FEMA-R9Watchofficer

Subject: Unusual Event related to Tsunami Warning 8.9 EQ Japan

#### Notification of Nuclear Power Plant Event

Actual or Exercise: Actual Event Event Classification: Unusual Event Plant/Facility: Diablo Canyon Location: Avila Beach, CA

Date/Time Declared: 3/11/2011, 1028EST

Date/Time Cancelled:

**Description of Event:** Due to the Tsunami Warning for the West Coast of the United States, NRC has entered Monitoring Mode for the plants located on the West Coast. There is no specific threat to any power plant. Per their procedures for tsunami warnings, Diablo Canyon NPP, has entered Unusual Event Mode.

NRC Response Mode: Monitoring Release or Potential Release? No

Considerable Public or Congressional Interest? No

Required Action: None

Note: A federal agency representative should be automatically dispatched to the Ops Center if NRC response mode

is "Activation" or "Expanded Activation".

Date/Time of Notification: 03/11/2011, 1028EST

NRC Caller: Mr. Pete Synder Received By: Kevin Biscoe

#### Definitions:

UNUSUAL EVENT: events are in process or have occurred which indicate potential degradation in the level of safety of the plant

ALERT: events are in process or have occurred which involve an actual or potential substantial degradation in the level of safety of the plant

SITE AREA EMERGENCY: events in process or which have occurred that result in actual or likely major failures of plant functions needed for protection of the public.

GENERAL EMERGENCY: actual or imminent substantial core damage or melting of reactor fuel with the potential for loss of containment integrity

Ralston, Michelle

To:

O"Boyle, Seamus; Harrington, Holly; Wright, Lisa (Gibney); Mroz (Sahm), Sara

Subject:

FW: Latest FEMA Talking Points

Date:

Friday, March 11, 2011 3:18:10 PM

FYI...FEMA EA and Mitigation in CA.

Respectfully,

Michelle Ralston, MS, PMI
Public Affairs, Stakeholder Outreach & Campaign Planning
Professional Services & Integration
Technological Hazards Division
Protection & National Preparedness
DHS/FEMA
1800 South Bell Street, Rm. 828
Arlington, VA 22202
(202) 212-2310 desk
(202)(b)(6)
(703) 305-0837 facsimile

----Original Message-----

From: Fiore, Craig

Sent: Friday, March 11, 2011 2:47 PM

To: Quinn, Vanessa; Ralston, Michelle; Horwitz, Steve

Subject: Latest FEMA Talking Points

Have you all seen these?

Talking Points on FEMA/Federal Family Response to Earthquake, Tsunami in the Pacific

Updated: 03/11/2011, 12:30 pm

President Obama received a briefing this morning at 9:30 a.m. in the Oval Office on the earthquake in Japan and the tsunami warnings across the Pacific from a number of senior US government officials including Homeland Security Secretary Janet Napolitano and Federal Emergency Management Agency Administrator Craig Fugate.

The senior officials provided the President with an update on the evolving situation stemming from the earthquake and subsequent tsunami that struck Japan early this morning including the actions being taken to assist U.S. states and territories that could be affected by the tsunami, as the President directed earlier this morning as well as the work being done to be prepared to assist the people of Japan

FEMA is closely monitoring the effects of the earthquake and subsequent tsunami that struck Japan early this morning, and as directed by the President, FEMA is in close contact and coordination with state and local officials and stands ready to support them in any way needed, through our regional offices in the West Coast and in the pacific area.

The Pacific Tsunami Warning Center has issued Tsunami Warnings and Watches for a number of countries, including parts of U.S. Territories in the Pacific as well as coastal areas along California, Oregon, Washington and Alaska.

We are also in contact with our federal partners at NOAA and other agencies. While there have been no requests for federal assistance from U.S. states or territories at this time, FEMA stands ready to assist if a request is made by a Governor.

FEMA has commodities, such as water, meals, blankets and cots, prepositioned on both Hawaii and Guam, should a request be made.

In addition, U.S. Coast Guard rescue crews are making preparations through the main Hawaiian Islands to provide post-tsunami support following any potential impacts.

Our message to the public is critical and simple: listen to the instructions of state and local officials, and if told to evacuate – evacuate. We urge everyone in the regions who could be impacted to listen to a NOAA Weather Radio and their local news to monitor for updates and directions provided by their local officials.

The United States Agency for International Development (USAID) remains the lead federal agency when it comes to responding to international disasters.

Additional federal coordination efforts include:

The Department of Defense has positioned National Guard personnel in county emergency operation centers in Hawaii, additional aircraft and personnel have been placed on standby if needed.

The U.S. Department of Health and Human Services (HHS) is deploying a Disaster Medical Assistance Team of more than 35 healthcare professionals and an Incident Response Coordination Team to Travis Air Force Base in California, as well as caches of medical equipment and supplies. From the Air Force base, the teams and equipment can deploy quickly wherever they are needed if requested by states or territories in the region or by the government of Japan.

The HHS Administration on Aging is monitoring the situation through its state, tribal and local Agencies on Aging, in impacted areas, to ensure safety of older adults in potentially impacted areas.

The U.S. Nuclear Regulatory Commission (NRC) is closely monitoring conditions near the Diablo Canyon

Power Plant, located near San Luis Obispo, CA. The NRC is working closely with its resident inspectors who are on site to ensure safe operating.

The National Oceanic and Atmospheric Administration and its Pacific Tsunami Warning Center are monitoring conditions and issuing warnings and advisory updates as available.

The U.S. Department of State has a call center established for Americans seeking information about family members in Japan. The number is 1-888-407-4747.

While tsunami watches and warning remain in effect, we urge the public to listen to the instructions of state and local officials, and if told to evacuate – evacuate. We urge everyone in the regions who could be impacted to listen to a NOAA Weather Radio and their local news to monitor for updates and directions provided by their local officials.

Sent from the BlackBerry of Craig J. Fiore

Brenner, Eliot

To:

Burnell, Scott; Hayden, Elizabeth; Harrington, Holly

Subject:

RE: Before I forget again...

Date:

Friday, March 11, 2011 7:26:02 PM

A technology to add to our quiver.

----Original Message----

From: Burnell, Scott Sent: Friday, March 11, 2011 7:25 PM

To: Brenner, Eliot; Hayden, Elizabeth; Harrington, Holly

Subject: Before I forget again...

At least three times today, TV stations asked for an interview via Skype, the Internet videophone service. It would require a webcam-enabled PC and a Skype account (free connections between Skype users). Something to seriously consider for the future. I can skype from my home laptop, but that's neither here nor there.

Sent from an NRC Blackberry Scott Burnell [(b)(6)



From: To: Subject: Date:	Harrington. Holly Brenner, Eliot RE: i"m headed home Friday, March 11, 2011 7:57:00 PM	
	ng these Q&As for the chairman. He wants a hig I answer. This will be fun.	th-level public answer and a technical
To: Harringt	y, March 11, 2011 7:49 PM	
I will be or by 7 or 8.	n the 11:15 call, (b)(6)	. I will probably be in
•	ffice of Public Affairs gulatory Commission	

O: 301-415-8200

C: (b)(6)

00/3/

To:

Date:

Harrington, Holly
(b)(6)
Friday, March 11, 2011 6:08:00 PM

http://www.youtube.com/user/NEINetwork

Kammerer, Annie

To:

Harrington, Holly; Hayden, Elizabeth

Subject:

Fw: Qs for: diable canyon comm plan---URGENT

Date:

Saturday, March 12, 2011 8:10:50 PM

FYI. I'll start thinking about the responses. Please advise when you want it.

Cheers, Annie

Sent from an NRC blackberry

Annie Kammerer

(b)(6)

annie.kammerer@nrc.gov

From: Uselding, Lara

To: Kammerer, Annie; Burnell, Scott; Markley, Michael; Dricks, Victor; Stuyvenberg, Andrew

Cc: Farnholtz, Thomas, Vegel, Anton; Brenner, Eliot

Sent: Sat Mar 12 16:37:01 2011

Subject: Qs for: diablo canyon comm plan---URGENT

Hello Annie- per our discussion, below are questions for the comm plan. Some are derived from reporters I have spoken with and then some I've created based on recent public topics raised. I use DC for Diablo:

Does the DC design basis include protection from both a worse case earthquake combined with a subsequest tsunami?

Could what's happened in Japan, happen at a plant here in the US?

Are US plants susceptible to the same sort of loss of all diesel power?

Now after the Japan tragedy, will the NRC finally hear us (ANR) and postpone DC license renewal until seismic studies are complete? How can you be sure that what happened there is not going to happen at Diablo with a worse case quake and tsunami?

SONGS received a white finding in 2008 for a bolt issue related to their EDGs that went undetected for 4 years. NRC issued the white as there was risk the EDGs may not have started under seismic conditions. Aren't all plants susceptible to the unknown? Is there any assurance the emergency cooling systems will function as desired in a Japan like emergency?

Lara Uselding
NRC Region 4 Public Affairs
(b)(6)

From: Kammerer, Annie

To: Uselding, Lara; Burnell, Scott; Markley, Michael; Dricks, Victor

Cc: Farnholtz, Thomas; Vegel, Anton Sent: Sat Mar 12 13:28:14 2011

Subject: Re: diablo canyon comm plan---URGENT

I am not sure if I have the latest. Please send ASAP. An updated plan is a very short term deliverable requested today. I realize that this is nearly impossible, but let's at least pull out the key questions.

Cheers, Annie

Sent from an NRC blackberry

Annie Kammerer

(b)(6)

annie.kammerer@nrc.gov

From: Uselding, Lara

To: Burnell, Scott; Kammerer, Annie; Markley, Michael; Dricks, Victor

Cc: Farnholtz, Thomas; Vegel, Anton Sent: Sat Mar 12 13:23:35 2011

Subject: Re: diablo canyon comm plan---URGENT

Hi Annie- I thought of you with all the recent activity. We are in the process of updating the comm plan at Tony Vegel's request from our last meeting and due to all the happenings. Tom - CCed above- is managing the collection of seismic data from his team so you should coordinate with he and his team.

We would really appreciate your help!

Do you have the latest version? If not, let me know and III send it to you.

Lara Uselding OPA RIV Lara Uselding

NRC Region 4 Public Affairs

(b)(6)

From: Burnell, Scott

To: Kammerer, Annie; Markley, Michael; Uselding, Lara; Dricks, Victor

Sent: Sat Mar 12 12:43:56 2011

Subject: RE: diablo canyon comm plan---URGENT

Feel free to provide factual updates and then we can work on language.

From: Kammerer, Annie

**Sent:** Saturday, March 12, 2011 12:42 PM

To: Markley, Michael; Burnell, Scott

Subject: diablo canyon comm plan---URGENT

There is discussion about the diablo canyon comm plan. From my recollection, it is pretty out of date.

How do you want to proceed. Should we take a look, pick out the key things and update?

From:

Loyd, Susan

Sent:

Saturday, March 12, 2011 11:10 AM

To:

Brenner, Eliot; Couret, Ivonne

Subject:

Cnn

# CNN. 11:05

(I will use their terminology) Reports that Fukushima plant evacuation zone has been doubled. Getting ready to distribute iodine tablets. Explosion was not reactor but the outside cement casing. Radiation levels outside plant are decreasing. Three plant workers have been exposed to radiation.

Sent from an NRC Blackberry

Susan Lovd (b)(6)

From:

Loyd, Susan

Sent:

Saturday, March 12, 2011 10:22 AM

To: Subject: Brenner, Eliot; Couret, Ivonne Media coverage

#### Fox

Keeps using headline of In Danger of Meltdown. Just had a segment on Chernobyl and aftermath. Then said just been told that three people have been exposed to radiation in plant. Then did phone call with Chester Dawson of WSJ. Dawson says people around plant are wearing protective clothing and breathing apparatus...so is this really minor problem?

CNN

Cnn reports damage to reactor and explosion that collaped roof over one of the reactprs. Says more than 83000 people live w/in 6 miles of plant.

**CBS Early Show** 

Interviews with experts on disaster and emergency planning and our readiness especiallu on west coast.

Sent from an NRC Blackberry

Susan Lovd (b)(6)

00/35

From:

Loyd, Susan

Sent:

Saturday, March 12, 2011 9:17 AM

To:

Brenner, Eliot; Couret, Ivonne; Batkin, Joshua

Subject:

Msnbc

Steve kerekes fom nei was just talking on msnbc. Gave info on radiation doses and comparisons and what nrc considers acceptable for workers etc. . Station reported that radiation levels around plant were down from where the has been.

Sent from an NRC Blackberry Susan Loyd

00/36

From:

(b)(6)

Sent:

Saturday, March 12, 2011 9:03 AM

To:

Couret, Ivonne

Subject:

Re: USAF denies sending "coolant" to Japan

awesome. thanks

----Original Message-----

From: Couret, Ivonne <Ivonne.Couret@nrc.gov>

To: hollymharrington (b)(6)

Sent: Sat, Mar 12, 2011 9:00 am

Subject: FW: USAF denies sending "coolant" to Japan

From: Burnell, Scott

Sent: Friday, March 11, 2011 5:55 PM To: Brenner, Eliot; Harrington, Holly

Subject: USAF denies sending "coolant" to Japan

#### FINALLY!!!

http://blogs.wsj.com/washwire/2011/03/11/state-department-no-emergency-delivery-to-japanese-nuclear-plant/

The US Air Force denies sending "coolant" to Japanese reactor.

"Regarding the question of whether US Air Force delivered assistance to a nuclear plant in Japan, I'm told that ultimately the Japanese Government handled the situation on its own," State Department spokeswoman Julie Reside said in an email.

For its part, the Air Force said it had no indication that it had delivered coolant or any other supplies to the stricken power plant."



To:	Brenner, Eliot; Dricks, Victor; Harrington, Holly; Burnell, Scott
Cc:	Miller, Geoffrey; Peck, Michael; Pruett. Troy; Kennedy, Kriss
Subject:	FW: NUCLEAR HAZARDS POSED BY EARTHQUAKES IN JAPAN Saburday, March 13, 2011 9:36:30 AM
Date:	Saturday, March 12, 2011 8:26:39 AM
FYI	•
Lara Uselding	
	1 Public Affairs
(b)(6)	
X * ** 1 **	CS S S CS
	on Jane <janeslo@me.com></janeslo@me.com>
	galton <davecongalton@edbroadcasters.com>; KEYT News <assignmentdesk@keyt.com></assignmentdesk@keyt.com></davecongalton@edbroadcasters.com>
	<pre><mquintero@ksby.com>; radio KCSB <news@kcsb.org>; Walch Aaron</news@kcsb.org></mquintero@ksby.com></pre>
	<pre>@kcoy.com&gt;; King harris <kingharris@edbroadcasters.com>; Ksby News</kingharris@edbroadcasters.com></pre>
	com>; Edward Bear (b)(6) April Charlton
	mespressrecorder.com>; Kcoy NEWS < news12@kcoy.com>; Dave Schermer
	ksby.com>; Press Information (b)(6) Matt Fountain
	newtimesslo.com>; Greg Haas <greg.haas@mail.house.gov>; Tolosa Press</greg.haas@mail.house.gov>
	ress.com>; SLOcity News <reporter@tolosapress.com>; Joseph Mangano</reporter@tolosapress.com>
(b)(6)	Frank Camas < <u>reporter@tolosapress.com</u> >; Press Women's  Lt (b)(6) banner bob <info@hopedance.org>;</info@hopedance.org>
(b)(6) Weber Tad 	L t (D)(6)   banner bob <info@hopedance.org>; weber@thetribunenews.com&gt;; Colin rigley <crigley@newtimesslo.com>; Nick welsh</crigley@newtimesslo.com></info@hopedance.org>
	ndent.com>; hodgson fivecities <mhodgson@timespressrecorder.com>; David Sneed</mhodgson@timespressrecorder.com>
	tribunenews.com>; David Kestenbaum <dkestenbaum@npr.org>; Angela Ellis</dkestenbaum@npr.org>
	Dabc.com>; Griest Dick (b)(6) Melanie Welte <mwelte@ap.org>; Matt wald</mwelte@ap.org>
	ytimes.com>; cjoyce@npr.org <cjoyce@npr.org>; Sue Yuba <yubasue@yubanet.com>;</yubasue@yubanet.com></cjoyce@npr.org>
Ken Gale (b)(6	Ben Geman (b)(6) Associated Press
<info@ap.org< td=""><td>&gt;; Erica Werner <ewerner@ap.org>; Herried roger <rogerh@energy-net.org>; press</rogerh@energy-net.org></ewerner@ap.org></td></info@ap.org<>	>; Erica Werner <ewerner@ap.org>; Herried roger <rogerh@energy-net.org>; press</rogerh@energy-net.org></ewerner@ap.org>
	s@yubanet.com>; Steven Greenlee <steveng@newsdata.com>; George Lewis</steveng@newsdata.com>
	.com>; Lompoc Record <abrooks@lompocrecord.com>; Santa Barbara MAG</abrooks@lompocrecord.com>
	.com>; Daily Nexus <county@dailynexus.com>; Santa Maria Sun</county@dailynexus.com>
	nariasun.com>; Mag central coast <editor@centralcoastmag.com>; Coastal View</editor@centralcoastmag.com>
	liview.com>; Montecito Mag <peter@montecitomag.com>; Santa Barbara City College</peter@montecitomag.com>
	cc.edu>; Santa Barbara Independent <news@independent.com>; Orcutt Pioneer</news@independent.com>
	ioneer.com>; Greg Hyatt <greg.hyatt@iwpnews.com>; Ja savage</greg.hyatt@iwpnews.com>
(b)(6)	(b)(6) ; Bob Gelko
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(b)(6)	Caroline Koo Ccaroline@nowsdata.com>: Aramavo James ; Energy Biz
<energyhizinsi< td=""><td>der@eneravcentral.com&gt;; Hildle Spritzer (b)(6) ; Dana Wilke</td></energyhizinsi<>	der@eneravcentral.com>; Hildle Spritzer (b)(6) ; Dana Wilke
(b)(6)	Alan Stahler <stahler@kvmr.org>; Amanda Witherell</stahler@kvmr.org>
(b)(6)	Weekly Orange <nschou@ocweekly.com>; Smith Rebecca</nschou@ocweekly.com>
	th@wsj.com>; SFC coile <zcoile@sfchronicle.com>; Elaine Platts</zcoile@sfchronicle.com>
	@platts.com>; LATimes Enviro <dan.weikel@latimes.com>; Chris Raphael</dan.weikel@latimes.com>
	lata.com>; SB Independent <nick@independent.com>; Hilary Corrigan</nick@independent.com>
	data.com>; Wired Kravets <david_kravets@wired.com>; C Energy Markets</david_kravets@wired.com>
	ata.com>; Tri Valley <news@tv30.org>; Clohessy Emma (b)(6)</news@tv30.org>
Scott Powell (t	
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	12 03:33:07 2011
	TEAR HAZARDS POSED BY EARTHOUAKES IN JAPAN

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San Luis Obispo Mothers for Peace P.O. Box 3608 San Luis Obispo, CA 93403 mothersforpeace.org

# **NEWS RELEASE**

For Immediate Release

Contact:

March 12, 2011

Elizabeth Apfelberg hankliz@charter.net (805) 783-2383

San Luis Obispo Mothers for Peace is monitoring information about the earthquakes in Japan and the effects on nuclear power plants there. As information continues to develop, there are grave concerns about the possible consequences of radiation releases.

The evacuation zone around the Fukushima Daiichi plant has been expanded from 3 to 10 KM (6 1/4 miles). Fukushima I-2 has lost backup power and necessary cooling capability. Evacuation efforts have been increased because of the detection of radioactive cesium in the atmosphere, suggesting some of the fuel may have melted.

Eleven of Japan's 55 reactors are reportedly shut down due to the earthquake, leading to a severe shortage of electrical energy.

SLO Mothers for Peace joins the world in its concerns for the people of Japan affected by the ground motion, the tsunamis and the radiological hazards posed buy this earthquake of unanticipated and unprecedented proportions.

# Uselding, Lara

From:

Uselding, Lara

Sent:

Saturday, March 12, 2011 7:41 AM

To:

Collins, Elmo; Howell, Art; Kennedy, Kriss; Pruett, Troy; Caniano, Roy; Cain, Chuck

Cc:

Dricks, Victor

Subject:

See first article on Japan... Google Alert - diablo canyon nuclear power plant

Also, Mothers for Peace have already sent out a press release early this morning on Japan happenings and their concerns for Diablo. Will share that in separate email.

Lara

Lara Uselding

NRC Region 4 Public Affairs

(b)(6

From: Google Alerts < googlealerts-noreply@google.com>

To: Uselding, Lara

Sent: Sat Mar 12 06:49:25 2011

Subject: Google Alert - diablo canyon nuclear power plant

News

3 new results for diable canyon nuclear power plant

# Japan Scrambles to Avert Meltdown

Wall-Street Journal

... what improvements should be made, such as to emergency power systems. Tsunami fears spread to many nations with coastal nuclear reactors including Korea, China, Taiwan and the US In Calfornia, PG&E Corp's Diablo Canyon nuclear plant went on alert.

See all stories on this topic »

## Tsunami threatens US nuclear power plants

PennEnergy - Energy News (press release)

The NRC is closely monitoring all nuclear facilities in the tsunami warning zone, including the **Diablo Canyon nuclear power plant**, the Sand Onofre nuclear power plant, the Humboldt Bay spent fuel storage site and the NRC-regulated nuclear materials ... See all stories on this topic n

### FACTBOX-Calif. power plants on tsunami alert

Reuters Africa

March 11 (Reuters) - Power plants along the US West Coast were preparing themselves in light of the tsunami alert on Friday, after a massive earthquake off Japan. PG&E Corp (PCG.N: Quote) said its **Diablo Canyon nuclear power plant** was operating ... See all stories on this topic n

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# Uselding, Lara

F	rom:
_	

Uselding, Lara

Sent:

Saturday, March 12, 2011 7:42 AM

To:

Collins, Elmo; Howell, Art; Caniano, Roy

Subject:

Fw: NUCLEAR HAZARDS POSED BY EARTHQUAKES IN JAPAN

I've already shared with Kriss and Troy and the branch Lara Uselding NRC Region 4 Public Affairs (b)(6)

From: Swanson Jane <a href="mailto:swanson"></a>
<b>To</b> : Dave Congalton < <u>davecongalton@edbroadcasters.com</u> >; KEYT News < <u>assignmentdesk@keyt.com</u> >; KSBY Quintero
<u><mquintero@ksby.com< u="">&gt;; radio KCSB &lt;<u>news@kcsb.org</u>&gt;; Walch Aaron <u><aaronwalch@kcov.com>: King harris</aaronwalch@kcov.com></u></mquintero@ksby.com<></u>
< <u>kingharris@edbroadcasters.com</u> >; Ksby News < <u>news@ksby.com</u> >; (b)(6) ; April
Charlton <acharlton@timespressrecorder.com>; Kcoy NEWS <news12@kcoy.com>; Dave Schermer</news12@kcoy.com></acharlton@timespressrecorder.com>
< <u>dschermer@ksby.com</u> >; Press Information (b)(6) Matt Fountain
< <u>mfountain@newtimesslo.com</u> >; Greg Haas < <u>greg.haas@mail.house.gov</u> >; Tolosa Press < <u>neil@tolosapress.com</u> >;
SLOcity News < reporter@tolosapress.com>; Joseph Mangano (b)(6) Frank Camas
< <u>reporter@tolosapress.com</u> >; Press Women's (b)(6) (b)(6) banner bob
< <u>info@hopedance.org</u> >; Weber Tad < <u>tweber@thetribunenews.com</u> >; Colin rigley < <u>crigiey@newtimessio.com</u> >; Nick
welsh < <u>nick@independent.com</u> >; hodgson fivecities < <u>mhodgson@timespressrecorder.com</u> >; David Sneed
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(b)(6) ; Melanie Welte < <u>mwelte@ap.org</u> >; Matt wald < <u>mattwald@nytimes.com</u> >; cjoyce@npr.org
< <u>cioyce@npr.orq</u> >; Sue Yuba < <u>yubasue@yubanet.com</u> >; (b)(6) ; (b)(6)
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< <u>rogerh@energy-net.org</u> >; press Nevada < <u>news@yubanet.com</u> >; Steven Greenlee < <u>steveng@newsdata.com</u> >; George
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Daily Nexus < <u>county@dailynexus.com</u> >; Santa Maria Sun < <u>mail@santamariasun.com</u> >; Mag central coast
<pre><editor@centralcoastmag.com>; Coastal View <matt@coastalview.com>; Montecito Mag <peter@montecitomag.com>;</peter@montecitomag.com></matt@coastalview.com></editor@centralcoastmag.com></pre>
Santa Barbara City College < <u>channels@sbcc.edu</u> >; Santa Barbara Independent < <u>news@independent.com</u> >; Orcutt
Pioneer < info@orcuttpioneer.com>; Greg Hyatt < greg.hyatt@iwpnews.com>; Ja savage ((b)(6)
Eliz McCarthy (b)(6); Bob Gelko < begelko@sfchronicle.com >; Marc Lirsner
<u><marc.iifsher@iatimes.com>; (b)(6)</marc.iifsher@iatimes.com></u> (b)(6) Caroline Keo < <u>caroline@newsdata.com</u> >;
(b)(6) ; Energy Biz
<pre><energybizinsider@energycentral.com>; (b)(6)</energybizinsider@energycentral.com></pre>
(b)(6) Alan Stahler $<$ stahler@kvmr.org>; (b)(6) ; Weekly
Orange < nschou@ocweekly.com >; Smith Rebecca < Rebecca. Smith@wsj.com >; SFC colle < zcolle@srcnronicle.com >;
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< <u>chris@newsdata.com</u> >; SB Independent < <u>nick@independent.com</u> >; Hilary Corrigan < <u>hilary@newsdata.com</u> >; Wired
Kravets < <u>david_kravets@wired.com</u> >; C Energy Markets < <u>cem@newsdata.com</u> >; Tri Valley < <u>news@tv30.org</u> >; (b)(6)
(b)(6)   (b)(6)   lanet Wolf < jwolf@co.santa- barbara ca us > (b)(6)   √(b)(6)   √(b)(6)   lanet Wolf < jwolf@co.santa-
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(Cristina Gonzalez
<coonzalez@fundforsantaparpara.org> (b)(6) &gt;; Joyce Howerton <joyce@sbcan.org></joyce@sbcan.org></coonzalez@fundforsantaparpara.org>
Sent: Sat Mar 12 03:33:07 2011
Subject: NUCLEAR HAZARDS POSED BY EARTHQUAKES IN JAPAN

San Luis Obispo Mothers for Peace P.O. Box 3608 San Luis Obispo, CA 93403 mothersforpeace.org

# **NEWS RELEASE**

For Immediate Release March 12, 2011

Contact: Elizabeth Apfelberg hankliz@charter.net

(805) 783-2383

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Uselding, Lara
From:         Uselding, Lara           Sent:         Saturday, March 12, 2011 7:40 PM           To:         (b)(6)           Subject:         Re: NRC - INCORRECT NEWS ITEM ON YOUR SITE!
Thanks Dan, Lara Lara Uselding NRC Region 4 Public Affairs (b)(6)
From: Dan Yurman (b)(6)  To: Uselding, Lara  Cc:  scheele@ans.org    scheele@ans.org    Sent: Sat Mar 12 20:37:11 2011  Subject: RE: NRC - INCORRECT NEWS ITEM ON YOUR SITE!  OK, thanks, I'll fix it. Send updates to me when you have any.
)an Yurman  mail:[(b)(6)  lobile:[(b)(6)  log: http://djysrv.blogspot.com
From: Uselding, Lara [mailto:Lara.Uselding@nrc.gov] Sent: Friday, March 11, 2011 2:23 PM To: outreach@ans.org Subject: NRC - INCORRECT NEWS ITEM ON YOUR SITE! Importance: High
Hello: Attached is the NRC press release from earlier stating that both California plants remain on line and have been so since the Japanese earthquake and subsequent tsunami. The ELP link is incorrect on your nuclear café site. The plants have not shutdown today.
Lara Uselding  NRC <u>Public Affairs</u> Cell: (b)(6)

No. 11-042

March 11, 2011

NRC MONITORS NOTICE OF UNUSUAL EVENT AT DIABLO CANYON POWER PLANT, TSUNAMI ISSUES

000/391

# The U.S. Nuclear Regulatory Commissio

n, through its regional office in Arlington,

# Tex., is monitorin g a notice ofunusual

# event (NOUE) at the Diablo Canyon

# Power Plant, located near San

# Luis Obispo, Calif. Senior

# NRC officials are working at

the agency's Rockville, Md.,

headquart ers to coordinate NRC

# activities with respect to the

# Japanese earthquak e and

# subsequen t tsunami.

"The NRC is closely monitoring this situation as it unfolds with respect to nuclear facilities within the United States NRC staff is working closely with its resident inspectors who are on site to ensure safe operations," said NRC Chairman Gregory Jaczko.

Pacific Gas and Electric Co. (PG&E), operator of the Diablo Canyon two-reactor plant, declared a precautionary NOUE Unusual Event at 4:23 a.m. EST today after receiving a tsunami warning from the West California Emergency Management Agency. The tsunami warning was generated after an estimated 8.9 magnitude earthquake occurred off the eastern Japanese coast.

The licensee reported the Diablo Canyon plant is stable and both units remain on line. The plant is well protected against tsunami conditions as required by NRC regulations. The NRC has staff at the plant keeping track of the plant's response.

Nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area.

In addition to the Diablo Canyon plant, the NRC is also monitoring the San Onofre nuclear power plant, the Humboldt Bay spent fuel storage site and NRC-regulated nuclear materials sites in Hawaii and Alaska to name a few. Site personnel have informed the NRC they are prepared for possible tsunami effects.

###

News releases are available through a free *listserv* subscription at the following Web address: <a href="http://www.nrc.gov/public-involve/listserver.html">http://www.nrc.gov/public-involve/listserver.html</a>. The NRC homepage at <a href="http://www.nrc.gov">www.nrc.gov</a> also offers a SUBSCRIBE link. E-mail notifications are sent to subscribers when news releases are posted to NRC's Web site.

# Couret, Ivonne

From:

Loyd, Susan

Sent:

Saturday, March 12, 2011 11:50 AM

To:

Brenner, Eliot; Couret, Ivonne; Batkin, Joshua; Jaczko, Gregory

Subject:

Msnbc

Interesting discussion on MSNBC now. Reporting that the govt of Japan is saying the two reactors that were of concern are now being cooled down, and that the radoation that was vented was not at levels that are dangerous. Then the commentator said this has not been confirmed by IAEA. And can we trust what the Japanese officials are saying? Are they telling whole story? Then discussion turned to U.S. and our plant by San Andreas Fault, etc.

Sent from an NRC Blackberry Susan Lovd

00/00

Brenner, Eliot

To:

McIntyre, David; Harrington, Holly; Burnell, Scott

Subject:

RE: Q&As

Date:

Saturday, March 12, 2011 10:07:44 PM

- 1: there is a good chance it was a hydrogen explosion that took the roof off that building, though we are not saying that publicly.
- 2: I have just reached out to CNN and asked them to call Diaz, and reached out to push the white house yet again to start talking on background or getting out in front of some of this crap.
- 3: go to the ops center. Your role in the morning is relieving scott, getting briefed up, then being the lead talking point/press release/q-and-a stuff, at least until someone else comes in to take some of that off your hands.

eliot

From: McIntyre, David

Sent: Saturday, March 12, 2011 10:02 PM

To: Harrington, Holly; Brenner, Eliot; Burnell, Scott

Subject: Re: Q&As

Where shd I report in the morning?

Just saw an incoherent discussion on cnn by Bill Nye the science guy who apparently knows zilcho about reactors and an idiot weatherman who said Hydrogen explosion? Pfft. I'm not buying it.

David Mcintivre

NRC Office of Public Affairs

.301-415-8200 (office)

Sent from my BlackBerry, which is wholly respnsble for all typoos.

From: Harrington, Holly

To: Burnell, Scott; McIntyre, David; Couret, Ivonne

**Sent**: Sat Mar 12 20:00:57 2011

Subject: FW: Q&As

These are good as of 8 p.m. I expect them to evolve . .. Scott - - these are saved to the desktop to the second computer in the Op Center

**From:** Harrington, Holly

Sent: Saturday, March 12, 2011 7:58 PM

To: Jaczko, Gregory

Cc: Brenner, Eliot; Hayden, Elizabeth

Subject: Q&As

These are the current Q&As with both answers suitable for the public and additional technical information. We expect these will continue to evolve.

McCree, Victor

To:

Virgilio, Martin

Subject:

Re: 1 p.m. call today for Japanese nuclear update

Date:

Saturday, March 12, 2011 1:24:28 PM

Ok, got it, thanks. Hang in there!

Vic

This email is being sent from an NRC Blackberry device.

----- Original Message -----From: Virgilio, Martin To: McCree, Victor

Sent: Sat Mar 12 13:22:43 2011

Subject: Re: 1 p.m. call today for Japanese nuclear update

Vic

Tony P and I spoke he did not extend the invite. We shared info and agreed to talk periodically.

Marty

----- Original Message -----From: McCree, Victor

To: HOO Hoc

Cc: Virgilio, Martin; Borchardt, Bill Sent: Sat Mar 12 10:53:45 2011

Subject: Fw: 1 p.m. call today for Japanese nuclear update

Bill Huffman, HOO - as we discussed, please give this to Marty Virgilio.

Thanks, Vic

This email is being sent from an NRC Blackberry device.

---- Original Message ----

From: Scarola, Jim <jim.scarola@pgnmail.com>

To: McCree, Victor

Sent: Sat Mar 12 10:28:12 2011

Subject: FW: 1 p.m. call today for Japanese nuclear update

FYI -as discussed.

Jim Scarola

-----Original Message-----

From: STEWARD, Lisa [mailto:lis@nei.org]

Sent: Saturday, March 12, 2011 09:27 AM Eastern Standard Time

To: Anthony Alexander; mark\_ayers@bctd.org; brew.barron@cengllc.com; wbaxter@ameren.com; donald.brandt@pinnaclewest.com; Dr. Aris Candris; aicathca@bechtel.com; david.christian@dom.com; christopher.crane@exeloncorp.com; Anthony Earley; Audeen Fentiman; FERTEL, Marvin; jack.fuller@ge.com; jfutcher@bechtel.com; Gary Gates; Gerald Grandey; ehalpin@stpegs.com; lew.hay@NextEraEnergy.com; ghempfling@curtisswright.com; ed\_hill@ibew.org; William P. Hite; Johnson, Bill; rjuzaitis@tamu.edu; Jack Keenan; Richard.Kelly@xcelenergy.com; Thomes D. Kilgore; Bill Levis; ron.litzinger@sce.com; ganpat.mani@converdyn.com; John C. McClure; Mike McMahon; jhmiller@southernco.com; James H. Miller; Michael Morris; cmmowry@babcock.com; George Nash;

lash; DO AZ

clarence.ray@shawqrp.com/ mereddemann@energy-northwest.com: Mike Rencheck; Keith Roe; James Regers; Kirk Schnoebelen; k.singh@holtec.com; Richard Smith; masunse@wcnoc.com; William Timmerman; George Turner; chris.tye@fluor.com; John Welch; Alan Wendorf; kiyoshi\_yamauchi@mhi.co.jp; John Young; jarchie@scana.com; dbannister@oppd.com; brew.barron@cengllc.com; jeffrey.benjamin@ch2m.com; sbyrne@scana.com; kcole@nacintl.com; jtch@pge.com; rcoward@mpr.com; davisjm3@dteenergy.com; pete.dietrich@sce.com; randall.edington@aps.com; ferlanej@westinghouse.com; rafael.flores@luminant.com; thomas.franch@areva.com; jtgasser@southernco.com; ehalpin@stpegs.com; david.heacock@dom.com; aheflin@ameren.com; jherron@entergy.com; dhiaa.jamil@duke-energy.com; thomas.joyce@pseq.com; dennis koehl@xenuclear.com; maria.korsnick@cengllc.com; kevin.lagasse@ge.com; jhlash@firstenergycorp.com; michel.maschi@edf.com; Mike McMahon; Jeff Merrifield; gary.mignogna@areva.com; tom.mitchell@opg.com; dmodeen@epri.com; john.mulligan@urs.com; mano.nazar@fpl.com; bjograd@nppd.com; Pierre Oneid; michael.pacilio@exeloncorp.com; charles.pardee@exeloncorp.com; hphillips@nmlneil.com; cwrau@bechtel.com; tsrausch@pplweb.com; breilly@bechtel.com; Mike Rencheck; brian.l.renwick@sargentlundy.com; rsanacore@amnucins.com; bjsawatzke@energy-northwest.com; Scarola, Jim; masunse@wcnoc.com; pdswafford@tva.gov; chris.tye@fluor.com; ljweber@aep.com; websterwe@inpo.org; nwilmshurst@epri.com 1 p.m. call today for Japanese nuclear update

There will be a conference call today at 1 p.m. (Eastern) for NEI's Board of Directors and the Nuclear Strategic Issues Advisory Committee to provide an update on the situation of the nuclear plants in Japan. The INPO Board of Directors will also participate on this call.

Scott Peterson, NEI's EP Director, will lead the call.

The call-in number is 719.955.1361. The pass code Due to the large number of callers expected on this call, please MUTE YOUR PHONE DURING THE CALL.

Thank you.

Lisa Steward

Senior Director and Assistant Corporate Secretary

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Sent through mail.messaging.microsoft.com

Harrington, Holly

To: Subject: Couret, Ivonne RE: ABC Question

Date:

Saturday, March 12, 2011 3:01:00 PM

They are available to assist the Japanese if asked and otherwise available to provide expert guidance to the USAID team.

From: Couret, Ivonne

Sent: Saturday, March 12, 2011 2:52 PM

To: Harrington, Holly Subject: ABC Question Importance: High

Did Japan accept are offer for help or are the two NRC experts only part of the USAID team? ABC on the line

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



(301) 415-8205 ivonne.couret@nrc.gov

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NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

From: Harrington, Holly

Sent: Saturday, March 12, 2011 2:32 PM To: Couret, Ivonne; Hayden, Elizabeth

Subject: RE: REPLY NEEDED - Is there anyone taking official pictures of current crisis in OPS center

Do not see them

From: Couret, Ivonne

Sent: Saturday, March 12, 2011 2:31 PM To: Hayden, Elizabeth; Harrington, Holly

Subject: FW: REPLY NEEDED - Is there anyone taking official pictures of current crisis in OPS center

FYI - Have they contacted you?

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



(301) 415-8205 ivonne.couret@nrc.gov

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NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

From: Kundrat, Christine

Sent: Saturday, March 12, 2011 2:30 PM

To: Couret, Ivonne; Stenberg, Danita; Schoenmann, Sandra

Subject: Re: REPLY NEEDED - Is there anyone taking official pictures of current crisis in OPS center

By now, Matt and Felix should have arrived at the ops cntr. Pls provide them with direction on what to capture and how long they are to stay.

Pls call me on this # if a press conference is likely.

Sent from an NRC blackberry Christine Kundrat (b)(6)

From: Couret, Ivonne

To: Kundrat, Christine; Stenberg, Danita

Cc: AV-PHOTO Resource

**Sent**: Sat Mar 12 07:09:37 2011

Subject: REPLY NEEDED - Is there anyone taking official pictures of current crisis in OPS center

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



ivonne.courel@nrc.gov

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NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx

Please consider the environmental impact before printing this email.

Barkley, Richard

To:

Harrington, Holly

Subject:

RE: Proposed Blog Comment - Your Thoughts?? Can we go there on a blog?? And do it now???

Date:

Saturday, March 12, 2011 10:48:00 AM

Agreed - Just trying to keep my promise to you and to my working group.

Is OPA pushing for a blog/press release on the secondary containment explosion in Japan today/tomorrow? That was a very scary picture to myself, much less the public, especially since the machine is a GE designed BWR not radically different in size, age and design than some high visibility plants in my region. I can see the cards and letters coming to my in-box by Monday.

From: Harrington, Holly

Sent: Saturday, March 12, 2011 10:27 AM

To: Virgilio, Rosetta; Barkley, Richard; Couret, Ivonne; Mitlyng, Viktoria; Rakovan, Lance; Ryan,

Michelle; Salter, Susan; Screnci, Diane; Steger (Tucci), Christine

Cc: Sheehan, Neil

Subject: Re: Proposed Blog Comment - Your Thoughts?? Can we go there on a blog?? And do it now?

22

Let's discuss next week when we get past current events

Sent from NRC Blackberry Holly Harrington

(b)(6)

From: Virgilio, Rosetta

To: Barkley, Richard; Couret, Ivonne; Mitlyng, Viktoria; Rakovan, Lance; Ryan, Michelle; Salter, Susan;

Screnci, Diane; Steger (Tucci), Christine Cc: Harrington, Holly; Sheehan, Neil Sent: Sat Mar 12 09:47:56 2011

Subject: Re: Proposed Blog Comment - Your Thoughts?? Can we go there on a blog?? And do it now??

2

Rich - I think its a good idea but blog length should be checked to be sure it falls w/in NRC guidelines. Might indicate up front that leak found not to be harmful, and suggest adding "voluntary" to item 3, with respect to exposure to sun, xrays, etc.

Sent from an NRC Blackberry Rosetta O. Virgilio

(b)(6)

From: Barkley, Richard

To: Couret, Ivonne; Mitlyng, Viktoria; Rakovan, Lance, Ryan, Michelle; Salter, Susan; Screnci, Diane;

Steger (Tucci), Christine; Virgilio, Rosetta Cc: Harrington, Holly; Sheehan, Neil

Sent: Fri Mar 11 17:25:42 2011

Subject: Proposed Blog Comment - Your Thoughts?? Can we go there on a blog?? And do it now???

Lance and I have discussed the possibility of blogging this subject, then asking for comments.

00/44

This is an early first cut at making it happen.

Can this be tweaked and loaded on our blog, or is this too senstive a subject to toss out in this forum? At this time??

Holly is looking for the first comment from a regional office – If it goes out under my name, this would be it.

Thanks – The timing of this thing is everything. NRR is looking to issue a renewed license to Vermont Yankee next week, so if this blog comment goes up then, I have a feeling I am going to be see a bit of harsh language in the replies. Thus it may have to wait a short while.

Richard S. Barkley, PE Nuclear & Environmental Engineer (610) 337-5065 Work (b)(6) Cell

Harrington, Holly

To:

Couret, Ivonne

Subject:

FW: I'm here and at my desk. If you want me at the op Center let me know

Date:

Saturday, March 12, 2011 1:56:00 PM

From: Harrington, Holly

Sent: Saturday, March 12, 2011 1:10 PM

To: Hayden, Elizabeth

Subject: RE: I'm here and at my desk. If you want me at the op Center let me know

(b)(6)

I do not have an ANS phone number. Do you want me to try and find one?

From: Hayden, Elizabeth

Sent: Saturday, March 12, 2011 1:08 PM

To: Harrington, Holly

Subject: RE: I'm here and at my desk. If you want me at the op Center let me know

Do you have the NEI and ANS phone numbers handy? I found the off-hours NEI # in my e-mails, but I thought you had given us 2 #s.

From: Harrington, Holly

Sent: Saturday, March 12, 2011 12:34 PM

To: Hayden, Elizabeth; Burnell, Scott; Brenner, Eliot; Couret, Ivonne

Subject: I'm here and at my desk. If you want me at the op Center let me know

O/M

Drogaitis, Spiros

To:

Harrington, Holly; Brenner, Eliot

Cc:

Batkin, Joshua

Subject:

FW: For the Q&As

Date:

Saturday, March 12, 2011 4:24:30 PM

# Thanks

----Original Message-----

From: Weil, Jenny

Sent: Saturday, March 12, 2011 4:08 PM

To: Droggitis, Spiros

Subject: Re: For the Q&As

Hi Spiros,

Did you think you'd be here on a Saturday?

Here are some questions from Rep. Markey. Not sure if you are able to feed it to the team or if Becky already did.

How many US reactors are located in active earthquake zones (and which reactors)?

How many reactors are along coastal areas that could be affected by a Tsunami (and which ones)?

How many have designs similar to the affected Japanese reactors (and which ones)?

Sent via BlackBerry
Jenny Weil
Congressional Affairs Officer
U.S. Nuclear Regulatory Commission
(b)(6)

00/AP

Harrington, Holly Barkley, Richard

To: Subject:

RE: Blog Offer

Date:

Saturday, March 12, 2011 5:03:00 PM

Thank you for the offer. The White House would shoot us, stab us and poison us and hang our corpses over a roaring flame if we did that. There is a concerted federal effort not to get ahead of Japan or even to speculate. Maybe sometime later . . . but not now.

But thank you for thinking of me!!! (sitting here in the op center on a Saturday after being here until midnight last night).

Holly

From: Barkley, Richard

Sent: Saturday, March 12, 2011 5:00 PM

**To:** Harrington, Holly **Subject:** Blog Offer

You are after me to post a blog. I would be happy to craft one explaining the explosion we witnessed on TV this morning in simple terms. In doing so, I could explain the source of the hydrogen, why the explosion appeared so dramatic, and yet why the main reactor containment is still intact. It would provide some assurance to the public here regarding the safety of similar BWRs in this country.

The discussion would be focused on that one plant, using information from the sources posted in your last press release, and avoid a detailed discussion of the status of the plant nor Japan's other nuclear plants in keeping with the statement in OPA's last press briefing.

Let me know – I can be reached at the numbers below. NEI and several news services has such information posted for the last 4 hours, so we should be able to blog it in the days (or weeks) ahead.

Richard S. Barkley, PE
Nuclear & Environmental Engineer
(610) 337-5065 Work
(b)(6) Cell

The NRC will not provide information on the status of that country's nuclear power plants. Check the NRC web site or blog for the latest information on NRC actions. Other sources of information include:

aoky

# Kock, Andrea

From:

Franovich, Mike

Sent:

Saturday, March 12, 2011 10:40 AM

To:

Ostendorff, William

Cc:

Nieh, Ho; Warnick, Greg; Kock, Andrea; Zorn, Jason

Subject:

Fw: Latest Q&A

Attachments:

Chairman Jaczko\_QA4\_earthquake031111.docx

### SENT FROM NRC BLACKBERRY

Mike Franovich

From: Burnell, Scott

To: Franovich, Mike; Orders, William; Snodderly, Michael; Castleman, Patrick

**Sent**: Sat Mar 12 10:04:34 2011

Subject: Latest Q&A

# Kock, Andrea

From:

Franovich, Mike

Sent:

Saturday, March 12, 2011 10:38 AM Ostendorff, William

To:

Cc:

Nieh, Ho; Warnick, Greg; Kock, Andrea; Zorn, Jason

Subject:

Fw: Latest talking points

Attachments:

03\_11\_QUAKE\_talk\_pts6.docx

SENT FROM NRC BLACKBERRY

Mike Franovich

(b)(6)

From: Burnell, Scott

To: Franovich, Mike; Orders, William; Snodderly, Michael; Castleman, Patrick

**Sent**: Sat Mar 12 09:41:42 2011 Subject: Latest talking points

And on we go...

# Kock, Andrea

From:

Kock, Andrea

Sent:

Saturday, March 12, 2011 11:46 AM

To:

Franovich, Mike

Subject:

Re: Hardened Vent Path for U.S. BWR/Mark I Containments

Yes it will. Thanks for the u tube video as well. I appreciate you keeping us all so informed.

Sent from NRC blackberry

Andrea Kock

(b)(6)

From: Franovich, Mike To: Kock, Andrea

Sent: Sat Mar 12 11:43:38 2011

Subject: Fw: Hardened Vent Path for U.S. BWR/Mark I Containments

I mean shape our agenda...

SENT FROM NRC BLACKBERRY

Mike Franovich (b)(6)

**From**: Franovich, Mike **To**: Kock, Andrea

**Sent**: Sat Mar 12 11:41:41 2011

Subject: Re: Hardened Vent Path for U.S. BWR/Mark I Containments

Thx Andrea. This disaster will share our agenda for months.

SENT FROM NRC BLACKBERRY

Mike Franovich (b)(6)

From: Kock, Andrea To: Franovich, Mike

Sent: Sat Mar 12 11:07:31 2011

Subject: Re: Hardened Vent Path for U.S. BWR/Mark I Containments

Mike you continue to impress me with your knowledge! Hope you get at least a little rest this weekend! This is very interesting for us non reactor types!

Sent from NRC blackberry

Andrea Kock (b)(6)

**From**: Franovich, Mike **To**: Ostendorff, William

Cc: Nieh, Ho; Warnick, Greg; Kock, Andrea; Zorn, Jason

**Sent**: Sat Mar 12 08:55:58 2011

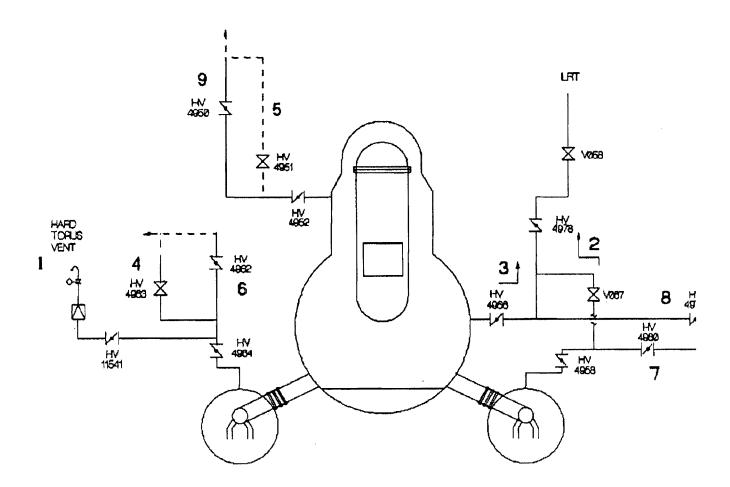
Subject: Hardened Vent Path for U.S. BWR/Mark I Containments

Sir.

00/50

If the Fukushima Daiichi Unit 1 explosion is the scenario in my previous e-mail, I put together a brief explanation of what US plants have to prevent such an explosion. Without a hardened vent, venting the primary containment shown below would have used soft ducting and other paths to the secondary containment (secondary containment is not shown). Based on severe accident risk studies of containments, the NRC took action in 1989 to retrofit BWR Mark I plants with a hardened wetwell vent path. Licensees also improved reactor pressure vessel depressurization system reliability, an alternative water supply to the reactor vessel and drywell sprays, and updated emergency procedures and training. Today I believe all U.S. plants have this feature. I say I believe all BWR/Mark I plants hav this feature because there were a few licensee's who refused to implement a change and I can't recall how those were resolved.

Below is a cutaway and on your left is the hardened vent of the torus (steam suppression pool). This is the arrangement for the Hope Creek plant as an example. The operator would use this pathway if necessary and the containment pressure was above 35 psig. The flow goes through a rupture disk. If there is no DC power or loss of pneumatics (local nitrogen bottle supply) the pathway valves may be throttled manually.



To:	Anthony Ulses
Subject:	RE: Backpack
Date:	Saturday, March 12, 2011 11:12:49 AM
Sorry - never	made the connection.
From: Anthon Sent: Saturda To: Ulses, Ant Cc: Trapp, Jar Subject: Re: E	y, March 12, 2011 9:02 AM thony mes
Hi Jim,	
	ogether Tony's $(b)(6)$ My mobile number is $(b)(6)$ In the event we are unable have placed the $(b)(6)$ on our front porch, $(b)(6)$
Thanks,	
(b)(6)	
On Mar 12, 20	011, at 8:51 AM, Ulses, Anthony wrote:
> Jim,	
>	
	It about to leave $(b)(6)$ was wondering if you could try and coordinate with $(b)(6)$ ickup my $(b)(6)$ and bring it along. It is going to be a handy item.
> Junia P	and sing it diorig. It is going to see a name, term
> Thanks,	
> _	
> Tony	
>	
> Sent from N	NRC BlackBerry
> Anthony Uls	
> (b)(6)	

Trapp, James

00/51

NSIF.

From:

OST05 Hoc Trapp, James

To: Subject:

Flectronic Briefing Package

Date:

Saturday, March 12, 2011 11:11:26 AM

Attachments:

Chairman Jaczko OA4 earthquake031111.pdf

NRC Status Update 3-12 10am.pdf

Hi Jim,

I will be the person sending you updates to the electronic briefing package. Currently it's way too big to email so if there's something in particular that you'd like to see first, I can send stuff like NRC status updates etc. I will include a few of these things in this email, please let me know if you have a problem viewing. My cell is (b)(6) if you need anything else. Thanks,

Jeff Kowalczik

00/62

Questions and Answers for Chairman Jaczko March 11, 2011 Japan Earthquake/Tsunami Aftermath As of 10:00 a.m. 3/12/2011

# 1. What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?

Public Answer: We are closely following events in Japan, working with other agencies of the federal government, and have been in direct contact with our counterparts in that country. In addition, we are ready to provide assistance if there is a specific request. An NRC staffer is participating in the USAID team headed to Japan.

Additional technical, non-public information:

We are taking the knowledge that the staff has about the design of the US nuclear plants and we are applying this knowledge to the Japan situation. For example, this includes calculations of severe accident mitigation that have been performed.

# 2. What's going to happen following the steam explosion everyone's seen from the video footage?

Public Answer: If a similar event occurred at a U.S. nuclear power plant, the NRC would be seeking information to answer several questions, including: What's the status of the reactor core, the reactor vessel and the containment building? What radiation measurement equipment is available and what measurements are being reported? What efforts are being taken to keep the public safe? How did the explosion affect efforts to keep the nearby reactors in a safe condition? And most importantly — What can the NRC do to help?

Additional technical, non-public information:

# 3. What should people in Alaska, Hawaii and the West Coast do to protect themselves from fallout?

Public Answer: The available evidence shows the United States can be expected to avoid any impacts from radioactive material, so no public action is necessary. We believe there is very low risk to the US considering the long distance from the US and the type of event. The NRC continues to analyze the available information, and existing monitoring equipment can detect any materials before they could present a hazard.

Additional technical, non-public information: NRC is working with DHS, EPA and other federal partners to ensure monitoring equipment is properly positioned, based on meterological and other relevant information.

# 4. Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?

Public Answer: All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area and then goes further. Nuclear power plants are designed to be safe based on historical data and projections regarding the area's maximum credible earthquakes.

The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information:

The reactor design is a Boiling Water Reactor that is similar to some U.S. designs, including Oyster Creek, Nine Mile Point and Dresden Units 2 and 3.

# 5. What would U.S. plants do in this situation?

Public Answer: The NRC requires plant designs to include multiple and diverse safety systems, and plants must test their emergency preparedness capabilities on a regular basis. Plant operators are very capable of responding to significant events. In addition, NRC regulations require plants to have plans in place that would allow them to mitigate even "worst case scenarios".

Since 9/11, we have implemented requirements for licensees to have additional response capabilities for extreme situations.

Additional technical, non-public information:

Our nuclear plants have procedures in place to address a variety of accident scenarios, including abnormal operating procedures, emergency operating procedures, sever accident guidelines and emergency plans.

### 6. Are U.S. power plants designed to withstand tsunamis?

Public Answer: Yes. Plants are built to withstand a variety of environmental hazards and those plants that might face a threat from tsunami are required to withstand large waves and the maximum wave height at the intake structure (which varies by plant.)

Additional, technical, non-public information:

Tsunami have been considered in the design of US nuclear plants since the publication of Regulatory Guide 1.59 in 1977. Nuclear plants are designed to withstand flooding from not only tsunami, but also hurricane and storm surge. Currently the US NRC has a tsunami research program that is focused on developing additional guidance through cooperation with the National Oceanic and Atmospheric Administration and the United States Geological Survey.

### 7. What happens when/if a plant "melts down"?

Public Answer: In short, nuclear power plants in the United States are designed to be safe. To prevent the release of radioactive material, there are multiple barriers between the radioactive material and the environment, including the fuel cladding, the heavy steel reactor vessel itself and the containment building, usually a heavily reinforced structure of concrete and steel several feet thick.

Additional, technical, non-public information:

The melted core may melt through the bottom of the vessel and flow onto the concrete containment floor. The core may melt through the containment liner and release radioactive material to the environment.

### 8. Should people in Japan take KI?

Public Answer: The Japanese people should listen to the public authorities in Japan regarding protective actions. KI – potassium iodide – is one of the protective measures that might be taken in a radiological emergency in this country. We do not know if this measure is necessary or appropriate in the Japanese situation.

Additional, technical non-public information.

There are a range of protective measures that we use ... the most effective is evacuation. Local government officials are responsible for determining the best means to protect their public. KI is another means for protection but evacuation and sheltering are the primary means that is used.

# 9. Was there any damage to U.S. reactors from either the earthquake or the resulting tsunami?

Public Answer: No

Additional, technical non-public information:

Diablo Canyon Units 1 and 2 declared an "unusual event" based on tsunami warning following the Japanese earthquake. They have since exited the "unusual event" declaration, based on a downgrade to a tsunami advisory.

### 10. Has this incident changed the NRC perception about earthquake risk?

Public Answer: As is prudent, the NRC will certainly be looking closely at this incident and the effects on the Japanese nuclear power plant in the future to see if any changes are necessary to NRC regulations.

Additional, technical, non-public information.

We expect that there would be lessons learned, etc.

# 11. Will this incident affect new reactor licensing?

Public Answer: It is not appropriate to hypothesize on such a future scenario at this point.

Additional, technical non-public information:

# OFFICIAL USE ONL Y

What do we know as of 10 am 3/12/2011

- i. TEPCO press release indicates loss of all power at Units 1, 2, and 3 at 1:46 AM Eastern time (3:46 PM local Japan time)
- 2. TEPCO press release indicates Units 4, 5 and 6 were already in an outage and shutdown.
- a. No more information Unit 4 is available.
- TEPCO press release indicates units 1, 2, and 3 automatically shutdown at 1:46 AM Eastern time (3:46 PM local Japan time)
- . TEPCO press release indicates all three Units offsite power was lost at approximately 1 :46 AM Eastern time (3:46 PM local Japan time) leading to automatic startup of emergency diesel generators
- TEPCO press release indicates at 2:41 AM Eastern time (4:41 PM local Japan time), emergency diesel generators shutdown for Units 1, 2, and 3 resulting a complete loss of Alternating Current for all units.
- . The staff believes that DC power via batteries is all that remains.
- a. These batteries would have been exhausted without mitigation in approximately 4-6 hours which is 6:41 8:41 AM Eastern time (8:41 10:41 PM local Japan time)
- . IAEA report as of 2:45 PM Eastern time (4:45 AM 03/12/11 local Japan time) indicates that Unit 1 water level was approximately 51 inches above the top of the core. For Unit 2, core coverage was approximately 138 inches. For Unit 3, IAEA indicated that power is being supplied.
- . The staff believes the worst case scenario for the Unit 1 would be core damage in 13 hours or about 4:00 PM Eastern time (6:00 AM 03/12/11 local Japan time).
- a. This assumes immediate loss of AC and no mitigation (apparently not the case for this situation).

Based on staff calculations worst case scenario for Unit 1 would lead to significant offsite releases at approximately 20 hours assuming no mitigation.

- a. This assumes immediate loss of AC and loss of Isolation Condenser (apparently not the case for this situation).
- b. Evacuations were ordered for a two mile radius early in the event. c. Given this order, protection of the public is being addressed.
- 10. As of 10:44 PM Eastern time (12:44 PM 03/12/11 local Japan time), Units 1 and 2 have been without alternating current power for 20 hours.
- 11. Evacuations extended to 10 km. as of approx. 7:00 PM Eastern time (9:00 AM local Japan time).
- 12. NRC Phone call with Exelon (VP of Quad Cities Site)
- a. Exelon simulated the Fukushima event with Quad Cities simulator simulator results significantly different from the Fukushima plant indication (containment pressure predicted by simulator was 2.5 psi vs. approximately 85 psi reported for Unit 1)
- b. Diesel fuel tanks for the diesels were severed by the 35-40 ft tsunami. c. Engineering building apparently collapsed. 13. Phone call with GEH (Hernando Madronero)
- a. GEH indicated that there has been no direct contact with TEPCO. b. GEH provided similar information as Exelon call.
- 14. (00:08 Eastern-March 12) E-Mail from Shunsuke Kondo, Chairman of the Japan Atomic Energy Commission to Daniel Poneman, Deputy Secretary DOE UPDATE Fukushima Daiichi Unit 1

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# OFFICIAL USE ONLY

- a. Information recently obtained is not inconsistent with NRC previous hypothesis which was based on wire reports and public information
- b. High radiation associated with containment venting suggest core damage, the extent of which is not known
- c. TEPCO appears to be taking extraordinary measures to supply water to the reactor, including using power supply trucks and batteries to supply power. The reactor vessel level is stabilized, possibly indicating a measure of control
- d. TEPCO is venting containment under high radiation conditions; wind direction is to sea 15. (0300 EST March 12) Fukushima Daiichi Unit 1- explosion noted at site. Substructure visible which suggests blowout panels. Status of drywell, level, pressure, and power still unknown. CIA suggested hydrogen explosion, no evidence to support.
- 16. (0800 EST March 12) Japanese Chief Cabinet Secretary Edano held a press conference and confirmed the explosion at 15:36 local time but said it did not affect the reactor's primary system or its containment. He said it was a hydrogen explosion in the space between the concrete containment and the reactor primary system.
- 17. TEPCO confirmed that it successfully vented the containment. They have not commented on the explosion.
- 18. Press reports state that KI is being distributed to the local area residents.

### Summary:

Core damage is likely for Fukushima Daiichi Unit 1, explosion appears to have destroyed ceiling of secondary containment, but extent of damage is still uncertain. Status of spent fuel pool is indeterminate.

OFFICIAL USE ONLY

Ulses, Anthony

To: Cc: "RMTPACTSU AC@ofda.gov"; L1A02 Hoc "njohnson@USAID.GOV"; Trapp, James

Subject:

Re: NRC DART Assistance

Date:

Saturday, March 12, 2011 8:33:16 AM

Natalya,

Thanks. We are fueling here at LAX and I expect to leave soon. I have been talking with Chris on the plane.

I am told that my BB is not Japan qualed so I will use the sat phone for now.

Thanks.

Tony

Sent from NRC BlackBerry

Anthony Ulses
(b)(6)

From: RMTPACTSU\_AC < RMTPACTSU\_AC@ofda.gov>

To: LIA02 Hoc

Cc: Johnson, Natalya (DCHA/OFDA) [USAID] <njohnson@USAID.GOV>; Ulses, Anthony; Trapp, James

Sent: Sat Mar 12 08:26:27 2011 Subject: RE: NRC DART Assistance

Thanks much.

Dear Tony and Jim – I will appreciate if you can provide me with ongoing updates on your whereabouts (wheels up, departure, arrival, hotel, etc).

My direct numbers are 202-712-0031 and 571-354-9086. My alternate email is njohnson@usaid.gov.

Please get in touch with other DART team members as soon as you're in Tokyo. You are on DART distribution list <u>DART\_PACTSU@ofda.gov</u>

We are working on sending blackberries to you with OFDA.GOV email access (we will provide you with OFDA email accounts). Please stay tuned.

#### Regards

~Natalya Johnson

Aumin Coordinator
Pacific Esunami and Japon Earthquake Response Management Team
USAID/DHCA/OFDA
Rmtpoctsu\_ac@ofda.gov
202-712-0039

#### Moyer, Carol

From: Sent: Kazunobu Sakamoto [kazu@bc-m.tepm.jp]

Sent:

Saturday, March 12, 2011 12:28 AM 'Kazunobu Sakamoto'; Moyer, Carol

Subject:

Information update

Follow Up Flag: Flag Status:

Follow Up Flagged

Carol.

Water level of the reactor at Fukushima daiichi Unit 1 is still too low and fuel rods are exposed to the air. NISA announced that they detected the Cesium, which means fuel has already started to melt.

Best.

Kazu

From: Kazunobu Sakamoto [mailto;kazu@bc-m.tepm.jp]

Sent: Saturday, March 12, 2011 12:09 PM

To: 'carol.moyer@nrc.gov'
Subject: RE: Sendai

Carol,

Thanks for your mail.

All of my family members are ok.

where is really close to epicenter of the earthquake. They told that the inside of the nouse is devastating situation but the house itself withstood well. All of lifeline is still dead.

Although my area was also severely shaken, there was no damage. To be honest, I took off yesterday and was in my house. So I was able to hold down furniture so as not to move when first wave hit.

Anyway, this one was so scared!

FYI, Fukushima daiichi(No1) NPP which has 6 BWR units and Fukushima daini(No2) NPP which has 4 BWR units has a trouble now.

NPPs lost the off site power and failed to start up the DGs, then they have lost the ECCS capability.

I guess 10 meter high Tsunami damaged DGs and seawater building. (But no official detailed report is available so far.) So last night the government ordered the residents within the 3km (2miles) to evacuate.

And this morning it is reported that radiation rate around the Fukushima daiichi station is high. We don't know the source of radiation release so far.

In addition it is reported that the utility cannot reduce the pressure of the containment vessel,

Under such circumstance our government decided to expand the evacuation area to 10km (6.2miles) from the station. The utility has begun to release the CV pressure.

1

Once I get the info, I will update.

Again, I do appreciate for your sympathy mail. Sincerely.

Kazu and Maho

From: kazunobu Sakamoto [mailto:sakamoto-kazunobu@ines.qo.ip]

Sent: Friday, March 11, 2011 11:46 PM

To: <u>kazu@bc-m.tepm.jp</u>
Subject: FW: Sendai

From: Mover, Carol Sent: Friday, March 11, 2011 9:27 AM To: SAKAMOTO, Kazunobu Cc: Moyer, Thomas Subject: Sendai Hello, Kazu, This morning we are seeing on the TV news shocking videos from |b|(b)(6)| showing the effects of the earthquake and tsunami. I do not know what to say, but that we are so sad to see this! The world seems much smaller now, since I have visited beautiful (b)(6) and these are not only pictures from some far-away land. I am worried about our colleagues at Tohoku University, and I hope that they are all right. If I remember correctly, (b)(6) lives in this area, also, yes? I am sure that you are very busy, and that news reports are only just coming in, so please do not feel obliged to reply soon to this message. But please tell Maho that we are thinking of her, and we are praying for the people of Japan, and especially those near (b)(6) Best regards, Carol

# Ostendorff, William

From:

Ostendorff, William

Sent:

Saturday, March 12, 2011 10:50 AM

To: Subject:

Franovich, Mike Re: Latest Q&A

Thanks Mike.

**From**: Franovich, Mike **To**: Ostendorff, William

Cc: Nieh, Ho; Warnick, Greg; Kock, Andrea; Zorn, Jason

**Sent**: Sat Mar 12 10:39:31 2011 **Subject**: Fw: Latest Q&A

SENT FROM NRC BLACKBERRY

Mike Franovich (b)(6)

**From**: Burnell, Scott **To**: Franovich, Mike; Orders, William; Snodderly, Michael; Castleman, Patrick

Sent: Sat Mar 12 10:04:34 2011

Subject: Latest Q&A

#### Kock, Andrea

From:

Kock, Andrea

Sent:

Saturday, March 12, 2011 6:06 PM

To:

Franovich, Mike

Subject:

Re: UPDATE on Fukushima Daiichi - 15:30 telecon

Thank you mike!

Sent from NRC blackberry

Andrea Kock (b)(6)

From: Franovich, Mike To: Ostendorff, William

Cc: Nieh, Ho; Warnick, Greg; Kock, Andrea; Zorn, Jason

**Sent**: Sat Mar 12 16:33:48 2011

Subject: UPDATE on Fukushima Daiichi - 15:30 telecon

Borchardt led the call. (44 folks on the call)

- Focus on Fukushima Daiichi Unit 1. The belief is the explosion occurred in the reactor building (secondary containment) either from a steam or hydrogen explosion. Possible the operators choose to depressurize the containment through the standby gas treatment system (in secondary containment). Steam or hydrogen may have accumulated in the upper part of the reactor building and blew of a thin roof. Seawater possibly being used in two ways and that the reactor is now stable:
  - 1. Borated seawater being injected into the reactor vessel and/or
  - 2. Seawater is pumped to flood the lower part of the reactor building (secondary containment) around the outside of the torus/suppression pool. This would be done to provide external cooling to the torus and lower primary containment.
- There was a Deputy Principals meeting today and focus of discussion was on nuclear event. The USAID Disaster Assistance Response Team (DART) is on its way to Japan. NRC sending two experts to support.
- NRC posture continues to be White House is lead for U.S. response. NRC available to support.
- On media front, Eliot said the strategy is to follow the above hierarchy in communications. Regarding NRC, he noted that news cycle is slow (weekend) now but will pickup with respect to wanting more NRC visibility by Monday.
- Former Chairman Diaz and Klein to make media circuit and essentially carrying NRC key messages as private citizens.
- Borchardt noted that the Chairman has spoken to each Commissioner regarding comm.. strategies and other matters.
- U.S. Industry/NEI had a telecom/meeting this afternoon to discuss any needs to support Japanese.
- Ops center had no info on Daini than the media reports.

#### NRC actions:

- 1. Continue to monitor events in Japan
- 2. Reach out to IAEA (again) and get IAEA to be the central lead in response. NRC unsuccessful so far. Attempting to get Denis Flory at IAEA. Looking to not burden Japanese with multiple nation support that is not coordinated.
- 3. Further develop Q&A as the attention will start to turn to US plants and our level of preparedness/protection from seismic and floods.
- 4. Keep interacting with DHS on potential plume plots and modeling capability, etc...

NEXT Telcon updates will be at 23:30 and 07:30.

Borchardt, Bill

To:

Coane, Margaret

Cc:

Weber, Michael; Momish, Nador; Virgilio, Martin; Ramsey, Jack

Subject: Date: Re: OIP Most Recent Analysis Sunday, March 13, 2011 9:32:44 AM

Margie,

I agree completely with your note.

Bill Borchardt Via blackberry

---- Original Message -----From: Doane, Margaret

To: Borchardt, Bill

Cc: Weber, Michael; Mamish, Nader; Virgilio, Martin, Ramsey, Jack

Sent: Sun Mar 13 09:15:53 2011 Subject: OIP Most Recent Analysis

I want to get this to the Chairman ASAP. Please get me your views. Feel free to share.

Chairman. Since Tony is now going to be in contact with MOFA and NISA anything we say or do will be much more important.

Japan responders have been averting possible greater and greater disasters by various extreme measures. If we interfere at all and some decision making is affected and something happens to change this course, the consequences are enormous.

History will judge whether they made all the right decisions, but at this time they have been routinely facing very dire circumstances and bringing them under some level of better control. They have demonstrated they have abundant technical expertise. We would be wise to let this guide any public statements.

It's complicated, but as far as I can tell they have no legal obligation to notify the US or other countries with specific info. until there is risk of transboundary movement. (DOS would have the final legal call on this). The technical staff has said at this time this clearly remains a Japanese and not a transboundary issue. In other words, the Japanese are inviting us to talk, they have no obligation to do so. Again anything we do or say publicly should keep this in mind.

Finally our long-standing cooperation with the Japenese regulators would tell us that it would be far better to have only the NRC reps talk with NISA (not DOE and DOS), and only for "disaster relief" liaison activities since there are international teams on the ground; and not for giving any technical "assistance," since at this time there isn't strong basis for technical help and we don't want to interfere or distract them. It would also be the best way culturally to approach the issue.

Call if you'd like to discuss. I'm at home (b)(6)

Sent from an NRC Blackberry Margaret Doane

OPA Resource

To:

Brenner, Eliot; McIntyre, David

Cc:

Couret, Ivonne

Subject:

FW: Interview Request for Nils Diaz for BBC/NY Times Radio Program

Date:

Sunday, March 13, 2011 3:39:37 PM

From: Arwa Gunja [mailto:agunja@wnyc.org] Sent: Sunday, March 13, 2011 2:19 PM

To: OPA Resource

Subject: Interview Request for Nils Diaz for BBC/NY Times Radio Program

My name is Arwa Gunja, and I am a producer for <u>The Takeaway</u>, a public radio program partnered with The New York Times and the BBC. The show airs nationally on the same stations as NPR programming.

I am writing to see if Chairman Nils Diaz may be available for an interview Monday morning at 6am EST to talk about the nuclear plants in Japan in the aftermath of the tsunami there. I know he has visited some of these plants in the past and we would love for him to share his insights and expertise with our audience.

The interview would be about 10 minutes long and we could do it by telephone.

Please let me know if he would be free to join.

Best, Arwa

Ms. Arwa Gunja The Takeaway, WNYC Radio .646-829-4060 (work)

OPA Resource

To: Cc: McIntyre, David; Brenner, Eliot

Cc: Subject: Couret. Ivonne
FW: Quick question

Date:

Sunday, March 13, 2011 1:02:49 PM

From: Andrew Restuccia [mailto:arestuccia@thehill.com]

Sent: Sunday, March 13, 2011 12:58 PM

To: OPA Resource Subject: Quick question

Good afternoon.

I'm hoping to get some background on any efforts by NRC to take into account the prospect of a U.S. nuclear reactor being affected by an earthquake or other natural disaster.

Some lawmakers are raising concerns that the U.S. could see a repeat of what's happening in Japan.

Thanks!

Email is fine. But if somebody needs to talk with me, my cell phone is best because I'm not in the office today (b)(6)

Andrew Restuccia
Staff Writer
The Hill
arestuccia@thehill.com
Office: 202-407-8012
(b)(6)

Follow me on Twitter: wAndrewRestuccia

http://thehill.com/blogs/e2-wire

McIntyre, David

To:

Couret, Ivonne

Subject:

FW: Thank you from NHK and our contact info

Date:

Sunday, March 13, 2011 2:21:00 PM

Please add this very nice young lady and her colleague to your media list

From: Reiko Sakurai [mailto:sakurai@nhkdc.com]

Sent: Sunday, March 13, 2011 1:01 PM

**To:** McIntyre, David **Cc:** kaho izumitani

Subject: Thank you from NHK and our contact info

Dear David,

Thank you for talking to us despite the fact that it is a Sunday.

NHK is the only public broadcaster in Japan(it's like PBS and BBC)

and we are doing 24 hour broadcasting and net-streaming on news of the earthquake.

Our contact info is:

.202-828-5180 (NHK Washington Bureau office): we are here till at least 11pm today.

(b)(6)

(My cell phone: this is 24-7)

And my e-mail address is sakurai@nhkdc.com

I am also copying this e-mail to my colleague Kaho kaho@nhkdc.com

who has been taking a close look at all US-AID activities.

Please let us know if you have any updates!

Thank you again for your support and patience!

Best regards,

Reiko

Reiko Sakurai

Correspondent

NHK/Japan Broadcasting Corporation Washington DC Bureau

202-828-5180 office

(b)(6)

sakurai@nhkdc.com

McIntyre, David

To: Subject: Brenner, Eliot

sullivan

Subject Date:

Sunday, March 13, 2011 12:38:00 PM

Message received.

From: john sullivan (b)(6)

Sent: Sunday, March 13, 2011 12:34 PM

**To:** McIntyre, David **Subject:** Re: NRC info

ok thanks.

On Sun, Mar 13, 2011 at 12:29 PM, McIntyre, David < <u>David McIntyre@nrc.gov</u> > wrote: John - Eliot Brenner asked me to respond to your phone message requesting an interview. We are currently not granting interviews, and would point you to the seismic safety information on our website, including in the press releases we issued yesterday and Friday.

Dave McIntyre
Office of Public Affairs

John Sullivan

phone 609-497-4585
((b)(6)

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john sullivan McIntyre, David

To: Subject:

McIntyre, David Re: NRC info

Date:

Sunday, March 13, 2011 12:34:38 PM

## ok thanks.

On Sun, Mar 13, 2011 at 12:29 PM, McIntyre, David < <a href="mailto:David.McIntyre@nrc.gov">David.McIntyre@nrc.gov</a> wrote:

John – Eliot Brenner asked me to respond to your phone message requesting an interview. We are currently not granting interviews, and would point you to the seismic safety information on our website, including in the press releases we issued yesterday and Friday.

Dave McIntyre

Office of Public Affairs

John Sullivan phone 609-497-4585 (b)(6)

McIntyre, David

To:

Brenner, Eliot; Harrington, Holly

Subject:

Fw: NEED TO INFORM YOU OF A POTENTIAL ISSUE WITH 11-046

Date:

Sunday, March 13, 2011 11:17:32 PM

You know, I adore Trish ... But ...

David McIntvre

NRC Office of Public Affairs

(b)(6)

301-415-8200 (office)

Sent from my BlackBerry, which is wholly respnsble for all typoos.

From: Milligan, Patricia

To: McIntyre, David; Harrington, Holly; Maier, Bill

Cc: LIA04 Hoc; McNamara, Nancy; Trojanowski, Robert; Tifft, Doug; Woodruff, Gena; Logaras, Harral;

Barker, Allan; Virgilio, Rosetta; Turtil, Richard; Brenner, Eliot

Sent: Sun Mar 13 22:33:36 2011

Subject: Re: NEED TO INFORM YOU OF A POTENTIAL ISSUE WITH 11-046

Maybe it could be revised to use tha language that ki is available as a supplement to evac and sheltering as determined by state and local authorities

Sent from my NRC Blackberry Patricia A Milligan, CHP RPh

(b)(6)

From: McIntyre, David

To: Harrington, Holly; Maier, Bill

Cc: LIA04 Hoc; Milligan, Patricia; McNamara, Nancy; Trojanowski, Robert; Tifft, Doug; Woodruff, Gena;

Logaras, Harral; Barker, Allan; Virgilio, Rosetta; Turtil, Richard; Brenner, Eliot

Sent: Sun Mar 13 17:04:00 2011

Subject: RE: NEED TO INFORM YOU OF A POTENTIAL ISSUE WITH 11-046

Bill, et al – we are not revisiting the KI dispute in our press releases. KI is used in the United States, after all, or at least is available for use. The descriptions of protective measures in both versions of the press release were included at the direct request of the Chairman, who was responding to the US Ambassador in Tokyo. The Ambassador was concerned that US citizens in Japan were ignoring the Japanese government's protective measures recommendations, and sought reassurance from us that the measures were comparable to what we would do here in the US.

Dave Mc, OPA

From: Harrington, Holly

Sent: Sunday, March 13, 2011 4:55 PM

To: Maier, Bill; McIntyre, David

Cc: LIA04 Hoc; Milligan, Patricia; McNamara, Nancy; Trojanowski, Robert; Tifft, Doug; Woodruff, Gena;

Logaras, Harral; Barker, Allan; Virgilio, Rosetta

Subject: RE: NEED TO INFORM YOU OF A POTENTIAL ISSUE WITH 11-046

Bill – I've cc'd Dave on this response. He wrote the release and I believe had a specific reason for this inclusion.

#### Holly

From: Maier, Bill

Sent: Sunday, March 13, 2011 4:46 PM

To: Harrington, Holly

Cc: LIA04 Hoc; Milligan, Patricia; McNamara, Nancy; Trojanowski, Robert; Tifft, Doug; Woodruff, Gena;

Logaras, Harral; Barker, Allan; Virgilio, Rosetta

Subject: NEED TO INFORM YOU OF A POTENTIAL ISSUE WITH 11-046

Importance: High

Holly,

I noticed in the revised news release (attached) and in its pre-revision predecessor, that the following statement appears:

The United States also uses sheltering in place and potassium iodide, protective measures also available in Japan.

This sentence may cause some issues because the issuance of potassium iodide to the general population is not a protective measure that some states have elected to implement. We may get some feedback from the states complaining that we implied a measure they are not using.

I don't know what the fix is, but I wanted to alert you (and the cc addressees) that some backlash is possible from this.

Bill Maier RSLO Region IV

From: opa administrators [mailto:opa@nrc.gov]

**Sent:** Sunday, March 13, 2011 4:23 PM

To: Maier, Bill

Subject: Revised -NRC Sees No Radiation at Harmful Levels Reaching U.S. From Damaged Japanese

Nuclear Power Plants

OST01 HOC

Sent:

Thursday, April 28, 2011 6:33 AM

To:

Hoc, PMT12

Cc:

FOIA Response.hoc Resource

Subject: Attachments:

FW: Radiation data by MEXT

-----

 $(English) 20110428\_14.pdf; (unofficial) (English) 20110428\_14.pdf; (Engli$ 

15.pdf

----Original Message----

From: HOO Hoc

Sent: Thursday, April 28, 2011 6:31 AM To: LIA07 Hoc; LIA08 Hoc; OST01 HOC Subject: FW: Radiation data by MEXT

Headquarters Operations Officer U.S. Nuclear Regulatory Commission

Phone: 301-816-5100 Fax: 301-816-5151 email: hoo.hoc@nrc.gov

secure e-mail: hoo1@nrc.sgov.gov

----Original Message-----

From: eda@mext.go.jp [mailto:eda@mext.go.jp]

Sent: Thursday, April 28, 2011 6:27 AM

(b)(6)

Subject: Radiation data by MEXT

Dear Sirs and Madams,

Please see attached the document.

Sincerely yours,
Kei EDA
EOC, Ministry of Education, Culture, Sports, Science & Technology (MEXT), Japan

# Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 16:00 April 28, 2011 Ministry of Education, Culture, Sports, Science and Technology (MEXT)

OMonitoring Outputs by MEXT

\*Boldface and underlined readings are new.

- 1 measured by Geigor-Müller counter
  2 measured by ionization chamber type survey meter
  3 measured by Nal scintillator detector

	*4 vanation range of the					easuring data in measuring time	
		Monitoring Post (length from NPP)	Monitaring Time	Reading (unit : ⊭Sv /·h )	Weather	Reading by	
Reading Point	[1]	Fukushima aity. Sugiteuma town (82kmNovth/West)	2011/4/28 8:24	1 0 *2	No Rain	MEXT	
Reading Point	[2]	Fukushima city Orami Takinoiri (\$6kmNorth/West)	2011/4/28 9:22	2.0 *2	No Rain	JAEA (Japan Atomic Energy Agency)	
Reading Point	[3]	Date city Ryuzer town Ishida Hisohei (48kmNorth/West)	2011/4/28 10:30	2.1 *2	No Rain	JAEA (Japan Atomic Energy Agency)	
Reading Point	[4]	Date county Kewamata (own usza: Tsurusawa sza Kawabata (47km/dorth/West)	2011/4/28 9:12	1.0 °Z	No Rain	MEXT	
Reading Point	[5]	Some city Nekenoterames (42kmHorth/North/West)	2011/4/28 11:22	0.5 *2	No Rain	JAEA (Japan Atomic Energy Agency)	
Reading Point	[6]	Minami Soma city Kashima meni hishimashi (32kmNotth)	2011/4/28 11:47	0.7 *2	No Rain	JAEA (Japan Atomic Energy Agency)	
Reading Point	[7]	Minami Seme city Keshima ward Teravohi Motoyashiki (32kmNerth/North/Neat)	2011/4/28 12:10	0.6 *2	No Rain	JAEA (Japan Atomic Energy Agency)	
Reading Point	[10]	Nihomostay city Hartmichi Nukaima (44kmWest/Nucth/West)	2011/4/28 13:05	0.4 42	No Rain	MEXT	
Reading Point	[11]	Nihenmatau ette Ota sza Shirnesia (432m:West/Herth/West)	2011/4/28 13:11	0.8 *2	No Rain	MEXT	
Reading Point	[20]	Iamara cite Funebili torm: Niista abima (AlkmWasi)	2011/4/28 12:47	<u>0,1 *²</u>	No Rain	MEXT	
Reading Point	[21]	Eviaba County Kataurao Villara Kamirosawa (32kmWest/North/West)	2011/4/28 12:23	<u>1.9 *²</u>	No Rain	MEXT	
Reading Point	[22]	Tamura city Funehild town Kamiutaushi Ushirota (35km)Nast/North/Wast)	2011/4/28 12:35	0.0 *2	No Rain	<u>MEXT</u>	
Reading Point	[23]	Tamura city Funeshiri town Minamiutavahi Sylichy-uchi (39kmWest/North/West)	2011/4/28 12:40	0.7 *2	No Rain	MEXT	
Reading Point	[31]	Futaba county Namie town: Taushima Nakaok: (30km/West/North/West)	2011/4/28 9:49	6.5 *²	No Rain	MEXT	
Reading Point	[32]	Futaha county Namin triwn. Akrikgi Teahichiro (31km/North/West)	2011/4/28 10:07	17.5 *2	No Rain	MEXT	
Reading Point	[33]	Some county litate village Negadoro (33kmNorth/West)	2011/4/28 10:19	13.5 *2	No Rain	MEXT	
Reading Point	[34]	fulaba county liamia town Isushima Isikousi (JOhnWest/Horth/West)	2011/4/28 11:56	4.0 *2	No Rain	MEXT	
Reading Point	[36]	Date county: Kawamata town Yansakiya Domakarı (40kmWsst/North/West)	2011/4/28 9:37	2.5 *2	No Rain	MEXT	
Reading Point	[37]	Date ofly Ryozen town (shida Hojszawa (48kmNorth/West)	2011/4/28 10:15	3.3 *2	No Rain	JAEA (Japan Atomic Energy Agency)	
Reading Point	[38]	braki City Yotauksen town Shiraine Hokita (24kmSouth/South/West)	2011/4/28 11:34	0.3 *2	No Rain	JAEA (Japan Atomio Energy Agency)	
Reading Point	[39]	Suma city Yamakami Kaminamiki (415mNorth/North/West)	2011/4/28 10:56	0.3 *2	No Rain	dAEA (Japan Atomic Energy Agency)	
Reading Point		- Applitude 17	2011/4/28 12:31	0.7 -2	No Rain	JAEA (Japan Atomio Energy Agency)	
Reading Point	[71]	Eutaba aqumtyHirona town.Shimphitaba Nawashirozaa 123kmSouth)	2011/4/28 8 <u>:25</u>	0.7 *2	No Rain	Police ( counter NBC operations unit )	
Reading Point	[72]	hvaki ofty Hisanelama, town Hisanehama aza Kitaaramaki	2011/4/28 12:10	0.4 -2	No Rain	JAEA (Japan Atomic Energy Agency)	
Reading Point	[72]	looki ofiz Hannohama, toon Hisarohama aza Kitaaramahi (21kmSovth)	2011/4/28 9:00	0.7 *2	No Rain	Police ( counter NBC operations unit )	
Reading Point	[73]	Imski City Ystaukura tenn (18km Seuth)	2011/4/28 11:55	0.6 -2	No Rein	JAEA (Japan Atomic Energy Agency)	
Reading Point	[73]	lmed City Yosenkum term (15kmSouth)	2011/4/28 9:18	0.5 *2	No Rain	Police ( counter NBC operations unit )	
Reading Point	[74]	hrski city Ozerra, term Takahazi (18km/Seuth/Seuth/West)	2011/4/28 11:02	0.2 *2	No Rain	JAEA (Japan Atomio Energy Agency)	
Reading Point	[74]	brok six Ozoro tom Takebud (36kmSenth/South/West)	2011/4/28 10:35	0.4 *2	No Rain	Police ( counter NBC operations unit )	

1 measured by Geiger-Müller counter
2 measured by ionization chamber type survey meter
3 measured by Nai scintillator detector
4 variation range of the measuring data in measuring time

		Monitoring Post (length from NPP)	Monitoring Time	Reading (unit: μSv/h)	Weather	Reading by
Reading Point	[75]	lwaki city. Uchigoushiyamaya town (43kmSouth/South/West)	2011/4/28 10:40	0.2 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[75]	hooki pity Uphicosmicasusca tava (†38m South/South/West)	2011/4/28 9:47	0.2 *2	No Rain	Police ( counter NBC operations unit )
Reading Point	[79]	Futaba county Namia town shimotaushima kayabuka (29kmWasU/NortIv/Wast)	2011/4/28 10:46	6.0 *2	No Rain	MEXT
Reading Point	[80]	Minami Sema city. Haramashi ward Tahami teren (24kmNorth)	2011/4/28 13:17	0.3 *2	No Rain	JAEA (Jacan Atomic Energy Astronoy)
Reading Point	[80]	Minarai Soma sitor. Haramashi marsi Jakami tewn	2011/4/28 8:10	0.3 *2	No Rain	Police ( counter NBC operations unit )
Reading Point	[83]	Eutaba opunty Namie Seem, Aboud Kumuntara (24km/Nerth/West)	2011/4/28 11:01	34.0 *2	No Rein	MEXT
Reading Point	[84]	lwaki city Miswa-town Saiso 139kmSouth/West)	2011/4/28 9:54	0.5 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[85]	Fusushëneshi Arei Herejsu (68kmWeeL/North/West)	2011/4/28 6:00	0.3 *2	Rain	Ministry of Defense
Reading Point	[86]	Koriyamashi Dotsuki town Choemoribayashi (\$3kmYtest)	2011/4/28 6:00	0.7 *2	Rain	Ministry of Defense
Reading Point	[87]	Futaba county Kawauchi vilage Kamikawauchi Harianauchi (29nnWast/ South/West)	2011/4/28 6:00	06*2	Rain	Ministry of Defense
Reading Point	[101]	Date nity Ryozen town Ciehi eze Minowa (55kmNarsh/West)	2011/4/28 9:50	0.8 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[103]	Minami Soma ette Haramashi, ward taka ata Mamasaraushi. 120kmNertin)	2011/4/28 13:41	0.6 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[104]	Fuseba county Kateurso Misere Daza Oohiel aza Qohiel (25kmNorth/West)	2011/4/28 12:12	0.8 *2	No Rain	MEXT

<sup>\* [71]:</sup> These are positioned in same area but a few hundred meters away

#### Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 18:00 April 28, 2011 Ministry of Education, Gulture, Sports, Science and Technology (MEXT)

OMonitoring Outputs by MEXT

\*Boldface and underlined readings are new.

- 1 1 messured by Gasper-Müller counter
  12 measured by ionizetton chember type survey meter
  2 measured by Nel scintillator detector
  1 venation renge of the measuring data in measuring time

r	* 1 variation range of the measuring data in measuring time						
	Monitoring Post langth from NPP)	Monitoring Time	Reading (unit . $\mu$ Sv / h.)	測定位置	測定位置の備考	Weather	Reading by
Reading Point [1]	Fubruhama arty: Supplessions lawn (8.20m/Aberth/West)	2011/4/28 8:24	1.0 *2	N: 37 ou 12.6 E 140 26 02.9	20110426距離のみ修正	No Rain	MEXT
Reading Point [2]	Estusions only Oness Teleronii (bilarriteronintes)	2011/4/28 9:22	2.0 4	N: 37 41 12.7 E: 140 33 29.3	20110426距離のみ修正	No Rain	JAEA (Jacan Alume Energy Agency)
Reading Point [3]	Date sirly Margan terms lithelic Hillarhay (488m/Hiristic/Mariet I	2011/4/28 10.30	2.1 *2	N: 37 41 12.7" F: 140 33 29.3"	20110426距離のみ修正	No Rain	JAEA (Japan Atomio Emergy Agency)
Reading Point [4]	Date colonicy Karamatta tarum daza. Tauristawa ada Karamata (4 Port North-West)	2011/4/28 9:12	1.0 7	N: 37' 39' 30.0" E 140 35' 54.0"	20110426距離のみ修正	No Rain	MEXT
Randing Point [5]	Serm all. Malacaterarum 142kmHerth/Hersh/Mastl	2011/4/28 11:22	0.5 💆	N: 37 45 06.7 E: 140 41 29.2	20110426距離・方位のみ修正	No Pain	JAEA (Jamen Atomie Energy Arengy)
Roading Point. [8]	Where Some site Souther anni Historianis. (2Herotext)	2011/4/28 11:47	9.7.°2	N 37 28 242 E 140 34 542	20110426距離のみ修正	No Rain	JAEA (Janes Atomis Energy Assnoy)
Renditus Point [2]	Mooral Serma jaba Kandalma moral Lurimento Mestamathist LESterolow (h/hw/th/Estavi)	2011/4/28 12:10	0.5 **	N 37 29 242 E 140 34 542	20110426距離・方位のみ等正	No Rain	IAEA (Lianan Azomia Energy Asensy)
Reading Point. [10]	illianomina efte: Phrimini Helialina Liekenilli et (Pherit/West)	2011/4/28 13:05	0.4 *	N: 37 33 032 E 140 44 250 T	20110428距離・方位のみ修正	No Rain	MEXT
Reading Point [11]	ishmenatus alte One am Rhiemin (+ Dametiant/Manth/Mant)	2011/4/28 13:11	0.8 **	N: 37 33 03.2 E 140 44 25.0	20110426距離・方位のみ修正	Ne Rain	MEXT
Resolve Point. [20]	Terreira alta Facuntale (aren. Mitata obiena (4) derriffasti)	2011/4/28 12:47	87 <del>.</del>	N: 37 29 24.2 E: 140 34 54.2	20110428距離・方位のみ修正	No Rain	MEXT
Reading Point [21]	f state Smorty Natures: Yllern Karaksaress	2011/4/28 12:23	1.9 💆	N: 37 45 98.7 E 140 41 29.2 E	20110426距離のみ修正	No Rain	MEXI.
Reading Point. [22]	Taracra nita funebiki taun. Karakanabi Usharna	2011/4/28 12:35	Q.Q *2	N: 37 45 08.7 5 E: 140 41 29.2	20110426方位・距離のみ破駅 (修正不要でした)	No Rain	MEXT
Rossins Point [2]]	Corners after Fermilitä Seine Mineralassenski Datuber ambi (Filmerik/Hestil/Hestil	2011/4/28 12:40	877 <u></u>	N: 37 45 05.7 E: 140 41 29.2	20110428距離のみ修正	No Rain	MEXT
Reading Point [31]	Fichalte appointly Member tuners. Tacestornic Makasake (2004rs/Member/March/Memb)	2011/4/28 9:49	6.5 °²	N: 37 41 12.7 " E: 140 31 29.3 "	20110426方位・距離のみ確認 (修正不要でした)	No Rain	мехт
Reading Point [32]	Fotable county Marrie tower Allowing Technoline (3 StortHorth-Milast)	2011/4/28 10:07	17.5 *2	N: 37 35 42.0 " E. 140 14.5 "	20110426距離のみ修正	No Rain	MEXT
Rauding Point (33)	Some coenty (tate: Wileyo Necesuro (Sitorn North (West)	2011/4/28 10:19	13.5 *7	N: 37 36 34.6 " E: 140 45 09.1"	20110426距離のみ修正	No Rain	MEXT
Researce Point. [34]	Estaba paseta Humb tona Jamidon Eskaset Likhanille sk/Horsh/Hani	2011/4/28 11:56	<u>4.0 °</u>	N: 37 45 06.7. E: 140 29.2	20110428方位のみ修正	No Rain	MEXI.
Reading Point [36]	Date scorty (Erwaneta term (amaliya Octoba) (400m West/Mest/ West)	2011/4/28 9:37	2.5 *²	N: 37 41 12.7 E: 140 33 29.3 "	20110426方位・距離のみ確認 (修正不要でした)	No Rain	MEXT ·
Reading Point [37]	Dear city Ryscen (mer. lands Heazynn) (65/cr/Harch/Weat)	2011/4/28 10:15	3.3 **	N: 37 41 12.7 E: 140 33 29.3	20110426距離のみ修正	No Rain	JAEA (Japan Atemic Energy Agency)
Reading Point [38]	lanis Che Ystadura terre Midsales Heida Li Mondanto (Santo Madi)	2011/4/28 11:34	9.3 -7	N: 37 33 03.2 E: 140 44 25.0	20110426距離のみ後正	No Rain	JALA Cannen Atomio Energy Acanny
Randing Point [39]	Sures city Yanakom Kammumbo (4) heofarth (Musth-Wast)	2011/4/28 10:56	03 %	N: 37 41 12.7 " E: 140 33 29.3 "	20110428方位・距離修正	No Rain	JAEA (Japan Atomic Energy Agency)
Reasing Point. [71]	Sala courte Meses tran Birosikata Manusikasa	2011/4/28 12:31	8T <del>.</del>	N: 37 33 932 E: 140 44 250 7	20110426距離のみ修正	No Bain	JAEA Glapen Atentio linerax Acensx
Reados Point. [71]	Caldu morte likura impa Riinchkain iilmasiiracia 2 12Mordashi)	2011/4/28 8:25	0.7 %	N: 37 33 03.2 E: 140 44 25.0	20110426距離のみ修正	No Rain	Police ( souther NBC executions unit )
Reading Point [72]	dunii.ete Marahara 1500 Marahara ata Marahain 1311eesiisathi	2011/4/28 12:10	0.4 ₹	N: 37 33 03.2 E: 140 44 25.0 "	20110428距離のみ施正	No Rain.	JAEA (Japan Atomio Enersy Assess)
Reeding Point [72]	imal etc ifemateme, ione Reportem see Classicali. (21kmSeeth).	2011/4/28 9:00	0.7 <u>*</u>	N: 37 33 93.2 5 E: 140 44 25.0	20110425距離のみ修正	No Rain	Polles ( opentar NBC operations unit.)
Sassing Point 1731	bruid City Yesteddays, terms (Albert Search)	2011/4/28 11:55	0.5 🛂	N. 37 33 03.2 1 E 140 44 25.0	20110428方位・距離のみ確認 (修正不要でした)	No Rain	iAFA (ilenen Atomio Enerry Assney
Reading Point. [73]	hebi City Yotadian hou [15]andauth]	2011/4/28 9:18	05 ₹		20110426方位・距離のみ確認 (修正不要でした)	No Rain	Pelica ( sountar HBC seenstiens unit )
Reading Point. [74]	legis site (house two Laighed (18kmlks/th/Seeth/Wart)	2011/4/28 11:02	0.2 <del>*</del>		20110426距離のみ接正	No Rain.	JAEA (Janen Atemia Energy Assassy
Sandon Point [74]	hodd affe Comme_lown Tukabadi (28hon5mahr/26mmh/Mhari	2011/4/28 10:35	0.4 **	N: 37 33 03.2 1 E: 140 44 25.0	20110426距離のみ修正	No Rain	Polos ( pourter NBC sperations unit.)
Reading Point [75]	high) eth Uphiggumyygnaya town (adamSwith (Bauth/Wale)	2011/4/28 10:40	0.2 *?	N: 37 33 03.2 " E: 140 44 25.0 "	20110426方位・距離のみ修正	No Rain	JAEA: (Jean) Atomic Energy Agencyl
Standing Point. [75]	testi oli: likimminimmi ten 15kmänch/Jach/Marti	2011/4/28 9:47	0.2 🗹		20110428方位・距離のみ修正	No Rain	Palsus ( sountar NBC operations unit.)
Reading Point [79]	Futata county Norw turn silvrotexelema kayabuka (20m/West/North/Mest)	2011/4/28 10:46	60 ·s	N: 37 33 03.2 ° E: 140 44 25.0 °	20110426方位・距離のみ修正	No Rain	MEXT
Reading Point [80]	Mineral Leave, when the community word Leavest course	2011/4/28 13:17	0.3 😤	N: 37 33 032 E 140 44 250	20110425距離のみ隻正	No Rain	JAFA (Jasan Stomio Enersy Aransy
Reading Point [80]	Misser Anna oliv Heramadi smed Jahani tassa. (24kentuetik)	2011/4/28 8:10	01 ₹	N. 37 33 03.2 E 140 44 250	20110428距離のみ修正	No Rain	Police ( counter HEC ecorations unit )
Bearline Paint. 1831	Existe perte terris per Atous Kaustinia (Edisopheris/Mass)	2011/4/28 11:01	34.0 -2	N: 37 33 03.2 E 140 44 25.0	20110426距離のみ修正	No Rein	MEXT
Reading Point [84]	hrab acte Misma-Form Saine (395mSauth-Meal)	2011/4/28 9.54	0.5 4	N: 37 33 C3.2 "	20110426距離のみ修正	No Rain	JAEA (Jaoun Atomic Energy Agency)
Reading Point [85]	Fib., shamaatir, Arisi Harighio (1 Benetrapi/Harib/Haai)	2011/4/28 6:00	0.3 *2	N: 37 33 03.2 ° 6: 140 44 25.0 °	20110426方位・距離のみ降正	Rain	Ministry of Defense
Reading Point [86]	Ranksanacki Ontuito town Chosmonbaysah (s.DunWens)	2011/4/28 6:00	07*2	N: 37 23 57.0 E: 140 19 35.0	20118426距離のみ降正	Rain	Ministry of Defense
Reading Point [87]	Fidabe causty Kimporix: village Komalomousiv Manazenski 1786/98655 (South / Meat)	2011/4/28 6:00	0.6 **	N 37 23 57.0 E: 40 19 35.0 2	20110426距離のみ停正	Rain	Ministry of Defense
Reading Point [101]	Qui a voto Principo I sonici Clipbi aga Minima (SCMMHATA (Pega))	2011/4/28 9:50	O8 **	N: 37 41 12.7" E: 140 33 293"	20110426方位・距離の升確認 (停正不要でした)	No Rein	JANA (Japan Atomic Energy Agency)
Seeding Print. [103]	Minosi liero elle incomenti succi toba esa Harmaneseri. 12Danhorth i	2011/4/28 13:41	0.5 💆	N: 37 33 03.2 E 140 44 25.0	20110426方位・距離のみ確認 (修正不要でした)	No Fain	AAEA Massen Atsenio Energy Acemes
Bessins Point [194]	Fatalia starity Ketarras, villara Gera Genisi era Debial (Elimpheth/Heat)	2011/4/28 12:12	0.8 <	N: 37 31 03.2 -	20110426方位のみ修正	No Rain	MEXT

<sup>\* [71]</sup> These are positioned in same area but a few hundred meters away.

Readings at Monitoring Post out of Fukushima Dai-ichi NPP Monitoring Time [2] [37] [101] [39] [5] 1.0 2.0 13.5 3,3 0.3 0.5 April 28, 6:00~14:00 [7] Monitoring Post [6] 0.6 [85] 0.7 0.3 [80] [36] 0.3 2.5 0.3 [103] [10] 0.5 [32] 0.4 [79] [31] [11] 6.0 [83] 0.8 34.0 [21] 1.9 Fukushima Dal-ichi NPP [34] 郡山市 [22] [23] [20] 4.0 0.0 0.7 Fukushima Dai-ni NPP [86] [104] 0.7 8.0 [71] 0.7 0.7 [72] 10km [38] 0.4 0.3 [84] [75] [87] [73] [74] 0.7 0.6 0.2 0.2 0.6 Circles indicate approximate range. 0.2 Unit:  $\mu$  Sv per hour

McIntyre, David

To:

Akstulewicz, Brenda; Couret, Ivonne; Hayden, Elizabeth

Subject:

Sullivan interview request

Date:

Sunday, March 13, 2011 12:30:00 PM

FYI - this was meant specifically for Sullivan.

From: McIntyre, David

Sent: Sunday, March 13, 2011 12:30 PM

To: (b)(6)

Subject: NKC INIO

John – Eliot Brenner asked me to respond to your phone message requesting an interview. We are currently not granting interviews, and would point you to the seismic safety information on our website, including in the press releases we issued yesterday and Friday.

Dave McIntyre
Office of Public Affairs

Shiffman, Karen WBUR

To:

McIntyre, David

Subject:

RE: MEDIA INTERVIEW REQUEST - NPR On Point

Date:

Sunday, March 13, 2011 2:25:52 PM

We go to air at 10.... I'll check in at 9

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Sunday, March 13, 2011 2:24 PM

To: Shiffman, Karen WBUR

Subject: RE: MEDIA INTERVIEW REQUEST - NPR On Point

About 9 am? We might have a Public Affairs staffer available.

From: Shiffman, Karen WBUR [mailto:kshiff@bu.edu]

Sent: Sunday, March 13, 2011 2:21 PM

To: McIntyre, David

Subject: RE: MEDIA INTERVIEW REQUEST - NPR On Point

What time can I check?

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

**Sent:** Sunday, March 13, 2011 2:19 PM

To: Shiffman, Karen WBUR

Subject: FW: MEDIA INTERVIEW REQUEST - NPR On Point

Karen – it's too early to say whether we will be doing interviews tomorrow. Please check back with us then!

Dave McIntyre NRC Public Affairs

From: Couret, Ivonne

**Sent:** Sunday, March 13, 2011 2:14 PM **To:** Brenner, Eliot; McIntyre, David

Subject: MEDIA INTERVIEW REQUEST - NPR On Point

NRP - ON Point

Karen Shiff

(b)(6)

Jshiff@bu.edu

Looking for a person to call in interview for show tomorrow (3/14) at the 10-11a.m. EDT hour

Ivonne L. Couret Public Affairs Officer Office of Public Affairs



McIntyre, David

To:

Couret, Ivonne; Brenner, Eliot

Subject:

RE: Media Request - Radio Nationally Syndicated show Beyond the Beltway

Date:

Sunday, March 13, 2011 12:43:00 PM

Yes, plus several from Fox News, NHK, News Ten Australia, NYT ....

From: Couret, Ivonne

Sent: Sunday, March 13, 2011 12:40 PM To: McIntyre, David; Brenner, Eliot

Subject: RE: Media Request - Radio Nationally Syndicated show Beyond the Beltway

Do you want me to add interview request to the Crisis Comm. document I created yesterday?

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



301) 415-8205

ivonne.couret@nrc.gov

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NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

From: McIntyre, David

Sent: Sunday, March 13, 2011 12:39 PM To: Couret, Ivonne; Brenner, Eliot

Subject: RE: Media Request - Radio Nationally Syndicated show Beyond the Beltway

Okey dokey.

From: Couret, Ivonne

Sent: Sunday, March 13, 2011 12:35 PM To: Brenner, Eliot; McIntyre, David

Subject: Media Request - Radio Nationally Syndicated show Beyond the Beltway

# Beyond the Beltway - WLS 840AM

Jason Seher

Phone: 856-617-1216

Jason. (b)(6)

Phone interview on snow today (3/13) @ 7p.m

Told them no interview at this time if it changes they will be notified

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



😘 (301) 415-8205

ivonne.couret@nrc.gov

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NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

Original Message From: (b)(6)
Sent: Saturday, March 12, 2011 8:29 PM To: OPA Resource
Subject: Radiation Question
Below is the result of your feedback form. It was submitted by
(b)(6) on Saturday, March 12, 2011 at 20:28:35
comments: We live in (b)(6) and see what is going on in Japanshould we be concerned with fallout if the situation deteriorates in Japan with the containment of these reactors that are not stable?? If so I've called around and have not been able to secure an Potassium Iodide so what should we do??
contactName: Brian D. Phillips
phone: (b)(6)

Subject: Date:

To:

OPA Resource

McIntyre, David

FW: Radiation Question Sunday, March 13, 2011 8:29:02 AM

Original Message From: Jack Paulden (b)(6) Sent: Saturday, March 12, 2011 9 To: OPA Resource Subject: china-syndrome-japan	F:22 PM
Below is the result of your feedba	ack form. It was submitted by
Jack Paulden (b)(6)	on Saturday, March 12, 2011 at 21:21:39
water(deuterium) as the secondar until Chernobyl. What concerns n event that was not anticipated; in not engineered to handle, althoug	If him telling me they used mercury as the primary coolant and heavy ry coolant. I grew up with a healthy respect for Nuclear Power Plants me about the current situation in Japan is that this seems to be an other words an event that Japans current nuclear power plants are in to date they have not yet lost the shipso to speak
country:(b)(6)	
phone:	
	•

OPA Resource

McIntyre, David

FW: china-syndrome-japan Sunday, March 13, 2011 9:30:51 AM

From: To:

Subject:

Date:

McIntyre, David

To: Subject: Mike Dudek

Date:

RE: NRC Liaison Status - USAID Sunday, March 13, 2011 10:33:00 AM

Not right now, thanks. I just spoke to the NHK reporter, who was primarily interested in the status of the two experts we sent to Japan. She also wanted info on an HHS/DOE team sent there, but I knew nothing about that and could only think of referring her to USAID as the coordinating agency for relief efforts.

She was very grateful for the assistance we're giving her country, and wished me a "wonderful day."

#### Dave

```
----Original Message----
From: Mike Dudek (b)(6)
Sent: Sunday, March 13, 2011 10:30 AM
To: McIntyre, David
```

Subject: Fw: NRC Liaison Status - USAID

David, just FYI. Do you need any information from Federal partners?

```
Mike
--- On Sun, 3/13/11, Mike Dudek (b)(6)
                                                           wrote:
> From: Mike Dudek (b)(6)
> Subject: NRC Liaison Status - USAID
> To: "LIA07 Hoc" <LIA07.Hoc@nrc.gov>, LIA01.hoc@nrc.gov, LIA11.hoc@nrc.gov,
Jason.Kozal@nrc.gov, opa.resource@nrc.gov
> Date: Sunday, March 13, 2011, 9:09 AM
> Good Morning!
>
> Jason Kozal and Michael Dudek have reported to the Reagan
> Building downtown and have integrated into USAID's Response
> Management Team (RMT).
> Information Needs: Please send us the most up-do-date
> talking points. Also, please continue to send us (a)
> updated SITREPS, (b) copies of the RST Status 1-pagers, the
> updated Q&A, and an updated ET Chronology.
> Additionally, if you need any information from Federal
> partners, please don't hesitate to ask. We have reps
> from DOD, CBRNE, State, and others at out disposal.
> Thanks!
> Michael I. Dudek
>
>
```

F	ro	m	;

OPA Resource

To:

McIntyre, David

Subject:

FW: Preparedness:if Emergency Japan nuclear reactor Meldown & Plume to US. - who distributes provides

necessary Interventions ?

Date:

Sunday, March 13, 2011 9:31:22 AM

From: Rosalind Brooks (b)(6)

Sent: Saturday, March 12, 2011 10:33 PM

To: OPA Resource

Cc: (b)(6)

**Subject:** Preparedness:if Emergency Japan nuclear reactor Meldown & Plume to US. - who distributes provides necessary Interventions?

TO: NRC - EMERGENCY Preparedness, Nuclear Meltdown Risk -

If Reactor Meltdown and Radiation Plume to US (36 HRS, ) who where when - Provides needed protection /antidotes/treatment

in US communities....You/NRC - FEMA - RED CROSS, such as potassium iodine etc.

Do you have these medications to protect thyroid etc. of citizenry already distributed to our cities, emergency medical resources, first responders, hospitals etc. ??

I am a social worker and people are asking me. Not certain that Japan authorities, leaders telling the whole Truth re: status troubled Units & Growing!

Sincerely, Rosalind Brooks, MSW	-	(b)(6)
(b)(6)		

00/1/

McIntyre, David

To:

OPA Resource; Brenner, Eliot; arestuccia@thehill.com

Cc:

Couret, Ivonne
RE: Quick question

Subject: Date:

Sunday, March 13, 2011 2:15:00 PM

Hi Andrew – we're not really addressing that question now. We have some language in our press releases from Friday and Saturday about seismic standards for US plants. We will, of course, be analyzing any and all information that evolves from the Japan situation for potential relevance and lessons that could improve our regulations and safety standards.

David McIntyre NRC Office of Public Affairs

From: Andrew Restuccia [mailto:arestuccia@thehill.com]

Sent: Sunday, March 13, 2011 12:58 PM

**To:** OPA Resource **Subject:** Quick question

Good afternoon.

I'm hoping to get some background on any efforts by NRC to take into account the prospect of a U.S. nuclear reactor being affected by an earthquake or other natural disaster.

Some lawmakers are raising concerns that the U.S. could see a repeat of what's happening in Japan.

Thanks!

Email is fine. But if somebody needs to talk with me, my cell phone is best because I'm not in the office today (b)(6)

Andrew Restuccia
Staff Writer
The Hill
arestuccia@thehill.com
Office: 202-407-8012
Cell: (b)(6)

Follow me on Twitter: @AndrewRestuccia

http://thehill.com/blogs/e2-wire

McIntyre, David

To:

Couret, Ivonne; OPA Resource; Brenner, Eliot

Cc:

Burnell, Scott

Subject:

RE: An Idea for the Nuclear Reactor Emergency in Japan

Date:

Sunday, March 13, 2011 2:12:00 PM

Eliot had Rob answer this one. "Tell him – we already got one!"

For now we're OK receiving them. That could change ....

From: Couret, Ivonne

Sent: Sunday, March 13, 2011 2:11 PM

To: OPA Resource; McIntyre, David; Brenner, Eliot

**Subject:** RE: An Idea for the Nuclear Reactor Emergency in Japan

Do you guys really want to receive public inquiries....otherwise I'll instruct Val and Bethany to send to me...Ivonne

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



್ (301) 415-8205

ivonne.couret@nrc.gov

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NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

From: OPA Resource

Sent: Sunday, March 13, 2011 2:06 PM To: McIntyre, David; Brenner, Eliot

Cc: Couret, Ivonne

Subject: FW: An Idea for the Nuclear Reactor Emergency in Japan

From: Chuck Hoffheiser (b)(6)

Sent: Sunday, March 13, 2011 1:25 PM

To: OPA Resource

Subject: An Idea for the Nuclear Reactor Emergency in Japan

I've been following the coverage of the nuclear reactor situation in Japan, and a thought occurred --- could we outfit helicopters with the fire-fighting water carrying devices often used in wildfires in the US? I don't know how to get in touch with the NRC experts in

Japan, and their offices in the US probably are closed today. Perhaps someone at NRC is monitoring e-mail today so perhaps you could transmit my idea to them.

Is there any way these "water-helicopters" could be used to slowly release water into the reactor containment structures? Various reports say Japanese crews are pumping seawater into the structures, and maybe this is a way to supplement the amount if water and add it more quickly. Additionally, if there are any mid-air refueling Air Force planes in the region, could they be filled with water rather than jet fuel, then used for the same purpose?

Naturally, the crews would have to be outfitted with radiation protection, and that might make this idea unworkable.

Thanks for keeping us informed. I've provided my phone number below, just in case.

Chuck	Hoffheiser	r
(b)(6)		
(p)(g)		

OPA Resource

To:

McIntyre, David; Brenner, Eliot

Cc:

Couret, Ivonne

Subject:

FW: Desperate need for informed input regarding Fukushima reactor situation

Date:

Sunday, March 13, 2011 4:41:53 PM

From: Greg Landry [mailto (b)(6)
Sent: Sunday, March 13, 2011 3:48 PM

To: OPA Resource

Subject: Desperate need for informed input regarding Fukushima reactor situation

It is imperative that informed experts from the NRC get actively involved with the on air dialogue regarding the Japanese reactors as soon as possible. There is far too much misinformation running rampant.

Respectfully,

gl

Harrington, Holly

To:

LIA04 Hoc

Subject:

RE: Latest Press Release and an inquiry from Office of Public Affairs

Date:

Sunday, March 13, 2011 3:12:00 PM

This does exactly capture what I'm asking.

We have a blog comment that asks this: Can you give us information on who is monitoring the US West Coast for dangerous environmental radiation levels and how we may contact that entity? We are in a region with NO US atomic energy plants and have no preparedness for nuclear accidents — What agency should we contact to acquire protective equipment and supplies?

We want to answer this: See our latest blog post. In short – no, we do not believe the U.S. West Coast (or any part of the U.S.) will receive harmful amounts of radiation from the nuclear power plants in Japan. If you have concerns specifically about your community, you can contact your state radiological or environmental office for information.

From: LIA04 Hoc

Sent: Sunday, March 13, 2011 3:00 PM

To: Harrington, Holly

Subject: Latest Press Release and an inquiry from Office of Public Affairs

Importance: High

Holly:

This is the e-mail I'm going to send to the RSLOs. Any amendments or clarifications? Thanks.

Rich (b)(6)

RSLOs:

The latest NRC press release states: "NRC SEES NO RADIATION AT HARMFUL LEVELS REACHING U.S. FROM DAMAGED JAPANESE NUCLEAR POWER PLANTS."

Holly in Public Affairs is preparing for incoming questions resulting from this press release. Her question:

Should OPA/NRC indicate to incoming callers that they contact their respective state professional organizations to get answers to their questions? (Holly: do you have appropriate state contact lists? How would you tag/identify the appropriate State contact for this purpose? What is your suggestion for OPA directing these questions?)

Rich			
(b)(6)	or (	b)(6)	

David Price

To:

McIntyre, David

Subject:

Re: question about Japan / Nuclear crisis

Date:

Sunday, March 13, 2011 4:57:02 PM

Thank you, SIr! I appreciate it!

David

---- Original Message -----

From: McIntvre. David

To: OPA Resource ; (b)(6)

Sent: Sunday, March 13, 2011 4:49 PM

Subject: RE: question about Japan / Nuclear crisis

Our protective measures team is confident that even in a worst-case scenario, radiation reaching the United States would not reach harmful levels. There is a bogus map on the Internet that pretends to be from the NRC - it is not.

David McIntyre

NRC Public Affairs

From: David Price (b)(6)

Sent: Sunday, March 13, 2011 4:40 PM

To: OPA Resource

Subject: question about Japan / Nuclear crisis

Hi. I'm not sure if i'm sending this to the right person, if not, please forward. I read an article where the NRC said that no harmful radiation from Japan, is expected in the U.S. I'm assuming you mean from what has been released so far. But my question is, if there was a "full meltdown" at one or more of these plants... would the U.S be in danger of harmful radiation? Thanks for any information!

David

McIntyre, David

To:

OPA Resource; (b)(6)

Subject:

RE: Plans for KI distribution

Date:

Sunday, March 13, 2011 4:52:00 PM

Hi Kathleen – KI distribution would be done by the state. However, we do not project harmful levels of radiation reaching the United States, even in a "worst-case" scenario. The states of Washington and Oregon have announced as much today, and NRC issued a press release on this.

Regards, David McIntyre NRC Public Affairs

From: Kathleen Downey (b)(6)

Sent: Sunday, March 13, 2011 4:00 PM

To: OPA Resource

Subject: Plans for KI distribution

I have (b)(6) What are your plans if the reactor in Japan melts down and is not contained? Are there plans for mass distribution of KI if the fall out has a potential to hit the coast. At this time they are unable to obtain any KI from pharmacies to use in the event of an exposure

Thank you

Kathleen Downey

Couret. Ivonne

Brenner, Eliot; McIntvre, David

Subject:

MEDIA INTERVIEW REQUEST - NPR On Point

Date:

Sunday, March 13, 2011 2:13:37 PM

# NRP - ON Point

## Karen Shiff

(b)(6)

Jshiff@bu.edu

Looking for a person to call in interview for show tomorrow (3/14) at the 10-11a.m. EDT

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



§ (301) 415-8205

ivonne.couret@nrc.gov

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

Hinson, Felicia

To:

Trapp, James

Subject:

FW: March 13, 2011, 3:00pm Japan Nuclear Facility Updates

Date:

Sunday, March 13, 2011 7:49:25 PM

It's an honor to know you Jim.

Be safe.

--Felicia

\_\_\_\_\_\_

From: samuel hansell (b)(6)

Sent: Sunday, March 13, 2011 4:54 PM

To: Dean, Bill; Lew, David; Wilson, Peter; Roberts, Darrell; Collins, Daniel; Lorson, Raymond; Baker,

Pamela; Walker, Tracy; Sunil.Weerakoddy@nrc.gov; Clifford, James; Miller, Chris

Cc: Screnci, Diane; Sheehan, Neil; Trapp, James; McNamara, Nancy; Tifft, Doug; Dentel, Glenn; Hansell,

Samuel; Hinson, Felicia; raymond.McKinely@nrc.gov

Subject: March 13, 2011, 3:00pm Japan Nuclear Facility Updates

Everyone,

Jim Trapp has arrived in Tokyo at the US Ambassador Office and has successfully provided a good source of current Japanese nuclear plant data. He has a scheduled

meeting with Japanese officials in four hours to obtain additional information related to the status of the nuclear power plants.

Fukushima Daiichi Units 1 and 3 have experienced core damage; the reactor cores were completely uncovered for a period of time; reactor water level was restored on Unit 1.

Sea water injection is in progress on Unit 3, however there is no indication that the reactor water level is restored above the fuel zone level on Unit 3.

Fukushima Daiichi Unit 2 reactor condition has improved. DC electrical power has been restored and Reactor Core Isolation Cooling (RCIC) has restored water level to above the fuel zone.

Latest information has stated that the reactor vessel and primary containment structures are still intact for all of the nuclear units; there is intermittent venting of the primary

containment (to the atmosphere) to maintain internal pressure within design limits.

The radiation readings on the US aircraft carrier Ronald Reagan was measured at 0.6 millirem; this radiation reading is consistent with the containment venting operation of the Fukushima reactors.

NRC has issued a press release stating that "no harmful radiation release has reached the US; additional press releases to follow.

The NRC Chairman's Senate Hearing scheduled for this Wednesday will now focus on the Japanese nuclear plant followup actions and not the previous budget discussion topic.

An erroneous release of projected Japanese plant release plume data, using the NRC logo without our knowledge, contains information that the release rates could be as high as 75 Rem and reach Colorado, USA. There has been an attempt to remove this mis-leading and unauthorized information; however the info still may exist on some social media locations.

Next Japan update call is tonight at 11:30 pm; I plan to listen in on the call.

Thanks, Sam H

Tokyo Electric Power Company recent updates (recent press release details attached):

- The value of radioactive material (iodine, etc) is increasing according to the monitoring car at the site (outside).
- We are currently coordinating with the relevant authorities and departments as

to how to cool down the water in the spent nuclear fuel pool.

Dailchi Unit 2's latest report noted that the high pressure Reactor Core Isolation Cooling (RCIC) system is injecting water into the reactor vessel; however vessel level is below normal levels and this reactor could be vulnerable

to further degradation.

The US aircraft carrier Ronald Reagan is 100 miles off the coast of Japan and is

being used by helicoptersfor supply delivery and rescueefforts. The radiation air monitors are detecting radiation releases form the nuclear plants; when asked the HQs briefer could not provide the initial radiation levels until they're verified with backup readings. Also, the helicoptersreturning to the aircraft carrier were found to have low levels of contamination; again no values

of the contamination levels at this time.

The White House plans to issue a press release "soon" that will stress the need for effective communication of the Japanese nuclear plants' status; the ongoing US support for the Japanese emergency response efforts; and the fact that the US

plants are not at risk.

The NRC has prepared a press release and will release if the White House press release does not include sufficient details about the ongoing nuclear reactor recovery efforts

MEIR

From:

LIA03 Hoc

Trapp, James; Ulses, Anthony; james.trapp((D))

Cc:

Foggie, Kirk; Ramsey, Jack; McGinty, Tim; Doane, Margaret; Mamish, Nader; Fragovannis, Nancy; Stahl, Eric

Subject:

Further guidance on interacting with your counterparts

Date:

Sunday, March 13, 2011 8:28:13 PM

Jim and Tony,

We would like to provide you with additional guidance concerning interacting with your counterparts on the document that we forwarded to you.

- 1. You should give your condolences to your counterparts, and express your appreciation for their willingness to talk with U.S. representatives.
- 2. You should say that you have the responsibility to be liaisons for the U.S. search and rescue teams as they do not have reactor experts with them at this time. Any information they can share with you in that regard would be very useful, such as radiation levels, and good real-time data necessary for health and safety.

If NRC requests specific information, you should:

- 1. First explain that the U.S. needs Japan's help in understanding the relevance of these events for U.S. reactors.
- 2. Specifically, it would be of great assistance if NRC knows (fill in the request).

On the Navy data – use the talking points we provided to you earlier (i.e., that you are passing it along for them to assess and act appropriately).

At the end of the conversation, you should

- 1. Again express your appreciation for their willingness to meet with you and share information with you.
- 2. Ask to set up periodic briefings, if that is acceptable to the Japanese Government
- 3. Note that the U.S. needs your help in understanding how the U.S. reactors would react under similar circumstances.

Let us know if you have any questions about this guidance.

Tim, Karen and Kirk

P.S. The next OIP team will be Nancy Fragoyannis and Eric Stahl – starting at 11 p.m. EST.

# Ostendorff, William

From:

Ostendorff, William

Sent:

Sunday, March 13, 2011 10:57 AM

To:

Nieh, Ho: Franovich, Mike

Subject:

Re: UPDATE from 07:30 telecon

### Thanks.

---- Original Message -----

From: Nieh, Ho

To: Ostendorff, William; Franovich, Mike

Sent: Sun Mar 13 10:02:45 2011

Subject: RE: UPDATE from 07:30 telecon

1msv = 100 mrem

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission

(301) 415-1811 (office) (b)(6)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

From: Ostendorff, William

Sent: Sunday, March 13, 2011 9:52 AM

To: Franovich, Mike

Cc: Nieh, Ho

Subject: Re: UPDATE from 07:30 telecon

Mike- how do I convert millisievert into millirem?

From: Franovich, Mike To: Ostendorff, William

Cc: Nieh, Ho; Warnick, Greg; Kock, Andrea; Zorn, Jason

Sent: Sun Mar 13 08:03:38 2011 Subject: UPDATE from 07:30 telecon

Marty Virgilio led the call

Fukushima Sites Status

Daiichi

Unit 1

- No new news for the Daiichi unit1.
- Staff believe there was core damage.
- The was some level of release from the hydrogen explosion in the reactor building but the primary containment remains intact.

1

Unit 2 no fuel damage, core being cooled by RCIC, containment intact.

### Unit 3

- believe there is core damage.
- sea water and boric acid into the reactor core.
- Primary containment intact

### Daini

Unit 1 venting primary containment. All other three units no change in status (stable).

### Other

Tony Ulses (NRC) arrived in Tokyo. Will assist U. S. Ambassador Jim Trapp (NRC) still enroute but will also assist the U.S. Ambassador

White House plans to issue press release. Key message that U.S. government is support/assisting, continues to monitor, no risk to U.S.

NRC will issue PR only if needed to supplement the WH PR.

NEI/Marv Fertel may make the morning news shows.

NRC in contact with DOE/Naval Reactors. USS Ronald Reagan is 100 miles from Fukushima sites. They are picking up airborne through aerial sampling. Helicopters also show contamination. NRC getting info to confirm if amounts consistent with our models/predicted levels.

Net telecon at 15:30.

## Weaver, Tonna

From:

Ulses, Anthony

Sent:

Sunday, March 13, 2011 8:29 AM

To:

LIA02 Hoc

Subject:

Re: Go to Tokyo

I called ron and gave him the ops center main number. He works us embassy japan. His number is

(b)(6)

Sent from NRC BlackBerry

Anthony Ulses

(b)(6)

From: LIA02 Hoc To: Ulses, Anthony Cc: LIA03 Hoc

**Sent**: Sun Mar 13 08:23:49 2011 **Subject**: RE: Go to Tokyo

Tony -

Who is Ron Cherry with so we can track down the number.

Let us know if you don't make the flight and need alternatives. We can contact the Embassy in Tokyo to see if they can help with flight arrangements.

Brooke and Janice

From: Ulses, Anthony

Sent: Sunday, March 13, 2011 8:21 AM

To: LIA02 Hoc

Subject: Re: Go to Tokyo

Call Ron Cherry for the number. They will call me. Get the questions from the RST that they prepared. I will tie in for as long as I can, but I will have to leave right before the plane departs.

Sent from NRC BlackBerry Anthony Ulses

(b)(6)

From: LIA02 Hoc To: Ulses, Anthony

Sent: Sun Mar 13 08:19:01 2011

**Subject**: Go to Tokyo

Tony,

Please get on the plane and go to Tokyo, even if that means missing the phone call with NISA. Also, please get us the number so that we can have someone on the phone call with NISA.

Janice Owens

From: Sent: To: Cc: Subject:	Ulses, Anthony Sunday, March 13, 2011 11:12 AM LIA03 Hoc; CherryRC@state.gov'; 'tokyodao@state.gov'; 'cooperJD@state.gov' LIA02 Hoc; LiA06 Hoc Re: Need Embassy Assistance for Mr. Tony Ulses
Anthony Ulses  Branch Chief, Reactor System (b)(6)	iems Branch
Sent from NRC BlackBerry Anthony Ulses (b)(6)	
<cooperjd@state.gov> Cc: Ulses, Anthony; LIA02 Fent: Sun Mar 13 11:08:34 Subject: Need Embassy A The purpose of this email i</cooperjd@state.gov>	
Mr. Ulses is trying to get m	nilitary transport to Yakota. He needs an email from the embassy to:  stating that he is on orders to travel to Yakota.
'his email needs to include This is needed ASAP.	e Mr. Ulses tull name, job and אוככ. (Tony please provide)
Mr. Jim Trapp has checked	

Weaver, Tonna

# Weaver, Tonna

From:

Ulses, Anthony

Sent:

Sunday, March 13 2011 6:48 PM

To:

LIA03 Hoc; (b)(6)

Cc:

McGinty, Time

Subject:

Re: Information

So should we take this to mean that DOE will be asking the questions and that we should try, if at possible, to be in on the conversation?

Thanks.

Tony

Sent from NRC BlackBerry

Anthony Ulses (b)(6)

From: LIA03 Hoc

To: Ulses, Anthony (b)(6)

Cc: McGinty, Tim Sent: Sun Mar 13 18:36:28 2011

Subject: Information

Jim,

Regarding the information which was sent to you earlier, we have the following guidance:

- 1. The data from Naval Reactors has been sent to you and Tony.
- 2. The NRC requests that you share this information with your Japanese counterparts for their assessment and appropriate action, as necessary.
- 3. Other U.S. Government agencies are aware that you are sharing this information with the Japanese government.
- 4. The NRC is not going to take any other action relating to this information.
- 5. The U.S. Government agency which originated the information has prepared background information. They may, at some time, also release the data to the public.

In addition, we have received the attached questions from Department of Energy. Per the OEDO, these are good questions for you to be aware of and to listen to your Japanese colleagues for answers. However, we are not asking you to directly ask these questions of your Japanese colleagues as we do not believe that is the best approach to take. Bill asked you to respect the Japanese sensitivities regarding these issues, and to not be impolite. Let us know if you have any questions. Call the HOO if you want to talk.

Kirk Foggie, Karen Henderson and Tim McGinty

00/8\*

# Frazier, Alan

From:

Frazier, Alan

Sent:

Sunday, March 13, 2011 5:47 PM

To:

Subject:

Re: Update from TEPCO 2am JST (12pm EST)

301-816-5151

From: (b)(6)

To: Frazier, Alan

Sent: Sun Mar 13 17:32:13 2011

Subject: Re: Update from TEPCO 2am JST (12pm EST)

Can you send me the HQ HOO fax # please - for some reason this email works on my bb? Sent from my Verizon Wireless BlackBerry

From: "Frazier, Alan" < Alan. Frazier@nrc.gov>

**Date:** Sat, 12 Mar 2011 18:07:34 -0500

To: (b)(6)

Subject: FW; Update from TEPCO 2am JST (12pm EST)

## Press Release (Mar 13,2011)

Plant Status of Fukushima Daiichi Nuclear Power Station (as of 2am March 13th)

All 6 units of Fukushima Daiichi Nuclear Power Station have been shut down.

## Unit 1(Shut down)

- Reactor has been shut down. However, the unit is under inspection due to the explosive sound and white smoke that was confirmed after the big quake occurred at 3:36PM.
- We have been injecting sea water and boric acid which absorbs neutron into the reactor core.

### Unit 2 (Shut down)

- Reactor and Reactor Core Isolation Cooling System have been shut down. Current reactor water level is lower than normal level, but the water level is steady. After fully securing safety, we are preparing to implement a measure to reduce the pressure of the reactor containment vessels under the instruction of the national government.

### Unit 3 (Shut down)

- Reactor has been shut down and we continue injecting water by High Pressure Core Injection System. After fully securing safety, we are preparing to implement a measure to reduce the pressure of the reactor containment vessels under the instruction of the national government.
- Currently, we do not believe there is any reactor coolant leakage inside the reactor containment vessel.

### Unit 4 (shut down due to regular inspection)

- Reactor has been shut down and sufficient level of reactor coolant to ensure safety is maintained.
- Currently, we do not believe there is any reactor coolant leakage inside the reactor containment vessel.

Unit 5 (outage due to regular inspection)

- Reactor has been shut down and sufficient level of reactor coolant to ensure safety is maintained.
- Currently, we do not believe there is any reactor coolant leakage inside the reactor containment vessel.

### Unit 6 (outage due to regular inspection)

- Reactor has been shut down and sufficient level of reactor coolant to ensure safety is maintained.
- Currently, we do not believe there is any reactor coolant leakage inside the reactor containment vessel.

### Casualty

- 2 workers of cooperative firm were injured at the occurrence of the earthquake, and were transported to the hospital.
- 1 TEPCO employee who was not able to stand by his own with his hand holding left chest was transported to the hospital by an ambulance.
- 1 subcontract worker at important earthquake-proof building was unconscious and transported to the hospital by an ambulance.
- The radiation exposure of 1 TEPCO employee, who was working inside the reactor building, exceeded 100mSv and was transported to the hospital.
- 4 workers were injured and transported to the hospital after explosive sound and white smoke were confirmed around the Unit 1.
- Presence of 2 TEPCO employees at the site are not confirmed

#### Others

- We measured radioactive materials inside of the nuclear power station area (outdoor) by monitoring car and confirmed that radioactive materials level is higher than ordinary level. Also, the level at monitoring post is higher than ordinary level. We will continue to monitor in detail the possibility of radioactive material being discharged from exhaust stack or discharge canal. The national government has instructed evacuation for those local residents within 20km radius of the periphery because it's possible that radioactive materials are discharged.
- We will continue to take all measures to restore the security of the site and to monitor the environment of the site periphery.

http://www.tepco.co.jp/en/press/corp-com/release/11031301-e.html

From: Sent: To: Subject:	Skarda, Raymond Monday, March 14, 2011 10 KT DP RE: Fukushima NPP crisis	:26 PM		
Dear Tonoike-san				
well and your family is sa	ling with, I very much appr afe. I will pass your regards nything we can do for you a	s on at NRC, and will lo		
(b)(6)	her wishes as well			
Dear Mr. Tonoike, I heard about the earthquimproving. Sincerely, Jinhie	uake and tsunami, and I re	ally hope that you are	doing well, and the	e situation is
From: KT DP [[(b)(6)] Sent: Monday, March 14, To: Skarda, Raymond Subject: Fukushima NPP				
Dear Ray-san				
request from Japanese G	encountered the worst cris Sovernment to aid the cour ratitude. Please give our b	nter actions at Fukushi	ma NPPs. I would	like to express
I personally has been in a NUCEF. Currently I am s	charge of securing and ma standing by at my home.	iking safe JAEA reseal	rch facilities, STAC	CY/TRACY in
It is very very lucky that to come back to my home. They are safe and fine.	he crisis started on the ear They are now in (b)(6)	rthq <u>uake iust one day</u> vith ( <sup>(b)(6)</sup>		no <sup>(b)(6)</sup> would kilometers away.
Best regards				
Kotaro				

Skarda, Raymond

Droggitis, Spiros

Sent:

Monday, March 14, 2011 7:42 AM

To:

Powell, Amy; Decker, David; Riley (OCA), Timothy

Subject:

Attachments:

FW: DNDO News 3/11/2011 DNDO NEWS 3-11-11.doc

From: Bolling, Lloyd [mailto:Lloyd.Bolling@dhs.gov]

Sent: Friday, March 11, 2011 12:43 PM

To: Layton, Michael; Reis, Terrence; Jones, Cynthia; Wastler, Sandra; Jackson, Gerard

Cc: Droggitis, Spiros; Dembek, Stephen; Owens, Janice; Casey, Timothy

Subject: DNDO News 3/11/2011

Attached is the DNDO News for Friday, March 11, 2011.

# Summary of news items:

1. Japan's Fukushima Daiichi Nuclear Power Plant on heightened alert.

- 2. Concerns have been raised that the proposed House stopgap budget would jeopardize nuclear nonproliferation programs.
- 1. Port officials and managers meet with security experts to improve port security.
- 2. Chinese think tank issues its first global nuclear security report.
- 3. Former Soviet President Mikhail Gorbachev says terrorists are eyeing Russian nuclear.
- 4. Illinois National Guard's Civil Support Team passes evaluation.

Lloyd Bolling, NRC Liaison Operations Support Directorate Domestic Nuclear Detection Office Department of Homeland Security

Phone: 202-254-7123

(b)(6)

Fax: 202-254-7752 Lloyd.Bolling@dhs.gov

## March 11, 2011 DNDO News Brief

## Fukushima Daiichi Nuclear Power Plant on Heightened Alert

The Island nation of Japan was hit with an 8.9 magnitude earthquake on Friday morning. The IAEA's Incident and Emergency Centre has received information from Japan's Nuclear and Industrial Safety Agency (NISA) that a heightened state of alert has been declared at Fukushima Daiichi nuclear power plant. NISA says the plant has been shut down and no release of radiation has been detected.

http://www.iaea.org/newscenter/news/2011/tsunamiupdate.html

## **Keep Nuclear Terrorist Safeguards**

Ken Brill, Politico - The stopgap 2011 budget proposed by the House undermines efforts to prevent nuclear terrorism. The House budget proposal cuts 22 percent, or more than \$600 million, from nonproliferation programs. http://www.politico.com/news/stories/0311/51048.html

## Securing America's Ports

Homeland Security Newswire – Port officials and managers will attend the ISC West Conference to discuss port security strategy and interagency coordination. Since 9/11, Counterterrorism officials have been implementing balanced solutions that allow cargo to pass through safely, without hindering the flow of goods to businesses. Each year roughly \$3 trillion worth of goods enters into the United States via water and more than 90 percent of the world's cargo travels by sea making ports a prime target for terrorist organizations. http://homelandsecuritynewswire.com/securing-americas-ports

## Chinese Think Tank Releases its First Global Nuclear Report

Li Yancheng, People's Daily Online – On March 10, a Chinese military think tank released a global nuclear report, titled the "Global Nuclear Posture Review 2010-2011." The report addresses nuclear policies and strategies, nuclear power, nuclear disarmament, nuclear safety, regional nuclear issues, international organizations and international nuclear issues. <a href="http://english.peopledaily.com.cn/90001/90776/90883/7316046.html">http://english.peopledaily.com.cn/90001/90776/90883/7316046.html</a>

## Terrorists Eye Russian Nuclear Material

J.J. Green, WTOP - An article in a scientific journal by former Soviet President Mikhail Gorbachev suggests that nuclear weapons and fissile material my not be as secure as Russian officials have claimed. Gorbachev said that terrorists may have friends who have access to fissile materials. http://www.wtop.com/?nid=220&sid=2302025

### Illinois National Guard's Civil Support Team Passes Evaluation

ReadMedia (press release) - The Illinois National Guard maintains the 5th WMD Civil Support Team (CST) to respond to events such as an attack using weapons of mass destruction, or chemical, biological or nuclear threats. Every 18 months the 5th CST undergoes a rigorous external evaluation to test its tactical and technical skills. <a href="http://readme.readmedia.com/Illinois-National-Guards-Civil-Support-Team-Passes-Evaluation/2202719">http://readme.readmedia.com/Illinois-National-Guards-Civil-Support-Team-Passes-Evaluation/2202719</a>

From: To: Cc: Subject: Date:	McIntyre, David Brenner, Eliot Burnell, Scott RE: Steve Dolley Request Monday, March 14, 2011 3:53:00 PM	
I take it gi	ven your new guidance, that is still our a	answer?
Sen To: Cc:	m: Brenner, Eliot nt: Monday, March 14, 2011 3:39 PM McIntyre, David Burnell, Scott pject: RE: Steve Dolley Request	
	Il that's very charitable of him. I would ha he moment and peeling one away for a r	
Sen To: Cc:	m: McIntyre, David nt: Monday, March 14, 2011 12:08 PM Brenner, Eliot Burnell, Scott pject: Steve Dolley Request	
	ve Dolley asks for a BWR containment e possible?	xpert to speak to Yanmei Jie today. Is
	nen I said it may be difficult, and asked it ay NRC is deferring inquiries to NEI?'	he had asked NEI, he said, "So should (b)(6)

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

McIntyre, David

To:

Steger (Tucci), Christine

Cc:

Akstulewicz, Brenda; Shannon, Valerie

Subject:

RE: NRC Quoted in Article - FOX News Broadcast at 5pm

Date:

Monday, March 14, 2011 3:53:00 PM

OK, thanks. When she sends the article, please forward it to me and I'll call her back.

From: Steger (Tucci), Christine

Sent: Monday, March 14, 2011 3:51 PM

To: McIntyre, David

Subject: NRC Quoted in Article - FOX News Broadcast at 5pm

Call from: Virginia Hayes Organization: Fox News Number: 212-301-5786

Interested in NRC comments re: article from Dr. Joseph Oman – NRC was quoted.

Virginia is sending the article to OPA e-mail.

From:	Burnell, Scott
To:	McIntyre, David
Subject	
Date:	Monday, March 14, 2011 12:22:27 PM
Oh, y	ou're no fun anymore
l told	Rob no laughing until I put on the clown nose.
From:	McIntyre, David
	Monday, March 14, 2011 12:22 PM
	irnell, Scott
Subje	ct: RE: Steve Dolley Request
"Oh,	so NRC is now deferring requests to the ANS???"
©	
	From: Burnell, Scott  Fort: Monday, March 14, 2011 13:15 PM
	Sent: Monday, March 14, 2011 12:15 PM To: McIntyre, David
	Subject: RE: Steve Dolley Request
	Subjects NE. Steve Dolley Neglect
	I'd suggest pointing him at the American Nuclear Society and reminding him we're not able to accommodate anyone today.
	From: McIntyre, David
	<b>Sent:</b> Monday, March 14, 2011 12:08 PM
	To: Brenner, Eliot
	Cc: Burnell, Scott Subject: Steve Dolley Request
	Subject: Steve Dolley Request
	Steve Dolley asks for a BWR containment expert to speak to Yanmei Jie today. Is
	it possible?
	it possible:
	When I said it may be difficult, and asked if he had asked NEI, he said, "So should
	I say NRC is deferring inquiries to NEI?'
	(b)(6)
	David McIntyre
	Public Affairs Officer
	U.S. Nuclear Regulatory Commission
	(301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

From: To: McIntyre, David Burnell, Scott

Subject:

RE: Steve Dolley Request

Date:

Monday, March 14, 2011 12:23:00 PM

I've been here 20 minutes and talked with three reporters, and four or five more calls to return! All those journalists who took the weekend off are trying to catch up.

When do you need relief?

From: Burnell, Scott

Sent: Monday, March 14, 2011 12:22 PM

To: McIntyre, David

**Subject:** RE: Steve Dolley Request

Oh, you're no fun anymore...

I told Rob no laughing until I put on the clown nose.

From: McIntyre, David

Sent: Monday, March 14, 2011 12:22 PM

To: Burnell, Scott

Subject: RE: Steve Dolley Request

"Oh, so NRC is now deferring requests to the ANS???"

0

From: Burnell, Scott

Sent: Monday, March 14, 2011 12:15 PM

**To:** McIntyre, David

Subject: RE: Steve Dolley Request

I'd suggest pointing him at the American Nuclear Society and reminding him we're not able to accommodate anyone today.

From: McIntyre, David

Sent: Monday, March 14, 2011 12:08 PM

**To:** Brenner, Eliot **Cc:** Burnell, Scott

Subject: Steve Dolley Request

Steve Dolley asks for a BWR containment expert to speak to Yanmei Jie today. Is it possible?

When I said it may be difficult, and asked if he had asked NEI, he said, "So should I say NRC is deferring inquiries to NEI?"

(b)(6)

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

McIntyre, David

To:

Burnell, Scott

Subject:

RE: Steve Dolley Request

Date:

Monday, March 14, 2011 12:23:00 PM

I've been here 20 minutes and talked with three reporters, and four or five more calls to return! All those journalists who took the weekend off are trying to catch up.

When do you need relief?

From: Burnell, Scott

Sent: Monday, March 14, 2011 12:22 PM

To: McIntyre, David

Subject: RE: Steve Dolley Request

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I told Rob no laughing until I put on the clown nose.

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Subject: Steve Dolley Request

Steve Dolley asks for a BWR containment expert to speak to Yanmei Jie today. Is it possible?

When I said it may be difficult, and asked if he had asked NEI, he said, "So should I say NRC is deferring inquiries to NEI?" F---ing a—hole.

David McIntyre **Public Affairs Officer U.S. Nuclear Regulatory Commission** (301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

From: To: McIntyre, David
(b)(6)

Subject:

iect: RE: Fallout hoax etc.

Date:

Monday, March 14, 2011 1:18:00 PM

Hi John - No such plans - even in the event of a major radiation release (and we're not sure that is happening at this time), NRC believes the US is not likely to experience harmful amounts of radiation.

David McIntyre
Office of Public Affairs
U.S. Nuclear Regulatory Commission
(301) 415-8200

From: Lavabit (b)(6)

Sent: Monday, March 14, 2011 8:50 AM

To: McIntyre, David

Subject: Re: Fallout hoax etc.

Hello again David. Concerning the second (much larger blast) and future problems, (other projected blasts) are potassium iodide tablets in order?

Do you foresee any evacuation happening in some of our west coast areas?

Also, any resources to check online for meteorological data with concern to this subject matter?

Cheers!
John

•••••

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On Mar 13, 2011, at 12:44 PM, "McIntyre, David" < <u>David McIntyre@nrc.gov</u>> wrote:

You are correct – that map was bogus! We are glad you recognized that it was a fake.

NRC just issued a press release (attached) addressing the short term projections.		
Regards,		
David McIntyre		
NRC Office of Public Affairs		
Original Message		
From: (b)(6)		
Sent: Sunday, March 13, 2011 2:57 PM		
To: OPA Resource		
Subject: Fallout hoax etc.		
Noticed there was a hoax involving your logo and at first it had concerned me. Then I realized that it was probably fake.		
What is the TRUE professional opinion on the reality of fallout radiation reaching the west coast? Any non-media resources or info would be appreciated. Thanks.		
Concerned,		
Johnny from (b)(6) <11-046.pdf>		

# Uselding, Lara

From:

Uselding, Lara

Sent:

Monday, March 14, 2011 12:32 PM

To:

Browder, Rachel

Subject:

RE: Recent NRC blog posts and press releases with NRC messaging

Yes of course!!

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara.Uselding@nrc.gov

(b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Browder, Rachel

Sent: Monday, March 14, 2011 12:29 PM

**To:** Uselding, Lara

Subject: RE: Recent NRC blog posts and press releases with NRC messaging

Thank you!

Can I send this email information to the Radiation Control Program Director in CA?

Rachel

From: Uselding, Lara

Sent: Monday, March 14, 2011 11:53 AM

To: R4; R4 IRC

Subject: Recent NRC blog posts and press releases with NRC messaging

## U.S. Nuclear Plants are Designed for Severe Natural Hazards

Leave a Comment Posted by Moderator on March 13, 2011

We've gotten some questions about how U.S. nuclear power plants would fare when faced with severe natural hazards. To answer: NRC's rigorous safety regulations ensure that U.S. nuclear facilities are designed to withstand tsunamis, earthquakes and other hazards. In addition to those plants in recognized earthquake zones, the NRC has been working with several agencies to assess recent seismic research for the central and eastern part of the country. That work continues to indicate U.S. plants will remain safe.

For more information on U.S. nuclear power plants and earthquakes, read our backgrounder on the subject here: <a href="http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html">http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html</a>

Eliot Brenner Public Affairs Director

Contact on Pendary north a

Available Information Points to No Radiation Risk to U.S. From Damaged Japanese Plants

2 Comments Posted by Moderator on March 19, 2011

We are working with other U.S. government agencies to monitor the situation in Japan — and to monitor for radioactive releases and to be prepared to predict their path. Fortunately, all the available information at this time indicates weather conditions have taken the small releases from the Fukushima reactors out to sea away from the population.

And, importantly, given the thousands of miles between Japan and us – including Hawaii, Alaska, the U.S. territories and the U.S. West Coast - we are not expecting to experience any harmful levels of radioactivity here. We would like to repeat - we are not expecting to experience any harmful levels of radioactivity here.

As expected, we are getting a lot of questions from people who are seeking information about developments at Japanese reactors. We understand the need for information, but we are not able to comment on the situation. It is an ongoing crisis for the Japanese and they have primary responsibility for handling it and communicating about it. But please stay tuned to this blog for the latest information we can provide.

Thank you for reading our blog. Remember to look at yesterday's post about how you can help Japan in this crisis with donations.

Eliot Brenner Public Affairs Director

The following is helpful as used in our press releases:

Nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.

The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC requires that safety-significant structures, systems, and components be designed to take into account:

- the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy;
- appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena; and
- the importance of the safety functions to be performed.

### Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara. Uselding@nrc.gov

Office: 817-276-6519

For more information visit www.nrc.gov

Hayden, Elizabeth

To:

Burnell, Scott; LIA04 Hoc

Cc:

Brenner, Eliot; Harrington, Holly;

(b)(6)

Subject:

RE: Ouestions

Date:

Monday, March 14, 2011 11:04:17 AM

More good questions. We need a well-understood strategy and process for handling these questions and guidance on what OPA staff can/cannot say. This ties into the questions that will be asked at the EOC meetings coming up. After Eliot talks to the Chairman, perhaps we can spend a few minutes getting resolution to this issue.

Beth

From: Burnell, Scott

Sent: Monday, March 14, 2011 10:48 AM

To: LIA04 Hoc

Cc: Brenner, Eliot; Hayden, Elizabeth; Harrington, Holly; hollymharrington@aol.com

Subject: RE: Questions

We're working on that, please stand by.

From: LIA04 Hoc

Sent: Monday, March 14, 2011 10:47 AM

To: Burnell, Scott Subject: FW: Questions

Scott, I just left you a voicemail. We are getting many of these types of questions and would like guidance from OPA on how to handle.

From: Tifft, Doug

**Sent:** Monday, March 14, 2011 10:36 AM

To: LIA04 Hoc Cc: McNamara, Nancy Subject: FW: Questions

Additional questions for our Q&A.

-Doug

From: Giarrusso, John (CDA) [mailto:John.Giarrusso@state.ma.us]

Sent: Monday, March 14, 2011 9:30 AM

To: 'Wilson, Mary Ann'; 'Currier, David'; McKenney, Mike Cc: McNamara, Nancy; Tifft, Doug; Schwartz, Kurt (EPS)

**Subject:** Questions

Needless to say, there are a lot of questions being asked because of the devastation in Japan. The Director, Secretary of EOPSS and Governor's office have been asking questions and I have been sending out information I have received on the plants in Japan.

I would like all three plants to answer the following questions that I have been asked.

 What is the seismic limit that Pilgrim Station, Seabrook Station and Vermont Yankee have been built to withstand?

Please explain that outcome at each plant if it was hit with a 8.9 earthquake the same as what hit Japan?

- For Pilgrim Station and Seabrook Station, what design and safety precautions have been installed at your plant to sustain a devastating tsunami that would hit as did the tragedy at the Japanese plants?
- If the same tragedy hit our plants would we be having the same major issues that the Japanese plants have? Please explain yes or not.

Please let me know when I can expect an answer to these questions or if you would like to meet and discuss that would be ok

Thanks and let me know if you have any questions John

John Giarrusso, Jr.
Planning and Preparedness Division Chief MEMA
508-820-2040 (w)
(b)(6)

Brenner, Eliot

To:

Hayden, Elizabeth; Burnell, Scott; L1A04 Hoc

Cc:

Harrington, Holly; (b)(6)

Subject:

RE: Questions

Date:

Monday, March 14, 2011 11:17:46 AM

That is why I want a conference call.

From: Hayden, Elizabeth

Sent: Monday, March 14, 2011 11:04 AM

To: Burnell, Scott; LIA04 Hoc

Cc: Brenner, Eliot; Harrington, Holly; hollymharrington@aol.com

Subject: RE: Questions

More good questions. We need a well-understood strategy and process for handling these questions and guidance on what OPA staff can/cannot say. This ties into the questions that will be asked at the EOC meetings coming up. After Eliot talks to the Chairman, perhaps we can spend a few minutes getting resolution to this issue.

Beth

From: Burnell, Scott

Sent: Monday, March 14, 2011 10:48 AM

To: LIA04 Hoc

Cc: Brenner, Eliot; Hayden, Elizabeth; Harrington, Holly; hollymharrington@aol.com

Subject: RE: Questions

We're working on that, please stand by.

From: LIA04 Hoc

Sent: Monday, March 14, 2011 10:47 AM

**To:** Burnell, Scott **Subject:** FW: Questions

Scott, I just left you a voicemail. We are getting many of these types of questions and would like guidance from OPA on how to handle.

From: Tifft, Doug

Sent: Monday, March 14, 2011 10:36 AM

To: LIA04 Hoc Cc: McNamara, Nancy Subject: FW: Questions

Additional questions for our Q&A.

-Doug

From: Giarrusso, John (CDA) [mailto:John.Giarrusso@state.ma.us]

**Sent:** Monday, March 14, 2011 9:30 AM

To: 'Wilson, Mary Ann'; 'Currier, David'; McKenney, Mike

Powell, Amy

To:

Hayden, Elizabeth; Brenner, Eliot

Cc:

Harrington, Holly; Schmidt, Rebecca

Subject:

Re: Chairman"s Qs and As

Date:

Monday, March 14, 2011 6:41:18 AM

The reactor safety team in the HOO has been compiling a number of Q ans As for a variety of audiences re: the situation in Japan. OCA does not have them yet but will check status this am and share.

Amy Powell
Associate Director
Office of Congressional Affairs
U. S. Nuclear Regulatory Commission
Phone: 301-415-1673

Sent from my Blackberry

From: Hayden, Elizabeth

To: Brenner, Eliot

Cc: Harrington, Holly; Powell, Amy Sent: Sun Mar 13 23:59:42 2011 Subject: Chairman's Qs and As

It would be helpful if we could get a complete set of the Chairman's Qs and As that have been prepared for the Wed. hearing.

Burnell, Scott

To:

Brenner, Eliot; Hayden, Elizabeth (b)(6)

Cc:

Akstulewicz, Brenda
Directions for Regions

Subject: Date:

Monday, March 14, 2011 10:45:50 AM

Importance:

High

# All;

Just had a call with Prema/Vika and a followup with Sartorius in the ET room – Regions seem to think tech staff/residents should send ALL media/public calls straight to the HOOs. I directed Vika/Prema to use their best judgement to act as a filter for the calls that can be handled at the Regions and send the rest to 8200.

Sartorius is fine with HOOs after hours and the arrangement above for business hours. Can we send a agency-wide e-mail with that direction? Thanks.

Scott

Brenner, Eliot

To:

Akstulewicz, Brenda

Cc:

Hayden, Elizabeth; Harrington, Holly; Landau, Mindy

Subject:

Re: Chairman Remarks

Date:

Monday, March 14, 2011 12:32:31 PM

There are NO prepared remarks.

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment 301 415 8200

(b)(6)

Sent from my Blackberry

From: Akstulewicz, Brenda

To: Brenner, Eliot

Cc: Hayden, Elizabeth; Harrington, Holly; Landau, Mindy

Sent: Mon Mar 14 12:30:32 2011 Subject: Chairman Remarks

Eliot – just got a call from Mindy Landau. Bill Borchardt would like to see the chairman's remarks for the press conference – do you have them? If so, please send them to Bill, Mindy, Beth, Holly and cc me if appropriate. ~ B

### Brenda Akstulewicz

Administrative Assistant Office of Public Affairs 301-415-8209

brenda.akstulewicz@nrc.gov



Uselding, Lara

To:

Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda; Harrington, Holly

Cc:

Burnell, Scott; McIntyre, David

Subject:

Would be helpful to get talkers from Jazcko WH briefing

Date:

Importance:

Monday, March 14, 2011 1:57:15 PM

Just heard Jazcko was on FOX and fielding Qs from reporters .Can we get the Q and A or talkers he's working from? Would be helpful!

## Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov

Office: 817-276-6519

For more information visit www.nrc.gov

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Powell, Amy

To: Subject: Harrington, Holly; Decker, David; Schmidt, Rebecca Re: 2:00 PM Conference Call with Congress Staffers

Date:

Monday, March 14, 2011 2:04:55 PM

Just showed your email to Marty.

Is there a way to let Mike Dudek know that OCA is looped in to the standing, daily 2pm USAID Hill call covered? He got us plugged in yesterday so we'll take it from here so you don't get 159 firedrills!

Amy Powell
Associate Director
Office of Congressional Affairs
U. S. Nuclear Regulatory Commission

Phone: 301-415-1673

Sent from my Blackberry

From: Harrington, Holly

To: Powell, Amy; Decker, David; Schmidt, Rebecca

**Sent**: Mon Mar 14 14:01:40 2011

Subject: RE: 2:00 PM Conference Call with Congress Staffers

Thank.

Our OPA message is to stick to the latest press release about no radiation coming to U.S. Also forthcoming will be transcript of Chairman press briefing at the WH this morning.

From: Powell, Amy

Sent: Monday, March 14, 2011 2:00 PM

**To:** Harrington, Holly; Decker, David; Schmidt, Rebecca **Subject:** Re: 2:00 PM Conference Call with Congress Staffers

I'm on it now with Marty

Amy Powell
Associate Director
Office of Congressional Affairs
U. S. Nuclear Regulatory Commission

Phone: 301-415-1673

Sent from my Blackberry

From: Harrington, Holly

To: Decker, David; Powell, Amy; Schmidt, Rebecca

Sent: Mon Mar 14 13:58:45 2011

Subject: FW: 2:00 PM Conference Call with Congress Staffers

Can you guys support?

From: RMTPACTSU\_ELNRC [mailto:RMTPACTSU\_ELNRC@ofda.gov]

Sent: Monday, March 14, 2011 1:25 PM

**To:** LIA11 Hoc; LIA01 Hoc; LIA07 Hoc; LIA08 Hoc; Burnell, Scott; Harrington, Holly; McIntyre, David **Subject:** 2:00 PM Conference Call with Congress Staffers

OCA & OPA,

From what I have been told, the USAID Administrator would like to "step-up" the communications that are being made to Congress and the public. He has specifically asked the NRC for its "plan for public communications" and a proactive list of Q&As. I assured him that we have a good working set of Q&As; however, I wasn't sure about the communications plan. Thoughts?

Also, I think that they are predicting a lot of participation and nuclear questions on today's 2:00 conference call with Congress staffers. Can we have a contingent of NRC folks on the line to help support this and answer questions?

The phone number for the 2:00 call is: 202-647-0817, (b)(6)

Thanks! Michael I. Dudek

Uselding, Lara

To:

Hayden, Elizabeth; Brenner, Eliot; Akstulewicz, Brenda; Shannon, Valerie; Burnell, Scott; McIntyre, David;

Harrington, Holly

Subject: Date: Satelilite feed company for NRC Interview Monday, March 14, 2011 2:54:46 PM

Here's the company we had used in the past at TSA and also good suggestion....Youtube posting!

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC)

Public Alfairs - Region IV

Lara. Uselding@nrc.gov

(b)(6)

Office: 817-276-6519

for more information visit www.nrc.gov

From: Payne, Sterling [mailto:Sterling.Payne@dhs.gov]

Sent: Monday, March 14, 2011 1:36 PM

To: Uselding, Lara

Subject: RE: I need your help!

I would suggest starting with Rock Creek Production to see if they can help. Here is their main number: 703-481 6590. Tell them you are looking to do a satellite feed.

You guys might also consider putting something on YouTube and folks could get it from there.

From: prvs=04715077b=Lara.Uselding@nrc.gov [mailto:prvs=04715077b=Lara.Uselding@nrc.gov] On

Behalf Of Uselding, Lara

**Sent:** Monday, March 14, 2011 11:57 AM **To:** sterling.payne@dhs.gov; Soule, Greg

Subject: Hi: I need your help!

Importance: High

Hello: So we are having TSA level news media due to the Japan earthquake/tsunami and now follow up questions for NRC here in the US. I must bring chaos wherever I go : )

So, I want to see if you all remember what entity there in DC area we used one time to post a TV interview with our selected TSA official so that TV affiliates around the country could pull b-roll from that interview. We are getting requests from states and cities near power plants and we want to have one voice.

Let me know if you remember who we might have used so I can share with my bosses in HQ in Maryland.

Thanks and hope you are well!

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara. Uselding@nrc.gov
(b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

Harrington, Holly

To: Subject: Janbergs, Holly RE: Photos!!!!!

Date:

Monday, March 14, 2011 3:50:00 PM

Fine.

-----Original Message-----From: Janbergs, Holly

Sent: Monday, March 14, 2011 3:49 PM

To: Harrington, Holly Subject: RE: Photos!!!!!

Understandable. Haven't heard that anyone's asked about the public web site. It seems to me that the pic of the Ops Center is probably going to be the most useful thing we can have up for a while. I'll send them into the photo gallery though

-----Original Message-----From: Harrington, Holly

Sent: Monday, March 14, 2011 3:48 PM

To: Janbergs, Holly Subject: RE: Photos!!!!!!

No, that looks good. I'm loathe to put it up on our web site. Has anyone asked us to do so? Do put them into our photo gallery with this caption, though

-----Original Message----from: Jambergs, Holly

Sent: Monday, March 14, 2011 3:46 PM

To: Harrington, Holly Subject: RE: Photos!!!!!

Search and rescue teams from Fairfax County and Los Angeles County fire departments arrive in Misawa Air Force Base in Japan. The teams include 144 team members, 12 search and rescue dogs, and over 45 tons of equipment. They were deployed by USAID in response to the ongoing efforts to deal with earthquake and tsunami damage after Friday's natural disasters struck. (Photo credit: Staff Sgt. Marie Brown, U.S. Air Force)

Edits?

-----Original Message-----From: Harrington, Holly

Sent: Monday, March 14, 2011 3:31 PM To: Janbergs, Holly; Couret, Ivonne

Subject: FW: Photos!!!!!!

Can you track these down for caption information?

-----Original Message-----

From: RMTPACTSU\_ELNRC [mailto:RMTPACTSU\_ELNRC@ofda.gov]

Sent: Monday, March 14, 2011 2:55 PM

To: LIA11 Hoc; LIA01 Hoc; LIA07 Hoc; LIA08 Hoc; LIA02 Hoc; Harrington, Holly; McIntyre, David;

Burnell, Scott

Subject: FW: Photos!!!!!!

-----Original Message-----From: RMTPACTSU\_PRO

Sent: Monday, March 14, 2011 2:52 PM To: RMT\_PACTSU; DART\_PACTSU

Subject: Photos!!!!!!

PHOTO CREDIT: Staff Sgt. Marie Brown / U.S. Air Force

Rebecca Gustafson Press Officer USAID Response Management Team (RMT) Pacific Tsunami and Japan Earthquake RMT 202-712-0039

(b)(6)

Powell, Amy Kundrat, Christine

To: Cc:

Harrington, Holly RE: Wed video record

Subject: Date:

Monday, March 14, 2011 5:50:49 PM

#### Hi Christine -

I talked to the Committee staff. No press pass is needed. Committee staff should be available around the hearing room (Rayburn 2123) no later than 845am to allow for set up. I would recommend going early, as I would imagine that there will be a heavy media presence for this hearing!

Thanks, Amy

Amy Powell Associate Director U. S. Nuclear Regulatory Commission Office of Congressional Affairs Phone: 301-415-1673

-----Original Message-----From: Kundrat, Christine

Sent: Monday, March 14, 2011 5:47 PM

To: Powell, Amy Cc: Kundrat, Christine Subject: Wed video record

Just wanted to follow up with a quick email.

The videographer will be Matt Williams. Photographer is tbd. Do you need specific names for the media passes?

Thank you!

Sent from an NRC blackberry Christine Kundrat [(b)(6)

Harrington, Holly

To:

LIA04 Hoc; Burnell, Scott; Hayden, Elizabeth

Subject:

RE: revised Q&A

Date:

Monday, March 14, 2011 4:21:00 PM

We recently revised/updated the talking points. They are posted on Webeoc.

From: LIA04 Hoc

Sent: Monday, March 14, 2011 4:10 PM

To: Burnell, Scott; Harrington, Holly; Hayden, Elizabeth

Subject: FW: revised Q&A

I have not heard about a new Q&A... you?

Amanda Noonan State Liaison – Liaison Team Incident Response Center

From: Tifft, Doug

Sent: Monday, March 14, 2011 4:00 PM

To: LIA04 Hoc Cc: McNamara, Nancy Subject: revised Q&A

I heard there was a revised Q&A that was in the process of being approved by the chairman. Do you know if that's ready yet, or when you expect it to be approved?

Thanks,

-Doug

## Doug Tifft

Regional State Liaison Officer

Office: 610-337-6918 Cell: (b)(6)

Brenner, Eliot

To:

McIntyre, David: Hayden, Elizabeth; Harrington, Holly; Burnell, Scott; Couret, Ivonne; Janbergs, Holly; Akstulewicz, Brenda; Screnci, Diane; Sheehan, Neil; Hannah, Roger; Ledford, Joey; Chandrathil, Prema;

Mitlyng, Viktoria; Uselding, Lara; Dricks, Victor

Subject:

RE: Does This Apply to Public Affairs??

Date:

Thursday, April 14, 2011 8:37:50 AM

A friend at the FAA told me last night she'd trade me Fukushima for five sleeping controllers.

From: McIntyre, David

Sent: Thursday, April 14, 2011 8:36 AM

**To:** Brenner, Eliot; Hayden, Elizabeth; Harrington, Holly; Burnell, Scott; Couret, Ivonne; Janbergs, Holly; Akstulewicz, Brenda; Screnci, Diane; Sheehan, Neil; Hannah, Roger; Ledford, Joey; Chandrathil, Prema;

Mitlyng, Viktoria; Uselding, Lara; Dricks, Victor **Subject:** Does This Apply to Public Affairs??

From John Sullivan's ProPublica piece:

"The NRC's guide on fatigue [7], for example, details how many hours employees in key jobs can work, how to respond when a worker is too tired, and how many days off employees in certain jobs need."

Sometimes I think I'd get more rest as an air traffic controller ... ;-P

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)
(202) (b)(6)

Protecting People & the Environment

Uselding, Lara

To:

Gaarder, Nancy

Subject:

RE: Nancy, NRC Press Releases #1 through 5 - Japan Event Earthquake/Tsunami

Date:

Monday, March 14, 2011 3:44:00 PM

Yes, thanks for your patience, super busy with calls!

#### Lara Uselding

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara.Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Gaarder, Nancy [mailto:Nancy.Gaarder@owh.com]

Sent: Monday, March 14, 2011 2:43 PM

To: Uselding, Lara

Subject: RE: Nancy, NRC Press Releases #1 through 5 - Japan Event Earthquake/Tsunami

Thank you!

## Omaha World-Herald

www.omaha.com

### Nancy Gaarder

Reporter

Office: 402-444-1102 Fax: 402-444-1231

Email: Nancy.Gaarder@owh.com 1314 Douglas St.- Suite 700

Omaha, NE 68102

From: Uselding, Lara [mailto:Lara.Uselding@nrc.gov]

Sent: Monday, March 14, 2011 2:43 PM

To: Gaarder, Nancy

Subject: RE: Nancy, NRC Press Releases #1 through 5 - Japan Event Earthquake/Tsunami

Yes, NRC is always looking to learn information that can be applied to the U.S. reactors and we will certainly be looking at the information that comes from this incident.

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Gaarder, Nancy [mailto:Nancy.Gaarder@owh.com]

Sent: Monday, March 14, 2011 2:39 PM

To: Uselding, Lara

Subject: RE: Nancy, NRC Press Releases #1 through 5 - Japan Event Earthquake/Tsunami

Yes, I have .....

Am just waiting for one that says.....'when this is over we'll look at our own plants...."

## The Carlo Activity and the control of the control o

## Omaha World-Herald

www.omaha.com

#### **Nancy Gaarder**

Reporter

Office: 402-444-1102 Fax: 402-444-1231

Email: Nancy Gaarder@owh.com 1314 Douglas St.- Suite 700

Omaha, NE 68102

From: Uselding, Lara [mailto:Lara.Uselding@nrc.gov]

Sent: Monday, March 14, 2011 2:38 PM

To: Gaarder, Nancy

Subject: Nancy, NRC Press Releases #1 through 5 - Japan Event Earthquake/Tsunami

Nancy, also want to be sure you have seen our press releases from Friday until today.

#### Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov

BlackBerry: (b)(6)
Office: 817-276-6519

for more information visit www.nrc.gov

<u>Uselding, Lara</u>

To:

Gaarder, Nancy

Subject:

RE: omaha paper calling in.

Date:

Monday, March 14, 2011 3:48:00 PM

Hi: see below

From: Gaarder, Nancy [mailto:Nancy.Gaarder@owh.com]

Sent: Monday, March 14, 2011 2:34 PM

To: Uselding, Lara

Subject: RE: omaha paper calling in.

Thank you Lara.

A logical outcome of this event would be a top-down safety review on U.S. nuclear plants.

Can you say whether the NRC will require some type of safety review? And if so, is there anything else you can say about the reivew?

Also, U.S. nuclear plants, as you point out, are conservatively designed, built and staffed. Can people living near a nuclear plant assume that they are 100 percent protected from nuclear catastrophe? Or should they assume, that despite all the effort, there remains some inherent risk?

The risk of a nuclear power plant accident with a significant amount of radioactivity released offsite to the public is very small. This risk is small due to diverse and redundant barriers and numerous safety systems in the plant, the training and skills of the reactor operators, testing and maintenance activities, and the regulatory requirements and oversight of the Nuclear Regulatory Commission.

Nuclear power plants are designed to be safe and are operated without significant effect on public health and safety and the environment. No industrial activity, however, is risk-free. To prevent the release of radioactive material to the environment, nuclear power plants are constructed with several barriers between the radioactive material and the environment surrounding the plant. The first barrier is the fuel cladding, sealed metal tubes in which ceramic pellets of uranium fuel are encased. The second barrier is the heavy steel reactor vessel, in the range of nine inches to a foot thick, and the primary cooling water system piping. The third barrier is the containment building, a heavily reinforced structure of concrete and steel up to several feet thick that surrounds the reactor and is designed to contain radioactivity that might be released from the reactor system in the unlikely event of a serious accident.

Thank you,

Nancy



www.omaha.com

#### **Nancy Gaarder**

Reporter
Office: 402-444-1102
Fax: 402-444-1231
Email: Nancy Gaarder@own.com
1314 Douglas St. - Suite 700

Omaha, NE 68102

**From:** Uselding, Lara [mailto:Lara.Uselding@nrc.gov]

Sent: Monday, March 14, 2011 2:29 PM

To: Gaarder, Nancy

Subject: RE: omaha paper calling in.

Hello Nancy: Answer to your question -

Important to note that, nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area.

The NRC has always required licensees to design, operate, and maintain safety-significant structures, systems, and components to withstand the effects of carthquakes and to maintain the capability to perform their intended safety functions. The agency ensures these requirements are satisfied through the licensing, reactor oversight, and enforcement processes.

The NRC requires that safety-significant structures, systems, and components be designed to take into account:

the most severe natural phenomena historically reported for the site and surrounding area.

The NRC then adds a margin for error to account for the historical data's limited accuracy; appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena;

and the importance of the safety functions to be performed.

The NRC's regulations for license renewal (10 CFR Part 54) require licensees to manage age-related degradation to ensure that systems, structures, and components (SSCs) will fulfill their safety-related functions, as specified in the current licensing basis, for the period of extended operation. The aging management review conducted by license renewal applicants specifically addresses the impact of age-related degradation on SSC seismic capacity. It should be noted that a plant's licensing basis, including its seismic design basis, is established outside of the license renewal process during initial plant licensing and subsequent license amendments. In addition, the NRC has processes to evaluate the adequacy of plant licensing bases (e.g., the Generic Issues Program) based on new information or operating experience and, if necessary, improve safety (e.g., require plant improvements through the backfit process).

Lara Uselding
U.S. Nuclear Regulatory Commission (NRC)
Public Affairs - Region IV

Lara.Uselding@nrc.gov
BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Gaarder, Nancy [mailto:Nancy.Gaarder@owh.com]

Sent: Monday, March 14, 2011 1:20 PM

To: Uselding, Lara

Subject: omaha paper calling in.

Lara,

Thank you for returning my call. I am back at my desk. If you'd like to tell me what time to be off the phone and planted in my seat, I'll do that....

402-444-1102

If we miss each other....I have a couple of questions, one of which would easily lend itself to an email response:

1. What can you say about the likelihood and extent of a new safety review of existing nuclear plants?

However, I do have a couple of other questions I'd like to ask you....

Thank you, Nancy

### 

## **Omaha World-Herald**

www.omaha.com

**Nancy Gaarder** 

Reporter

Office: 402-444-1102 Fax: 402-444-1231

Email: Nancy.Gaarder@owh.com 1314 Douglas St.- Suite 700

Omaha, NE 68102

Weiss, Jeffrey

To:

Uselding, Lara

Subject:

RE: NRC Press Releases #1 through 5 - Japan Event Earthquake/Tsunami

Date:

Monday, March 14, 2011 3:46:10 PM

Thank you. And one other thing; When I search your site for "Comanche Peak" and FSAR, I get many hundreds of hits. A lot of them are for the newer application. But they often mention "units 1 & 2" so I can't even use that as a filter. Might you be able to send me a link to the right document?

Jeffrey Weiss
The Dallas Morning News
jweiss@dallasnews.com
469-330-5632

From: Uselding, Lara [mailto:Lara.Uselding@nrc.gov]

Sent: Monday, March 14, 2011 2:38 PM

To: Weiss, Jeffrey

Subject: NRC Press Releases #1 through 5 - Japan Event Earthquake/Tsunami

First email, our press releases from Friday until today.

#### Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara. Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

Uselding, Lara

To:

iweiss@dallasnews.com

Subject: Date: NRC info

Monday, March 14, 2011 3:48:00 PM

Hello Jeff: To follow up on our conversation...Again- yes, the NRC is always looking to learn information that can be applied to the U.S. reactors and we will certainly be looking at the information that comes from this incident.

Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.

The licensing bases for existing nuclear power plants are based on historical data at each site. This data is used to determine design basis loads from the area's maximum credible earthquake, with an additional margin included. The NRC also requires existing plants to assess their potential vulnerability to earthquake events, including those that might exceed the design basis. This process examines the available safety margins of existing plants for various earthquakes and ensures these margins, together with the plant's accident management programs, continue to protect public health and safety.

The NRC has examined recent earthquake-related information to assess potential safety implications for nuclear power plants in the Central and Eastern United States (CEUS). The agency requires plant designs to withstand the effects of natural phenomena including earthquakes (i.e., seismic events). The agency's requirements, including General Design Criteria for licensing a plant, are described in Title 10 of the Code of Federal Regulations (10 CFR). These license requirements include traditional engineering practices such as "safety margins." Practices such as these add an extra element of safety into design, construction, and operations.

The NRC has always required licensees to design, operate, and maintain safety-significant structures, systems, and components to withstand the effects of earthquakes and to maintain the capability to perform their intended safety functions. The agency ensures these requirements are satisfied through the licensing, reactor oversight, and enforcement processes.

The NRC requires that safety-significant structures, systems, and components be designed to take into account:

the most severe natural phenomena historically reported for the site and surrounding area.

The NRC then adds a margin for error to account for the historical data's limited accuracy; appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena;

and the importance of the safety functions to be performed.

As I said, if you have additional questions, please feel free to shoot me an email!

Lara Uselding
U.S. Nuclear Regulatory Commission (NRC)
Public Affairs - Region IV

From: To: Subject: Date:	OPA Resource McIntyre, David Citizen Call Monday, March 14, 2011 6:09:12 PM
Alia (b)(6) Planning to go	on (b)(6) next week. Is it safe?

Office of Public Affairs
US Nuclear Regulatory Commission
301-415-820D
apa.resource@nrc.gov

Subject: Date:	FW: Radiation Question Monday, March 14, 2011 6:02:47 PM
From: (b)(6) Sent: Monda To: OPA Res	
-	result of your feedback form. It was submitted by
(b)(6)	on Monday, March 14, 2011 at 01:41:57
area around	live in $(b)(6)$ I've heard that radioactive vapor from Japan may reach our March 19 or 20. 1.) Should we be taking Potassium Iodide? 2.) Should we have some on event of a nuclear meltdown?
contactName	e: Dana Freeborn
phone:	

To:

OPA Resource

McIntyre, David

To:	OPA Resource (b)(6)
Subject:	RE: Radiation Question
Date:	Monday, March 14, 2011 1:16:00 PM
in a potential	Given the distance and prevailing weather conditions, and the nature of isotopes involved release, NRC believes that in the event of a major release from the Japanese plants, the plants, including Hawaii, is not expected to experience harmful amounts of radiation.
David McInty Office of Pub U.S. Nuclear (301) 415-82	lic Affairs Regulatory Commission
From: (b)(6)  Sent: Monday, March 14, 2011 12:33 PM  To: OPA Resource Subject: Radiation Question  Below is the result of your feedback form. It was submitted by  (b)(6)  on Monday, March 14, 2011 at 12:32:36	
	This week and next week. March 18th -March e safe in (b)(6) against any radiation threat? Please advise.  Carol Henry
phone:	

McIntyre, David

Steger (Tucci), Christine

To:

McIntyre, David

Subject:

Public Comment - Suggestion

Date:

Monday, March 14, 2011 5:26:30 PM

Call from Kenneth Workman

**Public** 

Number: (b)(6)

Has suggestion for cooling the core instead of using seawater.... I suggested he send an e-mail.

To:	McIntyre, David
Subject:	Public Call
Date:	Monday, March 14, 2011 2:55:46 PM
	onnie Gaddy (b)(6) hare his experience on discuss what he thinks is happening in Japan and what
(b)(6)	
Number: (10)	( <del>0)</del>

Steger (Tucci), Christine

000 108

OPA Resource

To:

McIntyre, David

Subject:

FW: Japan"s Nuclear Power plant Disaster Radioactive waste question

Date:

Monday, March 14, 2011 6:13:33 PM

From: David Freedom (b)(6)

Sent: Monday, March 14, 2011 6:13 PM

To: OPA Resource

Subject: Japan's Nuclear Power plant Disaster Radioactive waste question

I live in (b)(6) and want to knwo what danger there might be with the Jet stream bringin in the Radiactive Ceasium and Iodine into the midwest.

I have done a lot of resarch and many are saying within a few days the jetstream will deposit radioactive particles along the US midwest states.

I want a definative answer to this and no beating around the bush. I think Japan is lying about the first two explosions. I think they were meltodowns and I heard it starting to look like the 3rd reactor may go into meltdown.

Do I need to get out of the midwest for a few weeks? Take Iodine pills? I need to know what we need to do ASAP before the clowd of radiactive material reaches us.

Thanks

Weber, Michael

Sent:

Thursday, April 28, 2011 12:12 PM

To:

LIA08 Hoc

Cc:

OST01 HOC; Virgilio, Martin; Evans, Michele; Merzke, Daniel

Subject:

RESPONSE - USNRC Earthquake-Tsunami Update 042811 Revision 0, 1200 EDT

Nothing was highlighted in this copy, so I presume that nothing changed...or did we change our standard approach to reflecting updated information?

From: LIA08 Hoc

Sent: Thursday, April 28, 2011 12:09 PM

To: OST01 HOC; A Green; A Rock; Al Coons; Aleshia Duncan; alexancq; Anthony Herbold; Appleman Binkert; B Green; B Russo; Bill King; Bill King2; Bruce Howard; C Lay; C Noser; C Ops; Charles Burrows; Charles Donnell; Christopher Meadow; Conrad Burnside; D Drakeley; D May; D Murakami; D Webb; Damian Peko; Dan Feighert; Darrell Hammons; Devin Bush G LTJG RIA-Midwest MPLS.N47922; DHS Ops; DOE NIT; DOT; DTRA; DTRA; Dudek; E Wright; Elmer Naples; EOP; EPA; EPA2; Eric Sinibaldi; F Lewis; G Szeto; G Whitmire; George Higdon; gregopk; Gregory Simonson; Gretchen McCoy; H: Harry Sherwood; HHS: I Clark; Intel DIA; J Barnes; J Bartlett; J Moeller; J Noonkester; J Szymanski; J Tippets; James Purvis; Japan Embassy Task Force; Jason CIA; Jason Pepin; Jeremy Demott; Jeremy Morrow; Jeremyft1; Jim Kish; Johanna Berkey; John Holdren; Joyce Connery; K Donald; K Gonzalez; K Ousley; Karyn Keller; Kyle Viayra; L Mayer; Lee Nickel; Lisa; Lisa Hammond; Lukas McMichael; M Huchla; M Kerber; M Lansley; M Thon; M Thon2; maceck; MARFORPAC CAT All Hazards Div; MARFORPAC CAT G2; Mark Shaffer; markwb2; Marshall Shull; Michelle Ralston; Nan Calhoun; Navy; NICC; NMIC; NOC; NOC Duty Director; Nulcear SSA; P Gardner; pentagon; Peter Lyons; Phillip Barks; R Roesler; R Schueneman; Rebecca Thomson; roberhh; Ron Cherry; Ron McCabe; S Basile; S Buntman; S Levy; scotc1; Seamus O'Boyle; seiden; state; Stephen Trautman; Steve Colman; Steve Horwitz; T Roberts; Thomas Conran; Thomas Zerr; Tim Greten; Timothy Hitzelberger; Trent Hughes; Troy Heytens; USDA, John; USMC; Vanessa Quinn; Victoria Kinsey; W Cluff; W Young: Will Friese: William Webb; A Aviles; A Brown; A Estes; A Hough; A Tribble; B goldberg; B Moffat; B Perry; B Woo; Beavers, Shane; Brinser, Andrew; Brooks, Andrae; Brown, Michael; C Fiore; C Good; C Kim; Carlos Islas; CPF CATN5; Craig Gaddis; D Fletcher; D Putthoff; D Scully; D Smith; D Souza; D Wade; D Williams; David Graves; DOE DART; E Fiser; E kaye; E Price; E Shelland; E Train; Elder, Troy M SGT MIL USA USARPAC; Eric Wright; F Bantell; Fossum, Sgt Zachary; Guathier, Ronald; H Zito; Hickam; Hickam; J Blankenburg; J Kreykes; J McCallister; J Rhodes; J Rivera; J Scarbrough; J Soderbeck; J Stewart; J Trussler; James Williams; JR Haley; JTF505-MAIN-JOC-J2; JTF505-MAIN-JOC-J2-INTEL-ANAY; K Bollow; K Bollow; K Tomlinson; Koluch, SSqt Eric; L Bolling; L Elkins; L Heinrich; L Walter; Laurel Steinhurst; M Howsare; M Kabbur; M Nguyen; M Opfer; M Taafe; Marina Llewellyn; Michael Anderson; Michael Eberlein; Monaghan, Dylan; N Albritton; N Albritton; NCMI Ops; Office of Secretary of Defense Watch Officer; Olson, Niels; OST01 HOC; P Almquist; P Higginbotham; P Higgins; P Lyons; P Smalley; P Somboonpakron; PACOM; PACOM; Pasit Sombookpakron; Powers, Jeffrey; R Backley; R Fisher; R Garrett; R Neff; R Stephenson; R Tashma; Reid Tanaka; Richard, Sqt William; Robert Duke; Robert P; RST01 Hoc; RST01B Hoc; RST03 Hoc; S Aoki; S Jerabek; Sean Basile; Shirey, Sgt Eric; Simmers, Keith; Spencer Nordgran; Spurlock, Kenneth; Stephen Greco; T Lowman; T Miller; T True; Thomas Vavoso: Tovar, SSqt Eric: (b)(6) USFJ; USFJ Intel; V Raphael; Valerie Makino; Vaughn, Sgt Jerrod; Walter Hokett; Wanda Ayuso; William Brysacz; Andersen, James; Anderson, Joseph; Ash, Darren; Baggett, Steven; Barker, Allan; Batkin, Joshua; Boger, Bruce; Borchardt, Bill; Bradford, Anna; Brenner, Eliot; Breskovic, Clarence; Smith, Brooke; Brown, Frederick; Brown, Milton; Bubar, Patrice; Burns, Stephen; Camper, Larry; Carpenter, Cynthia; Castleman, Patrick; Ader, Charles; Murray, Charles; Casto, Chuck; Coggins, Angela; Collins, Elmo; ConE\_Resource; Copeland, Douglas; Correia, Richard; Craffey, Ryan; Dapas, Marc; Dean, Bill; Decker, David; Diaz-Sanabria, Yoira; Dickman-Disabled-11/14/2010, Paul; Dorman, Dan; Droggitis, Spiros; Dyer, Jim; English, Lance; ET02 Hoc; Evans, Michele; Franovich, Mike; Frye, Timothy; Garmon, David; Apostolakis, George; Gibbs, Catina; Giitter, Joseph; Gott, William; Grobe, Jack; Hahn, Matthew; Haney, Catherine; Harrington, Holly; Hipschman, Thomas; Hoc, PMT12; Holahan, Gary; Holahan, Patricia; Holahan, Vincent; HOO Hoc; Howe, Allen; Howell, Art; Howell, Linda; Issa, Alfred; Itzkowitz, Marvin; Foster, Jack; Jackson, Donald; Jaczko, Gregory; Johnson, Andrea; Johnson, Michael; Jones, Cynthia; Kahler, Robert; King, Mark; Foggie, Kirk; Kock, Andrea; Kozal, Jason; Leeds, Eric; LIA08 Hoc; Logaras, Harral; Loyd, Susan; Magwood, William; Maier, Bill; Marshall, Jane; Marshall, Michael; McCree, Victor; McDermott, Brian; McIntosh, Angela; McNamara, Nancy; Michalak, Paul; Miller, Charles; Miller, Chris; Monninger, John; Morris, Scott; Nease, Debecca; Nieh.

Ho; NRCHQ; NSIR\_DDSP\_ILTAB\_Distribution; Ordaz, Vonna; Orders, William; OST05 Hoc; Ostendorff, William; Pace, Patti; Patel, Jay; Pearson, Laura; Pederson, Cynthia; Plisco, Loren; Powell, Amy; Quichocho, Jessie; R1 IRC; R2 IRC; R3 IRC; R4 IRC; Reddick, Darani; Reyes, Luis; Devercelly, Richard; Riley (OCA), Timothy; Nelson, Robert; ROO hoc; Rothschild, Trip; Satorius, Mark; Schmidt, Rebecca; Sharkey, Jeffry; Sheron, Brian; Sigmon, Rebecca; Snodderly, Michael, Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Tabatabai, Omid; Thoma, John; Thomas, Eric; Tifft, Doug; Kolb, Timothy; Ulses, Anthony; Nakanishi, Tony; Tracy, Glenn; Trapp, Trapp, James; Trojanowski, Robert; Turtil, Richard; Uhle, Jennifer; Virgilio, Martin; Warnick, Greg; Warren, Roberta; Weber, Michael; Westreich, Barry; Wiggins, Jim; Cook, William; Williams, Kevin; Wittick, Brian; Woodruff, Gena; Zimmerman, Roy; Zorn, Jason; Borchardt, Bill; Cohen, Shari; Cooper, LaToya; Dyer, Jim; ET07 Hoc; Flory, Shirley; Hudson, Sharon; Schwarz, Sherry; Sprogeris, Patricia; Taylor, Renee; Virgilio, Martin; Walker, Dwight; Walls, Lorena; Weber, Michael

Subject: USNRC Earthquake-Tsunami Update 042811 Revision 0, 1200 EDT

This information in this status report is considered to be for official use only

McIntyre, David

To:

OPA Resource; (b)(6)

C¢:

NRC Allegation

Subject: Date: RE: Poor Quality information in a website Monday, March 14, 2011 5:00:00 PM

That map is bogus, and not an NRC website. We have been pushing back trying to get as many websites as possible to remove it.

Thanks for your vigilance.

#### David McIntyre

Office of Public Affairs U.S. Nuclear Regulatory Commission (301) 415-8200

From: (b)(6)

Sent: Sunday, March 13, 2011 7:17 AM

To: NRC Allegation

Subject: Poor Quality information in a website

Is this really your map?

http://www.japan.org/wp-content/uploads/2011/03/falloutmap2.jpg

because this was on youtube and nobody can validate what is going on when NRC has nothing on their website.

http://www.youtube.com/watch?v=HtnKEG3kELI&feature=related

this one looks interesting, but no source...totally not helpful.

http://www.youtube.com/watch?v=Rx8f1 2R6cs

Couret, Ivonne

To:

Burnell, Scott; McIntyre, David

Subject:

FW: NRC Backgrounders

Date:

Monday, March 14, 2011 2:44:15 PM

Can one of you respond. Ivonne

Ivonne L. Couret Public Affairs Officer Office of Public Affairs



... (301) 415-8205 ivonne.couret@nrc.gov

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



A Please consider the environmental impact before printing this email.

From: Janbergs, Holly

Sent: Monday, March 14, 2011 1:57 PM

To: Couret, Ivonne

Subject: FW: NRC Backgrounders

From: Crystal Phend (b)(6)

Sent: Monday, March 14, 2011 1:27 PM

To: Janbergs, Holly

Subject: Re: NRC Backgrounders

Thanks, I looked over these links and still have a few questions. Is there a national minimum requirement for emergency plans for nuclear power plants? And do current plans vary by location (between, say, California and Tennessee or between individual plants in the same arca)?

Crystal Phend Senior Staff Writer MedPage Today, LLC 150 Clove Rd. Little Falls, NJ 07424

Voice: 559-960-5027 Fax: 973-890-1327

c.phcnd@medpagetoday.com http://www.medpagetoday.com

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On Mon, Mar 14, 2011 at 9:16 AM, Janbergs, Holly < Holly, Janbergs@nrc.gov > wrote: Crystal,

Here are a few backgrounders to get you started. If you have any additional questions or require other information, please let me know, and I'll try and find the appropriate person to answer your questions.

http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/risks-assoc-medical-events.html http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-emerg-plan-prep-nuc-power.html

http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html
http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/emerg-plan-prep-nuc-fac-fs.html
http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/force-on-force-fs.html
http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/security-enhancements.html
http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-analys-cancer-risk-study.html
http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/bio-effects-radiation.html
http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0322/

-Beth

Beth Janbergs Public Affairs Assistant 301-415-8211

Hannah, Roger

Brenner, Eliot; Hayden, Elizabeth; Harrington, Holly

Subject: Date:

FW: Potential questions for EOC meetings

Monday, March 14, 2011 5:12:42 PM

Attachments:

image001.png

FYI --

## Roger Hannah, APR

Senior Public Affairs Officer Region II -- Atlanta, Ga. Office - 404-997-4417

roger.hannah@nrc.gov



From: McCree, Victor

**Sent:** Monday, March 14, 2011 4:46 PM

To: Hannah, Roger; Ledford, Joey

Cc: Collins, Elmo; Dean, Bill; Satorius, Mark; Wert, Leonard; Casto, Chuck

**Subject:** FW: Potential questions for EOC meetings

Here are questions that OPA, et.al., are asked to consider in developing the agency Q&As for the Japanese earthquake/tsunami...and that can be referenced by NRC managers in preparation for the ROP end-of-cycle and other near term public meetings.

Vic

From: Croteau, Rick

Sent: Monday, March 14, 2011 4:35 PM

To: McCree, Victor

Cc: Wert, Leonard; Jones, William

Subject: Potential questions for EOC meetings

Vic.

Not sure how you wanted these, but here are some of the questions we could see being asked at EOCs:

- 1. Do US nuclear plants have better capabilities to respond to natural disasters than the plants in Japan?
- 2. Did the NRC share the post 9/11 enhancements to the U.S. facilities with the Japanese?
- 3. Could there be core damage and radiation release at a US plant if a natural disaster exceeding the plant design were to occur?
- 4. Could explosions like those that occurred in Japan happen at a U.S facility?
- 5. How would the U.S. have responded to the events of March 1'

- 6. How are US BWRs similar and/or different from the plants experience problems in Japan?
- 7. Why are US plants safe to operate considering the events in Japan?
- 8. How big an earthquake is plant X designed to handle (for each plant)?
- 9. Is plant X designed to withstand a tsunami (for each coastal plant)?
- 10. What is the NRC doing to ensure this (Japan event) doesn't happen at US plants?
- 11. How will the U.S. learn from the failures at the Japanese reactors?
- 12. Is the NRC relooking at seismic analysis for US plants?
- 13. Is the event in Japan worse than TMI and Chernobyl?
- 14. What is the longer term prognosis for keeping the reactors cooled at the Japanese facilities?
- 15. Does the NRC participate in inspection of the Japanese facilities?
- 16. Given low probability events do occur, how does the U.S. ensure that U.S. plant designs are not significantly degraded by risk-informed changes?
- 17. How does the NRC ensure people can escape if an accident occurs from a natural disaster when the infrastructure is also affected or destroyed in an area around a plant?

Rick

Burnell, Scott

To:

McIntyre, David
RE: seismic questions

Subject: Date:

Monday, March 14, 2011 3:45:45 PM

Closest is the fact sheet on seismic issues for operating plants. #s are fine.

From: McIntyre, David

Sent: Monday, March 14, 2011 2:41 PM

To: Burnell, Scott

Subject: seismic questions

Do we have a webpage on seismic issues, especially for COLs?

And is the current count of COLs still 12 apps for 18 units?

David McIntyre
Public Affairs Officer

**U.S. Nuclear Regulatory Commission** 

(301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

McIntyre, David

To:

Harrington, Holly; Burnell, Scott; Couret, Ivonne

Subject:

seismic issues

Date:

Monday, March 14, 2011 5:42:56 PM

For earthquake questions, here's the GSI-199 comm plan.

http://www.internal.nrc.gov/communications/plans/active/CommPlan\_Generic\_Issue199.pdf

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

McIntyre, David

To: Subject: Hayden, Elizabeth FW: your phone call -

Date:

Monday, March 14, 2011 2:29:00 PM

FYI, from a colleague.

From: Campbell, Larry

Sent: Monday, March 14, 2011 2:29 PM

To: McIntyre, David

Subject: RE: your phone call -

Not a big concern - Long story short. I went to the public website over the weekend, from home on my computer, got curious who was in the control room, enlarged the picture, was able to read signatures on some of the documents persons were holding. Just a caution, someone else probably can do much better than me and may be able to read the document - - call (b)(6) if you have any questions. Cheers, Larry

From: McIntyre, David

Sent: Monday, March 14, 2011 2:11 PM

To: Campbell, Larry Subject: your phone call -

Larry – I'm not ignoring you - we're rather swamped over here. What's up?

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)

[202](b)(6)

Protecting People & the Environment

Holahan, Vincent McIntyre, David

To: Subject:

RE: deadly rad doses

Date:

Monday, March 14, 2011 2:15:17 PM

The fourth image may be too cluttered for what you are looking for. I'll look for another.

http://lowdose.energy.gov/imagegallery.aspx

From: McIntyre, David

Sent: Monday, March 14, 2011 2:04 PM

**To:** Holahan, Vincent **Subject:** deadly rad doses

Vince – is there a publicly available source with a graphic or info on

- 1) Rad releases from nuke plant disasters (expecting no, since there haven't been a lot of those)
- 2) Severity of rad doses, when most people are expected to die, etc. ...

Thanks, Dave

David McIntyre Public Affairs Officer U.S. Nuclear Regulatory Commission (301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

john sullivan

To:

McIntyre, David

Subject: Date: ProPublica blog story on spent fuel pools Monday, March 14, 2011 2:14:16 PM

Hi Dave,

I am doing a story for the ProPublica blog on storage of spent fuel at nuclear plants. The story is going ot talk about the safety of the fuel pools in light of the accidents in Japan. Critics say there is risk that if the fuel in the pools is uncovered, it could lead to a fire and a radiation release. The NEI says that the plants have systems to prevent such a loss of water and that even if the fuel is exposed the chance of a fire is small. The National Academy of Sciences opinion is a little more complicated: it says a fire is possible but depends on the age of the fuel and its configuation. The report said there were steps that should be taken to protect the fuel from exposure and to mitigate any damage.

I don't know if NRC wants to comment on this, but I would like to talk to you if you do. One primary question is the NAS made several recommendations in their 2005 report regarding storage of spent fuel. Kevin Crowley, who is with the NAS, says the nuclear industry has taken some of the steps, but he is not sure whether all of the steps were taken because some of them involve safeguards materal. Does NRC want to comment on the status of the spent fuel since the report was released or on the issue more generally?

It is a blog story so the deadline is pretty tight, but I can update with any comments you might want to make.

John Sullivan pho<u>ne 609-497-4585</u> cell (b)(6)

Jones, Cynthia

To:

HQO Hoc

Cc:

Hayden, Elizabeth; Harrington, Holly; McIntyre, David; Brandon, Lou; Temple, Jeffrey; Gott, William; ICWG;

Brown, Cris; Evans, Michele; Ballam, Nick; NSIR IT Services Resource

Subject:

INES link on NSIR NRC website

Date:

Monday, March 14, 2011 11:20:44 AM

FYI-

I have gotten several phone calls about the location of where the INES information is on the NSIR website. Since last week have I been trying to get the NSIR webmaster contact to move the INES link on the NSIR Homepage **back** to the front page of NSIR where it was until the recent web page renovations last week.

In the meantime, the NRC link is http://148.184.213.252/NSIR/docs/INES.pdf. I'll let you know when the NSIR webmaster gets its located back to the NSIR home page. (where it will be located on the lower left of the home page under "Quicklinks.")

Cyndi

Cynthia G. Jones, Ph.D.,
US INES National Officer
Sr. Technical Advisor for Nuclear Security
U.S. Nuclear Regulatory Commission
Office of Nuclear Security & Incident Response
Mail Stop T4-D22A, Washington, D.C. 20555
cynthia.jones@nrc.aov
cai@nrc.saov.gov
Work: 301-415-0298

Blackberry (b)(6)

The Best Places to Workfee the Love Augustusete.

McIntyre, David

To:

Burnell, Scott

Subject:

RE: \*SIGH\* ... another one

Date:

Monday, March 14, 2011 4:40:00 PM

Believe me, I understand what you mean, Dave!

From: Burnell, Scott

**Sent:** Monday, March 14, 2011 4:40 PM

To: McIntyre, David

Subject: RE: \*SIGH\* ... another one

Sorry, having trouble even remembering who I am right now...

From: McIntyre, David

Sent: Monday, March 14, 2011 4:39 PM

To: Burnell, Scott

Subject: RE: \*SIGH\* ... another one

Any idea who? I have no idea where to start fishing and no time to call down there.

From: Burnell, Scott

Sent: Monday, March 14, 2011 4:38 PM

To: McIntyre, David

Subject: RE: \*SIGH\* ... another one

Not off the top of my head (even though it's pointed) – try the Division of Safety Systems in NRR

From: McIntyre, David

Sent: Monday, March 14, 2011 4:37 PM

To: Burnell, Scott

Subject: \*SIGH\* ... another one

UCS is bleating about diesel backups + batteries being inadequate. We ever look into this? Can you point me to something.

David McIntyre Public Affairs Officer

**U.S. Nuclear Regulatory Commission** 

(301) 415-8206 (direct)

(202) (b)(6)

Protecting People & the Environment

OPA Resource McIntyre, David

To: Subject:

FW: Nutron/Oborber

Date:

Monday, March 14, 2011 4:10:41 PM

From: Padilla, Michael (CONTR) [mailto:Michael.Padilla@nnsa.doe.gov]

Sent: Monday, March 14, 2011 3:46 PM

To: OPA Resource

Subject: FW: Nutron/Oborber

Hello,

Received this inquiry earlier. Is there someone at the NRC who can respond to this gentleman?

Thanks, Michael Padilla NNSA

From: (b)(6)

Sent: Monday, March 14, 2011 3:21 PM

**To:** Padilla, Michael (CONTR) **Subject:** Nutron/Oborber

Hi Mike,

Thanks for your time although this may get no where please have a nuclear authority person contact me. There is a material that can absorb neutrons in a powder form and has been

used in the past. Out of loyalty I would like to be involved if this ever gets an interest.

Please feel free to contact me with any questions or comments. Thank you.

Best Regards, Rene Papa Abrasive Ceramic Manufactures LLC 2068 Techny Rd Northbrook II. 60062 USA P/847-729-7554 F/847-901-9212

V(p)(p)

00/12/

.11

Hannah Northey McIntyre, David

To: Subject:

RE: NRC info

Date:

Monday, March 14, 2011 4:18:54 PM

Thank you, David. I would also like to ask you about the recent concerns about back-up generation at the country's nuclear plants. I understand that some scientists are concerned most plants only have a 4-hour slot of back-up generation through batteries if their diesel-powered generators die. Is that accurate?

Was this an issue that NRC had addressed in the 1990s? I'm not sure how to go about looking for that information and would appreciate any direction.

Thanks for the help, Hannah

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Monday, March 14, 2011 3:56 PM

**To:** Hannah Northey **Subject:** NRC info

Hannah – here's our fact sheet on seismic issues – it's our best source of information.

http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html

Current numbers are we are actively reviewing 12 applications for 18 units (reactors).

David McIntyre Public Affairs Officer U.S. Nuclear Regulatory Commission (301) 415-8206 (direct)

(202) (b)(6)

Protecting People & the Environment

# **OPA**

# TALKING POINTS

## MARCH 11, 2011 JAPAN EARTHQUAKE AND WEST COAST TSUNAMI

As of 3/12/2011 9:45 a.m. EST

- The Nuclear Regulatory Commission has spoken with its counterpart agency in Japan, offering the assistance of U.S. technical experts. Should the Japanese want to make use of U.S. expertise, NRC staffers with extensive background in boiling water reactors are available to assist efforts in Japan.
- The NRC is coordinating its actions with other Federal agencies as part of the U.S. government response.
- The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States.

- The NRC has regulations in place that require licensees to design their plants to withstand the effects of tsunamis.
   (10CFR 50, Appendix A, Criterion 2, "Design bases for protection against natural phenomenon" requires licensees to designs structures, systems, and components important to safety to withstand the effects of natural phenomenon, including tsunamis.)
- Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.
- The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy. In other words, U.S. nuclear power plants are designed to be safe based on historical data from the area's maximum credible earthquake.

Date: 3/13/2011

Time: 1:55am

## State Q&A's:

Q. What is the radiological consequence of the event in Japan for the U.S.?

A. At this time, there is no indication that materials from the incidents in Japan have the potential to have any significant radiological effect on the U.S.

- Q. Are there any protective measures that residents in the U.S. should be considering?
- A. No, not given current information.
- Q. What is the Federal family, i.e., NRC-EPA-DOE, doing to monitor the radiological consequence of the event in Japan on the United States?
- A. The NRC is coordinating its actions with other Federal agencies as part of the U.S. government response. The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States.
- U.S. nuclear power plants have sensitive equipment to monitor the status of radiological conditions. Additionally, personnel at nuclear power plants have specific knowledge in radiological field monitoring techniques and could assist State and Federal personnel in environmental sampling activities, should that be necessary to evaluate public health and safety concerns.

EPA has permanent stationary radiological monitoring stations on the West coast. In the event of a confirmed radiological release with a potential to impact the U.S., EPA is the Federal agency responsible for radiological monitoring. DOE would be responsible for aerial monitoring, should there be a confirmed radiological release.

Non-Public Info For States Only: Questions about any radiological impact on the U.S. West coast is Adora Andy, the Deputy Associate Administrator for EPA's Office of External Affairs: cell is 202.527.5866; email andy.adora@epa.gov

### Key Messages:

The NRC is coordinating its actions with other Federal agencies as part of the U.S. government response. The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States. The NRC's headquarters Operations Center in Rockville, MD has been stood up since the beginning of the emergency in Japan and is operating on a 24-hour basis.

NRC officials in Rockville, MD have spoken with the agency's counterpart in Japan and offered the assistance of U.S. technical experts. Two officials from NRC with expertise in boiling water nuclear reactors have deployed to Japan as part of a U.S. International Agency for International Development (USAID) team. USAID is the federal government agency primarily responsible for providing assistance to countries recovering from disaster administering.

U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safetysignificant structures, systems, and components be designed to take into account the most severe natural phenomena historically estimated for the site and surrounding area.

The NRC will <u>not</u> provide information on the status of Japan's nuclear power plants. See NRC's web site at <u>www.nrc.gov</u> or blog at <u>http://public-blog.nrc-gateway.gov</u> for the latest information on NRC actions.

For background information on generic operations at a boiling-water reactor, including an animated graphic, visit the NRC's website at <a href="https://www.nrc.gov">www.nrc.gov</a>

## Other sources of information:

USAID -- <u>www.usaid.gov</u>
U.S. Dept. of State -- <u>www.state.gov</u>
FEMA -- <u>www.fema.gov</u>
White House -- <u>www.whitehouse.gov</u>
Nuclear Energy Institute -- <u>www.nei.org</u>
International Atomic Energy Agency -- <u>www.iaea.org/press</u>

Hayden, Elizabeth

To:

Burnell, Scott; Uselding, Lara; Harrington, Holly; Brenner, Eliot; Akstulewicz, Brenda

Cc:

McIntyre, David; Droggitis, Spiros

Subject:

RE: Would be helpful to get talkers from Jazcko WH briefing

Date:

Monday, March 14, 2011 2:13:32 PM

Transcript available of the WH press conference in an hour or two.

Beth Hayden
Senior Advisor
Office of Public Affairs
U.S. Nuclear Regulatory Commission
--- Protecting People and the Environment

301-415-8202

elizabeth.havden@nrc.gov

From: Burnell, Scott

Sent: Monday, March 14, 2011 2:12 PM

To: Uselding, Lara; Harrington, Holly; Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda

Cc: McIntyre, David

Subject: RE: Would be helpful to get talkers from Jazcko WH briefing

The latest I can produce after a quick search – Holly, sorry for the delay.

From: Uselding, Lara

Sent: Monday, March 14, 2011 2:09 PM

To: Harrington, Holly; Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda

Cc: Burnell, Scott; McIntyre, David

Subject: Re: Would be helpful to get talkers from Jazcko WH briefing

In meantime can I see the q and a from the weekend? It was shared wire here but I don't have it

Lara Uselding

NRC Region 4 Public Affairs

(b)(6)

From: Harrington, Holly

To: Uselding, Lara; Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda

Cc: Burnell, Scott; McIntyre, David Sent: Mon Mar 14 13:57:26 2011

**Subject**: RE: Would be helpful to get talkers from Jazcko WH briefing

Conference call will be at 3 p.m to discuss marching orders from eliot

From: Uselding, Lara

Sent: Monday, March 14, 2011 1:57 PM

To: Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda; Harrington, Holly

Cc: Burnell, Scott; McIntyre, David

Subject: Would be helpful to get talkers from Jazcko WH briefing

Importance: High

Just heard Jazcko was on FOX and fielding Qs from reporters .Can we get the Q and A or

talkers he's working from? Would be helpful!

Lara Uselding U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara. Uselding@nrc.gov

(b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

Burnell, Scott

To:

Uselding, Lara; Harrington, Holly; Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda

Cc:

McIntyre, David

Subject:

RE: Would be helpful to get talkers from Jazcko WH briefing

Date:

Monday, March 14, 2011 2:12:24 PM

Attachments:

03 11 QUAKE talk pts6.docx

stateOA.pdf

The latest I can produce after a quick search – Holly, sorry for the delay.

From: Uselding, Lara

Sent: Monday, March 14, 2011 2:09 PM

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Cc: Burnell, Scott; McIntyre, David

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Cc: Burnell, Scott; McIntyre, David

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U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara. Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From:

Burnell, Scott

(b)(6) Jeff, Karonis@DHS,GOV: (b)(6) Dan, Leistikow@hg, doe, gov: (b)(6) brent, colburn@dhs, gov

Cc: Brenner, Eliot; Hayden, Elizabeth; Harrington, Holly; (b)(6)

Subject: 10am NRC talking points and Q&A

Date: Saturday, March 12, 2011 10:12:42 AM

Attachments: 03 11 OUAKE talk pts6.docx
Chairman Jaczko QA4 earthguake031111.docx

Tracy, Tennille McIntyre, David

To: Subject:

RE: US nuclear questions

Date:

Monday, March 14, 2011 4:07:39 PM

Hi. Union of Concerned Scientists just had a phone call on Japan's nuclear disaster. They said the problems in the Japanese reactors came from loss of power and that US facilities are more vulnerable because they use batteries with even less backup power than Japanese batteries - four hours versus eight. Any comment on that? Does that sound right?

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Monday, March 14, 2011 12:56 PM

To: Tracy, Tennille

Subject: RE: US nuclear questions

No not really.

**From:** Tracy, Tennille [mailto:Tennille.Tracy@dowjones.com]

Sent: Monday, March 14, 2011 12:49 PM

To: McIntyre, David

Subject: RE: US nuclear questions

Thanks David. Hope to be able to meet you in person at Wednesday's hearing. ... One other thing: Have you heard any concerns about Japanese officials and whether they're being upfront about the potential severity of problems with the reactors?

t

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Monday, March 14, 2011 12:13 PM

To: Tracy, Tennille

**Subject:** RE: US nuclear questions

Hi Tennille – check our website for press releases beginning Friday. We've sent two BWR experts, who are already in Japan. Our Operations Center has been staffed 24/7 as we monitor the situation in Japan. The Chairman of course will be addressing current events at Wednesday's hearing, though I don't believe his testimony is written yet. Expect him to stress that US plants are designed to withstand various events such as earthquakes and tsunamis – as emphasized in our press releases – and that we will in due time analyze what happened in Japan for any relevant lessons to apply here – right now though, it's early for that.

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)
(b)(6) (mobile)

#### Protecting People & the Environment

From: Tracy, Tennille [mailto:Tennille.Tracy@dowjones.com]

Sent: Monday, March 14, 2011 11:22 AM

To: McIntyre, David

Subject: US nuclear questions

Hi Dave. Just left you a voice message.

So we're putting together a story on the Japanese nuclear facilities. Looking at US aid efforts and safety reviews.

Can you drop me a quick note on these points? ....

Can you let me know what you guys are doing to assist Japan? Sending experts or resources to help identify problems or address potential problems?

Are you guys conducting safety reviews of US facilities to determine whether they could withstand similar disasters? Particularly facilities in California?

Will the chairman be discussing these efforts when the testifies before the House committee on Wednesday? What other efforts would he like to highlight?

Thanks.

**Tennille Tracy** 

**Dow Jones Newswires | Wall Street Journal** 

Office: 202.862.6619 | Cell: (b)(6) 1025 Connecticut Ave NW, Washington D.C., 20036

From: To:

McIntyre, David

Bcc:

Tracy, Tennille

Subject:

Couret, Ivonne; Brenner, Eliot RE: US nuclear questions

Date:

Monday, March 14, 2011 12:13:00 PM

Hi Tennille - check our website for press releases beginning Friday. We've sent two BWR experts, who are already in Japan. Our Operations Center has been staffed 24/7 as we monitor the situation in Japan. The Chairman of course will be addressing current events at Wednesday's hearing, though I don't believe his testimony is written yet. Expect him to stress that US plants are designed to withstand various events such as earthquakes and tsunamis – as emphasized in our press releases – and that we will in due time analyze what happened in Japan for any relevant lessons to apply here - right now though, it's early for that.

David McIntyre **Public Affairs Officer** U.S. Nuclear Regulatory Commission (301) 415-8206 (direct)

((b)(6)

Protecting People & the Environment

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000/129

Thanks.

**Tennille Tracy** 

Dow Jones Newswires | Wall Street Journal,
Office: 202.862.6619 (b)(6)
1025 Connecticut Ave NW, Washington D.C., 2003b

Burnell, Scott

To:

Uselding, Lara; Harrington, Holly; McIntyre, David

Subject: Date:

RE: call in number for national call? Monday, March 14, 2011 12:24:00 PM

Not a clue here.

From: Uselding, Lara

Sent: Monday, March 14, 2011 12:23 PM

**To:** Harrington, Holly; Burnell, Scott; McIntyre, David **Subject:** call in number for national call?

Importance: High

Can you all share this? My (b)(6) Dept of Health mentioned a call in a few minutes and I'd like to listen in Lara Uselding U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

McCrea, Molly

To: Subject: McIntyre, David RE: KI near US plants

Date:

Monday, March 14, 2011 12:48:28 PM

Thanks so very much!

**From:** McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Monday, March 14, 2011 9:39 AM

To: McCrea, Molly

Subject: RE: KI near US plants

Molly – this page lists the states (including CA) that we gave KI to. It also answers your question about the 20-mile radius.

http://www.nrc.gov/about-nrc/emerg-preparedness/about-emerg-preparedness/potassium-iodide.html

From: McCrea, Molly [mailto:McCrea@kpix.cbs.com]

Sent: Monday, March 14, 2011 12:28 PM

To: McIntyre, David

Subject: RE: KI near US plants

Thanks David. Is California one of those states?

Molly

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Monday, March 14, 2011 9:25 AM

To: McCrea, Molly

Subject: RE: KI near US plants

Quick answers for background:

From: McCrea, Molly [mailto:McCrea@kpix.cbs.com]

Sent: Monday, March 14, 2011 11:26 AM

To: McIntyre, David

Subject: KI near US plants

Is it true that the law that Markey authored, that would distribute KI to those living within a certain distance of nuclear plants in U.S., is not yet being followed? YES.

That the pills have not yet been distributed? NRC has provided KI to several states that have asked for it; under current regulations this is for residents in the 10-mile EPZ (Emergency Protection Zone)

I'm told the NRC is discouraging this. If this is not true, what is the status of the KI distribution? Have these pills been distributed? Will they? If so, when?

This is a US Govt decision - it's not just NRC but HHS and others.

McIntyre, David McCrea, Molly

Subject:

RE: KI near US plants

Date:

Monday, March 14, 2011 12:28:00 PM

I think so ..... let me check.

From: McCrea, Molly [mailto:McCrea@kpix.cbs.com]

Sent: Monday, March 14, 2011 12:28 PM

To: McIntyre, David

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Thanks – hope you are well. Molly

McCrea, Molly McIntyre, David

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This is a US Govt decision - it's not just NRC but HHS and others.

Thanks – hope you are well. Molly

McIntyre, David

To:

Milligan, Patricia

Subject:

KI inquiries

Date:

Monday, March 14, 2011 12:29:00 PM

Hi Trish – the KI inquiries are flooding in. Can you send your current list of states that we've given it to?

And short question: Is California one of them?

Thanks,

Dave

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

McIntyre, David

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Date:

Monday, March 14, 2011 12:39:00 PM

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Subject: RE: KI near US plants

Quick answers for background:

From: McCrea, Molly [mailto:McCrea@kpix.cbs.com]

**Sent:** Monday, March 14, 2011 11:26 AM

To: McIntyre, David Subject: KI near US plants

Is it true that the law that Markey authored, that would distribute KI to those living within a certain distance of nuclear plants in U.S., is not yet being followed? YES.

That the pills have not yet been distributed? NRC has provided KI to several states that have asked for it; under current regulations this is for residents in the 10-mile EPZ (Emergency Protection Zone)

I'm told the NRC is discouraging this. If this is not true, what is the status of the KI distribution? Have these pills been distributed? Will they? If so, when?

This is a US Govt decision – it's not just NRC but HHS and others.

Thanks – hope you are well. Molly

McIntyre, David

To:

adam.reiss@cnn.com

Subject:

NRC Press release

Date:

Monday, March 14, 2011 12:27:00 PM

As requested. http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-047.pdf

Click on "More News Releases" for previous ones from the weekend.

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)
(b)(6)

Protecting People & the Environment

000/12/8

McIntyre, David

To:

Hayden, Elizabeth

Cc:

Couret, Ivonne; Burnell, Scott; Uselding, Lara; Drícks, Victor; Screnci, Diane; Sheehan, Nell; Ledford, Joey; Hannah, Roger; Mitlyng, Viktoria; Chandrathil, Prema

Subject:

KI as key topic?

Date:

Monday, March 14, 2011 12:40:00 PM

Beth - as we are getting an increasing number of questions on KI, perhaps we can make it a Key Topic and link to this page, so it's just one click from the Homepage?

http://www.nrc.gov/about-prc/emerg-preparedness/about-emerg-preparedness/potassiumiodide.html

David McIntyre Public Affairs Officer U.S. Nuclear Regulatory Commission (301) 415-8206 (direct)

Protecting People & the Environment

McIntyre, David Tracy, Tennille

Subject:

RE: US nuclear questions

Date:

Monday, March 14, 2011 12:55:00 PM

No not really.

From: Tracy, Tennille [mailto:Tennille.Tracy@dowjones.com]

Sent: Monday, March 14, 2011 12:49 PM

To: McIntyre, David

Subject: RE: US nuclear questions

Thanks David. Hope to be able to meet you in person at Wednesday's hearing. ... One other thing: Have you heard any concerns about Japanese officials and whether they're being up-

front about the potential severity of problems with the reactors?

t

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Monday, March 14, 2011 12:13 PM

To: Tracy, Tennille

Subject: RE: US nuclear questions

Hi Tennille – check our website for press releases beginning Friday. We've sent two BWR experts, who are already in Japan. Our Operations Center has been staffed 24/7 as we monitor the situation in Japan. The Chairman of course will be addressing current events at Wednesday's hearing, though I don't believe his testimony is written yet. Expect him to stress that US plants are designed to withstand various events such as earthquakes and tsunamis – as emphasized in our press releases – and that we will in due time analyze what happened in Japan for any relevant lessons to apply here – right now though, it's early for that.

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission

(301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

From: Tracy, Tennille [mailto:Tennille.Tracy@dowjones.com]

Sent: Monday, March 14, 2011 11:22 AM

**To:** McIntyre, David

Subject: US nuclear questions

Hi Dave. Just left you a voice message.

So we're putting together a story on the Japanese nuclear facilities. Looking at US aid efforts and safety reviews.

Can you drop me a quick note on these points? ....

Can you let me know what you guys are doing to assist Japan? Sending experts or resources to help identify problems or address potential problems?

Are you guys conducting safety reviews of US facilities to determine whether they could withstand similar disasters? Particularly facilities in California?

Will the chairman be discussing these efforts when the testifies before the House committee on Wednesday? What other efforts would he like to highlight?

Thanks.

**Tennille Tracy** 

**Dow Jones Newswires | Wall Street Journal** 

Office: 202.862.6619 (Cell: (b)(6) 1025 Connecticut Ave NW, Washington D.C., 20036

Hayden, Elizabeth

To:

McIntyre, David

Subject:

RE: TV requests at plants - strategy moving forward

Date:

Monday, March 14, 2011 12:04:16 PM

# It only says

Given the thousands of miles between the two countries

Reporters are looking for more detailed information.

Beth

From: McIntyre, David

Sent: Monday, March 14, 2011 12:02 PM

To: Mitlyng, Viktoria; Hayden, Elizabeth; Screnci, Diane; Uselding, Lara; Brenner, Eliot; Burnell, Scott; Harrington, Holly; Akstulewicz, Brenda; Sheehan, Neil; Chandrathil, Prema; Hannah, Roger; Ledford,

Joey

Subject: Re: TV requests at plants - strategy moving forward

It was explained in the press release.

David McIntyre

NRC Office of Public Affairs

301-415-8200 (office)

Sent from my BlackBerry, which is wholly respnsble for all typoos.

From: Mitlyng, Viktoria

To: Hayden, Elizabeth; Screnci, Diane; Uselding, Lara; Brenner, Eliot; Burnell, Scott; Harrington, Holly; McIntyre, David; Akstulewicz, Brenda; Sheehan, Neil; Chandrathil, Prema; Hannah, Roger; Ledford, Joey

Sent: Mon Mar 14 11:55:25 2011

Subject: RE: TV requests at plants - strategy moving forward

Addressing how we reached the conclusion that US citizens wouldn't be harmed would be useful. We are getting questions about that.

From: Hayden, Elizabeth

Sent: Monday, March 14, 2011 10:50 AM

To: Screnci, Diane; Uselding, Lara; Brenner, Eliot; Burnell, Scott; Harrington, Holly; McIntyre, David; Akstulewicz, Brenda; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Hannah, Roger; Ledford,

Subject: RE: TV requests at plants - strategy moving forward

Also the individual could address plume dispersion and how we can say why no one in the U.S. would be harmed by the radiation from Japan.

Beth Hayden Senior Advisor

McIntyre, David

To:

Mitlyng, Viktoria; Hayden, Elizabeth; Screnci, Diane; Uselding, Lara; Brenner, Eliot; Burnell, Scott; Harrington,

Holly; Akstulewicz, Brenda; Sheehan, Neil; Chandrathil, Prema; Hannah, Roger; Ledford, Joey

Subject:

Re: TV requests at plants - strategy moving forward

Date:

Monday, March 14, 2011 12:02:05 PM

It was explained in the press release.

David McIntyre

NRC Office of Public Affairs

(b)(6

301-415-8200 (office)

Sent from my BlackBerry, which is wholly respnsble for all typoos.

From: Mitlyng, Viktoria

**To**: Hayden, Elizabeth; Screnci, Diane; Uselding, Lara; Brenner, Eliot; Burnell, Scott; Harrington, Holly; McIntyre, David; Akstulewicz, Brenda; Sheehan, Neil; Chandrathil, Prema; Hannah, Roger; Ledford, Joey

**Sent**: Mon Mar 14 11:55:25 2011

Subject: RE: TV requests at plants - strategy moving forward

Addressing how we reached the conclusion that US citizens wouldn't be harmed would be useful. We are getting questions about that.

From: Hayden, Elizabeth

Sent: Monday, March 14, 2011 10:50 AM

**To:** Screnci, Diane; Uselding, Lara; Brenner, Eliot; Burnell, Scott; Harrington, Holly; McIntyre, David; Akstulewicz, Brenda; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Hannah, Roger; Ledford, loev

Subject: RE: TV requests at plants - strategy moving forward

Also the individual could address plume dispersion and how we can say why no one in the U.S. would be harmed by the radiation from Japan.

Beth Hayden

Senior Advisor

Office of Public Affairs

U.S. Nuclear Regulatory Commission

--- Protecting People and the Environment

301-415-8202

elizabeth.hayden@nrc.gov

From: Screnci, Diane

Sent: Monday, March 14, 2011 11:35 AM

**To:** Uselding, Lara; Brenner, Eliot; Hayden, Elizabeth; Burnell, Scott; Harrington, Holly; McIntyre, David; Akstulewicz, Brenda; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Hannah, Roger; Ledford,

Joey

Subject: RE: TV requests at plants - strategy moving forward

Good idea.

DIANE SCRENCI SR. PUBLIC AFFAIRS OFFICER USNRC, RI

610/337-5330

From: Uselding, Lara

Sent: Monday, March 14, 2011 10:44 AM

**To:** Brenner, Eliot; Hayden, Elizabeth; Burnell, Scott; Harrington, Holly; McIntyre, David; Akstulewicz, Brenda; Screnci, Diane; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Hannah, Roger; Ledford,

Joey

**Subject:** Re: TV requests at plants - strategy moving forward

Perhaps a good option is we select the best NRC person to do one on camera interview to discuss all the issues being raised, design basis and seismic related defense in depth, barriers, etc.n and make available thru a TV consortium so that affiliates around the country can pull from this b-roll. We did this at TSA once and I can try and get who we used to do this.

Lara

Lara Uselding

NRC Region 4 Public Affairs

(b)(6)

From: Brenner, Eliot

**To**: Uselding, Lara; Hayden, Elizabeth; Burnell, Scott; Harrington, Holly; McIntyre, David; Couret, Ivonne; Shannon, Valerie; Janbergs, Holly; Akstulewicz, Brenda; Screnci, Diane; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Hannah, Roger; Ledford, Joey; Dricks, Victor

**Sent**: Mon Mar 14 10:25:22 2011

Subject: Re: TV requests at plants - strategy moving forward

Exploring all PR options now.
Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200

C (p)(e)

Sent from my Blackberry

From: Uselding, Lara

To: Brenner, Eliot; Hayden, Elizabeth; Burnell, Scott; Harrington, Holly; McIntyre, David; Couret, Ivonne; Shannon, Valerie; Janbergs, Holly; Akstulewicz, Brenda; Screnci, Diane; Sheehan, Neil; Chandrathil, Brenda; Mitteria; Hannah, Begar, Ledford, Josey, Dricks, Victor.

Chandrathil, Prema; Mitlyng, Viktoria; Hannah, Roger; Ledford, Joey; Dricks, Victor

**Sent**: Mon Mar 14 10:22:40 2011

Subject: TV requests at plants - strategy moving forward

Hello Eliot: I had an interview request this morning from an Arkansas ABC affiliate looking for an interview at the ANO plant to discuss design and safety measures to protect against seismic activity. I also know that CNN mentioned Calloway along with DC. I imaging we are all getting a lot of "is my plant safe?" type interviews.

For the ANO site, I obviously didn't provide an interview and was able to share our

messaging on plant requirements. As we get more of these types of interview requests for our different plants, do we anticipate wanting to put the RIs on camera at all or just let the plants discuss their design basis?

Lara Uselding
U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara.Uselding@nrc.gov
BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Brenner, Eliot

**Sent:** Sunday, March 13, 2011 6:02 PM

**To:** Hayden, Elizabeth; Burnell, Scott; Harrington, Holly; McIntyre, David; Couret, Ivonne; Shannon, Valerie; Janbergs, Holly; Akstulewicz, Brenda; Screnci, Diane; Sheehan, Neil; Chandrathil, Prema;

Mitlyng, Viktoria; Hannah, Roger; Ledford, Joey; Dricks, Victor; Uselding, Lara

Subject: upcoming week

#### **OPA Staffers:**

It has been a very hectic weekend and a good test of our crisis communication planning. Thank you to the headquarter's folks who sacrificed their weekends (and their sleep) to come in. And thank you to the regional folks who fielded a number of calls about our response and the impact of the Japanese situation on our plants. Some things worked very well – the blog was a great way to get information out besides our standard press releases and NSIR released access to YouTube and Twitter by mid-day Sunday so we could do more monitoring of what information was "in the public domain."

Please take the time Monday morning to review all the press releases that went out and the blog posts as well. Please use these to guide any media responses you provide. While we know more than what these say, we're sticking to this story for now.

Stay tuned as the week unfolds. We anticipate staffing the Op Center on a 24-hour basis at least through Wednesday. Neil will be helping us out in that regard, and we may need to ask for further regional assistance if we need to continue the full-court-press through next weekend.

The chairman has a hearing on the hill on Wednesday morning, which will occur a lot of my time and may be the place where we really push out our message.

We expect fall-out over this to continue for a time along the lines of: Can this happen in the U.S. and what is the NRC doing about it? This is a marathon not a 50-yard dash. While I am expecting us to need full staffing for a while and may ask that you put off non-essential time off, we also need to conserve our energy. So be sure to take time when you need it. Thank you all for your help!

Screnci, Diane

To:

Brenner, Eliot; Useldinc, Lara; Hayden, Elizabeth; Burnell, Scott; Harrington, Holly; McIntyre, David; Couret, Ivonne; Shannon, Valerie; Janbergs, Holly; Akstulewicz, Brenda; Sheehan, Neil; Chandrathil, Prema; Mitlyng.

Viktoria: Hannah, Roger; Ledford, Joey; Dricks, Victor

Subject:

RE: TV requests at plants - strategy moving forward

Date:

Monday, March 14, 2011 10:26:51 AM

For what it's worth.... I wouldn't offer up the resident inspectors. Some would be good at this, others not.

DIANE SCRENCI SR. PUBLIC AFFAIRS OFFICER USNRC, RI 610/337-5330

From: Brenner, Eliot

Sent: Monday, March 14, 2011 10:25 AM

**To:** Uselding, Lara; Hayden, Elizabeth; Burnell, Scott; Harrington, Holly; McIntyre, David; Couret, Ivonne; Shannon, Valerie; Janbergs, Holly; Akstulewicz, Brenda; Screnci, Diane; Sheehan, Neil;

Chandrathil, Prema; Mitlyng, Viktoria; Hannah, Roger; Ledford, Joey; Dricks, Victor

Subject: Re: TV requests at plants - strategy moving forward

Exploring all PR options now.
Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200
C\$\frac{1}{10}(6)(6)

Sent from my Blackberry

From: Uselding, Lara

**To**: Brenner, Eliot; Hayden, Elizabeth; Burnell, Scott; Harrington, Holly; McIntyre, David; Couret, Ivonne; Shannon, Valerie; Janbergs, Holly; Akstulewicz, Brenda; Screnci, Diane; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Hannah, Roger; Ledford, Joey; Dricks, Victor

Sent: Mon Mar 14 10:22:40 2011

Subject: TV requests at plants - strategy moving forward

Hello Eliot: I had an interview request this morning from an Arkansas ABC affiliate looking for an interview at the ANO plant to discuss design and safety measures to protect against seismic activity. I also know that CNN mentioned Calloway along with DC. I imaging we are all getting a lot of "is my plant safe?" type interviews.

For the ANO site, I obviously didn't provide an interview and was able to share our messaging on plant requirements. As we get more of these types of interview requests for our different plants, do we anticipate wanting to put the RIs on camera at all or just let the plants discuss their design basis?

Lara Uselding
U.S. Nuclear Regulatory Commission (NRC)

McIntyre, David

To:

Couret, Ivonne

Subject:

FW: Interview Regust - Federal News Radio

Date:

Monday, March 14, 2011 1:02:00 PM

For your list if you're still keeping it. I spoke to her and told her we aren't doing interviews but would contact her if that changes.

From: OPA Resource

Sent: Monday, March 14, 2011 1:01 PM

To: McIntyre, David

Subject: FW: Interview Requst - Federal News Radio

From: Jamie Blanco [mailto:jblanco@federalnewsradio.com]

Sent: Monday, March 14, 2011 12:36 PM

To: Jamie Blanco; OPA Resource

Cc: Tom Temin; Amy Morris; Julia Ziegler; Vyomika Jairam Subject: RE: Interview Requst - Federal News Radio

Just following up on this request. If possible we would love for an expert to join us Tomorrow or early this week.

Many thanks,

#### Jamie Blanco

Producer, The Federal Drive Federal News Radio 202 274 4824 - work

(b)(6)

jblanco@federalnewsradio.com

Tune in weekdays 6-10 a.m. for The Federal Drive With Tom Temin & Amy Morris, 1500 on the AM dial www.federalnewsradio.com

From: Jamie Blanco

Sent: Monday, March 14, 2011 4:40 AM

To: 'opa.resource@nrc.gov'

Cc: Tom Temin; Amy Morris; Julia Ziegler; Vyomika Jairam

Subject: Interview Regust - Federal News Radio

Good morning,

This is Jamie Blanco, I'm the producer of the Federal Drive morning show on Federal news Radio in Washington D.C.

We wanted to know if it was possible for an expert from the Nuclear Regulatory Commission to join us for a brief, 7-10 minute radio interview about the response to the nuclear crisis in Japan. We wanted to know in what way the commission was offering aid and to discuss the situation at the Japanese power plants.

If possible could someone join us this morning? We have times available at 7:30a, 8:05a, 8:30a and 9:05a

Please let us know if any of those work. If not this morning of course we would still love if someone could speak with us briefly early this week. We have times in the 7am and 8am hours as well as between 10am and noon.

Thank you for your tie and consideration.

#### Jamie Blanco

Producer, The Federal Drive Federal News Radio 202 274 4824 - work

(b)(6)

jblanco@federalnewsradio.com

Tune in weekdays 6-10 a.m. for The Federal Drive With Tom Temin & Amy Morris, 1500 on the AM dial www.federalnewsradio.com

McIntyre, David

To:

Couret, Ivonne

Subject:

another media interview request to add to the list

Date:

Monday, March 14, 2011 1:23:00 PM

Shona Somerville with ITN tv from London (DC Bureau)

Shona.somerville@itn.co.uk

(cell)

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission

(301) 415-8206 (direct) (b)(6) (mobile)

Protecting People & the Environment

Uselding, Lara

To:

Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda; Harrington, Holly

Cc:

Burnell, Scott; McIntyre, David

Subject:

Would be helpful to get talkers from Jazcko WH briefing

Date:

Monday, March 14, 2011 1:57:01-PM

Importance:

High

Just heard Jazcko was on FOX and fielding Qs from reporters .Can we get the Q and A or talkers he's working from? Would be helpful!

Lara Uselding U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

McIntyre, David

To:

Regina Bediako

Subject:

RE: question on fire truck delivered to Fukushima?

Date:

Monday, March 14, 2011 7:59:00 PM

No comment on the new development. We're watching NHK! International officers can help with the US Embassy, etc., liaison with NISA. I'm only aware of one request from the Japanese government, forwarded today.

From: Regina Bediako [mailto:bediako@nhkdc.com]

Sent: Monday, March 14, 2011 7:54 PM

To: McIntyre, David

**Subject:** RE: question on fire truck delivered to Fukushima?

Importance: High

Thanks very much for the heads up! I've let our reporters know; we will be looking out for the press release tonight. I had a few clarification questions that I was hoping you might be able to help with in the meantime:

Chairman Jaczko has already mentioned early today that the NRC received a request from the Japanese for assistance, that's why they sent two reactor experts to Tokyo. About the additional 9 people being sent – is this is still a response by the NRC to the Japanese government's first request, or is this a response to a second, new request for additional resources from the Japanese? Did the Japanese government request certain types of officials to send?

And one of our reporters was a little unclear on what the international affairs officers would be doing - if you could let us know what the purpose of sending them would be, what their role is, we would greatly appreciate it.

I'm sure you probably know already, but in the hour there has been an explosion at the second reactor at Fukushima. Tokyo Electric is currently holding an emergency press conference to address the serious situation. Can you give us a reaction or comment on this new development?

Thanks David! Regina

Regina Bediako

NHK (Japan Broadcasting Corporation)

2030 M St NW, Suite 706

Washington, D.C. 20036

Office: (202) 828-5180, ext. 111/ Cell: (b)(6)

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Monday, March 14, 2011 7:29 PM

To: Regina Bediako

Subject: RE: question on fire truck delivered to Fukushima?

Something else I can tell you – NRC has sent nine more people, including some reactor experts, international affairs officers, and others, to Tokyo. They are leaving tonight and should arrive there on Wednesday. This is in response to Japan's request for additional assistance. We will have a press release tonight on our Web site.

From: Regina Bediako [mailto:bediako@nhkdc.com]

Sent: Monday, March 14, 2011 7:13 PM

To: McIntyre, David

**Subject:** RE: question on fire truck delivered to Fukushima?

Thanks for letting us know, David—

Regina Bediako

NHK (Japan Broadcasting Corporation)

2030 M St NW, Suite 706

Washington, D.C. 20036

Office: (202) 828-5180, ext. 111/Cell:

1 (Cell: (b)(6)

**From:** McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Monday, March 14, 2011 6:57 PM

To: Regina Bediako

Subject: RE: question on fire truck delivered to Fukushima?

My instructions are to refer you to US AID, which is leading the aid effort.

But if you report that, you won't hear complaints from us.

From: Regina Bediako [mailto:bediako@nhkdc.com]

**Sent:** Monday, March 14, 2011 6:42 PM

To: McIntyre, David

**Subject:** question on fire truck delivered to Fukushima?

Importance: High

Hello David,

I'm a producer at the DC bureau of NHK, I got your contact info from my reporter Reiko – we're hoping to get some clarification on info we're getting out of Tokyo about equipment that has been sent to Fukushima.

Chairman Jaczko at the WH today: "It is a serious situation certainly in Japan. The efforts right now of the Japanese government, with our assistance, where they've requested it, is to continue to look for ways to provide the ability to keep the reactors cool. And that is a process that has been ongoing now for some time, and we continue to provide assistance where we can. In particular, they have asked for additional types of equipment that will help provide water and other resources

to ensure that the reactors continue to be cool."

We've heard that a US fire truck has sent from a military base in Japan to Fukushima, ostensibly to help cool down the reactors. What we are hoping to clarify is this - is this fire truck part of the "additional types of equipment" Japan has asked for and the US/NRC is now providing? I just talked to Yvonne about this, but was a little confused by the answer (I was told to USAID is taking the lead on this) – we are looking to confirm for a report we're airing within the hour.

Thanks very much! Regina

Regina Bediako NHK (Japan Broadcasting Corporation) 2030 M St NW, Suite 706

Washington, D.C. 20036

Office: (202) 828-5180, ext. 111 Cell: (b)(6)

Couret, Ivonne

To:

Harrington, Holly; Brenner, Eliot; McIntyre, David

Subject:

Media Request - CNN American Morning

Date:

Monday, March 14, 2011 7:53:12 PM

**CNN American Morning** 

Cara Kaplan

646-734-2151

24/7 phone is (b)(6)

Request Interview with CHAIRMAN ASAP

She plans on sending email to OPA. Resource requesting Hearing Info.... Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



. (301) 415-8205

ivonne.couret@nrc.gov

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

Uselding, Lara

To:

Brenner, Eliot; Hayden, Elizabeth; Burnell, Scott; McIntyre, David; Harrington, Holly

Subject:

SONGS CNO is getting grilled by Wolf Blitzer about seismic risk

Date:

Monday, March 14, 2011 6:48:50 PM

CNO is trying to describe why he thinks SONGS can withstand what happed at Japan. He's using numbers of ground acceleration as comparison, but Wolf Blitzer keeps spouting numbers from the epicenter. Wolf accused him of spinning the facts. This seismic and nuclear risk communication is going to get ugly! CNN is still confusing PWR and BWR reactor designs.

### Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV



Lara.Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Andreas, Dorothy C [mailto:Dorothy.Andreas@pepperdine.edu]

**Sent:** Monday, March 14, 2011 4:56 PM

To: Collins, Elmo

Subject: SONGS CNO is getting grilled by Wolf Blitzer about seismic risk

CNO is trying to describe why he thinks SONGS can withstand what happed at Japan. He's using numbers of ground acceleration as comparison, but Wolf Blitzer keeps spouting numbers from the epicenter. Wolf accused him of spinning the facts. This seismic and nuclear risk communication is going to get ugly! CNN is still confusing PWR and BWR reactor designs.

### Dorothy

### Dorothy C. Andreas, Ph.D.

Assistant Professor of Communication Seaver College, Communication Division Pepperdine University 24255 Partific Curst Highway Manbu, CA 90263-4211. 310-306-4430 denothy, andreas@popperdine.edu

OPA Resource

To:

McIntyre, David

Subject: Date: FW: Japanese Radiation Fall Out Map Monday, March 14, 2011 6:15:16 PM

-----Original Message-----

From: Jeffre Juliano (b)(6)

Sent: Saturday, March 12, 2011 11:49 PM

To: OPA Resource

Subject: Japanese Radiation Fall Out Map

We have a planned (b)(6)

next week, 3/20/11.

Is there a projected radiation fall out map?

We wanted to know if one exists and whether it will advise on likely fall out levels.

Thank you.

Jeff Juliano

(b)(6)

Jennifer Smith

To: Subject: McIntyre, David Re: NRC Info

Date:

Monday, March 14, 2011 5:42:46 PM

ok, thanks.

\twitter:(b)(6)

Jennifer Smith
Reporter, *Newsday*jennifer.smith@newsday.com
tel: 631-843-4233
/ cell:(b)(6)

>>> "McIntyre, David" <David.McIntyre@nrc.gov> 3/14/2011 5:41 PM >>> Jennifer – sorry to be late getting back to you. The recent review of seismic issues covered all nuclear power plants in the central and Eastern US.

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)
Protecting People & the Environment

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Burnell, Scott

To:

"scott.disavino@thomsonreuters.com"; McIntyre, David; Brenner, Eliot

Subject: Date: Re: dimensions on a reactor vessel Monday, March 14, 2011 6:29:11 PM

Hi Scott:

I'm away from all the tech documents -- David + Eliot might be able to help. Thanks.

Scott

Sent from an NRC Blackberry

Scott Burnell

(b)(6)

From: scott.disavino@thomsonreuters.com <scott.disavino@thomsonreuters.com>

To: Burnell, Scott

Sent: Mon Mar 14 18:26:42 2011

Subject: dimensions on a reactor vessel

Do you know the dimensions on a reactor vessel – how high and how wide and about how much fuel in it

Scott

#### Scott DiSavino

Correspondent

**Thomson Reuters** 

Phone: 1 646 223 6072 Mobile: (b)(6)

Email - scott.disavino@thomsonreuters.com

Reuters (Instant) Messaging - scott.disavino.thomsonreuters.com@reuters.net

thomsonreuters.com

From: Burnell, Scott [mailto:Scott.Burnell@nrc.gov]

**Sent:** Saturday, March 12, 2011 12:39 PM

To: DiSavino, Scott P. (M Edit Ops)

Subject: RE: 23 US reactors are same design as Fukushima-1

Scott;

I'm about to close down for the day, but here goes...

Appendix A in the Information Digest (<a href="http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/appa.xis">http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/appa.xis</a>) clearly describes each U.S. reactor's design and containment type, so you can compare our list to NIRS. The newer Mark I reactors are certainly not carbon copies of Fukushima Daiichi 1. The NRC continues to find the existing U.S. fleet meets our stringent safety requirements.

Off the record (and bear with me) – don't get me started on the over-the-top hyperbole. I'd greatly appreciate seeing coverage that only discusses numbers without the scare quotes. It's really been a long day. Thanks.

Scott

**From:** scott.disavino@thomsonreuters.com [mailto:scott.disavino@thomsonreuters.com]

Sent: Saturday, March 12, 2011 12:13 PM

To: Burnell, Scott

Subject: FW: 23 US reactors are same design as Fukushima-1

Got this note – I'm interested in the list of similar reactors in the US – not as much on the NRC and other criticizing the design

But on that criticism - does the NRC have any comment -

Also – does this look like a good list for similar reactors – I notice they include some BWR 4's on the list so I may need to go over it a bit more

My understanding is the daiichi 1 reactor is a bwr 3 - does that match what u have seen,

Scott

#### Scott DiSavino

Correspondent
Thomson Reuters

Phone: 1 646 223 6072 Mobile: (b)(6)

Email - scott.disavino@thomsonreuters.com

Reuters (Instant) Messaging - scott.disavino.thomsonreuters.com@reuters.net

thomsonreuters.com

From: Michael Mariotte [mailto:nirsnet@nirs.org]
Sent: Saturday, March 12, 2011 11:46 AM

To: scott.disavino@reuters.com

Subject: 23 US reactors are same design as Fukushima-1

# **NUCLEAR INFORMATION AND RESOURCE SERVICE**

6930 Carroll Avenue, Suite 340, Takoma Park, MD 20912 301-270-NIRS (301-270-6477); Fax: 301-270-4291

nirsnet@nirs.org; www.nirs.org

FOR IMMEDIATE RELEASE Contact: Michael Mariotte, Executive Director

McIntyre, David

To: Subject: Couret, Ivonne; Harrington, Holly
RE: Interview with Voice of America

Date:

Monday, March 14, 2011 6:29:00 PM

Eliot is calling him now to tell him to grow some manners.

-----Original Message-----From: Couret, Ivonne

Sent: Monday, March 14, 2011 6:27 PM To: Harrington, Holly; McIntyre, David Subject: FW: Interview with Voice of America

The only Voice of America Request I have where:

Voice of America (Bengalise Language); Anis; 202-382-5375; Cell (b)(6) NRC Staff prasant chowdhury (Told him we do not have some one of authority at this time. We would keep the request in the que. If you choose to respond. Ivonne

-----Original Message-----From: OPA Resource

Sent: Monday, March 14, 2011 6:24 PM

To: Couret, Ivonne

Subject: FW: Interview with Voice of America

-----Original Message-----

From: Ira Mellman [mailto:imellman@voanews.com]

Sent: Monday, March 14, 2011 6:20 PM

To: OPA Resource

Subject: Interview with Voice of America

Below is the result of your feedback form. It was submitted by

Ira Mellman (imellman@voanews.com) on Monday, March 14, 2011 at 18:20:27

comments: I put in a request this morning (3-14-11) for an interview dealing with the power plant crisis in Japan. It was to be used by our English to Asia program, with an audience estimated in the millions throughout Asia including Japan and China. I was told I would receive a callback.

That call NEVER came. I understand you were all pressed today, but to totally ignore another federal government agency's request (VOA) for an interview to be sent to the country and area in question is beyond me.

I would still like to speak with an NRC representative. I can do it on the telephone or visit your headquarters.

Ira Mellman
Reporter/Host
Voice of America
English to Asia
Washington, DC
202-203-4278
(b)(6) [cell)

Couret, Ivonne

To:

McIntyre, David; Harrington, Holly

Subject:

Media Request - Scientific American- Expert interview request

Date:

Monday, March 14, 2011 6:16:00 PM

I left her a message saying we did not have an "expert" for an interview at this moment also suggested Health Physics Society. NO need to pursue further at this time I left a message asking her to call us tomorrow with specific questions et. Thanks, Ivonne

-----Original Message-----

From: Burnell, Scott

Sent: Monday, March 14, 2011 6:10 PM

To: Couret, Ivonne

Subject: RE: Did we respond to this? FW: Scientific American- Expert interview request

Thought I already replied no...

----Original Message-----

From: Couret, Ivonne

Sent: Monday, March 14, 2011 5:56 PM

To: Burnell, Scott

Subject: FW: Did we respond to this? FW: Scientific American- Expert interview request

Did you talk to them?

----Original Message-----From: McIntyre, David

Sent: Monday, March 14, 2011 4:35 PM

To: Couret, Ivonne

Subject: RE: Did we respond to this? FW: Scientific American- Expert interview request

Not me

-----Original Message-----

From: Couret, Ivonne

Sent: Monday, March 14, 2011 4:34 PM To: Burnell, Scott; McIntyre, David

Subject: Did we respond to this? FW: Scientific American- Expert interview request

-----Original Message-----

From: Nina Bai (b)(6)

Sent: Monday, March 14, 2011 11:49 AM

To: OPA Resource

Subject: Scientific American- Expert interview request

Below is the result of your feedback form. It was submitted by

Nina Bai<sup>(b)(6)</sup> on Monday, March 14, 2011 at 11:48:47

comments: Hello,

I am a reporter for Scientific American and we are doing an online story about radiation sickness considering the growing worries in Japan. Is there a radiation safety expert (medical physicist, etc.) who would be available for a phone call today? Given the timeliness of the issue, the sooner the better.

the better.

Thanks and hope to hear from you! Best regards, Nina Nina Bai Scientific American 75 Varick St, 9th Fl New York NY 10013 Office: (212) 451-8849 Cell: (b)(6) organization: Scientific American address1: address2: city: New York state: NY - 51 L zip: country: phone: (212) 451-8849

McIntyre, David

To:

Brenner, Eliot

Cc:

Burnell, Scott

Subject:

ABC NEWS follow up from the Chairman's briefing

Date:

Monday, March 14, 2011 4:51:00 PM

Importance:

Sunlen Miller of ABC News called seeking background clarification - she said she asked the Chairman today a question about differences in Japanese and US safety measures, and he sidestepped. She wants to give us a second chance, as Diane Sawyer is focusing on this on World News Tonight.

She can be reached at 202-222-7715

David McIntyre **Public Affairs Officer** U.S. Nuclear Regulatory Commission

(301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

OPA Resource

To:

McIntyre, David

Subject:

FW: Nuclear in Japan

Date:

Monday, March 14, 2011 4:48:11 PM

From: Diamant Salihu [mailto:diamant.salihu@expressen.se]

Sent: Monday, March 14, 2011 10:28 AM

To: OPA Resource

Subject: Nuclear in Japan

Hi,

My name is Diamant Salihu and I am a journalist at Swedish newspaper Expressen.

I am writing about the nuclear reactors in Japan that has exploded.

According to nytimes.com (http://www.nytimes.com/2011/03/14/world/asia/japan-fukushima-nuclear-reactor.html?\_r=2&hp)

Pentagon officials reported Sunday that helicopters flying 60 miles from the plant picked up small ammounts of radioactive particulates, presumed include cesium-137 and iodine-121.

We wonder if this is dangerous that the particles has reached that far from the plant?

Is it dangerous at all?

Does people in Japan have anything to fear when they are beeing exposed to the radiation that has been released from the japanese plants?

Hope you can answer our questions. Our deadline is 22 AM. EMG time.

Best regards,

Diamant Salihu

Reporter

Tel: +46.8.738.30.00

Mob: (b)(6)

Fax: +46 8 619 05 00

www.expressen.se

OPA Resource

To:

McIntyre, David

Subject:

FW: Radiation risk levels for (b)(6)

Date:

Monday, March 14, 2011 4:46:19 PM

Importance:

High

From: Marcello Barone [mailto:marcello@mvptalent.ca]

Sent: Monday, March 14, 2011 11:36 AM

To: OPA Resource

**Subject:** Radiation risk levels for (b)(6)

Importance: High

My family and I are scheduled to travel to (b)(6) this Thursday, March 17. I understand there is no CURRENT threat of radiation to (b)(6) but my question is:

If this situation goes from bad to worse and there is a catastrophic blow out, then at that point what kind of risk would (b)(6) and the west coast of USA be under?

Please advise if you recommend travel to (b)(6)

Thanks!

Marcello Barone Marcello@mvptalent.ca

Office: 403.239.1140 (Cell: [6)(6) www.myptalent.ca

od As

McIntyre, David

To:

OPA Resource; gburke@ap.org

Subject:

RE: Associated Press getting in touch re: radioactive particulates

Date:

Monday, March 14, 2011 4:42:00 PM

Garance - My understanding is actual monitoring would be state and EPA; airborne monitoring would be DOE.

David McIntyre
Office of Public Affairs
U.S. Nuclear Regulatory Commission
(301) 415-8200

-----Original Message-----From: OPA Resource

Sent: Monday, March 14, 2011 4:25 PM

To: McIntyre, David

Subject: FW: Associated Press getting in touch re: radioactive particulates

----Original Message-----

From: Burke, Garance [mailto:gburke@ap.org] Sent: Monday, March 14, 2011 4:19 PM

To: OPA Resource

Subject: Associated Press getting in touch re: radioactive particulates

Dear Office of Public Affairs,

I'm an AP reporter based in San Francisco and am writing to ask a few follow-up questions regarding your press release yesterday about federal efforts to track potential particulate impacts from the earthquake-damaged nuclear reactor in Japan along the West Coast. Which federal agencies are gathering data thus far, and how, specifically, will NRC be monitoring this going forward? I'm interested to know whether NNSA's aerial measuring system or surveillance systems, for instance, would pick small amounts of radioactive particulates, or whether any additional emergency monitors are checking for potential environmental contamination. I see that NNSA's FRMAC or RAP may also have similar components, but NNSA let me know that NRC is coordinating this federal effort. I look forward to hearing back from you as soon as possible via email, or the best number to reach me is 415-495-1708. Thanks in advance for your help, Garance

Garance Burke Reporter The Associated Press San Francisco gburke@ap.org @garanceburke T 415-495-1708

(b)(6)

OPA Resource

To:

McIntyre, David

Subject:

FW: Associated Press getting in touch re: radioactive particulates

Date:

Monday, March 14, 2011 4:25:31 PM

----Original Message----

From: Burke, Garance [mailto:gburke@ap.org]

Sent: Monday, March 14, 2011 4:19 PM

To: OPA Resource

Subject: Associated Press getting in touch re: radioactive particulates

Dear Office of Public Affairs,

I'm an AP reporter based in San Francisco and am writing to ask a few follow-up questions regarding your press release yesterday about federal efforts to track potential particulate impacts from the earthquake-damaged nuclear reactor in Japan along the West Coast. Which federal agencies are gathering data thus far, and how, specifically, will NRC be monitoring this going forward? I'm interested to know whether NNSA's aerial measuring system or surveillance systems, for instance, would pick small amounts of radioactive particulates, or whether any additional emergency monitors are checking for potential environmental contamination. I see that NNSA's FRMAC or RAP may also have similar components, but NNSA let me know that NRC is coordinating this federal effort. I look forward to hearing back from you as soon as possible via email, or the best number to reach me is 415-495-1708. Thanks in advance for your help, Garance

Garance Burke Reporter The Associated Press San Francisco gburke@ap.org @garanceburke T 415-495-1708 [(b)(6)

The Associated Press is the essential global news network, delivering fast, unbiased news from every corner of the world to all media platforms and formats. Founded in 1846, AP today is the largest and most trusted source of independent news and information. On any given day, more than half the world's population sees news from AP.

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OPA Resource

To:

McIntyre, David

Subject:

FW: nuclear safety-request-brazilian newspaper

Date:

Monday, March 14, 2011 4:27:12 PM

From: Denise Chrispim Marin (b)(6)

Sent: Monday, March 14, 2011 2:22 PM

To: OPA Resource

**Subject:** nuclear safety-request-brazilian newspaper

To the NRC Public Affairs, Dear sir/madam.

I am the Washington correspondent for O Estado de S. Paulo, the leading Brazilian newspaper, and wonder to talk with you today about how safety are the nuclear power reactors here in US. I remember a report from NRC on the not good situation at Vermont Yankee and more than twenty other reactors. And also know that most of nuclear power plants in US are too old. May I have your information/opinion on this?

Thank you very much.

Regards

Denise Chrispim Marin

### Denise Chrispim Marin

Washington Correspondent O Estado de S. Paulo - Brazil

(b)(6)

Tel. (+1-202) 248-0280

(b)(6)

denise.chrispim@grupoestado.com.br

www.estadao.com.br

McIntyre, David mcolburn@npr.org

To: Cc:

Milligan, Patricia

Subject:

FW: NPR reporters seeking KI

Date:

Monday, March 14, 2011 4:59:00 PM

Matt - Our KI expert says your folks won't need it, and she's willing to explain to you why. See below.

#### David McIntyre

Office of Public Affairs U.S. Nuclear Regulatory Commission (301) 415-8200

From: Milligan, Patricia

Sent: Monday, March 14, 2011 4:58 PM

To: McIntyre, David

Subject: Re: NPR reporters seeking KI

Yes. My cell is (b)(6) Sent from my NRC Blackberry Patricia A Milligan, CHP RPh (b)(6)

From: McIntyre, David To: Milligan, Patricia

Sent: Mon Mar 14 16:31:05 2011 Subject: RE: NPR reporters seeking KI

CVS is apparently sold out.;-)

May I forward them your message with your number?

From: Milligan, Patricia

Sent: Monday, March 14, 2011 4:21 PM

To: McIntyre, David

Subject: Re: NPR reporters seeking KI

They don't need it. However they could try a local drugstore. I would be happy to explain to them why they don't need it

Sent from my NRC Blackberry Patricia A Milligan, CHP RPh

(b)(6)

From: McIntyre, David To: Milligan, Patricia

Sent: Mon Mar 14 16:14:16 2011 Subject: NPR reporters seeking KI

Trish – NPR is wondering how to procure KI for their reporters heading to Japan. Any suggestions?

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)

(b)(6) (mobile)

Protecting People & the Environment

McIntyre, David

To:

Burnell, Scott

Subject:

RE: another seismic question

Date:

Monday, March 14, 2011 4:32:00 PM

The seismic fact sheet doesn't seem to address this. Is there another?

From: Burnell, Scott

Sent: Monday, March 14, 2011 4:30 PM

**To:** McIntyre, David

**Subject:** RE: another seismic question

That's GSI-199, refer them to the fact sheet and Diane should be able to provide more plant-specific stuff.

From: McIntyre, David

Sent: Monday, March 14, 2011 4:29 PM

To: Burnell, Scott

Subject: another seismic question

From Newsday - review of seismic issues at IP and other Northeast NPPs (esp Oyster Creek and Millstone). Status of that? And were all three included?

**David McIntyre Public Affairs Officer** U.S. Nuclear Regulatory Commission (301) 415-8206 (direct)

(b)(6)(mobile)

Protecting People & the Environment

Couret, Ivonne

To:

Burnell, Scott; McIntyre, David

Subject:

Did we respond to this? FW: Scientific American- Expert interview request

Date:

Monday, March 14, 2011 4:34:11 PM

Original Message		
rom: Nina Bai (b)(6)	<del></del>	
Sent: Monday, March 14, 2011	. 11:49 AM	
To: OPA Resource		
Subject: Scientific American - E	xpert interview request	
Below is the result of your fee	dback form. It was submitted by	•
Nina Bai (b)(6)	on Monday, March 14, 2011 at 11:48:47	
· ************************************		
comments: Hello,		
considering the growing worrie	merican and we are doing an online story about rass in Japan. Is there a radiation safety expert (me	dical physicist, etc.)
who would be available for a p	phone call today? Given the timeliness of the issue	, the sooner the better.
Thanks and hope to hear from	ı you!	
Best regards,		
Nina		
••		
Nina Bai		
Scientific American		
75 Varick St, 9th Fl		
New York NY 10013 b)(6)		
Office: (212) 451-8849		
Cell: (b)(6)		
organization: Scientific Americ	an	
address1:		
address2:		
city: New York		
state: NY		
zip:		
country:		1
(040) 454 0040		1,50
phone: (212) 451-8849		000/150

OPA Resource

To:

McIntyre, David

Subject: Date: FW: radiation impacts from Japan Monday, March 14, 2011 4:39:08 PM

From: John Upton [mailto:jupton@baycitizen.org]

Sent: Monday, March 14, 2011 2:12 PM

To: OPA Resource Cc: OPA4 Resource

Subject: radiation impacts from Japan

Hello NRC media team,

Is your agency tracking or modeling any potential impacts on the US from the nuclear accidents in Japan? I was referred your way from NOAA on this question.

Best regards,

John Upton

Staff Reporter, The Bay Citizen

www.baycitizen.org/profiles/john-upton

Facebook: www.facebook.com/pages/John-Upton/137225776340613

Twitter: www.twitter.com/#!/johnupton

126 Post St, Suite 500, San Francisco, CA 94108

Desk: +1 415-821-8552 | (Cell: (b)(6) ) | Email:

jupton@baycitizen.org

Ratnavake, Hiran

To: Subject: McIntyre, David interview request

Date:

Monday, March 14, 2011 4:41:25 PM

# HI DAVID,

I am writing an article on radiation risks in the wake of the disaster in Japan. Could I speak to someone tomorrow morning with the commission on what the commission does to ensure that people aren't at risk for detrimental health effects from radiation? And how much radiation can be too much?

# thanks,

Hiran Ratnayake
Health Reporter
The News Journal in Wilmington, DE
w: (302) 324-2547
c: [(b)(6)
hratnayake@delawareonline.com

McIntyre, David Brenner, Eliot

To: Subject:

RE: Fallout hoax etc.

Date:

Monday, March 14, 2011 10:21:44 AM

I realize that. Just wanted to let you know the question was being raised ... =8-0

From: Brenner, Eliot

Sent: Monday, March 14, 2011 10:16 AM

To: McIntyre, David

Subject: Re: Fallout hoax etc.

Reply answer is no.
Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200

 $C_{1}(p)(6)$ 

Sent from my Blackberry

---- Original Message -----From: McIntyre, David To: Brenner, Eliot

Sent: Mon Mar 14 10:09:34 2011 Subject: FW: Fallout hoax etc.

Eliot - this is from the guy who removed that bogus map from RealNews.com or whatever the site is. I have not replied to this yet. Note the concern about evacuating the US West Coast ....

#### Dave

From: (b)(6)

Sent: Monday, March 14, 2011 8:49 AM

To: McIntyre, David

Subject: Re: Fallout hoax etc.

Hello again David. Concerning the second (much larger blast) and future problems, (other projected blasts) are potassium iodide tablets in order?

Do you foresee any evacuation happening in some of our west coast areas?

Also, any resources to check online for meteorological data with concern to this subject matter?

Cheers! John

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On Mar 13, 2011, at 12:44 PM, "McIntyre, David"

Brenner, Eliot McIntyre, David

To: Subject:

Re: Fallout hoax etc.

Date:

Monday, March 14, 2011 10:16:43 AM

Reply answer is no.
Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200

C (b)(6)

Sent from my Blackberry

---- Original Message -----From: McIntyre, David To: Brenner, Eliot

Sent: Mon Mar 14 10:09:34 2011 Subject: FW: Fallout hoax etc.

Eliot - this is from the guy who removed that bogus map from RealNews.com or whatever the site is. I have not replied to this yet. Note the concern about evacuating the US West Coast ....

#### Dave

From: Lavabit (b)(6)

Sent: Monday, March 14, 2011 8:49 AM

To: McIntyre, David

Subject: Re: Fallout hoax etc.

Hello again David. Concerning the second (much larger blast) and future problems, (other projected blasts) are potassium iodide tablets in order?

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•••••

On Mar 13, 2011, at 12:44 PM, "McIntyre, David" <David.McIntyre@nrc.gov<mailto:David.McIntyre@nrc.gov>> wrote:

You are correct - that map was bogus! We are glad you recognized that it was a fake.

Regards,
David McIntyre
NRC Office of Public Affairs
Original Message
From: (b)(6)
[mailto:(b)(6)
Sent: Sunday, March 13, 2011 2:57 PM
To: OPA Resource
Subject: Fallout hoax etc.
Noticed there was a hoax involving your logo and at first it had concerned me. Then I realized that it was probably fake.
was probably failer
What is the TRUE professional opinion on the reality of fallout radiation reaching the west coast? Any
non-media resources or info would be appreciated. Thanks.
Concerned,
Johnny from (b)(6)
<11-046.pdf>

NRC just issued a press release (attached) addressing the short term projections.

From: To: McIntyre, David Brenner, Eliot

Subject:

FW: Fallout hoax etc.

Date:

Monday, March 14, 2011 10:09:35 AM

Eliot - this is from the guy who removed that bogus map from RealNews.com or whatever the site is. I have not replied to this yet. Note the concern about evacuating the US West Coast ....

#### Dave

From: Lavabit (b)(6)

Sent: Monday, March 14, 2011 8:49 AM

To: McIntyre, David

Subject: Re: Fallout hoax etc.

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Cheers! John

•••••••

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\*

On Mar 13, 2011, at 12:44 PM, "McIntyre, David" <David.McIntyre@nrc.gov<mailto:David.McIntyre@nrc.gov>> wrote:

You are correct – that map was bogus! We are glad you recognized that it was a fake.

NRC just issued a press release (attached) addressing the short term projections.

Regards,

David McIntyre

NRC Office of Public Affairs

(b)(6)

To: Subject: McIntyre, David
Re: Fallout hoax etc.

Date:

Monday, March 14, 2011 8:49:58 AM

Hello again David. Concerning the second (much larger blast) and future problems, (other projected blasts) are potassium iodide tablets in order?

Do you foresee any evacuation happening in some of our west coast areas?

Also, any resources to check online for meteorological data with concern to this subject matter?

Cheers!
John

•••••••

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•••••••

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You are correct – that map was bogus! We are glad you recognized that it was a fake.

NRC just issued a press release (attached) addressing the short term projections.

Regards,

David McIntyre

NRC Office of Public Affairs

Original Message
From: (b)(6)
Sent: Sunday, March 13, 2011 2:57 PM
To: OPA Resource
Subject: Fallout hoax etc.
Noticed there was a hoax involving your logo and at first it had concerned me. Then I realized that it was probably fake.
What is the TRUE professional opinion on the reality of fallout radiation reaching the west coast? Any non-media resources or info would be appreciated. Thanks.
Concerned,
Johnny from (b)(6)
<11-046.pdf>

Brenner, Eliot

To:

Burnell, Scott; Uselding, Lara; Hayden, Elizabeth; Akstulewicz, Brenda; OPA Distribution

Subject: Date: Re: FYI on fake graphic circulating Monday, March 14, 2011 11:52:54 AM

Have holly do quick blog sayong we have seen plume charts and they are bogus. Thought we shot it down yesterday.

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment 301 415 8200

C(p)(e)

Sent from my Blackberry

From: Burnell, Scott

To: Uselding, Lara; Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda; OPA Distribution

Sent: Mon Mar 14 11:46:16 2011

Subject: RE: FYI on fake graphic circulating

Also a version with NRC logo on it – suggest we might need a blog post or something to counter.

From: Uselding, Lara

**Sent:** Monday, March 14, 2011 11:44 AM

To: Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda; OPA Distribution

Subject: FYI on fake graphic circulating

My colleague saw this in a comment section of an online news story. I've already had a call from a member of the public asking for a website where he can track wind direction from Japan....

## Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara. Uselding@nrc.gov BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Smith, Chris

Sent: Monday, March 14, 2011 10:41 AM

To: Uselding, Lara Subject: FYI

Attached is a fake graphic that's floating around the internet. Obviously, it is fraudulent, but it wouldn't surprise me if it appears in a news story. Just a heads up.

Burnell, Scott

10:

Uselding, Lara; Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda; OPA Distribution

Subject: Date: RE: FYI on fake graphic circulating Monday, March 14, 2011 11:46:30 AM

Also a version with NRC logo on it – suggest we might need a blog post or something to counter.

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#### Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

#### Lara.Uselding@nrc.gov

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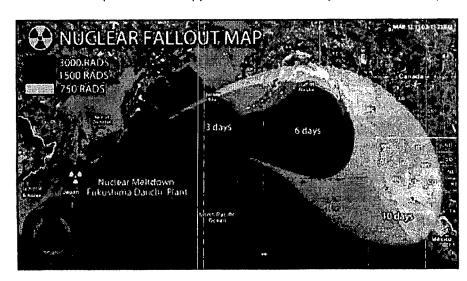
For more information visit www.nrc.gov

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W. Christopher Smith NRC, Region IV Division of Reactor Projects (PBE)

(b)(6)

Couret, Ivonne

To:

Uselding, Lara; Brenner, Eliot; Hayden, Elizabeth; Akstulewicz, Brenda; OPA Distribution

Cc:

Harrington, Holly

Subject:

RE: FYI on fake graphic circulating

Date:

Monday, March 14, 2011 11:46:20 AM

Perhaps this can be a blog post on fake or inaccurate maps...Ivonne

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



14 (301) 415-8205

ivonne.couret@nrc.gov

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

From: Uselding, Lara

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Lara Uselding U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara. Uselding@nrc.gov

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To: Uselding, Lara Subject: FYI

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# Uselding, Lara

From:

Uselding, Lara

Sent:

Monday, March 14, 2011 6:14 PM

To:

'spree@rivervalleyleader.com'

Subject:

RE: River Valley Leader

I don't have the specific info in front of me but what I sent you earlier, plants are built to withstand worst case scenario.

#2:

The NRC has always required licensees to design, operate, and maintain safety-significant structures, systems, and components to withstand the effects of earthquakes and to maintain the capability to perform their intended safety functions. The agency ensures these requirements are satisfied through the licensing, reactor oversight, and enforcement processes.

#3)

# NRC SEES NO RADIATION AT HARMFUL LEVELS REACHING U.S. FROM DAMAGED JAPANESE NUCLEAR POWER PLANTS

The Nuclear Regulatory Commission is coordinating with the Department of Energy and other federal agencies in providing whatever assistance the Japanese government requests as they respond to conditions at several nuclear power plant sites following the March 11 earthquake and tsunami. The NRC has sent two boiling-water reactor experts to Japan as part of a U.S. Agency for International Development team.

In response to nuclear emergencies, the NRC works with other U.S. agencies to monitor radioactive releases and predict their path. All the available information indicates weather conditions have taken the small releases from the Fukushima reactors out to sea away from the population. Given the thousands of miles between the two countries, Hawaii, Alaska, the U.S. Territories and the U.S. West Coast are not expected to experience any harmful levels of radioactivity.

During a nuclear event the NRC has requirements to protect populations around reactors. For instance, the U.S. evacuation standard at 10 miles is roughly equivalent to the 20-kilometer distance recommended in some instances in Japan. The United States also uses sheltering in place and potassium iodide, protective measures also available in Japan.

The NRC will not comment on hour-to-hour developments at the Japanese reactors. This is an ongoing crisis for the Japanese who have primary responsibility.

###

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara. Useldina@nrc.aov

BlackBerry (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Spree Hilliard [mailto:spree@rivervalleyleader.com]

Sent: Monday, March 14, 2011 5:17 PM

To: Uselding, Lara

Subject: RE: River Valley Leader

Lara.

Can you tell me more details about this site? What is the greatest historical phenomena reported for this area?

Is there anything in particular that this nuclear plant is doing to prepared for future possible disasters?

Does NRC have any connections with any of the plants in Japan? According to your expertise, is there anything that Japan could have done differently so that they would not have had to endure the explosions and meltdowns?

Thank you for your help,

Spree Hilliard River Valley Leader Your Town, Your News, NOW News Reporter www.rivervalleyleader.com

## !FOLLOW US ON FACEBOOK TO GET INSTANT ACCESS TO YOUR NEWS NOW!

From: "Uselding, Lara" <Lara.Uselding@nrc.gov>

Sent: Monday, March 14, 2011 3:42 PM

To: "spree@rivervalleyleader.com" <spree@rivervalleyleader.com>

Subject: RE: River Valley Leader

Hello Spree: Thanks for your email as I am getting lots of calls. Here's what I have for you on that and feel free to follow up if I don't address all your questions:

Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.

The licensing bases for existing nuclear power plants are based on historical data at each site. This data is used to determine design basis loads from the area's maximum credible earthquake, with an additional margin included. The NRC also requires existing plants to assess their potential vulnerability to earthquake events, including those that might exceed the design basis. This process examines the available safety margins of existing plants for various earthquakes and ensures these margins, together with the plant's accident management programs, continue to protect public health and safety.

The NRC has examined recent earthquake-related information to assess potential safety implications for nuclear power plants in the Central and Eastern United States (CEUS). The agency requires plant designs to withstand the effects of natural phenomena including earthquakes (i.e., seismic events). The agency's requirements, including General Design Criteria for licensing a plant, are described in Title 10 of the Code of Federal Regulations (10 CFR). These license requirements include traditional engineering practices such as "safety margins." Practices such as these add an extra element of safety into design, construction, and operations.

The NRC has always required licensees to design, operate, and maintain safety-significant structures, systems, and components to withstand the effects of earthquakes and to maintain the capability to perform their intended safety functions. The agency ensures these requirements are satisfied through the licensing, reactor oversight, and enforcement processes.

The NRC requires that safety-significant structures, systems, and components be designed to take into account:

- the most severe natural phenomena historically reported for the site and surrounding area.
- The NRC then adds a margin for error to account for the historical data's limited accuracy;
- appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena;

and the importance of the safety functions to be performed.

As I said, if you have additional questions, please feel free to shoot me an email!

## Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

**From:** Spree Hilliard [mailto:spree@rivervalleyleader.com]

Sent: Monday, March 14, 2011 3:38 PM

To: Uselding, Lara

Subject: River Valley Leader

#### Lara.

I am a reporter with The River Valley Leader and am currently working on a story that is putting a local angle on the disaster going on in Japan. Since there has been so many events that have dealt with their nuclear plants, I would like to dig deeper into that topic. I would like to speak to you and get a few official statements about what natural disasters Nuclear One is prepared for and exactly what their safeguards are for disasters, such as earthquakes.

I would like to have this e-mail as soon as possible or call me at 870-688-8316. U

Thank you,
Spree Hilliard
River Valley Leader
Your Town, Your News, NOW
News Reporter
www.rivervalleyleader.com

IFOLLOW US ON FACEBOOK TO GET INSTANT ACCESS TO YOUR NEWS NOW!

# Uselding, Lara

From:

Uselding, Lara

Sent:

Monday, March 14, 2011 3:21 PM

To:

'Vargas, Lena'

Subject:

RE: nuclear plant safety for story today

Hello Lena: The following relates to ALL plants to include Columbia Nuclear power plant. I am not able to speak for Japanese plants but I have provided info for US plants below.

All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area, to include:

- the most severe natural phenomena historically reported for the site and surrounding area.
- The NRC then adds a margin for error to account for the historical data's limited accuracy:
- appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena;

and the importance of the safety functions to be performed.

The NRC has always required licensees to design, operate, and maintain safety-significant structures, systems, and components to withstand the effects of earthquakes and to maintain the capability to perform their intended safety functions. The agency ensures these requirements are satisfied through the licensing, reactor oversight, and enforcement processes.

#### Lara Useldina

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara. Uselding@nrc.aov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Vargas, Lena [mailto:lenav@keprtv.com]

Sent: Monday, March 14, 2011 3:07 PM

To: Uselding, Lara

Subject: nuclear plant safety for story today

Thanks for your call back. I will look on your website to see if that answers my questions.

But if you could just email me back some of the safety features in place in U.S. nuclear plants—and specifically the Energy Northwest plant in Richland/Pasco, WA—that were NOT put in place in Japan.

Basically, I'm doing a compare and contrast what we have here at our plant (in Richland/Pasco) vs. Japan plants. If there are safety features they have that we don't have—I'll also take that info. po/156

Best,

Lena Vargas

- 1	F٢	n	m	٠

Harrington, Holly

To:

Brenner, Eliot; McIntyre, David

Subject:

Also -- NPR

Date:

Monday, March 14, 2011 10:08:15 PM

Kojo Namde (sp) show sometime between noon to 2 – what's happening in Japan, long-term health consequences, etc.

	_
(b)(6)	

Harrington, Holly

To:

McIntyre, David

Subject:

RE: something else for you?

Date:

Monday, March 14, 2011 10:13:31 PM

Thanks for trying

From: McIntyre, David

Sent: Monday, March 14, 2011 10:13 PM

To: Harrington, Holly

Subject: RE: something else for you?

No answer, no voicemail.

From: Harrington, Holly

Sent: Monday, March 14, 2011 10:06 PM

To: McIntyre, David

Subject: something else for you?

Aaron Welch, Japanese newspaper, wants info on our team, what their mission is, etc.

(b)(6)

McIntyre, David

To:

Harrington, Holly

Subject:

RE: something else for you?

Date:

Monday, March 14, 2011 10:11:00 PM

Can't he read the press release? \*Sigh .... \*

From: Harrington, Holly Sent: Monday, March 14, 2011 10:06 PM To: McIntyre, David

Subject: something else for you?

Aaron Welch, Japanese newspaper, wants info on our team, what their mission is, etc.

(b)(6)

**OPA Resource** 

McIntyre, David

Subject:

FW: An Idea for the Nuclear Reactor Emergency in Japan

Date:

Monday, March 14, 2011 6:14:10 PM

From: Chuck Hoffheiser (b)(6)

Sent: Sunday, March 13, 2011 1:25 PM

To: OPA Resource

Subject: An Idea for the Nuclear Reactor Emergency in Japan

I've been following the coverage of the nuclear reactor situation in Japan, and a thought occurred --- could we outfit helicopters with the fire-fighting water carrying devices often used in wildfires in the US? I don't know how to get in touch with the NRC experts in Japan, and their offices in the US probably are closed today. Perhaps someone at NRC is monitoring e-mail today so perhaps you could transmit my idea to them.

Is there any way these "water-helicopters" could be used to slowly release water into the reactor containment structures? Various reports say Japanese crews are pumping seawater into the structures, and maybe this is a way to supplement the amount if water and add it more quickly. Additionally, if there are any mid-air refueling Air Force planes in the region, could they be filled with water rather than jet fuel, then used for the same purpose?

Naturally, the crews would have to be outfitted with radiation protection, and that might make this idea unworkable.

Thanks for keeping us informed. I've provided my phone number below, just in case.

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(b)(6)		
(b)(6)		

McIntyre, David Screnci, Diane

To: Subject:

FW: Media Inquiry

Date:

Monday, March 14, 2011 4:44:00 PM

## Interested? You might win an award!

From: Jaimee Kelsey (b)(6)

Sent: Monday, March 14, 2011 4:34 PM

To: NRCExecSec Resource Subject: Media Inquiry

Hello Ms. Vietti-Cook,

I am the producer of The Lisa Wexler Show, an award winning radio show out of Fairfield County, CT and The New York Metro Area.

Lisa would love to invite a representative from your commission on her show to discuss the situation in Japan, and possible implications here in the US.

Please advise if you can help me arrange this.

Many thanks! Jaimee

Jaimee Kelsey Producer The Lisa Wexler Show **WWW.LISAWEXLER.COM** 203.454.9960 (w) 203.845.3050 (studio call-in number) WATCH LIVE ON USTREAM.COM

**42 43** 

To: Subject:	McIntyre. David FW: cool down reactor core in Japan
Date:	Monday, March 14, 2011 5:58:51 PM
Original	Message Bessemer (b)(6)
Sent: Monda	ay, March 14, 2011 5:15 PM
To: OPA Res Subject: coo	source of down reactor core in Japan
	result of your feedback form. It was submitted by
Eric Besseme	er (b)(6) on Monday, March 14, 2011 at 17:14:48
comments: "	They have been using water to cool down the damaged reactors in Japan and in some sea
water was u	ised. What would happen if liquid nitrogen to super cool these reactors since normally
	nert. The liquid nitrogen would tend to super cool the core but it would also turn to ogen and would require to be vented or be allowed to escape
organization	
address1 (b)	(6)
address2:	
ci <b>ty</b> : (b)(6)	
state (b)(6)	
zip: (b)(6)	
country: US/	A
phone: (b)(6)	
	 · · ·

OPA Resource

00/10/

From: To: Subject: Date:	OPA Resource  McIntyre, David  FW: Response from "Contact Us about Public Meetings on Nuclear Security and Safeguards;  Monday, March 14, 2011 6:00:47 PM
Sent: Monda To: OPA Res	WebServices Resource y, March 14, 2011 9:58 AM
From: (b)(6) Sent: Saturda To: NSIR_We	Message  ay, March 12, 2011 9:05 PM  ebServices Resource  conse from "Contact Us about Public Meetings on Nuclear Security and Safeguards;
Below is the	result of your feedback form. It was submitted by
(b)(6)	on Saturday, March 12, 2011 at 21:04:40
name: Evelyr	
organization:	· · · · · · · · · · · · · · · · · · ·
address1: (b)	(6)
address2:	
city:(b)(6)	
state: (b)(6)	
zip: (b)(6)	
country: USA	

phone: (b)(6)

To: Subject: Date:	McIntyre. David FW: Response from "Contact Us about Public Meetings on Nuclear Security and Safeguards; Monday, March 14, 2011 6:01:01 PM
Sent: Monda To: OPA Res	WebServices Resource y, March 14, 2011 9:57 AM
To: NSIR_We	Message  7, March 13, 2011 3:03 AM ebServices Resource ponse from "Contact Us about Public Meetings on Nuclear Security and Safeguards;
	result of your feedback form. It was submitted by
(b)(6)	on Sunday, March 13, 2011 at 03:02:52
comments: V have a full-o	Ve live in $(b)(6)$ and are wondering if we are safe if Japan's Nuclear Facilities n meltdown? If not, where do we go? To the East coast? how much time would we have?
name: Mary	Clements
organization:	
address1: (b)	(6)
address2:	
city: (b)(6)	
state: (b)(6)	
zip:[(b)(6)	
country: USA	
phone: (b)(6)	

OPA Resource McIntyre, David

To: Subject: Date:	McIntyre, David FW: Response from "Contact Us about Public Meetings on Nuclear Security and Safeguards; Monday, March 14, 2011 6:01:19 PM
From: NSIR_ Sent: Monda To: OPA Res	MessageWebServices Resource _y, March 14, 2011 9:57 AM source : Response from "Contact Us about Public Meetings on Nuclear Security and Safeguards;
From: (b)(6) Sent: Sunda To: NSIR_W	Message y, March 13, 2011 11:24 AM ebServices Resource sponse from "Contact Us about Public Meetings on Nuclear Security and Safeguards;
	result of your feedback form. It was submitted by
(b)(6)	on Sunday, March 13, 2011 at 11:23:31
earthquake of (b)(6) coast? since 137, and no potassium io	does the radioactivity from the japan nuclear which will come to the west coast pose a threat to us on the west the radioactivity is cessnium tradioactive iodine, mean that odine will not be effective? Is so the safe for a 9 month old
name: cathe	rine neifing
organization	
address1: (b	)(6)
address2:	
city: (b)(6)	
state: (b)(6)	
zip: (b)(6)	
country: Uni	ted States
phone: (b)(6)	Λ,
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

OPA Resource McIntyre, David

From:

David Freedom

To:

McIntyre, David

Subject:

RE: Japan's Nuclear Power plant Disaster Radioactive waste question

Date:

Monday, March 14, 2011 7:08:48 PM

## Thanks David

# --- On Mon, 3/14/11, McIntyre, David < David.McIntyre@nrc.gov > wrote:

From: McIntyre, David <David.McIntyre@nrc.gov>
Subject: RE: Japan's Nuclear Power plant Disaster Radioactive waste question
To: "OPA Resource" <OPA.Resource@nrc.gov>, (b)(6)

Date: Monday, March 14, 2011, 10:53 PM

Mr. Freedom – We do not yet know the full extent of the Japanese nuclear situation. However, we believe that there is little likelihood that the United States will experience harmful levels of radiation, due primarily to the great distances involved, over which the radiation will dissipate.

NRC Chairman Gregory Jaczko spoke today at the White House press briefing. Here's part of his comments:

First and foremost, based on the type of reactor design and the nature of the accident we see a very low likelihood, really a very low probability that there's any possibility of harmful radiation levels in the United States or in Hawaii, or in any other U.S. territories.

Q And one other question. You said that there's a "very low likelihood," I believe were your words, of harmful radiation making it to Hawaii or the West Coast. Is that based on the condition of those plants right now, or is that based on a partial meltdown or, heaven forbid, a total meltdown? Could that change your assessment?

CHAIRMAN JACZKO: The information about harmful -- the lack of any harmful impacts to the U.S. is simply based on the nature of these reactors and the large distances, obviously, between those and any U.S. territory. So you just aren't going to have any radiological material that by the time it traveled those large distances could present any risk to the American public.

Q Even in a worst-case scenario, even with a meltdown, you're not going to have harmful radiation reach Hawaii or the West Coast?

CHAIRMAN JACZKO: Again, I don't want to speculate on various scenarios, but based on the design and the distances involved, it is very unlikely that there would be any harmful impacts.

Based on this, there is no need for you to leave home or take potassium iodide.

David McIntyre

NRC Public Affairs

From: David Freedom (b)(6)
Sent: Monday, March 14, 2011 6:13 PM

To: OPA Resource

Subject: Japan's Nuclear Power plant Disaster Radioactive waste question

I live in the Jet stream bringin in the Radiactive Ceasium and Iodine into the midwest.

I have done a lot of resarch and many are saying within a few days the jetstream will deposit radioactive particles along the US midwest states.

I want a definaltve answer to this and no beating around the bush. I think Japan is lying about the first two explosions. I think they were meltodowns and I heard it starting to look like the 3rd reactor may go into meltdown.

Do I need to get out of the midwest for a few weeks? Take Iodine pills? I need to know what we need to do ASAP before the clowd of radiactive material reaches us.

Thanks

McIntyre, David

To:

Couret, Iyonne

Subject:

Media Interview Request

Date:

Monday, March 14, 2011 2:55:00 PM

Please add: Kate Eby, Fox News 40 in Sacramento, who would like someone for their morning program 3/15 to talk about the Japan situation.

Kate.ebv@fox40.com Gell (b)(6)

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)

(202) (b)(6)

Protecting People & the Environment

Couret, Ivonne

To:

McIntyre, David

Subject:

FW: Reporter - Q on NRC inspections

Date:

Monday, March 14, 2011 3:56:20 PM

## Going through emails found this message

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



**301) 415-8205** 

ivonne.couret@nrc.gov

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx



Please consider the environmental impact before printing this email.

From: Janbergs, Holly

Sent: Monday, March 14, 2011 1:03 PM

To: Couret, Ivonne

Subject: Reporter - Q on NRC inspections

Roger Batson from Nippon TV said that he looked over the NRC website and wanted to discuss our most recent PR re: assistance to Japanese gov't. He's also looking for information on whether the US is considering additional inspection efforts in light of the situation in Japan.

212-660-6969 (office) (cell)

Beth Janbergs Public Affairs Assistant 301-415-8211

OST01 HOC

Sent:

Tuesday, April 26, 2011 2:34 AM

To:

FOIA Response.hoc Resource

Subject:

FW: NRC-hosted Consortium Conference Call Info

Attachments:

image001.jpg

From: HOO Hoc

**Sent:** Tuesday, April 26, 2011 2:34 AM **To:** LIA07 Hoc; LIA08 Hoc; OST01 HOC

Subject: RE: NRC-hosted Consortium Conference Call Info

The HOOs can accommodate having 2 bridges which can be muted from each other when requested. When are they planning to have this conference call?

#### John Knoke

Headquarters Operations Officer U.S. Nuclear Regulatory Commission

Phone: 301-816-5100 Fax: 301-816-5151 email: hoo.hoc@nrc.gov

secure e-mail: hool@nrc.sgov.gov



From: Meighan, Sean

Sent: Tuesday, April 26, 2011 2:07 AM

**To:** RST01 Hoc; HOO Hoc **Cc:** Norwood, Donald

Subject: FW: NRC-hosted Consortium Conference Call Info

### Good Afternoon HQ RST:

There is a request from a participating member of the consortium call (Office of the Secretary of Defense) that the NRC provide two lines going forward for the Consortium Calls. One line will be the line that governmental organizations dial into, the other line will be for NGOs to dial into. For the majority of the call the two lines will be connected. When items that are not appropriate for discussion outside of government organizations are addressed, the request is that the NRC HOO will disconnect the NGO bridge line.

It is suggested that the governmental organizations call into the currently established line 301-816-5120, Passcode: (b)(6) and that we have the other participants call the HOO at 301-816-5100, and request the HOO establish the second line and connect/disconnect the bridges as needed.

Please respond to let me know if this is "doable"

Sean Meighan Japan PMT Team

**From:** Abbot, Charles Spencer (TDY/DAO) **Sent:** Friday, April 22, 2011 7:56 PM

To: Basalla, Suzanne I; 'Schear, James A SES OSD POLICY'; 'Schiffer, Michael SES OSD POLICY'; 'Hersman, Rebecca SES

OSD POLICY'; 'Terrell, Patrick COL (USA) OSD POLICY'; 'Johnstone, Christopher CIV OSD POLICY'

Cc: 'Chuck Casto'; 'jeffrey.mitman@nrc.gov'; 'Steve Garchow'; 'steven.reynolds@nrc.gov'; 'Meighan, Sean'; Cherry, Ronald C; 'Reid Tanaka'; Wall, Marc M; Spurlock, Kenneth R (TDY/MDAO); 'Aaron Leong'; 'DARTDOELiaison1'; Berger, William (RDMA/OFDA); 'Trigilio, John, CIV, OSD-POLICY'; 'Clark, Ngoc CIV OSD POLICY'; Zumwalt, James P; Cipullo, Timothy I

Subject: NRC-hosted Consortium Conference Call Info

OSD participation is welcomed in the consortium conference calls that take place Tuesday and Friday at 0900 JST (Monday and Thursday 2000 EDT). The dial-in number to the NRC Ops Center is 301-816-5120, Passcode: (b)(6) alternate number 800-772-3842, Passcode: (b)(6)

INPO will be brought into the call by the NRC Ops Center via a separate bridge, and then will be dropped off the line once the shareable portion of the call is completed (this is anticipated to be the majority of the call). OSD and others can then discuss any items that need to be maintained USG-only. NRC does this often in discussions between regulators and licensees, so it's an easy process for their Ops Center.

Please forward the names of anticipated participants to me prior to the call if possible, and any feedback/suggestions would be welcomed. V/r, Spencer

CDR Spencer Abbot, USN
Defense Attache Office (TDY)
Bilateral Assistance Coordination Cell
U.S. Embassy Tokyo
+81 03 3224 5386
tdyabbotcs@state.gov

SBU
This email is UNCLASSIFIED.

From:	McIntyre, David
To:	OPA Resource; (b)(6)
Subject:	RE: Response from "Contact Us about Public Meetings on Nuclear Security and Safeguards;
Date:	Monday, March 14, 2011 6:19:00 PM
**************************************	
•	
Please consul	t your state health authorities - they issued a press release yesterday saying they do not
expect harmfo	ul levels of radiation to reach $(b)(6)$ The NRC agrees with this.
David McInty	
NRC Public Af	Tairs
Original M	Message
From: (b)(6)	Tessage
	y, March 12, 2011 9:05 PM
	bServices Resource
	ponse from "Contact Us about Public Meetings on Nuclear Security and Safeguards;
Below is the i	result of your feedback form. It was submitted by
(b)(6)	
(0)(0)	on Saturday, March 12, 2011 at 21:04:40
comments: H	ow should we prepare for the nucular reactor's exploding in Japan in (b) state?
	or should the property the measure reaction of shiptoning in separt in [6]
name: Evelyn	Gillihan
,	
organization:	
1 (b)(	6)
address1: (b)(	0)
address2:	
auuressz.	
city: (b)(6)	
· L	
state (b)(6)	
(h)(6)	- ¬
zip: (b)(6)	
	·
country: USA	
phono: (b)(6)	
phone: (b)(b)	

McIntyre, David

To:

Harrington, Holly; Couret, Ivonne

Subject:

RE: Media Request for Background - Popular mechanics

Date:

Monday, March 14, 2011 6:32:00 PM

I'll try to reach her now.

From: Harrington, Holly

**Sent:** Monday, March 14, 2011 6:15 PM **To:** Couret, Ivonne; McIntyre, David

Subject: RE: Media Request for Background - Popular mechanics

Here deadline is tonight. Dave - what do you think?

From: Couret, Ivonne

**Sent:** Monday, March 14, 2011 6:11 PM **To:** Harrington, Holly; McIntyre, David

Subject: Media Request for Background - Popular mechanics

Olivia Koski from Popular Mechanics would like to get some background information on our nuclear program and how we're reacting to the situation in Japan.

(b)(6)

Beth Janbergs Public Affairs Assistant 301-415-8211

Harrington, Holly

To:

Couret, Ivonne; McIntyre, David

Subject:

RE: Media Request for Background - Popular mechanics

Date:

Monday, March 14, 2011 6:14:02 PM

I'll check and ask her deadline

From: Couret, Ivonne

**Sent:** Monday, March 14, 2011 6:11 PM **To:** Harrington, Holly; McIntyre, David

Subject: Media Request for Background - Popular mechanics

Olivia Koski from Popular Mechanics would like to get some background information on our nuclear program and how we're reacting to the situation in Japan.

(b)(6)

Beth Janbergs Public Affairs Assistant 301-415-8211

OPA Resource

10;.

McIntyre, David FW: NHK"s Query

Subject: Date:

Monday, March 14, 2011 4:45:32 PM

I apologize if I'm sending you repeats from phone calls.

From: Ichiro KABASAWA

(b)(6)

Sent: Monday, March 14, 2011 1:39 PM

To: OPA Resource Subject: NHK's Query

Dear Sir/Madam,

My name is Ichiro Kabasawa, a correspondent of NHK, Japanese Broadcasting Corporation, to Washington DC.

I have follow up questions on your latest press release regarding your 2 experts in Japan.

- 1. What kind of specific requests those experts have received from Japanese government?
- 2. Where are they going to work, in Tokyo or near the damaged nuclear reactor?

  Could you give us the name of the Japanese agency they are going to work with?

Thank you very much.

Ichiro

Ichiro Kabasawa Correspondent NHK Washington Bureau

(b)(6)

From: To:

McIntyre, David

Subject:

Janhergs, Holly RE: U(b)(6) student? wtf

Date:

Monday, March 14, 2011 5:18:00 PM

We can ignore this. He should read the New York Times online.

From: Janbergs, Holly

Sent: Monday, March 14, 2011 4:43 PM

**To:** McIntyre David **Subject:**  $U^{(b)(6)}$  student? wtf

Chris Kemp, a U (b)(6) student, was apparently given an assignment to find out what partial meltdown means in the context of the situation at the Japanese reactors. He just has a few questions on the matter.

(b)(6)			

Beth Janbergs Public Affairs Assistant 301-415-8211

Powell, Amy

To:

Harrington, Holly

Subject:

RE: Chairman"s Qs and As

Date:

Monday, March 14, 2011 9:33:56 AM

Could still help him prep, but I will check with Scott. Thanks

From: Harrington, Holly

Sent: Monday, March 14, 2011 9:24 AM

To: Powell, Amy

Subject: Re: Chairman's Qs and As

Talk to scott in the op center as to status. So far they are ouo not for public

Sent from NRC Blackberry

Holly Harrington

(b)(6)

From: Powell, Amy

To: Hayden, Elizabeth; Brenner, Eliot Cc: Harrington, Holly; Schmidt, Rebecca Sent: Mon Mar 14 06:41:09 2011 Subject: Re: Chairman's Qs and As

The reactor safety team in the HOO has been compiling a number of Q ans As for a variety of audiences re: the situation in Japan. OCA does not have them yet but will check status this am and

share.

Amy Powell
Associate Director
Office of Congressional Affairs
U. S. Nuclear Regulatory Commission

Phone: 301-415-1673

Sent from my Blackberry

**From**: Hayden, Elizabeth **To**: Brenner, Eliot

Cc: Harrington, Holly; Powell, Amy Sent: Sun Mar 13 23:59:42 2011 Subject: Chairman's Qs and As

It would be helpful if we could get a complete set of the Chairman's Qs and As that have been prepared for the Wed. hearing.

Brenner, Eliot

To:

Loyd, Susan; Harrington, Holly

Subject:

Re: Language

Date:

Monday, March 14, 2011 8:48:09 AM

But of course.
Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200
d(b)(6)

From: Loyd, Susan

Sent from my Blackberry

**To**: Brenner, Eliot; Harrington, Holly **Sent**: Mon Mar 14 08:43:38 2011

Subject: Language

(In light of what is happening, I know that this is minor. But, we keep repeating it...and will do so throughout the week unless we make a change now)

In our press releases and on the website notice on the homepage, we talk about the Ops Center being "stood up." In accord with our plain English initiative, can we talk about it being activated, or use some other term? This sounds like military-speak or very antiquated. Thanks.

Susan

Susan K. Loyd Communications Director Office of the Chairman U.S. Nuclear Regulatory Commission Tele: 301-415-1838

Susan.Loyd@nrc.gov

# Uselding, Lara

From:

Uselding, Lara

Sent:

Monday, March 14, 2011 1:21 PM

To:

Cohen, Ronald

Subject:

Re: KEPR the local television station contact

Thanks for sending to me, will let you know if I need more Lara Uselding NRC Region 4 Public Affairs 817-917-0321

From: Cohen, Ronald To: Uselding, Lara

Cc: Walker, Wayne; Proulx, David; Hayes, Mahdi; Howell, Linda

Sent: Mon Mar 14 14:14:48 2011

Subject: KEPR the local television station contact

#### Lara,

I received a call from KEPR the local television station. Reporter Lena Vargas phone number (509) 521-4705. She was looking to do a video report on the BWR here at CGS, its design and relative information to the accident in Japan. I forwarded to her your number. Let me know how I can help. Thanks.

Ron Cohen Senior Resident Inspector Columbia Generating Station-

Office (509) 377-2627



# Uselding, Lara

From:

Uselding, Lara

Sent:

Monday, March 14, 2011 2:20 PM

To:

Tutak, Greg; Warnick, Greg; Lantz, Ryan; Allen, Don

Subject:

RE: Earthquake plans/reports/risk analysis for San Onofre nuclear power plant

Importance:

High

Hi: Can you all get back to me if you are able to weigh in on this question below? I'm not aware of a study we did at SONGS like the RIL we did for Diablo? Can you offer me some info?

Lara

From: keith.darce@uniontrib.com [mailto:keith.darce@uniontrib.com]

Sent: Monday, March 14, 2011 12:08 PM

To: Uselding, Lara

Subject: Earthquake plans/reports/risk analysis for San Onofre nuclear power plant

Lara,

I am trying to track down any documents on file with the NRC concerning the risk of earthquakes occurring near the San Onofre nuclear plant north of San Diego. I am particularly interested in emergency plans, analysis of the risks faced by the plant from earthquakes and predictions of the types of damage and dangers that could be created by earthquake damage to the plant. I'm also interested in documents looking at the risk and dangers posed by tsunamis to the plant. Can you tell me if these types of documents exist and when I might be able to get them? I am trying to turn a story around on this topic for tomorrow's (Tuesday's) edition of the paper.

Thanks, Keith

### Keith Darcé

Biotechnology writer The San Diego Union-Tribune keith.darce@uniontrib.com 619.293.1020

www.signonsandiego.com/news/business/biotech/

Follow me on Twitter at KeithDarce

Recipient Tutak, Greg Warnick, Greg Lantz, Ryan Allen, Don

Delivery

Delivered: 3/14/2011 2:20 PM Delivered: 3/14/2011 2:20 PM

Delivered: 3/14/2011 2:20 PM

Delivered: 3/14/2011 2:20 PM

Read

Read: 3/14/2011 5:21 PM Read: 3/14/2011 2:25 PM

Read: 3/14/2011 3:40 PM

# Uselding, Lara

From:

Uselding, Lara

Sent:

Monday, March 14, 2011 2:38 PM

To:

Omaha World Herald

Subject:

Nancy, NRC Press Releases #1 through 5 - Japan Event Earthquake/Tsunami

Attachments:

Press Release 1 pdf; Press Release 2 pdf; Press Release 3 pdf; Press Release 4 pdf; Press

Release 5.pdf

Nancy, also want to be sure you have seen our press releases from Friday until today.

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

## <u>Lara.Uselding@nrc.qov</u>

(b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

# Uselding, Lara

From:

Uselding, Lara

Sent:

Monday, March 14, 2011 2:38 PM

To:

'jweiss@dallasnews.com'

Subject:

NRC Press Releases #1 through 5 - Japan Event Earthquake/Tsunami

Attachments:

Press Release 1.pdf; Press Release 2.pdf; Press Release 3.pdf; Press Release 4.pdf; Press

Release 5.pdf

First email, our press releases from Friday until today.

## Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

## Lara. Uselding@nrc.gov

(b)(6)

Office: 817-276-6519

For more information visit <u>www.nrc.gov</u>

From: To: McIntyre, David Hannah Northey

Subject:

NRC info

Date:

Monday, March 14, 2011 3:55:00 PM

Hannah – here's our fact sheet on seismic issues – it's our best source of information.

http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html

Current numbers are we are actively reviewing 12 applications for 18 units (reactors).

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)

(b)(6)

Protecting People & the Environment

Jones, Cynthia

To:

Harrington, Holly

Subject: Date: RE: INES link on NSIR NRC website Monday, March 14, 2011 11:34:39 AM

Holly-

You can add it to your webpage also if you want.

From: Harrington, Holly

Sent: Monday, March 14, 2011 11:33 AM

To: Jones, Cynthia

Subject: Re: INES link on NSIR NRC website

Good rhinking

Sent from NRC Blackberry

Holly Harrington

(b)(6)

From: Jones, Cynthia

To: HOO Hoc

Cc: Hayden, Elizabeth; Harrington, Holly; McIntyre, David; Brandon, Lou; Temple, Jeffrey; Gott, William;

ICWG; Brown, Cris; Evans, Michele; Ballam, Nick; NSIR\_IT\_Services Resource

Sent: Mon Mar 14 11:20:43 2011

Subject: INES link on NSIR NRC website

FYI-

I have gotten several phone calls about the location of where the INES information is on the NSIR website. Since last week have I been trying to get the NSIR webmaster contact to move the INES link on the NSIR Homepage **back** to the front page of NSIR where it was until the recent web page renovations last week.

In the meantime, the NRC link is <a href="http://l 48.184.213.252/NSIR/docs/INES.pdf">http://l 48.184.213.252/NSIR/docs/INES.pdf</a>. I'll let you know when the NSIR webmaster gets its located back to the NSIR home page. (where it will be located on the lower left of the home page under "Quicklinks.")

Cyndi

Cynthia G. Jones, Ph.D.,
US INES National Officer
Sr. Technical Advisor for Nuclear Security
U.S. Nuclear Regulatory Commission
Office of Nuclear Security & Incident Response
Mail Stop T4-D22A, Washington, D.C. 20555
cynthia.jones@nrc.gov
caj@nrc.sgov.gov
Work: 301-415-0298

(b)(6)

Couret, Ivonne

To:

McIntyre, David

Subject:

FW: Media Request - NOT on my list - FW: on deadline RE: question, supercomputer simulations

Date:

Monday, March 14, 2011 2:27:18 PM

## Can you respond per scott's direction thanks, Ivonne

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



**(301) 415-8205** 

ivonne.couret@nrc.gov

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/bloq/default.aspx



Please consider the environmental impact before printing this email.

From: Burnell, Scott

Sent: Monday, March 14, 2011 12:14 PM **To:** Couret, Ivonne; Brenner, Eliot

Subject: RE: Media Request - NOT on my list - FW: on deadline RE: question, supercomputer

simulations

I haven't. I'd point her at the second paragraph in yesterday's release as an example of how computer analysis is playing a role. No further specifics available at this point, etc.

From: Couret, Ivonne

Sent: Monday, March 14, 2011 12:11 PM

To: Burnell, Scott; Brenner, Eliot

Subject: Media Request - NOT on my list - FW: on deadline RE: question, supercomputer simulations

Scott/Eliot did you guys talk to Gov Exec. If not let me know if I should contact. Ivonne

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs



(301) 415-8205

ivonne.couret@nrc.gov

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance

http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

NRC Employees can read interesting insight on the OPA Blog http://portal.nrc.gov/OCM/opa/blog/default.aspx

Please consider the environmental impact before printing this email.

From: Sternstein, Aliya [mailto:asternstein@govexec.com]

Sent: Monday, March 14, 2011 11:51 AM

To: OPA Resource

**Subject:** on deadline RE: question, supercomputer simulations

Hi, I just tried calling to follow-up. Not surprisingly, the line is busy. \*AGAIN, DEADLINE IS 3PM\* Can you confirm that someone is working the below inquiry?

Aliya Sternstein nextgov.com/Government Executive

asternstein@nextgov.com; asternstein@govexec.com

202.266.7521 (office)

600 New Hampshire Avenue, NW

Washington, DC 20037

From: Sternstein, Aliya

Sent: Sunday, March 13, 2011 11:42 PM

To: 'opa.resource@nrc.gov'

**Subject:** question, supercomputer simulations

I cover Obama's tech agenda for National Journal's Nextgov.com and Government Executive. On Monday, I'd like to let our readers know how the U.S. government is using supercomputers to respond to the nuclear emergency in Japan. I'm waiting to hear back from NNSA public affairs. I'm hoping NRC officials also can shed light on how supercomputer simulations are aiding decisionmakers.

### \*DEADLINE IS MONDAY 3:00 PM\*

#### Questions:

- 1. What kinds of calculations are federal supercomputers capable of performing to gauge the risks posed by the Japan nuclear crisis, plus containment options? I want to describe the simulations that may be helpful during this unfolding situation.
- 2. What risks or mitigating actions have U.S. supercomputers identified so far?

I'm at 301.367.9944 and on e-mail. If one of your experts is available by phone, that would be great. If not, a written response is fine. Thank you. -Aliya

Aliya Sternstein nextgov.com/Government Executive asternstein@nextgov.com; asternstein@govexec.com 202,266,7521 (office)

(b)(6)

600 New Hampshire Avenue, NW Washington, DC 20037

Kammerer, Annie

To:

Stutzke, Martin; Thomas, Eric

Cc:

Hiland, Patrick

Subject:

RE: Request for data from Chmn/EDO Offices

Date:

Monday, March 14, 2011 5:20:15 PM

I'm not sure what we are being asked for. This seems to be targeted more towards the reactors themselves.

FYI, I am also providing a plot of the plants overlaid on the US national seismic hazard map under a separate request by mike marshall.

From: Stutzke, Martin

**Sent:** Monday, March 14, 2011 4:42 PM **To:** Thomas, Eric; Kammerer, Annie

Cc: Hiland, Patrick

Subject: RE: Request for data from Chmn/EDO Offices

I can help with information on seismic hazard and seismic risk in the Central and Eastern US (the subject of Generic Issue 199). We'll need someone to cover the West Coast plants (Columbia, Diablo Canyon, San Onofre, and Palo Verde); it's not clear to me if we have recent seismic hazard or seismic risk estimates for any of these plants. Mike Markley (NRR/DORL/LPL4) chaired a session at last week's RIC on seismic issues, and I think he's involved in the assessment of recently discovered offshore fault near Diablo Canyon.

For info on the severe accident behavior of BWR containments, I suggest contacting the State of the Art Reactor Consequence Analysis (SOARCA) team in RES/DSA (Pat Santiago, Charlie Tinkler, Jason Schaperow), and/or Ed Fuller (NRO/DSRA/SPRA). Note that SOARCA has assessed Peach Bottom, which ought to be similar to the Fukushima Dai-ichi Unit 1 plant.

#### Marty

From: Thomas, Eric

**Sent:** Monday, March 14, 2011 4:12 PM **To:** Kammerer, Annie; Stutzke, Martin

Cc: Hiland, Patrick

Subject: Request for data from Chmn/EDO Offices

Annie or Marty,

As you probably know, the Chairman's office is gathering information to discuss the Japan Earthquake situation at a meeting this Wednesday. We received a request through the EDO's Office to provide some information that the Chairman remembers seeing at a recent briefing. Forgive the partial information, we are working on getting clarification.

They are looking for:

1. Graphs related to Safe S/D during an Earthquake

2. Information (graphical perhaps) on BWR containment and release pathways.

If you have briefed either of these recently and the topics ring a bell, please let me and Pat Hiland know.

Thanks, Eric

Eric Thomas

U.S. Nuclear Regulatory Commission

NRR/DIRS/IOEB

OWFN-7E24

eric.thomas@nrc.gov

301-415-6772 (office)

(b)(6)

Ross-Lee, MaryJane

To:

Kammerer, Annie; Brown, Frederick; Gitter, Joseph; Howe, Allen; Hiland, Patrick; Skeen, David; Case, Michael;

Ruland, William; Dudes, Laura; Karas, Rebecco

Cc:

McDermott, Brian; Hasselbern, Rick

Subject:

Re: (Action) Tsunami Fact Sheet - NUREG issued in March 2009 Link

Date: Monday, March 14, 2011 7:45:26 PM

There are a number of resources in NRO that could help. Becky Karas is poc.

Sent from my blackberry M. (b)(6)

From: Kammerer, Annie

To: Brown, Frederick; Giitter, Joseph; Howe, Allen; Hiland, Patrick; Skeen, David; Case, Michael;

Ruland, William; Dudes, Laura

Cc: McDermott, Brian; Ross-Lee, MaryJane; Hasselberg, Rick

Sent: Mon Mar 14 12:45:21 2011

Subject: RE: (Action) Tsunami Fact Sheet - NUREG issued in March 2009 Link

I have a fair amount of info on tsunami. I don't recall ever seeing a tsunami fact sheet, but could be wrong.

My suggestion, if we don't have one, is to get Henry Jones and Goutam Bagchi working on one. I lead the RES work, but can't really dig into this until tomorrow. Goutam and Henry are the two people in NRO who I work most closely with on this topic. They could give us an excellent start. Should I ask them?

BTW, there is a good (and only slightly out of date) summarization of our regulatory approach and regulatory research in an appendix on US practice that I wrote for an IAEA guide on flooding (DS417). Also, Goutam, Henry and I wrote a paper for an IAEA workshop last year.

#### Annie

From: Brown, Frederick

Sent: Monday, March 14, 2011 7:13 AM

To: Giltter, Joseph; Howe, Allen; Hiland, Patrick; Skeen, David; Case, Michael; Ruland, William; Dudes,

Laura

Cc: McDermott, Brian; Ross-Lee, MaryJane; Kammerer, Annie; Hasselberg, Rick Subject: FW: (Action) Tsunami Fact Sheet - NUREG issued in March 2009 Link

FYI

From: King, Mark

**Sent:** Monday, March 14, 2011 7:08 AM

**To:** Thorp, John; Boger, Bruce **Cc:** Brown, Frederick; Thomas, Eric

Subject: RE: (Action) Tsunami Fact Sheet - NUREG issued in March 2009 Link

We had a NUREG issued on this subject back in March 2009.

TSUNAMI HAZARD ASSESSMENT AT NUCLEAR POWER PLANT SITES IN THE UNITED STATES OF AMERICA

Click link to view: (b)	)(6)
-------------------------	------

http://pbadupws.nrc.gov/docs/ML0915/ML091590193.pdf

From: Thorp, John

Sent: Monday, March 14, 2011 6:57 AM

To: Boger, Bruce

**Cc:** Brown, Frederick; King, Mark; Thomas, Eric **Subject:** RE: (Action) Tsunami Fact Sheet

We'll look for it; If we don't find it quickly, we'll start producing one. (Mark King, please start looking)

I take it we would define & describe the tsunami phenomena, then address which nuclear stations in the U.S. are located in areas subject to tsunami waves, and describe what we can regarding the design of plants to withstand tsunami impacts?

Thanks,

John

From: Boger, Bruce

Sent: Monday, March 14, 2011 6:48 AM

**To:** Thorp, John **Cc:** Brown, Frederick

Subject: Tsunami Fact Sheet

I seem to recall that OpE developed a tsunami fact sheet? Should we dust it off?

### Weber, Michael

From:

Weber, Michael

Sent:

Monday, March 14, 2011 3:13 PM

To:

LIA05 Hoc

Subject:

FYI - MOX Alert - TVA, Energy Northwest & Exploding Japanese MOX Reactor

From: (b)(6)
To: (b)(6)

Sent: Mon Mar 14 10:48:46 2011

Subject: MOX Alert - TVA, Energy Northwest & Exploding Japanese MOX Reactor

## MOX Alert - Energy Northwest and TVA MOX Plans & Exploding Japanese MOX Reactor

Energy Northwest, TVA and DOE officials have remained virtually silent about secret plans to use experimental weapons-grade plutonium fuel (MOX) in the Columbia Generating Station. It is noted that the Fukushima Daiichi Unit 3 exploding reactor is partially loaded with a first batch of <u>reactor-grade MOX</u>, thus making radioactive release potentially worse. <u>Weapons-grade MOX</u> has <u>never</u> even been tested in a boiling water reactor (BWR) and DOE is planning to use it in the GE Mark I design (Browns Ferry and Fukushima Daiichi 1-3 reactors) and GE Mark II (CGS). We will continue efforts to reveal information about this program to the US public.

Tom Clements
Friends of the Earth

top of homepage - Salem, OR

http://salem-news.com/

http://salem-news.com/articles/march142011/nuke-reactor-wash.php

Mar-14-2011 03:05

## Secret Plan Exposed to Use Surplus Weapons Plutonium in Washington State Nuclear Reactor

#### Salem-News.com

FOIA Documents Reveal Energy Northwest Plans Plutonium Fuel (MOX) Experiments While Seeking to Control Information Leaks to the Media.

See original Feb. 3, 2011 news release on Friends of the Earth website:

Secret Plan Exposed to Use Surplus Weapons Plutonium in Washington State Nuclear Reactor

http://www.foe.org/secret-plan-exposed-use-surplus-weapons-plutonium-washington-state-nuclear-reactor

#### ###

distributed nationally:

from Experts Comment on U.S. Implications of Japanese Reactor Crisis

March 14, 2011

http://www.foe.org/experts-comment-us-implications-japanese-reactor-crisis

MOX section:

As in Japan's Fukushima Unit 3, the use of plutonium fuel (MOX) in U.S. reactors poses special radiation and safety risks. One of the Japanese reactors under risk of continued fuel melting or explosion is now operating for the first time with part of the core being plutonium fuel. This plutonium mixed oxide (MOX) fuel, shipped from Europe and inserted in Fukushima Unit 3 in September 2010, poses greater risks than traditional uranium fuel. MOX, made from plutonium which is capable of being used in nuclear weapons, is harder to control during reactor operation and results in a more serious radiation release in the event of an accident. The plutonium in the MOX is a result of the reprocessing of Japanese spent fuel and that reprocessing program. MOX use has long been opposed by public interest groups due to safety, cost and non-proliferation concerns.

Tom Clements, Southeastern nuclear campaign coordinator, Friends of the Earth, said: "In the U.S., the Department of Energy is considering use of MOX fuel in the Tennessee Valley Authority's Browns Ferry reactors, of the same aging Mark I boiling water reactor design as Fukushima Unit 3. Analysis by the Tennessee Valley Authority of unsafe MOX fuel made from surplus weapons plutonium must be halted and the \$850 million request related to this in President Obama's FY2012 must be rejected. The cost of the MOX plant now under construction at the Department of Energy's Savannah River Site has skyrocketed from \$1.4 billion in FY 2004 to \$4.9 billion in FY 2009 and has become a program driven by special interests that profit from it."

See <a href="http://www.fissilematerials.org/blog/2011/03/us\_plutonium\_disposition\_.html">http://www.fissilematerials.org/blog/2011/03/us\_plutonium\_disposition\_.html</a> and <a href="http://www.foe.org/secret-plan-exposed-use-surplus-weapons-plutonium-washington-state-nuclear-reactor">http://www.foe.org/secret-plan-exposed-use-surplus-weapons-plutonium-washington-state-nuclear-reactor</a>.

Contact Tom Clements a (b)(6) (landline).

# Ostendorff, William

From:

Nieh, Ho

Sent:

Monday, March 14, 2011 11:20 AM

To:

Ostendorff, William

Subject:

FW: Japan

fyi

Ho Nieh Chief of Staff Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission (301) 415-1811 (office) (b)(6)

(301) 415-1757 (tax) ho.nieh@nrc.gov

From: Nouri, Ali (Webb) [mailto:Ali Nouri@webb.senate.gov]

Sent: Monday, March 14, 2011 10:04 AM

To: Nieh, Ho Subject: Japan

Ho-

Just wanted to let you know that my boss is watching developments very closely, given both nuclear issues and his chairmanship of the east asia subcommittee on foreign relations. If we can help you in any way please let us know.

224-0074 / 253-3157

Ali

Ali Nouri, PhD Legislative Assistant Office of U.S. Senator Jim Webb 202-224-4024

## Bozin, Sunny

From:

Nieh, Ho

Sent:

Monday, March 14, 2011 6:58 AM

To:

LIA07 Hoc

Cc:

Ostendorff, William; Franovich, Mike

Subject:

RE: 0430 EDT (March 14, 2011) USNRC Earthquake/Tsunami SitRep

Dear Jim - can you please add William Ostendorff to the SITREP distribution?

Many thanks.

Ho

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission
(301) 415-1811 (office)
(b)(6)
(301) 415-1757 (tax)
ho.nieh@nrc.gov

From: LIA07 Hoc

Sent: Monday, March 14, 2011 4:48 AM

To: LIA07 Hoc; Al Coons; Andersen, James; Anderson, Joseph; Barker, Allan; Batkin, Joshua; Bill King; Bill King 2; Brenner, Eliot; Bubar, Patrice; Castleman, Patrick; Charles Donnell; Coggins, Angela; Collins, Elmo; Conrad Burnside; D Feighert; D Hammons; Dean, Bill; Decker, David; DIA; DIA2; Dorman, Dan; DOT; Droggitis, Spiros; DTRA; Dudek; EOP; EPA; EPA2; Franovich, Mike; Hahn, Matthew; Haney, Catherine; Harrington, Holly; Harry Sherwood; HHS; Hipschman, Thomas; HOO Hoc; Howell, Linda; J H-L; Jaczko, Gregory; Jim Kish; Johanna Berkey; Johnson, Michael; Kahler, Robert; L Hammond; Leeds, Eric; Logaras, Harral; Loyd, Susan; Maier, Bill; Marshall, Michael; McCree, Victor; McDermott, Brian; McNamara, Nancy; Michaelle Ralston; Miller, Charles; Miller, Chris; Monninger, John; Nan Calhoun; Navy; Nieh, Ho; NOC; Orders, William; Pace, Patti; Pearson, Laura; Peter Lyons; R McCabe; R Thomson; S Horwitz; Satorius, Mark; Schmidt, Rebecca; Seamus O'Boyle; Sharkey, Jeffry; Sheron, Brian; Snodderly, Michael; Sosa, Belkys; Steve Colman; Thomas Zerr; Tifft, Doug; Timothy Greten; Trapp, James; Trojanowski, Robert; Vanessa Quinn; W Webb; Warren, Roberta; Wiggins, Jim; Williams, Kevin; Wittick, Brian; Woodruff, Gena; Schmidt, Rebecca; Powell, Amy; Loyd, Susan; Coggins, Angela; Batkin, Joshua; taskforce-1@state.gov; NOC; Charles Donnell

Cc: LIA09 Hoc; LIA11 Hoc

Subject: RE: 0430 EDT (March 14, 2011) USNRC Earthquake/Tsunami SitRep

Attached, please find a 0430 EDT situation report from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami on March 13, 2011. This Update includes information on the status of Fukushima Daiichi, Fukushima Daini, Onagawa, and the US Navy.

Please note that this information is "Official Use Only" and is only being shared within the federal family.

Please call the Headquarters Operations Officer at 301-816-5100 with questions. -Jim  $\,$ 

Jim Anderson
Office of Nuclear Security and Incident Response
US Nuclear Regulatory Commission
james.anderson@nrc.gov
LIA07.HOC@nrc.gov (Operations Center)

# Bozin, Sunny

From:

Nieh, Ho

Sent:

Monday, March 14, 2011 3:12 PM

To:

Bubar, Patrice

Subject:

meeting

WCO just wanted to get WDM's perspective's on DOE vs. NRC roles in this type of event.

Call me when you get back and I can fill you in w/ some more detail.

Not a major concern or issue.

Но

Ho Nieh Chief of Staff Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission (301) 415-1811 (office)

(b)(6)

(301) 415-175 / (tax) ho.nieh@nrc.gov

Trapp, James

To:

Kreuter, Jane

Subject:

RE: emergency contact

Date:

Monday, March 14, 2011 4:19:32 PM

(b)(6)

Thanks

From: Kreuter, Jane

Sent: Monday, March 14, 2011 1:20 PM

To: Trapp, James

Subject: emergency contact

Jim,

I am in the process of gathering emergency contact information for the travelers to Japan. I am in need of an emergency contact name, phone number and email address. Thank you.

# Jane A. Kreuter

U.S. Nuclear Regulatory Commission Office of International Programs

Phone: 301-415-1780 Fax: 301-415-2395

E-Mail: Jane.Kreuter@nrc.gov

000 186

Trapp, James

To:

Dentel, Glenn

Cc:

McGinty, Tim

Subject:

RE: March 14, 2011, 3:30pm Japan Nuclear Facility Updates

Date:

Monday, March 14, 2011 4:45:43 PM

I just haven't got conformation that core cooling was restored. But I was excited to hear that!

We should get more information when folks wake up overhere. Thanks for the update - while it was good news I needed the source.

Thanks take care!

From: Dentel, Glenn

Sent: Monday, March 14, 2011 4:43 PM

To: Trapp, James

Subject: RE: March 14, 2011, 3:30pm Japan Nuclear Facility Updates

From Marty Virgilio's 3:30 update from the operations center. Was any of the information characterized

incorrectly?

----Original Message----

From: Trapp, James

Sent: Monday, March 14, 2011 4:35 PM

To: Dentel, Glenn

Subject: RE: March 14, 2011, 3:30pm Japan Nuclear Facility Updates

Hi Glenn - can you provide the source of this information. Thank you!

From: Dentel, Glenn

Sent: Monday, March 14, 2011 4:09 PM

To: Dean, Bill; Lew, David; Wilson, Peter; Roberts, Darrell; Collins, Daniel; Lorson, Raymond; Baker,

Pamela; Walker, Tracy; Sunil.Weerakoddy@nrc.gov; Clifford, James; Miller, Chris

Cc: Screnci, Diane; Sheehan, Neil; Trapp, James; McNamara, Nancy; Tifft, Doug; Hansell, Samuel;

Hinson, Felicia; raymond.McKinely@nrc.gov

Subject: March 14, 2011, 3:30pm Japan Nuclear Facility Updates

Update regarding Japan,

Fukushima Daiichi

Unit 1 has restored sea water injection approximately 6 hours ago

Unit 2 has sea water injection; a hole was intentionally created in the secondary containment to prevent a buildup of hydrogen and explosion as occurred at Units 1 and 3

Unit 3 has sea water injection

No spent fuel pool issues at this time.

Chuck Casto will lead a team to support Japan and recovery efforts.

Operations Center has developed/is developing:

- Accident progression evaluations and potential releases

- Q&As including focus on the safety of our reactors

This is a brief summary of the ongoing efforts.

Glenn Dentel, RDO

-----Original Message-----

From: samuel hansell (b)(6)

Sent: Sunday, March 15, 2011 4.55 PM

To: Dean, Bill; Lew, David; Wilson, Peter; Roberts, Darrell; Collins, Daniel; Lorson, Raymond; Baker,

Pamela; Walker, Tracy; Sunil.Weerakoddy@nrc.gov; Clifford, James; Miller, Chris

Cc: Screnci, Diane; Sheehan, Neil; Trapp, James; McNamara, Nancy; Tifft, Doug; Dentel, Glenn; Hansell,

Samuel; Hinson, Felicia; raymond.McKinely@nrc.gov

Subject: March 13, 2011, 3:00pm Japan Nuclear Facility Updates

Everyone,

Jim Trapp has arrived in Tokyo at the US Ambassador Office and has successfully provided a good source of current Japanese nuclear plant data. He has a scheduled

meeting with Japanese officials in four hours to obtain additional information related to the status of the nuclear power plants.

Fukushima Daiichi Units 1 and 3 have experienced core damage; the reactor cores were completely uncovered for a period of time; reactor water level was restored on Unit 1.

Sea water injection is in progress on Unit 3, however there is no indication that the reactor water level is restored above the fuel zone level on Unit 3.

Fukushima Daiichi Unit 2 reactor condition has improved. DC electrical power has been restored and Reactor Core Isolation Cooling (RCIC) has restored water level to above the fuel zone.

Latest information has stated that the reactor vessel and primary containment structures are still intact for all of the nuclear units; there is intermittent venting of the primary

containment (to the atmosphere) to maintain internal pressure within design limits.

The radiation readings on the US aircraft carrier Ronald Reagan was measured at 0.6 millirem; this radiation reading is consistent with the containment venting operation of the Fukushima reactors.

NRC has issued a press release stating that "no harmful radiation release has reached the US; additional press releases to follow.

The NRC Chairman's Senate Hearing scheduled for this Wednesday will now focus on the Japanese nuclear plant followup actions and not the previous budget discussion topic.

An erroneous release of projected Japanese plant release plume data, using the NRC logo without our knowledge, contains information that the release rates could be as high as 75 Rem and reach Colorado, USA. There has been an attempt to remove this mis-leading and unauthorized information; however the info still may exist on some social media locations.

Next Japan update call is tonight at 11:30 pm; I plan to listen in on the call.

Thanks, Sam H Tokyo Electric Power Company recent updates (recent press release details attached):

- The value of radioactive material (iodine, etc) is increasing according to the monitoring car at the site (outside).
- We are currently coordinating with the relevant authorities and departments as

to how to cool down the water in the spent nuclear fuel pool.

Daiichi Unit 2's latest report noted that the high pressure Reactor Core Isolation Cooling (RCIC) system is injecting water into the reactor vessel; however vessel level is below normal levels and this reactor could be vulnerable

to further degradation.

The US aircraft carrier Ronald Reagan is 100 miles off the coast of Japan and is

being used by helicoptersfor supply delivery and rescueefforts. The radiation air monitors are detecting radiation releases form the nuclear plants; when asked the HQs briefer could not provide the initial radiation levels until they're verified with backup readings. Also, the helicoptersreturning to the aircraft carrier were found to have low levels of contamination; again no values

of the contamination levels at this time.

The White House plans to issue a press release "soon" that will stress the need for effective communication of the Japanese nuclear plants' status; the ongoing US support for the Japanese emergency response efforts; and the fact that the US

plants are not at risk.

The NRC has prepared a press release and will release if the White House press release does not include sufficient details about the ongoing nuclear reactor recovery efforts

Barkley, Richard

To:

Trapp, James

Subject:

Hopefully They Were Good Enough to Send You This Press Release

Date:

Monday, March 14, 2011 8:04:20 PM

The explosion today at Unit 3 was so much more violent than the one at Unit 1. I hope the reactor building shell remained intact. I am surprised more workers weren't injured by that blast.

Keep up the good work. Anything you need??

#### NRC SENDS ADDITIONAL EXPERTS TO ASSIST JAPAN

Acting as part of a U.S. Agency for International Development assistance team, the NRC has dispatched nine additional experts to Tokyo to provide assistance as requested by the Japanese government.

The first members of the team left the United States Monday evening and were due to arrive in Tokyo Wednesday afternoon. The team includes additional reactor experts, international affairs professional staffers, and a senior manager from one of the NRC's four operating regions.

The team members come from the NRC's headquarters in Rockville, Md., and from offices in King of Prussia, Pa., and Atlanta. The team has been instructed to: conduct all activities needed to understand the status of efforts to safely shut down the Japanese reactors; better understand the potential impact on people and the environment of any radioactivity releases; if asked, provide technical advice and support through the U.S. ambassador for the Japanese government's decision making process; and draw on NRC-headquarters expertise for any other additional technical requirements. The team will be in communication with the Japanese regulator, the U.S. Embassy, NRC headquarters, and other government stakeholders as appropriate.

The team is led by Charles A. Casto, deputy regional administrator of the NRC's Center of Construction Inspection, based in NRC's office in Atlanta. Casto has worked in the commercial nuclear power industry at three different nuclear power plants, including Browns Ferry, which has three boiling water reactors, operated by the Tennessee Valley Authority in Alabama. He has also worked as a licensed reactor operator and operator instructor. Casto will provide a single point of contact for the U.S. Ambassador in Japan on nuclear reactor issues.

The two reactor experts sent Saturday to Japan will participate as members of this assistance team.

From: Trapp, James

Sent: Monday, March 14, 2011 4:23 PM

To: Barkley, Richard

Subject: RE: How are Things Going Over There??

Doing well. Take care.

From: Barkley, Richard

Sent: Monday, March 14, 2011 10:58 AM

To: Trapp, James

Subject: How are Things Going Over There??

I am gambling you have Internet access. Hope they can get some water in these reactors.

Richard S. Barkley, PE Nuclear & Environmental Engineer (610) 337-5065 Work

LIA06 Hoc

To:

(b)(6)

Cc:

Trapp, James; CIA11 Hoc; RST01 Hoc; Ulses, Anthony

Subject:

Equipment List requested

Date: Attachments: Monday, March 14, 2011 11:01:06 PM FW Contingency Action from GEH.msg

Jim – Here's is the equipment list updated with specs.

This is Tom Blount as the LT Director - PIs confirm receipt.

Thanks,

Tom

From: (b)(6)

Sent: Monday, March 14, 2011 6:10 PM

To: LIA06 Hoc

Subject: Re: Neutron Absorbers - Millenitek

Can you email me the list of potential assets needed at Fukushima put together by the NRC to my nrc email account. Thanks

Sent from my Verizon Wireless BlackBerry

From: LIA06 Hoc <LIA06.Hoc@nrc.gov>

Date: Mon, 14 Mar 2011 17:59:18 -0400

To: (b)(6)

Subject: RE: Neutron Absorbers - Millenitek

We do have the same info. This was briefed by the RST to the ET and the Chairman recently. I do not know the "source" (of the information) yet, but I will try to find out. Tim

From: (b)(6)

Sent: Monday, March 14, 2011 4:41 PM

To: LIA06 Hoc

Subject: Re: Neutron Absorbers - Millenitek

Need your help - there is an email in RI the says cooling restored to all 3 reactors. Could you confirm the source and do you have the same info - I am having trouble contacting Japanese counterparts. Thanks much!

Sent from my Verizon Wireless BlackBerry

From: LIA06 Hoc <LIA06.Hoc@nrc.gov>

Date: Mon, 14 Mar 2011 16:37:01 -0400

**To:** (b)(6)

Cc: L1A02 Hoc<L1A02.Hoc@nrc.gov>; RST01 Hoc<RST01.Hoc@nrc.gov>

Subject: RE: Neutron Absorbers - Millenitek

Jim – Hi, Tim McGinty. LT Director for the next 8 hours.

Regarding your Mark I Containment question, the RST is working it and I checked 10 minutes ago, ... I think we are getting close to a response.

Regarding the Millenitek request, the RST has higher priority action items that they are pursuing. Without a specific request for assistance from Japan in this regard, the RST is hesitant to divert the resources needed to fully evaluate the material and its suitability. I will brief the Executive Team about this request shortly, and let you know if there is anything different. Similarly, please let us know if the Embassy wants us to prioritize this activity. Tim McGinty

From: LIA02 Hoc

Sent: Monday, March 14, 2011 4:08 PM

To: LIA06 Hoc

Subject: FW: Neutron Absorbers - Millenitek

Importance: High

From: (b)(6)

Sent: Monday, March 14, 2011 3:55 PM

**To:** LIA02 Hoc **Cc:** Ronald C Cherry

Subject: Fw: Neutron Absorbers - Millenitek

Importance: High

Please evaluate and determine if this material may be of assistance. Thank you!

Sent from my Verizon Wireless BlackBerry

From: "Cherry, Ronald C" < Cherry RC@state.gov>

Date: Tue, 15 Mar 2011 04:42:43 +0900

**To:**  $\triangleleft^{(b)(6)}$ ; Duncan,

Aleshia Aleshia. Duncan@nuclear.energy.gov>; Duncan, Aleshia D<DuncanAD@state.gov>

Subject: FW: Neutron Absorbers - Millenitek

Jim, would something like this help?

This email is UNCLASSIFIED.

From: Hammitt, Brad [mailto:Brad.Hammitt@nnsa.doe.gov]

Sent: Tuesday, March 15, 2011 4:41 AM

To: NITOPS

**Cc:** Cherry, Ronald C; Daschbach, Michael A; 'Robert.Leach@trade.gov'; 'John.Peters@trade.gov'; 'Greg.Loose@trade.gov'; 'steve.getley@millennitek.com'; 'eric.youngquist@millennitek.com';

'shart@knoxvillechamber.com'; 'Alain.DeSarran@trade.gov'; Kilmartin, William

**Subject:** FW: Neutron Absorbers - Millenitek

Importance: High

Below is an offer to donate 20,000 boron carbide neutron absorbers from a company called,

"Millennitek." This is being made through the Knoxville U.S. Export Assistance Center.

#### -Brad

Country Manager Offich of Second Line of Defense National Nuclear Security Administration Tel: (202) 666-8396

**From:** Robert Leach [mailto:Robert.Leach@trade.gov]

Sent: Monday, March 14, 2011 3:24 PM

To: John Peters; Greg Loose; Hammitt, Brad; Cherry, Ron; steve.getley@millennitek.com;

eric.youngquist@millennitek.com
Cc: Sam Hart; Alain DeSarran

Subject: Neutron Absorbers - Millenitek

Importance: High

John and Greg, Ron and Brad,

Millenntek, a manufacturer of advanced ceramic materials, initiated contact with me and has asked for our help to facilitate a donation of 15 barrels of approximately 20,000 Boron Carbide Neutron Absorbers. These absorbers can be dropped into the damaged reactor and will slow down the nuclear reaction to buy time for the Japan government.

Would you help us with this donation? We want to help the Japanese people to be safe from harm.

I've copied the President of Millennitek on this e-mail, Mr. Steve Getley, his co-worker Eric Youngquist and a co-worker of mine Sam Hart of the Knoxville Chamber of Commerce. I've also taken the liberty to address the two gentlemen from DOE whom Greg recently introduced and Alain DeSarran who would be aware of how the crisis has effected your staff in Japan.

Best regards, Rob Leach

Robert Leach, Director

Knoxville U.S. Export Assistance Center

U.S. Commercial Service

U.S. Department of Commerce

17 Market Square, #201

Knoxville, TN 37902-1405

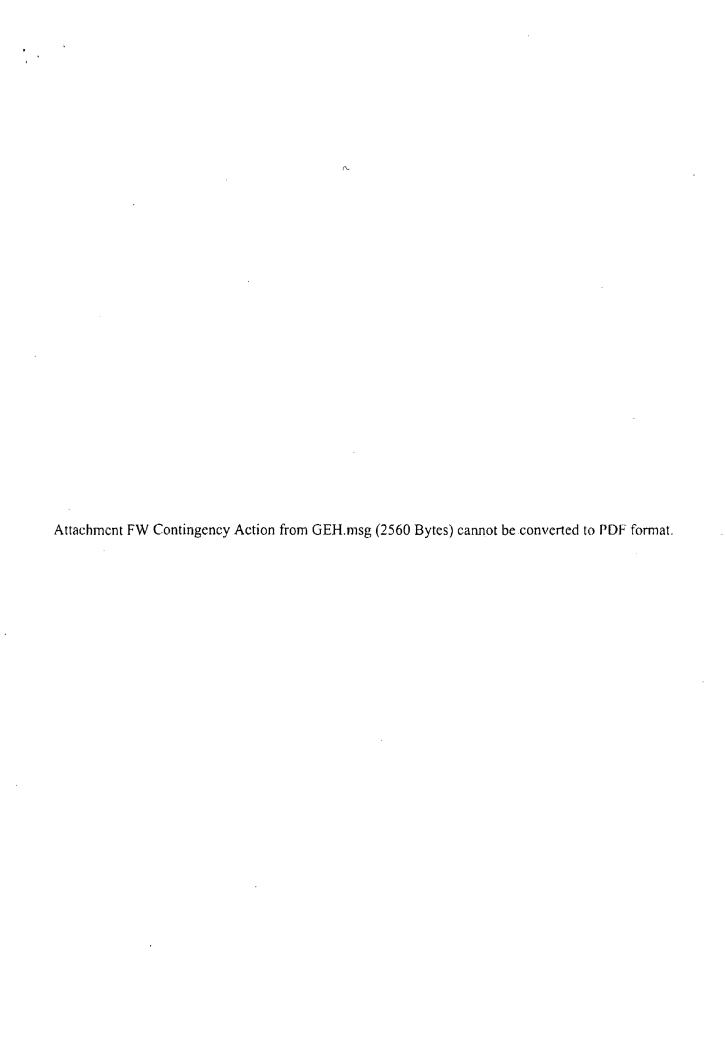
Tel: (865) 545-4637

Fax: (865) 545-4435

www.export.gov

www.buyusa.gov/tennessee

My e-mail address has changed to robert leach@trade.gov.



Monninger, John

To:

Casto, Chuck; Nakanishi, Tony; Kolb, Timothy; Foster, Jack; Cook, William; Devercelly, Richard; Ulses,

Anthony; Trapp, James; Smith, Brooke; Foggie, Kirk

Cc:

Virgilio, Martin; Borchardt, Bill; LIA10 Hoc

Subject:

Re: Travel and thoughts

Date:

Monday, March 14, 2011 9:30:04 PM

I'm at Dulles gate C14 if anyone wants to get together and chat.

John Monninger

(b)(6)

---- Original Message -----

From: Casto, Chuck

To: Monninger, John; Nakanishi, Tony; Kolb, Timothy; Foster, Jack; Cook, William; Devercelly, Richard;

Ulses, Anthony; Trapp, James; Smith, Brooke; Foggie, Kirk

Cc: Virgilio, Martin; Borchardt, Bill; LIA10 Hoc

Sent: Mon Mar 14 21:21:10 2011 Subject: Travel and thoughts

Folks, i don't know if and when you might get this email, but here's some thoughts for our work.

Let me know if you need anything. The Chairman and EDO are fully supporting our needs and they clearly expressed that to me.

We are to support the Ambassador in all ways possible.

My flight may be the last to arrive. Seemingly the logistics from Atlanta are difficult. I am on a flight to Dallas now.

Let's think about organization of the team. It seems to me that we need a reactor safety team, protective measures, recovery/severe accident, and liaison team.

First we need briefings by Jim and Tony. Then a briefing by the host. Plus we need an operations center or place to work from. I believe that we have some KI but might need more.

Please think about who is on what group, I.e. Team. Then we probably need to reach back to resources in the US. For instance we may want to set up a bridge with general electric, INPO, and other technical groups.

For the protective measures team let's think about reaching back to DOE/FERMAC for advice.

You get my point. While I don't know the organizational situation over there, absent any other arrangement, let's form teams like we would in the US, and reach back to our counterparts, both federal and industry to accomplish our work. I would suggest using the Hoo Liaison team for coordination. We need to leverage all assets for maximum effect.

John I would suggest that you work with Brooke and Kirk.

Those are merely initial thoughts and suggestions. I know it will likely change immediately upon arrival.

I am anxious to get there and work with this break group and our counterparts back home.

See you soon.

Chuck

# Ostendorff, William

From:

Zorn, Jason

Sent:

Monday, March 14, 2011 5:45 PM

To:

Nieh, Ho; Warnick, Greg; Franovich, Mike; Kock, Andrea; Ostendorff, William

Subject:

Re: GBJ WH brief

FYI. I just heard an interview on CNN where Wolf Blitzer essentially called the Chief Operating Officer at San Onofre a liar after he tried to explain the way in which seismic events are used to calculate the ability of a nuclear plant to withstand an earthquake. I expect there will be questions as a result. Not being an expert on the subject, I thought his explanation that you don't simply use a Richter number to do the calculation was reasonable.

From: Nieh, Ho

To: Zorn, Jason; Warnick, Greg; Franovich, Mike; Kock, Andrea; Ostendorff, William

Sent: Mon Mar 14 16:52:26 2011

Subject: GBJ WH brief

http://www.cnn.com/video/#/video/world/2011/03/12/vo.japan.kamaishi.flood.nhk

scroll down to see GBJ's video - he did a good job.

Но

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission
(301) 415-1811 (office)

(301) 415-1757 (fax) ho.nieh@nrc.gov

00/19/

Rihm, Roger

To:

Thomas, Eric; Hiland, Patrick

Cc:

Hasselberg, Rick

Subject:

RE: I"ve got OCA checking with Chmn staff for any addtl info on graphics to guide search EOM

Date: Monday, March 14, 2011 4:27:24 PM

Great! Michael Marshall was just literally in my office showing me this exact picture – BUT the Chairman wants it even simpler. I presume we don't have this in a manipulatable form and that I'm going to have to go to graphics to do that?

Pat I got some additional/different direction as well and will follow up in a few minutes — I think it still may involve you.

From: Thomas, Eric

Sent: Monday, March 14, 2011 4:19 PM

To: Hiland, Patrick

Cc: Hasselberg, Rick; Rihm, Roger

Subject: RE: I've got OCA checking with Chmn staff for any addtl info on graphics to guide search EOM

Here is the picture from the RTM showing BWR release pathways for Mark 1 containment. We can get Mark 2 and Mark 3 as well but I believe the Japanese plants are all Mark 1 design.

#### Eric Thomas

U.S. Nuclear Regulatory Commission NRR/DIRS/IOEB OWFN-7E24 eric.thomas@nrc.gov

301-415-6772 (office) (b)(6)

From: Hiland, Patrick

Sent: Monday, March 14, 2011 4:17 PM

To: Thomas, Eric

Subject: RÉ: I've got OCA checking with Chmn staff for any addtl info on graphics to guide search EOM

Contact Rick Hasselberg and see if he recalls anything. I believe David went down to Hill with Chairman on Sat.

From: Thomas, Eric

Sent: Monday, March 14, 2011 4:13 PM

To: Hiland, Patrick

Subject: RE: I've got OCA checking with Chmn staff for any addtl info on graphics to guide search EOM

I know the Ops Center has pictures of BWR containments and release pathways.

Eric Thomas

U.S. Nuclear Regulatory Commission NRR/DIRS/IOEB

# OWFN-7E24 eric.thomas@nrc.gov 301-415-6772 (office) (b)(6)

From: Hiland, Patrick

Sent: Monday, March 14, 2011 4:03 PM

To: Thomas, Eric

Subject: FW: I've got OCA checking with Chmn staff for any addtl info on graphics to guide search

EOM

fyi

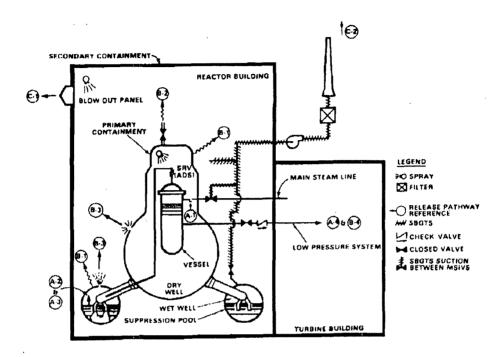
From: Rihm, Roger

**Sent:** Monday, March 14, 2011 3:58 PM

To: Hiland, Patrick

Subject: I've got OCA checking with Chmn staff for any addtl info on graphics to guide search EOM

Fig. C-3
BWR Mark I simplified release pathways.



## Figure key:

- A Reactor coolant system
  - A-1 Breaks and leaks bypassing suppression pool
  - A-2 Breaks and leaks through suppression pool
  - A-3. Automatic depressurgation system (ADS) and safety relief valves (SRV)
  - A-1 Bypass finterface LOCA)
- B Containment
  - B-1 Design leakage
  - B-2 Small isolation valve scal failure -
  - B-3 Catastrophic
  - B-4 Bypass
- C Other
  - C-1 Binlding leakage-inifiltered
  - C42 Standby gas realment system (SBGTS)

McIntyre, David

To:

Sheehan, Noil Re: WTF?

Subject: Date:

Tuesday, March 15, 2011 12:20:13 AM

WTOP, NPR

David McIntyre

NRC Office of Public Affairs

202-657-7096 (mobile)

(b)(6)

Sent from my BlackBerry, which is wholly respnsble for all typoos.

---- Original Message -----

From: Sheehan, Neil To: McIntyre, David

Sent: Mon Mar 14 23:53:21 2011

Subject: RE: WTF?

What media?

-----Original Message-----

From: McIntyre, David

Sent: Monday, March 14, 2011 11:52 PM

To: Brenner, Eliot; Harrington, Holly; Sheehan, Neil

Subject: WTF?

Media reports fire in Unit4 is out.

David McIntyre

NRC Office of Public Affairs

(b)(6)

301-415-8200 (office)

Sent from my BlackBerry, which is wholly respnsble for all typoos.

Couret, Ivonne

To: Subject: McIntyre, David; Burnell, Scott Media Question - looking to respond Tuesday, March 15, 2011 12:55:10 PM

Subje Date:

This is an online media outlet looking to get responses in email format can either of you follow up? Thanks, Ivonne

From: OPA Resource

Sent: Tuesday, March 15, 2011 12:02 PM

To: Couret, Ivonne

Subject: FW: media questions

I have no idea who he spoke with.

From: Boonsri Dickinson (b)(6)

Sent: Tuesday, March 15, 2011 12:01 PM

To: OPA Resource Subject: media questions

Hi l just spoke to one of your public affairs officers on the phone. I'm writing about the Japan nuclear situation and what this means for California and the United States. This is for CBS interactive website, *SmartPlanet*. [http://www.smartplanet.com/technology/blog/science-scope/]

I would like to have the following questions answered:

- 1. You sent a team of 11 people to Japan. In what way are they helping control the meltdown of the plants?
- 2. When you are doing an inspection for radiation levels, what is considered acceptable? How does this compare to the radiation levels measured in Japan?
- 3. What's the state of reactors in California and the US? Could a similar thing happen in the US? Or are the US plants designed to withstand earthquakes and other disasters?
- 4. Why can't the nuclear plants in Japan be stopped? Are the pools the issue or the hydrogen building up in the containment vessel? How much worse can the situation get if the pools all catch on fire?
- 5. How will the situation in Japan affect how other commercial reactors are regulated and maintained?

All the best, Boonsri

website: www.boonsridickinson.com

Smart Planet: http://www.smartplanet.com/technology/blog/science-scope/

To:	Burnell, Scott; McIntyre, David; "ivonne@nrc.gov"
Cc:	Everly, JKeith
Subject: Date:	Fw: AUSTRALIAN EMBASSY INQUIRY Tuesday, March 15, 2011 1:23:28 AM
Importance:	High
Could someone	please followup w/this inquiry if someone hasn't already done so.
Sent: Mon Mar	Keith Hayden, Elizabeth 14 16:35:37 2011 RALIAN EMBASSY INQUIRY
Eric and Beth	<b>:</b>
know what ac	Ill from a Mr. Ben Milton of the Australian Embassy in WDC. He wanted to stions if any the NRC was taking as a result of the earthquake and tsunami in Mr. Milton that I would refer his inquiry to you both for a response. Mr. per is (b)(6)
J. Keith Everly	
Senior Program	n Manager (Licensee Security)
Information Se	curity Branch
Division of Sec	urity Operations
Office of Nucle	ar S <u>ecurity and Incide</u> nt Response
(O)301-415-70	48 ((b)(6) (FAX)301-415-2190 ((b)(6)

Hayden, Elizabeth

McIntyre, David

To:

Regina Bediako

Subject: Date: RE: change in NRC press release? Tuesday, March 15, 2011 12:42:00 PM

We ran out of fingers.

Apparently it was an initial counting mistake. It was 9 all along, is my understanding.

From: Regina Bediako [mailto:bediako@nhkdc.com]

Sent: Tuesday, March 15, 2011 12:36 PM

To: McIntyre, David

Subject: change in NRC press release?

Importance: High

Hi David,

I had another (hopefully quick) clarification question I wanted to pose to you — we saw the revised press release on the number of individuals the NRC is sending to Japan; it's now been updated from 8 individuals to 9. Were there always nine individuals in the group that departed yesterday, or was it eight and then one more sent today? Basically, we're just trying to figure out why the NRC ran with the "8" number yesterday.

Thanks! Regina

Regina Bediako
NHK (Japan Broadcasting Corporation)
2030 M St NW, Suite 706
Washington, D.C. 20036

Office: (202) 828-5180, ext. 111 Cell: (b)(6)

Brenner, Eliot

To:

McIntyre, David; Burnell, Scott

Subject:

Fw: Checking in

Date:

Tuesday, March 15, 2011 2:15:50 PM

Bill ruland said he could talk briefly.
Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment

301 415 8200

Q(b)(6)

Sent from my Blackberry

From: Xie, Yanmei <yanmei\_xie@platts.com>

To: Brenner, Eliot; Burnell, Scott Sent: Tue Mar 15 14:06:23 2011

Subject: Checking in

Hey, Eliot and Scott,

I understand that you guys are super swamped, and I do feel bad for bugging you.

Steve Dolley here said he has contacted you about us talking with a BWR expert at NRC. I'm assigned to write the story, so want to check with you about the status of that inquiry. My deadline is 5pm, but as you can imagine, I do need time to digest and write this very technical story, so if you could respond as soon as possible, I'll appreciate it greatly!

I have very specific technical questions. I was told: The Nuclear Regulatory Commission has analyzed the Mark I containment design in great detail. The NRC analysis found that the BWR Mark I risk was dominated by two scenarios: station blackout and anticipated transient without scram. The NRC subsequently promulgated regulations for both of these sequences as well as other actions to reduce the probability.

So I want to know exactly what the NRC analysis found and what regulations NRC installed to mitigate the risk as a result of the analysis. I will be in a meeting in the next half an hour or so, so could you call me at my cell phone 202-701-0025 during that period?

Thank you so much!

#### Yanmei Xie

Associate Editor Platts Nuclear Publications Office: (202) 383-2161

(b)(6)

www.platts.com

McIntyre, David

To: Subject: Brenner, Eliot

Subject

RE: ACTION: STATEMENT

Date:

Tuesday, March 15, 2011 2:59:00 PM

You mean overtime pay? ;-)

Note that Stars and Stripes story on the map even has Fred von Hippel agreeing with me! That's two difficult alignments in one day!

----Original Message-----

From: Brenner, Eliot

Sent: Tuesday, March 15, 2011 2:58 PM

To: 'Andy.Adora@epamail.epa.gov'; McIntyre, David

Cc: 'Johnson.Alisha@epamail.epa.gov' Subject: Re: ACTION: STATEMENT

Dave; there will be a little something extra in your pay packet friday.

Eliot Brenner

Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200

d(p)(e)

Sent from my Blackberry

---- Original Message -----

From: Andy.Adora@epamail.epa.gov <Andy.Adora@epamail.epa.gov>

To: McIntyre, David

Cc: Johnson.Alisha@epamail.epa.gov < Johnson.Alisha@epamail.epa.gov>; Brenner, Eliot

Sent: Tue Mar 15 14:52:48 2011 Subject: RE: ACTION: STATEMENT

You're the best! Thanks so much!

From: "McIntyre, David" <David.McIntyre@nrc.gov>

To: Adora Andy/DC/USEPA/US@EPA

Cc: Alisha Johnson/DC/USEPA/US@EPA, "Brenner, Eliot"

<Eliot.Brenner@nrc.gov>

Date: 03/15/2011 02:51 PM

Subject: RE: ACTION: STATEMENT

Adora - NRC is fine with this wording. Thanks!

I'm cc-ing my boss, Eliot Brenner, Director of Public Affairs, on this message.

My contact info is:

David McIntyre

301-415-8200 (general OPA office for all of us)

301-415-8206 (my direct line)

(b)(6)

000/198

The Control of the Co

Our Operations Center number (where you reached me) is 301-816-5107; we're staffing it 24/7 for the time being, but you can also reach us during extended normal hours (whatever that means) through the 8200 number.

----Original Message----

From: Andy.Adora@epamail.epa.gov [mailto:Andy.Adora@epamail.epa.gov]

Sent: Tuesday, March 15, 2011 2:44 PM

To: McIntyre, David

Cc: Johnson.Alisha@epamail.epa.gov Subject: ACTION: STATEMENT

As the U.S. Nuclear Regulatory Commission has said, we do not expect to see radiation at harmful levels reaching the U.S. from damaged Japanese Nuclear Power Plants. As part of the federal government's continuing effort to make our activities and science transparent and available to the public, EPA will continue to keep all RadNet data available in the current online database. In addition, EPA plans to work with its federal partners to deploy additional monitoring capabilities to parts of the western U.S. and U.S. territories.

As always, the U.S. Environmental Protection Agency (EPA) is utilizing its existing nationwide radiation monitoring system, RadNet, which continuously monitors the nation's air and regularly monitors drinking water, milk and precipitation for environmental radiation. The RadNet online searchable database contains historical data of environmental radiation monitoring data from all fifty states and U.S. territories.

Adora Andy
Deputy Associate Administrator
U.S. Environmental Protection Agency
Office of External Affairs and Environmental Education
202-564-2715
andy.adora@epa.gov

McIntyre, David

Cc:

Wald, Matthew

- . .

Brenner, Eliot

Subject:

K1

Date:

Tuesday, March 15, 2011 3:59:00 PM

Matt – to avoid cut/pasting too much, here's a summary:

Dec 2001 – NRC offered KI to states w/populations w/in 10 mile EPZ of NPPs. Oct 2006 – NRC offered to replace stockpiles that were expiring, on a one-time basis. Some states decided in 2007 to "extend" the shelf life of existing stocks.

### **Current Status on KI Distribution**

Twenty-two states (Alabama, Arizona, California, Connecticut, Delaware, Florida, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Vermont, Virginia, and West Virginia) have requested and/or received potassium iodide tablets.

Arizona, Delaware, Florida, New Jersey, New York, Minnesota, Mississippi, North Carolina, Virginia, and West Virginia have requested and/or received liquid pediatric potassium iodide. I'll try to get you aggregate numbers of how many doses we've distributed over the years.

My office and cell #'s are below. Our OPS CTR OPA line is 301-815-5107.

Dave

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)

(50.k)

Protecting People & the Environment

Couret, Ivonne

To:

Harrington, Holly; McIntyre, David

Subject:

Media Request for Tokyo Team - FW: NRC Team Arrival in Tokyo

Date:

Tuesday, March 15, 2011 5:01:39 PM

From: OPA Resource

Sent: Tuesday, March 15, 2011 2:53 PM

To: Couret, Ivonne

Subject: FW: NRC Team Arrival in Tokyo

From: Eric Weiner [mailto:eric@tbsi-us.com]
Sent: Tuesday, March 15, 2011 12:10 PM

To: OPA Resource

Subject: NRC Team Arrival in Tokyo

### To whom it may concern:

Following up on a voicemail left earlier. Regarding the release put out today on the arrival in Tokyo of the first members of the eight person team; we have teams on the ground and are very interested covering the NRC arrival and movements if possible. This is for planning only and not for broadcast. We would like to know when the NRC team is arriving in Tokyo (more specifics than "Wednesday PM" if possible). Is there a local contact whom I could coordinate with? Thank you. Please let me know as soon as possible.

Thanks.

Eric Weiner
Producer
Tokyo Broadcasting System
Washington, DC Bureau
(202) 393-3801 (O)
(b)(6)

McIntyre, David

To:

Uselding, Lara

Cc:

Harrington, Holly

Subject: Date:

RE: question on Diablo Canyon plant Tuesday, March 15, 2011 7:17:00 PM

Have we told you how much we love you?

From: Uselding, Lara

Sent: Tuesday, March 15, 2011 7:17 PM

To: McIntyre, David Cc: Harrington, Holly

Subject: Re: question on Diablo Canyon plant

Just got this from ivonne and called him- I'm taking care of it. Thx!

Lara Uselding

NRC Region 4 Public Affairs

817-917-0321

From: McIntyre, David To: Uselding, Lara Cc: Harrington, Holly

**Sent**: Tue Mar 15 19:14:26 2011

Subject: FW: question on Diablo Canyon plant

Lara – are you able to handle this? If not we'll try to follow up tomorrow.

Thanks. Dave

From: Harrington, Holly

Sent: Tuesday, March 15, 2011 6:59 PM

To: McIntyre, David

Subject: RE: question on Diablo Canyon plant

I have no clue. They'll have to wait until tomorrow morning unless lara can handle

From: McIntyre, David

Sent: Tuesday, March 15, 2011 6:59 PM

To: Harrington, Holly

Subject: FW: question on Diablo Canyon plant

Since Scott is gone, and this is an EP question, does this sound right to you?

From: OPA Resource

Sent: Tuesday, March 15, 2011 6:23 PM

To: McIntyre, David

**Subject:** FW: question on Diablo Canyon plant

Is he talking about the issue you handled with a few weeks ago?

**From:** Chris Kirkham [mailto:kirkham@huffingtonpost.com]

**Sent:** Tuesday, March 15, 2011 4:59 PM

To: OPA Resource

Subject: question on Diablo Canyon plant

Hello --

I'm tracking a lawsuit that had been filed against the Nuclear Regulatory Commission in the '80s at about the time that Diablo Canyon was licensed.

At that time, the commission had decided not to incorporate an earthquake scenario into the emergency response plans at the plant -- a decision that was later upheld by the U.S. Court of Appeals in D.C.

My understanding is that the situation remains the same -- that there is no specific earthquake contingency fit into the emergency response plans, largely because the NRC is satisfied that the plant is able to withstand an earthquake in the area. I'm making sure this is still correct, and that there hasn't been any public hearing since or major changes to the emergency response that would incorporate earthquakes.

Thanks much for your help.

I'm available at either numbers below all tonight.

All best,

Chris

Chris Kukham | Business Reporter | The Huffington Post | 646.274.2444 (office) | (b)(6) | kirkham@huffingtonpost.com

Uselding, Lara

To:

McIntyre, David; Burnell, Scott; Kammerer, Annie

Subject:

Help with this Question from AP reporter

Date:

Tuesday, March 15, 2011 4:20:43 PM

Would one of you be able to help me here?

From: Blood, Michael [mailto:mblood@ap.org]
Sent: Tuesday, March 15, 2011 3:16 PM

To: Uselding, Lara

Subject: RE: Questions from AP reporter

Lara,

The 2009 NRC report, Tsunami Hazard Assessment at Nuclear Power Plant Sites in the United States of America, NUREG/CR-6966

PNNL-17397, makes a series of recommendations about nuclear power plants and tsunamis. I'd like to determine if these benchmarks have been met by coastal plants and, if not, why not.

From: Uselding, Lara [mailto:Lara.Uselding@nrc.gov]

**Sent:** Tuesday, March 15, 2011 12:47 PM

To: Blood, Michael

Subject: RE: Questions from AP reporter

Michael: Can you email me questions please? I've got several interviews lined up now

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara. Uselding@nrc.gov

(b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Blood, Michael [mailto:mblood@ap.org]

Sent: Monday, March 14, 2011 5:20 PM

To: Uselding, Lara

Subject: Questions from AP reporter

Lara,

Thanks very much for the help with the Diablo Canyon and San Onofre reactors.

As I said, I'm working on a story assessing the safety of the plants in the event a large earthquake takes place in coastal California.

Rgds, and please call with any questions,

Mike

## AP Associated Press

Michael R. Blood Los Angeles (213) 346-3116, office (b)(6)

http://twitter/michaelrbloodap

Founded in 1846, The Associated Press is the world's oldest and largest newsgathering organization. On any given day, more than half the world's population sees news from AP.

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[IP US DISC]msk dccc60c6d2c3a6438f0cf467d9a4938

Uselding, Lara

To:

Brenner, Eliot; Burnell, Scott; Harrington, Holly; McIntyre, David

Cc:

Akstulewicz, Brenda

Subject: Date: FYI- working with LA AP reporter Monday, March 14, 2011 6:35:59 PM

Importance:

High

We just spoke by phone and he is going to email me for starters. He has been tasked with doing a more in-depth story on the California plants and what types of seismic safety issues exist and how we address them. He is going to get more in depth with me tomorrow as it's a longer lead piece

#### Lara

From: Uselding, Lara

Sent: Monday, March 14, 2011 5:23 PM

To: 'Blood, Michael'

Subject: RE: Questions from AP reporter

Hello Michael: I received your email. So to start, let me know what source documents you are thinking you need. A good resource as I mentioned when we spoke is our Public Document Room and you can request help at <a href="mailto:PDR.resource@nrc.gov">PDR.resource@nrc.gov</a> or 301-415-4737. Let me know what you are looking for so I can assist if possible.

Let me know what kinds of questions you have now that I can assist in providing answers.

### Lara

Lara Uselding
U.S. Nuclear Regulatory Commission (NRC)
Public Alfairs - Region IV

Lara.Uselding@nrc.gov

(b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Blood, Michael [mailto:mblood@ap.org] Sent: Monday, March 14, 2011 5:20 PM

To: Uselding, Lara

Subject: Questions from AP reporter

Lara,

Thanks very much for the help with the Diablo Canyon and San Onofre reactors.

As I said, I'm working on a story assessing the safety of the plants in the event a large earthquake takes place in coastal California.

McIntyre, David

To:

Brenner, Eliot; "justin.solomon@nbcuni.com"

Subject:

RE: Fact Question

Date:

Tuesday, March 15, 2011 5:37:00 PM

I believe it's 12 for 18 reax, and that Justin's number on the storage sites sounds right, from all the old Yucca talk.

Sorry to be slow responding.

From: Brenner, Eliot

**Sent:** Tuesday, March 15, 2011 5:34 PM

To: 'justin.solomon@nbcuni.com'

Cc: McIntyre, David

Subject: Re: Fact Question

12 under active consideration for aboit 20 reactors.

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment

301 415 8200

(b)(6)

Sent from my Bláckberry

From: Solomon, Justin (NBCUniversal) < Justin. Solomon@nbcuni.com>

To: Brenner, Eliot Cc: McIntyre, David

**Sent**: Tue Mar 15 17:30:36 2011 Subject: RE: Fact Question

Also looking to get the exact number on current Applications for new reactors. I cant imagine how busy you all are right now, but I am working on a bit of a tight deadline and want to make sure I get this information correct.

Thanks Eliot and David.

-Justin

**From:** Brenner, Eliot [mailto:Eliot.Brenner@nrc.gov]

**Sent:** Tuesday, March 15, 2011 5:06 PM **To:** Solomon, Justin (NBCUniversal)

Cc: McIntyre, David

Subject: Re: Fact Question

Dave: has justin got it right?

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment

301 415 8200

C(b)(6)

## Sent from my Blackberry

From: Solomon, Justin (NBCUniversal) < Justin.Solomon@nbcuni.com>

To: Brenner, Eliot

**Sent:** Tue Mar 15 17:01:14 2011

Subject: Fact Question

Eliot,

I am sure you must be extremely busy right now. I am hoping to find out the most up to date number on Nuclear Storage Sites in the Country right now & The number of states that have them.

I see mixed numbers online and want to get it correct.

Last I saw was 121 sites in 33 states. Is this correct?

# **Justin Solomon** Field Producer CNBC | 900 Sylvan Ave | Englewood Cliffs, NJ 07632

tel 201-735-2319 | www.cnbc.com

justin.solomon@nbcuni.com

From: To:	McIntyre, David  OPA Resource;(b)(6)
Subject:	RE: Response from "Contact the NRC Web Site Staff"
Date:	Tuesday, March 15, 2011 12:33:00 PM
	Message
To: McIntyre	ay, March 15, 2011 12:23 PM e, David
Subject: FW:	: Response from "Contact the NRC Web Site Staff"
At this point	we are not projecting dangerous levels of radiation reaching the West Coast.
David McInty NRC Public A	
From: NRCW Sent: Tuesda To: OPA Res	Message VEB Resource ay, March 15, 2011 9:57 AM source : Response from "Contact the NRC Web Site Staff"
From: Davide Sent: Tuesda To: NRCWEB Subject: Res	Message le Terisacco ((b)(6) ay, March 15, 2011 9:41 AM 3 Resource sponse from "Contact the NRC Web Site Staff" result of your feedback form. It was submitted by
Davide Terisa	on Tuesday, March 15, 2011 at 09:40:52
<ul><li>&gt; Please I w</li><li>&gt; wind forec</li><li>&gt; from Japan</li></ul>	to (b)(6) since  28th of March.  v'd know if it's possible if there are dangerous marine and casts about radioactive material resulting in.  is mail is for you a little strange.
organization:	: private sector
address1: (b)	)(6)
address2:	$\mathcal{O}_{\mathcal{A}}$
city (b)(6)	$\sim$

state: ---

Uselding, Lara

To:

Gene Nelson

Subject:

RE: Japan's nuclear crisis grows more dire after third explosion, reactor fire

Date:

Tuesday, March 15, 2011 5:07:00 PM

Hello Gene: I am still busy with media calls. Please let me know if I can assist you by email.

Lara Uselding U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov

BlackBerry (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Gene Nelson (b)(6)

Sent: Tuesday, March 15, 2011 2:47 AM

**To:** mufsons@washpost.com; harlanc@washpost.com

**Cc:** achenbachj@washpost.com; vastagb@washpost.com; yamamotoa@washpost.com;

ombudsman@washpost.com

Subject: RE: Japan's nuclear crisis grows more dire after third explosion, reactor fire

Importance: High

Dear Steve, Harlan, Joel, Brian, and Akiko: Great article and excellent accompanying graphics from the WaPo website.

http://www.washingtonpost.com/business/economy/nuclear-crisis-deepens-as-third-reactor-loses-cooling-capacity/2011/03/14/ABk6rOV\_story.html

I see that it is the entire above the fold front page article of the 15 March 2011 printed edition.

I think it may be helpful in follow up articles to stress that modern U.S. nuclear power reactors are mandated to have *multiple* extremely powerful diesel backup generators to keep critical cooling systems functioning, even in the event of the loss of grid power. Those backup generators also keep the backup batteries charged, so the batteries can take over for short intervals, which is their purpose. These backup generators must meet rigid Nuclear Regulatory Commission standards to insure reliable, long-term operation. These generators are frequently tested by plant staff to insure reliable plant operation.

I can supply you with detailed specifications, including a photograph, of the diesel generator that is utilized in multiple locations within the turbine building at the Diablo Canyon Nuclear Power Station. This diesel generator is identified on the manufacturer's website as being used at Diablo Canyon. (This manufacturer produces the backup generators used in about 60% of the American nuclear plants.) I can also supply you with copies of many of the detailed standards that this unit must meet.

To summarize, this unit is similar in size to the diesel powered engine and generator of a

train locomotive, as is correctly noted in your article. The continuous rated power output is **2,650,000** watts. (This would be enough power to run 120 homes each steadily consuming 20,000 watts.) The 16 cylinder unit weighs about **42,000** pounds. This unit is bolted to the rigid metal support structure of the turbine building. (To compare and contrast with a portable generator unit for brief home power outages might be rated a continuous output of 2,000 watts and weigh about 300 pounds.)

In my letter to the editor submitted a day ago which many of you have seen, I also noted some of the additional safety systems found in nuclear power plants such as Diablo Canyon that make nuclear power much safer, even in seismic zones. For balance, I hope that some of these safety systems can be described in your follow-on articles. I'm available as a resource and I also have other contacts within the nuclear industry.

Thanks again,			
Gene Nelson, Ph.D.	Arlington, VA	(b)(6)	· · · · · · · · · · · · · · · · · · ·
	l	(2)(0)	$\neg \supset$

7

Uselding, Lara

To:

McIntyre, David; Harrington, Holly; Burnell, Scott; Couret, Ivonne

Cc: Subject: Akstulewicz, Brenda; Brenner, Eliot See Blog entry on phony map

Date:

Tuesday, March 15, 2011 2:07:10 PM

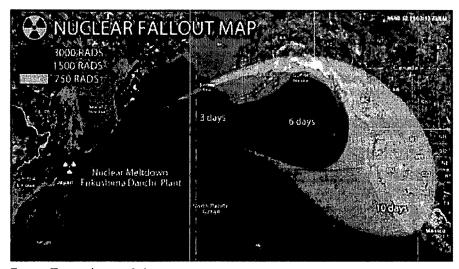
More reports of the bogus map circulating...now with an NRC logo Here's a start that could accompany bogus map which I've attached:

#### MYTH BUSTER: BOGUS MAP CIRCULATING ONLINE

NRC monitoring Japan incident - not expecting harmful levels of radioactivity

The following bogus map has been circulating online and causing citizens to be confused and concerned about its authenticity. The NRC has not issued warnings nor maps of any kind and is continuing to monitor for radioactive releases and to be prepared to predict their path. Fortunately, all the available information at this time indicates weather conditions have taken the small releases from the Fukushima reactors out to sea away from the population.

And, importantly, given the thousands of miles between Japan and us – including Hawaii, Alaska, the U.S. territories and the U.S. West Coast – we are not expecting to experience any harmful levels of radioactivity here. We would like to repeat — we are not expecting to experience any harmful levels of radioactivity here.



From: Tannenbaum, Anita

Sent: Tuesday, March 15, 2011 12:40 PM

To: Uselding, Lara

Subject: Telephone Message....

David Meserve (Concerned Citizen)

(b)(6)

There is a map on the internet showing high levels of radiation coming to the US and it has the NRC seal. He thinks the map is a fraud and wanted to report it. The map is on 000/200 the following websites:

Therealnews.com

Commondreams.org (video on top right corner)

He would like to speak to someone about this.

Thanks, Anita T.

#### Uselding, Lara

From:

Uselding, Lara

Sent:

Tuesday, March 15, 2011 4:08 PM

To:

'Gene Nelson'

Subject:

RE: Japan's nuclear crisis grows more dire after third explosion, reactor fire

Hello Gene: I am still busy with media calls. Please let me know if I can assist you by email.

Lara Useldina

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara. Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Gene Nelson (b)(6)

Sent: Tuesday, March 15, 2011 2:47 AM

To: mufsons@washpost.com; harlanc@washpost.com

Cc: achenbachi@washpost.com; vastaqb@washpost.com; yamamotoa@washpost.com; ombudsman@washpost.com

Subject: RE: Japan's nuclear crisis grows more dire after third explosion, reactor fire

Importance: High

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http://www.washingtonpost.com/business/economy/nuclear-crisis-deepens-as-third-reactor-loses-coolingcapacity/2011/03/14/ABk6rOV story.html

I see that it is the entire above the fold front page article of the 15 March 2011 printed edition.

I think it may be helpful in follow up articles to stress that modern U.S. nuclear power reactors are mandated to have *multiple* extremely powerful diesel backup generators to keep critical cooling systems functioning, even in the event of the loss of grid power. Those backup generators also keep the backup batteries charged, so the batteries can take over for short intervals, which is their purpose. These backup generators must meet rigid Nuclear Regulatory Commission standards to insure reliable, long-term operation. These generators are frequently tested by plant staff to insure reliable plant operation.

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with a portable generator unit for brief home power outages might be rated a continuous output of 2,000 watts and weigh about 300 pounds.)

In my letter to the editor submitted a day ago which many of you have seen, I also noted some of the additional safety systems found in nuclear power plants such as Diablo Canyon that make nuclear power much safer, even in seismic zones. For balance, I hope that some of these safety systems can be described in your follow-on articles. I'm available as a resource and I also have other contacts within the nuclear industry.

I hanks again,		
Gene Nelson, Ph.D.	(b)(6)	(b)(6)

Taylor, Robert

To: Cc: Harrington, Holly Shoop, Undine

Subject:

RE: Potential OPA Questions.docx

Date:

Tuesday, March 15, 2011 1:14:01 PM

Will do. Have I seen Undine's questions? Are they the 4 added to the end of the bigger Chairman questions?

From: Harrington, Holly

Sent: Tuesday, March 15, 2011 1:12 PM

To: Taylor, Robert

Subject: RE: Potential OPA Questions.docx

Correct answer to foregn travel, not our place. My changes to this one:

1. My family has planned a vacation to (b)(6) next week – is it safe to go, or should we cancel our plans?

Repeat our overall message about not affecting U.s. and then say: changes to travel is a personal decision. We are unaware of any travel restriction, that the events in Japan warrant any travel restrictions within the United States or its territories.

We'll marry these with Undine questions for the public. Yes?

From: Taylor, Robert

Sent: Tuesday, March 15, 2011 1:02 PM

To: Harrington, Holly

Subject: Potential OPA Questions.docx

Here are the responses I drafted to the questions Dave thought up. I added the last one regarding travel to Asia based on the email you sent me. I really don't think it is our place to speak regarding foreign travel. Your thoughts?

I plan to maintain this bank of questions and add as anyone from OPA deems necessary.

Milligan, Patricia

To:

Harrington, Holly; McDermott, Brian; Jones, Cynthia; Morris, Scott

Subject:

Re: Script for internal call center

Date:

Tuesday, March 15, 2011 10:20:55 AM

We just published the risk communication nureg with its 400 questions. We should start there first Sent from my NRC Blackberry Patricia A Milligan, CHP RPh

(b)(6)

**From**: Harrington, Holly **To**: Milligan, Patricia

**Sent:** Mon Mar 14 23:47:34 2011 **Subject:** Script for internal call center

We're anticipating we're going to start getting a lot of public calls of general anxiety/concern and we're going to start up an internal call center to take those calls from the HOOs and OPA. I've asked the protective measures chief today to get us some "scripts' that we can use. Anything you can do to facilitate that would be appreciated . . .

OST01 HOC

Sent:

Tuesday, April 26, 2011 2:24 PM

To:

FOIA Response.hoc Resource

Subject: Attachments:

FW: Revised ET schedule through May 28 ET Directors Schedule through May 27.docx

From: Johnson, Michael

Sent: Tuesday, April 26, 2011 6:40 AM

To: OST01 HOC

Subject: FW: Revised ET schedule through May 28

LATEST.

From: Holahan, Patricia

Sent: Monday, April 25, 2011 4:19 PM

To: Dudes, Laura; Tappert, John; Ordaz, Vonna; Correia, Richard; Coe, Doug; Bergman, Thomas; Chokshi, Nilesh; Lombard, Mark; Holonich, Joseph; Brown, Frederick; Skeen, David; Holian, Brian; Mohseni, Aby; Camper, Larry; Webber,

Robert; McConnell, Keith; Reis, Terrence; Layton, Michael; Holahan, Patricia; Giitter, Joseph; Tracy, Glenn

Cc: Johnson, Michael; Givvines, Mary; Leeds, Eric; Moore, Scott; Lewis, Robert; Flanders, Scott; Haney, Catherine; Kokajko, Lawrence; Ruland, William; Sheron, Brian; Uhle, Jennifer; McDermott, Brian; Wiggins, Jim; Evans, Michael;

Marshall, Jane

Subject: Revised ET schedule through May 28

I have made some switches in the schedule. Right now I only have a few holes. Dave, I put you in this week for Laura.

Original message: Your names were all given as potential candidates for the ET schedule. I have placed your names in the schedule trying not to have one office support all three shifts in one day, etc. Please take a look at the revised schedule and get back to me ASAP if there are problems (such as leave, etc).

Thanks, Trish

Patricia K. Holahan
Director, Division of Security Operations
Office of Nuclear Security and Incident Response
U.S. Nuclear Regulatory Commission
Washington, DC 20555

(301) 415-6828 (work)

(b)(6)

(cell)

patricia.holahan@nrc.gov

### **ET Director Schedule**

### April 24- April 30, 2011

Shift	4/24 (Sun)	4/25 (Mon)	4/26 (Tues)	4/27 _(Wed)	4/28 (Thur)	4/29 (Fri)	4/30 (Sat)
7am-3pm	J. Uhle	J. Uhle	J. Uhle	L. Kokajko	D. Skeen	D. Skeen	D. Skeen
3pm-11pm	C. Carpenter	C. Carpenter	C. Carpenter	R. Correia	R. Correia	R. Correia	R. Correia
11pm-7am	M. Johnson	M. Johnson	M. Johnson	G. Tracy	G. Tracy	G. Tracy	G. Tracy

## May 1 – May 7, 2011

Shift	5/1 (Sun)	5/2 (Mon)	5/3 (Tue)	5/4 (Wed)	5/5 (Thurs)	5/6 (Fri)	5/7 (Sat)
* * * * * * * * * * * * * * * * * * * *							1,00
7am-3pm	D. Skeen	D. Skeen	F. Brown	F. Brown	F. Brown	F. Brown	F. Brown
3pm-11pm	R. Correia	J. Holonich	J. Holonich	J. Holonich	J. Holonich	J. Holonich	T. Bergman
11pm-7am	G. Tracy	TBD	TBD ·	TBD	TBD	TBD	M. Lombard

## May 8 - May 14, 2011

Shift	5/8 (Sun)	5/9 (Mon)	5/10 (Tue)	5/11 (Wed)	5/12 (Thurs)	5/13 (Fri)	5/14 (Sat)
t again a si	in the second						2,2
7am-3pm	R. Webber	R. Webber	R. Webber	R. Webber	R. Webber	J. Tappert	J. Tappert
3pm-11pm	T. Bergman	T. Bergman	T. Bergman	T. Bergman	J. Giitter	J. Giitter	J. Giitter
11pm-7am	M. Lombard	M. Lombard	M. Lombard	M. Lombard	D. Coe	D. Coe	D. Coe

# May 15 – May 21, 2011

Shift	5/15 (Sun)	5/16 (Mon)	5/17 (Tue)	5/18 (Wed)	5/19 (Thurs)	5/20 (Fri)	5/21 (Sat)
7am-3pm	J. Tappert	J. Tappert	J. Tappert	V. Ordaz	V. Ordaz	V. Ordaz	V. Ordaz
3pm-11pm	J. Giitter	J. Giitter	A. Mohseni	A. Mohseni	A. Mohseni	A. Mohseni	A. Mohseni
11pm-7am	D. Coe	D. Coe	T. Reis	T. Reis	T. Reis	T. Reis	T. Reis

# May 22 – May 28, 2011

Shift	5/22 (Sun)	5/23 (Mon)	5/24 (Tue)	5/25 (Wed)	5/26 (Thurs)	5/27 (Fri)	5/28 (Sat)
	14 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -					ì	
7am-3pm	V. Ordaz	M. Layton	M. Layton	M. Layton	M. Layton	M. Layton	F. Brown
3pm-11pm	B. Holian	B. Holian	B. Holian	B. Holian	B. Holian	P. Holahan	P. Holahan
11pm-7am	N. Chokshi	N. Chokshi	N. Chokshi	N. Chokshi	TBD	V. Ordaz	V. Ordaz

Landau, Mindy

To:

Weber, Michael; Borchardt, Bill; Virgilio, Martin; Ash, Darren; Muessle, Mary

Cc:

Rihm, Roger; Ellmers, Glenn; Harrington, Holly

Subject:

Fw: Senate Hearing on Thursday

Date:

Tuesday, March 15, 2011 7:01:30 PM

Looks like the original email was wrong - this Boxer hearing is Wednesday

Sent from my NRC Blackberry

Mindy Landau

(b)(6)

Mindy.Landau@nrc.gov

From: Schmidt, Rebecca To: Landau, Mindy

Sent: Tue Mar 15 18:53:20 2011

Subject: Re: Senate Hearing on Thursday

Hearing sorta but it is wednesday afternoon.

From: Landau, Mindy

To: Decker, David; Powell, Amy; Schmidt, Rebecca

Cc: Rihm, Roger

Sent: Tue Mar 15 18:50:48 2011

Subject: Fw: Senate Hearing on Thursday

Can you confirm? Is this a new briefing or hearing?

Sent from my NRC Blackberry

Mindy Landau

(b)(6)

Mindy.Landau@nrc.gov

From: Harrington, Holly

To: Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Hayden, Elizabeth; McIntyre, David; Chandrathil, Prema; Dricks, Victor; Hannah, Roger; Ledford, Joey; Mitlyng, Viktoria; Screnci, Diane; Sheehan, Neil;

Uselding, Lara **Cc**: Landau, Mindy

**Sent**: Tue Mar 15 17:47:20 2011 **Subject**: Senate Hearing on Thursday

New: Nuclear Crisis in Japan

Senate Environment and Public Works Committee (Chairwoman Boxer, D-Calif.) will hold a briefing on the ongoing crisis associated with nuclear power facilities in Japan, including potential ramifications for the United States. 3:30 p.m., 406 Dirksen

Brenner, Eliot

To:

Coggins, Angela; Harrington, Holly

Cc:

Powell, Amy

Subject: Date: Re: a favor... Tuesday, March 15, 2011 4:43:24 PM

Sorry for delay. Unsure. They are clearly from a frequent coRrespondent. Will look.

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment

301 415 8200

(b)(6)

Sent from my Blackberry

From: Coggins, Angela

To: Brenner, Eliot; Harrington, Holly

Cc: Powell, Amy

Sent: Tue Mar 15 14:25:38 2011

Subject: a favor...

I have a big favor to ask... Can you check to see if these attached questions are already included in the questions and answers, and if not, add them to the list and prepare some responses for us? Thanks so much!!

Angela B. Coggins
Policy Director
Office of Chairman Gregory B. Jaczko
U.S. Nuclear Regulatory Commission
301-415-1828/angela.coggins@nrc.gov

Hannah, Roger

To:

McCree, Victor; Wert, Leonard; Rich, Daniel; Croteau, Rick; Jones, William

Cc:

Brenner, Eliot; Harrington, Holly; Burnell, Scott; Ledford, Joey; Morrissey, Thomas

Subject:

CR3 News Release

Date:

Tuesday, March 15, 2011 3:56:59 PM

Attachments:

FINAL CR3 News Release 03 15 2011 with draft watermark.pdf

image001.png

Progress Energy plans to issue this release in a few minutes....

### Roger Hannah, APR

Senior Public Affairs Officer Region II -- Atlanta, Ga. Office - 404-997-4417

(b)(6)

roger.hannah@nrc.gov



00/2/3



### news release

# Progress Energy provides update on Crystal River Nuclear Plant outage Repair work and restart plans temporarily suspended

CRYSTAL RIVER, Fla. (March 15, 2011) – Progress Energy Florida has notified the Nuclear Regulatory Commission (NRC) and the Florida Public Service Commission (FPSC) that final retensioning of tendons within the Crystal River Nuclear Plant reactor building has been temporarily suspended while engineers investigate information from monitoring equipment at the repair site. The suspension will delay the planned April restart of the plant.

There are indications of additional delamination (or separation) resulting from the repair work. Engineers are evaluating the situation and will conduct a thorough assessment of repair options and the impact to the plant's restart plans. The plant has been shut down since September of 2009 and there continues to be no threat to public health and safety.

"Our engineers will thoroughly evaluate all potential repair options. This has been a first-of-a-kind repair and we will continue to move forward cautiously and deliberately," said Vincent Dolan, president and chief executive officer of Progress Energy Florida. "Our first priority remains protecting public health and safety. The plant remains shut down and is in a safe condition."

A portion of the building was damaged in late 2009 during the process of creating an opening in the structure to remove and replace the steam generators inside. The unit was already shut down for refueling and maintenance at the time the damage was found. The damage was delamination (or separation) of a portion of the concrete at the periphery of the containment building.

Progress Energy (NYSE: PGN), headquartered in Raleigh, N.C., is a Fortune 500 energy company with more than 22,000 megawatts of generation capacity and approximately \$10 billion in annual revenues. Progress Energy includes two major electric utilities that serve about 3.1 million customers in the Carolinas and Florida. The company has earned the Edison Electric Institute's Edison Award, the industry's highest honor, in recognition of its operational excellence, and was the first utility to receive the prestigious J.D. Power and Associates Founder's Award for customer service. The company is pursuing a balanced strategy for a secure energy future, which includes aggressive energy-efficiency programs, investments in renewable energy technologies and a state-of-the-art electricity system. Progress Energy celebrated a century of service in 2008. Visit the company's website at <a href="https://www.progress-energy.com">www.progress-energy.com</a>.

Sheehan, Neil

To: Subject: Brenner, Eliot; Burnell, Scott; Couret, Ivonne RE: CNN call for interview - May piece

Date:

Friday, April 15, 2011 3:31:15 PM

I can appreciate that. It's a small blaze out in the countryside versus the Chicago Fire.

From: Brenner, Eliot

Sent: Friday, April 15, 2011 3:30 PM

To: Sheehan, Neil; Burnell, Scott; Couret, Ivonne Subject: RE: CNN call for interview - May piece

Thanks re the APP stuff. I haven't really been able to focus on anything other than the big three – Japan, fire, and when did the NRC quit beating its wife.

From: Sheehan, Neil

Sent: Friday, April 15, 2011 3:29 PM

To: Brenner, Eliot; Burnell, Scott; Couret, Ivonne Subject: RE: CNN call for interview - May piece

Bill might make more sense in this case. We could prep him for that.

I also think we need to prepare a response to the recent APP stories and editorial on tritium issues. I'd be willing to take a crack at that. Our perspective did not get its due.

From: Brenner, Eliot

**Sent:** Friday, April 15, 2011 3:27 PM To: Burnell, Scott; Couret, Ivonne

Cc: Sheehan, Neil

Subject: RE: CNN call for interview - May piece

Sounds to me like something we could do with a statement, or throw bill dean into the fray.

From: Burnell, Scott

Sent: Friday, April 15, 2011 3:07 PM **To:** Brenner, Eliot; Couret, Ivonne

Cc: Sheehan, Neil

**Subject:** RE: CNN call for interview - May piece

Spoke to Dana – she wants to interview the Chairman (early May is her best estimate on when they'd be ready), and I explained that was highly unlikely given his workload. It's the same old tritium "why aren't you fining them, you're relying too much on voluntary measures" sort of routine we've heard before. She specifically mentioned Oyster Creek and the NJ DEP action, and I responded out information suggested the drinking water aquifer would be unaffected but she should talk to Neil for more details. I'm waiting for an 000/214 e-mail from her with more on what they want to cover.

From: Brenner, Eliot

Sent: Friday, April 15, 2011 1:43 PM

To: Couret, Ivonne

Cc: Sheehan, Neil; Burnell, Scott

Subject: Re: CNN call for interview - May piece

Why don't you ask scott to talk with her. I would be interested in finding out if anyone has been

whispering in her ear to pique her interest.

Eliot Brenner

Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment

301 415 8200

C(b)(6)

Sent from my Blackberry

**From**: Couret, Ivonne **To**: Brenner, Eliot **Cc**: Sheehan, Neil

**Sent**: Fri Apr 15 13:25:30 2011

Subject: CNN call for interview - May piece

Eliot - Dana Garrett for CNN called when I was on leave said she spoke to both Veronika and Neil about a story they are trying to do NOT about Japan but issues with safety at US nuclear plants, groundwater leaks and recent taskforce informational memo. Her phone number is 212-275-7983. Please advise how I should respond. Ivonne

Ivonne L. Couret Public Alfairs Officer Office of Public Alfairs Media Desk opa.resource@nrc.gov 301-415-8200

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

McIntyre, David

To: Subject: <u>Couret, Ivonne</u> RE: Human Interest Piece

Date:

Tuesday, March 15, 2011 4:57:00 PM

Yes, I'll work with her.

From: Couret, Ivonne

Sent: Tuesday, March 15, 2011 4:56 PM

To: McIntyre, David

Subject: FW: Human Interest Piece

Can you help on this...

From: Janbergs, Holly

Sent: Tuesday, March 15, 2011 2:46 PM

To: Couret, Ivonne

Subject: Human Interest Piece

Selena Ross from the Daily is working on a human interest piece on the latest team that was assembled to head over the Japan. She basically just wants a quote from the agency discussing whether they chose to go over themselves, they volunteered, were selected, etc., and whether the process of selection was difficult.

(b)(6)	<del></del>		

Beth Janbergs Public Affairs Assistant 301-415-8211

SIL

From:

LIA03 Hoc

To:

CherryRC@state.gov; Ulses, Anthony; Trapp, James

Subject: Date: JAPANESE TRAVELER INFORMATION.doc Tuesday, March 15, 2011 7:51:14 PM

Attachments:

JAPANESE TRAVELER INFORMATION.doc

Undated to reflect Japan time,	All travelers staying at
(b)(6)	
(6)(0)	

Thanks!

-Jenny

LIA03 Hoo

To:

Ulses, Anthony; Trapp, James; CherryRC@state.gov

Subject: Date: JAPANESE TRAVELER INFORMATION.doc Tuesday, March 15, 2011 7:19:27 PM

Attachments:

JAPANESE TRAVELER INFORMATION.doc

Please protect this information as PII. Note, the flight was delayed leaving Heathrow and so doesn't get in until 10:00 EST.

Thanks!

-Jenny

### NRC TRAVELER INFORMATION IN JAPAN 3/15/2011 4:44 PM

#### **NRC TRAVELERS IN JAPAN**

	Phone Number	Email	Flight Arrival (in Eastern Daylight Time)
Jim Trapp			Arrived
Chief,		(b)(6)	
Tony Ulses Chief, Reactor Systems Branch		Anthony.ulses@nrc.gov	Arrived
Chuck Casto Deputy Regional Administrator, Region II		Chuck.casto@nrc.gov	12:30 AM Wednesday
John Monninger Deputy Chief-of-Staff, Office of the Chairman		Jahn.monninger@nrc.gov	10:00 PM Tuesday
Tony Nakanishi Reactor Systems Engineer,		Tony.nakanishi@nrc.gov	10:00 PM Tuesday
Reactor Systems Branch Tim Kolb		<u> </u>	
Senior Reactor Engineer, Operator Licensing and Training Branch		Timothy.kolb@nrc.gov	10:00 PM Tuesday
Jack Foster Chief, Licensing Branch (FSME)		Jack.foster@nrc.gov	10:00 PM Tuesday
Bill Cook Senior Reactor Analyst		William.cook@nrc.gov	10:00 PM Tuesday
Richard Devercelly Reactor Technology Instructor, Technical Training Center		Richard.devercelly@nrc.gov	3:15 AM Wednesday
Kirk Foggie International Relations Officer		Kirk.foggie@nrc.gov	10:00 PM Tuesday
Brooke Smith International Policy Analyst	(b)(6)	Brooke.smith@nrc.gov	10:00 PM Tuesday

#### **HOTEL IN TOKYO**

	(b)(6)		

#### FLIGHT INFORMATION FOR NRC PERSONNEL (ASIDE FROM CASTO)

DEPARTURE: MONDAY 14 MAR ARRIVAL: TUESDAY 15 MAR

UNITED AIRLINES UA 0924 Duration: 07hr(s):10min(s)

IAD WASHINGTON DULLES, DC -> LHR LONDON HEATHROW, UNITED KINGDOM

Departing At: 11:05pm (Mon, Mar 14) Arriving At: 10:15am (Tue, Mar 15)

DEPARTURE: TUESDAY 15 MAR ARRIVAL: WEDNESDAY 16 MAR

BRITISH AIRWAYSBA 0005 Duration: 11hr(s): 35min(s)

LHR LONDON HEATHROW, UNITED KINGDOM -> NRTTOKYO NARITA, JAPAN

Departing At: 12:35pm (Tue, Mar 15)

Arriving At: 09:10am (Wed, Mar 16)

CASTO FLIGHT INFORMATION
ATL ATLANTA, GA
DFW DALLAS FT WORTH TX
AMERICAN AIRLINES
AA 1329
Departing At 08:05pm
Arriving At 09:35pm
Duration There are use

Tuesday Mar 15
DFW Call ASSIT MORE LITE
NRT TORY COLASITA, ACCORD
AMERICAN AIRLINES
AA 0175
Departing At 10:10am Tue, Mar 15
Arriving At 01:30pm Wed, Mar 16

Cherry, Ronald C

To:

JapanEmbassy, TaskForce; Duncan, Aleshia D; DARTDOELiaison1@ofda.gov; Trapp, James; Ulses, Anthony

Cc:

Morales, Russell A; Mears, Jeremy M

Subject: Date: RE: 19:00 SPEEDI Data attached Tuesday, March 15, 2011 8:46:06 AM

Please include Russ Morales and Jeremy Mears on distribution for all monitoring data, with cc's to the rest of those above.

Thanks very much!

Ron

This email is UNCLASSIFIED

----Original Message-----

From: JapanEmbassy, TaskForce

Sent: Tuesday, March 15, 2011 8:57 PM

To: Duncan, Aleshia D; 'DARTDOELiaison1@ofda.gov'; Cherry, Ronald C; 'James.trapp@nrc.gov';

'Anthony.Ulses@nrc.gov'

Subject: 19:00 SPEEDI Data attached

Importance: High

DOE and NRC colleagues,

Please find 19:00 SPEEDI data; sorry for the delay.

**SBU** 

This email is UNCLASSIFIED

Naomi Walcott Emergency Action Officer Japan Emergency Command Center U.S. Embassy Tokyo

----Original Message-----

From: JapanEmbassy, TaskForce

Sent: Tuesday, March 15, 2011 8:43 PM

(b)(6)

Subject: 19:00 SPEEDI Data attached

Naomi Walcott Emergency Action Officer Japan Emergency Command Center U.S. Embassy Tokyo

SBU
This email is UNCLASSIFIED-----Original Message----From: nustec [mailto:spd01@nustec.or.jp]
Sent: Tuesday, March 15, 2011 7:42 PM
(b)(6)

Subject: 19時SPEEDI単位量放出図形イメージの送付

#### 関係者 位

お世話になっております。 子力安全 術センター 水野です。 3/15 19時のSPEEDI単位量放出図形のイメージデータを送付致します。 ご確認のほど、よろしくお願い致します。

Tour	Traps, James				
To:	LIAO2 Hoc				
Subject: Date:	RE: Message from Lt. Cmdr. Joy from NAC for NRC - symmetry devices received? Tuesday, March 15, 2011 10:39:00 PM				
Could you call the Lt. Cmdr. back and see what's up. Thanks					
From: LIA02	2 Hoc				
Sent: Tuesd	day, March 15, 2011 9:45 PM				
	oc; Trapp, James; LIA01 Hoc; LIA07 Hoc				
<b>Subject:</b> RE	E: Message from Lt. Cmdr. Joy from NAC for NRC - symmetry devices received?				
Yes, I think	we can assume that.				
From: LIA08	8 Hoc				
	day, March 15, 2011 9:45 PM				
	lames; LIA01 Hoc; LIA02 Hoc; LIA07 Hoc				
Subject: RE	E: Message from Lt. Cmdr. Joy from NAC for NRC - symmetry devices received?				
Dosimetry?					
,					
From: Trap					
	day, March 15, 2011 9:38 PM				
	oc; LIA02 Hoc; LIA07 Hoc; LIA08 Hoc				
<b>Subject:</b> FV	V: Message from Lt. Cmdr. Joy from NAC for NRC - symmetry devices received?				
	·				
Anybody kno	ow anything about this? Thanks				
, ,					
From:	(b)(6)				
	day, March 15, 2011 9:38 PM				
To: Trapp, J					
	v: Message from Lt. Cmdr. Joy from NAC for NRC - symmetry devices received?				
	The body of the state of the st				
Sent from m	y Verizon Wireless BlackBerry				
From: "Hind	ds, Lynda J" <hindslj@state.gov></hindslj@state.gov>				
	16 Mar 2011 10:30:12 +0900				
To: Cherry,	Ronald C <cherryrc@state.gov>; Duncan, Aleshia D<duncanad@state.gov>;</duncanad@state.gov></cherryrc@state.gov>				
<james.trap< td=""><td>p@nrc.gov&gt;; (b)(6) /Anthony.Ulses@nrc.gov&gt;;</td></james.trap<>	p@nrc.gov>; (b)(6) /Anthony.Ulses@nrc.gov>;				
	.iaison1@ofda.gov>; Uchida, Koichi <uchidakx@state.gov>; Tamada,</uchidakx@state.gov>				
	madaYX@state.gov>; Nesheiwat, Julia <nesheiwatj@state.gov>; Morales, Russell</nesheiwatj@state.gov>				
	A@state.gov>; Mears, Jeremy M <mearsjm@state.gov> (b)(6)</mearsjm@state.gov>				
	essage from Lt. Cmdr. Joy from NAC for NRC - symmetry devices received?				
	addigod an onian boy nomina to this or opinition proceed toochiod.				
It Conda	love at MAC in Volkaguika called to ack if NDC has received its summether				
	Joy at NAC in Yokosuka called to ask if NRC has received its symmetry				
aevices. H	lis number is (b)(6)				
Lumalm Llima	40				
Lynda Hind	JS				
	tant to Ambassador John V. Roos				
U.S. Emba					
	asaka, Minato-ku				
<u>Tokyo 107</u> -	$\frac{-8420}{}$				

(b)(6)

Twitter.com/AmbassadorRoos

This email is UNCLASSIFIED.

LIA02 Hoc

To:

Trapp, James

Subject:

RE: 1330 EDT (March 15, 2011) USNRC Earthquake/Tsunami SitRep

Date: Attachments: Tuesday, March 15, 2011 6:26:36 PM JAPANESE TRAVELER INFORMATION.DOC

Hi Jim,

I think you are asked around for this. Can you give me a call on my bb this morning (b)(6)

Danielle

From: LIA09 Hoc

**Sent:** Tuesday, March 15, 2011 6:25 PM

To: LIA02 Hoc

Subject: FW: 1330 EDT (March 15, 2011) USNRC Earthquake/Tsunami SitRep

From: Trapp, James

Sent: Tuesday, March 15, 2011 6:17 PM

To: LIA07 Hoc

Cc: LIA09 Hoc; LIA11 Hoc; LIA01 Hoc; HOO Hoc

Subject: RE: 1330 EDT (March 15, 2011) USNRC Earthquake/Tsunami SitRep

Could you pass along the details of all nine NRC members that are coming to Tokyo. Thanks

From: LIA07 Hoc

Sent: Tuesday, March 15, 2011 1:55 PM

To: LIA07 Hoc

Cc: LIA09 Hoc; LIA11 Hoc; LIA01 Hoc; HOO Hoc

Subject: 1330 EDT (March 15, 2011) USNRC Earthquake/Tsunami SitRep

Attached, please find a 1330 EDT situation report from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami on March 15, 2011. This Update includes information on dose rates near Fukushima Daiichi, Fukushima Daiichi plant parameters, and NRC PMT hypothetical Worst Case Analyses.

Please note that this information is "Official Use Only" and is only being shared within the federal family.

Please call the Headquarters Operations Officer at 301-816-5100 with questions. -Jim

Jim Anderson Office of Nuclear Security and Incident Response US Nuclear Regulatory Commission james.anderson@nrc.gov

LIA07.HOC@nrc.gov (Operations Center)

#### NRC TRAVELER INFORMATION IN JAPAN

#### **NRC TRAVELERS IN JAPAN**

Name	Phone Number	Email ·	Flight Arrival (in Eastern Daylight Time)
Jim Trapp		•	Arrived
Chief, /		(b)(6)	
Tony Ulses		Anthony.ulses@nrc.gov	Arrived
Chief, Reactor Systems Branch			
Chuck Casto		Chuck.casto@nrc.gov	12:30 AM Wednesday
Deputy Regional Administrator,			
Region II			
John Monninger		John.monninger@nrc.gov	8:10 PM Tuesday
Deputy Chief-of-Staff, Office of the			
Chairman			
Tony Nakanishi		Tony.nakanishi@nrc.gov	8:10 PM Tuesday
Reactor Systems Engineer,		AND THE PARTY OF T	
Reactor Systems Branch			
Tim Kolb		Timothy.kolb@nrc.gov	8:10 PM Tuesday
Senior Reactor Engineer, Operator			
Licensing and Training Branch			
Jack Foster		Jack.foster@nrc.gov	8:10 PM Tuesday
Chief, Licensing Branch (FSME)			
Bill Cook		William.cook@nrc.gov	8:10 PM Tuesday
Senior Reactor Analyst			
Richard Devercelly		Richard.devercelly@nrc.gov	3:15 AM Wednesday
Reactor Technology Instructor,			
Technical Training Center			
Kirk Foggie		Kirk.foggie@nrc.gov	8:10 PM Tuesday
International Relations Officer			
Brooke Smith		Brooke.smith@nrc.gov	8:10 PM Tuesday
International Policy Analyst	(b)(6)		
HOTEL IN TOKYO			
THO TEE IN TORTO			
(b)(6)			•

#### FLIGHT INFORMATION FOR NRC PERSONNEL (ASIDE FROM CASTO)

DEPARTURE: MONDAY 14 MAR ARRIVAL: TUESDAY 15 MAR

UNITED AIRLINES UA 0924 Duration: 07hr(s):10min(s)

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BRITISH AIRWAYSBA 0005 Duration: 11hr(s): 35min(s)

LHR LONDON HEATHROW, UNITED KINGDOM -> NRTTOKYO NARITA, JAPAN

Departing At: 12:35pm (Tue, Mar 15) Arriving At: 09:10am (Wed, Mar 16) CASTO FLIGHT INFORMATION ATL ATLANTA, GA DFW DALLAS FT WORTH, TX AMERICAN AIRLINES AA 1329 Departing At 08:05pm Arriving At 09:35pm Duration02hr(s):30min(s)

Tuesday Mar 15
DFW DALLAS FT WORTH, TX
NRT TOKYO NARITA, JAPAN
AMERICAN AIRLINES
AA 0175
Departing At 10:10am Tue, Mar 15
Arriving At 01:30pm Wed, Mar 16

 $\lim_{r\to\infty} (x,r) \leq r p$ 

From: To: Cherry, Ronald C Trapp, James

Subject:

RE: Engineer from NISA

Date:

Tuesday, March 15, 2011 7:53:07 PM

Thanks. Jim, I suggest you call him. Ask him what he needs. We've been asked for another truck, and personnel with HAZMAT gear. Is there anything else?

Ron

This email is UNCLASSIFIED.

From: Trapp, James [mailto:James.Trapp@nrc.gov]

Sent: Wednesday, March 16, 2011 8:50 AM

To: Cherry, Ronald C

Subject: Engineer from NISA

Mr. Yasui - (cell

Primary Engineering Contact - NISA

Bock, Yoni

To:

Sink, Amy (8F5) [USAID]; (b)(6)

Cc:

Hughart, Joseph (FOH); Napp: James; Ulses, Anthony; WARTNRCLiaison1; ofdaPACOM; Brown, Courtney;

Brown, Courtney (RDMA/OFDA) [USAID]

Subject:

Arrival of DOE - latest info

Date:

Tuesday, March 15, 2011 5:54:07 AM

Amy/Nick,

Latest info on the arrival of the DOE team is 0145 (1:45AM).

Amy -> Nick has arranged for the person (name TBD) to be transported upon arrival to Tokyo and to the Hotel Akuro.

Nick -> Please have the person covering for you email the individuals above to report that the person has been picked up and is en route to Tokyo.

Much thanks!

Yoni

Mr. Yonahton Bock

Military Liaison Officer / Civ-Mil Coordinator

Japan Earthquake/Tsunami DART

Email: ybock@usaid.gov

Blackberry: (b)(6)

DNS at USFJ (b)(6)

Calling Yokota from non DSN: (0) 425 522-511,

ext 54329, 52469, 53137

Current Location: Yokota AB, Tokyo, Japan

#### Kock, Andrea

From:

Caputo, Annie (EPW) [Annie\_Caputo@epw.senate.gov]

Sent:

Tuesday, March 15, 2011 8:44 PM

To:

Nieh, Ho

Subject:

RE: Reactions from Policymakers on the Hill:

My pleasure.

From: Nieh, Ho [mailto:Ho.Nieh@nrc.gov]
Sent: Tuesday, March 15, 2011 8:44 PM

To: Caputo, Annie (EPW)

Subject: Re: Reactions from Policymakers on the Hill:

Very helpful Annie. Thanks.

Ho

Sent via BlackBerry

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission
(301) 415-1811 (office)
(b)(6)

(301) 415-1757/(fax) ho.nieh@nrc.gov

From: Caputo, Annie (EPW) < Annie\_Caputo@epw.senate.gov>

To: Nieh, Ho

**Sent**: Tue Mar 15 20:42:16 2011

**Subject**: Reactions from Policymakers on the Hill:

Here is something I put together for my boss.

#### Reactions from Policymakers on the Hill:

• DOE Sec. Chu: "The American people should have full confidence that the United States has rigorous safety regulations in place to ensure that our nuclear power is generated safely and responsibly." He adds that the administration "is committed to learning from Japan's experience," but that "to meet our energy needs, the administration believes we must rely on a diverse set of energy sources including renewables like wind and solar, natural gas, clean coal and nuclear power."

• Southern Company: As part of the NRC approval process, the Vogtle site was evaluated for the most severe earthquake that might occur once in a 10,000 year period. The AP 1000 design

#### Bozin, Sunny

From:

Nieh. Ho

Sent:

Tuesday, March 15, 2011 8:44 PM

To: Subject:

'annie\_caputo@epw.senate.gov'
Re: Reactions from Policymakers on the Hill:

Very helpful Annie. Thanks.

Ho

Sent via BlackBerry

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission
(301) 415-1811 (office)
(b)(6)
(301) 415-1757 (tax)

From: Caputo, Annie (EPW) < Annie\_Caputo@epw.senate.gov>

To: Nieh, Ho

ho.nieh@nrc.gov

**Sent**: Tue Mar 15 20:42:16 2011

Subject: Reactions from Policymakers on the Hill:

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- Southern Company: As part of the NRC approval process, the Vogtle site was evaluated for the most severe carthquake that might occur once in a 10,000 year period. The AP 1000 design greatly exceeds that requirement for the Vogtle site. Based on the AP 1000's enhanced design and the rigorous regulatory reviews already performed, we are confident that the licensing process can remain on schedule.
- NRC Chairman Jaczko: "Right now, we continue to believe that nuclear power plants in this country operate safety and securely."
- White House Press Secretary Carney: I would just add that we have the plants that we have already in operation that provide 20 percent of the electricity in the United States. And information is still

coming in from Japan, so as we evaluate that information, these gentlemen have made clear that they will incorporate that into how we view safety and security of nuclear energy as a resource. But it remains a part of the President's overall energy plan when he talks about reaching a clean energy standard it's a vital part of that.

- Sen. Landrieu: "I hope this is slowing down and checking the safety," she said. "You know, tapping the brakes, not slamming on them."
- Sen. Alexander: "Right now the effort needs to be helping those who need help" in Japan, said Alexander, who called nuclear power "a demanding but manageable technology."
- Sen. Bingaman: "I think nuclear power can be provided in a safe reliable way and it is possible that we will learn some things from what's happened in Japan that will persuade us to put in place additional precautions."
- Eric Cantor: "As far as we know, this is the result of a tsunami. Nuclear power is an essential mix of the energy economy in this country."
- Lindsey Graham: "I don't hear a moratorium to stop building along the coast. I don't hear a moratorium to stop building high-rise buildings in earthquake areas. You try to make buildings as safe as possible. You learn from every national disaster, but most of the reactors that are being built now are light years ahead of the 1971 version."
- .• Richard Burr: "I liken this very much to New Orleans when it flooded. And we learned afterwards that everybody's generators and storage tanks were on the ground the worst place to be in a city below sea level. We may find out the same thing in the case of Japan: that they were just strategically placed wrong, or we may find out some engineering changes that should be made and we'll work to make those. But I don't think that this is a death knell for nuclear generation in the future."
- Reps. Waxman, Markey, DeGette, and Rush letter to Chairman Upton: "We hope the nuclear industry's self-confidence is warranted, but we should not accept the industry's assurances without conducting our own independent evaluation of the risks posed by nuclear reactors in the United States and the preparedness of industry and regulators to respond to those risks."

- Chairman Fred Upton: "There will no doubt be a desire to question what the events in Japan mean for our nation's pursuit of safe, clean nuclear energy," the Michigan Republican said at a markup Monday. But he added, "We will have those conversations in due time."
- John Kerry: "I think serious questions have to be asked about what the hell nuclear plants are doing 40 or 50 yards from the ocean on a fault and whose idea was it to build it there in the first place. But no community in America is going to accept a plan without fail-safe guarantees that are in the design and in the location."
- Sen. Mitch McConnell: "I don't think right after a major environmental catastrophe is a very good time to be making American domestic policy."
- Sen. Joseph Lieberman: "I think we've got to kind of quietly -- quickly put the brakes on until we can absorb what has happened in Japan as a result of the earthquake and the tsunami and then see what

more, if anything, we can demand of the new power plants that are coming on line," Lieberman said Sunday on CBS's "Face the Nation."

Even as he called for a pause and examination of the reported partial meltdown and ongoing crisis in Japan, Lieberman said he's long been a supporter of more nuclear power for the U.S. "It's domestic, it's ours and it's clean," he said. "I don't want to stop the building of nuclear power plants."

• Rep. Ed Markey: Rep. Markey on Saturday called for the Nuclear Regulatory Commission to impose a moratorium on building nuclear reactors in seismically active areas until a sweeping safety review is completed, and he demanded reviews of the Japanese plants' designs to determine if there were flaws that could be repeated elsewhere.

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#### Bozin, Sunny

From:

Nieh, Ho

Sent:

Tuesday, March 15, 2011 8:45 PM

To:

Ostendorff, William

Subject:

Fw: Reactions from Policymakers on the Hill:

FYI. Mix of opinions - everyone will have one!

Но

Sent via BlackBerry

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission
(301) 415-1811 (office)
(b)(6)
(301) 415-1757/(fax)

(301) 415-1757 (tax) ho.nieh@nrc.gov

From: Caputo, Annie (EPW) <Annie\_Caputo@epw.senate.gov>

To: Nieh, Ho

Sent: Tue Mar 15 20:42:16 2011

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## Kock, Andrea

From:

Nieh, Ho

Sent:

Tuesday, March 15, 2011 8:28 PM

To:

Franovich, Mike

Subject:

Re: Congressional activities tomorrow

Yeah, not sure if you noticed.

BTW, re the new explosion - any info from the TA brief?

Sent via BlackBerry

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission (301) 415-1811 (office)

(b)(6)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

----- Original Message -----From: Franovich, Mike

To: Nieh, Ho

Sent: Tue Mar 15 20:20:13 2011

Subject: RE: Congressional activities tomorrow

Funny!

----Original Message-----

From: Nieh, Ho

Sent: Tuesday, March 15, 2011 8:19 PM

To: Ostendorff, William; Franovich, Mike; Warnick, Greg; Kock, Andrea; Zorn, Jason

Subject: Fw: Congressional activities tomorrow

Fyi - we should all plan on watching this hearing. Tomorrow.

Andrea - no burned popcorn please ;)

Ho

Sent via BlackBerry

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission (301) 415-1811 (office)

(b)(6)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

---- Original Message -----

From: Powell, Amy

To: Bubar, Patrice; Sharkey, Jeffry; Nieh, Ho; Sosa, Belkys; Batkin, Joshua

000/22A

Cc: Schmidt, Rebecca; Coggins, Angela

Senf: Tue Mar 15 20:12:52 2011

Subject: Congressional activities tomorrow

Hi all -

As you might imagine, it has been a hectic few days. I want to follow up on what Josh shared with you at your CoS staff meeting about Hill happenings tomorrow:

- -House Energy and Commerce Committee, Subcommittees on Energy and Power, Environment and the Economy will hold their planned hearing with Sec. Chu and Chairman Jaczko at 930am. While FY12 budget may come up, the focus will largely be on events in Japan. As Becky mentioned, the written testimony was not changed given the timeline. We are working now to finalize the oral statement.
- -Senate EPW, in a bit of an unusual occurrence, is holding a public briefing with Chairman Jaczko at 330pm tomorrow. This was just arranged today. Sen. Boxer, as Chairman, called the meeting; Sen. Inhofe and Sen. Carper are confirmed to attend but I am sure attendance from the Committee will be strong.

Amy Powell
Associate Director
Office of Congressional Affairs
U. S. Nuclear Regulatory Commission
Phone: 301-415-1673

Sent from my Blackberry

## Kock, Andrea

From:

Kock, Andrea

Sent:

Tuesday, March 15, 2011 7:19 AM

To:

Herr, Linda; Bozin, Sunny

Subject:

FW: GBJ WH brief

Chairman Jaczko's press interview on CNN below. He indicates there is minimal risk of radiation exposure in the US.

Andrea Kock Technical Assistant for Materials Office of Commissioner Ostendorff 301-415-2896

From: Nieh, Ho

Sent: Monday, March 14, 2011 4:52 PM

To: Zorn, Jason; Warnick, Greg; Franovich, Mike; Kock, Andrea; Ostendorff, William

**Subject:** GBJ WH brief

http://www.cnn.com/video/#/video/world/2011/03/12/vo.japan.kamaishi.flood.nhk

scroll down to see GBJ's video - he did a good job.

Но

Ho Nieh Chief of Staff Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission (301) 415-1811 (office)

(b)(6)

(301) 415-1757 (fax) ho.nieh@nrc.gov

Frischknecht Albert

To:

M.Lipar@iaea.org; M.Syab@iaea.org

Cc:

(b)(6)

Grobe, Jack; cgv@csn.es

Subject:

Aw: Regarding Reporteur wisk (personal communication)

Date:

Tuesday, March 15, 2011 4:23:21 AM

#### Dear colleagues

I fully understand that Mr. Kudo is needed to support his colleagues and the people in Japan coping with this extreme situation.

Can we prepare something for the eventuality that Mr. Kudo could not act as Rapporteur?

Best regards

Albert

Von: (b)(6)

Gesendet: Dienstag, 15. März 2011 04:26

An: Frischknecht Albert; Jack.Grobe@nrc.gov; cqv@csn.es; M.Lipar@iaea.org; M.Svab@iaea.org

Betreff: Regarding Raporteur task (personal communication)

Dear Collegues in Country Group 1

From Fumio Kudo (Kudough)

Personal communication

As you know, Fukushima Dai-ichi Nuclear Power Station is in a critical condition.

After coming back from Vienna I was preparing NSC's Rapportuer task, but I was dispatched to the Government Emergency Response Center (ERC) in the NISA office immediately after the occurrence of the earthquake (15:00 11th, March).

(NISA: Nuclear and Industrial Safety Agency)

I worked at the ERC until the next morning.

Since then I was in a midnight shift.

My task was to prepare English disseminating documents regarding earthquake and tsunami damage of nuclear power stations.

Since this morning (15th) I have returned back to a day shift at JNES to prepared NSC's Rapporteur task.

Currently, Fukushima Dai-ichi Unit 2 is in a critical conditon,

00/23/10

as you know, and I am likely to be dispatched again to the ERC.

Currently since my schedule to go to Vienna has not been changed yet, I'm continuing my best to prepare the Rapporteur task

On the other hand, the situation of Unit 2 is worsening hourly. (Sheltering area has been augmented to 30km radius this morning.) (Evacuation area is already set as 20km radius.)

In view of the current situation, in my personal view, my visit itself to Vienna could be cancelled by the Govenment. (This is not certain of course.)

In that case, I should have to ask a Rapporteur substitution to someone.

This is, of course, my personal view and this is a personal alerting mail just in case.

Best Regards; Fumio

Burnell, Scott

To: Cc: Neuron, Ouron: Bisonur, Eist: Count, Ironne: Hamisaton, Holy

Subject

Boger, Bruce; Meighan, Sean; Stone, Rebecca RE: QUERY; Getting ready to send this out... sound good?

Tuesday, March 15, 2011 1:04:55 PM

Yes, send it...

From: Nguyen, Quynh

Sent: Tuesday, March 15, 2011 12:56 PM

To: Brenner, Eliot; Couret, Ivonne; Burnell, Scott; Harrington, Holly

Cc: Boger, Bruce; Meighan, Sean; Stone, Rebecca

Subject: QUERY: Getting ready to send this out... sound good?

Importance: High

OPA.

I just want to make sure of expectations and alignment... we need to start getting the Regions plugged in.

Thanks Quynh

All,

Per Eric Leeds' request and working closely with NSIR and OPA...

The below SharePoint link is the location of our INTERNAL USE ONLY activities regarding the Japan Events and the effects on their nuclear operations. Again, NO PUBLIC RELEASE of any documents.

Given lessons learned from 9-11, we want to ensure clear, concise messages in alignment with the Chairman and focus of our safety mission in the United States. To this end, we established this SharePoint as a centralized location to collect our questions from stakeholders and our draft responses. These draft responses will be vetted by OPA and once approved by OPA – it is OK for use by the staff to answer questions from stakeholders. For matters related to Emergency Preparedness, NSIR is the lead.

As such, please understand that, while we are doing our best to be timely with the most up-to-date information, it is more to important to ensure accurate information is being posted.

http://portal.nrc.gov/edo/nrr/NRR%20TA/FAQ%20Related%20to%20Events%20Occuring%20in%20Japan/Forms/Allitems.aspx

Note: "Chairman JaczkoQA7\_031511" contains parts that are PUBLIC and additional INTERNAL information for NRC staff.

All correspondence to the public should be directed to our Office of Public Affairs (OPA)!

Additionally, if questions arise out of the Region, please let us know via email. We'll do our best to coordinate the answer and ensure that we get OPA's blessing.

Thank you for all your support during this time and understanding!

POC: Quynh Nguyen (301) 415-5844: (b)(6) Sean Meighan (301) 415-1020

000/227

Walcott, Naomi

To:

JapanEmbassy, TaskForce; Duncan, Aleshia D; DARTDOELiaison1@ofda.gov; Cherry, Ronald C; Trapp, James;

Ulses, Anthony

Subject: Date: NUSTEC calculates source term as 1 Bq/h Tuesday, March 15, 2011 8:06:44 AM

Importance:

High

NUSTEC (the NISA Technical Center which send the SPEEDI data) calculates source term as  $1\,\mathrm{Bq/h}$ . I requested that they send us raw radiation monitoring data as well, but they said they do not handle that matter.

SBU

This email is UNCLASSIFIED

Naomi Walcott Emergency Action Officer Japan Emergency Command Center U.S. Embassy Tokyo

----Original Message-----

From: JapanEmbassy, TaskForce

Sent: Tuesday, March 15, 2011 8:57 PM

To: Duncan, Aleshia D; 'DARTDOELiaison1@ofda.gov'; Cherry, Ronald C; 'James.trapp@nrc.gov';

'Anthony.Ulses@nrc.gov'

Subject: 19:00 SPEEDI Data attached

Importance: High

DOE and NRC colleagues,

Please find 19:00 SPEEDI data; sorry for the delay.

SBU

This email is UNCLASSIFIED

Naomi Walcott Emergency Action Officer Japan Emergency Command Center U.S. Embassy Tokyo

----Original Message----

From: JapanEmbassy, TaskForce

Sent: Tuesday, March 15, 2011 8:43 PM

(b)(6)

Subject: 19:00 SPEEDI Data attached

Naomi Walcott Emergency Action Officer Japan Emergency Command Center 000/2018

SBU

This email is UNCLASSIFIED-----Original Message-----

From: nustec [mailto:spd01@nustec.or.jp] Sent: Tuesday, March 15, 2011 7:42 PM

(b)(6)

Subject: 19時SPEEDI単位量放出図形イメージの送付

## 関係者 位

お世話になっております。 子力安全 術センター 水野です。 3/15 19時のSPEEDI単位量放出図形のイメージデータを送付致します。 ご確認のほど、よろしくお願い致します。

\_

Miller, Chris

To:

Dorman, Dan

C¢:

Brown, Frederick; Hiland, Patrick; Ross-Lee, Marylane; Lubinski, John; Grobe, Jack; Levis, Robert

Subject:

1st set of assumptions needs to be cleaned up and PMT

Date:

Tuesday, March 15, 2011 11:31:41 PM

Given that there appears to be damage to fuel in the reactors at Fukushima Daiichi units 1,2, and 3 with limited seawater injection into the cores at those units;

and no secondary containment for Units 1 and 3, and due to hydrogen explosions apparently significant damage to components at least at Unit 3 with a possible loss of primary containment to Unit 3; with smoke reported coming from Unit 3

and a reported tear in primary containment on Unit 2, and

there appears to be loss of cooling water to the spent fuel pool for Dalichi Unit 4 and a loss of secondary containment (reactor building) for Unit 4; and a reported fire ongoing at Unit

and there is apparently a loss of cooling to spent fuel pools for Units 5 and 6 with temperatures at least 80 centigrade;

and it is reported that all workers are leaving the Fukushima Daiichi site;

There is serious concern for safety of individuals. Using current dose projections, we believe>>>>

Christopher G. Miller
Deputy Director for Emergency Preparedness
US Nuclear Regulatory Commission
Office of Nuclear Security and Incident Response
Division of Preparedness and Response
work 301-415-1086

cell (b)(6)

000/22A

Droggitis, Spiros

Sent:

Tuesday, March 15, 2011 1:51 PM

To:

Powell, Amy; Decker, David; Riley (OCA), Timothy

Subject:

FW: DNDO News 3/15/2011

Attachments:

DNDO Stern RD Hearing Testimony - final 3-15-2011.pdf; DNDO NEWS 3-15-11.htm

From: Bolling, Lloyd [mailto:Lloyd.Bolling@dhs.gov]

Sent: Tuesday, March 15, 2011 1:50 PM

To: Layton, Michael; Reis, Terrence; Jones, Cynthia; Wastler, Sandra; Jackson, Gerard

Cc: Droggitis, Spiros; Dembek, Stephen; Owens, Janice; Casey, Timothy

Subject: DNDO News 3/15/2011

Attached is the DNDO News for Tuesday, March 15, 2011.

#### Summary of news items:

1. DNDO Director Warren Stern testimony before the House Committee on Science, Space, and Technology, Subcommittee on Technology and Innovation.

- Police officers from New York City and surrounding jurisdictions are preparing for an April "Dirty Bomb" exercise.
- 3. The Y-12 National Security Complex in Tennessee is making highly enriched uranium to aid in evaluating new radiation sensor technology.
- 4. The EPA's National Air and Radiation Laboratory is collecting air samples from instruments in three California cities in response to the events in Japan.
- 5. The NNSA's Megaports Initiative is deploying radiation detection equipment to Latin America and the Caribbean.
- 6. The National Commission on Children and Disasters questions the U.S. level of preparedness for an event like the earthquake in Japan.
- 7. Lawmakers on the House Energy panel are calling for a congressional investigation into the unfolding crisis at three Japanese nuclear reactors.

Lloyd Bolling NRC Liaison

Operations Support Directorate Domestic Nuclear Detection Office Department of Homeland Security

Phone: 202-254-7123

Blackberry: (b)(6)

Fax: 202-254-7752 Lloyd.Bolling@dhs.gov

000/230

Opening Statement

of

Warren M. Stern

Director

Domestic Nuclear Detection Office

Department of Homeland Security

Before the House Committee on Science, Space, and Technology
Subcommittee on Technology and Innovation

Research and Development Priorities and Strategic Direction

March 15, 2011

# Warren M. Stern Before the House Committee on Science, Space, and Technology Subcommittee on Technology and Innovation March 15, 2011

#### Introduction

Good morning Chairman Quayle, Ranking Member Wu, and distinguished Members of the Subcommittee. Thank you for the opportunity to appear before you today with my colleague Dr. O'Toole to discuss research and development (R&D) programs at the Department of Homeland Security (DHS). In order to fully express the Domestic Nuclear Detection Office's (DNDO) R&D efforts, I would first like to share my strategic vision for DNDO and provide insights into our programs.

The Domestic Nuclear Detection Office's (DNDO) mandate is to improve the nation's capability to detect and report unauthorized attempts to import, possess, store, develop, or transport nuclear or radiological material for use against the nation, and to further enhance this capability over time. With assistance and participation from a wide variety of U.S. government departments and agencies, DNDO synchronizes and integrates inter-agency efforts to develop technical nuclear detection capabilities, characterizes detector system performance, ensures effective response to detection alarms, integrates nuclear forensics efforts, coordinates the global detection architecture and conducts a transformational research and development program for advanced technology to detect nuclear and radiological materials. Countering nuclear terrorism is a whole-of-government challenge and DNDO must work with federal, state, local, international, and private sector partners to develop and implement the Global Nuclear Detection Architecture (GNDA).

## **Three Principles**

My strategic vision for DNDO is based on three key principles that I think will help shape the office and all our activities: discipline, intellectual rigor, and transparency.

One of the first things I would like to build upon at DNDO is the *discipline* with which we approach our work. In DNDO's nearly six years of existence, the office has embarked on many efforts to enhance the GNDA, but in order to ensure that we address the most pressing and impactful needs, we must carefully review all our plans and expenditures so that we exercise discipline in utilization of resources. While we have implemented a range of measures designed to provide oversight and instill appropriate processes for administrative, management, and program activities within DNDO, we must find ways to be more efficient, especially in the current budget climate.

Building upon a disciplined approach to executing our mission, we must also ensure that there is *intellectual rigor* behind our analyses, strategies, and programs. Our decision making and planning must be supported by strong methodologies and analyses. This includes making use of available expertise and tools, like peer review, that can assist us in developing the best strategies and solutions. We must make sure that our assumptions, strategies, and solutions reflect thoughtful and deliberate analyses and defensible conclusions.

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Finally, I support increased *transparency* at DNDO. Transparency is essential in providing an understanding of our mission and receiving the necessary oversight and feedback to improve our operations. I pledge that DNDO will work with all relevant stakeholders and provide as much insight as possible into our programs and planning for our partners, including Congress, the Government Accountability Office (GAO), and the American public. Working within all applicable laws and classification regulations, we will provide as much information as possible about our programs.

## **GNDA Strategic Plan**

As you may know, National Security Presidential Directive (NSPD)-43/Homeland Security Presidential Directive (HSPD)-14 and the Security and Accountability For Every (SAFE) Port Act of 2006 (P.L. 109-347) require that DNDO be the lead federal agency for coordinating the and implementing the domestic portion of the GNDA.

We worked with federal partners to define the GNDA and the necessary roles, responsibilities, and objectives. Completion of this strategic plan was a priority when I took the lead at DNDO.

The GNDA is an interagency product that represents the inputs of: the departments of Defense, State, Energy, and Justice; the Office of the Director of National Intelligence; Intelligence Community members; the Nuclear Regulatory Commission; and the National Security Staff. The completion of the GNDA Strategic Plan represents a high degree of cooperation and coordination among the interagency to create a document that will guide multiple U.S. government efforts to fulfill the objectives and goals set forth in the plan. I am proud to say that we were able to deliver the GNDA Strategic Plan to Congress in December 2010, as promised.

Implementation of the GNDA is an ongoing process. Currently, there are many existing programs and initiatives that fall under the GNDA and many more programs that support these efforts. Using the Strategic Plan as a framework, DNDO will continue to work with interagency partners on GNDA implementation. DNDO's forthcoming domestic implementation plan will outline programs, technologies, execution, and timelines in greater detail.

DNDO will also complement the GNDA Strategic Plan with a revised GNDA annual review report. The annual report, required by Congress under the "Implementing Recommendations of the 9/11 Commission Act of 2007" (Pub. L. 110-53), will provide a means to evaluate, document and track progress to assist in refining the GNDA. It will also link the U.S. government's organizational roles and responsibilities to the GNDA's goals, and identify the analyses and investments necessary to achieve those objectives. Like the Strategic Plan, the GNDA annual report will be jointly produced and approved by all relevant USG stakeholders.

Within DNDO we will place much greater emphasis on defining the GNDA, both as it exists now and as we determine it should exist in the future. The responsibility to define the architecture is DNDO's greatest challenge and its greatest opportunity. Over the next several

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years, our long-term architectural vision can be characterized by several common themes that apply across all layers. In every layer and pathway we will seek to increase detection coverage and capability and deter terrorists from planning or attempting nuclear terrorism. The architecture will also introduce uncertainty for adversaries with regard to the risk of interdiction, and take maximum advantage of existing activities that can contribute to the overall capability to prevent nuclear terrorism.

## Strategic Emphasis

Our future enhancements to the domestic architecture will focus on situations where there is some intelligence information available, but where information may not be precise. Future implementations of the GNDA will emphasize mobile or agile detection components, which will increase our capability to respond to escalated threat levels by focusing detection assets to interdict these threats. These threats will impact the way we move forward with deployments and systems development, as well as how we provide support and training to build effective operational concepts. We will use existing capabilities and assets, on a federal, State, and local level, to surge our radiological and nuclear detection abilities in a coordinated fashion to respond to suspected threats or radiological/nuclear detection scenarios. This will not be one specific program, rather a concept of operations that will bring together multiple capabilities and rely on a breadth of assets.

We need to utilize the integrated efforts of federal, state, and local responders to perform radiological and nuclear detection in concentrated regions or areas when information indicates there may be a need for responsive search operations for preventive detection. We have many programs, assets, and capabilities that contribute to radiological and nuclear detection response activities, and we must work to enhance coordination and implementation mechanisms to ensure that we make the best use of all available personnel, equipment, and knowledge. A more flexible architecture will strategically bring together the assets and capabilities for detection and search operations into a unified effort for the domestic prevention of radiological and nuclear terrorism. Some current programs have begun to establish more randomized and mobile capabilities with broad applications, including the radiological and nuclear detection equipment and training DNDO has provided for all U.S. Coast Guard boarding teams and Transportation Security Administration Visible Intermodal Prevention and Response teams. We have recently reached an important milestone for the development of advanced handheld systems, which were developed through DNDO and approved for production and deployment in September 2010. This system is the first of DNDO's next generation human-portable systems and will be acquired for U.S. Customs and Border Protection and other users in support of their operations. Following the success of our advanced handheld, the small area search handheld system, RadSeeker, will be ready for a production and deployment system this year. Our work will continue to enhance our federal capabilities and build on these efforts in a strategic way so that the pieces are linked together and can respond as needed.

DNDO also has a number of separate state and local pilot programs and training efforts that can contribute to distributed, agile capabilities to develop an effective domestic architecture. My

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objective for 2011 is to increase our focus on DNDO state and local support programs and consolidate the efforts into an integrated program. One element for doing that is the Securing the Cities (STC) initiative. The current STC pilot was initiated in the New York City region and has resulted in unprecedented regional cooperation among federal, state, county, and city agencies in the Tri-state region. The STC program provides assistance to state and local jurisdictions, which enable these entities to build and sustain capabilities by: deploying current technologies regionally in a coordinated manner; designing, acquiring, and deploying a regional architecture for radiological/nuclear detection focused on state and local jurisdictions; developing and implementing a common, multi-agency concept of operations (CONOPS) for sharing sensor data and resolving alarms; and instituting training and exercising by the regional agencies to execute the CONOPS at a high level of proficiency. STC partners in the New York region use commercially available radiological and nuclear detection equipment and work with DNDO to establish requirements and conduct operational assessments of equipment in the development stages. The President's FY 2012 budget request outlines a transition from the STC pilot to a three-phased program that will continue in NYC and commence in another UASI Tier I region. DNDO will assist regional partners in implementing self-supported sustainment of capabilities and real-time sharing of data from fixed, mobile, maritime and human-portable radiation detection systems.

## New Approach for Technology Development, Test, and Evaluation

As we develop solutions that support flexible, coordinated capabilities and a deeper understanding of an effective architecture, we need to continue to improve our technological capability. DNDO is mandated to serve as "the primary entity in the U.S. Government to further develop, acquire, and support the deployment of an enhanced domestic system to detect and report on attempts to import, posses, store, transport, develop..." nuclear weapons or materials. Historically, we have focused on developing technology and detection systems to address identified needs. We are now transitioning to a new approach, focusing on commercially developed devices, developing government standards, and testing to those standards. Because industry has repeatedly demonstrated the ability to rapidly improve detection technologies, we have an opportunity to shift our approach to one that is more flexible and adaptable and relies on the private sector – as well as other DHS components – to enhance existing products and develop new devices. This technical transition will also include a new approach at the systems level, which defines strategic interfaces at various points in the detector/system architecture, allowing improvements without wholesale changes to the entire system.

DNDO will place greater emphasis on developing standards for radiological/nuclear detection equipment and testing to those standards, while taking advantage of the technological advancements made by the private sector and building upon those efforts. In addition, we will enhance our approach to testing to reflect the recommendations of the recent report from the National Academies of Sciences, which encouraged us to more heavily integrate detector

<sup>&</sup>lt;sup>1</sup> Security and Accountability For Every Port Act of 2006 (SAFE Port Act, P.L. 109-347, Sec. 1802)

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modeling. Data collected in the field can then be used with the models to understand system behavior instead of relying on new testing alone.

Testing and evaluating systems to achieve technical and operational standards is crucial in developing and delivering the necessary equipment to our stakeholders. DNDO is required by the SAFE Port Act "to carry out a program to test and evaluate technology for detecting a nuclear explosive device and fissile or radiological material, in coordination with the Secretary of Defense and the Secretary of Energy, as appropriate." In response, DNDO has conducted more than 50 separate test and evaluation campaigns at more than 20 experimental and operational venues. These test campaigns were planned and executed with the interagency using rigorous, reproducible, peer-reviewed processes. Tested detection systems include pagers, handhelds, portals, backpacks, mobiles, boat- and spreader bar-mounted detectors, and next-generation radiography technologies. The results from DNDO's test campaigns have informed federal, state, local and tribal operational users on the technical and operational performance of radiological and nuclear detection systems to select the most suitable equipment and effective CONOPs as we work to keep the nation safe from nuclear terrorist threats.

DNDO is also required by the SAFE Port Act, in collaboration with the National Institute of Standards and Technology, to publish technical capability standards and recommended standard operating procedures for the use of nonintrusive imaging and radiation detection equipment in the United States. In executing its T&E and Standards responsibilities, DNDO collaborates with the Test & Evaluation and Standards Division of DHS S&T. This collaboration includes coordination of American National Standards Institute (ANSI) N42 consensus standards, major systems operational testing and evaluation, including large programs like the Advanced Spectroscopic Portal (ASP) program, the implementation of DHS T&E guidance in smaller systems development efforts, and coordination of T&E facilities. The DNDO T&E lead participates on the DHS T&E Council, and DNDO T&E staff has made good use of T&E training and certification capabilities developed by S&T.

We also have supported the development, publication and adoption of national consensus standards for radiation detection equipment. Several such standards now exist for use in homeland security. The DNDO Graduated RN Detector Evaluation and Reporting (GRaDER<sup>SM</sup>) Program is using these standards to test and evaluate both commercially developed systems. GRaDER is a conformity assessment program that provides independent standards compliance information for selected radiation detection equipment. The program has created the infrastructure for vendor voluntary testing of commercial off-the-shelf radiological/nuclear detection equipment by independent accredited laboratories against national consensus standards and government-unique Technical Capability Standards. Final test results for our initial GRaDER testing are expected beginning this month. We anticipate that the GRaDER Evaluated Equipment List – which is supported by the Federal Emergency Management Agency's guidance for compliance in relation to their grants program – will enable federal, state, local, tribal and territorial agencies to make more informed radiological/nuclear detector procurement decisions by ensuring they are buying equipment that has demonstrated compliance with published standards.

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Beyond our work with Component partners, DNDO's testing expertise and experience is sought by interagency partners, such as the departments of Energy and Defense, and international partners such as the United Kingdom, Canada, Israel, the European Union, and the International Atomic Energy Agency. DNDO has an active partnership with the European Commission's Joint Research Center to conduct the Illicit Trafficking Radioactive Assessment Program+10, an ambitious three-year test program to evaluate nine classes of radiological/nuclear detection systems in U.S. and European test facilities.

## Research and Development: Programs and Coordination

The Transformational and Applied Research (TAR) programs at DNDO support basic and applied research of systems with increased capabilities. I will describe the TAR portfolio as it currently exists within DNDO. Our research and development contributes to advances in nuclear detection and technical nuclear forensics. TAR projects feed into the DNDO Solutions Development process and shape our work on systems development. Within DNDO, these programs address advanced compact high-performance handheld systems; advanced passive standoff detection technologies; improved detection through networked and distributed detection systems; better detector materials; and improved material characterization and radiochemistry. Additionally, DNDO is pursuing targeted technologies for the detection of shielded special nuclear material through passive, active, and radiographic interrogation programs, and the development of key supporting systems for varied deployment schemes. TAR divides projects between the Exploratory Research Program (ERP) and the Near Term Research Program (NTRP). Underlying these efforts is our work to ensure a continued pipeline for human capital development and basic research, executed through DNDO's partnership with the National Science Foundation for the Academic Research Initiative. Currently, the Academic Research Initiative has awards with 30 universities through 36 grants supporting 118 students.

The ERP explores innovative, high-risk, early-stage technologies, concepts and ideas that can make transformational contributions to support the GNDA and reduce the risk of nuclear terrorism. Specifically, the ERP researches technology and techniques that: 1) address capability gaps and weaknesses in the GNDA, with an emphasis on radiological and nuclear detection; 2) provide substantial performance improvement or cost reductions of radiological/nuclear detection capabilities; and 3) improve nuclear forensics capabilities. Efforts under the ERP are intended to transform the basic building blocks of nuclear detection technology and supporting fields for dramatic improvements in technical capabilities, with the research generally culminating in a proof of concept or proof of feasibility demonstration in a laboratory setting. Successful ERP technologies and concepts may then transition to support a subsequent near-term research project or spur commercial development. ERP also provides performance modeling, improved algorithm development, and other support capabilities for the broader DNDO mission.

Additionally, our ERP work began exploring options for alternative neutron detection, years before the recent helium-3 shortage was identified. Helium-3 is commonly used as a neutron detector material in radiation detection equipment. Our exploratory research projects have been

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developing near and long-term alternatives to helium-3 neutron detectors for different applications, including portals, backpacks, handhelds, and pagers. These technologies are aimed at achieving efficiencies and discrimination capabilities that are equivalent to or better than helium-3 detectors, as well as examining detector cost-competitiveness. Approximately 15 different technology approaches are being pursued, including those based on boron or lithium.

Some of these technologies have advanced to a point where they could be tested with other alternative neutron detection technologies. We have completed a test campaign for neutron detection at Los Alamos National Laboratory that evaluated 11 units in three application spaces, which helped us to identify and verify the performance of several very promising technologies and effectively target funding.

The second program within TAR is the NTRP, which performs accelerated development, characterization, and demonstration of leading-edge technologies to address critical gaps in nuclear detection capabilities. The NTRP was started in 2006 and was formerly called the Advanced Technology Demonstration (ATD) Program.

Contracts awarded under the NTRP are typically executed in four distinct phases: preliminary design review, critical design review, characterization readiness review, and characterization assessment. The NTRP characterization results form the basis for a subsequent initial cost benefit analysis to determine if the technology should transition to system development and eventual production and deployment.

Our basic and applied research efforts push the envelope by identifying gaps in current technologies and architectural needs and selecting R&D programs that can begin the early stage work necessary to address these challenges. Our programs must be able to reach out to operators for user requirements and to balance both "technology push" and "technology pull" efforts, as appropriate. For technology push efforts, the developer of a technology is pushing a new concept out for examination by the operator. These are often new or advanced concept detectors that could improve threat detection or allow for altered or simplified CONOPS. These technology push systems are often state-of-the-art with enhanced or dramatically improved capabilities that might be otherwise unknown to operators. Technology pull refers to equipment and programs where operators have identified CONOPS and features that they need in order to achieve their missions. The operators are pulling the technologies in directions that guide development for industry and the government.

Many of our important research and development successes highlight the necessity of integrating architectural analyses with R&D efforts. One example of DNDO's R&D work that is transitioning through technology push efforts is our Long Range Radiation Detection (LRRD) program. The LRRD program is the follow-on program to the Stand-Off Radiation Detection Systems (SORDS) ATD program, completed in FY 2010. The overarching goal of the LRRD program is to determine if a passive, long-range, radiological/nuclear detection system with localization capability should be developed and fielded. To achieve this goal, the LRRD program will allow systems developers to determine if there is a need, identify that need with a

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gap in the GNDA, and evaluate whether that need can be met in a cost effective manner. Next, we must collect user requirements and perform an analysis of alternatives, the result of which helps us determine if we will field one or more systems.

The LRRD systems are undergoing a series of activities that engage federal, state, and local partners in utilizing and assessing the technology. Participating in these activities are two SORDS prototypes and the Roadside Tracker (RST), which were developed through the ERP. The SORDS technologies are designed to detect and identify sources from 100 meters away on a mobile platform, and the RST is designed to detect and identify sources in vehicles over five lanes of traffic at speeds of up to 70 mph. An operational demonstration will evaluate the potential utility of these systems in a simulated urban environment, and follows the technology demonstration that was conducted at Fort Belvoir in November 2010. Next week, the operational demonstration will include the cooperative efforts of DNDO, Fort Indiantown Gap Military Reservation, the 3<sup>rd</sup> Civil Support Team, Nassau & Suffolk County Police Departments, the Department of Energy's National Nuclear Security Administration, and the Defense Threat Reduction Agency. Following the completion of the operational demonstration, we will work with the Nassau & Suffolk County Police Departments to provide a live demonstration of the LRRD systems for radiological/nuclear scanning at a real event. The live demonstration will allow operators to use the systems and provide feedback for future technology and CONOPS development. This project is illustrative of the important interplay between R&D efforts, technical and operational evaluation activities, and operators in the field, which all together lead to the best solutions.

As Under Secretary O'Toole mentioned, the FY 2011 and FY 2012 President's Budget Requests transfer our TAR activities to DHS S&T, pending Congressional approval of the budget. In order to maintain and improve the current levels of integration for transformational research and development activities and transitions of technologies for use by operators, my office will work closely with S&T to ensure that the pipeline for technological advancements remains coordinated to address gaps in the GNDA and operational needs.

## **Nuclear Forensics**

DNDO has an additional mandate, codified last year in the "Nuclear Forensics and Attribution Act" (P.L. 111-140), to provide stewardship and integration for U.S. government technical nuclear forensics efforts. Nuclear forensics is a key supporting element to the GNDA and must be closely linked in order to receive relevant information and provide data and analyses that can impact detector development, tuning, and deployment. Established in 2007, DNDO's National Technical Nuclear Forensics Center (NTNFC) serves as a national-level "system integrator" for joint planning, exercising and evaluating our national capabilities, while also investing in technical capability advancement. Last year, the NTNFC led the interagency effort to develop the "National Strategic Five-Year Plan for Improving the Nuclear Forensics and Attribution Capabilities of the United States," which was signed by the President and submitted to Congress. NTNFC also has the responsibility to develop the U.S. government's capability to rapidly, accurately and credibly identify the origin and history of radiological and nuclear materials

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intercepted before a detonation. We work with laboratory experts to develop standard reference materials for the validation of analytical methodologies; develop validated methodologies to be employed in nuclear forensics activities; and develop and validate predictive models and techniques to improve the understanding of how material signatures.

#### Conclusion

My vision of DNDO is for us to continue to improve our work developing a broad spectrum of capabilities, including nuclear detection, reporting and analysis, and nuclear forensics. Our responsibilities include coordinating the development of the GNDA and implementing the domestic portion of that architecture. We also must provide the analyses and integration mechanisms for detection and reporting that will link technical elements like research, systems development, testing and evaluation to operational solutions for mitigating the threat of nuclear terrorism. Our research and development work will consistently be matched with needs in the GNDA and the operational requirements of our end users. My hope and expectation is that, over time, we will develop a reputation that allows us greater leverage in defining detection architecture throughout the world.

Other U.S. government agencies and Congress make important contributions in accomplishing the mission to prevent nuclear terrorism, and I am committed to working in coordination with all parties to develop effective strategies, capabilities, and technologies.

Chairman Quayle, Ranking Member Wu, I thank you for this opportunity to discuss DNDO's strategic direction and my vision for its future. I am happy to answer any questions the Subcommittee may have.

#### March 15, 2011 News Brief as of 8:09 am

**HEARING TODAY:** DNDO Director Warren Stern will be testifying along with DHS Under Secretary O'Toole before the House Committee on Science, Space, and Technology, Subcommittee on Technology and Innovation today at 10:00 a.m. Attached is a copy of Director Stern's hearing testimony and below is a link to the hearing page: <a href="http://science.house.gov/hearing/technology-innovation-subcommittee-hearing-homeland-security">http://science.house.gov/hearing/technology-innovation-subcommittee-hearing-homeland-security</a>

## NYC Planning "Dirty Bomb" Exercise

Global Security Newswire - Police officers from New York City and surrounding jurisdictions are set to take part in an early April drill intended to assess regional preparedness for averting a terrorist attack involving a radiological "dirty bomb."

http://www.globalsecuritynewswire.org/gsn/nw 20110314 6002.php

## Y-12 Opens Radiation Detection Testing Center

Global Security Newswire - A recently opened branch at the Y-12 National Security Complex in Tennessee is making highly enriched uranium available to aid scientists in evaluating experimental radiation sensor technology. <a href="http://www.globalsecuritynewswire.org/gsn/nw">http://www.globalsecuritynewswire.org/gsn/nw</a> 20110314 3079.php

## Radiation Lab Set To Detect Contamination From Japan

KTVU San Francisco - In Northern California, the government has three radiation detection instruments: one in San Francisco, one in San Jose, and one in Sacramento. The instruments are operated by the U.S. EPA's National Air and Radiation Laboratory. <a href="http://www.ktvu.com/news/27197395/detail.html">http://www.ktvu.com/news/27197395/detail.html</a>

## Terrorism in Latin America: US Policy

<u>Mark P. Sullivan</u>, Eurasia Review - The Department of Energy's NNSA administers the Megaports Initiative, a program which involves deploying radiation detection equipment in order to deter, detect, and interdict illicit trafficking in nuclear and radioactive materials. To date, the Megaports Initiative is operational in ports in the Bahamas, Colombia, the Dominican Republic, Honduras, Mexico, and Panama.

http://www.eurasiareview.com/analysis/terrorism-in-latin-america-us-policy-14032011/

#### Group Questions U.S. Capacity to Provide Countermeasures for Nuclear Disaster

Jennifer Scholtes, Congressional Quarterly Staff - Among the many questions Japan's disaster has prompted the United States to ask about its own preparedness, the meltdown of nuclear reactors northeast of Tokyo has incited scrutiny about how the government would distribute lifesaving compounds during such an emergency.

Members of the National Commission on Children and Disasters, a group established by Congress in 2007 (PL 110-161), asked Obama administration officials Monday to take a close look at whether or not the United States has a sufficient stockpile and ability to distribute potassium iodide — an inorganic compound the Food and Drug Administration approved in the 1980s that can be taken in liquid or tablet form to protect individuals from cancer caused by radioactive materials emitted by uncontained nuclear power plants.

"There are ongoing concerns — many, many concerns. But I'd like to focus on one particular thing, and that's the availability of potassium iodide that would be available to children," said Irwin Redlener, president of the Children's Health Fund and a member of the commission. "Relative to what we're watching in Japan, that needs to be at the top of the agenda."

Redlener and other commission members said the government would likely not be able to get potassium iodide to affected individuals in time for the compound to work, even if the country has enough of it.

Those who eat, drink or breathe harmful radioactive iodine that can get into the air and food supply after a radiological or nuclear event will absorb the chemical into their thyroid, which can cause cancer. Children, because their thyroids are still developing, are at heightened risk. But if potassium iodide is taken first, it will protect the thyroid from absorption.

Nicole Lurie, assistant secretary for Preparedness and Response at the Health and Human Services Department, said the federal government carried out a preparedness exercise in recent months simulating response to a large nuclear power plant disaster. After the March 11 earthquake and tsunami in Japan, the department has begun discussion of its strategy again, she said.

Most states stockpile potassium iodide, and homes in the exposure radius of the plants often have a supply, but the more pressing question is whether the compound could be delivered in time to those who do not have it on hand, she said.

"We'll be looking at this again and just being sure that the policy we've had going into this is right, and if not, changing it," Lurie said. "We've got to go back and look at this policy and be sure that it enables children to be safe. And that's going to be an issue for states, it's going to be an issue for NRC and the nuclear power plants themselves and the communities in which these exist."

Commission's Time Runs Low

The commission, tasked with providing Congress with recommendations for responding to children during disasters, will terminate in April if Congress does not provide a continuation. During the last meeting of the commission before the termination date, Lurie commended the group for its influence on the government's preparedness planning.

"Largely a result of your efforts, I think the way the department prepares for and handles disasters has really been forever changed," Lurie said. "Children's issues are now hard-wired into the way we do business."

#### House Democrats Call for Nuclear Safety Review After Japanese Reactor Crisis

Margaret Kriz Hobson and Geof Koss, Congressional Quarterly Staff - Democrats on the House Energy panel are calling for a congressional investigation into the unfolding crisis at three Japanese nuclear reactors, despite Republican suggestions that safety reviews should take a back seat for now to humanitarian relief.

In a letter to House Republican leaders on Monday, Energy and Commerce Committee Democrats said the U.S. nuclear power industry is "downplaying the significance of the events" in Japan, where the failure of emergency cooling systems at the commercial reactors damaged in last week's earthquake and tsunami have raised concerns about possible radioactivity releases.

The letter, signed by committee members Henry A. Waxman of California, Bobby

L. Rush of Illinois, Diana DeGette of Colorado, and Edward J. Markey of

Massachusetts, said Congress "should not accept the industry's assurances without conducting our own independent evaluation of the risks posed by nuclear reactors in the United States and the preparedness of industry and regulators to respond to those risks."

The Democrats were particularly critical of a statement by a Nuclear Energy Institute official, who told the Washington Post that the explosion at a Japanese nuclear plant was "not good . . . But in the scheme of things, is it a disaster? We don't think so."

House Energy and Commerce Chairman Fred Upton, R-Mich., sidestepped calls for hearings, responding that "our concern is squarely with the Japanese people and providing whatever assistance we can to them in this time of tragedy."

Upton added, "There will no doubt be a desire to question what the events in Japan mean for our nation's pursuit of safe, clean nuclear energy, and we will have those conversations in due time." Senate Minority Leader Mitch McConnell, R-Ky., echoed those comments.

"We ought not to make a long-term decision about any American energy policy in the wake of an environmental catastrophe in another part of the world," he said. "In other words, we ought to try to right now focus on helping the Japanese in any way that we possibly can."

Other Republican lawmakers were more direct in defending nuclear power.

"While the risk is by no means over and the events in Japan continue to evolve, the reactor safety systems so far seem to have done their jobs," Sen. Lamar Alexander, R-Tenn., said on the Senate floor. "The lesson that America can take away from this experience is this: Learn all we can from the Japanese experience to make the operations of our reactors as safe as possible."

Sen. Lindsey Graham. R-S.C., said it would be a "huge mistake" to reject the potential for nuclear power to produce large amounts of emission-free electricity.

"What would you replace the coal-fired power plants that are going to be retired in the next 30 years with?" he said. "You can't have the power we need for the 21st century to grow our economy if you take nuclear power off the table."

Indiana Republican Richard G. Lugar acknowledged that "anxiety" would hang over congressional energy debates, but said it will not alter Senate energy legislation he is writing that would boost the industry.

White House spokesman Jay Carney said nuclear power "remains a part of the president's overall energy plan."

"As we get more information about Japan — and what happened there — that can be incorporated," he added.

The Senate Energy and Natural Resources Committee held a briefing on the situation Monday for staff, featuring officials of Exelon Energy, the largest U.S. nuclear plant operator, and the Nuclear Energy Institute, which is the policy organization of the nuclear energy industry.

Potential Setback

The magnitude 9 earthquake and subsequent tsunami in Japan knocked out power to the three reactors and disabled backup diesel generators designed to power critical cooling systems. Since battery power ran out, officials have been cooling the radioactive fuel with ocean water.

Environmental energy experts predict the crisis will cloud efforts by utilities to finance a new generation of U.S. nuclear facilities and extend the lives of older plants.

"I think it's pretty clear that loan guarantees, subsidies to the nuclear industry to be building new power plants, are certainly in question," said Damon Moglen, director of the Friends of the Earth climate and energy project. He said proposals to extend the operating lives of older plants are unlikely to "survive the searing images that people are watching on the television right now."

America's 104 nuclear plants provide 20 percent of the nation's electricity. No new nuclear power plant has been licensed since a partial core meltdown in 1979 at Three Mile Island in Pennsylvania. In the years since, the industry has conducted an expansive public relations campaign to build support for new nuclear plants. "Public opinion will be a major factor in the extent to which the problem in Japan effects future nuclear power plant construction in the United States," said Elgie Holstein, senior director for strategic planning at the Environmental Defense Fund.

While nuclear energy supporters argue that U.S. plants are unlikely to experience a one-two punch of an earthquake and a tsunami, David Lochbaum, director of the Union of Concerned Scientists' nuclear safety program, said there are other threats.

"Many of our reactors are in situations where earthquakes or hurricanes in the gulf or ice storms in the Northeast, or a tree [falling] in Cleveland can cause an extensive blackout that puts us in a very similar situation," he said.

(b)(6)

To:

Virgilio, Martin

Subject:

Re: ACTION: NRR taking the lead for commission meeting

Date:

Wednesday, March 16, 2011 10:15:40 PM

Would be good to stream/Webinar Invite States to view

Sent from my Verizon Wireless BlackBerry

From: "Virgilio, Martin" < Martin. Virgilio@nrc.gov>

**Date:** Wed, 16 Mar 2011 10:01:53 -0400 **To:** Miller, Charles<br/>
Charles.Miller@nrc.gov>

**Subject:** Fw: ACTION: NRR taking the lead for commission meeting

FYI

From: Leeds, Eric To: Virgilio, Martin

Cc: Borchardt, Bill; Weber, Michael; Boger, Bruce; Grobe, Jack

**Sent**: Wed Mar 16 09:56:17 2011

Subject: ACTION: NRR taking the lead for commission meeting

Marty -

NRR was asked to take the lead for this Commission meeting. In addition, we're also taking the following actions:

- 1. Establishing a media guru to help facilitate Q&As (beyond the current Share-point site) Bob Nelson will lead the effort.
- 2. We've started work on a generic communication to NRC licensees based on the Japanese events. We're following the INPO work.

FYI.

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

From: Virgilio, Martin

Sent: Wednesday, March 16, 2011 3:29 AM

To: Borchardt, Bill

**Cc:** Weber, Michael; Leeds, Eric; Dorman, Dan; Miller, Chris; Lewis, Robert; Doane, Margaret; Powell, Amy; Wiggins, Jim; Casto, Chuck; Brenner, Eliot; Muessle, Mary; Andersen, James; Wittick, Brian;

Grobe, Jack; Evans, Michele; Ash, Darren **Subject:** FW: commission meeting outline.docx

Bill

00/231

Last night the Chairman briefed the Commissioners on the status of the events in Japan and NRC's response. During that meeting the Commissioners suggested NRC hold a Commission meeting either this week or next on the events and the Chairman agreed to the meeting.

Attached is a draft outline for that meeting. We believe this outline could also be used as a tool for organizing a presentation for Congressional Briefings and interactions with the media. We acknowledge the ambitious nature of the outline and the fact that we might not be ready to speak to each of the issues if the Commission meeting is held this week.

Marty

## Satorius, Mark

From:

Pederson, Cynthia

Sent:

Wednesday, March 16, 2011 2:31 PM

To:

All R3 Users

Subject:

FW: 1400 EDT (March 15, 2011) USNRC Earthquake/Tsunami SitRep

Attachments:

USNRC Earthquake-Tsunami Update.031611.1400EDT.docx

Please note that this information is "Official Use Only" and is only being shared within the federal family.

This includes info regarding worse case dose estimate that led to press release that said Americans should evacuate out to 50 miles. This distance is greater than the Japanese government has evacuated. This is based on a calculation of what could happen not what is happening.

Please note that this information is "Official Use Only" and is only being shared within the federal family.

From: LIA07 Hoc

Sent: Wednesday, March 16, 2011 1:17 PM

To: Andersen, James; Anderson, Joseph; Ash, Darren; Baggett, Steven; Barker, Allan; Batkin, Joshua; Boger, Bruce; Borchardt, Bill; Bradford, Anna; Brenner, Eliot; Smith, Brooke; Brown, Milton; Bubar, Patrice; Camper, Larry; Carpenter, Cynthia; Castleman, Patrick; Ader, Charles; Casto, Chuck; Coggins, Angela; Collins, Elmo; Correia, Richard; Dapas, Marc; Dean, Bill; Decker, David; Dickman-Disabled-11/14/2010, Paul; Dorman, Dan; Droggitls, Spiros; Dyer, Jim; ET02 Hoc; Evans, Michele; Franovich, Mike; Apostolakis, George; Gibbs, Catina; Giitter, Joseph; Gott, William; Grobe, Jack; Hahn, Matthew; Haney, Catherine; Harrington, Holly; Hipschman, Thomas; Holahan, Gary; Holahan, Patricia; HOO Hoc; Howell, Art; Howell, Linda; Foster, Jack; Jackson, Donald; Jaczko, Gregory; Johnson, Andrea; Johnson, Michael; Kahler, Robert; Foggie, Kirk; Kock, Andrea; Kozal, Jason; Leeds, Eric; LIA01 Hoc; LIA02 Hoc; LIA03 Hoc; LIA06 Hoc; LIA08 Hoc; LIA11 Hoc; Logaras, Harral; Loyd, Susan; Magwood, William; Maier, Bill; Marshall, Jane; Marshall, Michael; McCree, Victor; McDermott, Brian; McNamara, Nancy; Miller, Charles; Miller, Chris; Monninger, John; Morris, Scott; Nieh, Ho; NSIR\_DDSP\_ILTAB\_Distribution; Ordaz, Vonna; Orders, William; OST05 Hoc; Ostendorff, William; Pace, Patti; Pearson, Laura; Pederson, Cynthia; Plisco, Loren; Powell, Amy; R1 IRC; R2 IRC; R3 IRC; R4 IRC; Reddick, Darani; Reyes, Luis; Devercelly, Richard; ROO hoc; Satorius, Mark; Schmidt, Rebecca; Sharkey, Jeffry; Sheron, Brian; Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Thoma, John; Tifft, Doug; Kolb, Timothy; Ulses, Anthony; Nakanishi, Tony; Tracy, Glenn; Trapp; Trapp, James; Trojanowski, Robert; Uhle, Jennifer; Virgilio, Martin; Warnick, Greg; Warren, Roberta; Weber, Michael; Westreich, Barry; Wiggins, Jim; Cook, William; Williams, Kevin; Wittick, Brian; Woodruff, Gena; Zimmerman, Roy; Zorn, Jason; Casto, Chuck; Cook, William; Devercelly, Richard; Foggie, Kirk; Foster, Jack; Kolb, Timothy; Nakanishi, Tony; Smith, Brooke; Ulses, Anthony

CC: (b)(b)

Subject: 1400 EDT (March 15, 2011) USNRC Earthquake/Tsunami SitRep

Attached, please find a 1400 EDT situation report from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami on March 16, 2011. This Update includes information on the status of the units at Fukushima Daiichi, NRC recommendations to Americans in Japan, and NRC PMT hypothetical Worst Case Analyses.

Landau, Mindy

To: Subject: McIntyre, David; Burnell, Scott RE: Quick follow-up - The Daily

Date:

Wednesday, March 16, 2011 12:03:12 PM

I emailed her back and said faggeddaboudit

----Original Message-----From: McIntyre, David

Sent: Wednesday, March 16, 2011 12:01 PM

To: Burnell, Scott; Landau, Mindy Subject: RE: Quick follow-up - The Daily

I would think not. She's all into the heroics of people leaving behind young kids and family to march into the maw of death in Japan. I tried to discourage that. She should be talking to families of the Fairfax SAR Team ....

From: Burnell, Scott

Sent: Wednesday, March 16, 2011 10:53 AM

To: Landau, Mindy Cc: McIntyre, David

Subject: RE: Quick follow-up - The Daily

Correct.

From: Landau, Mindy

Sent: Wednesday, March 16, 2011 10:44 AM

To: Burnell, Scott Cc: McIntyre, David

Subject: FW: Quick follow-up - The Daily

I'm assuming we're not going to allow family members to be interviewed, correct?

From: OPA Resource

Sent: Wednesday, March 16, 2011 10:41 AM

To: Landau, Mindy

Subject: FW: Quick follow-up - The Daily

From: Selena Ross (b)(6)

Sent: Tuesday, March 15, 2011 7:42 PM

To: OPA Resource

Subject: Quick follow-up - The Daily

Hi,

This is Selena Ross from The Daily. I spoke to David McIntyre about an hour ago about the NRC team's decision to go to Japan, I'm wondering if you'd be willing to allow a family member of one of those colleagues, or a close coworker, to talk to me guickly. Since those in Japan can't tell me themselves, I'm looking for some color about what the trip might mean to them. This is NOT a policy story, and I'm not overplaying the health risks - it's a short human-interest piece about Americans deciding to help with another country's problems. I have a home number for Charles Casto and would call the family with 200/233 your permission.

Thanks again, Selena 613-232-2960

Ledford, Joey

To:

Harrington, Holly; Uselding, Lara

Cc: Subject: Hannah, Roger Information Line??

Date:

Wednesday, March 16, 2011 4:21:00 PM

Attachments:

image001.png

Holly: One of the messages relayed to Region II was from a representative of the California Emergency Management Agency. He says there is a report circulating that the general public should call a number that turns out to be the OPA office phone for information about the situation in Japan. I am fairly certain this is a result of improper distribution of the earlier notes from the HOO.

Is there any such information line at NRC that I should pass along to this individual?

Joey Ledford Public Affairs Officer Region II -- Atlanta, Ga. 0: 404.997.4416

**C:** (b)(6)

joey.ledford@nrc.gov



000/22/

McIntyre, David

To: Subject: Hennessey, Kathleen B. RE: chairman testimony?

Date:

Wednesday, March 16, 2011 2:33:00 PM

I'll ask, but I have a feeling it was heavily rewritten right before he spoke.

From: Hennessey, Kathleen B. [mailto:kathleen.hennessey@latimes.com]

Sent: Wednesday, March 16, 2011 2:14 PM

To: McIntyre, David

Subject: chairman testimony?

Hi Dave,

Can you forward over a copy of the chairman's testimony? I'm having trouble pulling it off commerce committee site.

Thanks, Kathleen

Kathleen Hennessey Los Angeles Times/Chicago Tribune Tribune Washington Bureau desk: 202-824-8324

cell (b)(6)

00/200

From: To:

McIntyre, David Brenner, Eliot

Subject:

RE: blog question on dose

Date:

Wednesday, March 16, 2011 4:03:00 PM

Always helpful, 'cause Ah ayant nevah bin no goo-ud wid math ...

From: Brenner, Eliot

Sent: Wednesday, March 16, 2011 4:02 PM

To: McIntyre, David

**Subject:** Fw: blog question on dose

Fyi

Eliot Brenner Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment 301 415 8200

C(p)(6)

Sent from my Blackberry

From: Shoop, Undine

To: Harrington, Holly; Couret, Ivonne; Burnell, Scott; Brenner, Eliot

**Sent**: Wed Mar 16 15:54:03 2011 Subject: RE: blog question on dose

See attached. Please let me know if it meets the mark.

From: Harrington, Holly

Sent: Wednesday, March 16, 2011 3:24 PM

To: Shoop, Undine; Couret, Ivonne; Burnell, Scott; Brenner, Eliot

Subject: RE: blog question on dose

Can you write me up something that directly responds to blog comment. This is good

From: Shoop, Undine

Sent: Wednesday, March 16, 2011 2:14 PM

To: Harrington, Holly; Couret, Ivonne; Burnell, Scott; Brenner, Éliot

Subject: blog question on dose

One of my staff pointed out a comment on the blog related to dose, specifically that it would be helpful if we would use mSv in addition to rem when we are discussing dose since most of the world uses the international standard for units (SI) including the IAEA and TEPCO press releases. The conversion is:

1 mSv = .1 rem

Undine Shoop Chief, Health Physics and Human Performance Branch Division of Inspection and Regional Support Office of Nuclear Reactor Regulation 301-415-2063

Mitlyng, Viktoria

To: Subject: Harrington, Holly; McIntyre, David; Burnell, Scott RE: questions about consequences of Japan disaster

Date:

Wednesday, March 16, 2011 10:32:11 AM

## Could you, please review the response below for accuracy:

Hello Eartha.

The NRC is working with other government agencies, such as the State Department, USAID, and others to obtain information about radiation from Japan.

The radiation monitoring data for the US is handled by the EPA. Please see the link below:

http://www.epa.gov/radiation/japan-fags.html

From: Eartha Melzer (b)(6)

Sent: Tuesday, March 15, 2011 4:40 PM

To: Mitlyng, Viktoria

Subject: Re: questions about consequences of Japan disaster

Thanks very much.

On Tue, Mar 15, 2011 at 5:38 PM, Mitlyng, Viktoria < <u>Viktoria, Mitlyng@nrc.gov</u>> wrote: Hello Eartha.

Hope you're well. Just wanted to drop you a line to say I got your question and am working on tracking down an answer.

Vika

From: Eartha Melzen (b)(6)

Sent: Tuesday, March 15, 2011 4:03 PM

To: Mitlyng, Viktoria

Subject: questions about consequences of Japan disaster

Hi Viktoria,

I interviewed a nuclear expert today who said he has no confidence that U.S. officials will keep the citizens informed about the levels and pathways of radiation from the nuclear disaster in Japan.

Can you help me figure out what system exists to monitor and communicate about radiation from Japan?

Thanks,

Eartha Melzer Reporter www.michiganmessenger.com (231) 933-3249 of the



Couret, Ivanne

To:

Wuebker, Andrea

Cc:

Landau, Mindy; Rakovan, Lance

Subject:

NRC Speaker Bureau - Invitation to Ogilvy Washington's Lecture Series

Date:

Wednesday, April 20, 2011 3:16:00 PM

Importance:

High

#### Andrea -

NRC is setting up a Speaker's Bureau that will be managed through the OEDO's office. I have copied the lead representatives on this initiative and have the proceed to respond to your request and identify the NRC speaker.

Thanks in advance for your patience on this matter. Have a great day. Ivonne

Ivonne L. Couret Public Affairs Officer Office of Public Affairs Media Desk opa.resource@nrc.gov 301-415-8200

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

From: Wuebker, Andrea [mailto:Andrea.Wuebker@ogilvypr.com]

Sent: Wednesday, April 20, 2011 3:05 PM

To: Couret, Ivonne

Subject: FW: Invitation to Ogilvy Washington's Lecture Series

Ivonne,

Thanks for taking my call and the invitation.

Andrea

Dear Mr. Borchardt:

We would like to invite you to speak at our monthly Ogilvy Exchange morning lecture series in our downtown conference center. The series is free and open to the public. The format is straightforward: you would speak for 20-30 minutes on nuclear safety issues, policies and regulations, and then you would take 20-30 minutes of questions from the floor. If you would rather speak on another topic, we are certainly open to ideas that you feel might be more compelling for audience members. In terms of timing, we request that you consider coming to speak the fourth week of May (23-26), but of course we would work around your schedule for

whatever date is most convenient.

**BACKGROUND ON THE LECTURE SERIES**: Ogilvy Washington is committed to illuminating for key audiences the policies of the Obama administration. In the past, our series has hosted administration speakers and other senior level speakers who have delved into U.S. foreign policy, military policy, social media and politics, economic issues, the European debt crisis, and U.S. demographic shifts, and health care reform.

Recent Ogilvy Exchange lectures held our offices include the following:

- Jared Cohen, then-member of Secretary of State Hillary Clinton's Policy and Planning Staff. Cohen gave a lecture on Sec. Clinton's vision of 21st Century Statecraft, how the Obama Administration's State Department is maximizing technology for diplomatic goals; how the State Department is using cutting-edge technologies to solve problems and respond to crises; how diplomats are leveraging digital networks to engage people and governments around the world; and how the State Department is promoting a free and open internet.
- James Miller, Principal Deputy Under Secretary of Defense for Policy. Underscoring the
  importance of cyberspace in the conduct of warfare, the Pentagon is setting up the U.S.
  Cyber Command. Dr. Miller discussed the new Command and the overall need to devise
  capabilities that protect the U.S. military from cyber attacks.
- Adam Conner and Andrew Noves, executives with Facebook, Inc. They discussed how
  government agencies, corporations and non-profits can tap into the power of this online
  community of 400 million active users (70% outside of the U.S.) to achieve their
  organizational missions.
- <u>Uri Dadush</u>, former director of international trade and economic policy for the World Bank, and <u>David J. Lynch</u>, author of the new book, "When the Luck of The Irish Ran Out: The World's Most Resilient Country and Its Struggle to Rise Again." They discussed the Irish and broader European debt crisis and its potential impact on the U.S.
- Adm. Gary Roughead, the Chief of Naval Operations, conducted a lecture and questionanswer session about trends in the Navy, in Navy spending priorities and his views about how the Navy is evolving to meet new national security challenges. It was covered by C-SPAN and news media such as Reuters.
- <u>Price Floyd</u>, then-principal deputy assistant secretary of defense, and <u>PJ Crowley</u>, then-State
  Department communications chief, gave lectures on the communications challenges
  associated with the use of social media in the armed forces and in aid of foreign policy.
- News media panel: we conducted a panel discussion of media experts and journalists on the transformation of the news media, how that is changing the way the federal government is covered by news media, and the implications for Americans when receiving news about national security, monetary policy and the like. Darrell West of Brookings served as our

moderator and the panel included journalists from USA Today and the Washington Post. Last month, we conducted a panel discussion on innovation in U.S. industry.

• <u>Steve J. Jost.</u> U.S. Census Bureau, discussed how demographic changes will potentially affect the economy, the way we conduct business and interact within communities. Mr. Jost discussed how the bureau overcame the challenges of reaching hard-to-reach populations to gather and finalize the vital 2010 census results.

<u>ATTENDEES</u>: We usually have anywhere from 50-100 attendees, including Senate staff, House staff, executive branch staff, company executives, NGOs, government relations types, think tank scholars, and news media. The events are free and open to the public and are covered by the press.

The time of day for the lecture is typically 8-9:30 a.m. Continental breakfast is served at 8 a.m., the lecture kicks off around 8:30 a.m. The speaker(s) usually speaks for 20 mins to 30 mins and then takes 30 mins for questions.

**LINKS TO PAST INVITES:** These are links to several past invites to our lecture series.

http://www.hostingimagesemail.com/OPR/lectureseries/101509/index.html

http://www.hostingimagesemail.com/OPR/lectureseries/110509/index.html

http://www.hostingimagesemail.com/OPR/lectureseries/042810/index.html

#### LINKS TO RECORDINGS OF PAST EVENTS:

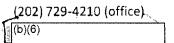
Adm. Roughead: http://www.c-spanvideo.org/program/287360-1

Price Floyd:

Part 1: http://nextgenweb2.blip.tv/file/2832248/ Part 2: http://nextgenweb2.blip.tv/file/2835601/

Jared Cohen: http://www.c-spanvideo.org/program/293841-1

Andrea Wuebker
Account Director
Ogilvy Public Relations
1111 19th Street, NW
10th Floor
Washington, DC 20036



Brenner, Eliot

To:

Screnci, Diane; Harrington, Holly

Cc:

Hannah, Roger; Sheehan, Neil; Mitlyng, Viktoria; Dricks, Victor; Uselding, Lara

Subject:

Re: annual assessment meetings

Date:

Wednesday, March 16, 2011 8:56:08 AM

All: absebt word to conmtrary from jaczko, borchardt believes nd I agrrr we are goimg fwd with our responsibilities. We can start by saying we are not here to discuss details of japan problem. Disuss plant performsnmce.

Diane: what message did youi contemlate for TV

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment

301 415 8200

C(b)(6)

Sent from my Blackberry

From: Screnci, Diane To: Brenner, Eliot

Cc: Hannah, Roger; Sheehan, Neil; Mitlyng, Viktoria; Dricks, Victor; Uselding, Lara

Sent: Wed Mar 16 08:49:23 2011 Subject: annual assessment meetings

Eliot,

I attended a meeting this morning in the Region to discuss the upcoming annual assessment meetings. The staff is going-forward with the schedule.

While we have put no one on TV up until now, beginning Thursday, 3/24, we'll be putting people in front of the cameras across the country. Most of these meetings don't normally get much attention. But, I'd expect TV cameras at all of them. Beginning next week at TMI, there are about one a week – sometimes more- that we'll have to attend. Normally we attend a half-dozen or so

I think the agency should give serious consideration to putting these on hold until the situation in Japan calms down. It makes no sense to delay issuance of the VY license to control information and continue to hold meetings across the country.

DIANE SCRENCI SR. PUBLIC AFFAIRS OFFICER USNRC, RI 610/337-5330

000/239

Graser, Dan

To:

McIntyre, David; Brenner, Eliot

Cc:

Hawkens, Roy

Subject:

RE: Press contact/request

Date:

Wednesday, March 16, 2011 7:46:40 AM

#### Dave.

Eliot sent a quick response advising me to "stay away for now", which is in accord with my sentiment.



Protecting People and the Environment

# Daniel J. Graser

Licensing Support Network Administrator Atomic Safety and Licensing Board Panel, NRC (301) 415-7401 Dan.Graser@nrc.gov

"If everybody is thinking alike, then somebody isn't thinking."

From: McIntyre, David

Sent: Wednesday, March 16, 2011 7:45 AM

To: Graser, Dan; Brenner, Eliot

Cc: Hawkens, Roy

**Subject:** Re: Press contact/request

I will call him later today if I remember. I be working 2 to midnight.

David McIntyre

NRC Office of Public Affairs

(b)(6)

301-415-8200 (office)

Sent from my BlackBerry, which is wholly respnsble for all typoos.

From: Graser, Dan

To: Brenner, Eliot, McIntyre, David

Cc: Hawkens, Roy

**Sent**: Wed Mar 16 07:26:03 2011 **Subject**: Press contact/request

I got a voice message on my phone from an individual named Scott Conner (ph: 424-781-6036) who stated that he is with CBS/talk format and who asked me to give him a "shout

back". I'm disinclined to do any interviews right now, any thoughts/recommendations?



# Daniel J. Graser

Licensing Support Network Administrator Atomic Safety and Licensing Board Panel, NRC (301) 415-7401 Dan.Graser@nrc.gov

"If everybody is thinking alike, then somebody isn't thinking."

Burnell, Scott

To: Subject: Date: LIA04 Hoc; Harrington, Holly; Screnci, Diane RE: potential inaccurate statement in press Wednesday, March 16, 2011 8:36:47 AM

If Diane feels the need to follow up on this, feel free.

From: LIA04 Hoc

Sent: Wednesday, March 16, 2011 8:27 AM

To: Burnell, Scott; Harrington, Holly

Subject: FW: potential inaccurate statement in press

Scott/Holly, what the press released seems to be in contraction to NRC reports. I believe that this would be housed in RES, but I am not sure which Division.

Amanda Noonan State Liaison – Liaison Team Incident Response Center

From: Tifft, Doug

Sent: Wednesday, March 16, 2011 8:24 AM

To: LIA04 Hoc

Subject: RE: potential inaccurate statement in press

Thanks.

From: LIA04 Hoc

Sent: Wednesday, March 16, 2011 8:23 AM

**To:** Tifft, Doug **Cc:** McNamara, Nancy

Subject: RE: potential inaccurate statement in press

I am forwarding this to the correct individuals to research the answer, but from the NRC link you provided it looks like they are on that list contrary to what the article says. We will get back to you as soon as possible.

From: Tifft, Doug

Sent: Wednesday, March 16, 2011 8:15 AM

To: LIA04 Hoc Cc: McNamara, Nancy

Subject: potential inaccurate statement in press

MA pointed out this article to me:

http://www.newburyportnews.com/local/x449492654/Japans-crisis-raises-worries-about-local-nuclear-power-plant

Last paragraph in the article says Seabrook was not among the 27 plants where more

evaluation was required. Back in September, when I implemented the Comm Plan associated with GI-199, I informed MA that Seabrook was on the list of 27 plants in the continue region. Version of the Comm Plan I have has Seabrook on the list, but it cautions that the list could change. Did the list change? Is Seabrook in the continue region or not?

# See Q23:

http://www.internal.nrc.gov/communications/plans/active/CommPlan Generic Issue199.pdf

-Doug

Doug Tifft

Regional State Liaison Officer

Office: 610-337-6918 Cell: (b)(6)

Brenner, Eliot

To:

Harrington, Holly; Burnell, Scott

Subject:

Later media

Date:

Wednesday, March 16, 2011 9:26:43 AM

Someone please draft a short media advisory for later use to effect that chairman and borchadt will be available for interviews at 400 , capitol. Contact thru opa for relay to me. Will probably go first to cnn then to north captiol.

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment 301 415 8200

C(b)(6)

Sent from my Blackberry

(b)(6)

To:

McIntyre, David; OPA Resource

Cc:

NRC Allegation

Subject: Date: Re: Poor Quality information in a website Wednesday, March 16, 2011 10:16:29 AM

#### THANK YOU! THANK YOU! THANK YOU!

I wondered about that. I went out to find maps, and I saw some strange ones...and then traced to a different one that looks the same, but had a different scale. Some had U.S.NRC on them, and others, that looked like the same map, didn't. So, I saw those and tried to verify on your website, but couldn't. An exercise in frustration since people were asking for them and I couldn't verify...the one that I sent to you seemed like the obvious hoax, but there were others out there. It would be better if you said something (even if it's something that says that you don't think radiation would hit the US, HI, AK)...that would be better than reading hoax websites. People would speculate...but the one that I ran into was pretty strange (about angels and such). Thanks.

# sande bruggeman

---- Original Message -----

From: McIntyre, David

To: OPA Resource ; (b)(6)

Cc: NRC Allegation

Sent: Monday, March 14, 2011 4:00 PM

Subject: RE: Poor Quality information in a website

That map is bogus, and not an NRC website. We have been pushing back trying to get as many websites as possible to remove it.

Thanks for your vigilance.

David McIntyre
Office of Public Affairs
U.S. Nuclear Regulatory Commission
(301) 415-8200

From: (b)(6)

Sent: Sunday, March 13, 2011 7:17 AM

To: NRC Allegation

Subject: Poor Quality information in a website

Is this really your map?

http://www.japan.org/wp-content/uploads/2011/03/falloutmap2.jpg

because this was on youtube and nobody can validate what is going on when NRC has nothing on their website.

http://www.youtube.com/watch?v=HtnKEG3kEL1&feature=related

this one looks interesting, but no source...totally not helpful.

http://www.youtube.com/watch?v=Rx8fl\_2R6cs

Brenner Fliot (b)(6)

To:

Cc:

McIntyre, David; Harrington, Holly

Subject:

Tv this afternoon

Date:

Wednesday, March 16, 2011 2:21:14 PM

It is now my intention after our afternoon senate meeting to go to russel bldg rotunda to be available for as many interviews as possible. Will figure out later if we can handle morning shows.

Will keep you advised on how things are going

Eliot Eliot Brenner Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment 301 415 8200

**C**(p)(e)

Sent from my Blackberry

Ake, Jon

To:

Kammerer, Annie; Uselding, Lara; Burnell, Scott; Manoly, Kamal

Cc:

Brenner, Eliot; Harrington, Holly; Screnci, Diane; Sheehan, Neil; Hannah, Roger; Ledford, Joey; Chandrathil,

Prema: Mitlyng, Viktoria: McIntyre, David: Couret, Ivonne

Subject:

RE: Reporters are asking for research? Date: Wednesday, March 16, 2011 12:10:22 PM

## Pages 17-23 of the Q/A's deal explicitly w/ GI-199

From: Kammerer, Annie

Sent: Wednesday, March 16, 2011 10:07 AM

To: Uselding, Lara; Burnell, Scott; Ake, Jon; Manoly, Kamal

Cc: Brenner, Eliot; Harrington, Holly; Screnci, Diane; Sheehan, Neil; Hannah, Roger; Ledford, Joey;

Chandrathil, Prema; Mitlyng, Viktoria; McIntyre, David; Couret, Ivonne

**Subject:** RE: Reporters are asking for research?

Jon and cliff know the contents of the various GI-199 documents better than anyone.

Also, just in case any of you don't have it... I've attached the latest version of the Q&As.

#### Annie

From: Uselding, Lara

Sent: Wednesday, March 16, 2011 12:02 PM

To: Burnell, Scott; Kammerer, Annie; Ake, Jon; Manoly, Kamal

Cc: Brenner, Eliot; Harrington, Holly; Screnci, Diane; Sheehan, Neil; Hannah, Roger; Ledford, Joey;

Chandrathil, Prema; Mitlyng, Viktoria; McIntyre, David; Couret, Ivonne

Subject: Reporters are asking for research?

Is there a report we can point to on this or more to give?

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara. Uselding@nrc.gov

BlackBerry (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Burnell, Scott

Sent: Wednesday, March 16, 2011 6:22 AM To: Kammerer, Annie; Ake, Jon; Manoly, Kamal

Cc: Brenner, Eliot; Harrington, Holly; Screnci, Diane; Sheehan, Neil; Hannah, Roger; Ledford, Joey;

Chandrathil, Prema; Mitlyng, Viktoria; Uselding, Lara; McIntyre, David; Couret, Ivonne

Subject: FW: Numbers Importance: High

Annie, Jon, Kamal;

I know you're going to have a cow over this – somewhat inevitable when a reporter new to the subject tries to summarize things. Apart from "you're totally off-base," what specific

technical corrections can we ask for??

OPA – this is likely to spark a lot of follow-up. The immediate response would be "that's a very incomplete look at the overall research and we continue to believe U.S. reactors are capable of withstanding the strongest earthquake their sites could experience." I'll share whatever we get from the experts.

Scott

From: Bill Dedman [mailto:Bill.Dedman@msnbc.com]

Sent: Wednesday, March 16, 2011 6:47 AM

To: Burnell, Scott Subject: RE: Numbers

Scott,

FYI, this story is online now.

If you or the NRC technical see any error, please let me know right away. I linked to all the source documents so people can also read in full.

Thanks,

Bill

http://www.msnbc.msn.com/id/42103936/ns/world\_news-asiapacific/

From: Burnell, Scott [mailto:Scott.Burnell@nrc.gov]

**Sent:** Tuesday, March 15, 2011 3:38 PM

To: Bill Dedman Subject: Numbers

Bill;

Staff's amazing here – they were compiling these numbers just in case – the Western plants are in there.

Scott Burnell

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Kammerer, Annie

To:

Hannah, Roger; Uselding, Lara; Burnell, Scott; Ake, Jon; Manoly, Kamal; Munson, Clifford

Cc:

Brenner, Eliot; Harrington, Holly; Screnci, Diane; Sheehan, Neil; Ledford, Joey; Chandrathil, Prema; Mitlying,

Viktoria; McIntyre, David; Couret, Ivonne

Subject:

RE: Numbers

Date: V

Wednesday, March 16, 2011 12:03:14 PM

Attachments:

image001.png

#### Jon/Cliff:

Can you get on this ASAP?

I have been fielding phone calls and must get dressed to come in...I won't make it on time if I don't.

BTW, we are also getting questions about our latest guidance on tsunami and tsunami research. I Need to do a write up on this...

#### Annie

From: Hannah, Roger

Sent: Wednesday, March 16, 2011 11:00 AM

To: Uselding, Lara; Burnell, Scott; Kammerer, Annie; Ake, Jon; Manoly, Kamal

Cc: Brenner, Eliot; Harrington, Holly; Screnci, Diane; Sheehan, Neil; Ledford, Joey; Chandrathil, Prema;

Mitlyng, Viktoria; McIntyre, David; Couret, Ivonne

Subject: RE: Numbers

We've also had some related reporter questions and it would be nice to have a more definitive statement to put the numbers in context...

# Roger Hannah, APR

Senior Public Affairs Officer Region II -- Atlanta, Ga. Office - 404-997-4417 Cell - [(b)(6)

roger.hannah@nrc.gov



From: Uselding, Lara

Sent: Wednesday, March 16, 2011 10:53 AM

To: Burnell, Scott; Kammerer, Annie; Ake, Jon; Manoly, Kamal

Cc: Brenner, Eliot; Harrington, Holly; Screnci, Diane; Sheehan, Neil; Hannah, Roger; Ledford, Joey;

Chandrathil, Prema; Mitlyng, Viktoria; McIntyre, David; Couret, Ivonne

Subject: RE: Numbers

Any update on this? Got Q from AP reporter...right now, I've said what you suggest below

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Alfairs - Region IV

Lara.Uselding@nrc.gov BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Burnell, Scott

**Sent:** Wednesday, March 16, 2011 6:22 AM **To:** Kammerer, Annie, Ake, Jon; Manoly, Kamal

Cc: Brenner, Eliot; Harrington, Holly; Screnci, Diane; Sheehan, Neil; Hannah, Roger; Ledford, Joey;

Chandrathil, Prema; Mitlyng, Viktoria; Uselding, Lara; McIntyre, David; Couret, Ivonne

Subject: FW: Numbers Importance: High

Annie, Jon, Kamal;

I know you're going to have a cow over this – somewhat inevitable when a reporter new to the subject tries to summarize things. Apart from "you're totally off-base," what specific technical corrections can we ask for??

OPA – this is likely to spark a lot of follow-up. The immediate response would be "that's a very incomplete look at the overall research and we continue to believe U.S. reactors are capable of withstanding the strongest earthquake their sites could experience." I'll share whatever we get from the experts.

Scott

From: Bill Dedman [mailto:Bill.Dedman@msnbc.com]

Sent: Wednesday, March 16, 2011 6:47 AM

To: Burnell, Scott Subject: RE: Numbers

Scott,

FYI, this story is online now.

If you or the NRC technical see any error, please let me know right away. I linked to all the source documents so people can also read in full.

Thanks,

Bill.

http://www.msnbc.msn.com/id/42103936/ns/world\_news-asiapacific/

From: Burnell, Scott [mailto:Scott.Burnell@nrc.gov]

**Sent:** Tuesday, March 15, 2011 3:38 PM

To: Bill Dedman Subject: Numbers

Bill;

Staff's amazing here – they were compiling these numbers just in case – the Western plants are in there.

Scott Burnell

This e-mail message and attached documents are confidential; intended only for the named recipient(s) above and may contain information that is privileged, confidential, proprietary, and/or exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any unauthorized use, dissemination, distribution or copy of this communication is strictly prohibited. No waiver of privilege, confidence or otherwise is intended by virtue of this communication. If you have received this message in error, or are not the named recipient(s), please immediately notify the sender, destroy all copies and delete this e-mail message from your computer. Thank you.

Uselding, Lara

To:

Landau, Mindy; Burnell, Scott; McIntyre, David; Harrington, Holly

Subject: Date:

Need HQ to respond as she is asking HQ Qs Wednesday, March 16, 2011 11:51:09 AM

I called her - She wants to know if we are issuing another press release today with our analysis and support of CA as we did in 11-049 - send her that if we do.

Also asking for the research document and what our statement is based on that we feel MSNBC report is incomplete.

Need help please. I have 12 more waiting in the queue and one AP reporter I'm working with on bigger CA Story

#### Thanks!

Lara Uselding U.S. Nuclear Regulatory Commission (NRC) Public Alfairs - Region IV

Lara. Uselding@nrc.gov BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Landau, Mindy

Sent: Wednesday, March 16, 2011 10:23 AM

To: Uselding, Lara Subject: FW: Media

Lara - please handle

From: Royer, Deanna

Sent: Wednesday, March 16, 2011 11:23 AM

To: Landau, Mindy Subject: Media

Ayesha Rascoe

Reuters

202-310-5683

Re: Nuclear Power Rankings

Deanna Royer Contract Secretary Division of New Reactor Licensing (301) 415-7158 Deanna.Royer@nrc.gov

Landau, Mindy Burnell, Scott

To: Cc:

McIntyre, David

Cc: Subject:

FW: Quick follow-up - The Daily

Date:

Wednesday, March 16, 2011 10:43:58 AM

I'm assuming we're not going to allow family members to be interviewed, correct?

From: OPA Resource

Sent: Wednesday, March 16, 2011 10:41 AM

To: Landau, Mindy

Subject: FW: Quick follow-up - The Daily

From: Selena Ross (b)(6)

Sent: Tuesday, March 15, 2011 7:42 PM

To: OPA Resource

Subject: Quick follow-up - The Daily

Hi,

This is Selena Ross from The Daily. I spoke to David McIntyre about an hour ago about the NRC team's decision to go to Japan. I'm wondering if you'd be willing to allow a family member of one of those colleagues, or a close coworker, to talk to me quickly. Since those in Japan can't tell me themselves, I'm looking for some color about what the trip might mean to them. This is NOT a policy story, and I'm not overplaying the health risks - it's a short human-interest piece about Americans deciding to help with another country's problems. I have a home number for Charles Casto and would call the family with your permission.

Thanks again, Selena 613-232-2960

cell:(b)(6)

Harrington, Holly

To:

Burnell, Scott; Brenner, Eliot; Shannon, Valerie; Akstulewicz, Brenda; Hayden, Elizabeth; Couret, Ivonne;

Janbergs, Holiy; McIntyre, David

Subject:

RE: Hearing Today

Date:

Wednesday, March 16, 2011 9:18:46 AM

lasked AV to tape.

Will ask Bethany to watch

From: Burnell, Scott

Sent: Wednesday, March 16, 2011 9:02 AM

To: Brenner, Eliot; Shannon, Valerie; Akstulewicz, Brenda; Harrington, Holly; Hayden, Elizabeth; Couret,

Ivonne; Janbergs, Holly; McIntyre, David

Subject: RE: Hearing Today

OPS Ctr can't monitor - sorry to state the obvious.

From: Brenner, Eliot

Sent: Wednesday, March 16, 2011 9:02 AM

To: Shannon, Valerie; Akstulewicz, Brenda; Burnell, Scott; Harrington, Holly; Hayden, Elizabeth; Couret,

Ivonne; Janbergs, Holly; McIntyre, David

**Subject:** Re: Hearing Today

Staff: pls monitor. We may commit lots of news.

Eliot Brenner

Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment

301 415 8200

C(b)(6)

Sent from my Blackberry

From: Shannon, Valerie

To: Akstulewicz, Brenda; Brenner, Eliot; Burnell, Scott; Harrington, Holly; Hayden, Elizabeth; Couret,

Iyonne; Janbergs, Holly; McIntyre, David **Sent**: Wed Mar 16 08:59:34 2011

**Subject**: Hearing Today

FYI,

The hearing at 9:30 today can be viewed on C-Span 3 which is channel 39 (NRC Broadband)

Val

000) 2487

Uselding, Lara

To:

Brenner, Eliot; Akstulewicz, Brenda

Çc:

McIntyre, David; Burnell, Scott; Harrington, Holly; Couret, Ivonne

Subject:

RE: Not to alarm you - John Couwels with CNN Online plans to be at Victoria, TX.

Date:

Wednesday, March 16, 2011 10:15:30 AM

I agree I should stay here. I also share this news to show the level of interest we will be getting at upcoming meetings. If CNN (even online) is willing to drive down to Victoria a meeting that is going to disappoint them, I agree it may start becoming a circus. I think CNN will get bored and leave after today because there are 2 members of the public there.

The judges feel they can manage this.

Due to the volume of calls I'm getting and the ones that HQ is forwarding me to help with, I really can't see me being able to function down there. Maybe if Victor is feeling like taking some calls from home at some point, that would be very helpful.

# Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara. Uselding@nrc.gov

BlackBerry (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Brenner, Eliot

**Sent:** Wednesday, March 16, 2011 8:59 AM **To:** Uselding, Lara; Akstulewicz, Brenda

Cc: McIntyre, David; Burnell, Scott; Harrington, Holly; Couret, Ivonne

Subject: Re: Not to alarm you - John Couwels with CNN Online plans to be at Victoria, TX.

Can you both be there and atke calls? Tend to think youir time better spent at R4.

Eliot Brenner

Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment

301 415 8200

C ((b)(6)

Sent from my Blackberry

From: Uselding, Lara

To: Brenner, Eliot; Akstulewicz, Brenda

Cc: McIntyre, David; Burnell, Scott; Harrington, Holly; Couret, Ivonne

**Sent**: Wed Mar 16 09:57:01 2011

Subject: Not to alarm you - John Couwels with CNN Online plans to be at Victoria, TX.

He's in Florida and was asked late yesterday to attend (because this is first NRC related meeting since Japan perhaps) and I explained ground rules after speaking with Judges. They say he can film before and after - not during. So far this morning, only two members of the public are in attendance. Judge Baratta spoke with his colleagues and they are OK and not freaked out and feel this would be fine.

I've also heard that a Houston TV station is attending.

I have asked the Judges to let me know if it becomes a zoo and I can fly down there today.

Lara Uselding U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Owen, Lucy

Sent: Wednesday, March 16, 2011 8:32 AM

To: Uselding, Lara

Subject: Good Morning dear Lara - Please call John Couwels with CNN regarding the Victoria, TX.

meeting 305 794 1496

Ahlers, Mike

To:

McIntyre, David; Brenner, Eliot

Cc:

Meserve, Jeanne; Barnett, Jim

Subject:

RE: CNN -- Letter?

Date:

Wednesday, March 16, 2011 7:12:26 PM

Thank you for making the chairman available today.

And, we remain very interested in any communications between the NRC and the industry resulting from the Japan incident. So please copy us any communications when they are made. Thanks - Mike Ahlers, CNN ((b)(6)

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Wednesday, March 16, 2011 5:31 PM

To: Ahlers, Mike; Brenner, Eliot Cc: Meserve, Jeanne; Barnett, Jim Subject: RE: CNN -- Letter?

#### Hi Mike -

Yes, we are already working on a communication to industry in this regard. It's too early right now to give details, however.

Dave McIntyre NRC Public Affairs

From: Ahlers, Mike [mailto:Mike.Ahlers@turner.com]

Sent: Wednesday, March 16, 2011 5:16 PM

To: Brenner, Eliot; McIntyre, David Cc: Meserve, Jeanne; Barnett, Jim

Subject: CNN -- Letter?

Eliot, David,

We're hearing the NRC may be sending a letter to nuclear operators asking them to check certain systems, as a result of the Japan incident. Can you confirm and give us details, or point me in the right direction? Thanks - Mike Ahlers, CNN

Mike Ahlers **CNN** Washington 202-898-7917 (o)

(b)(6)

-mike.ahlers@turner.cóm

From: To:

McIntyre, David

Brenner, Eliot

Subject:

CNN wants CHM for AM shows ...

Date:

Wednesday, March 16, 2011 7:48:00 PM

This would be American Morning, in the 7 am time frame.

Her contact info is... Elizabeth Mayo 212-275-7853

Should I be sending such requests to you?

Brenner, Eliot

To: Subject: McIntyre, David Re: Enroute to ops

Date:

Wednesday, March 16, 2011 8:31:31 PM

Not yet. Let me get in and chat. Eliot Brenner Director, Office of Public Affairs

US Nuclear Regulatory Commission
Protecting People and the Environment

301,415,8200

 $d^{(b)(6)}$ 

Sent from my Blackberry

---- Original Message -----From: McIntyre, David To: Brenner, Eliot

Sent: Wed Mar 16 20:12:40 2011 Subject: Re: Enroute to ops

What about Casto and 60 Mins? That is time sensitive as he could be available today.

David McIntyre

NRC Office of Public Affairs

(b)(6)

mobile) )

301-415-8200 (office)

Sent from my BlackBerry, which is wholly respnsble for all typoos.

---- Original Message -----

From: Brenner, Eliot

To: McIntyre, David

Sent: Wed Mar 16 19:58:22 2011

Subject: Enroute to ops

Not doing morning shows. Expect to be at white house poress room tomorrow.

Eliot Brenner

Director, Office of Public Affairs
US Nuclear Regulatory Commission

Protecting People and the Environment

301 415 8200

q(p)(e)

Sent from my Blackberry

Harrington, Holly

To:

Vircilio, Martin; McIntyre, David; Brenner, Eliot; Sheehan, Neil

Cc:

Casto, Chuck

Subject:

RE: Request from 60 Minutes

Date:

Wednesday, March 16, 2011 10:10:22 AM

Marty—we got it. thanks

From: Virgilio, Martin

**Sent:** Wednesday, March 16, 2011 10:06 AM

To: McIntyre, David; Brenner, Eliot; Harrington, Holly; Sheehan, Neil

Cc: Casto, Chuck

Subject: Fw: Request from 60 Minutes

Dave

Can you please assist us on this one

Marty

From: Casto, Chuck

To: Virgilio, Martin; Miller, Charles Sent: Wed Mar 16 09:55:56 2011 Subject: Fw: Request from 60 Minutes

Elliot's and beth's email kicks back.

From: Young, Nicole <ney@cbsnews.com>

**To**: Casto, Chuck

Sent: Wed Mar 16 09:49:39 2011 Subject: Request from 60 Minutes

Dear Mr. Casto,

My name is Nicole Young with 60 Minutes and my team and corresondent, Scott Pelley, are currently on the ground in Sendai, Japan.

We would like to see if there's any way we can link up with you and your NRC staff on the ground. We are one of the last news teams on the ground covering this urgent and important situation.

Please, let me know if there's any way we can arrange for our team to meet up with yours

Thank you and I hope to hear from you soon.

Best, Nicole Young +1 646 975 7521

Brenner, Eliot

To:

Casto, Chuck; Virgilio, Martin; McIntyre, David; Harrington, Holly; Burnell, Scott

Subject:

Re: Request from 60 Minutes

Date:

Wednesday, March 16, 2011 10:09:47 AM

Please re talking points.

Eliot Brenner

Director, Office of Public Affairs **US Nuclear Regulatory Commission** Protecting People and the Environment

301 415 8200

 $C^{(p)(6)}$ 

Sent from my Blackberry

From: Casto, Chuck To: Brenner, Eliot

**Sent**: Wed Mar 16 10:00:20 2011 Subject: Re: Request from 60 Minutes

I'll check on visuals. We have some rough drawings and diagrams. Don't want to share the pics we

have. Your call I will do whatever you all agree to. I can send you my talking points.

From: Brenner, Eliot To: Casto, Chuck

Sent: Wed Mar 16 09:56:59 2011 Subject: Re: Request from 60 Minutes

Thanks. Leaning forward on al requests like this. Will advise probably in 3-4 hours. Do youi feel

comfortable? Have you go good visuals?

Eliot Brenner

Director, Office of Public Affairs **US Nuclear Regulatory Commission** Protecting People and the Environment 301 415 8200

C(b)(6)

Sent from my Blackberry

From: Casto, Chuck To: Brenner, Eliot

Sent: Wed Mar 16 09:51:15 2011 Subject: Fw: Request from 60 Minutes

From: Young, Nicole <ney@cbsnews.com>

To: Casto, Chuck

**Sent**: Wed Mar 16 09:49:39 2011 Subject: Request from 60 Minutes

Dear Mr. Casto,

My name is Nicole Young with 60 Minutes and my team and corresondent, Scott Pelley, are currently on the ground in Sendai, Japan.

We would like to see if there's any way we can link up with you and your NRC staff on the ground. We are one of the last news teams on the ground covering this urgent and important situation.

Please, let me know if there's any way we can arrange for our team to meet up with yours

Thank you and I hope to hear from you soon.

Best, Nicole Young +1 646 975 7521

McIntyre, David

To: Subject: Casto, Chuck RE: 60 Minutes

Date:

Wednesday, March 16, 2011 8:59:00 PM

OK. I will break the news to them.

----Original Message-----From: Casto, Chuck

Sent: Wednesday, March 16, 2011 8:52 PM

To: McIntyre, David Subject: Re: 60 Minutes

Not now. Too busy

---- Original Message -----From: McIntyre, David

To: Casto, Chuck

Sent: Wed Mar 16 20:25:39 2011

Subject: 60 Minutes

Chuck - I understand you were contacted by CBS for an interview. I'm trying to reach Eliot Brenner for clearance. What is your comfort level?

David McIntyre

NRC Office of Public Affairs
(b)(6)

301-415-8200 (office)

Sent from my BlackBerry, which is wholly respnsble for all typoos.

Couret, Ivonne

To:

Burnell, Scott

Subject:

Media Interview - Voice of Russia - 4.21 1:30 Airing

Date:

Tuesday, April 19, 2011 3:14:00 PM

Importance:

Hiah

Scott - Can you follow up? Don't think this is Eliot worthy...

Jessica Jordan

Phone 941-961-0039

(b)(6)

Looking for an NRC expert to talk about nuclear safety was given Eliot's name by Rebecca Cooper of NPR

Ivonne L. Couret Public Affairs Officer Office of Public Affairs Media Desk opa.resource@nrc.gov 301-415-8200

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

000 55

Kammerer, Annie

To:

Munson, Clifford; Karas, Rebecca; Ake, Jon; Seber, Donan; Devlin, Stephanie; Chokshi, Nilesh

Cc:

Case, Michael; Skeen, David; Hiland, Patrick; Hasselberg, Rick; Grenner, Eliot; Harrington, Holly; Burnell, Scott;

McIntyre, David; RST01 Hoc

Subject:

Seismic Team Members supporting the RST, Responsibilities, and Protocols

Date:

Wednesday, March 16, 2011 8:13:00 PM

All,

We are increasing seismic support to the Reactor Safety Team (RST) and Office of Public Affairs (OPA) in the Ops Center such that there will be a responsible person in the Ops center that the RST and OPA teams can turn to at all times. (RST and OPA staff see a note to you at the bottom of the page)

## Staffing in the next few days is generally as follows:

7am to 3pm; Cliff Munson (on site) and Jon Ake remotely. (The exception is Thursday when Cliff and Jon are both working remotely and Nilesh is in the center) 3pm to 11pm; Annie Kammerer (on site) with some support by Jon Ake remotely 11pm to 7 am; GIS staffers (all of whom are seismologist) will support RST and OPA by acting as a point of contact. This will be Stephanie Devlin or Dogan Seber, depending on the day.

#### General Responsibilities:

- All members of the seismic team noted above have the responsibility to support the RST and OPA in assuring that a timely response to questions, both in house and from the media (through OPA), is provided.
- All members of the seismic team also have the responsibility to assure that the Seismic Q&A document is updated with all the questions received and answered, such that the NRC message is consistent and we don't reinvent the wheel.

#### Specific Responsibilities:

- Annie Kammerer is the keeper of the seismic Q&A document and is responsible for issuing the document as needed.
- Cliff is the point of contact during the 7am to 3pm shift. He will be supported by Jon Ake and, to the extent possible, Annie Kammerer.
- Annie and Cliff are responsible for the coordination of assistance coming from the various groups who are providing responses in their areas of expertise.
- The GIS staff should first act in their official role as technical specialists. However, when questions come into the Op Center or OPA, they are to act as a point of contact and area responsible for assuring the timely response to seismic- or tsunami-related questions, using the below protocols.

#### Protocols for Seismic Team:

- To keep everyone on the same page, please send all Q&As received to Annie, Cliff and Jon.
- When possible, please add the Q&As received during the shift (even if they are just the questions without answers) into the working version of the word document, using track changes. If not possible to add during shift, please make a list of new items and provide to Cliff or Annie so that they can be dug out of email and added.
- The primary responsibility of the GIS team is the GIS work. In their secondary role as seismic contacts for RST and OPA, they should undertake the following actions:

actions:

- First determine if the question being asked is already in the seismic Q&As, if so, please provide to RST or OPA
- o If the question is not immediately available, please call Annie (try me first, and use (b)(6) for Cliff to inform us that a new question has come in, and what it is. Please don't be shy about calling.

RST and OPA staff: Note that all correspondence should be sent to Annie Kammerer, Clifford Munson and Jon Ake. We are a tight team who have worked together for years; and we immediately forward everything we see to each other anyway. This will save us a step and a lot of extra email. Also email Nilesh when he is on duty in the Ops Center.

JapanEmbassy, TaskForce

To:

Duncan, Aleshia D: Cherry, Ronald C: Roos, John; Zumwalt, James P; Basalla, Suzanne 1;

(b)(6)

James; Ulses, Anthony

CCi

Luke, Robert S; Wall, Marc M

Subject:

FW: 0630 EDT (March 16, 2011) USNRC Earthquake/Tsunami SitRep

Date: Attachments: Wednesday, March 16, 2011 8:00:07 AM NRC Status Update 3-16.11--0630am.pdf

From Washington, Limited distribution to those shown

This email is UNCLASSIFIED.

From: CMS TaskForce1C - Coordinator On Behalf Of zTask Force 1 Mailbox

Sent: Wednesday, March 16, 2011 8:50 PM

**To:** Donovan, Joseph R; Deming, Rust M; Patel, Nirav S; Loi, James L; Campbell, Kurt M; Steinberg, James B; Mace, Casey K; Leou, Nancy W; Seiden, Maya D; 'Duncan, Shawn H.'; Jung, Thomas T; EAP-J-Office-DL; JapanEmbassy, TaskForce

Cc: zTask Force 1 Mailbox

Subject: FW: 0630 EDT (March 16, 2011) USNRC Earthquake/Tsunami SitRep

Most recent Status Update from NRC, for your information.

From: LIA07 Hoc [mailto:LIA07.Hoc@nrc.gov] Sent: Wednesday, March 16, 2011 6:46 AM

To: Andersen, James; Anderson, Joseph; Ash, Darren; Baggett, Steven; Barker, Allan; Batkin, Joshua; Boger, Bruce; Borchardt, Bill; Bradford, Anna; Brenner, Eliot; Smith, Brooke; Brown, Milton; Bubar, Patrice; Camper, Larry; Carpenter, Cynthia; Castleman, Patrick; Ader, Charles; Casto, Chuck; Coggins, Angela; Collins, Elmo; Correia, Richard; Dapas, Marc; Dean, Bill; Decker, David; Dickman-Disabled-11/14/2010, Paul; Dorman, Dan; Droggitis, Spiros; Dyer, Jim; ET02 Hoc; Evans, Michele; Franovich, Mike; Apostolakis, George; Gibbs, Catina; Giitter, Joseph; Gott, William; Grobe, Jack; Hahn, Matthew; Haney, Catherine: Harrington, Holly; Hipschman, Thomas; Holahan, Gary; Holahan, Patricia; HOO Hoc; Howell, Art; Howell, Linda; Foster, Jack; Jackson, Donald; Jaczko, Gregory; Johnson, Andrea; Johnson, Michael: Kahler, Robert; Foggie, Kirk; Kock, Andrea; Kozal, Jason; Leeds, Eric; LIA01 Hoc; LIA02 Hoc; LIA03 Hoc; LIA06 Hoc; LIA08 Hoc; LIA11 Hoc; Logaras, Harral; Loyd, Susan; Magwood, William; Maier, Bill: Marshall, Jane; Marshall, Michael; McCree, Victor; McDermott, Brian; McNamara, Nancy; Miller, Charles; Miller, Chris; Monninger, John; Morris, Scott; Nieh, Ho; NSIR\_DDSP\_ILTAB\_Distribution; Ordaz, Vonna; Orders, William; Ostendorff, William; Pace, Patti; Pearson, Laura; Pederson, Cynthia; Plisco, Loren; Powell, Amy; R1 IRC; R2 IRC; R3 IRC; R4 IRC; Reddick, Darani; Reyes, Luis; Devercelly, Richard; ROO hoc; Satorius, Mark; Schmidt, Rebecca; Sharkey, Jeffry; Sheron, Brian; Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Thoma, John; Tifft, Doug; Kolb, Timothy; Ulses, Anthony; Nakanishi, Tony: Tracy, Glenn; Trapp; Trapp, James; Trojanowski, Robert; Uhle, Jennifer, Virgilio, Martin: Warnick, Grea: Warren, Roberta; Weber, Michael; Westreich, Barry; Wiggins, Jim; Cook, William; Williams, Kevin; Wittick, Brian; Woodruff, Gena; Zorn, Jason

Subject: 0630 EDT (March 16, 2011) USNRC Earthquake/Tsunami SitRep

Attached, please find a 0630 EDT situation report from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami on March 16, 2011. This Update includes information on dose rates near Fukushima Daiichi, Fukushima Daiichi plant parameters, and NRC PMT hypothetical Worst Case Analyses.

Please note that this information is "Official Use Only" and is only being shared

within the federal family.

Please call the Headquarters Operations Officer at 301-816-5100 with questions.

Yen Chen
US Nuclear Regulatory Commission
LIA07.HOC@nrc.gov (Operations Center)

# Bozin, Sunny

From:

Caputo, Annie (EPW) [Annie\_Caputo@epw.senate.gov]

Sent:

Wednesday, March 16, 2011 9:12 PM

To: Subject: Nieh, Ho Re: Dose calcs

Just tried your cell. Call me at home again?

---- Original Message -----

From: Nieh, Ho [mailto:Ho.Nieh@nrc.gov] Sent: Wednesday, March 16, 2011 08:58 PM

To: Caputo, Annie (EPW)

Cc: Ostendorff, William < William. Ostendorff@nrc.gov>

Subject: Dose calcs

Hi Annie. Tried to get in touch with you regarding your question to Commissioner Ostendorff.

Would be easier if I talked you through what our understanding is about how our dose assessment team arrived at the results you saw.

Please give me a call at your convenience.

Thanks

Но

Sent via BlackBerry

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

# Ostendorff, William

From:

Ostendorff, William

Sent:

Wednesday, March 16, 2011 8:59 PM

To: Subject:

Nieh, Ho Re: Dose calcs

Thanks Ho.

---- Original Message -----

From: Nieh, Ho

To: 'annie\_caputo@epw.senate.gov' <annie\_caputo@epw.senate.gov>

Cc: Ostendorff, William

Sent: Wed Mar 16 20:58:26 2011

Subject: Dose calcs

Hi Annie. Tried to get in touch with you regarding your question to Commissioner Ostendorff.

Would be easier if I talked you through what our understanding is about how our dose assessment team arrived at the results you saw.

Please give me a call at your convenience.

Thanks

Но

Sent via BlackBerry

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6)

(301) 415-1757/(fax)

ho.nieh@nrc.gov

Courer, Ivonna

fo: Hayden, Elizabeth

Subject:

FW: For Wednesday: Our Tritium Fact Sheet is Still Very Light on Graphics and Visual Perspectives

Tuesday, April 19, 2011 8:22:00 AM

FYI – the taskforce/group/committee was tasked to update factsheet and make it plain English with simpler graphics before Japan event. Transitioning back to past assignments. Thoughts on comments below? Ivonne

From: Barkley, Richard

Sent: Monday, April 18, 2011 5:29 PM

To: Couret, Ivonne; Mitlyng, Viktoria; Rakovan, Lance; Ryan, Michelle; Salter, Susan; Screnci, Diane; Steger (Tucci), Christine; Virgilio, Rosetta Subject: For Wednesday: Our Tritlum Fact Sheet is Still Very Light on Graphics and Visual Perspectives

The new NRC website uses the lengthy fact sheet below:

http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/tritium-radiation-fs.html

I would love to see it changed to include one of these graphic charts below, heavily modified to just show low dose exposures, say those below the yearly average exposure of a member of the public (620 mrem) down to the 0.1 mrem exposure received by members of the public offsite the Braidwood facility.

As future resources allow, we can then create another chart to show equivalent societal risks (e.g., riding Rosetta's motorcycle for 10 miles, eating a Five Guys Double Cheeseburger with the Chairman, etc.).

http://xkcd.com/radiation/

# Radiation Dosage Chart

Eating a barwine

Natural radiation in the human body

Using a CRT monitor for a year

Eating dose from one day in average lown near the Fusichma plant

Disets X-ray

Background dose received by an everage person on an average day

Fight from New York to LA

Living at a stonal brick or concrete budging for a year

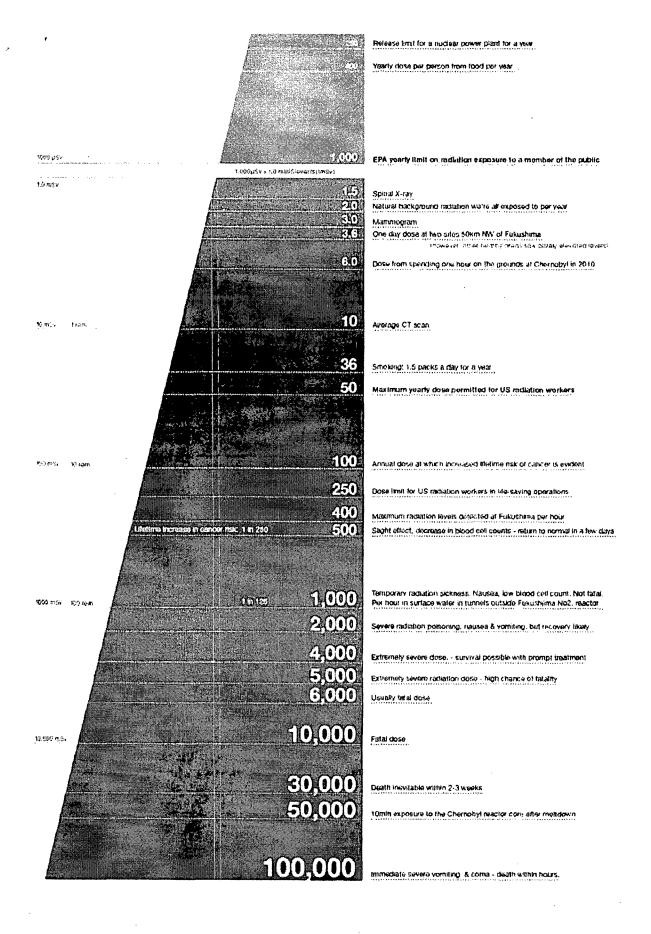
Check X-ray

Check X-ray

Check X-ray

Check X-ray

Check X-ray



CovidMcConoles: 45 H 35 H May 30%

# InformationIsBeautiful.net

Richard S. Barkley, PE
Nuclear & Environmental Engineer
(610) 337-5065 Work
((b)(6) Cell



Post, of train is dependent on both the dose and the dose rate (the time the body is exposed to that dose)

So a dose of 1000mSk over an hour is considerably more dumoping than a dase 1905mSV over a year.

sources the Country Databook Hayes three the Lacobian control from the control for the country has a second for the control f

# Weaver, Tonna

From:

Monninger, John

Sent:

Wednesday, March 16, 2011 11:51 AM

To:

Foggie, Kirk; Casto, Chuck: Cook, William; Kolb, Timothy; Foster, Jack; Smith, Brooke;

Nakanishi, Tony (b)(6)

Ulses, Anthony; Devercelly, Richard

Subject:

Re: Tomorrow Morning 3/1

Also, there is another (3rd) meeting with TEPCO at 1000 to advance the potential assistance from the US to Japan. We got a good list during the mtg. tonight and passed it to the Hdqtrs ET. ET understands that we need feedback on the request in about 8 hours.

<u>John Monninger</u>

---- Original Message -----

From: Foggie, Kirk

To: Casto, Chuck; Monninger, John; Cook, William; Kolb, Timothy; Foster, Jack; Smith, Brooke; Nakanishi,

Tony (b)(6)

Ulses, Anthony; Devercelly, Richard

Sent: Wed Mar 16 11:46:47 2011 Subject: Tomorrow Morning 3/17

All,

Please be at the Embassy by 9 am tomorrow as we will have a busy morning filled with briefs and conference calls.

The first brief will be from Tony N. on his findings at the Prime Minister's EOF, then Brooke (and possibly Tony N.) need to leave for next iteration of that meeting.

Next, John M. will give an update on the second TEPCO meeting this evening, if necessary.

At 9:30 me and Tony U. will meet with NISA representatives and see if we can get some traction on a better line of communication.

Last, at 10:30 there will be a conference call with a DTRA team based in ?Yokasoto? Base in southern Japan to see if we are aware of some of the same findings.

Get some rest. You will need it for tomorrow.

Kirk

Sent from Blackberry.

000/26/

Weaver, Tonna From: Ulses, Anthony Wednesday, March 16, 2011 11:19 PM Sent: LIA07 Hoc To: Subject: Re: Two Pager - Please Review Is this a final product? Thanks, Tony Sent from NRC BlackBerry Anthony Ulses (b)(6)From: LIA07 Hoc •Fo: Cook, William: Smith, Brooke: Casto, Chuck: Devercelly, Richard: Foggie, Kirk; Foster, Jack; (b)(6) ; Kolb, Timothy; Monninger, John; Nakanishi, Tony; Ulses, Anthony Sent: Wed Mar 16 23:07:57 2011 Subject: RE: Two Pager - Please Review Thank you very very much! -Sara From: Cook, William Sent: Wednesday, March 16, 2011 10:59 PM :To: Smith Brooke: LIA07 Hoc: Casto, Chuck; Devercelly, Richard; Foggie, Kirk; Foster, Jack; Kolb, Timothy; Monninger, John; Nakanishi, Tony; Ulses, Anthony Subject: RE: Two Pager - Please Review Please find attached a revision to the two pager. We have limited availability to facility status, but provided the best available info in the revision. Sorry for the delay in turn-around of the document. Bill Cook From: Smith, Brooke Sent: Wednesday, March 16, 2011 7:21 PM To: LIA07 Hoc: Casto, Chuck: Cook, William; Devercelly, Richard; Foggie, Kirk; Foster, Jack; Kolb, Timothy; Monninger, John; Nakanishi, Tony; Ulses, Anthony Subject: Re: Two Pager - Please Review \*Will do∕oncé we get lap tops up and running. We are working off of of BB right now. Sent from an NRC Blackberry. Brooke G. Smith (b)(6)

From: LIA07 Hoc

To: Casto, Chuck; Cook, William; Devercelly, Richard; Foggie, Kirk; Foster, Jack; Jim Trapp

b)(6) Finothy; Monninger, John; Nakanishi, Tony; Smith, Brooke; Ulses, Anthony

Sent: Wed Mar 16 19:15:54 2011

Subject: Two Pager - Please Review

The ET has requested that someone on your team please review this and mark it up as necessary. We want to make sure that we are capturing accurate information. Edits can be sent back to me or if it is easier, you can call in and we can walk through the document.

Thank you very much!

-Sara

From:

PMT02 Hoc

Sent:

Wednesday, March 16, 2011 2:30 PM

To:

PMTERDS Hoc

Subject:

FW: Quick summary of status in Japan

Attachments:

tepco\_status\_6.jpg

Attached needs be recorded in PMTR Chronology please.

From: NITOPS [mailto:NITOPS@nnsa.doe.gov] Sent: Wednesday, March 16, 2011 2:14 PM

To: 'narac@llnl.gov'; PMT02 Hoc; Aoki, Steven; Visosky, Mark; Connery, Joyce; Miller, Neile; Hoagland, David

Cc: NITOPS

Subject: FW: Quick summary of status in Japan

Nuclear Incident Team (NIT)
Office of Emergency Response (NA-42)
National Nuclear Security Administration
U.S. Department of Energy
<a href="mailto:nitops@nnsa.doe.gov">nitops@nnsa.doe.gov</a>
<a href="mailto:nitops@nnsa.doe.gov">nit@doe.sgov.gov</a>
202-586-8100

From: Bradley, Michael M. [mailto:Bradley6@llnl.gov]

Sent: Wednesday, March 16, 2011 2:11 PM

To: NITOPS; CMHT

Subject: FW: Quick summary of status in Japan

Just in case you haven't seen this status summary from TEPCO.

Mike Bradley
Michael M. Bradley, Ph.D.
Coordinator for International Emergency Management and Cooperation
National Atmospheric Release Advisory Center (NARAC)

& Manager, US DOE/NNSA International Exchange Program (IXP)

e-mail: <u>mbradley@llnl.gov</u>
Office: <u>925-422-1835</u>
Celi: (b)(6)
Fax: <u>925-423-4527</u>

(Country code: +1)

From: Atkins-Duffin, Cindy [mailto:atkinsduffin1@llnl.gov]

Sent: Wednesday, March 16, 2011 9:32 AM

To: Miller, George H.; Albright, Parney; Warner, Bruce; Mccallen, Dave; Anzelon, George A.

Cc: narac@llnl.gov

Subject: Quick summary of status in Japan

Bill Conaway found this earlier.

000/263

Cindy Atkins-Duffin
E Program Manager
Energy Security · Nonproliferation
Global Security

B132N, Room 2808A 2-5693 page (b)(6)

# Status of nuclear power plants in Fukushima as of 12:30 March 16 (Estimated by JAIF)

Power Station	Fukushing #1 Nuclear Power Station					
Urit	1	2	,	4	5	
Electric / Thermal Power output (MW)	460 / 1380		784 / 2381   1100 / 3293			
Type of Reactor	BWR 3	BWR-4	BWR-4	BWA-4	BWR-4	BWR-5
Operation Status at the certiqueke excurred	Service	Service	Service	Outage	Outage	Outago
Cory and Fuel Integrity			V-1	The shall be to be seen at 1750.		
Containment Inturrity	SEW IN Demogration	Dimago Suspected	Denuge Suspected	President Caragous Salas		
Care cooling requiring AC power				and the Phot necessary 5420 255		
Core cooling not regulning AC power	Lat. 11			Pot recryary		
Building Integrity	i. i.i.	Stephely Devraged			Hick Damaged	Mar Not Devocated 3-3
water level of the pressure vessel				Company of State Provide And State	NAMES OF STREET	Camerina Soft State
pressure of the pressure vessel	Statify	Phystophys	State	170年、2年7日大大学は10万円の大学では2月		
Containment procesure	Surble	D.W. Unknown, S.P. Atmosphere	Stable	TANK TELEVISION OF BUILDING TO THE AND MADE	And the same of th	240 C
Water injection to core (Accident Mennagement)	Continuing (Scawaler)		Continuing Seawater)	Not necessary	Not necessary	Not recessary
Water injection to Containment Vessel (AM)	Continuing(Seewater)		to be docided Seewater		Not necessary	Not necessary
Containment venting (AM)	Continuing Seamater	Property (Soswetor)	Continuing(Seawater)	Not necessary	Not necessary	Not necessary
Fuel Integrity in the spent fuel pool	(No info )	(No info )	(Nó mfo )		Pool Temp, Incressive	Pool Tomp, Increasing
Environmental effect				u Sv./h at 11 00 Mar. 16	· · · · · · · · · · · · · · · · · · ·	<del></del>
Evecuation Area	20km from NPS  • Papple who five between 20km to 30km from the Fukushime #INPS are to stay indearu.					
Romarks	A few broke on the 4th floor of the Unit-4 Reactor Building around GAM, Mar. 15, and the rediction monitor readings increased outside of the building.  30mSv between Unit-2 and Unit-3, 400mSv beside Unit-3, 100mSv beside Unit-4 at 1022, Mar. 15.  It is extimated that signet flow allored in the leaded and high open was generated from these fivels, resulting an explosion.  TEPGO later amounted the fire was been burned out. Another fire has observed at 5.45, Mar. 10, and then disappeared later.  Other staff and workers then fifty TEPGO employees who are organized in water injection operation have been executed.  What a similar was seen risks from the victing of Unit-3 at a result 3.0, Mar. 10, Damage is to the operations visual of the ownk is suspected.					

Power Station	Fukushima #2 Nuclear Power Station				
Urit	1	2	3	4	
Electric - Thermal Power output (MWe)	7100 / 3293				
Type of Resotor	BWR-5	BWR-5	BWR-5	BWR-5	
Operation Status at the earthquake occurred	Sarring	Survice	Service	Service	
Core and Fuel Integrity	" Hea Damaged "	3 See J Nov Damageus (1255)	2 . ter Daningraden.	wie fer bert Damaged wieber	
Containment filtigrity	. Not Osmaged.	1 Not Darlaged	'an Damagett	# 1 - Will of the Danning of the Walter	
Core cooling requiring AC power	"Fire Charmen "."			Land in the Conclusive of the St.	
Core cooling not requiring AC power	Latet nevetsory ?	"S" "" Hyt necessary	" Not ringe to any 1. 2	Countries and Indianaparany & Security	
Building Integrity	tkil Dettand	163 Dentagi	Het Deinaged	Not Democial	
water level of the pressure vessel	THE WOODS OF THE			C. J. S. Jo Manda Com. Assess	
prosture of the pressure votard	tram this was promite a			OCIAL Said Manage 14 Lander Reference	
Contamient pressure	The aftering of a	** (#LE:Mg)mb & IF & E	The Manual Area	to a security and minimal transfer.	
Water injection to core (Accident Mannagement)	Flot horassary "	Lite Not recessary for her	Not recessory	Not improve v	
Mater Importion to Containment Vessel (AM)	Not narygater			Harathad Hermania Gradus A.	
Containment ventine (AM)	hiet necessors	Not received	Not receptable and	Proposition Mathematical Proposition	
Fuel Integrity in the spent fuel pool	Constitution of	"L" TO DATE (PAY INSUIT LIBERATE.	ffe Info	the later to the l	
Environmental effect	HPS border; 38.6 y 5// h at 4:00, Mar 16				
Execution Aces	10km from NPS				
Permarks	Af the unity are a both statement and the statem				

| Source | Governmental Emergency Mandoustrons; News Release (3/16.100). Press conference (3/14.11:45, 16:15, 3/15.800, 11:00, 16:25, 3/16/11/15) NISA News Release (3/14.7:30). Press conference (3/16.1200). TEPCO: Press Helease (3/14.7:30). Press Conference (3/16.1200, 3/15.800, 3/16.800). Press Conference (3/16.1210, 2000, 3/15.800, 3/16.800). BSS. Statemational Nuclear Event. Scale NISA: Nuclear and Industrial Sefety Agency SFP, spent fuel good. TEPCO: Tokyo Electric Power Company, Inc.

From: To:	(b)(6)	
Subject: Date:	LLW Forum Flash: NRC Esta Wednesday, March 16, 2011	Revisions to 10 CFR Part 61

### U.S. Nuclear Regulatory Commission

# NRC Establishes Web Link re Potential Revisions to 10 CFR Part 61

Please be advised that the U.S. Nuclear Regulatory Commission has established the following link to keep interested stakeholders advised of developments as the agency initiates activities in connection with a risk-informed/performance-based revision of Title 10, Part 61, of the *Code of Federal Regulations* (10 CFR Part 61), "Licensing Requirements for Land Disposal of Radioactive Waste:"

http://www.nrc.gov/about-prc/regulatory/rulemaking/potential-rulemaking/potential-part61-revision.html

Among other things, the link contains information on background, the staff initiative to revise 10 CFR Part 61, and the recent public workshop. In regard to the latter item, the link includes copies of the revised agenda and presentation slides.

### Background

The Commission's licensing requirements for the disposal of low-level radioactive waste in near-surface (approximately the uppermost 30 meters (100 feet)] facilities reside in part 61. These regulations were published in the *Federal Register* on December 27, 1982 (47 *Federal Register* 57446). The rule applies to any near-surface LLW disposal technology, including shallow-land burial, engineered land disposal methods such as below-ground vaults, earth-mounded concrete bunkers, and augered holes. The regulations emphasize an integrated systems approach to the disposal of commercial low-level radioactive waste, including site selection, disposal facility design and operation, minimum waste form requirements, and disposal facility closure.

To lessen the burden on society over the long periods of time contemplated for the control of the radioactive material, and thus lessen reliance on institutional controls, Part 61 emphasizes passive rather than active systems to limit and retard releases to the environment. Development of the part 61 regulation in the early 1980's was based on several assumptions as to the types of wastes likely to go into a commercial low-level radioactive waste disposal facility.

To better understand what the likely inventory of wastes available for disposal might be, the NRC conducted a survey of existing low-level radioactive waste generators. The survey, documented in Chapter 3 of NUREG-0782—the Draft Part 61 Environmental Impact Statement (DEIS)—revealed that there were about 36 distinct commercial waste streams consisting of approximately 24 radionuclides of potential regulatory interest.

The specific waste streams in question were representative of the types of commercial low-level radioactive waste being generated at the time. Waste streams associated with DOE's nuclear defense complex were not considered as part of the survey, since disposal of those wastes, at that time, was to be conducted at the DOE-operated sites.

Over the last several years there have been a number of developments that have called into question some of the key assumptions made in connection with the earlier Part-61 DEIS, including:

- the emergence of potential low-level radioactive waste streams that were not considered in the original Part 61 rulemaking, including large quantities of depleted uranium, and possibly incidental wastes associated with the commercial reprocessing of spent nuclear fuel;
- DOE's increasing use of commercial facilities for the disposal of defense-related low-level radioactive

waste streams; and,

• extensive international operational experience in the management of low-level radioactive waste and intermediate-level radioactive wastes that did not exist at the time part 61 was promulgated.

These developments will need to be considered if the staff undertakes a revision of Part 61.

Before the start of any rulemaking process, NRC staff recommended that it engage stakeholders and solicits their views on whether there should be amendments to the current Part 61 and, if so, what the nature of those amendments should be. This approach is consistent with NRC's openness policy and with the type of public outreach used by the staff to develop Part 61.

NRC hosted a public workshop on March 4, 2011 -- immediately following the Waste Management Symposia in Phoenix, Arizona. DOE, which served as co-host of the workshop, addressed planned changes to its Order 435.1. The current of this Order has been in place for about 11 years and applies to management of radioactive waste within the DOE complex. Like Part 61, Order 435.1 places a heavy emphasis on performance assessment as part of its radioactive waste management decision making. DOE recently started a comprehensive revision of Order 435.1, which it plans to complete sometime in 2011. The staff plans to consider any modifications to Order 435.1 as part of a comprehensive revision to Part 61. In SRM-M100617B (ADAMS ML1018203015), the Commission directed the staff to outline its approach to initiate activities in connection with a possible revision to part 61 that is risk informed, performance-based.

For additional information, please contact Michael Lee at (301) 415–6887 or at Mike.Lee@nrc.gov; Donald Lowman at (301) 415–5452 or at Donald Lowman@nrc.gov; or. Antoinette Walker-Smith at (301)415–6390 or at Antoinette Walker-Smith@nrc.gov.

March 16, 2011

Todd D. Lovinger, Esq. Executive Oirector LLW Forum, Inc. (202) 265-7990

The preceding information was provided to you on behalf of the LLW Forum, Inc. It may not be reproduced or distributed without the express written approval of the organization's Executive Director. To view other communications and documents of the LLW Forum, Inc., visit the LLW Forum's web site at <a href="http://www.llw/organ.org/">http://www.llw/organ.org/</a>.

From:

Brenner, Eliot

To:

Casto, Chuck; Virgilio, Martin; McIntyre, David; Hamington, Holly; Burnell, Scott

Subject:

Re: Request from 60 Minutes

Date:

Wednesday, March 16, 2011 10:09:47 AM

Please re talking points.

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment

301 415 8200

(b)(6)

Sent from my Blackberry

From: Casto, Chuck To: Brenner, Eliot

Sent: Wed Mar 16 10:00:20 2011 Subject: Re: Request from 60 Minutes

I'll check on visuals. We have some rough drawings and diagrams. Don't want to share the pics we

have. Your call I will do whatever you all agree to. I can send you my talking points.

From: Brenner, Eliot To: Casto, Chuck

**Sent**: Wed Mar 16 09:56:59 2011 **Subject**: Re: Request from 60 Minutes

Thanks, Leaning forward on all requests like this. Will advise probably in 3-4 hours. Do youi feel

comfortable? Have you go good visuals?

Eliot Brenner Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment 301 415 8200 Q(p)(6)

Sent from my Blackberry

From: Casto, Chuck To: Brenner, Eliot

**Sent**: Wed Mar 16 09:51:15 2011 Subject: Fw: Request from 60 Minutes

From: Young, Nicole <ney@cbsnews.com>

To: Casto, Chuck

**Sent**: Wed Mar 16 09:49:39 2011 Subject: Request from 60 Minutes

Dear Mr. Casto,

My name is Nicole Young with 60 Minutes and my team and corresondent, Scott Pelley, are currently on the ground in Sendai, Japan.

We would like to see if there's any way we can link up with you and your NRC staff on the ground. We are one of the last news teams on the ground covering this urgent and important situation.

Please, let me know if there's any way we can arrange for our team to meet up with yours

Thank you and I hope to hear from you soon.

Best, Nicole Young +1 646 975 7521 From:

McCree, Victor

To:

Leeds, Eric; Collins, Elmo; Satorius, Mark; Dean, Bill

Cc:

Virgilio, Martin; Weber, Michael

Subject:

Re: FYI: Event Response - Communications and Qs&As

Date:

Wednesday, March 16, 2011 6:30:40 PM

Attachments:

image001.png

Thanks Eric - we appreciate your support.

Vic

This email is being sent from an NRC Blackberry device.

From: Leeds, Eric

To: Collins, Elmo; Satorius, Mark; McCree, Victor; Dean, Bill

**Cc**: Virgilio, Martin; Weber, Michael **Sent**: Wed Mar 16 18:01:24 2011

Subject: FYI: Event Response - Communications and Qs&As

See below – we've upped our ante and are doing our best to support the regions.

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

From: Nelson, Robert

Sent: Wednesday, March 16, 2011 3:13 PM

To: Lew, David; Wert, Leonard; Pederson, Cynthia; Howell, Arthur

Cc: Giitter, Joseph; Leeds, Eric; Boger, Bruce; Ruland, William; Meighan, Sean; Nguyen, Quynh;

Thomas, Eric; Thorp, John

Subject: Event Response - Communications and Qs&As

I've been assigned as the NRR Communications Coordinator for matters dealing with our response to the events in Japan.

- 1. I understand that you were recently sent the Chairman's Qs&As. I understand that EOC meetings are beginning next week and the regional staff need to be prepared for stakeholder questions that will arise regarding the events & our plants. Are these Qs&As sufficient? If not, what additional areas do you want addressed?
- 2. Please identify a POC in your region that my team & I can coordinate with on communications issues.
- 3. I understand that a concern was raised about the Ops Center contacting a family member and that a protocol is needed for such contact. I'm working on it.
- 4. We will likely formulate a "tiger team" to prepare responses to written inquiries. I'll keep you advised.
- 5. Communications with the regions, particularly those requesting information regarding specific plants, should be coordinated thru my team. If you have concerns in this regard, please contact me.

11.1 Sec. 1

Robert A. Nelson Deputy Director Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation



E-mail: <u>robert.nelson@nrc.gov</u> | Office: (301) 415-1453 | ☐ Cell: (b)(6) | ♣ Fax: (301) 415-2102|

From:

Casto, Chuck

Ta:

Burnell, Scott; Brenner, Eliot; Virgilio, Martin

Cc:

Havden, Elizabeth; Harrington, Hully

Subject:

RE: Request from 60 Minutes

Date: Attachments:

Wednesday, March 16, 2011 11:01:23 AM Casto Talking Points for Interviews Japan...dock

agreed.....

nevertheless, some initial TP's attached.....

casto

From: Burnell, Scott

Sent: Wednesday, March 16, 2011 10:41 AM To: Brenner, Eliot; Casto, Chuck; Virgilio, Martin

Subject: RE: Request from 60 Minutes

ET offers the opinion this is pretty low on Chuck's priority list but understands Eliot and Chuck are discussing.

From: Brenner, Eliot

Sent: Wednesday, March 16, 2011 10:10 AM

To: Casto, Chuck; Virgilio, Martin; McIntyre, David; Harrington, Holly; Burnell, Scott

Subject: Re: Request from 60 Minutes

Please re talking points.

Eliot Brenner

Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment 301 415 8200 --

Sent from my Blackberry

From: Casto, Chuck To: Brenner, Eliot

Sent: Wed Mar 16 10:00:20 2011 Subject: Re: Request from 60 Minutes

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Sent: Wed Mar 16 09:56:59 2011 Subject: Re: Request from 60 Minutes

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Eliot Brenner Director, Office of Public Affairs US Nuclear Regulatory Commission Protecting People and the Environment 301 415 8200 (b)(6)

### Sent from my Blackberry

From: Casto, Chuck To: Brenner, Eliot

Sent: Wed Mar 16 09:51:15 2011 Subject: Fw: Request from 60 Minutes

From: Young, Nicole <ney@cbsnews.com>

To: Casto, Chuck

Sent: Wed Mar 16 09:49:39 2011 Subject: Request from 60 Minutes

Dear Mr. Casto,

My name is Nicole Young with 60 Minutes and my team and corresondent, Scott Pelley, are currently on the ground in Sendai, Japan.

We would like to see if there's any way we can link up with you and your NRC staff on the ground. We are one of the last news teams on the ground covering this urgent and important situation.

Please, let me know if there's any way we can arrange for our team to meet up with yours

Thank you and I hope to hear from you soon.

Best, Nicole Young +1 646 975 7521 Talking Points for Interviews....

### Casto

- -Terrible tragedy, sympathies to all
- -US honored to be asked to support
- -Friend with Japan, technical competence very strong
- -Goal to protect the people of Japan and visitors
- -Heroic efforts, professional
- -Incident at one NPP elicits support from all. Industry that works together to solve problems
- -Bring the collective wisdom of the USNRC, US industry and Japanese operator and regulator to take prudent actions. All are committed to safety.
- -Plants built to standards and reasonable challenges sometimes conditions go beyond what is reasonable. Japan has a challenging environment.
- -We do all possible to ensure reactors safety, low-risk doesn't mean no-risk.
- -US. Fleet had its lessons learned from Browns Ferry, TMI, Davis Besse 2x, 9/11 and international events, e.g., Chernobyl. We've added layers of safety each time, most recently with 9/11 prepared for catastrophic events. Japanese safety record strong, however until you experience something for yourself, you really don't know about it, it's abstract.

US has more reactors with diverse ecological and environmental conditions. Those are reviewed to create the most robust designs.

- -US reactors were safe yesterday, safe today and safer tomorrow because of robust corrective actions programs, strong regulatory regime and lessons learned.
- -Honored to serve and support the Japanese people

From: To:

Wittick, Brian **OJP Distribution** 

Cc:

Irapp, James; Wittick, Susan

Subject:

RE: Launch of FAQ Related to Events Occuring in Japan

Attachments:

Wednesday, March 16, 2011 8:29:27 AM Chairman Jaszko OA7 031533[1] Litocx OUAKE TP 3 15,000x

Seismic Questions for Incident Response 3:16:11 3am pdf

### Brooke/Kirk,

Attached are a couple of the referenced documents on the Sharepoint site that may be useful to you. Recommend you coordinate with the HOC International Liaisons to get updates and new postings.

Thanks Brian Wittick Executive Technical Assistant for Reactors Office of the Executive Director for Operations U.S. Nuclear Regulatory Commission 301-415-2496 (w) (b)(6)

From: Smith, Brooke

Sent: Tuesday, March 15, 2011 11:35 PM

To: Wittick, Brian

Subject: Re: Launch of FAQ Related to Events Occuring in Japan

Brian - Please send these in a word document or in a formal that we can read on a BB here in Japan. Thx.

Sent from an NRC Blackberry.

Brooke G. Smith (b)(6)

From: Wittick, Brian

To: Wittick, Susan; OIP Distribution

Sent: Tue Mar 15 14:02:36 2011

Subject: FW: Launch of FAQ Related to Events Occuring in Japan

Please note the below link to FAQ data. Please share as necessary,

Brian Wittick

Executive Technical Assistant for Reactors Office of the Executive Director for Operations U.S. Nuclear Regulatory Commission 301-415-2496 (w) (b)(6)

From: Nguyen, Quynh

Sent: Tuesday, March 15, 2011 1:16 PM

To: Thomas, Eric; Sigmon, Rebecca; Powell, Amy; Riley (OCA), Timothy; Browder, Rachel; Erickson, Randy; Tifft, Doug; McNamara, Nancy; Trojanowski, Robert; Woodruff, Gena; Barker, Allan; Logaras, Harral; Maier, Bill

Cc: Stone, Rebecca; Westreich, Barry; Scales, Kerby; Leeds, Eric; Boger, Bruce; Grobe, Jack; Diec, David; Deegan, George; Williams, Donna; Rini, Brett; Wittick, Brian; Andersen, James; Brenner, Eliot; Couret, Ivonne; Burnell, Scott; Harrington, Holly; Azeem, Almas; Cartwright William; Cusumano, Victor; Heida, Bruce; Mahoney, Michael; Meighan, Sean; Nguyen, Quynh; Roquecruz, Carla; Susco, Jeremy; Titus, Brett; Valentine, Nicholee; Wertz, Trent; Bahadur, Sher; Blount, Tom; Brown, Frederick; Cheok, Michael; Evans, Michele; Galloway, Melanie; Giitter, Joseph; Givvines, Mary; Hiland, Patrick; Holian, Brian; Howe, Allen; Lee, Samson; Lubinski, John; Lund, Louise; McGinty, Tim; Nelson, Robert; Quay, Theodore; Ruland, William; Skeen, David

Subject: Launch of FAQ Related to Events Occuring in Japan

Importance: High

All,

Per Eric Leeds' request and working closely with NSIR and OPA...

The below SharePoint link is the location of our INTERNAL USE ONLY activities regarding the Japan Events and the effects on their nuclear operations. Again, NO PUBLIC RELEASE of any documents.

Given lessons learned from 9-11, we want to ensure clear, concise messages in alignment with the Chairman and focus of our safety mission in the United States. To this end, we established this SharePoint as a centralized location to collect our questions from stakeholders and our draft responses. These draft responses will be vetted by OPA and once approved by OPA - it is OK for use by the staff to answer questions from stakeholders.

As such, please understand that, while we are doing our best to be timely with the most up-to-date information, it is more to important to ensure accurate information is being posted.

http://portal.nrc.gov/edo/nrr/NRR%20TA/FAQ%20Related%20to%20Events%20Occuring%20in%20Japan/Forms/Allitems.aspx

Note: "Chairman JaczkoQA7\_031511" contains parts that are PUBLIC and additional information for NRC staff.

All correspondence to the public should be directed to our Office of Public Affairs (OPA)!

Additionally, if questions arise out of the Region, please let us know. We'll do our best to coordinate the answer and ensure that we get OPA's blessing.

Thank you for all your support during this time and understanding!

POC: Quynh Nguyen (301) 415-5844 BlackBerry (b)(6) Sean Meighan (301) 415-1020 Questions and Answers for Chairman Jaczko

March 11, 2011 Japan Earthquake/Tsunami Aftermath As of 11:30 a.m. 3/15/2011

# 1. What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?

Public Answer: We are closely following events in Japan, working with other agencies of the federal government, and have been in direct contact with our counterparts in that country. We have sent a total of 11 staff to Tokyo in response to the Japanese government's request for assistance. Two of those NRC staff members, knowledgeable about boiling water reactors, are already in Japan participating in the USAID team.

Additional technical, non-public information:

We are taking the knowledge that the staff has about the design of the US nuclear plants and we are applying this knowledge to the Japan situation. For example, this includes calculations of severe accident mitigation that have been performed. Tony Ulses and Jim Trapp are in-country. Team led by Chuck Casto enroute from various locations.

# 2. What's going to happen following the hydrogen explosions everyone's seen from the video footage?

Public Answer: The NRC is aware of the Japanese efforts to stabilize conditions at the affected reactors, and those actions are in line with what would be done in the United States. The NRC continues to monitor information on the status of the reactor core, the reactor vessel and the containment structure – all three areas are important to controlling the situation and protecting the public.

Additional technical, non-public information:

The explosions affected the secondary containment buildings for Units 1 and 3 of the reactor plant. The primary containment was unaffected by the explosion. This does expose the spent fuel pools to atmosphere but should not affect the integrity of the spent fuel pool. With the integrity of the Secondary Containment breached it is more essential to maintain Primary Containment intact.

To provide additional protection to Primary Containment, US reactors of the containment type similar to Fukushima Unit 1 installed a hardened vent line from primary containment directly to the vent stack. A hardened vent provides a release path which would prevent an overpressurization of containment as experienced at Fukushima Unit One. Venting from the hardened vent is typically a manual operation that is controlled by the Emergency Operating Procedures as a last resort to protect the containment from failure. This vent path can be directly from the upper containment or from the torus (the preferred vent path due to scrubbing effect of the torus water).

# 3. What should be done to protect people in Alaska, Hawaii and the West Coast from radioactive fallout?

Public Answer: The NRC continues to believe that the type and design of the Japanese reactors, combined with how events have unfolded, will prevent radiation at harmful levels from reaching U.S. territory.

Additional technical, non-public information: NRC is working with DHS, EPA and other federal partners to ensure monitoring equipment for confirmatory readings is properly positioned, based on meteorological and other relevant information.

### Questions and Answers developed by Rob Taylor

# 4. Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?

Public Answer: All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located in areas with low and moderate seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account even very rare and extreme seismic and tsunami events.

The Japanese facilities are similar in design to several US facilities.

### Additional technical, non-public information:

Currently operating reactors were designed using a "deterministic" or "maximum credible earthquake" approach. Seismic hazard for the new plants is determined using a much more robust probabilistic seismic hazard assessment approach that explicitly addresses uncertainty and very rare events, as described in RG1.208. The NRC requires that adequate margin beyond the design basis ground shaking levels is assured. The NRC further enhances seismic safety for beyond-design-basis events through the use of a defense-in-depth approach.

In addition, the NRC periodically reviews the seismic risk at operating reactors when information may have changed. Over the last few years the NRC has undertaken a program called Generic Issue 199, which is focused on assessing hazard for plants in the central and eastern US using the latest techniques (developed in part during reviews of Western U.S. plants) and determining the possible risk implications of any increase in the anticipated ground shaking levels. This program will help us assure that the plants are safe under exceptionally rare and extreme ground motions that represent beyond-design-basis events.

# 5. What would U.S. plants do in this situation?

Public Answer: The NRC requires plant designs to include multiple and diverse safety systems, and plants must test their emergency preparedness capabilities on a regular basis. Plant operators are very capable of responding to significant events. In addition, NRC regulations require plants to have plans in place that would allow them to mitigate even "worst case scenarios".

Since 9/11, we have implemented requirements for licensees to have additional response capabilities for extreme situations.

Additional technical, non-public information:

U.S. nuclear plants have procedures in place to address a variety of accident scenarios, including abnormal operating procedures, emergency operating procedures, severe accident management guidelines and emergency plans. Additionally, the NRC activates ilncident Response centers in Headquarters and individual Regions as necessary for the event to provide technical monitoring and support.

The NRC is capable of providing access to many external agencies (i.e., FEMA, Homeland Security, Military, etc.) to provide any additional help that individual plant sites may need. Additionally, the NRC has access to real-time plant information through the ERDS System for each site in the US and can monitor the status anytime.

# 6. Are U.S. power plants designed to withstand tsunamis?

Public Answer: Yes. Plants are built to withstand a variety of environmental hazards. Those plants that might face a threat from tsunami are required to withstand large waves and the maximum and minimum wave heights at the intake structure (which varies by plant.)

Additional, technical, non-public information:

Tsunami have been considered in the design of US nuclear plants since the publication of Regulatory Guide 1.59 in 1977, although the approaches that were used for design of the existing plants varied significantly. Nuclear plants are designed to withstand flooding from not only tsunami, but also hurricane and storm surge; therefore there is often significant margin against tsunami flooding. However, it should be noted that Japanese experience has shown that drawdown can be a significant problem. Drawdown was not generally analyzed in the past.

Currently the US NRC has a tsunami research program that is focused on developing modern hazard assessment techniques and additional guidance through cooperation with the National Oceanic and Atmospheric Administration and the United States Geological Survey. This has already lead to several technical reports and an update to NUREG 0-800. The NOAA and USGS contractors are also assisting with NRO reviews of tsunami hazard. A new regulatory guide on tsunami hazard assessment is currently planned in the office of research, although it is not expected to be available in draft form until 2012.

### 7. What happens when/if a plant "melts down"?

Public Answer: In short, nuclear power plants in the United States are designed to be safe. To prevent the release of radioactive material, there are multiple barriers between the radioactive material and the environment, including the fuel cladding, the heavy steel reactor vessel itself and the containment building, usually a heavily reinforced structure of concrete and steel several feet thick.

Additional, technical, non-public information:

The melted core may melt through the bottom of the vessel and flow onto the concrete containment floor. The core may melt through the containment liner and release radioactive material to the environment.

# 8. Why is KI administered during nuclear emergencies?

Public Answer: KI – potassium iodide – is one of the protective measures that might be taken in a radiological emergency in this country. A KI tablet will saturate the thyroid with non radioactive iodine and prevent the absorption of radioactive iodine that could be part of the radioactive material mix of radionuclides in a release. KI does not prevent exposure from these other radionuclides.

Additional, technical non-public information.

There are a range of protective measures that we use ... the most effective is evacuation. Local government officials are responsible for determining the best means to protect their public. KI is another means for protection but evacuation and sheltering are the primary means that are used.

# 9. Was there any damage to U.S. reactors from either the earthquake or the resulting tsunami?

Public Answer: No

Additional, technical non-public information: Diablo Canyon Units 1 and 2 were the only US plants to declare any type of an emergency classification. The site entered an "unusual event" based on a tsunami warning from the State, NOAA, NWS, Coast Guard or System Dispatcher following the Japanese earthquake. They have since exited the "unusual event" declaration, based on a downgrade to a tsunami advisory.

### 10. Has this incident changed the NRC perception about earthquake risk?

Public Answer: There has been no change in the NRC's perception of earthquake hazard (i.e. ground shaking levels) for US nuclear plants. As is prudent, the NRC will certainly be looking closely at this incident and the effects on the Japanese nuclear power plant in the future to see if any changes are necessary to NRC regulations.

Additional, technical, non-public information.

We expect that there would be lessons learned, etc. It appears that the sites did not have any critical damage due to the earthquake from the fact that the emergency diesel generators initially responded to provide power to the site. The tsunami and consequential site flooding was responsible for the complete loss of power to the site, including the diesel generators which resulted in a Station Blackout.

# 11. Will this incident affect new reactor licensing?

Public Answer: It is not appropriate to hypothesize on such a future scenario at this point.

Additional, technical non-public information:

This event could potentially call into question the NRC's seismic requirements which could require the staff to re-evaluate the staff's approval of the AP1000 and ESBWR design and certifications.

# 12. What magnitude earthquake are US plants designed to?

Public Answer: Each plant is designed to a ground-shaking level that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of and earthquake and the distance from the fault plane to the site. The probabilistic approaches currently used by the NRC account for a large number of different magnitudes.

Additional, technical non-public information:

In the past, "deterministic" or "scenario based" analyses were used to determine ground shaking (seismic hazard) levels. Now a probabilistic method is used that accounts for all possible earthquakes coming from all possible sources (including background seismicity) and the likelihood that each particular hypothetical earthquake occurs.

# 13. How many US reactors are located in active earthquake zones (and which reactors)?

Public Answer: Although we often think of the US as having "active" and "non-active" earthquake zones, earthquakes can actually happen almost anywhere. Seismologists typically separate the US into low, moderate, and high seismicity zones. The NRC requires that every plant is designed for site-specific ground motions that are appropriate for their location. In addition, the NRC has specified a minimum ground shaking level to which the plants must be designed.

Additional, technical non-public information: No additional.

# 14. How many reactors are along coastal areas that could be affected by a tsunami (and which ones)?

Public Answer: Many plants are located in coastal areas that could theoretically be affected by tsunami. Two plants, Diablo Canyon and San Onofre, are on the Pacific Coast, which is known to have tsunami hazard. There are also two plants on the Gulf Coast, South Texas and Crystal River. There are many plants on the Atlantic Coast or on rivers that may be affected by a tidal bore. These include St. Lucie, Turkey Point, Brunswick, Oyster Creek, Millstone, Pilgrim, Seabrook, Calvert Cliffs, Salem/Hope Creek, and Surry. Tsunami on the Gulf and Atlantic Coasts occur, but are very rare. Generally the flooding anticipated from hurricane storm surge exceeds the flooding expected from a tsunami for plants on the Atlantic and Gulf Coast.

Additional, technical non-public information: None

# 15. How many U.S. plants have designs similar to the affected Japanese reactors (and which ones)?

Public answer: Thirty-five of the 104 operating nuclear power plants in the U.S. are boiling water reactors (BWRs), as are the reactors at Fukushima. Twenty-three of the U.S. BWRs have the same Mark I containment as the Fukushima reactors.

Four of the U.S. BWRs are early designs which are similar to Fukushima Unit 1.

Nineteen U.S. BWRs are similar to Fukushima Unit 3.

### Additional Information

Fukushima Unit 1 is a BWR-3 with a Mark 1 containment similar to Oyster Creek, Nine Mile Point Unit 1, and Dresden Units 2 and 3.

Fukushima Unit 3 is a BWR-4 with a Mark 1 containment and a Reactor Core Isolation Cooling (RCIC) system. The remaining 31 U.S. BWRs use a Reactor Core Isolation Cooling (RCIC) system instead of an isolation condenser. Nineteen of those 31 reactors have a Mark 1 containment, while the remainder are more recent designs.

# 16. What resources are the Japanese asking for?

The Japanese have formally requested equipment needed to cool the reactor fuel. This includes such things as pumps, fire hoses, portable generators, and diesel fuel. The NRC is coordinating with General Electric, which has plant design specifications, to ensure any equipment provided will be capable of meeting the needs of the Japanese.

### 17. What should the American public know about the incident in Japan?

The events unfolding in Japan are the result of a catastrophic series of natural disasters. These include the fifth largest earthquake in recorded history and the resulting devastating tsunami. Despite these unique circumstances, the Japanese appear to have taken reasonable actions to mitigate the event and protect the surrounding population. Since the beginning of the event, the NRC has continuously manned its Operations Center in Rockville, MD in order to gather and examine all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States.

# 18. What could you say about the dangers to the American public from our nuclear plants?

As the events in Japan continue to unfold, the NRC is focused on supporting the Japanese government and people in bringing this crisis to closure in the safest manner possible. The NRC remains convinced that U.S. nuclear power plants are designed and operated in a manner that protects public health and safety. The time will come, after this crisis is behind us, to evaluate what, if any, changes are needed at U.S. nuclear power plants. We will assess all the available information and, as we have done with previous natural disasters, such as the 2007 earthquake in the Sea of Japan and the 2004 tsunami in the Indian Ocean, evaluate whether enhancements to U.S. nuclear power plants are warranted.

# 19. What happens next in Japan? How long will it take to assess the damage to the reactors?

The current focus is ensuring that adequate cooling of the reactor fuel at each of the affected Japanese reactors is established and maintained. In the days, weeks, and months that follow, there will be adequate time to assess the damage and determine next steps.

# 20. Compare this incident to the Three Mile Island. What are the similarities?

The events at Three Mile Island in 1979 were the result of an equipment malfunction that resulted in the loss of cooling water to the reactor fuel. Subsequent operator actions compounded the malfunction ultimately resulting in the partial core meltdown. While details are still developing, the events in Japan appear to be the result of an earthquake and subsequent tsunami that knocked out electrical power to emergency safety systems designed to cool the reactor fuel. In both events the final safety barrier, the containment building, contained the majority of the radioactivity preventing its release to the environment.

# 21. Why did the seawater fail to cool the reactor?

Based on information available to the NRC, it appears that the seawater has been effective at providing some cooling for the reactor. While it appears that some fuel damage has occurred, there will be plenty of time once this crisis is resolved to determine the effectiveness of the measures taken in response to this event.

# 22. If Chernobyl was a 7 and Three Mile Island was a 5, when does this event move from the 4 level?

The International Atomic Energy Agency (IAEA) rates nuclear events in accordance with its International Nuclear and Radiological Event Scale (INES). IAEA has assigned the events in Japan an INES rating of 4, "Accident with Local Consequences." This rating is subject to change as events unfold and additional information becomes available. INES classifies nuclear accidents based on the radiological effects on people and the environment and the status of barriers to the release of radiation. IAEA determinations regarding the INES rating of events are made independently.

Three Mile Island was assigned an INES rating of 5, "Accident with Wider Consequences," due to the severed damage to the reactor core.

# 23. Are any Americans in danger - armed forces, citizens in Tokyo?

The NRC, in consultation with the White House and U.S. Embassy, has advised United States citizens in Japan to follow the protective measures recommended by the Japanese government. These measures appear to be consistent with steps the United States would take. The Department of Defense has personnel trained in radiation protective measures and is responsible for providing guidance to U.S. armed forces. Inquiries regarding U.S. citizens in Japan should be directed to the State Department, Consular Services at 202-647-7004.

### 24. What is the worst case scenario for the plant?

In a nuclear emergency, the most important action is ensure the core is covered with water to provide cooling to remove any heat from the fuel rods. Without adequate cooling, the fuel rods will melt. Should the final containment structure fail, radiation from these melting fuel rods would be released to the atmosphere and additional protective measures may be necessary, depending on factors such as prevailing wind patterns.

# 25. As time goes on, does the chance for a meltdown increase?

Not necessarily. Each passing hour the fuel rods will become cooler. If adequate cooling can be established and maintained, the risk of a meltdown will be mitigated.

## 26. Is our battery backup power less effective than the Japanese?

No. US regulations do not specify the length of time that you need to have the batteries operate following a loss of offsite power (most sites plan to have battery backup capability for 8 hours). Instead, the amount of time is dependent on the site recovery strategy and is based on

providing sufficient capacity to assure that the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

# 27. Are we providing additional KI to the Japanese?

We have not been asked to provide KI.

# 28. What are US plants required to have for backup power? More than what the Japanese reactors did?

US plants need to meet 10 CFR 50 Appendix A criterion 17. Reactor units must have 2 independent power supplies. All US (except Oconee) plants have diesels and battery backup systems. Most of the US plants with diesels have two diesels per unit and those that have only one dedicated diesel have a swing diesel available. The regulations do not specify the length of time that you need to have the diesels and batteries operate following a loss of offsite power (most sites plan to run the diesels for multiple days and have battery backup capability for 8 hours). Instead the amount of time is dependent on the site recovery strategy and is based on providing sufficient capacity to assure that the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

# [[[Japanese regulations to follow from OIP.]]]

# 29. Some in the media and in Hill briefings are suggesting that Mark 1 containment is flawed. What are the concerns about this type of containment? Are the US plants with this safe?

BWR Mark I containments have relatively small volumes in comparison with PWR containments. This makes the BWR Mark I containment relatively more susceptible to containment failure given a core meltdown severe enough to (1) fail the reactor vessel and also (2) severe enough so that the core melt reaches the containment boundary. On the positive side, BWRs have more ways of adding water to the core than PWRs. This includes 2 water injection sources which do not rely on AC electric power. These systems include Reactor Core Isolation Cooling (RCIC) and High pressure coolant injection (HPCI).

The NRC considers BWRs with Mark I containment designs to be safe.

# 30. Any quick-hit info about how the Southeast Reactors performed during Katrina? What damage did the flood water do? Any power loss?

The reactors performed as designed. Waterford was the most impacted while River Bend also experienced some effects.

Waterford 3 (near New Orleans, LA) did not have damage to any safety equipment during, or shortly after Katrina. They shut down on August 28, 2005, in advance of the hurricane strike. The flooding did affect local infrastructure, including communications and power distribution. However, the plant successfully used their emergency diesel generators to furnish plant power. Access was maintained to the plant throughout the event. On September 9, 2005, after a comprehensive review by FEMA and the NRC, the plant was authorized to restart.

River Bend Station (30 miles north of Baton Rouge, LA) did not experience damage to any safety relate equipment and only minimal damage to emergency planning equipment (one siren) during and after Hurricane Katrina. The station reduced power to 70 percent core thermal power on August 28, 2005, due to reduced electrical grid loads. Access was maintained to the plant throughout the event. On September 2, 2005, the plant returned to 100% power.

Also, in 1992 the eye of Hurricane Andrew, a category 5 hurricane, passed directly over the Turkey Point nuclear plant. The plant was shut down prior to the hurricane making landfall and an assessment of the plant following the hurricane demonstrated that the plant sustained very little damage and all of the safety equipment was intact. (Most of the damage was too the security fences being blown down).

31. With NRC moving to design certification, at what point is seismic capability tested – during design or modified to be site-specific? If in design, what strength seismic event must these be built to withstand?

The regulations related to seismic requirements are contained in 10 CFR 50 Appendix A criterion 2.

During design certification, vendors propose a seismic design in terms of a ground motion spectrum for their nuclear facility. This spectrum is called a standard design response spectrum and is developed so that the proposed nuclear facility can be sited at most locations in the central and eastern United States. The vendors show that this design ground motion is suitable for a variety of different subsurface conditions such as hard rock, deep soil, or shallow soil over rock. Combined License and Early Site Permits applicants are required to develop a site specific ground motion response spectrum that takes into account all of the earthquakes in the region surrounding their site as well as the local site geologic conditions. Applicants estimate the ground motion from these postulated earthquakes to develop seismic hazard curves. These seismic hazard curves are then used to determine a site specific ground motion response spectrum that has a maximum annual likelihood of 1x10<sup>-4</sup> of being exceeded. This can be thought of as a ground motion with a 10,000 year return period. This site specific ground motion response spectrum is then compared to the standard design response spectrum for the proposed design. If the standard design ground motion spectrum envelopes the site specific ground motion spectrum then the site is considered to be suitable for the proposed design. If the standard design spectrum does not completely envelope the site specific ground motion spectrum, then the COL applicant must do further detailed structural analysis to show that the design capacity is adequate. Margin beyond the standard design and site specific ground motions must also be demonstrated before fuel loading can begin.

# **OPA**

# TALKING POINTS

# JAPAN NUCLEAR SITUATION

# As of 3/15/2011 8:30 A.M. EDT

- The NRC continues to believe that the type and design of the Japanese reactors, combined with how events have unfolded, will prevent radiation at harmful levels from reaching U.S. territory.
- The NRC believes the Japanese response to the reactor situations and the protective actions they are taking are comparable to how we would respond. We advise Americans in Japan to follow the guidance of Japanese officials.
- The Japanese government has formally asked for U.S. assistance in responding to nuclear power plant cooling issues triggered by an earthquake and tsunami on March 11. The NRC has two staff on the ground in Japan as part of the USAID team and 10 other NRC personnel are enroute.
- The NRC is coordinating its actions with other federal agencies as part of the U.S. government response. The NRC's headquarters Operations Center is activated and monitoring the situation on a 24-hour basis.

- The NRC is always looking to learn information that can be applied to U.S. reactors and we will analyze the information that comes from this incident.
- The NRC is working with other U.S. agencies to monitor radioactive releases from Japan and to predict their path.
- Given the results of the monitoring and distance between Japan and Hawaii, Alaska,
   U.S. Pacific Territories and the U.S. West Coast, the NRC expects the U.S. to
   AVOID any harmful levels of radioactivity.
- U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.
- The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy. In other words, U.S. nuclear power plants are designed to be safe based on historical data to predict the area's maximum credible earthquake.



# Compiled Seismic Questions for NRC Response to the March 11, 2001 Japanese Earthquake and Tsunami

This is current as of 3-16-11 at 3 am.

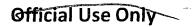
The keeper of this file is Annie Kammerer. Please provide comments, additions and updates to Annie with CC to Clifford Munson and Jon Ake.

A SharePoint site has been set up so that anyone can download the latest Q&As. Information will be provided as soon as we have a link to this document on line.

We greatly appreciate the assistance of the many people who have contributed. The enclosed list of questions and answers has been compiled from multiple sources including, questions forwarded from NRC staff, GI-199 communications plan, Diablo Canyon communications plan, the NEI website, lists of questions that followed the 2007 earthquake that shut down the Kashiwazaki-Kariwa plant, and others. Please do not distribute beyond the NRC.

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# Natural Hazards and Ground Shaking Design Levels

# 1) Did the Japanese underestimate the size of the maximum credible earthquake that could affect the plants?

**Public response:** The magnitude of the earthquake was somewhat greater than was expected for that part of the subduction zone by seismologists worldwide. The Japanese plants were recently reviewed to ground shaking similar to that observed. The review level ground motions were expected to result from a smaller earthquake closer to the sites.

Additional, technical, non-public information: None.

# 2) Can a very large earthquake and tsunami happen here?

**Public response:** This earthquake was caused by a "subduction zone" event, which is the type of mechanism that produces the largest magnitude earthquakes. A subduction zone is a tectonic plate boundary where one tectonic plate is pushed under another plate. In the continental US, the only subduction zone is the Cascadia subduction zone which lies off the coast of northern California, Oregon and Washington. So, an earthquake and tsunami this large could only happen in that region. The only plant in that area is Columbia, which is far from the coast and the subduction zone. Outside of the Cascadia subduction zone, earthquakes are not expected to exceed a magnitude of approximate 8, which is about 10 times smaller than a magnitude 8.9.

**Additional, technical, non-public information:** Magnitude is on a log scale, so 9 is 10 times bigger than an 8.

# 3) Has this changed our perception of Earthquake risk?

**Public Answer:** This does not change the NRC's perception of earthquake hazard (i.e. ground shaking) at US plants. It is too early to tell what the lessons from this earthquake are from an engineering perspective. The NRC will look closely at all aspects of response of the plants to the earthquake and tsunami to determine if any actions need to be taken in US plants and if any changes are necessary to NRC regulations.

**Additional, technical, non-public information:** We expect that there would be lessons learned and we may need to seriously relook at common cause failures, including dam failure and tsunami.

# 4) What magnitude earthquake are US plants designed to?

**Public Answer:** Each plant is designed to a ground-shaking level that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of an earthquake and the distance from the fault to the site. The magnitude alone cannot be used to predict ground motions. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant. Several tables that include plant design ground motions are provided as the first table in the "additional information" section of this document.

**Additional, technical non-public information:** In the past, "deterministic" or "scenario based" analyses were used to determine ground shaking (seismic hazard) levels. Now a probabilistic method is used that accounts for possible earthquakes of various magnitudes that come from potential sources (including background seismicity) and the likelihood that each particular hypothetical earthquake occurs.

# 5) How many US reactors are located in active earthquake zones (and which reactors)?

**Public Answer:** Although we often think of the U.S. as having "active" and "non-active" earthquake zones, earthquakes can actually happen almost anywhere. Seismologists typically separate the U.S. into low, moderate, and high seismicity zones. The NRC requires that every plant be designed for site-specific ground motions that are appropriate for their locations. In addition, the NRC has specified a minimum ground shaking level to which plants must be designed.

Seismic designs at U.S. nuclear power plants are developed in terms of seismic ground motion spectra, which are called the Safe Shutdown Earthquake ground motion response spectra (SSE). Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location. Currently operating nuclear power plants developed their SSEs based on a "deterministic" or "scenario earthquake" that accounts for the largest earthquake expected in the area around the plant.

Generally speaking, seismic activity in the regions surrounding U.S. plants is much lower than that for Japan since most U.S. plants are located in the interior of the stable continental U.S. However, the most widely felt earthquakes within the continental U.S. are the 1811-12 New Madrid sequence and the 1886 Charleston, SC, which were estimated to be between about magnitude 7.0 to 7.75. Nuclear power plants in the U.S. are sited far away from these two earthquake zones as well as other identified potential seismic sources.

On the west coast of the U.S., the two nuclear power plants are designed to specific ground motions from earthquakes of about magnitude 7+ on faults located just offshore of the plants. The earthquakes on these faults are mainly strike-slip (horizontal motion) type earthquakes, not subduction zone earthquakes. Therefore, the likelihood of a tsunami from these faults is remote.

Additional, technical non-public information: None.

# 6) How many reactors are along coastal areas that could be affected by a tsunami (and which ones)?

**Public Answer:** Many plants are located in coastal areas that could potentially be affected by tsunami. Two plants, Diablo Canyon and San Onofre, are on the Pacific Coast, which is known to have tsunami hazard. There are also two plants on the Gulf Coast, South Texas and Crystal River. There are many plants on the Atlantic Coast or on rivers that may be affected by a tidal bore resulting from a tsunami. These include St. Lucie, Turkey Point, Brunswick, Oyster Creek, Millstone, Pilgrim, Seabrook, Calvert Cliffs, Salem/Hope Creek, and Surry. Tsunami on the Gulf and Atlantic Coasts occur, but are very rare. Generally the flooding anticipated from hurricane storm surge exceeds the flooding expected from a tsunami for plants on the Atlantic and Gulf Coast.

**Additional, technical non-public information:** A table with information on tsunami design levels is provided in the "Additional Information" section of this document.

7) If the earthquake in Japan was a larger magnitude than considered by plant design, why can't the same thing happen in the US?

Public response: Discuss in terms of, IPEEE, Seismic PRA to be provided by Nilesh

Additional, technical, non-public information: ADD

8) If the earthquake in Japan was a larger magnitude than considered by plant design, why can't the same thing happen in the US?

**Public response:** Discuss in terms of, IPEEE, Seismic PRA to be provided by Nilesh

Additional, technical, non-public information: ADD

9) What if an earthquake like the Sendai earthquake occurred near a US plant?

**Public response:** ADD

Additional, technical, non-public information: ADD

10) What would be the results of a tsunami generated off the coast of a US plant? (Or why are we confident that large tsunamis will not occur relatively close to US shores?)

**Public response:** Request for answer by Henry Jones, Goutam Bagchi and/or Richard Raione (once the tsunami fact sheet is done and you have time).

Additional, technical, non-public information: ADD

11) Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?

**Public Answer:** All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located within areas with low and moderate seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account even rare and extreme seismic and tsunami events.

The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information: Currently operating reactors were designed using a "deterministic" or "maximum credible earthquake" approach. Seismic hazard for the new plants is determined using a probabilistic seismic hazard assessment approach that explicitly addresses uncertainty, as described in Regulatory Guide 1.208. The NRC requires that adequate margin beyond the design basis ground shaking levels is assured. The NRC further enhances seismic safety for beyond-design-basis events through the use of a defense-in-depth approach.

In addition, the NRC reviews the seismic risk at operating reactors as needed when information may have changed. Over the last few years the NRC has undertaken a program called Generic Issue 199, which is focused on assessing hazard for plants in the central and eastern US using the latest techniques and data and determining the possible risk implications of any increase in the anticipated ground shaking levels. This program will help us assure that the plants are safe under exceptionally rare and extreme ground motions that represent beyond-design-basis events.

# 12) What level of earthquake hazard are the US reactors designed for?

**Public Answer:** Each reactor is designed for a different ground motion that is determined on a site-specific basis. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant. New reactors are designed using probabilistic techniques that characterize the hazard (i.e. ground shaking levels) and uncertainty at the proposed site. Ground motions from all potential seismic sources in the region are estimated and used to develop an appropriate site specific ground motion, which has a return period of 10,000 years on average over very long time periods.

Additional technical, non-public information: None

# 13) Does the NRC consider earthquakes of magnitude 8.9?

**Public Answer:** Earthquakes with very large magnitudes, such as the recent earthquake of the coast of Japan, occur only within subduction zones. Subduction zones are regions where one of the earth's tectonic plates is subducting beneath another. In the continental US, the only subduction zone is the Cascadia subduction zone, which lies off of the coast of northern California, Oregon, and Washington. The only nuclear power plant in that area is Columbia, which is far from the coast and the subduction zone.

Seismic designs at U.S. nuclear power plants are developed in terms of seismic ground motion spectra, which are called the Safe Shutdown Earthquake ground motion response spectra (SSE). Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location. Currently operating nuclear power plants developed their SSEs based on a "deterministic" or "scenario earthquake" basis that account for the largest earthquake expected in the area around the plant. Seismic activity in the regions surrounding U.S. plants is much lower than that for Japan since most U.S. plants are located in the interior of the stable continental U.S. The largest earthquakes within the continental U.S. are the 1811-12 New Madrid sequence and the 1886 Charleston, SC, which were estimated to be between about magnitude 7 to 7.5. Nuclear power plants in the U.S. are sited far away from these two earthquake zones as well as other potential seismic sources. On the west coast of the U.S., the two nuclear power plants are designed to specific ground motions from earthquakes of about magnitude 7 on faults located just offshore of the plants. The earthquakes on these faults are mainly strike-slip (horizontal motion) type earthquakes, not subduction zone earthquakes. Therefore, the likelihood of a tsunami from these faults is very remote.

Additional technical, non-public information: None.

# 14) What are the definitions of the SSE and OBE?

# CLEAN UP BELOW information — late question

From RG1.208 Safe Shutdown Earthquake Ground Motion (SSE). The vibratory ground motion for which certain structures, systems, and components are designed, pursuant to Appendix S to 10 CFR Part 50, to remain functional. The SSE for the site is characterized by both horizontal and vertical free-field ground motion response spectra at the free ground surface

Appendix S to 10 CFR Part 50 (3) has the following information: Required Plant Shutdown. If vibratory ground motion exceeding that of the Operating Basis Earthquake Ground Motion or if significant plant damage occurs, the licensee must shut down the nuclear power plant. If systems, structures, or components necessary for the safe shutdown of the nuclear power plant are not available after the occurrence of the Operating Basis Earthquake Ground Motion, the licensee must consult with the Commission and must propose a plan for the timely, safe shutdown of the nuclear power plant. Prior to resuming operations, the licensee must demonstrate to the Commission that no functional damage has occurred to those features necessary for continued operation without undue risk to the health and safety of the public and the licensing basis is maintained.

The the ratio is provided in guidance as the ratio that the licensees can chose without additional analysis. The OBE mostly used to be half for existing plants, but now it's a 1/3 unless you do analyses to show why it should be ½.

Def	inition of	
Safe	Shutdown	

The safe-shutdown earthquake (SSE) for the site is the ground motion response spectra (GMRS), which also satisfies the minimum requirement of paragraph IV(a)(1)(i) of Appendix S,

Earthquake	"Earthquake Engineering Criteria for Nuclear Power Plants," to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the Code of Federal Regulations (10 CFR Part 50).
	To satisfy the requirements of paragraph IV(a)(2)(A) of Appendix S to 10 CFR Part 50, the operating-basis earthquake (OBE) ground motion is defined as follows:
	(i) For the certified design portion of the plant, the OBE ground motion is one-third of the CSDRS.
	(ii) For the safety-related noncertified design portion of the plant, the OBE ground motion is one-third of the design motion response spectra, as stipulated in the design certification conditions specified in design control document (DCD).
Definition of	(iii) The spectrum ordinate criterion to be used in conjunction with Regulatory Guide
Operating Basis	1.166, "Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator
Earthquake:	Post-earthquake Actions," issued March 1997, is the lowest of (i) and (ii).

# 15) What is the likelihood of the ground motions occurring over the life of the plant?

# TO BE CLEANED UP BY MUNSON AND AKE

Assuming independent Poisson behavior, the relationship is---Return Period = Exposure Period/In(1/P), where P=probability of <u>non</u>-exceedance, and exposure period is 50 years say. IF we plug 10,000 years for the return period we find that the probability of non-exceedance is .995, i.e. the probability of exceedance is 0.5%.

To properly emphasize the conservatism in our current process I suggest we refer to this as: our design ground motions are required to have an annual probability of exceedance of 1E-4 or less which alternatively can be viewed as a 0.5% probability of exceedance (or less) in a 50 year period.

Thanks for clarifying. I think in our effort to make this understandable that we sometimes don't consider all of the ramifications. I like using "about 0.5-1.0% probability of exceedence in 50 years" because that provides a straight comparison to the USGS hazard maps

The point you make is quite true and part of my concern. However, keep in mind we interested in the ground motions that are possibly going to happen in the design life of the plant (a few years to a few decades). We want ensure that the design ground motions have a very low probability of being exceeded (i.e. 1E-4 AFE is equal to about 0.5-1.0% probability of exceedence in 50 years). Use of the "10,000 year ground motion" invites goofy questions like "how can we guarantee consistency in seismic/tectonic characteristics over 10,000 or 100,000 years?", as well as potential sampling issues, i.e. how do we sample a few years and estimate behavior over 10,000? I think it best to just leave it at 1E-4 or 0.5% in 50 years or some way to express it that is consistent with our intended use.

# 16) What is magnitude anyway? What is the Richter Scale? What is intensity?

# Design Against Natural Hazards & Plant Safety in the US

# 18) Are power plants designed for Tsunami's?

**Public Answer:** Yes. Plants are built to withstand a variety of environmental hazards and those plants that might face a threat from tsunami are required to withstand large waves and the maximum wave height at the intake structure (which varies by plant.)

**Additional, technical, non-public information:** Tsunami are considered in the design of US nuclear plants. Nuclear plants are designed to withstand flooding from not only tsunami, but also hurricane and storm surge; therefore there is often significant margin against tsunami flooding. However, it should be noted that Japanese experience has shown that drawdown can be a significant problem.

Currently the US NRC has a tsunami research program that is focused on developing modern hazard assessment techniques and additional guidance through cooperation with the National Oceanic and Atmospheric Administration and the United States Geological Survey. This has already lead to several technical reports and an update to NUREG 0-800. The NOAA and USGS contractors are also assisting with NRO reviews of tsunami hazard. A new regulatory guide on tsunami hazard assessment is currently planned in the office of research, although it is not expected to be available in draft form until 2012.

# 19) What level of Tsunami are we designed for?

**Public Answer:** Like seismic hazard, the level of tsunami that each plant is designed for is site-specific and is appropriate for what may occur at each location.

Additional, technical, non-public information: None.

# 20) How was the seismic design basis for an existing nuclear power plant established?

**Public Answer:** The seismic ground motion used for the design basis was determined from the evaluation of the maximum historic earthquake within 200 miles of the site, without explicitly considering the time spans between such earthquakes; safety margin was then added beyond this maximum historic earthquake to form a hypothetical *design basis earthquake*. The relevant regulation for currently operating plants is 10 CFR Part 100, Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants" (<a href="http://www.nrc.gov/reading-rm/doc-collections/cfr/part100/part100-appa.html">http://www.nrc.gov/reading-rm/doc-collections/cfr/part100/part100-appa.html</a>).

**Additional, technical, non-public information:** See discussion at end of GI-199 section for discussion of safety margin and design basis.

# 21) Is there margin above the design basis?

**Public Answer:** Yes, there is margin beyond the design basis). In the mid to late 1990s, NRC staff reviewed the plants' assessments of potential consequences of severe earthquakes (earthquakes beyond the safety margin included in each plant's design basis), which licensees performed as part of the Individual Plant Examination of External Events (or IPEEE) program. From this review, the staff determined that seismic designs of operating plants in the United States have adequite safety margins, for withstanding earthquakes, built into the designs.

Additional, technical, non-public information: None.

## 22) Are US plants safe?

**Public Answer:** US plants are designed for appropriate earthquake shaking levels and are safe. Currently the NRC is also conducting a program called Generic Issue 199, which is reviewing the adequacy of earthquake design of US NPPs in the central and eastern North America based on the latest data and analysis techniques.

Additional, technical, non-public information: None.

# 23) Was the Japanese plant designed for this type of accident? Are US plants?

**Public Answer:** Plants in both the US and Japan area designed for earthquake shaking. In addition to the design of the plants, significant effort goes into emergency response planning and accident mitigation. This approach is called defense-in-depth.

Additional, technical, non-public information: None.

# 24) Why do we have confidence that US nuclear power plants are adequately designed for earthquakes and tsunamis?

**Public Answer:** Plants in both the US and Japan area designed for earthquake shaking. In addition to the design of the plants, significant effort goes into emergency response planning and accident mitigation. This approach is called defense-in-depth.

Additional, technical, non-public information: None.

# 25) Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?

**Public Answer:** All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located within areas with low and moderate seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account even rare and extreme seismic and tsunami events Nuclear power plants are designed to be safe based on the most severe natural phenomena historically reported for the site and surrounding area. The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information: Currently operating reactors were designed using a "deterministic" or "maximum credible earthquake" approach. Seismic hazard for the new plants is determined using a probabilistic seismic hazard assessment approach that explicitly addresses uncertainty, as described in Regulatory Guide 1.208. The NRC requires that adequate margin beyond the design basis ground shaking levels is assured. The NRC further enhances seismic safety for beyond-design-basis events through the use of a defense-in-depth approach.

In addition, the NRC reviews the seismic risk at operating reactors as needed when information may have changed. Over the last few years the NRC has undertaken a program called Generic Issue 199, which is focused on assessing hazard for plants in the central and eastern US using the latest techniques and data and is determining the possible risk implications of any increase in the anticipated ground shaking levels. This program will help us assure that the plants are safe under exceptionally rare and extreme ground motions that represent beyond-design-basis events.

The reactor design is a Boiling Water Reactor that is similar to some U.S. designs, including Oyster Creek, Nine Mile Point and Dresden Units 2 and 3.

#### 26) Are US plants susceptible to the same sort of loss of all power?

Public response: ADD. Can someone discuss how we deal with station blackout? I need help with this one...

Additional, technical, non-public information: ADD

## 27) Could an accident like the one at Japan's Fukushima Daiichi nuclear plant happen in the United States?

**Public response:** It is difficult to answer this question until we have a better understanding of the precise problems and conditions that faced the operators at Fukushima Daiichi. We do know, however, that Fukushima Daiichi Units 1-3 lost all offsite power and emergency diesel generators. This situation is called "station blackout." U.S. nuclear power plants are designed to cope with a station blackout event that involves a loss of offsite power and onsite emergency power. The Nuclear Regulatory Commission's detailed regulations address this scenario. U.S. nuclear plants are required to conduct a "coping" assessment and develop a strategy to demonstrate to the NRC that they could maintain the plant in a safe condition during a station blackout scenario. These assessments, proposed modifications and operating procedures were reviewed and approved by the NRC. Several plants added additional AC power sources to comply with this regulation.

In addition, U.S. nuclear plant designs and operating practices since the terrorist events of September 11, 2001, are designed to mitigate severe accident scenarios such as aircraft impact, which include the complete loss of offsite power and all on-site emergency power sources.

U.S. nuclear plant designs include consideration of seismic events and tsunamis'. It is important not to extrapolate earthquake and tsunami data from one location of the world to another when evaluating these natural hazards. These catastrophic natural events are very region- and location-specific, based on tectonic and geological fault line locations.

Additional technical, non-public information: None

## 28) Should U.S. nuclear facilities be required to withstand earthquakes and tsunamis of the kind just experienced in Japan? If not, why not?

**Public response:** U.S. nuclear reactors are designed to withstand an earthquake equal to the most significant historical event or the maximum projected seismic event and associated tsunami without any breach of safety systems.

The lessons learned from this experience must be reviewed carefully to see whether they apply to U.S. nuclear power plants. It is important not to extrapolate earthquake and tsunami data from one location of the world to another when evaluating these natural hazards, however. These catastrophic natural events are very region- and location-specific, based on tectonic and geological fault line locations.

The U.S. Geological Survey (USGS) conducts continuous research of earthquake history and geology, and publishes updated seismic hazard curves for various regions in the continental US. These curves are updated approximately every six years. NRC identified a generic issue (GI-199) that is currently undergoing an evaluation to assess implications of this new information to nuclear plant sites located in the central and eastern United States. The industry is working with the NRC to address this issue.

Additional technical, non-public information: None

## 29) Can you summarize the plant seismic design basis for the US plants? Are there any special issues associated with seismic design?

**Public response:** Please see one of the several tables provided in the "Additional information" section of this document

Additional, technical, non-public information: None

#### 30) How do we know that the equipment in plants is safe in earthquakes?

**Public response:** All equipment important to safety (required to safely shutdown a nuclear power plant) is qualified to withstand earthquakes in accordance with plants' licensing basis and NRC regulations.

**Additional, technical, non-public information:** 10 CFR 50, Appendix A, General Design Criterion 2 and 4, 10 Part 100, and Appendix S. Guidance: Regulatory Guides 1.100, IEEE 344 and ASME QME-1

## 31) How do we know equipment will work if the magnitude is bigger than expected, like in Japan?

**Public response:** Plant systems are designed to mitigate a design basis earthquake which includes margin above the postulated site specific earthquake. (reviewers comment: this needs to be expanded)

Additional, technical, non-public information: See part 100 Reactor Site Criteria

#### 32) Are US plants susceptible to the same kind of loss of power as happened in Japan?

**Public response:** Yes in the sense that sites can lose offsite power. Also, hurricane or tornado related high winds may potentially damage the transmission network in the vicinity of a nuclear plant. Flood waters can also 'affect transformers used to power station auxiliary system. These types of weather related events have the potential to degrade the offsite power source to a plant.

The onsite Emergency Diesel Generators need fuel oil stored in tanks that are normally buried underground. These tanks and associated pumps/piping require protection from the elements.

Above ground tanks have tornado/missile protection.

In case both offsite and onsite power supplies fail, NRC has required all licensee to evaluate for a loss of all AC power (station blackout) scenario and implement coping measures to safely shutdown the plant law 10 CFR 50.63.

**Additional, technical, non-public information:** Some plants have safeguards equipment below sea level and rely on watertight doors or Bilge pumps to remove water from equipment required to support safe shutdown. Overflowing rivers can result in insurmountable volume of water flooding the vulnerable areas.

## 33) How do we know that the EDGs in Diablo Canyon and SONGS will not fail to operate like in Japan?

**Public response:** EDGs are installed in a seismically qualified structure. Even if these EDGs fail, plants can safely shutdown using station blackout power source law 10 CFR 50.63.

Additional, technical, non-public information: None.

34) Is all equipment at the plant vulnerable to tsunami?

**Public response:** Plants are designed law GDC 2 to withstand protection against natural phenomena such as tsunami, earthquakes. (reviewers comment: this needs to be expanded. I need assistance with this)

Additional, technical, non-public information: ADD

35) What protection measures do plants have against tsunami?

**Public response:** Plants are designed iaw GDC 2 to withstand protection against natural phenomena such as tsunami, earthquakes. (note from reviewer: add information on breakwater from songs and Diablo example. I need assistance with this)

Additional, technical, non-public information: ADD

36) Is there a risk of loss of water during tsunami drawdown? Is it considered in design?

Public response: Goutam, Henry and Rich, can you guys answer this?

Additional, technical, non-public information: ADD

37) Are nuclear buildings built to withstand earthquakes? What about tsunami?

Public response: There is language elsewhere in this document that answers that...copy here.

Additional, technical, non-public information: ADD

38) Are aftershocks considered in the design of equipment at the plants? Are aftershocks considered in design of the structure?

Public response: ADD

Additional, technical, non-public information: ADD

39) Are there any special issues associated with seismic design at the plants? For example, Diablo Canyon has special requirements. Are there any others?

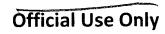
**Public response:** Both SONGS and Diablo canyon are licensed with an automatic trip for seismic events. (can this be expanded? any others?) Mike Markley, can your group assist with this?

Additional, technical, non-public information: ADD

40) Is the NRC planning to require seismic isolators for the next generation of nuclear power plants? How does that differ from current requirements and/or precautions at existing U.S. nuclear power plants?

**Public response:** The NRC would not require isolators for the next generation of plants. However, it is recognized that a properly designed isolation system can be very effective in mitigating the effect of earthquake. Currently the NRC is preparing guidance for plant designers considering the use of seismic isolation devices.

**Additional, technical, non-public information:** A NUREG is in the works in the office of research. It is expected to be available for comment in 2011.



41) Are there any U.S. nuclear power plants that incorporate seismic isolators? What precautions are taken in earthquake-prone areas?

**Public response:** No currently constructed nuclear power plants in the US use seismic isolators. However seismic isolation is being considered for a number of reactor designs under development. Currently seismic design of plants is focused on assuring that design of structures, systems, and components are designed and qualified to assure that there is sufficient margin beyond the design basis ground motion.

Additional, technical, non-public information: None.

42) Do you think that the recent Japan disaster will cause any rethinking of the planned seismic isolation guidelines, particularly as it regards earthquakes and secondary effects such as tsunamis?

**Public response:** Whenever an event like this happens, the NRC thoroughly reviews the experience and tries to identify any lessons learned. The NRC further considers the need to change guidance or regulations. In this case, the event will be studied and any necessary changes will be made to the guidance under development. However, it should be noted that Japan does not have seismically isolated nuclear plants.

Additional, technical, non-public information: None.



#### About Japanese Hazard, Design and Earthquake Impact

#### 43) Was the damage done to the plants from the Earthquake or the Tsunami?

**Public response:** It is hard to tell at this point. In the nuclear plants there seems to have been some damage from the shaking. However, the tsunami lead to some of the biggest problems in terms of the loss of backup power. This is also true in the general population; the tsunami seems to have lead to most of the deaths.

Additional, technical, non-public information: None

#### 44) What is the design level of the Japanese plants? Was it exceeded?

**Public response:** As a result of a significant change in seismic regulations in 2006, the Japanese regulator initiated a program to reassess seismic hazard and seismic risk for all nuclear plants in Japan. This resulted in new assessments of higher ground shaking levels (i.e. seismic hazard) and a review of seismic safety for all Japanese plants. The program is still on-going, but has already resulted in retrofit in some plants. Therefore, it is useful to discuss both the design level and a review level ground motion for the plants, as shown below.

Currently we do not have official information. However, it appears that the ground motions (in terms of peak ground acceleration) are similar to the S<sub>s</sub> shaking levels, although the causative earthquakes are different. Thus the design basis was exceeded, but the review level may not have been.

## Table: Original Design Basis Ground Motions (S<sub>2</sub>) and New Review Level Ground Motions (S<sub>s</sub>) Used for Review of Japanese Plants

Plant sites	Contributing earthquakes used for determination of hazard	New DBGM.S.	Original DBGM S <sub>1</sub>
Onagawa	Soutei Miyagiken-oki (M8.2)	580 gal (0.59g)	375 gal (0.38g)
Fukushima	Earthquake near the site (M7.1)	600 gal (0.62g)	370 gal (0.37g)
Tokai	Earthquakes specifically undefined	600 gal (0.62g)	380 gal (0.39g)
Hamaoka	Assumed Tokai (M8.0), etc.	800 gal (0.82g)	600 gal (0.62g)

Additional, technical, non-public information: None

#### 45) What are the Japanese S<sub>1</sub> and S<sub>s</sub> ground motions and how are they determined?

**Public response:** Japanese nuclear power plants are designed to withstand specified earthquake ground motions, previously specified as  $S_1$  and  $S_2$ , but now simply  $S_5$ . The design basis earthquake ground motion  $S_1$  was defined as the largest earthquake that can reasonably be expected to occur at the site of a nuclear power plant, based on the known seismicity of the area and local faults that have shown activity during the past 10,000 years. A power reactor could continue to operate safely during an  $S_1$  level earthquake, though in practice they are set to trip at lower levels. The  $S_2$  level ground motion was based on a larger earthquake from faults that have shown activity during the past 50,000 years and assumed to be closer to the site. The revised seismic regulations in May 2007 replaced  $S_1$  and  $S_2$  with  $S_5$ .

The  $S_s$  design basis earthquake is based on evaluating potential earthquakes from faults that have shown activity during the past 130,000 years. The ground motion from these potential earthquakes are simulated for each of the sites and used to determine the revised  $S_s$  design basis ground motion level. Along with the change in definition, came a requirement to consider "residual risk", which is a consideration of the beyond-design-basis event.

Additional, technical, non-public information: None

#### 46) Did this earthquake affect Kashiwazaki-Kariwa NPP?

**Public response:** No, this earthquake did not affect Kashiwazaki-Kariwa NPP and all reactors remained in their pre-earthquake operating state. It also did not trip during an earthquake of magnitude XX that occurred on the western side subsequent to the 8.9 earthquake. This is very important for the stability of Japan's energy supply due to the loss of production at TEPCO's Fukushima NPPs.

Additional, technical, non-public information: None

#### 47) How high were the tsunami at the plants?

**Public response:** The actual tsunami height at the plants is not currently known. However, NOAA has publically information on the recordings at sea for many areas.

**Additional, technical, non-public information:** A preliminary rough estimate of tsunami height at the plant locations was provided to NRC by NOAA shortly after the earthquake. This was developed using NOAA's global ocean model and is shown in the "additional information" section. Most notably, there was a 6 meter wave at Fukushima and the wave at Onogawa may have been between 18 and 23 meters.

### What happened in US Plants during the earthquake?

## 48) Was there any damage to U.S. reactors from either the earthquake or the resulting tsunami?

Public Answer: No

Additional, technical non-public information: Two US plants on the Pacific Ocean (Diablo Canyon and San Onofre) experienced higher than normal sea level due to tsunami. However, the wave heights were consistent with previously predicted levels and this had no negative impact to the plants. In response, Diablo Canyon Units 1 and 2 declared an "unusual event" based on tsunami warning following the Japanese earthquake. They have since exited the "unusual event" declaration, based on a downgrade to a tsunami advisory.

#### 49) Have any lessons for US plants been identified?

**Public Answer:** The NRC is in the process of following and reviewing the event in real time. This, inevitably, leads to the indemnification of lessons that warrant further study. However, a complete understanding of lessons learned requires more information than is currently available to NRC staff.

**Additional, technical non-public information:** We need to take a closer look at common cause failures, such as earthquake and tsunami, and earthquake and dam failure.

#### Future Actions, Reassessment of US Plants and GI-199

50) What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?

**Public Answer:** We are closely following events in Japan, working with other agencies of the federal government, and have been in direct contact with our counterparts in that country. In addition, we are ready to provide assistance if there is a specific request. An NRC staffer is participating in the USAID team headed to Japan.

**Additional technical, non-public information:** We are taking the knowledge that the staff has about the design of the US nuclear plants and we are applying this knowledge to the Japan situation. For example, this includes calculations of severe accident mitigation that have been performed.

51) With NRC moving to design certification, at what point is seismic capability tested – during design or modified to be site-specific? If in design, what strength seismic event must these be built to withstand?

Public Answer: During design certification, vendors propose a seismic design in terms of a ground motion spectrum for their nuclear facility. This spectrum is called a standard design response spectrum and is developed so that the proposed nuclear facility can be sited at most locations in the central and eastern United States. The vendors show that this design ground motion is suitable for a variety of different subsurface conditions such as hard rock, deep soil, or shallow soil over rock. Combined License and Early Site Permits applicants are required to develop a site specific ground motion response spectrum that takes into account all of the earthquakes in the region surrounding their site as well as the local site geologic conditions. Applicants estimate the ground motion from these postulated earthquakes to develop seismic hazard curves. These seismic hazard curves are then used to determine a site specific ground motion response spectrum that has a maximum annual likelihood of 1x10<sup>-4</sup> of being exceeded. This can be thought of as a ground motion with a 10,000 year return period. This site specific ground motion response spectrum is then compared to the standard design response spectrum for the proposed design. If the standard design ground motion spectrum envelopes the site specific ground motion spectrum then the site is considered to be suitable for the proposed design. If the standard design spectrum does not completely envelope the site specific ground motion spectrum, then the COL applicant must do further detailed structural analysis to show that the design capacity is adequate. Margin beyond the standard design and site specific ground motions must also be demonstrated before fuel loading can begin.

Additional technical, non-public information: None.

#### 52) Is the earthquake safety of US plants reviewed once the plants are constructed?

**Public response:** Yes, earthquake safety is reviewed during focused design inspections, under the Generic Issues Program (GI-199) and as part of the Individual Plant Evaluation of External Events program (IPEEE) that was conducted in response to Generic Letter 88-20 Supplement 4.

Additional, technical, non-public information: None.

#### 53) Does the NRC ever review tsunami risk for existing plants?

**Public Answer:** The NRC has not conducted a generic issue program on tsunami risk to date. However, some plants have been reviewed as a result of the application for a license for a new reactor. In the ASME/ANS 2009 seismic probabilistic risk assessment standard, all external hazards are included.

Additional, technical, non-public information: None.

#### 54) Does GI-199 consider tsunami?

**Public response:** GI-199 stems from the increased in perceived seismic hazard focused on understanding the impact of increased ground motion on the risk at a plant. GI-199 does not consider tsunami

**Additional, technical, non-public information:** In the past there has been discussion about a GI program on tsunami, but the NRC's research and guidance was not yet at the point it would be effective. We are just getting to this stage and the topic should be revisited.

#### 55) What is Generic Issue 199 about?

**Public Answer:** Generic Issue 199 investigates the safety and risk implications of updated earthquake-related data and models. These data and models suggest that the probability for earthquake ground shaking above the seismic design basis for some nuclear power plants in the Central and Eastern United States is still low, but larger than previous estimates.

**Additional, technical, non-public information:** See additional summary/discussion of GI-199 and terms below.

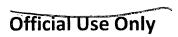
#### 56) Where can I get current information about Generic Issue 199?

Public Answer: The public NRC Generic Issues Program (GIP) website (<a href="http://www.nrc.gov/about-nrc/regulatory/gen-issues.html">http://www.nrc.gov/about-nrc/regulatory/gen-issues.html</a>) contains program information and documents, background and historical information, generic issue status information, and links to related programs. The latest Generic Issue Management Control System quarterly report, which has regularly updated GI-199 information, is publicly available at <a href="http://www.nrc.gov/reading-rm/doc-collections/generic-issues/quarterly/index.html">http://www.nrc.gov/reading-rm/doc-collections/generic-issues/quarterly/index.html</a>. Additionally, the U.S. Geological Survey provides data and results that are publicly available at <a href="http://earthquake.usgs.gov/hazards/products/conterminous/2008/">http://earthquake.usgs.gov/hazards/products/conterminous/2008/</a>.

Additional, technical, non-public information: The GI-199 section of the NRC internal GIP website (<a href="http://www.internal.nrc.gov/RES/projects/GIP/Individual%20GIs/GI-0199.html">http://www.internal.nrc.gov/RES/projects/GIP/Individual%20GIs/GI-0199.html</a>) contains additional information about Generic Issue 199 (GI-199) and is available to NRC staff.

#### 57) How was the seismic design basis for an existing nuclear power plant established?

**Public Answer:** The seismic ground motion used for the design basis was determined from the evaluation of the maximum historic earthquake within 200 miles of the site, without explicitly considering the time spans between such earthquakes; safety margin was then added beyond this



maximum historic earthquake to form a hypothetical *design basis earthquake*. The relevant regulation for currently operating plants is 10 CFR Part 100, Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants" (<a href="http://www.nrc.gov/reading-rm/doc-collections/cfr/part100/part100-appa.html">http://www.nrc.gov/reading-rm/doc-collections/cfr/part100/part100-appa.html</a>).

**Additional, technical, non-public information: See** discussion at end of GI-199 section for discussion of safety margin and design basis.

#### 58) Is there margin above the design basis?

**Public Answer**: Yes, there is margin beyond the design basis. In the mid to late 1990s, NRC staff reviewed the plants' assessments of potential earthquakes beyond the safety margin included in each plant's design basis), which licensees performed as part of the Individual Plant Examination of External Events (or IPEEE) program. From this review, the staff determined that seismic designs of operating plants in the Central and Eastern United States have considerable safety margins, for withstanding earthquakes, built into the designs.

**Additional, technical, non-public information:** The goal of seismic engineering is to design structures, systems and components that explicitly do not fail at the design level. The application of specific codes, standards, and analysis techniques results in margin beyond the design level. The assessments carried out as part of the IPEEE program demonstrated that margin exists in the operating reactors against seismic demand.

#### 59) Are all U.S. plants being evaluated as a part of Generic Issue 199?

**Public Answer:** The scope of the Generic Issue 199 (GI-199) Safety/Risk Assessment is limited to all plants in the Central and Eastern United States. Although plants at the Columbia, Diablo Canyon, Palo Verde, and San Onofre sites are not included in the GI-199 Safety/Risk Assessment, the Information Notice on GI-199 is addressed to all operating power plants in the U.S. (as well as all independent spent fuel storage installation licensees). The staff will also consider inclusion of operating reactors in the Western U.S. in its future generic communication information requests.

**Additional, technical, non-public information:** The staff is currently developing specific information needs to be included in a Generic Letter to licensees in the CEUS.

60) Are the plants safe? If you are not sure they are safe, why are they not being shut down? If you are sure they are safe, why are you continuing evaluations related to this generic issue?

**Public Answer:** Yes, currently operating nuclear plants in the United States remain safe, with no need for immediate action. This determination is based on NRC staff reviews associated with Early Site Permits and updated seismic hazard information, the conclusions of the Generic Issue 199 Screening Panel (comprised of technical experts), and the conclusions of the Safety/Risk Assessment Panel (also comprised of technical experts).

No immediate action is needed because: (1) existing plants were designed to withstand anticipated earthquakes with substantial design margins, as confirmed by the results of the Individual Plant Examination of External Events program; (2) the probability of exceeding the *safe shutdown earthquake* ground motion may have increased at some sites, but only by a relatively small amount; and (3) the Safety/Risk Assessment Stage results indicate that the probabilities of seismic core damage are lower than the guidelines for taking immediate action.

Even though the staff has determined that existing plants remain safe, the Generic Issues Program criteria (Management Directive 6.4) direct staff to continue their analysis to determine whether any cost-justified plant improvements can be identified to make plants enhance plant safety.

**Additional, technical, non-public information :** The Safety/Risk Assessment results confirm that plants are safe. The relevant risk criterion for GI-199 is total *core damage frequency* (CDF). The threshold for taking immediate regulatory action (found in NRR Office Instruction LIC-504, see below) is a total CDF greater than or on the order of  $10^{-3}$  (0.001) per year. For GI-199, the staff calculated seismic CDFs of  $10^{-4}$  (0.0001) per year and below for nuclear power plants operating in the Central and Eastern U.S. (CEUS) (based on the new U.S. Geological Survey seismic hazard curves). The CDF from internal events (estimated using the staff-developed Standardized Plant Analysis of Risk models) and fires (as reported by licensees during the IPEEE process and documented in NUREG-1742), when added to the seismic CDF estimates results in the total risk for each plant to be, at most,  $4 \times 10^{-4}$  (0.0004) per year or below. This is well below the threshold (a CDF of  $10^{-3}$  [0.001] per year) for taking immediate action. Based on the determination that there is no need for immediate action, and that this issue has not changed the licensing basis for any operating plant, the CEUS operating nuclear power plants are considered safe. In addition, as detailed in the GI-199 Safety/Risk Assessment there are additional, qualitative considerations that provide further support to the conclusion that plants are safe.

Note: The NRC has an integrated, risk-informed decision-making process for emergent reactor issues (NRR Office Instruction LIC-504, ADAMS Accession No. ML100541776 [not publically available]). In addition to deterministic criteria, LIC-504 contains risk criteria for determining when an emergent issue requires regulatory action to place or maintain a plant in a safe condition.

## 61) What do you mean by "increased estimates of seismic hazards" at nuclear power plant sites?

**Public Answer:** Seismic hazard (earthquake hazard) represents the chance (or probability) that a specific level of ground shaking could be observed or exceeded at a given location. Our estimates of seismic hazard at some Central and Eastern United States locations have changed based on results from recent research, indicating that earthquakes occurred more often in some locations than previously estimated. Our estimates of seismic hazard have also changed because the models used to predict the level of ground shaking, as caused by a specific magnitude earthquake at a certain distance from a site, changed. The increased estimates of seismic hazard at some locations in the Central and Eastern United States were discussed in a memorandum to the Commission, dated July 26, 2006. (The memorandum is available in the NRC Agencywide Documents Access and Management System [ADAMS] under Accession No. ML052360044).

Additional, technical, non-public information: See additional discussion of terms below.

#### 62) What do the following terms mean?

- Annual exceedance frequency
- Core damage frequency
- Design basis earthquake or safe shutdown earthquake
- Ground acceleration
- High confidence of low probability of failure capacity
- Large early release frequency
- Seismic hazard
- Seismic margin
- Seismic risk

Public Answer: The terms are defined as follows:

**Annual exceedance frequency (AEF)** – Number of times per year that a site's ground motion is expected to exceed a specified acceleration.

Core damage frequency (CDF) — Expected number of core damage events per unit of time. Core damage refers to the uncovery and heat-up of the reactor core, to the point that prolonged oxidation and severe fuel damage are not only anticipated but also involve enough of the core to result in off-site public health effects if released. Seismic core damage frequency refers to the component of total CDF that is due to seismic events.

Design basis earthquake or safe shutdown earthquake (SSE) – A design basis earthquake is a commonly employed term for the safe shutdown earthquake (SSE); the SSE is the earthquake ground shaking for which certain structures, systems, and components are designed to remain functional. In the past, the SSE has been commonly characterized by a standardized spectral shape associated with a peak ground acceleration value.

Ground acceleration – Acceleration produced at the ground surface by seismic waves, typically expressed in units of g, the acceleration of gravity at the earth's surface.

High confidence of low probability of failure (HCLPF) capacity – A measure of seismic margin. In seismic risk assessment, HCLPF capacity is defined as the earthquake motion level, at which there is high confidence (95%) of a low probability (at most 5%) of failure of a structure, system, or component.

Large early release frequency (LERF) — The expected number of large early releases per unit of time. A large early release is the rapid, unmitigated release of airborne fission products from the containment building to the environment, occurring before the effective implementation of off-site emergency response and protective actions, such that there is a potential for early health effects. Seismic large early release frequency refers to the component of total LERF that is due to seismic events.

**Seismic hazard** – Any physical phenomenon, such as ground motion or ground failure, that is associated with an earthquake and may produce adverse effects on human activities (such as posing a risk to a nuclear facility).

**Seismic margin** – The difference between a plant's capacity and its seismic design basis (safe shutdown earthquake, or SSE).

**Seismic risk** – The risk (frequency of occurrence multiplied by its consequence) of severe earthquake-initiated accidents at a nuclear power plant. A severe accident is an accident that causes core damage, and, possibly, a subsequent release of radioactive materials into the environment. Several risk metrics may be used to express *seismic risk*, such as seismic *core damage frequency* and seismic *large early release frequency*.

63) Let's say there's an estimate expressed as "2.5E-06." (I'm looking at Table D-2 of the safety/risk assessment of August 2010.) I believe that this expression means the same as 2.5 x 10^-06, or 0.0000025, or 2.5 divided by one million. In layman's terms, that means an expectation, on average, of 2.5 events every million years, or once every 400,000 years. Similarly, "2.5E-05" would be 2.5 divided by 100,000, or 2.5 events every 100,000 years, on average, or once every 40,000 years. Is this correct?

**Public Response:** Yes, at least partly. In the subject documents the frequencies for core damage or ground motion exceedance have been expressed in the form "2.5E-06". As you noted this is equivalent to 2.5x10-6, or 0.000025 per year. If, for example, the core damage frequency was estimated as 2.5E-06, this would be equivalent to an expectation of 2.5 divided by a million per year. It is not really correct to think of these values as "once every 400,000 years," the two numbers are mathematically equivalent but do not convey the same statistical meaning within this context. Rather, you could characterize it as 1 in 400,000 per year of something occurring.

Additional, technical, non-public information: None

64) The GI-199 documents give updated probabilistic seismic hazard estimates for existing nuclear power plants in the Central and Eastern U.S. What document has the latest seismic hazard estimates (probabilistic or not) for existing nuclear power plants in the Western U.S.?

Public Response: At this time the staff has not formally developed updated probabilistic seismic hazard estimates for the existing nuclear power plants in the Western U.S. However, NRC staff during the midto late-1990's reviewed the plants' assessments of potential consequences of severe ground motion from earthquakes beyond the plant design basis as part of the Individual Plant Examination of External Events (IPEEE) program. From this review, the NRC staff determined that the seismic designs of operating plants in the U.S. have adequate safety margin. NRC staff has continued to stay abreast of the latest research on seismic hazards in the Western U.S. and interface with colleagues at the U.S. Geological Survey. The focus of Generic Issue 199 has been on the CEUS. However, the Information Notice that summarized the results of the Safety/Risk Assessment was sent to all existing power reactor licensees. The documents that summarize existing hazard estimates are contained in the Final Safety Analysis Reports (FSARS) and in the IPEEE submittals. It must be noted that following 9/11 the IPEEE documents are no longer publicly available.

Additional, technical, non-public information: None

65) The GI-199 documents refer to newer data on the way. Have NRC, USGS et al. released those? I'm referring to this: "New consensus seismic-hazard estimates will become available in late 2010 or early 2011 (these are a product of a joint NRC, U.S. Department of Energy, U.S. Geological Survey (USGS) and Electric Power Research Institute (EPRI) project). These consensus seismic hazard estimates will supersede the existing EPRI, Lawrence Livermore National Laboratory, and USGS hazard estimates used in the GI-199 Safety/Risk Assessment."

Public Response: The new consensus hazard curves are being developed in a cooperative project that has NRC, U.S. Department of Energy, U.S. Geological Survey (USGS) and Electric Power Research Institute (EPRI) participation. The title is: the Central and Eastern U.S. Seismic Source Characterization (CEUS-SSC) project. The project is being conducted following comprehensive standards to ensure quality and regulatory defensibility. It is in its final phase and is expected to be publicly released in the fall of 2011. The project manager is Larry Salamone (Lawrence.salamone@srs.gov, 803-645-9195) and the technical lead on the project is Dr. Kevin Coppersmith (925-974-3335, kcoppersmith@earthlink.net).

Additional information on this project can be found at: <a href="http://mydocs.epri.com/docs/ANT/2008-04.pdf">http://mydocs.epri.com/docs/ANT/2008-04.pdf</a>, and

http://my.epri.com/portal/server.pt?open=512&objID=319&&PageID=218833&mode=2&in hi us erid=2&cached=true.

Additional, technical, non-public information: None

66) What is the timetable now for consideration of any regulatory changes from the GI-199 research?

**Public Response:** The NRC is working on developing a Generic Letter (GL) to request information from affected licensees. The GL will likely be issued in a draft form within the next 2 months to stimulate discussions with industry in a public meeting. After that it has to be approved by the Committee to Review Generic Requirements, presented to the Advisory Committee on Reactor Safeguards and issued as a draft for formal public comments (60 days). After evaluation of the public comments it can then be finalized for issuance. We expect to issue the GL by the end of this calendar year, as the new consensus seismic hazard estimates become available. The information from licensees will likely require 3 to 6 months to complete. Staff's review will commence after receiving licensees' responses. Based on staff's review, a determination can be made regarding cost beneficial backfits where it can be justified.

Additional, technical, non-public information: None

### Seismic Probabilistic Risk Assessment (SPRA)

67) The NRC increasingly uses risk-information in regulatory decisions. Are risk-informed PRAs useful in assessing an event such as this?

Public response: Nilesh Chokshi to provide Q&As on SPRA

Additional, technical, non-public information: None



#### **Plant-Specific Questions**

#### **SONGS** questions

Note, these were added 3/15 and have not yet been reviewed.

68) SONGS received a white finding in 2008 for 125VDC battery issue related to the EDGs that went undetected for 4 years. NRC issued the white finding as there was increased risk that one EDG may not have started due to a low voltage condition on the battery on one Unit (Unit 2). Aren't all plants susceptible to the unknown? Is there any assurance the emergency cooling systems will function as desired in a Japan-like emergency?

**Public response:** The low voltage condition was caused by a failure to properly tighten bolts on a electrical breaker that connected the battery to the electrical bus that would be relied on to start the EDG in case of a loss of off-site power. This was corrected immediately on identification and actions taken to prevent its reoccurrence. The 3 other EDGs at SONGS were not affected.

Additional, technical, non-public information: None

69) Has the earthquake hazard at SONGS been reviewed like DCNPP is doing? Are they planning on doing an update before relicensing?

**Public Answer:** Relicensing does not evaluate the potential change to seismic siting of a plant. If there is a seismic design concern, it would be addressed for the plant as it is currently operating.

The closest active fault is approximately five miles offshore from San Onofre, a system of folds and faults exist called the OZD. The Cristianitos fault is ½ mile southeast, but is an inactive fault. Other faults such as the San Andreas and San Jacinto, which can generate a larger magnitude earthquake, are far enough away that they would produce ground motions less severe than the OZD for San Onofre.

Past history relative to nearby major quakes have been of no consequences to San Onofre. In fact, three major earthquakes from 1992 to 1994 (Big Bear, Landers and Northridge), ranging in distance from 70-90 miles away and registering approximately 6.5 to 7.3 magnitude, did not disrupt power production at San Onofre. The plant is expected to safely shutdown if a major earthquake occurs nearby. Safety related structures, systems and components have been designed and qualified to remain functional and not fail during and after an earthquake.

Additional, technical, non-public information: None

70) Is possible to have a tsunami at songs that is capable of damaging the plant?

**Public Information**: The San Onofre Units 2 and 3 plant grade is elevation +30.0 feet MLLW. The controlling tsunami for San Onofre occurring during simultaneous high tide and storm surge produces a maximum runup to elevation +15.6 feet MLLW at the Unit 2 and 3 seawall. When storm waves are superimposed, the predicted maximum runup is to elevation +27 MLLW. Tsunami protection for the SONGS site is provided by a reinforced concrete seawall constructed to elevation +30.0 MLLW. A tsunami greater than this height is extremely unlikely.

Additional, technical, non-public information: None

71) Does SONGS have an emergency plan for tsunami?

**Public Response**: The SONGS emergency plan does initiate the emergency response organization and results in declaration of emergency conditions via their EALs. The facility would then make protective

action recommendations to the Governor, who would then decide on what protective actions would be ordered for the residents around SONGS.

Additional, technical, non-public information: None

#### 72) Has evacuation planning at SONGS considered tsunami?

**Public Response:** These considerations would be contained in the State and local (City, County) emergency plans, which are reviewed by FEMA. FEMA then certifies to the NRC that they have "reasonable assurance" that the off-site facilities can support operation of SONGS in an emergency.

Additional, technical, non-public information: None

#### 73) Is SONGS designed against tsunami and earthquake?

**Public Response:** Yes. SONGS is designed against both tsunami and earthquake.

Additional, technical, non-public information: None

#### 74) What is the height of water that SONGS is designed to withstand?

**Public Response:** 30 feet. Information for all plants can be found in the "Additional Information' section of this document.

Additional, technical, non-public information: None

#### 75) What about drawdown and debris?

Public Response: Good guestion ... can HQ answer? Goutam, Henry, or Rich... can you help with this one?

Additional, technical, non-public information: None

#### 76) Will this be reviewed in light of the Japan quake.

**Public Response:** The NRC will do a through assessment of the lessons learned from this event and will review all potential issues at US nuclear plants as a result.

Additional, technical, non-public information: None

# 77) Could all onsite and offsite power be disrupted from SONGS in the event of a tsunami, and if that happened, could the plant be safely cooled down if power wasn't restored for days after?

**Public Response:** Seismic Category I equipment is equipment that is essential to the safe shutdown and isolation of the reactor or whose failure or damage could result in significant release of radioactive material. All Seismic Category I equipment at SONGS is designed to function following a DBE with ground acceleration of 0.67g.

The operating basis earthquake (1/2 of the DBE) is characterized by maximum ground shaking of 0.33g. Historically, even this level of ground shaking has not been observed at the site. Based on expert analysis, the average recurrence interval for 0.33g ground shaking at the San Onofre site would be in excess of 1000 years and, thus, the probability of occurrence in the 40-year design life of the plant would be less than 1 in 25. The frequency of the DBE would be much more infrequent, and very unlikely to occur during the life of the plant. Even if an earthquake resulted in greater than the DBE movement/acceleration at SONGS, the containment structure would ultimately protect the public from harmful radiation release, in the event significant damage occurred to Seismic category 1 equipment.

Additional, technical, non-public information: None

#### 78) Are there any faults nearby SONGS that could generate a significant tsunami?

**Public Response:** Current expert evaluations estimate a magnitude 7 earthquake about 4 miles from SONGS. This is significantly less than the Japan quake, and SONGS has been designed to withstand this size earthquake without incident. Should discuss the different tectonic nature (not a subduction zone like Japan)?

Additional, technical, non-public information: None

## 79) What magnitude or shaking level is SONGS designed to withstand? How likely is an earthquake of that magnitude for the SONGS site?

**Public Response:** The design basis earthquake (DBE) is defined as that earthquake producing the maximum vibratory ground motion that the nuclear power generating station is designed to withstand without functional impairment of those features necessary to shut down the reactor, maintain the station in a safe condition, and prevent undue risk to the health and safety of the public. The DBE for SONGS was assessed during the construction permit phase of the project. The DBE is postulated to occur near the site (5 miles), and the ground accelerations are postulated to be quite high (0.67g), when compared to other nuclear plant sites in the U.S (0.25g or less is typical for plants in the eastern U.S.). Based on the unique seismic characteristics of the SONGS site, the site tends to amplify long-period motions, and to attenuate short-period motions. These site-specific characteristics were accounted for in the SONGS site-specific seismic analyses.

Additional, technical, non-public information: None

#### 80) Could SONGS withstand an earthquake of the magnitude of the Japanese earthquake?

**Public Response:** We do not have current information on the ground motion at the Japanese reactors. SONGS was designed for approximately a 7.0 magnitude earthquake 4 miles away. The Japanese earthquake was much larger (8.9), but was also almost 9 miles away. The local ground motion at a particular plant is significantly affected by the local soil and bedrock conditions. SONGS was designed (,67g) to withstand more than 2 times the design motion at average US plants.

Additional, technical, non-public information: None

#### 81) What about the evacuation routes at SONGS? How do we know they are reasonable?

**Public Response:** FEMA reviews off-site evacuation plans formally every 2 years during a biennial emergency preparedness exercise. NRC evaluates on-site evacuation plans during the same exercise. Population studies are formally done every 10 years, and evacuation time estimates are re-evaluated at that time. FEMA reviews these evacuation plans, and will conclude their acceptability through a finding of "reasonable assurance" that the off-site facilities and infrastructure is capable of protecting public health and safety in the event of an emergency at SONGS. The next such exercise is planned for April 12, 2011.

Additional, technical, non-public information: None

82) Regarding tsunami at Diablo and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami?

Public response: See below

#### 83) What is the design level flooding for DNCPP and SONGS? Can a tsunami be larger?

**Public response:** Both the Diablo Canyon (main plant) and SONGS are located above the flood level associated with tsunami. However, the intake structures and Auxiliary Sea Water System at Diablo canyon are designed for combination of tsunami-storm wave activity. SONGS has reinforced concrete cantilevered retaining seawall and screen well perimeter wall designed to withstand the design basis earthquake, followed by the maximum predicted tsunami with coincident storm wave action

Additional, technical, non-public information: None

#### Diablo Canyon Questions

84) Now after the Japan tragedy, will the NRC finally hear us (A4NR) and postpone DC license renewal until seismic studies are complete? How can you be sure that what happened there is not going to happen at Diablo with a worse cast quake and tsunami?

Public response: ADD

Additional, technical, non-public information: ADD

85) The evacuation routes at DCNPP see are not realistic. Highway 101 is small...and can you imagine what it will be like with 40K people on it? Has the evacuation plan been updated w/ all the population growth?

**Public Response:** FEMA reviews off-site evacuation plans formally every 2 years during a biennial emergency preparedness exercise. NRC evaluates on-site evacuation plans during the same exercise. Population studies are formally done every 10 years, and evacuation time estimates are re-evaluated at that time. FEMA reviews these evacuation plans, and will conclude their acceptability through a finding of "reasonable assurance" that the off-site facilities and infrastructure is capable of protecting public health and safety in the event of an emergency at DCNPP.

Additional, technical, non-public information: None

86) Are there local offshore fault sources capable of producing a tsunami with very short warning times?

Public Response: ADD- question forwarded to region
Additional, technical, non-public information: ADD

87) Are there other seismically induced failure modes (other than tsunami) that would yield LTSBO? Flooding due to dam failure or widespread liquefaction are examples.

Public Response: ADD question forwarded to region

Additional, technical, non-public information: ADD

88) Ramifications of beyond design basis events (seismic and tsunami) and potential LTSBO on spent fuel storage facilities?

Public Response: ADD question forwarded to region

Additional, technical, non-public information: ADD

89) Why did a Emergency Warning go out for a 'tsunami' that was only 6 ft high? Do these guys really know what they're doing? Would they know it if a big one was really coming? Crying wolf all the time doesn't instill a lot of confidence.

**Public Response:** The warning system performed well. The 6 foot wave was predicted many hours before and arrived at the time it was predicted. Federal officials to accurately predicted the tsunami arrival time and size; allowing local official to take appropriate measures as they saw necessary to warn and protect the public. It should be understood that even a 6 foot tsunami is very dangerous. Tsunami have far more energy and power than wind-driven waves.

Additional, technical, non-public information: ADD

90) How big did the Japanese think a quake/tsunami could be before 3/11? Why were they so wrong (assuming this quake/tsunami was bigger than what they had designed the plant for)?

Public Response: ADD can HQ answer?

Additional, technical, non-public information: ADD

The Japanese were supposed to have one of the best tsunami warning systems around. What went wrong last week (both with the reactors and getting the people out...see #1, evacuation plan above)?

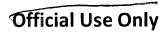
Public Response: ADD can HQ answer?

Additional, technical, non-public information: ADD

91) Regarding tsunami at Diablo and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami?

**Public Response:** Both the Diablo Canyon (main plant) and SONGS are located above the flood level associated with tsunami. However, the intake structures and Auxiliary Sea Water System at Diablo canyon are designed for combination of tsunami-storm wave activity. SONGS has reinforced concrete cantilevered retaining seawall and screen well perimeter wall designed to withstand the design basis earthquake, followed by the maximum predicted tsunami with coincident storm wave action

Additional, technical, non-public information: ADD



#### Indian Point Questions

#### 92) Why is Indian Point safe if there is a fault line underneath it?

Public Response: The Ramapo fault system, which passes through the Indian Point area, is a group of Mesozoic age faults, extending from southeastern New York to northern New Jersey, as well as further southwest. The fault system is composed of a series of southeast-dipping, northeast-striking faults. Various faults of the system contain evidence of repeated slip in various directions since Proterozoic time, including Mesozoic extensional reactivation. However, the USGS staff, who reviewed 31 geologic features in the Appalachian Mountains and Coastal Plain and compiled a National Database on Quaternary Faulting (Crone and Wheeler, 2000), listed the Ramapo fault system as low risk because the fault system lacks evidence for Quaternary slip. They further pointed out that the Ramapo fault system, and 17 other geologic features, "have little or no published geologic evidence of Quaternary tectonic faulting that could indicate the likely occurrence of earthquakes larger than those observed historically" (Wheeler and Crone, 2004). Among these faults, the Ramapo fault system is one of the three that underwent a paleoseismological study. In two trenches excavated across the Ramapo fault, no evidence of Quaternary tectonic faulting was found (Wheeler and Crone, 2000). Because the Ramapo fault system is relatively inactive, because the Indian Point plants are built on solid bedrock, and because the plants are designed to safely shutdown in the event of an earthquake of the highest intensity ever recorded in that area, the NRC has concluded that the risk of significant damage to the reactors due to a probable earthquake in the area is extremely small.

Additional, technical, non-public information: None.

#### Questions for the Japanese

NOTE: These were all collected from what we produced after the KKNPP earthquake: These need to be gone through and revised for this event. We should separate into high, medium and low priorities:

The below is pulled from an KKNPP summary...to be reviewed...

What seismic monitoring equipment exists at the plants? Can we get the recordings from the Are there recordings of the tsunami at the plant location?

What is the geology and soil profile at the plants?

NOAA has a prediction of very large tsunami waves at Onagawa. Are these accurate?

#### The below is pulled from an KKNPP summary...to be reviewed...

<u>DESIGN BASES</u>: Exactly what is the design basis ground motion for each of the plants? Did it change through time (i.e. from the first plant to the seventh)? Where was the design basis motion defined, at the top of rock, at the ground surface, at the floor level or somewhere else? Were the site-specific geotechnical properties used in the development of the design basis ground motions for each plant?

<u>SEISMIC HAZARDS</u>: What assumptions were used in the seismic hazard evaluation to arrive at the design basis ground motions? What faults were considered, what magnitudes and geometries were assumed? What activity rates were assumed for both fault sources and "background" earthquakes?

OBSERVATIONS-GROUND MOTIONS: What ground motions were recorded and where were they recorded? Specifically, what free-field, in-structure and down-hole recordings were obtained? What are the locations of the instruments that obtained records? Did all the instruments respond as planned, or are there lessons to be learned? Can the digital data be shared with the NRC? Is there any way of evaluating how well the existing analysis methods predicted the observed motions at different points within the plant?

<u>OBSERVATIONS-DAMAGE</u>: What damage was observed at the plants? How well did equipment such as cranes perform? Were there observations of displacements of equipment from anchorages, were cracks observed in any of the buildings? How well did non-nuclear safety type of buildings and equipment perform? What types of geotechnical phenomena were observed, was there ground deformation/slope failures, lateral spreading or liquefaction near the facility? Did the ABWRs perform better or similar to the older designs?

#### And another set from the KKNPP earthquake...to be reviewed...

Please provide the following information in the time frame indicated:

Highest Priority Questions – as soon as possible

- A timeline describing the order of events and the individual plant responses to the earthquake
- Confirmation that all operating and shut down units achieved or maintained safe-shutdown
  conditions without manual operator intervention or complications. Did all safety-related
  systems respond to the seismic scram as designed? Please note if there were any unexpected
  plant responses to the event, including any spurious signals.
- A more detailed description of the impacts of the earthquake on the plant (e.g., what systems were involved, which pipes were damaged, where did the leakage occur (pipe wall, joints, fittings,,etc).
- A description of seismic instrumentation at the site and at each of the 7 units, soil/rock shear wave properties through depth, instrument location and mounting condition, all the recorded



data on the basis of unified starting time, such that the coherency of motion through the surface or the foundations and at depth can be determined

- Full spectrum seismic design basis for the plant.
- What actually caused the Unit 3B house transformer fire?

#### Additional Questions - please provide answers as more information is developed

- Damage to buildings, slope failures, intake structure failure, if any
- Behavior of cranes, cables and conduits
- Failures of any large pumps and valves, pipe mounted control or valve failure
- Instances of any relay or vibration sensitive components malfunctioning
- Nature of damage to service water and fire-suppression piping their diameter, material they
  are made of including their elastic properties, design standards used for the piping design,
  nature of failure (at support, anchor motion, failure of anchors, subsidence differential
  movement etc)
- Were there any systems that changed state?
- · Impact on physical security, and any vulnerabilities identified
- Were there any impacts on the grid because of the event?
- Please describe the switchyard performance?
- What emergency preparedness concerns have been identified as a result of the event?

## <u>3B Transformer Specific Questions</u> – please respond when there is time and other issues have been addressed

- What are the primary and secondary voltages of the transformer?
- What type of transformer liquid or dry-type (air-cooled)?
- Who was the manufacturer of the transformer?
- What are the physical dimensions of the transformer?
- How are the transformer coils restrained within the cabinet?
- What is the clearance between transformer energized component and cabinet?
- What is the relative displacement for connection between the high voltage leads and the first anchor point (adequate slack?) in the transformer?
- What was the natural frequency of the burned transformer, if known?
- What was the acceleration level (or the response spectrum, if available) at the support location of the burned transformer?
- What seismic requirements exist for the burned transformer? Was the transformer tested or analyzed to a specific acceleration or response spectra, and if so, what are they?
- Are there any of the same type of transformer installed at other locations in the plant?

### **Additional Information**

Table of Design Basis Ground Motions for US Plants

Nuclear Plant By	Maximum	Relative	Design SSE	OBE Peak	Soil
State/Location	Observed Or Inferred Intensity (MMI Scale)	Distance Of Seismic Source	Peak Acceleration, g	Acceleration, g	Condition
New York					
Fitzpatrick	VI	Near	0.15	0.08	Soil
Ginna 1	VIII/IX	>60 miles	0.2	0.08	Rock
Indian Point 2, 3	VII	Near	0.15	0.1	Rock
Nine Mile Point 1	IX-X	>60 miles	0.11	0.06	Rock
Nine Mile Point 2	VI	Near	0.15	0.075	Rock
New Jersey					
Salem 1,2	VII-VIII	Near	0.2	0.1	Deep Soil
Connecticut					
Millstone 1, 2, 3	VII	Near	0.17	0.07	Rock
Vermont					
Vermont Yankee	VI	Near	0.14	0.07	Rock
Ohio					
Davis Besse 1	VII	Near	0.15	0.08	Rock
Perry 1	VII	Near	0.15	0.08	Rock
Georgia					
Hatch 1, 2	VII	Near	0.15	0.08	Deep Soil
Vogtle 1, 2	VII-VIII	Near	0.2	0.12	Deep Soil
Tennessee					
Seqouyah 1, 2	VIII	Near	0.18	0.09	Rock
Watts Bar 1	VIII	Near	0.18	0.09	Rock
California					
San Onofre 2, 3	IX-X	Near	0.67	0.34 <sup>-</sup>	Soil
Diablo Canyon 1, 2	X-XI	Near	0.75	0.20	Rock
Florida					

Crystal River 3	V	Near	0.10	0.05	Rock
St. Lucie 1, 2	VI	Near	0.10	0.05	Soil
Turkey Point 3, 4	VII	Near	0.15	0.05	Rock

#### NOTES:

MMI=Modified Mercalli Intensity, a measure of observed/reported damage and severity of shaking. Relative distance measure used in FSAR to develop SSE acceleration, "Near" indicates distance less than 10 miles.

SSE=Safe Shutdown Earthquake ground motion, for horizontal acceleration, in units of earth's gravity, *g*. OBE=Operating Basis Earthquake ground motion, level of horizontal acceleration, which if exceeded requires plant shutdown.

Table of SSE, OBE and Tsunami Water Levels

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Alabama			
Browns Ferry	0.200	0.100	N/A (Non-Coastal)
Farley	0.100	0.050	N/A (Non-Coastal)
Arkansas			
Arkansas Nuclear	0.200		N/A (Non-Coastal)
Arizona			
Palo Verde	0.200	0.100	N/A (Non-Coastal)
California			
Diablo Canyon	0.400	0.200	The design basis maximum combined wave runup is the greater of that determined for near-shore or distantly-generated tsunamis, and results from near-shore tsunamis.  For distantly-generated tsunamis, the combined runup is 30 feet  For near-shore tsunamis, the combined wave runup is 34.6 feet, as determined by hydraulic model testing.  The safety-related equipment is installed in watertight compartments to protect it from adverse sea wave events to elevation +48 feet above MLLW.
San Onofre	0.670	0.340	The controlling tsunami occurs during simultaneous high tide and storm surge produces a maximum runup to elevation +15.6 feet mean lower low water line (mllw) at the Unit 2 and 3 seawall. When storm waves are superimposed, the predicted maximum runup is to elevation +27 mllw. Tsunami protection for the SONGS site is provided by a reinforced concrete seawall constructed to elevation +30.0 mllw.
Connecticut	7.5		
Millstone	0.170	0.090	18 ft SWL
Florida			
Crystal River	0.050	0.025	N/A (Non-Coastal)

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water/Level
St. Lucie	0.100	0.050	No maximum tsunami level, bounded by PMH surge of +18 MLW wave runup, with plant openings at +19.5 MLW
Turkey Point	0.150	0.050	No maximum tsunami level, bounded by PMH surge of +18.3 MLW water level, site protected to +20 MLW with vital equipment protected to +22 MLW
Georgia			
Hatch	0.150	0.080	N/A (Non-Coastal)
Vogtle	0.200	0.120	N/A (Non-Coastal)
Illinois			
Braidwood	0.200	0.090	N/A (Non-Coastal)
Byron	0.200	0.090	N/A (Non-Coastal)
Clinton	0.250	0.100	N/A (Non-Coastal)
Dresden	0.200	0.100	N/A (Non-Coastal)
LaSalle	0.200	0.100	N/A (Non-Coastal)
Quad Cities	0.240	0.120	N/A (Non-Coastal)
lowa			
Duane Arnold	0.120	0.060	N/A (Non-Coastal)
Kansas			
Wolf Creek	0.120	0.060	N/A (Non-Coastal)
Louisiana			
River Bend	0.100	0.050	
Waterford	0.100		Floods – 30 feet MSL
Maryland			
Calvert Cliffs	0.150	0.080	14 ft design wave
Massachusetts			
Pilgrim	0.150	0.080	*Storm flooding design basis - 18.3ft
Michigan			
D.C. Cook	0.200	0.100	N/A
Fermi	0.150	0.080	N/A
Palisades	0.200	0.100	N/A

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration; (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Missouri	7. 47. 54. 34. 34. 34. 34. 34. 34. 34. 34. 34. 3		
Callaway	0.200		N/A (Non-Coastal)
Mississippi			
Grand Gulf	0.150	0.075	N/A
Minnesota			· ·
Monticello	0.120	0.060	N/A (Non-Coastal)
Prarie Island	0.120	0.060	N/A (Non-Coastal)
Nebraska			
Cooper	0.200	0.100	N/A (Non-Coastal)
Fort Calhoun	0.170	0.080	N/A (Non-Coastal)
New York			
Fitzpatrick	0.150	0.080	N/A (Non-Coastal)
Ginna	0.200	0.080	N/A
Indian Point	0.150	0.100	15 ft msl
Nine Mile Point, Unit 1	0.110	0.060	N/A
Nine Mile Point, Unit 2	0.150	0.075	N/A
New Hampshire			
Seabrook	0.250	0.125	(+) 15.6' MSL Still Water Level (Tsunami Flooding -Such activity is extremely rare on the U.S. Atlantic coast and would result in only minor wave action inside the harbor.)
New Jersey			
Hope Creek	0.200	0.100	35.4 MSL The maximum probable tsunami produces relatively minor water level changes at the site. The maximum runup height reaches an elevation of 18.1 feet MSL with coincident 10 percent exceedance high tide)
Oyster Creek	0.184	0.092	(+) 23.5' MSL Still Water Level (Probable Maximum Tsunami - Tsunami events are not typical of the eastern coast of the United States and have not, therefore, been addressed.)

Nuclear Plant Name By State/	Safe Shutdown Earthquake (SSE) Peak Acceleration	Operating Basis Earthquake (OBE) Peak Acceleration,	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Location	(g)	(g)	
Salem	0.200	0.100	21.9 MSL (There is no evidence of surface rupture in East Coast earthquakes and no history of significant tsunami activity in the region)
North Carolina			
Brunswick	0.160	0.030	N/A
McGuire	0.150	0.080	N/A (Non-Coastal)
Shearon Harris	0.150		N/A (Non-Coastal)
Ohio			
Davis-Besse	0.150	0.080	N/A
Perry	0.150	0.080	N/A
Pennsylvania			
Beaver Valley	0.130	0.060	N/A (Non-Coastal)
Limerick	0.150	0.075	N/A (Non-Coastal)
Peach Bottom	0.120	0.050	N/A (Non-Coastal)
Three Mile Island	0.120	0.060	N/A (Non-Coastal)
Susquehanna	0.150	0.080	N/A (Non-Coastal)
South Carolina			
Catawba	0.150	0.080	N/A (Non-Coastal)
Oconee	0.150	0.050	N/A (Non-Coastal)
Robinson	0.200	0.100	N/A (Non-Coastal)
V.C. Summer	0.250	0.150	N/A (Non-Coastal)
Tennessee			
Sequoyah	0.180	0.090	N/A (Non-Coastal)
Watts Bar, Unit 1	0.180	0.090	N/A (Non-Coastal)
Texas			
Comanche Peak	0.120	0.060	N/A
South Texas Project	0.100	0.050	N/A
Vermont			·

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level				
Vermont Yankee	0.140	0.070	N/A				
Virginia							
North Anna	0.180		N/A				
Surry	0.150	0.080	N/A				
Washington							
Columbia	0.250		N/A (Non-Coastal)				
Wisconsin	·						
Kawaunee	0.120	0.060	N/A				
Point Beach	0.120		N/A				
Definition of Safe Shutdown Earthquake	(GMRS), which also s "Earthquake Enginee	atisfies the minimum re ering Criteria for Nuclear	site is the ground motion response spectra quirement of paragraph IV(a)(1)(i) of Appendix S, Power Plants," to Title 10, Part 50, "Domestic ties," of the Code of Federal Regulations (10 CFR				
	To satisfy the requirements of paragraph IV(a)(2)(A) of Appendix S to 10 CFR Part 50, the operating-basis earthquake (OBE) ground motion is defined as follows:  (iv) For the certified design portion of the plant, the OBE ground motion is one-third of the CSDRS.  (v) For the safety-related noncertified design portion of the plant, the OBE ground motion is one-third of the design motion response spectra, as stipulated in the design certification conditions specified in design control document (DCD).						
Definition of Operating Basis Earthquake:	(vi) The spe 1.166,	ectrum ordinate criterio "Pre-Earthquake Plannir	n to be used in conjunction with Regulatory Guide ag and Immediate Nuclear Power Plant Operator and March 1997, is the lowest of (i) and (ii).				

# Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level Earthquakes, and Seismic Core Damage Frequencies

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Arkansas 1	05000313	0.2	2.8E-04	0.3	4.1E-06	0.3g full-scope EPRI SMA	GI-199
Arkansas 2	05000368	0.2	9.7E-05	0.3	4.1E-06	0.3g focused- scope EPRI SMA	GI-199
Beaver Valley 1	05000334	0.12	3.3E-04	n/a	4.8E-05	seismic PRA	GI-199
Beaver Valley 2	05000412	0.12	2.7E-04	n/a	2.2E-05	seismic PRA	GI-199
Braidwood 1	05000456	·0.2	6.7E-05	0.3	7.3E-06	0.3g focused- scope EPRI SMA	GI-199
Braidwood 2	05000457	0.2	6.7E-05	0.3	7.3E-06	0.3g focused- scope EPRI SMA	GI-199
Browns Ferry 1	05000259	0.2	2.5E-04	0.3	3.7E-06	0.3g focused- scope EPRI SMA	GI-199
Browns Ferry 2	05000260	0.2	2.5E-04	0.26	5.4E-06	0.3g focused- scope EPRI SMA	GI-199
Browns Ferry 3	05000296	0.2	2.5E-04	0.26	5.4E-06	0.3g focused- scope EPRI SMA	GI-199
Brunswick 1	05000325	0.16	7.3E-04	0.3	1.5E-05	0.3g focused- scope EPRI SMA	GI-199
Brunswick 2	05000324	0.16	7.3E-04	0.3	1.5E-05	0.3g focused- scope EPRI SMA	GI-199
Byron 1	05000454	0.2	5.2E-05	0.3	5.8E-06	0.3g focused- scope EPRI SMA	GI-199
Byron 2	05000455	0.2	5.2E-05	0.3	5.8E-06	0.3g focused- scope EPRI SMA	GI-199
Callaway	05000483	0.2	3.8E-05	0.3	2.0E-06	0.3g focused- scope EPRI SMA	GI-199
Calvert Cliffs 1	05000317	0.15	1.9E-04	n/a	1.0E-05	seismic PRA	GI-199
Calvert Cliffs 2	05000318	0.15	1.9E-04	n/a	1.2E-05	seismic PRA	GI-199
Catawba 1	05000413	0.15	1.4E-04	n/a	3.7E-05	seismic PRA	GI-199
Catawba 2	05000414	0.15	1.4E-04	n/a	3.7E-05	seismic PRA	GI-199
Clinton	05000461	0.25	5.8E-05	0.3	, 2.5E-06	0.3g focused- scope EPRI SMA	GI-199
Columbia	05000397	0.25	1.7E-04	n/a	2.1E-05	seismic PRA	IPEEE
Comanche Peak 1	05000445	0.12	1.6E-05	0.12	4.0E-06	reduced-scope EPRI SMA; SSE = 0.12g	GI-199
Comanche	05000446	0.12	1.6E-05	0.12	4.0E-06	reduced-scope EPRI SMA; SSE =	GI-199

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Peak 2						0.12g	2222202
Cooper	05000298	0.2	1.5E-04	0.3	7.0E-06	0.3g focused- scope EPRI SMA	GI-199
Crystal River 3	05000302	0.1	8.9E-05	0.1	2.2E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
D.C. Cook 1	05000315	0.2	2.1E-04	n/a	2.2E-05	seismic PRA	GI-199
D.C. Cook 2	05000316	0.2	2.1E-04	n/a	2.2E-05	seismic PRA	GI-199
Davis Besse	05000346	0.15	6.3E-05	0.26	6.7E-06	reduced-scope EPRI SMA	GI-199
Diablo Canyon 1	05000275	0.75	3.9E-03	n/a	4.2E-05	seismic PRA	IPEEE
Diablo Canyon 2	05000323	0.75	3.9E-03	n/a	4.2E-05	seismic PRA	IPEEE
Dresden 2	05000237	0.2	9.7E-05	0.26	1.9E-05	0.3g focused- scope EPRI SMA	GI-199
Dresden 3	05000249	0.2 .	9.7E-05	0.26	1.9E-05	0.3g focused- scope EPRI SMA	GI-199
Duane Arnold	05000331	0.12	2.3E-04	0.12	3.2E-05	reduced-scope EPRI SMA; SSE = 0.12g	GI-199
Farley 1	05000348	0.1	1.0E-04	0.1	2.8E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Farley 2	05000364	0.1	1.0E-04	0.1	2.8E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Fermi 2	05000341	0.15	1.0E-04	0.3	4.2E-06	0.3g focused- scope EPRI SMA	GI-199
Fitzpatrick	05000333	0.15	3.2E-04	0.22	6.1E-06	0.3g focused- scope NRC SMA	GI-199
Fort Calhoun 1	05000285	0.17	3.7E-04	0.25	5.4E-06	0.3g focused- scope NRC SMA	GI-199
Ginna	05000244	0.2	1.0E-04	0.2	1.3E-05	0.3g focused- scope EPRI SMA	GI-199
Grand Gulf	05000416	0.15	1.0E-04	0.15	1.2E-05	reduced-scope EPRI SMA; SSE = 0.15g	GI-199
Hatch 1	05000400	0.148	3.9E-04	0.29	2.3E-06	0.3g focused- scope EPRI SMA	GI-199
Hatch 2	05000321	0.15	2.7E-04	0.3	2.5E-06	0.3g focused- scope EPRI SMA	GI-199

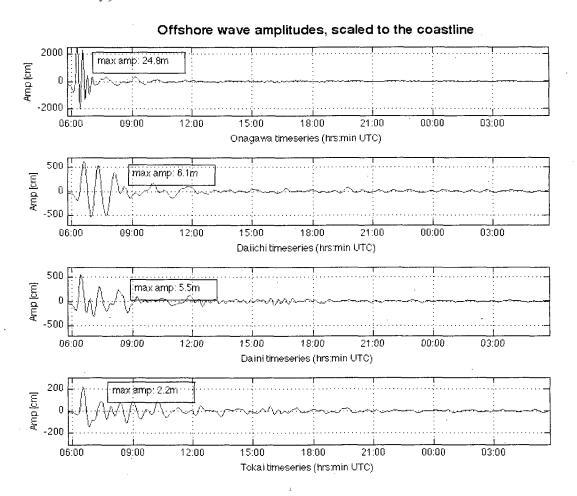
Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency	IPEEE Method	Source
			SSE (per year)	(6.3)	(per year)		
Hope Creek	05000366	0.2	9.7E-05	0.3	2.5E-06	0.3g focused- scope EPRI SMA	GI-199
Indian Point 2	05000354	0.15	4.9E-04	n/a	2.8E-06	seismic PRA	GI-199
Indian Point 3	05000247	0.15	4.9E-04	n/a	3.3E-05	seismic PRA	GI-199
Kewaunee	05000286	0.12	2.8E-04	n/a	1.0E-04	seismic PRA	GI-199
LaSalle 1	05000305	0.2	1.7E-04	n/a	5.1E-06	seismic PRA	GI-199
LaSalle 2	05000373	0.2	1.7E-04	n/a	2.8E-06	seismic PRA	GI-199
Limerick 1	05000374	0.15	1.8E-04	n/a	2.8E-06	seismic PRA	GI-199
Limerick 2	05000352	0.15	1.8E-04	0.15	5.3E-05	reduced-scope EPRI SMA	GI-199
McGuire 1	05000353	0.15	9.5E-05	0.15	5.3E-05	reduced-scope EPRI SMA	GI-199
McGuire 2	05000369	0.15	9.5E-05	n/a	3.1E-05	seismic PRA	GI-199
Millstone 1	05000370	0.254	9.3E-05	n/a	3.1E-05	seismic PRA	GI-199
Millstone 2	05000336	0.17	8.3E-05	0.25	1.1E-05	0.3g focused- scope EPRI SMA	GI-199
Millstone 3	05000423	0.17	8.3E-05	n/a	1.5E-05	seismic PRA	GI-199
Monticello	05000263	0.12	9.3E-05	0.12	1.9E-05	modified focused/expended reduced-scope EPRI SMA	GI-199
Nine Mile Point	05000220	0.11	1.5E-04	0.27	4.2E-06	0.3g focused- scope EPRI SMA	GI-199
Nine Mile Point	05000410	0.15	4.8E-05	0.23	5.6E-06	SPRA and focused- scope EPRI SMA	GI-199
North Anna 1	05000338	0.12	2.1E-04	0.16	4.4E-05	0.3g focused- scope EPRI SMA	GI-199
North Anna 2	05000339	0.12	2.1E-04	0.16	4.4E-05	0.3g focused- scope EPRI SMA	GI-199
Oconee 1	05000269	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oconee 2	05000270	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oconee 3	05000287	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oyster Creek	05000219	0.17	1.5E-04	n/a	1.4E-05	seismic PRA	GI-199
Palisades	05000255	0.2	1.4E-04	n/a	6.4E-06	seismic PRA	GI-199
Palo Verde 1	05000528	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE
Palo Verde 2	05000529	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HGLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Palo Verde 3	05000530	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE
Peach Bottom 2	05000277	0.12	2.0E-04	0.2	2.4E-05	modified focused- scope EPRI SMA	GI-199
Peach Bottom	05000278	0.12	2.0E-04	0.2	2.4E-05	modified focused- scope EPRI SMA	GI-199
Perry	05000440	0.15	2.2E-04	0.3	2.1E-05	0.3g focused- scope EPRI SMA	GI-199
Pilgrim 1	05000293	0.15	8.1E-04	n/a	6.9E-05	seismic PRA	GI-199
Point Beach 1	05000266	0.12	2.0E-04	n/a	1.1E-05	seismic PRA	GI-199
Point Beach 2	05000301	0.12	2.0E-04	n/a	1.1E-05	seismic PRA	GI-199
Prairie Island 1	05000282	0.12	2.0E-04	0.28	3.0E-06	0.3g focused- scope EPRI SMA	GI-199
Prairie Island 2	05000306	0.12	2.0E-04	0.28	3.0E-06	0.3g focused- scope EPRI SMA	GI-199
Quad Cities 1	05000254	0.24	8.2E-04	0.09	2.7E-05	0.3g focused- scope EPRI SMA	GI-199
Quad Cities 2	05000265	0.24	8.2E-04	0.09	2.7E-05	0.3g focused- scope EPRI SMA	GI-199
River Bend	05000458	0.1	2.4E-04	0.1	2.5E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Robinson (HR)	05000261	0.2	1.1E-03	0.28	1.5E-05	0.3g full-scope EPRI SMA	GI-199
Saint Lucie	05000335	0.1	1.4E-04	0.1	4.6E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Salem 1	05000389	0.2	2.6E-04	0.1	4.6E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Salem 2	05000272	0.2	2.6E-04	n/a	9.3E-06	seismic PRA	GI-199
San Onofre 2	05000361	0.67	1.2E-04	n/a	1.7E-05	seismic PRA	IPEEE
San Onofre 3	05000362	0.67	1.2E-04	n/a	1.7E-05	seismic PRA	IPEEE
Seabrook	05000311	0.25	1.3E-04	n/a	9.3E-06 '	seismic PRA	GI-199
Sequoyah 1	05000443	0.18	7.1E-04	n/a	2.2E-05	seismic PRA	GI-199
Sequoyah 2	05000327	0.18	7.1E-04	0.27	5.1E-05	0.3g full-scope EPRI SMA	GI-199
Shearon Harris	05000328	0.15	4.6E-05	0.27	5.1E-05	0.3g full-scope EPRI SMA	GI-199
South Texas 1	05000498	0.1	3.0E-05	n/a	6.2E-06	seismic PRA	GI-199

(Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
South Texas 2	05000499	0.1	3.0E-05	n/a	6.2E-06	seismic PRA	GI-199
Summer	05000395	0.15	3.9E-04	0.22	3.8E-05	0.3g focused- scope EPRI SMA	GI-199
Surry 1	05000280	0.15	2.2E-04	n/a	5.7E-06	seismic PRA	GI-199
Surry 2	05000281	0.15	2.2E-04	n/a	5.7E-06	seismic PRA	GI-199
Susquehanna 1	05000387	0.1	1.9E-04	0.21	1.3E-05	0.3g focused- scope EPRI SMA	GI-199
Susquehanna 2	05000388	0.1	1.9E-04	0.21	1.3E-05	0.3g focused- scope EPRI SMA	GI-199
Three Mile Island 1	05000289	0.12	1.0E-04	n/a	4.0E-05	seismic PRA	GI-199
Turkey Point 3	05000250	0.15	3.8E-05	0.15	1.0E-05	site-specific approach; SSE=0.15g	GI-199
Turkey Point 4	05000251	0.15	3.8E-05	0.15	1.0E-05	site-specific approach; SSE=0.15g	GI-199
Vermont Yankee	05000271	0.14	1.2E-04	0.25	8.1E-06	0.3g focused- scope EPRI SMA	GI-199
Vogtle 1	05000424	0.2	1.5E-04	0.3	1.8E-05	0.3g focused- scope EPRI SMA	GI-199
Vogtle 2	05000425	0.2	1.5E-04	0.3	1.8E-05	0.3g focused- scope EPRI SMA	GI-199
Waterford 3	05000382	0.1	1.1E-04	0.1	2.0E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Watts Bar	05000390	0.18	2.9E-04	0.3	3.6E-05	0.3g focused- scope EPRI SMA	GI-199
Wolf Creek	05000482	0.12	3.7E-05	0.2	1.8E-05	reduced-scope EPRI SMA	GI-199
25th percentile min median mean max			9.6E-05	1	6.0E-06		
			1.6E-05		2.0E-06		
			1.7E-04		1.5E-05		· · ·
			3.1E-04		2.1E-05		
			3.9E-03		1.0E-04		***
	75th p	ercentile	2.6E-04		3.2E-05		

Summary of seismological information from regional instrumentation					
Placeholder: Jon Ake is developing.					
			·		
	, ·				
					·
			·		

Tsunami wave heights from NOAA (very preliminary. For basic situational awareness only)



Tsunami Fact Shee	T	'ciin	an	ni	Fa	ct	Sh	aa	÷
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Placeholder: Goutam Bagchi, Henry Jones and Rich Raone are developing.

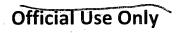
Seismicity of the Central and Eastern US Fact Sheet

Placeholder: Jon Ake is developing.



# Design Basis Ground Motions and New Review Level Ground Motions Used for Review of Japanese Plants

Plant sites	Contributing earthquakes	New DBGM.S.	Original DBGM S <sub>2</sub>
Tomari	Earthquakes undefined specifically	550 Gal	370 Gal
Onagawa	Soutei Miyagiken-oki (M8.2)	580	375
Higashidoori	Earthquakes undefined specifically	450	375
Fukushima	Earthquake near the site (M7.1)	600	370
Tokai	Earthquakes undefined specifically	600	380
Hamaoka	Assumed Tokai (M8.0), etc.	800	600
Shika	Sasanami-oki Fault (M7.6)	600	490
Tsuruga	Urazoko-Uchiikemi Fault (M6.9), etc. →Mera-Kareizaki - Kaburagi(M7.8), Shelf edge+B+Nosaka (M7.7)	800	532
Mihama	C, Fo-A Fault (M6.9) $\rightarrow$ Shelf edge+B+Nosaka(M7.7)	750	405
Ohi	C, Fo-A Fault (M6.9)→Fo-A+Fo-B(M7.4)	700	405
Takahama	Fo-A Fault (M6.9) →Fo-A+Fo-B(M7.4)	550	370
Shimane	Shinji Fault (M7.1)	600	456
lkata	Central Tectonic Structure (M7.6)	570	473
Genkai	Takekoba F. (M6.9) → Enhanced uncertainty consideration	540	370
Sendai	Gotandagawa F.(M6.9), F-A(M6.9)	540	372
Kashiwazaki- Kariwa	F-B Fault (M7.0), Nagaoka-plain-west Fault (M8.1)	2300 (R1 side) 1209 (R5 side)	450
Monjyu (Proto Type FBR)	Shiraki-Niu F.(M6.9) , C F.(M6.9)→Shelf edge+B+Nosaka(M7.7), Small Damping	760	408
Shimokita Reprocessing F.	Deto-Seiho F.(M6.8), Yokohama F.(M6.8)	450	320



Status of Review of Japanese NPPs to New Earthquake Levels Based on 2006 Guidance

Utility	Site (Unit)	Туре	Dec.2010
Hokkaido	Tomari	PWR	Δ .
Tóhoku	Onagawa (Unit1)	BWR	<b></b>
	Higashi-dori	BWR	Δ
	Kashiwazaki-Kariwa	BWR	Unit 1,5,6,7 ©
Tokyo	Fukushima-No1	BWR	Unit 3 ◇, 5 ◎
	Fukushima-No2	BWR	Unit 4,5 ©
Chubu	Hamaoka	BWR	Δ .
Hokuriku	Shika (Unit 2)	BWR	0
	Mihama(Unit 1)	PWR 	0
Kansai	Ohi(Unit 3,4)	PWR	0
	Takahama(Unit 3,4)	PWR	0
Chugoku	Shimane (Unit 1, 2)	BWR	© .
Shikoku	Ikata (Unit 3)	PWR	0
Kyushu	Genkai (Unit 3 )	PWR	© .
	Sendai (Unit 1)	PWR	©
Japan Atomic Power	Tokai-Daini	BWR	0
	Tsuruga	BWR/PWR	Δ
JAEA	Monjyu	Proto Type FBR	0
Japan Nuc. Fuel	Rokkasyo	Reprocessing	<u></u>
©: NSC review finished, ○	: NISA review finished and in NSC re	view Δ: Under review by	NISA

### US Portable Array briefing sheet for brief congressional staffers

NOTE: This is provided because IRIS participants let us know that here was a discussion about the NRC's involvement in this program. We have been involved in this for the last couple years.



The Incorporated Research Institutions for Seismology is the Consortium of Unites States Universities with Major Research Programs in Seismology and Related Fields.

#### The Transportable Array: A Science Investment that Can Be Leveraged

IRIS is installing the Transportable Array – a set of 400 broadband seismic instruments – in each of more than 1600 sites across the contiguous United States. The instruments operate at each site for two years and then are removed and redeployed further east. Roughly 1100 stations have been installed since 2003, and instruments have been removed from more than 600 of those sites in the western United States.

The National Science Foundation is funding the full cost to "roll" the Transportable Array across the US, more than \$90,000,000 over ten years. Comparatively small incremental investments could add significant data that are relevant to the safety of nuclear power plants. These efforts would be uniquely cost effective, since NSF is already funding installation, and they would feed data into an existing, standardized and widely used data management system that already incorporates the vast majority of seismic data from US networks. But these opportunities are time constrained: the array will be fully installed in the contiguous 48 states by late 2013.

#### More Value from Longer Term Regional Observations

A dense, uniform seismic network is necessary for long-term, broad-area seismic monitoring of the central and eastern United States due to low event recurrence rates and the risk of significant earthquakes (M>5) anywhere in the region. Monitoring seismicity in the central and eastern US can be improved by turning selected sites into permanent seismic stations. A total of more than 35 Transportable Array stations have already been "adopted" by several organizations, creating a permanent legacy, but only in the western United States.

A strategic "1-in-4" plan would involve "adoption" of systematically selected stations in the central and eastern United States — every other station in both the east-west and north-south directions, creating a uniform grid of some 250 stations. Long-term regional operation could be combined with two optional enhancements to create a unique observatory for the study of seismicity, source characteristics, attenuation, and local ground acceleration.

#### Enhancement 1: Acquire Higher Frequency Data

Crustal rigidity in the central and eastern US makes it desirable to record high frequency characteristics of local and regional earthquakes. The existing instruments could be reconfigured to record high frequencies but doing so would nearly triple the data flow, necessitating improvements to the communications infrastructure.

#### Enhancement 2: Add Strong Motion Sensors

Acquiring strong motion sensors and reconfiguring field computers that record and telemeter the data would help to measure unique effects of severe shaking. The design anticipated this augmentation, and several stations in California and Washington were operated that way. Upgrade would be more efficient at sites that have not yet been installed.

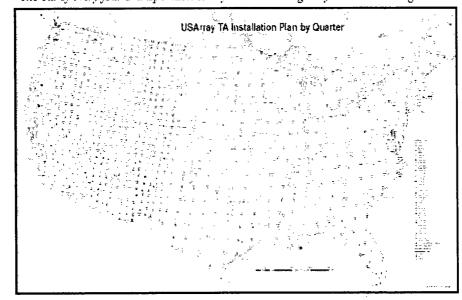
Estimate of annual acquisition and O&M costs for the 1-in-4, 250-station network in central and eastern US.

Year	Stations	Acquisition <sup>1</sup>	O&M <sup>2</sup>	Total
2011	50	\$1,800,000	\$ 400,000	\$2,200,000
2012	50	\$1,800,000	\$ 800,000	\$2,600,000
2013	50	\$1,800,000	\$1,200,000	\$3,000,000
2014	50	\$1,800,000	\$1,600,000	\$3,400,000
2015	50	\$1,800,000	\$2,000,000	\$3,800,000
2016	_	_	\$2,000,000	\$2,000,000

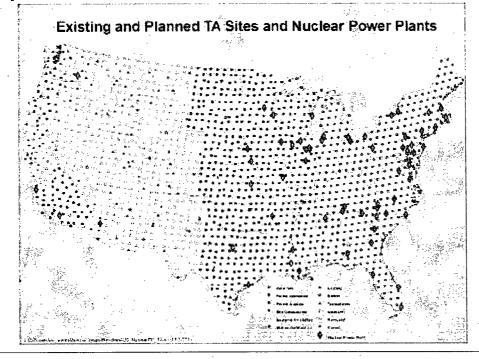
Assumes upgrades to six channel data loggers with strong motion sensors.

Assumes a conservative estimate of \$8,000/station/year.

The 1-in-4, 250-station network that could be created in the central and eastern US by "leaving behind" one out of every four Transportable Array stations during the years 2011 through 2015.



A large majority of nuclear power plants are located in the central and eastern parts of the US, where it is still possible to "leave behind" 1-in-4 Transportable Array stations for long-term regional observations



# **List of Questions**

Nat	ural	Hazards and Ground Shaking Design Levels1	
	1) affe	Did the Japanese underestimate the size of the maximum credible earthquake that could at the plants?1	
	2)	Can a very large earthquake and tsunami happen here?1	-
	3)	Has this changed our perception of Earthquake risk?1	
	4)	What magnitude earthquake are US plants designed to?	
	-5)	How many US reactors are located in active earthquake zones (and which reactors)?	!
	6) ones	How many reactors are along coastal areas that could be affected by a tsunami (and which s)?	<u>,</u>
	7) the :	If the earthquake in Japan was a larger magnitude than considered by plant design, why can't same thing happen in the US?	<u>.</u>
	8) the	If the earthquake in Japan was a larger magnitude than considered by plant design, why can't same thing happen in the US?	;
	9)	What if an earthquake like the Sendai earthquake occurred near a US plant?	}
	10) we d	What would be the results of a tsunami generated off the coast of a US plant? (Or why are confident that large tsunamis will not occur relatively close to US shores?)	;
	11) Are	Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? the Japanese plants similar to U.S. plants?	}
	12)	What level of earthquake hazard are the US reactors designed for?	3
	13)	Does the NRC consider earthquakes of magnitude 8.9?	ļ
	14)	What are the definitions of the SSE and OBE?	ļ
	15)	What is the likelihood of the ground motions occurring over the life of the plant?	;
	16)	What is magnitude anyway? What is the Richter Scale? What is intensity?	5
	17).		5
Des	ign A	Against Natural Hazards & Plant Safety in the US 6	;
	18)	Are power plants designed for Tsunami's?	õ
	19)	What level of Tsunami are we designed for?	5
	20)	How was the seismic design basis for an existing nuclear power plant established?	5
	21)	Is there margin above the design basis?	ŝ
	22)	Are US plants safe?	7
,	23)	Was the Japanese plant designed for this type of accident? Are US plants?	7

earthquakes and tsunamis?
25) Can this happen here i.e. an earthquake that significantly damages a nuclear power plant?  Are the Japanese plants similar to U.S. plants?
26) Are US plants susceptible to the same sort of loss of all power?
27) Could an accident like the one at Japan's Fukushima Daiichi nuclear plant happen in the United States?
28) Should U.S. nuclear facilities be required to withstand earthquakes and tsunamis of the kind just experienced in Japan? If not, why not?
29) Can you summarize the plant seismic design basis for the US plants? Are there any special issues associated with seismic design?
30) , How do we know that the equipment in plants is safe in earthquakes?9
31) How do we know equipment will work if the magnitude is bigger than expected, like in Japan? 9
32) Are US plants susceptible to the same kind of loss of power as happened in Japan?9
33) How do we know that the EDGs in Diablo Canyon and SONGS will not fail to operate like in Japan? 9
34) Is all equipment at the plant vulnerable to tsunami?
35) What protection measures do plants have against tsunami?
36) Is there a risk of loss of water during tsunami drawdown? Is it considered in design? 10
37) Are nuclear buildings built to withstand earthquakes? What about tsunami?10
38) Are aftershocks considered in the design of equipment at the plants? Are aftershocks considered in design of the structure?
39) Are there any special issues associated with seismic design at the plants? For example, Diablo Canyon has special requirements. Are there any others?
40) Is the NRC planning to require seismic isolators for the next generation of nuclear power plants? How does that differ from current requirements and/or precautions at existing U.S. nuclear power plants?
41) Are there any U.S. nuclear power plants that incorporate seismic isolators? What precautions are taken in earthquake-prone areas?
Do you think that the recent Japan disaster will cause any rethinking of the planned seismic isolation guidelines, particularly as it regards earthquakes and secondary effects such as tsunamis?  11
out Japanese Hazard, Design and Earthquake Impact12
43) Was the damage done to the plants from the Earthquake or the Tsunami?12

	44)	What is the design level of the Japanese plants? Was it exceeded?12
	45)	What are the Japanese $S_1$ and $S_s$ ground motions and how are they determined?12
	46)	Did this earthquake affect Kashiwazaki-Kariwa NPP?
	47)	How high were the tsunami at the plants?
Wh	at happ	pened in US Plants during the earthquake?14
	. 48) tsunan	Was there any damage to U.S. reactors from either the earthquake or the resulting ni?14
	49)	Have any lessons for US plants been identified?
Fut	ure Act	ions, Reassessment of US Plants and GI-19915
	50) sendin	What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you g staff over there?15
	_	With NRC moving to design certification, at what point is seismic capability tested – during or modified to be site-specific? If in design, what strength seismic event must these be built astand?
	52)	Is the earthquake safety of US plants reviewed once the plants are constructed?16
	53)	Does the NRC ever review tsunami risk for existing plants?
	54)	Does GI-199 consider tsunami?
	55)	What is Generic Issue 199 about?16
	56)	Where can I get current information about Generic Issue 199?
	57)	How was the seismic design basis for an existing nuclear power plant established?16
	58)	Is there margin above the design basis?17
	59)	Are all U.S. plants being evaluated as a part of Generic Issue 199?17
	60) you ar	Are the plants safe? If you are not sure they are safe, why are they not being shut down? If e sure they are safe, why are you continuing evaluations related to this generic issue?17
	61) sites?	What do you mean by "increased estimates of seismic hazards" at nuclear power plant 18
	62)	What do the following terms mean?
	06, or average be 2.5	Let's say there's an estimate expressed as "2.5E-06." (I'm looking at Table D-2 of the /risk assessment of August 2010.) I believe that this expression means the same as 2.5 x 10^-0.0000025, or 2.5 divided by one million. In layman's terms, that means an expectation, on ge, of 2.5 events every million years, or once every 400,000 years. Similarly, "2.5E-05" would divided by 100,000, or 2.5 events every 100,000 years, on average, or once every 40,000 Is this correct?
	years.	13 till3 correct:

		The GI-199 documents give updated probabilistic seismic hazard estimates for existing ar power plants in the Central and Eastern U.S. What document has the latest seismic hazard ates (probabilistic or not) for existing nuclear power plants in the Western U.S.?20
•	2010 d Survey hazard	The GI-199 documents refer to newer data on the way. Have NRC, USGS et al. released? I'm referring to this: "New consensus seismic-hazard estimates will become available in late or early 2011 (these are a product of a joint NRC, U.S. Department of Energy, U.S. Geological y (USGS) and Electric Power Research Institute (EPRI) project). These consensus seismic d estimates will supersede the existing EPRI, Lawrence Livermore National Laboratory, and hazard estimates used in the GI-199 Safety/Risk Assessment."
	66) resear	What is the timetable now for consideration of any regulatory changes from the GI-199 ch?21
Sei	smic Pr	robabilistic Risk Assessment (SPRA)22
	67) useful	The NRC increasingly uses risk-information in regulatory decisions. Are risk-informed PRAs in assessing an event such as this?
Pla	nt-Spe	cific Questions23
9	SONGS o	questions
	may n plants	SONGS received a white finding in 2008 for 125VDC battery issue related to the EDGs that undetected for 4 years. NRC issued the white finding as there was increased risk that one EDG of have started due to a low voltage condition on the battery on one Unit (Unit 2). Aren't all susceptible to the unknown? Is there any assurance the emergency cooling systems will on as desired in a Japan-like emergency?
	69) on do	Has the earthquake hazard at SONGS been reviewed like DCNPP is doing? Are they planning ing an update before relicensing?
•	70)	Is possible to have a tsunami at songs that is capable of damaging the plant?23
	71)	Does SONGS have an emergency plan for tsunami?
	72)	Has evacuation planning at SONGS considered tsunami?24
	73)	Is SONGS designed against tsunami and earthquake?
	74)	What is the height of water that SONGS is designed to withstand?
	75)	What about drawdown and debris?
	76)	Will this be reviewed in light of the Japan quake24
	77) that h	Could all onsite and offsite power be disrupted from SONGS in the event of a tsunami, and if appened, could the plant be safely cooled down if power wasn't restored for days after?24
	78)	Are there any faults nearby SONGS that could generate a significant tsunami?25
	79) earth	What magnitude or shaking level is SONGS designed to withstand? How likely is an quake of that magnitude for the SONGS site?25
	80)	Could SONGS withstand an earthquake of the magnitude of the Japanese earthquake?25

	81)	What about the evacuation routes at SONGS? How do we know they are reasonable?25
		Regarding tsunami at Diablo and SONGS, is the tsunami considered separately from flooding sing? And from the design perspective, is the flood still the controlling event for those plants than the tsunami?25
	83)	What is the design level flooding for DNCPP and SONGS? Can a tsunami be larger?26
Di	ablo Ca	nyon Questions27
		Now after the Japan tragedy, will the NRC finally hear us (A4NR) and postpone DC license al until seismic studies are complete? How can you be sure that what happened there is not to happen at Diablo with a worse cast quake and tsunami?27
٠	_	The evacuation routes at DCNPP see are not realistic. Highway 101 is smalland can you e what it will be like with 40K people on it? Has the evacuation plan been updated w/ all the tion growth?
	86) warnin	Are there local offshore fault sources capable of producing a tsunami with very short g times?27
	87) LTSBO	Are there other seismically induced failure modes (other than tsunami) that would yield? Flooding due to dam failure or widespread liquefaction are examples27
	88) spent f	Ramifications of beyond design basis events (seismic and tsunami) and potential LTSBO on fuel storage facilities?
	-	Why did a Emergency Warning go out for a 'tsunami' that was only 6 ft high? Do these guys know what they're doing? Would they know it if a big one was really coming? Crying wolf all ne doesn't instill a lot of confidence27
	90) wrong	How big did the Japanese think a quake/tsunami could be before 3/11? Why were they so (assuming this quake/tsunami was bigger than what they had designed the plant for)? 28
	wrong	panese were supposed to have one of the best tsunami warning systems around. What went last week (both with the reactors and getting the people outsee #1, evacuation plan 28
		Regarding tsunami at Diablo and SONGS, is the tsunami considered separately from flooding asing? And from the design perspective, is the flood still the controlling event for those plants than the tsunami?28
In	dian Po	oint Questions
	92)	Why is Indian Point safe if there is a fault line underneath it?29
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Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level E and Seismic Core Damage Frequencies	•

From:

Smith, Brooke

To: Subject: Trapp, James

Subjec

Re: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED, ARRIVAL: 3/16/2011

Date:

Wednesday, March 16, 2011 3:06:56 AM

We are all here. We are going to walk to the embassy in a few minutes. Is there someone to contact to meet us? The guy from TTC comes in later today.

Sent from an NRC Blackberry.

Brooke G. Smith (b)(6)

From: Trapp, James

To: LIA03 Hoc

Cc: Foggie, Kirk; Smith, Brooke Sent: Wed Mar 16 03:03:54 2011

Subject: RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Do you know if the others made it to the hotel? Thanks

From: LIA03 Hoc

Sent: Wednesday, March 16, 2011 2:55 AM

To: Trapp, James

Cc: Foggie, Kirk; Smith, Brooke

Subject: RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

They are at the hotel. Here is Brooke's bb# rumber (b)(6) copied her and Kirk on this email.

Andrea

From: Trapp, James

Sent: Wednesday, March 16, 2011 2:53 AM

To: LIA03 Hoc

Subject: RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Any word where our team is?

From: LIA03 Hoc

Sent: Tuesday, March 15, 2011 11:58 PM

To: (b)(6)

Trapp, James

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Jim – Here is the clearance info via email. Please let us know if this is good enough, or if they need it on an official letterhead.

Thanks,

Lauren Mayros

#### International Liaison

From: LIA11 Hoc

Sent: Tuesday, March 15, 2011 11:55 PM

To: LIA02 Hoc; LIA03 Hoc

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Clearance Info

From: RMTPACTSU\_ELNRC [mailto:RMTPACTSU\_ELNRC@ofda.gov]

Sent: Tuesday, March 15, 2011 11:50 PM

To: LIA11 Hoc; LIA01 Hoc

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRÎVAL: 3/16/2011

Is this what you're looking for? Thanks.

From: RMTPACTSU\_AC

Sent: Tuesday, March 15, 2011 7:54 PM

To: RMTPACTSU\_ELNRC

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

FYI: approved country clearances for 9-member NRC team.

#### ~Natalya

Admiri Coordinator

Pacific Tsunami and Jupan Earthquake Response Monagement Team

USAID/DHCA/OFDA Rattpactsu\_oc@ofda.gov

202-712-0039

**From:** ecc@state.gov [mailto:ecc@state.gov] **Sent:** Tuesday, March 15, 2011 7:50 PM

To: RMTPACTSU\_AC

Subject: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED, ARRIVAL:

3/16/2011

# Request Summary

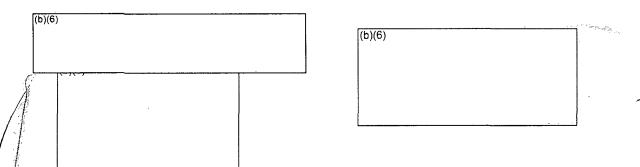
Itinerary #:622049

Date Requested: 3/15/2011

Request Summary

Travel Itinerary						
<b>Destination Country</b>	Destination Cities	<b>Start Date</b>	End Date	Status		
JAPAN	Tokyo	3/16/2011	4/11/2011	APPROVED		

Travelers (b)(6) (b)(6) (b)(6) (b)(6) (b)(6)



			Carrier Information		
Carrier and #	Mode	Departure Point	Departure Date/Time	Arrival Point	Arrival Date/Time
DL 0275	AIR	TN	3/15/2011 11:15:00 AM	Nama	3/16/2011 4:15:00 PM
BA 0005	AIR	Washington, DC	3/14/2011 11:05:00 PM	Narita	3/16/2011 9:10:00 AM
BA005	AIR	Philadelphia, PA	3/14/2011 10:25:00 AM	Narita	3/16/2011 9:10:00 AM

Request Details

	JAI	'AN			
!From	Agency/Section/Other USAID	Arrival Date 3/16/2011	Departure Date 4/11/2011	Status APPROVED	

#### Other Posts & Sections to be informed Access to Building Required? Yes Section Post

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**Destination Cities**Tokyo

VIP Visit? No

Purpose of VisitProvide disaster assistance in response to Disaster Declaration on 03/11/2011.

POC at post John Beed

Access to PCC Required? No

Fiscal Data: None

Other Comments/Remarks: None

Hotel Reservations? No

Airport Assistance/Transportation?

No

**Accompanying Pouch?** No **Appointment Request?** No Other Needed Assistance? No

Control Officer: John A. Beed

Post: TOKYO

Email: BeedJA@state.gov

**Phone:** 81-3-3224-5015

**Airport** 

Assistance /

Transportation:

Appointment

Request:

**Expediter:** 

Other Provided

Assistance:

Comments:

### List of recipients:

### [ACTION]-REQUEST APPROVER:

yamakirx@state.gov

beedja@state.gov

### [INFO]-COUNTRY DESK:

williamsge@state.gov

kelleyk@state.gov

### [INFO]-GROUP CC:

miyajimacx@state.gov

horowitzpd@state.gov

bergermc@state.gov

katagirinx@state.gov

vizcarrajk@state.gov

### [INFO]-REQUESTOR CC:

travel@ofda.gov

rmtpactsu\_ac@ofda.gov

jbeed@usaid.gov

LIA03 Hoc Trapp, James

From: To: Cc:

Hoggie, Kirk; Smith, Brooke

Subject:

RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED, ARRIVAL: 3/16/2011

Date:

Wednesday, March 16, 2011 3:06:24 AM

Yes. My understanding is that the only person missing is Rich from TTC. Chuck has arrived. He is scheduled to arrive at about 4:15p 3/16, Tokyo time.

From: Trapp, James

Sent: Wednesday, March 16, 2011 3:04 AM

To: LIA03 Hoc

Cc: Foggie, Kirk; Smith, Brooke

Subject: RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Do you know if the others made it to the hotel? Thanks

From: LIA03 Hoc

Sent: Wednesday, March 16, 2011 2:55 AM

To: Trapp, James

Cc: Foggie, Kirk; Smith, Brooke

Subject: RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

They are at the hotel. Here is Brooke's bb# number (b)(6)

I copied her and Kirk on this

email. Andrea

From: Trapp, James

Sent: Wednesday, March 16, 2011 2:53 AM

To: LIA03 Hoc

Subject: RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Any word where our team is?

From: LIA03 Hoc

Sent: Tuesday, March 15, 2011 11:58 PM

**To(**(b)(6)

Subject: FW: ecc - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Jim – Here is the clearance info via email. Please let us know if this is good enough, or if they need it on an official letterhead.

Thanks,

Lauren Mayros

International Liaison

From: LIA11 Hoc

Sent: Tuesday, March 15, 2011 11:55 PM

00/210

To: LIA02 Hoc; LIA03 Hoc

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Clearance Info

From: RMTPACTSU\_ELNRC [mailto:RMTPACTSU\_ELNRC@ofda.gov].

Sent: Tuesday, March 15, 2011 11:50 PM

To: LIA11 Hoc: LIA01 Hoc

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Is this what you're looking for? Thanks.

From: RMTPACTSU AC

Sent: Tuesday, March 15, 2011 7:54 PM

To: RMTPACTSU\_ELNRC

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

FYI: approved country clearances for 9-member NRC team.

#### ~Natalya

Admin Coordinator
Pacific Tsunami and Japan Earthquake Response Management Team
USAID/DHCA/OFDA
Rmtpactsu\_ac@ofdo.aov
202-712-0099

From: ecc@state.gov [mailto:ecc@state.gov]

Sent: Tuesday, March 15, 2011 7:50 PM

To: RMTPACTSU\_AC

Subject: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED, ARRIVAL:

3/16/2011

# **Request Summary**

Itinerary #:622049

Date Requested: 3/15/2011

Request Summary

Travel Itinerary						
<b>Destination Country</b>	<b>Destination Cities</b>	<b>Start Date</b>	End Date	Status		
JAPAN	Tokyo	3/16/2011	4/11/2011	APPROVED		

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	Carrier Information					
Carrier and #	Mode	Departure Point	Departure Date/Time	Arrival Point	Arrival Date/Time	
DL 0275	AIR	Chattanooga, TN	3/15/2011 11:15:00 AM	nanta	3/16/2011 4:15:00 PM	
BA 0005	AIR	Washington, DC	3/14/2011 11:05:00 PM	Narita	3/16/2011 9:10:00 AM	
BA005	AIR	Philadelphia, PA	3/14/2011 10:25:00 AM	Narita	3/16/2011 9:10:00 AM	

### Request Details

#### JAPAN

Clearance From JAPAN/TOKYO	Agency/Section/Other USAID	Arrival Date 3/16/2011	Departure Date 4/11/2011	Status APPROVED
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#### Other Posts & Sections to be Informed Access to Building Required? Yes Section **Post**

**Destination Cities**Tokyo

POC at post John Beed

VIP Visit? No

Access to PCC Required? No

Purpose of VisitProvide disaster

Fiscal Data: None

assistance in response to Disaster

Other Comments/Remarks: None

Declaration on 03/11/2011.

Hotel Reservations? No

Airport Assistance/Transportation?

No

Accompanying Pouch? No

**Appointment Request?** No Other Needed Assistance? No

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Control Officer: John A. Beed

Post: TOKYO

Email: BeedJA@state.gov

Phone: 81-3-3224-5015

**Airport** 

Assistance /

Transportation:

**Appointment** 

Request:

**Expediter:** 

**Other Provided** 

Assistance:

Comments:

### List of recipients:

#### [ACTION]-REQUEST APPROVER:

yamakirx@state.gov

beedja@state.gov

[INFO]-COUNTRY DESK:

williamsge@state.gov

kelleyk@state.gov

[INFO]-GROUP CC:

miyajimacx@state.gov

horowitzpd@state.gov

bergermc@state.gov

katagirinx@state.gov

vizcarrajk@state.gov

[INFO]-REQUESTOR CC:

travel@ofda.gov

rmtpactsu\_ac@ofda.gov

jbeed@usaid.gov

From:

LIA03 Hoc

To:

Smith, Brooke; Traop, James

Cc:

Foggie, Kirk

Subject:

RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED, ARRIVAL: 3/16/2011

Date:

Wednesday, March 16, 2011 3:26:20 AM

Brooke, once you guys get some direction, could you give me some insights on where the team will go. Someone from NAC (Yokasuka (sp?) Base called to say the teams' dosimeter was ready for pick-up.

From: Smith, Brooke

Sent: Wednesday, March 16, 2011 2:57 AM

To: LIA03 Hoc; Trapp, James

Cc: Foggie, Kirk

Subject: Re: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Jim - we are headed over in about 10 minutes. See you soon.

Sent from an NRC Blackberry.

Brooke G. Smith (b)(6)

From: LIA03 Hoc To: Trapp, James

Cc: Foggie, Kirk; Smith, Brooke Sent: Wed Mar 16 02:55:43 2011

Subject: RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

They are at the hotel. Here is Brooke's bb# number (b)(6) copied her and Kirk on this email.

Andrea

From: Trapp, James

Sent: Wednesday, March 16, 2011 2:53 AM

To: LIA03 Hoc

Subject: RE: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Any word where our team is?

From: LIA03 Hoc

Sent: Tuesday, March 15, 2011 11:58 PM

**Fo:**[(b)(6) | Trapp, James

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Jim – Here is the clearance info via email. Please let us know if this is good enough, or if they need it on an official letterhead.

Thanks,

Lauren Mayros

International Liaison

From: LIA11 Hoc

Sent: Tuesday, March 15, 2011 11:55 PM

To: LIA02 Hoc; LIA03 Hoc

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Clearance Info

From: RMTPACTSU\_ELNRC [mailto:RMTPACTSU\_ELNRC@ofda.gov]

Sent: Tuesday, March 15, 2011 11:50 PM

To: LIA11 Hoc; LIA01 Hoc

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

Is this what you're looking for? Thanks.

From: RMTPACTSU\_AC

Sent: Tuesday, March 15, 2011 7:54 PM

To: RMTPACTSU ELNRC

Subject: FW: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED,

ARRIVAL: 3/16/2011

FYI: approved country clearances for 9-member NRC team.

#### ~Natalya

Admin Coordinator

Pacific Tsunumi and Japan Farthquake Response Management Team

USAID/OHCA/OFDA

Rmtpacieu ac@ofgc.gov

202-712-0039

From: ecc@state.gov [mailto:ecc@state.gov] Sent: Tuesday, March 15, 2011 7:50 PM

To: RMTPACTSU AC

Subject: eCC - [INFO ONLY, NO ACTION] - Itinerary #622049/Casto(+) REQUEST GRANTED, ARRIVAL:

3/16/2011

# **Request Summary**

Itinerary #:622049

Date Requested: 3/15/2011

Request Summary

	Travel Itine	erary	*	
<b>Destination Country</b>	Destination Cities	Start Date	End Date	Status
JAPAN	Tokyo	3/16/2011	4/11/2011	APPROVED

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Carrier Information						
Carrier and #	Mode	Departure Point	Departure Date/Time	Arrival Point	Arrival Date/Time	
DL 0275	AIR	Chattanooga, TN	3/15/2011 11:15:00 AM	ivarita	3/16/2011 4:15:00 PM	
BA 0005	AIR	Washington, DC	3/14/2011 11:05:00 PM	Narita	3/16/2011 9:10:00 AM	
BA005	AIR	Philadelphia, PA	3/14/2011 10:25:00 AM	Narita	3/16/2011 9:10:00 AM	

Request Details

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Clearance	Agency/Section/Other	Arrival	Departure	Status
From	USAID	Date	II late	APPROVED
JAPAN/TOKYO	USAID	3/16/2011	4/11/2011	APPROVED

#### Other Posts & Sections to be Informed Access to Building Required? Yes Section **Post**

**Destination Cities**Tokyo

VIP Visit? No

Purpose of VisitProvide disaster assistance in response to Disaster Declaration on 03/11/2011.

POC at post John Beed

Access to PCC Required? No

Fiscal Data: None

Other Comments/Remarks: None

Hotel Reservations? No

Airport Assistance/Transportation?

No

**Accompanying Pouch?** No **Appointment Request? No** Other Needed Assistance? No

(b)(6)		
<u> </u>		•

Control Officer: John A. Beed

Post: TOKYO

Email: <u>BeedJA@state.gov</u> Phone: 81-3-3224-5015

Airport
Assistance /
Transportation:
Appointment
Request:
Expediter:
Other Provided

Assistance: Comments:

### List of recipients:

### [ACTION]-REQUEST APPROVER:

yamakirx@state.gov

beedja@state.gov

### [INFO]-COUNTRY DESK:

williamsge@state.gov

kelleyk@state.gov

### [INFO]-GROUP CC:

miyajimacx@state.gov

horowitzpd@state.gov

pergermc@state.gov

katagirinx@state.gov

vizcarrajk@state.gov

### [INFO]-REQUESTOR CC:

travel@ofda.gov

rmtpactsu\_ac@ofda.gov

jbeed@usaid.gov

From:

Cherry, Ronald C

To: Cc: Zumwalt, James P; Fuller, Matthew G; JapanEmbassy, TaskForce; Basalla, Suzanne I; Angelov, Bonnie A Trapp, James; Ulses, Anthony; Alan Remick; jhughart@ofda.gov; Aleshia Duncan; Duncan, Aleshia D; Morales,

Russell A; Mears, Jeremy M

Subject:

FW: recommendation

Date:

Wednesday, March 16, 2011 3:54:15 AM

Attachments:

Combined.pdf

Jim Trapp asked that the attached NRC assessment be forwarded to the Ambassador.

Thanks.

Ron

This email is UNCLASSIFIED.

From: Miller, Chris [mailto:Chris.Miller@nrc.gov] Sent: Wednesday, March 16, 2011 2:26 PM

**To:** Cherry, Ronald C **Cc:** Miller, Chris

Subject: FW: recommendation

Ron,

Please call us at the NRC Ops Center at 301-816-5100 to discuss.

Thanks Chris

Christopher G. Miller

**Deputy Director for Emergency Preparedness** 

**US Nuclear Regulatory Commission** 

Office of Nuclear Security and Incident Response

Division of Preparedness and Response

work 301-415-1086

cell(b)(6)

From: OST02 HOC

Sent: Wednesday, March 16, 2011 1:16 AM

To: Miller, Chris

Subject:

00/212

#### USNRC Understanding of the Current Conditions at the Fukushima Daiichi Site

We understand that there is significant damage to reactors and spent fuel pools at Fukushima Daiichi site as evidenced by:

Unit 1 – We understand that the fuel is damaged, there is limited seawater injection into the reactor vessel, there is no secondary containment integrity due to a previous hydrogen explosion, and we have no information on the condition of the spent fuel pool.

Unit 2— We understand that the fuel is damaged, there is limited seawater injection into the reactor vessel, the reactor coolant system has been breached, the primary containment has been breached, the secondary containment is not at a negative pressure as designed, and we have no information on the condition of the spent fuel pool.

Unit 3 – We understand that the fuel is damaged, there is limited seawater injection into the reactor vessel, the reactor coolant system has been breached, the primary containment has been breached, there is no secondary containment integrity due to a previous hydrogen explosion, and we have no information on the condition of the spent fuel pool.

Unit 4 – We understand that there has been a loss of cooling water for the spent fuel and the fuel is uncovered, there is no secondary containment integrity due to a hydrogen explosion and there is an ongoing fire.

Units 5 and 6 - We understand that there is a loss of cooling capability for the spent fuel pools and fuel pool temperatures are significantly elevated and increasing.

We understand that all TEPCO staff have been evacuated from Fukushima Daiichi site.

We understand that the prevailing winds are currently from the west and are expected to shift to from the east by the end of the week.

Based on this information and understanding, we have prepared dose projections with the following assumptions:

Unit 4 full core offload in the spent fuel pool fully uncovered and 50% fuel damage

These dose projections are only based on one unit. The contribution of the other units to the offsite dose may be significant.

Based on the attached dose projections, the USNRC would recommend protective actions of:

- Prompt restriction of shipping down wind to 50 miles.
- Evacuation of populations out to 50 miles downwind be completed before Sunday in anticipation of the wind shifts.

### **Case Summary**

**Event Type** 

**Nuclear Power Plant** 

Location

Name:

Fukushima Unit 2

City, county, state:

<undefined>, <undefined>, <undefined>

Lat / Long / Elev:

37.4214° N, 141.0325° E, 0 m

UTC Offset:

9 hours

Population:

not available

Reactor Parameters

Reactor power:

2500 MWt

Average fuel burn-up:

30000 MWD / MTU

Containment type:
Containment volume:
Design pressure:

BWR Mark I 2.50E+05 ft<sup>3</sup>

Design pressure: Design leak rate: 60 lb/in² 0.54 %/d

Coolant mass:

1.25E+05 kg

Assemblies in core:

550

Source Term

Type:

Time Core Is Uncovered

Shutdown: Core uncovered: 2011/03/11 14:46 2011/03/15 21:00

Core recovered:

No

Release Pathway

Type:

BWR - Release Through Dry Well

via direct, unfiltered pathway

Description:

Unit 4

Release height:

10. m

Release events

2011/03/15 00:00

Sprays Off

2011/03/15 21:00

Leak rate (% vol) Total failure

Meteorology

Type:

Actual Observations

Dataset name: Dataset desc:

Fukushima 1735 email 3-15-11 Obs/fcsts for Fukushima Unit 2

Summary of data at release point:	Туре	Dir deg	Speed m/s	Stab class	Precip	Temp °C
2011/03/15 09:00	Obs	009	7.0	D	None	
2011/03/15 10:00	Obs	012	6.5	D	None	
2011/03/15_11:00	Obs	032	6.0	D	None	
2011/03/15 12:00	Obs	037	5.2	D	None	
2011/03/15 13:00	Obs	044	3.8	D	None	
2011/03/15 14:00	Obs	047	4.0	С	None	
2011/03/15 15:00	Obs	004	2.4	С	None	
2011/03/15 16:00	Obs	042	2.9	С	Lgt rain	
2011/03/15 17:00	Obs	099	1.8	E	None	
2011/03/15 18:00	Obs	172	1.4	Ε	None	
2011/03/15 19:00	Obs	183	1.6	F.	None	

2011/03/15 20:00	Obs	242	2.4	Ε	Lgt rain
2011/03/15 21:00	Obs	258	2.5	Ε	Lgt rain
2011/03/15 22:00	Obs	305	3.3	Ε	Lgt rain
2011/03/15 23:00	Obs	307	3.9	Ε	Rain
2011/03/16 00:00	Obs	335	4.6	Ε	Rain
2011/03/16 01:00	Obs	007	4.9	Ε	Rain
2011/03/16 02:00	Obs	344	4.7	Ε	Lgt rain
2011/03/16 03:00	Obs	331	7.6	D	Lgt rain
2011/03/16 04:00	Obs	332	6.1	D	None
2011/03/16 05:00	Obs	320	4.4	С	None
2011/03/16 06:00	Fcst	332	6.4	Ε	None
2011/03/16 07:00	Fcst	329	7.2	D	None
2011/03/16 08:00	Fcst	333	7.6	D	None
2011/03/16 09:00	Fcst	350	8.7	С	None
2011/03/16 10:00	Fcst	353	10.0	С	None
2011/03/16 11:00	Fcst	001	7.7	С	None
2011/03/16 12:00	Fcst	002	7.4	С	None
2011/03/16 13:00	Fcst	351	7.3	С	None
2011/03/16 14:00	Fcst	321	10.3	D	None
2011/03/16 15:00	Fcst	323	10.4	D	None
2011/03/16 16:00	Fcst	316	12.7	D	None
2011/03/16 17:00	Fcst	315	13.0	D	None
2011/03/16 18:00	Fcst	314	10.0	С	None
2011/03/16 19:00	Fcst	315	6.4	D	None
2011/03/16 20:00	Fcst	302	6.6	С	None
2011/03/16 21:00	Fcst	302	7.6	D	None
2011/03/16 22:00	Fcst	280	7.1	Ε	None
2011/03/16 23:00	Fcst	291	7.7	Ε	None
2011/03/17 00:00	Fcst	293	8.6	E	None
2011/03/17 01:00	Fcst	291	9.1	Ε	None
2011/03/17 02:00	Fcst	282	7.5	E	None
2011/03/17 03:00	Fcst	262	6.0	E	None
2011/03/17 04:00	Fcst	278	3.7	Ε	None
2011/03/17 05:00	Fcst	005	3.1	Ε	None
2011/03/17 06:00	Fcst	308	3.9	D	None

Dataset options:

Est. missing stability using: Wind speed, time of day, etc.

Adjust stability for consistency: No Modify winds for topography: Yes

#### **Calculations**

Case description: End of calculations: Fukushima Unit 4 estimate for 50 miles

2011/03/16 21:00

Start of release to atmosphere + 24 h

Distance of calculation:

Close-in + to 50 miles

Close-in distances:

0.5, 1.0, 1.5, 2.0, 3.0, 5.0, 7.0, 10.0 miles

**Source Term** Total amount released to atmosphere: 1.7E+08 Ci

Nuclide	Ci	Nuclide	Ci	Nuclide	<u>Ci</u>
Am-241	7.2E-01	Nd-147	1.5E+05	Tc-99m	1.7E+05
Ba-140	9.7E+06	Np-239	1.9E+06	Te-127	1.0E+06
Ce-141	4.8E+05	Pm-147	5.5E+02	Te-127m	2.6E+05
Ce-143	5.2E+04	Pr-143	3.6E+05	Te-129	6.5E+05
Ce-144*	4.2E+05	Pr-144	4.1E+05	Te-129m	1.0E+06
Cm-242	1.2E+04	Pu-238	1.3E+00	Te-131	6.9E+04
Cs-134	4.7E+06	Pu-239	1.3E+00	Te-131m	3.0E+05
Cs-136	1.5E+06	Pu-241	3.9E+04	Te-132	9.7E+06
Cs-137*	3.3E+06	Rb-86	5.9E+04	Xe-131m	7.1E+05
I-131	2.5E+07	Rb-88	2.4E-04	Xe-133	7.8E+07
I-132	2.1E+07	Rh-103m	4.4E+05	Xe-133m	1.1E+06
I-133	2.1E+06	Rh-105	4.5E+04	Xe-135	1.1E+05
I-135	1.1E+03	Ru-103	4.4E+05	Xe-135m	1.5E+03
Kr-85	5.4E+05	Ru-105	2.5E-02	Y-90	2.6E+04
Kr-85m	1.6E+00	Ru-106*	1.3E+05	Y-91	3.4E+05
Kr-88	3.8E-04	Sb-127	7.0E+05	Y-91m .	7.2E+02
La-140	5.8E+05	Sb-129	2.4E-01	Y-92	1.6E-03
La-141	3.8E-03	Sr-89	5.9E+06	Y-93	2.0E+02
Mo-99	1.8E+05	Sr-90	4.8E+05	Zr-95	4.8E+05
Nb-95	5.1E+05	Sr-91	3.5E+03	Zr-97*	6.1E+03
Nb-97	3.5E+02	Sr-92	1.6E-05		

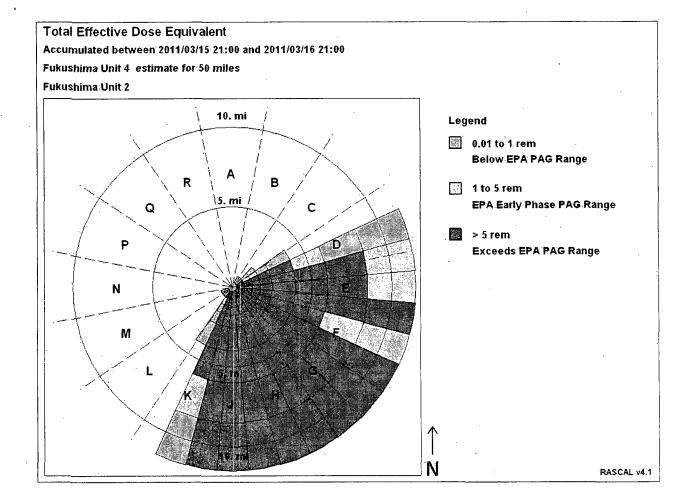
Notes:
• Nuclides with \* in name include implicit daughters.

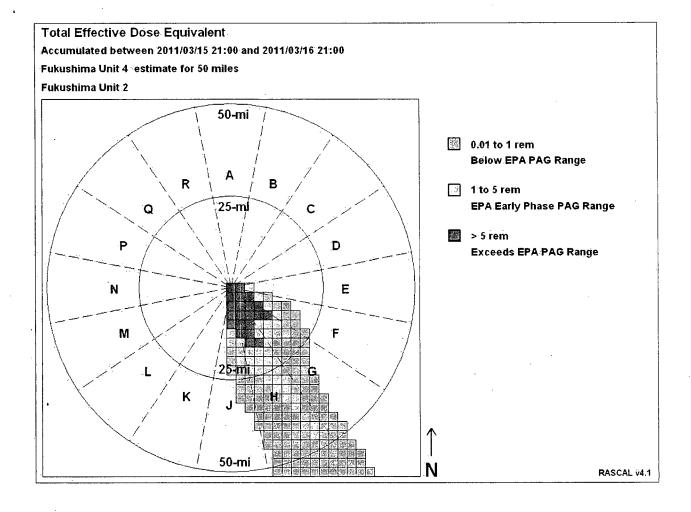
# Maximum Dose Values (rem) - To 50 mi

Dist from release miles (kilometers)	15 (24.1)	20 (32.2)	30 (48.3)	40 (64.4)	50 (80.5)
Total EDE	6.3E+00	4.9E+00	1.3E+00	1.1E+00	9.8E-01
Thyroid CDE	5.4E+01	3.9E+01	1.6E+01	1.3E+01	9.3E+00
Inhalation CEDE	2.2E+00	1.5E+00	1.1E+00	9.0E-01	8.1E-01
Cloudshine	5.8E-02	4.3E-02	2.9E-02	2.0E-02	1.2E-02
4-day Groundshine	4.8E+00	3.5E+00	2.2E-01	1.8E-01	1.6E-01
Inter Phase 1st Yr	6.6E+01	4.8E+01	3.0E+00	2.3E+00	2.1E+00
Inter Phase 2nd Yr	3.1E+01	2.2E+01	1.4E+00	1.0E+00	9.4E-01

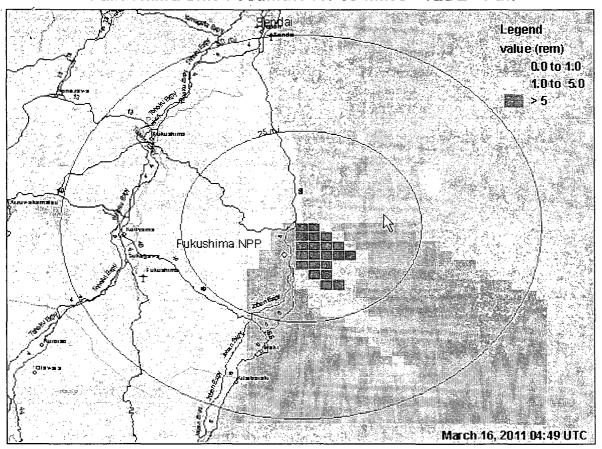
#### Notes:

- Doses exceeding PAGs are underlined.
- Early-Phase PAGs: TEDE 1 rem, Thyroid (iodine) CDE 5 rem
- Intermediate-Phase PAGs: 1st year 2 rem, 2nd year 0.5 rem
- \*\*\* indicates values less than 1 mrem
- To view all values use Detailed Results | Numeric Table
- Total EDE = CEDE Inhalation + Cloudshine + 4-Day Groundshine
- Total Acute Bone = Bone Inhalation + Cloudshine + Period Groundshine





Fukushima Unit 4 estimate for 50 miles - TEDE - Puff



Cherry, Ronald C

To:

**NITOPS** 

Cc:

Trapp, James; Ulses, Anthony;

Subject:

JapanEmbassy, TaskForce; Duncan, Aleshia D; (b)(6)
Alan Remick; Russ Morales; Mears, Jeremy M; Uchida, Koichi
RE: [urgent inquiry] additional personnel in fireflighting

Date:

Wednesday, March 16, 2011 11:17:47 AM

Trapp, James
"cherryrc@state.gov"

Subject:

Fw: 1400 EDT (March 15, 2011) USNRC Earthquake/Tsunami SitRep

Date:

Wednesday, March 16, 2011 6:41:05 PM

Attachments:

USNRC Earthquake-Tsunami Update 031611.1400EDT.docx

From: LIA07 Hoc

To: Andersen, James; Anderson, Joseph; Ash, Darren; Baggett, Steven; Barker, Allan; Batkin, Joshua; Boger, Bruce; Borchardt, Bill; Bradford, Anna; Brenner, Eliot; Smith, Brooke; Brown, Milton; Bubar, Patrice; Camper, Larry; Carpenter, Cynthia; Castleman, Patrick; Ader, Charles; Casto, Chuck; Coggins, Angela; Collins, Elmo; Correia, Richard; Dapas, Marc; Dean, Bill; Decker, David; Dickman-Disabled-11/14/2010, Paul; Dorman, Dan; Droggitis, Spiros; Dyer, Jim; ET02 Hoc; Evans, Michele; Franovich, Mike; Apostolakis, George; Gibbs, Catina; Giitter, Joseph; Gott, William; Grobe, Jack; Hahn, Matthew; Haney, Catherine; Harrington, Holly; Hipschman, Thomas; Holahan, Gary; Holahan, Patricia; HOO Hoc; Howell, Art; Howell, Linda; Foster, Jack; Jackson, Donald; Jaczko, Gregory; Johnson, Andrea; Johnson, Michael; Kahler, Robert; Foggie, Kirk; Kock, Andrea; Kozal, Jason; Leeds, Eric; LIA01 Hoc; LIA02 Hoc; LIA03 Hoc; LIA06 Hoc; LIA08 Hoc; LIA11 Hoc; Logaras, Harral; Loyd, Susan; Magwood, William; Maier, Bill; Marshall, Jane; Marshall, Michael; McCree, Victor; McDermott, Brian; McNamara, Nancy; Miller, Charles; Miller, Chris; Monninger, John; Morris, Scott; Nieh, Ho; NSIR\_DDSP\_ILTAB\_Distribution; Ordaz, Vonna; Orders, William; OST05 Hoc; Ostendorff, William; Pace, Patti; Pearson, Laura; Pederson, Cynthia; Plisco, Loren; Powell, Amy; R1 IRC; R2 IRC; R3 IRC; R4 IRC; Reddick, Darani; Reyes, Luis; Devercelly, Richard; ROO hoc; Satorius, Mark; Schmidt, Rebecca; Sharkey, Jeffry; Sheron, Brian; Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Thoma, John; Tifft, Doug; Kolb Timothy; Ulses, Anthony; Nakanishi, Tony; Tracy, Glenn; (b)(6) Trapp, James; Trojanowski, Robert; Uhle, Jennifer; Virgilio, Martin, Warnick, Greg; Warren, Roberta Weber, Michael; Westreich, Barry; Wiggins, Jim; Cook, William; Williams, Kevin; Wittick, Brian; Woodruff, Gena; Zimmerman, Roy; Zorn, Jason; Casto, Chuck; Cook, William; Devercelly, Richard; Foggie Kirk: Foster Tack: Kolb Timothy: Nakanishi Tony; Smith, Brooke; Ulses, Anthony Cc/(b)(6)

Sent: Wed Mar 16 14:16:34 2011

Subject: 1400 EDT (March 15, 2011) USNRC Earthquake/Tsunami SitRep

Attached, please find a 1400 EDT situation report from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami on March 16, 2011. This Update includes information on the status of the units at Fukushima Daiichi, NRC recommendations to Americans in Japan, and NRC PMT hypothetical Worst Case Analyses.

Please note that this information is "Official Use Only" and is only being shared within the federal family.

Please call the Headquarters Operations Officer at 301-816-5100 with questions. -Jim

Jim Anderson
Office of Nuclear Security and Incident Response
US Nuclear Regulatory Commission
james.anderson@nrc.gov
LIA07.HOC@nrc.gov (Operations Center)

Lee. Pete

To: Cc: Correia, Richard; Dudes, Laura Layton, Michael; Huyck, Doug RE: High Expansion Foam

Subject: Date:

Thursday, March 17, 2011 1:04:29 PM

RST has the information via TST01.hoc for consideration. RST was getting ready to brief the ET when I stop in this morning.

From: Correia, Richard

Sent: Thursday, March 17, 2011 10:58 AM

To: Lee, Pete

Cc: Layton, Michael; Huyck, Doug Subject: FW: High Expansion Foam

Pete.

Michele Evans asked that we communicate directly with Laura Dudes in the Ops Center. I feel it would be best if you provide the information in case she has questions.

thx

From: Evans, Michele

Sent: Thursday, March 17, 2011 10:11 AM

To: Correia, Richard

Subject: RE: High Expansion Foam

Can you send this in to the RST - Laura Dudes is director today. Hand carry is probably best. They are the team looking at the options for cooling. Thanks,

From: Correia, Richard

Sent: Thursday, March 17, 2011 10:02 AM

To: Evans, Michele

Subject: FW: High Expansion Foam

Importance: High

Michele,

FYI...a suggestion from Pete lee (DSP). Not sure how this could be transmitted to the ground team in Japan but I thought you should know.

From: Lee, Pete

**Sent:** Thursday, March 17, 2011 9:59 AM

To: Ross-Lee, MaryJane; Leeds, Eric; Weber, Michael; Correia, Richard

Cc: Lain, Paul; Huyck, Doug; Prescott, Peter

Subject: High Expansion Foam

Importance: High

Has anyone suggested or looked at the option of using high expansion foam (firefighting agent) to fill the remaining cavity of the containment building to form a blanket that provide cooling and contain radiological fission product for the spent fuel pool and the reactor?

The high expansion foam is used for firefighting where it is difficult or too hazardous (temp hot, toxic, etc.) to enter in enclosures (i.e., where the water from hose stream or helicopter drop can't get to the heat source). Based on the pictures from the link, I think if the onsite responders have not, considered using HX foam, they should take a hard look at this option. Below are four desired outcomes that should be important:

- (1) the high-expansion foam will reach areas that can't be reach by fire hoses and at sufficient rate will fill the volume of the entire enclosure;
- (2) it will prevent access to oxygen by burning metal mass;
- (3) the foam (water content) bubbles will provide cooling larger surface area to absorb heat convert to steam;
- (4) trap material release within the foam to plate out material.

It has been a long time, but equipment should be available worldwide from vendors that provide such foam agent and supply equipment of such application. They should also available at some fire departments, but this is a not widely used firefighting technique.

The information on this subject is available in the Fire Protection Handbook from our technical library.

From: Ross-Lee, MaryJane

Sent: Wednesday, March 16, 2011 11:36 PM

To: Lee, Pete Subject: check out

This website for some great pictures of plants:

DigitalGlobe

Mary Jane Ross-Lee (MJ)
Director, Division of Facilities and Security
TWFN 3D3

US Nuclear Regulatory Commission

Direct: 301-415-3281

① Mobile: (b)(6)

" e-mail: maryjane.ross-lee@nrc.gov

Layton, Michael

To: Subject: Correia, Richard

Subject

Re: High Expansion Foam

Date:

Thursday, March 17, 2011 11:01:11 AM

Sitting in Doug's branch meeting. Pete got the info and will head to RST after the branch meeting.

MCI

Michael Layton

From: Correia, Richard

To: Lee, Pete

Cc: Layton, Michael; Huyck, Doug Sent: Thu Mar 17 10:57:39 2011 Subject: FW: High Expansion Foam

Pete,

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thx

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To: Lee, Pete Subject: check out

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DigitalGlobe

Mary Jane Ross-Lee (MJ) Director, Division of Facilities and Security TWFN 3D3

US Nuclear Regulatory Commission

**☎** Direct: <u>301-415-32</u>81

(b) (b)(6) e-mail; maryjane.ross-lee@nrc.gov

Huyck, Doug

To:

Lee. Pete

Cc:

Prescott, Peter; Correia, Richard; Layton, Michael; Caldwell, Robert

Subject:

Re: High Expansion Foam

Date:

Sunday, March 20, 2011 12:47:01 AM

Pete, thanks for suggestion and thinking ahead.

Doug

Sent from NRC blackberry

From: RST01 Hoc To: Lee, Pete

Cc: Correia, Richard; Huyck, Doug; Layton, Michael

Sent: Thu Mar 17 11:35:12 2011 Subject: RE: High Expansion Foam

Thank you for your suggestion. It has been provided to the Reactor Safety Team for their consideration.

From: Lee, Pete

Sent: Thursday, March 17, 2011 11:22 AM

To: RST01 Hoc

Subject: FW: High Expansion Foam

See below.

From: Correia, Richard

Sent: Thursday, March 17, 2011 10:58 AM

To: Lee, Pete

**Cc:** Layton, Michael; Huyck, Doug **Subject:** FW: High Expansion Foam

Pete,

Michele Evans asked that we communicate directly with Laura Dudes in the Ops Center. I feel it would be best if you provide the information in case she has questions.

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To: Lee, Pete Subject: check out

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DigitalGlobe

Mary Jane Ross-Lee (MJ) Director, Division of Facilities and Security TWFN 3D3

US Nuclear Regulatory Commission
Direct: 301-415-3281
(Direct: (D)(6)
Commission
Direct: 301-415-3281
Commission
Direct: 301-4

Droggitis, Spiros

Sent:

Thursday, March 17, 2011 10:26 AM

To:

Powell, Amy; Decker, David; Riley (OCA), Timothy

Subject: Attachments: FW: DNDO News 3/17/2011 DNDO NEWS 3-17-11.doc

From: Bolling, Lloyd [mailto:Lloyd.Bolling@dhs.gov]

Sent: Thursday, March 17, 2011 10:17 AM

To: Layton, Michael; Reis, Terrence; Jones, Cynthia; Wastler, Sandra; Jackson, Gerard

Cc: Droggitis, Spiros; Dembek, Stephen; Owens, Janice; Casey, Timothy

Subject: DNDO News 3/17/2011

Attached is the DNDO News for Thursday, March 17, 2011.

#### Summary of News items:

1. Shock Begins To Turn To Anger in Japan.

- 2. South Korea screens airline passengers from Japan.
- 3. NYPD to buy Counterterror combat vessel.
- 4. U.S. will reconsider radiation countermeasures policy.
- 5. Congress debates budget cuts in programs that protect, remove and eliminate nuclear materials in vulnerable locations.
- 6. Summary of U.S. Government agencies helping Japan.

Lloyd Bolling

NRC Liaison

Operations Support Directorate **Domestic Nuclear Detection Office** Department of Homeland Security

Phone: 202-254-7123 Blackberry: (b)(6) Fax: 202-254-7752

Lloyd.Bolling@dhs.gov

#### March 17, 2011 DNDO News Brief

#### Shock Begins To Turn To Anger in Japan

NPR - Shock among survivors of Japan's earthquake and tsunami turned to anger as nearly a half-million people displaced by the disaster and resulting nuclear crisis remained crammed in makeshift evacuation centers, many with few basic necessities and even less information. http://www.npr.org/2011/03/17/134582384/japan-struggles-to-aid-survivors-amid-nuclear-fears

#### Radiation Check on Evacuees Begins

Lee Hyo-sik, Korea Times - The South Korean government began checking radiation levels of people arriving from Japan. The Ministry of Education, Science and Technology installed two residual radiation detection gates each at Incheon International Airport and Gimpo International Airport, in cooperation with the state-run Korea Institute of Nuclear Safety. http://www.koreatimes.co.kr/www/news/nation/2011/03/117 83359.html

#### NYPD to Buy Counterterror Combat Vessel

Anthony M. DeStefano, Officer.com - The NYPD will be getting a high-speed combat vessel to respond to Mumbai-style terror attacks in New York Harbor. The boat will be outfitted with radiation detection, infrared imaging and satellite communication equipment. http://www.officer.com/online/article.isp?siteSection=8&id=57336

#### US to Reassess Radiation Countermeasure Plans

Global Security Newswire - The US intends to examine "every aspect" of the crisis at Japan's Fukushima Daiichi nuclear power plant as well as efforts to contain the damage. Included in the review will be use of the substance, Potassium lodide, which could help prevent cancer in the thyroid by inhibiting the gland's absorption of certain radiation types. http://www.globalsecuritynewswire.org/gsn/nw 20110316 7822.php

#### Who Wants to be Responsible for Nuclear Terrorism?

Kenneth N. Luongo, The Hill (blog) - Congress is currently debating how much to cut the budget for the programs that protect, remove and eliminate nuclear materials in vulnerable locations around the world.

http://thehill.com/blogs/congress-blog/homeland-security/149977-who-wants-to-be-responsible-for-nuclear-terrorism

#### How the US Government is Helping Japan

Ed O'Keefe, Washington Post – This article summarizes efforts to help Japan by managers and technical staff from the Departments of Defense, Energy, State, the Agency for International Development and the Nuclear Regulatory Commission.

http://www.washingtonpost.com/politics/how-the-us-government-is-helping-japan/2011/03/16/ABhZdTj\_story.html

Casto, Chuck

To:

Virgilio, Martin

Cc:

Monninger, John; Sheron, Brian; Wiggins, Jim

Subject:

Re: Additional support

Date:

Thursday, March 17, 2011 11:17:12 PM

Thank you

From: Virgilio, Martin To: Casto, Chuck

Cc: Monninger, John; Sheron, Brian; Wiggins, Jim

Sent: Thu Mar 17 23:13:44 2011 Subject: Additional support

#### Chuck

Note that we engaged DOE NE management to turn off any plans to have them send a team to Japan. Brian will follow up again on day shift.

Note the message below for additional options. I have worked with Gil in the past and would recommend him.

#### Marty

From: Zigler, Gilbert [mailto:gzigler@alionscience.com]

Sent: Thursday, March 17, 2011 1:22 PM

**To:** Virgilio, Martin **Subject:** RE: Message

#### Marty:

Thanks for taking the time to respond. I would like to inform you that Bahman Atefi, Alion's Chairman & CEO, stands ready to provide pro-bono technical support (including travel to Japan) to support the request by the Japanese government for technical assistance concerning the Fukushima accident. Alion has personnel who are very experienced in the ECCS performance analysis of BWRs as well as post-accident analysis. I was personally involved in the TMI accident—arriving on-site 16 hours after the reactor scram to establish reactor vessel water level monitoring—and became very familiar with plant responses to upset conditions. Over the last 6 years I have also had significant interactions and performed multiple ECCS system analyses for TEPCO, and could facilitate obtaining additional sources of information. Dr. Peter Mast was a consultant to the Kemeny Commission Technical Task Force that investigated the TMI accident and co-authored a report at Los Alamos to provide an early estimate of fuel damage in the plant. Steve Unikewicz just recently left the NRC and was a qualified member of the Incident Response Team as well as a Reactor Safety Team counterpart to the Protective Measure Team, Red Team. Previous to his work at NRC, Steve was a severe accident team lead at Millstone 1. Alion has been actively engaged in CFD modeling of post-accident reactor vessel thermal hydraulics by virtue of performing ECCS analysis for both PWRs and BWRs. I would suggest that Alion could provide in-depth technical support in documenting and understanding the accident progression at each of the 000/278 Fukushima Daiichi plants.

Please let me know who I should contact either within the NRC or the US Agency for International Development to integrate Alion into the US team supporting the Fukushima accident response. We would like to be of assistance, and your help in facilitating our involvement would be greatly appreciated.

Gilbert Zigler
Senior Scientist/Engineer
Alion Science and Technology
6200 Uptown Blvd NE, Suite 120
Albuquerque, NM 87110

Phone:

Albuquerque: (505) 872-1089 ext 126

Colorado: (970) 882-8066 Mobile: (b)(6)

From: Virgilio, Martin [mailto:Martin.Virgilio@nrc.gov]

Sent: Wednesday, March 16, 2011 10:28 PM

To: Zigler, Gilbert Subject: Message

Hi Gil

I understand that you have been trying to get in touch. I have been working night shift this week in support of our team in Japan. Is theer something we can discuss by e mail.

Marty

McIntyre, David Subject: Re: Radiation Question Date: Thursday, March 17, 2011 9:51:40 AM You are one of the best! Thanks for the prompt and wonderful reply! I am dying for a Tropical Itch! Carol Henry ---- Original Message -----From: "McIntyre, David" < David. McIntyre@nrc.gov> To: "Carol Henry" (b)(6) Sent: Thursday, March 17, 2011 7:42 AM Subject: RE: Radiation Question Actually, I would be even more confident now. The jetstream projections show the prevailing winds carrying any radiation plume far to the north of Have a nice trip! If you happen to be at the  $|^{(b)(6)}$ the bar in the lobby (I forget its name) makes a terrific "Tropical Itch. Aloha, David McIntyre NRC Public Affairs ----Original Message-----From: Carol Henry (b)(6). Sent: Thursday, Malcri 17, 2011 9:04 AM To: McIntyre, David Subject: Re: Radiation Question Good Morning Mr. McIntyre Thank you for this information. It is now Thursday, things are a bit worse in Japan, so are you still thinking that we will be okay <u>in</u> (b)(6) (b)(6)Thank you again for your prompt reply. I know how busy you must be. Carol Henry ----- Original Message -----From: "McIntyre, David" <David.McIntyre@nrc.gov> To: "OPA Resource" < OPA.Resource@nrc.gov >; (b)(6) Sent: Monday, March 14, 2011 11:16 AM Subject: RE: Radiation Question Ms. Henry - Given the distance and prevailing weather conditions, and the nature of isotopes involved in a potential release, NRC believes that in the event of a major release from the Japanese plants, the United States, including (b)(6) is not expected to experience harmful amounts of

David McIntyre Office of Public Affairs U.S. Nuclear Regulatory Commission (301) 415-8200

radiation.

From:

To:

Carol Henry

Original Message							
From: (b)(6)							
Sent: Monday, March 14, 2011 12:33 PM							
To: OPA Resource							
Subject: Radiation Question							
Below is the result of your feedback form. It was submitted by							
(b)(6) on Monday, March 14, 2011 at 12:32:36							
comments: (b)(6)							
(b)(6) Are we safe in (b)(6) against any radiation							
threat? Please advise.							
Carol HEnry							
contactName: Carol Henry							
phone:							
No virus found in this incoming message. Checked by AVG - www.avg.com Version: 9.0.894 / Virus Database: 271.1.1/3506 - Release Date: 03/14/11 01:34:00							

No virus found in this incoming message.

Checked by AVG - www.avg.com Version: 9.0.894 / Virus Database: 271.1.1/3512 - Release Date: 03/17/11

01:34:00

From: To:

McIntyre, David Chernoff, Allan

Subject:

RE: CNN QUESTION RE: JAPAN

Date:

Thursday, March 17, 2011 9:39:00 AM

Not much to say - They're trying everything they can think of.

From: Chernoff, Allan [mailto:Allan.Chernoff@turner.com]

Sent: Thursday, March 17, 2011 9:23 AM

To: McIntyre, David

Subject: CNN QUESTION RE: JAPAN

David,

Can you give me a response to the fact that the Japanese are dropping water from a helicopter to deal with the nuclear plant crisis? It would seem that alone tells us quite a bit about the situation there. Thanks,

Allan Chernoff Sr. Correspondent, CM

twitter: AllanCNN

Ahlers, Mike

To: Subject: McIntyre, David; Brenner, Eliot RE: CNN -- MOX fuel question

Date:

Thursday, March 17, 2011 12:31:12 PM

Can I attribute the MOX fuel in unit 3 to NRC spokesman? Official? David McIntyre? Or what?

From: McIntyre, David [mailto:David.McIntyre@nrc.gov]

Sent: Thursday, March 17, 2011 12:21 PM

To: Ahlers, Mike; Brenner, Eliot

Subject: RE: CNN -- MOX fuel question

Hi Mike – yes, unit 3 has MOX fuel. I would say that we are focused equally on all the reactors – and also specifically their spent fuel pools – as the situation is in such flux that we aren't concentrating specifically on any one.

Dave Mc

From: Ahlers, Mike [mailto:Mike.Ahlers@turner.com]

Sent: Thursday, March 17, 2011 12:14 PM

**To:** Brenner, Eliot; McIntyre, David **Subject:** CNN -- MOX fuel question

Eliot, David,

The NYT and others have reported that there is mox (mixed oxide) fuel which includes reclaimed plutonium in Fukushima Daiichi's No. 3 reactor, and that the presence of mixed oxide might explain the Japanese focus on that reactor.

Does the NRC know if there is mox fuel in No. 3? And can you give us any guidance on the NYT reporting that U.S. authorities and Japanese authorities appear to believe different reactors are the bigger threat. (The NYT says the U.S. is focused on Reactor No. 4 and the Japanese on Reactor No. 3.)

Thanks - Mike

Mike Ahlers CNN Washington 202-898-7917 (o) (b)(6)

mike ahlers@turner.cor

000/28/

Mayo, Flizabeth

To:

McIntyre, David

Subject:

CNN American Morning - NRC Chairman Jaczko

Date:

Thursday, March 17, 2011 1:53:12 PM

Importance:

High

#### Hi David,

Thanks again for taking my call. As I mentioned, I wanted to inquire about NRC Chairman Jaczko's availability tomorrow morning for a live interview. We would like to invite him on "American Morning" to talk about the latest in the response to the Japanese disaster and nuclear crisis, and whether American should be worried at home.

Let me know if this is possible. American Morning is CNN's flagship national morning show, and we air from 6am to 9am Eastern. If a morning show rotation is set up, we'd be happy to participate and help in the coordination.

Thanks again,

Elizabeth Mayo Web/Guest Producer CNN American Morning 212-275-7850 - main 212-275-7853 - direct

(b)(6)

elizabeth.mayo@turner.com

Ledford, Joey

To:

McIntyre, David; Harrington, Holly; Couret, Iyonne; Burnell, Scott; Screnci, Diane; Taylor, Robert; Sheehan,

Neil; Hannah, Roger; Uselding, Lara; Mitlyng, Viktoria; Chandrathil, Prema; Brenner, Eliot

Cc:

Kammerer, Annie

Subject: Date: RE: Huffington Post correction on MSNBC Thursday, March 17, 2011 2:23:40 PM

Attachments:

image001.png

Great talking point, Dave. I wish I had it during my 10 or so calls today trying to debunk this thing.

Joey Ledford
Public Affairs Officer
Region II -- Atlanta, Ga.
0: 404.997.4416
C: (b)(6)
ioey.ledford@nrc.goy



From: McIntyre, David

**Sent:** Thursday, March 17, 2011 2:20 PM

**To:** Harrington, Holly; Couret, Ivonne; Burnell, Scott; Screnci, Diane; Taylor, Robert; Sheehan, Neil; Hannah, Roger; Uselding, Lara; Ledford, Joey; Mitlyng, Viktoria; Chandrathil, Prema; Brenner, Eliot

Cc: Kammerer, Annie

Subject: Huffington Post correction on MSNBC

I just filed this request for correction with The Huffington Post, which has a report of Cuomo wanting to shut IP based on the MSNBC report:

There is NO SUCH NRC REPORT! The NRC does not rank nuclear power plants according to their vulnerability to earthquakes. This "ranking" was developed by an MSNBC reporter using partial information and an even more partial understanding of how we evaluate plants for seismic risk. Each plant is evaluated individually according to the geology of its site, not by a "one-size-fits-all" model - therefore such rankings or comparisons are highly misleading. Please correct this report.

David McIntyre
NRC Office of Public Affairs

Here's the <u>HuffPo piece</u>. You'll note the link to "a new report from the NRC" goes to the MSNBC article.

Dave

Uselding, Lara

To:

McIntyre, David; Harrington, Holly; Chandrathil, Prema; Burnell, Scott; Widomski, Michael; Taylor, Robert;

Brenner, Eliot; Couret, Ivonne

Subject:

RE: Indian point/ nark report HuffPo correction

Date:

Thursday, March 17, 2011 4:42:00 PM

I did not. I've already ytelled at my reporter from there on the Diablo Story and waiting for a correction!!!

#### Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: McIntyre, David

Sent: Thursday, March 17, 2011 3:28 PM

To: Harrington, Holly; Uselding, Lara; Chandrathil, Prema; Burnell, Scott; Widomski, Michael; Taylor,

Robert; Brenner, Eliot; Couret, Ivonne

Subject: FW: indian point/ nrc report HuffPo correction

FYI – they do quote us. Anyone remember speaking to them?

From: Jonah Green [mailto:jgreen@huffingtonpost.com]

Sent: Thursday, March 17, 2011 4:12 PM

To: McIntyre, David

Subject: indian point/ nrc report

Hi David,

Thank you for getting in touch with us about that article.

We've updated our post to clarify that the NRC is not the source of this 'most vulnerable' claim:

http://www.huffingtonpost.com/2011/03/17/cuomo-wants-indian-point- n 836982.html

Best, Jonah

Toron Green New York Editor The Hutlington Post

http://www.huftinotonbost.com/new-yorld

Brenner, Eliot

To:

Burnell, Scott; Ledford, Joey; McIntyre, David; Harrington, Holly; Couret, Ivonne; Janbergs, Holly; Hannah, Roger; Screnci, Diane; Sheehan, Neij; Chandrathil, Prema; Mitlyng, Viktoria; Widomski, Michael; Landau.

Mindy; Uselding, Lara

Subject:

RE: Presidential directive

Date:

Thursday, March 17, 2011 4:45:12 PM

Attachments:

image001.png

To futher elaborate ... we will be undertaking a methodical and systematic review of the information to be gleaned from this to inform a decision as to whether any changes need to be made to strengthen an already strong safety regulatory system. As a first step, the commission will be meeting Monday to begin discussing the form of this review.

Eliot

From: Burnell, Scott

**Sent:** Thursday, March 17, 2011 4:25 PM

To: Ledford, Joey; McIntyre, David; Brenner, Eliot; Harrington, Holly; Couret, Ivonne; Janbergs, Holly;

Hannah, Roger; Screnci, Diane; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Widomski,

Michael; Landau, Mindy; Uselding, Lara **Subject:** RE: Presidential directive

Eliot's OK with this language:

"The NRC has received the President's request and we will be responding to it."

No timelines, no further details at this point.

From: Ledford, Joey

Sent: Thursday, March 17, 2011 4:02 PM

To: McIntyre, David; Brenner, Eliot; Harrington, Holly; Burnell, Scott; Couret, Ivonne; Janbergs, Holly;

Hannah, Roger; Screnci, Diane; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Widomski,

Michael; Landau, Mindy; Uselding, Lara

**Subject:** Presidential directive

Reuters says the President has directed us to do a systematic review of all plants. True? They want a comment, and I'm not willing to tackle this one blind.

Joey Ledford Public Affairs Officer Region II -- Atlanta, Ga. 0: 404.997.4416

C:(b)(6)

Joey ledford@nrc.gov



To:

brian yanick

Subject: RE: HELP IN JAPAN

Date:

Thursday, March 17, 2011 11:06:06 AM

Brian: Thank you. We are not in charge of sending folks over but check out <u>www.usaid.gov</u> to see if they have

Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

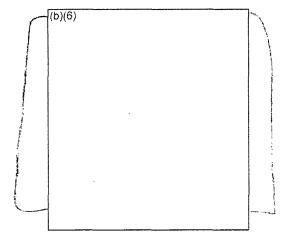
Lara.Uselding@nrc.qov
BlackBerry:
(b)(6)
Office: 817-276-6519

for more information visit www.nrc.gov

From: (b)(6)

Sent: Thursday, March 17, 2011 1:19 AM

To: Uselding, Lara Subject: HELP IN JAPAN



I am writing you today regarding the on-going nuclear tragedy taking place in Japan. I have worked in the nuclear industry in the US for about 10 years starting out as an Ironworker, placing lead shielding in the drywell, transporting machinery and manufacturing parts and components to support Safe, on time refueling outages. And as a Boilermaker, working with spent fuel, MSR's, sump projects, condenser repair and modifications, ect. and as a Mechanical

Superintend for the Shaw Group, overseeing safe outage operations, troubleshooting, problem solving and procedure compliance.

Over the years I have gained both knowledge and expertise in the safe operation and maintenance of nuclear power stations in the US and I would like to offer my help and support to the Japanese people during the on-going crisis.

If there is any way the US NRC thinks I can be of help dealing with this situation, or the Japanese Government requests the help of the US in there time of need, dealing with there nuclear tragedy, please let me know. I am offering to go to Japan to assist in any way I can. As we all know, we both Japan and The USA, weed this situation to come to a safe and informative conclusion.

My thoughts and prayers go out to the people of Japan and my thanks to the people from the US NRC and the US Military for there heroic efforts to support and minimize the effects of this situation.

Brian Yanick

Couret, Ivonne

To:

McIntyre, David

Subject:

FW: Media - Question TOKYO PRESS

Date:

Thursday, March 17, 2011 2:52:03 PM

Importance:

Ivonne L. Couret **Public Affairs Officer** Office of Public Affairs Media Desk opa.resource@nrc.gov 301-415-8200

Visit our online photo gallery. Incorporate graphics and photographs to tell your story! http://www.nrc.gov/reading-rm/photo-gallery/

2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

From: Royer, Deanna

Sent: Thursday, March 17, 2011 2:13 PM

To: Couret, Ivonne

Subject: Media - Question

Takao Ikeuchi

Kvodo News @

202-347-5767

Re: Press release yesterday on 50 mile evacuation

Deanna Royer **Contract Secretary** 301-415-8200

Uselding, Lara

To:

Hageman Jenny N; Dricks, Victor

Subject:

RE: Media calls in response to situation in Japan

Date:

Thursday, March 17, 2011 11:16:00 AM

#### I spoke to Mike yesterday

#### Lara Uselding

U.S. Nuclear Regulatory Commission (NRC)

Public Affairs - Region IV

Lara.Uselding@nrc.gov

BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Hageman Jenny N [mailto:jehagem@WCNOC.com]

Sent: Thursday, March 17, 2011 9:43 AM

To: Dricks, Victor; Uselding, Lara

Subject: FYI: Media calls in response to situation in Japan

From: Hageman Jenny N

Sent: Thursday, March 17, 2011 9:37 AM

To: 'OPA4.Resource@nrc.gov'

Cc: Yunk Jennifer L; Burgio Cassandra A; Autrey Cathy C; Muilenburg William T

**Subject:** FYI: Media calls in response to situation in Japan

Lara/Victor,

We have received several media calls from local and regional media this week in response to the situation in Japan. This morning, I briefed Chris Long, the senior resident inspector at Wolf Creek, on the activity. I've attached a list of the contacts we've received.

Mike McGraw, a reporter for the Kansas City Star, asked me "how often are you inspected by the NRC." To that, I explained that Wolf Creek, like all U.S. plants, have resident inspectors on site full time who are indepedent of the plant and additionally the NRC brings in inspection teams to look at specific areas. I did not mention Chris or Charlie by name. Mike referenced a copy of a recent inspection report (problem identification and resolution), and Matt Suneri, Wolf Creek CEO, answered questions relative to that.

Here is a link to the resulting online story: <u>Nuclear plants in KC area not immune from problems - KansasCity.com</u>. The print version was under the headline, "Nuclear Plants Have Had Glitches," and it ran on page 16 of 18.

I am out of the office today and tomorrow and will be back in the office Saturday (to support our maintenance and refueling outage). If you have questions, please contact

Cassie Burgio, 620-364-4071, or via e-mail, cahaas@wcnoc.com.

Jenny

## Jenny Hageman

Corporate Communication Staff Specialist | Wolf Creek Nuclear Operating Corporation w. 620.364.4070 | c. (b)(6) | jehagem@wcnoc.com

<<2011Contacts.doc>>

Uselding, Lara

To:

Hageman Jenny N: Dricks, Victor

Subject:

RE: Media calls in response to situation in Japan

Date:

Thursday, March 17, 2011 11:16:00 AM

Victor is out this week. It's just me. Send reporters my way for NRC related issues to 817-276-6519 and direct them to our website as well <a href="www.nrc.gov">www.nrc.gov</a>. The call volume is great and there is some delay in me responding but I will. I've been telling reporters to see blogs and PRs on our site

#### Lara Uselding

U.S. Nuclear Regulatory Commission (NRC) Public Affairs - Region IV

Lara.Uselding@nrc.gov BlackBerry: (b)(6)

Office: 817-276-6519

For more information visit www.nrc.gov

From: Hageman Jenny N [mailto:jehagem@WCNOC.com]

Sent: Thursday, March 17, 2011 9:43 AM

To: Dricks, Victor, Uselding, Lara

Subject: FYI: Media calls in response to situation in Japan

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To: 'OPA4.Resource@nrc.gov'

Cc: Yunk Jennifer L; Burgio Cassandra A; Autrey Cathy C; Muilenburg William T

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Mike McGraw, a reporter for the Kansas City Star, asked me "how often are you inspected by the NRC." To that, I explained that Wolf Creek, like all U.S. plants, have resident inspectors on site full time who are indepedent of the plant and additionally the NRC brings in inspection teams to look at specific areas. I did not mention Chris or Charlie by name. Mike referenced a copy of a recent inspection report (problem identification and resolution), and Matt Suneri, Wolf Creek CEO, answered questions relative to that.

Here is a link to the resulting online story: <u>Nuclear plants in KC area not immune from problems - KansasCity.com</u>. The print version was under the headline, "Nuclear Plants Have Had Glitches," and it ran on page 16 of 18.

Ordaz, Vonna

To:

Dudes, Laura; Ruland, William; McIntyre, David

Cc: Subject: Dorman, Dan; Haney, Catherine; Einziger, Robert; Rahimi, Meraj

Date:

Proposal to handle dried Spent fuel pool.docx Thursday, March 17, 2011 12:39:24 PM

Attachments:

Proposal to handle dried Spent fuel pool,dock

#### Laura,

I understand that you are on duty as the RST Director today. From our shift last night, Bill Ruland and the RST staff were discussing various approaches to address the potentially dry SFP. One of our Senior Materials Experts, Bob Einziger has prepared the attached proposal to offer support on how to handle a dry SFP. He is available, if needed, and can be reached at (b)(6)

Thanks, Vonna

### Proposal to handle dried spent fuel pool

# RE Einziger, Ph.D. SFST/MNSS/NRC

Credential: I have over 30 yrs experience at National Laboratories studying the behavior of Spent Fuel rods in an Oxidizing Atmosphere.

The spent fuel consists of UO2 fuel inside a Zircaloy-2 cladding covered with a Zirconium oxide layer and a layer of CRUD. If the pool goes dry, the rods will heat up until the rate of heat production is balanced by the rate of heat removal by conduction, convection, and radiation. As the rod is heating up the gas inside the rod will be stressing the cladding, that has a lower yield strength and thus the cladding will expand. The expansion will cause the CRUD to flake off and break up to particulate in the 1-10 micron range as it hits the pool floor. This CRUD, with a main radioactive component as Co-60 may become airborne

Somewhere between 600 and 1000C the Zircaloy cladding that has a high concentration of zirconium hydrides on the outer surface may catch on fire. Zirconium hydride is pyrophoric but the ignition temperature is not an intrinsic properties but is dependent onn many features including the surface to volume ratio of the cladding. Concurrently the pressure in the rod will continue to rise until ~750C when the rod will burst, ejecting fission gases and volatiles in the gap including Cs and I compounds. Some fuel particulate will also be ejected.

As these temperatures the exposed fuel will rapidly oxidize to U3O8 with a ~32% volume expansion. This expansion will split the cladding from end to end in a relatively short time. The fuel, now in grain size articulate (~10-15 micron) will stay in the cladding as a compact until it experiences a mild physical force at which time it will fall to the bottom of the pool.

Of primary important is to prevent the oxidation of the UO2 fuel that contains the preponderance of the radionuclides. Unless you can cover the fuel completely with water the fuel will oxide. When water is sprayed on the fuel, steam is formed which further oxidizes the fuel. A better choice would be to put liquid Argon in the pool if it is available. In not then use liquid N2. The benefits of these gases are that they have a large, (1000 times) volume expansion when they vaporize thus a small volume has to be put in the pool then the volume of water and more importantly, both will displace the oxygen and prevent the further oxidation of the fuel. (note that this is more effective for the Argon than the N2). Once the oxygen is displaced, both the fire, if it occurs, and fuel oxidation will stop. At this point it would be best to fill the pool with sand and glass formers and let the fuel melt into a glass. Since the assemblies are ~ 50% dense, and the pool is about ½ to 2/3 full (at least it was when I was there in November). The glass layer would be about 3-5 feet high. The molten glass could then be quenched to solidify it. One has to be aware though, if the fuel is allowed to melt into a glass, most of the fission gases, and volatiles trapped in the fuel pellets would escape.

Any success of this plan would be dependent on the availability of liquid gases in Japan, and ability to deliver them. That is out of my range of expertise.

Just a suggestion.

McIntyre, David Andrew Restuccia

To: Subject:

RE: Question

Date:

Thursday, March 17, 2011 12:46:00 PM

We believe it is still sufficient – as I noted, it's considered a basis that can be expanded if circumstances warrant. However, I would be mighty surprised if that question doesn't come up when we review this incident for lessons learned!

From: Andrew Restuccia [mailto:arestuccia@thehill.com]

Sent: Thursday, March 17, 2011 12:15 PM

**To:** McIntyre, David **Subject:** Re: Question

Is 10 miles for evacuation in the U.S. enough given that the NRC called for a 50-mile evacuation zone in Japan?

On Thu, Mar 17, 2011 at 12:08 PM, Andrew Restuccia <a restuccia@thehill.com wrote: Yes, it does. Thanks for the speedy response!

On Thu, Mar 17, 2011 at 12:06 PM, McIntyre, David < <u>David.McIntyre@nrc.gov</u>> wrote: Emergency preparedness plans for nuclear power plants, developed by the licensees working with NRC and FEMA, are based on a 10-mile radius around each plant for evacuation, and a 50-mile radius "ingestion zone" – one that would look at food supplies, etc. These were developed considering design-basis accidents for each plant. The zones were always considered a base that could be expanded if circumstances warrant.

Does that help?

From: Andrew Restuccia [mailto:arcstuccia@thehill.com]

Sent: Thursday, March 17, 2011 11:23 AM

To: McIntyre, David Subject: Question

The Union of Concerned Scientists just said that NRC doesn't require plans for evacuating the area surrounding a nuclear plant beyond a 10-mile radius. Is that true?

Andrew Restuccia
Staff Writer
The Hill
arestuccia@thehill.com
Office: 202-407-8012
Cell: (b)(6)

Follow me on Twitter: @AndrewRestuccia http://thehill.com/blogs/e2-wire

From:

McIntyre, David

To:

Couret, Ivonne; Burnell, Scott

Subject:

RE: Platts - info

Date:

Thursday, March 17, 2011 4:43:00 PM

### Done.

From: Couret, Ivonne

**Sent:** Thursday, March 17, 2011 4:05 PM **To:** Burnell, Scott; McIntyre, David

Subject: FW: Platts - info

Let me know who takes it..Ivonne

Ivonne L. Couret
Public Affairs Officer
Office of Public Affairs
Media Desk
opa.resource@nrc.gov
301-415-8200

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2010-2011 Information Digest - Where you can find NRC Facts at a Glance http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

From: Akstulewicz, Brenda

Sent: Thursday, March 17, 2011 3:47 PM

**To:** Couret, Ivonne **Subject:** Platts - info

Maureen Conley

**Platts** 

301-933-9008 CK

(b)(6)

info on shared spent fuel pool at Fukushima – is it in a separate bldg.

## **Brenda Akstulewicz**

Administrative Assistant Office of Public Affairs 301-415-8209 brenda akstulewicz@nrc.gov

orenaa.akstulewiczenrc.gor



000/291

From:

Bonaccorso, Amy

To:

McIntyre, David

Cc:

Deavers, Ron; Screnci, Diane

Subject:

RE: Japan Related Call

Date:

Thursday, March 17, 2011 9:33:29 AM

### Dave:

We don't have NPP specific data up here...but Wikipedia just added something about this NPP being a similar design to the ones in Japan.

Can you help?

Thanks,

## Amy

From: Screnci, Diane

Sent: Thursday, March 17, 2011 9:29 AM To: Bonaccorso, Amy; Deavers, Ron Subject: FW: Japan Related Call

Can you guys handle?

## DIANE SCRENCI

SR. PUBLIC AFFAIRS OFFICER USNRC, RI 610/337-5330

From: McFadden, John

Sent: Thursday, March 17, 2011 9:27 AM

To: Screnci, Diane

Cc: Urban, Richard; Johnson, Sharon; McFadden, John

Subject: Japan Related Call

The following individual called and wanted to know what the NRC is doing about the Pilgrim NPP since it is old and similar in design to the Japanese plants and is also vulnerable to tsunamis and earthquakes.

Wanda Doles

W: 617.896.5201

H: (b)(6)

From: To: Virgilio, Martin Virgilio, Rosetta

Subject:

FW: Japan event Q&As - additional info

Date:

Thursday, March 17, 2011 9:14:00 PM

Bob Nelson is now heading up the communications effort

From: Leeds, Eric

Sent: Thursday, March 17, 2011 2:38 PM

**To:** Dean, Bill; McCree, Victor; Satorius, Mark; Collins, Elmo; Lew, David; Wert, Leonard; Pederson, Cynthia; Howell, Art; Boger, Bruce; Grobe, Jack; Wiggins, Jim; Evans, Michaele; Sheron, Brian; Uhle, Jennifer; Johnson, Michael; Holahan, Gary; Haney, Catherine; Dorman, Dan; Miller, Charles; Moore, Scott; Doane, Margaret; Mamish, Nader; Boyce, Thomas (OIS); Schmidt, Rebecca; Powell, Amy; Brenner, Eliot; Hayden, Elizabeth; McDermott, Brian

**Cc:** Virgilio, Martin; Weber, Michael; Ash, Darren; Nguyen, Quynh; Meighan, Sean; Kammerer, Annie; Landau, Mindy; Wittick, Brian; Morris, Scott; Bahadur, Sher; Blount, Tom; Brown, Frederick; Cheok, Michael; Galloway, Melanie; Giitter, Joseph; Givvines, Mary; Hiland, Patrick; Holian, Brian; Howe, Allen; Lee, Samson; Lubinski, John; McGinty, Tim; Nelson, Robert; Quay, Theodore; Ruland, William; Skeen, David

Subject: Japan event Q&As - additional info

I've assigned Bob Nelson, Deputy Director, Division of Operating Reactor Licensing, as the NRR Coordinator for External Communications related to NRR's response to the recent events in Japan. Nelson and his team will be responsible for coordinating the development and review of related Qs & As, and coordinating the response to related controlled correspondence tasked to NRR, including related 2.206 petitions. Assisting Nelson will be Sean Meighan and Quynh Nguyen from the NRR front office, Eric Thomas from DIRS and a communications "tiger team" being formulated in DORL headed by Mike Markley. Harold Chernoff will also provide assistance as needed. Please forward all of your requests for support in this area to Nelson. (Extension 7298 and cell: (b)(6)

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

00/293

## Weaver, Tonna

From:

Kammerer, Annie

Sent:

Thursday, March 17, 2011 2:36 AM

To: Cc: Kammerer, Annie; Hiland, Patrick; Skeen, David; Case, Michael; RST01 Hoc

Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Giitter, Joseph; Howe, Allen; Ruland, William; Dudes,

Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Revnoso, John; Lantz, Ryan; Markley, Michael; Orders, William; Santiago, Patricia; Snor

Reynoso, John; Lantz, Ryan; Markley, Michael; Orders, William; Santiago, Patricia; Snodderly, Michael; Baggett, Steven; Sosa, Belkys; Davis, Roger; Franovich, Mike; Castleman, Patrick; Sharkey, Jeffry; Boska, John; Ma, John; Tegeler, Bret; Patel, Pravin; Shams, Mohamed; Morris, Scott; Brenner, Eliot; Harrington, Holly; Seber, Dogan; Ledford, Joey; Johnson,

Michael; Virgilio, Martin; Holahan, Vincent; Bergman, Thomas

Subject:

Seismic Q&As March 17th 2am update

Attachments:

Seismic Questions for Incident Response 3-17-11 2am.pdf

All,

As promised, a sharepoint site has been set up where our friends in NRR will be posting the latest version of the Seismic Q&A document on an ongoing basis. If someone would prefer to use the sharepoint site, instead of being on this distribution list, please let me know...

http://portal.nrc.gov/edo/nrr/NRR%20TA/FAQ%20Related%20to%20Events%20Occuring%20in%20Japan/Forms/Allitems.aspx

This latest update has a number of new questions (not many with answers today, but we are working hard). A high priority question we are working on is "how many plants are near a mapped active fault". We're focusing on anything within 50 miles. We're also pulling relevant questions from the congressional inquiries we just received; and will also give these high priority to support any needs by NRR.

Many new figures and some draft fact sheets have added to the "additional information" section. These include the NRO half of a tsunami fact sheet...a description of the tsunami research is still to come from RES.

Some good news: Yesterday's version seems to have been widely forwarded around the agency. So, we are also starting to get some excellent questions from staff looking forward. This is allowing us to feel that we are finally getting out in front of things to a small degree. Also, our team has grown and we now have someone acting as source of seismic expertise for the 11pm to 7 am shift. This means that we now have seismic experts available to the RST and OPA at the Op Center 24 hours, with 2 people during the day. That extra support is allowing us to get this out at least an hour earlier today ©

We are continuing to compile the questions that come in and update the seismic Q&A document. If you have suggested changes, or want to provide missing answers, please forward them to me for compilation.

This is a living document and will be updated daily in the foreseeable future.

Happy St. Paddy's Day. May the world (especially our friends in Japan) have the luck of the Irish today.

Cheers, Annie

Dr. Annie Kammerer, PE Senior Seismologist and Earthquake Engineer 000/294

红色,是最近的玻璃点,从外间的影响影响影响影响影响,是一个人名的古马马·迪·斯特·斯特·斯特·斯特·克克·斯特·斯特·克克·斯特·万里·斯特·斯特·斯特·斯特·斯特

US Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Washington DC 20555

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(b)(6)	mobile
	ВВ

From: Kammerer, Annie

Sent: Tuesday, March 15, 2011 3:41 AM

To: Hiland, Patrick; Skeen, David

Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Giitter, Joseph; Howe, Allen; Case, Michael; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael

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Subject: latest version of Q&As

All,

This is the first draft of the seismic-specific Q&As. It is pretty rough and there are many answers still missing, but people have contributed a lot and we thought it may be useful for many people trying to answer questions coming in.

We are continuing to compile the questions that come in and update the seismic Q&A document. If you have suggested changes, or want to provide missing answers, please forward them to me for compilation.

This is a living document and will be updated daily in the foreseeable future.

## Annie

Dr. Annie Kammerer, PE Senior Seismologist and Earthquake Engineer US Nuclear Regulatory Commission Office of Nuclear Regulatory Research Washington DC 20555

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	E	B			

## Nelson, Robert

From:

Nelson, Robert

Sent:

Thursday, March 17, 2011 2:27 PM

To: Subject: Harrington, Holly FYI: Seismic Q&As

Attachments:

image001.png

Importance:

High

Heads up for possible action tomorrow.

## NELSON

From: Nelson, Robert

Sent: Thursday, March 17, 2011 2:18 PM

To: Kammerer, Annie

Cc: Roberts, Darrell; Croteau, Rick; Kennedy, Kriss; Lara, Julio; West, Steven; Shear, Gary; Ruland, William; Boger,

Bruce; Meighan, Sean; Nguyen, Quynh; Giitter, Joseph

Subject: Action: Seismic O&As

Importance: High

Annie:

The regions have a critical need for publicly releasable seismic info (Qs & As) to support public meetings beginning next week. We need a releasable version of your document. Can you assemble the info that you have prepared that you believe is good to go. We can then get that reviewed by OPA. Need your input tomorrow.

R. M. Nedan

Robert A. Nelson Deputy Director Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation



E-mail: robert.nelson@nrc.gov | Office: (301) 415-1453 | Cell

🖺 Fax: (301) 415-2102l

From: Kammerer, Annie

**Sent:** Thursday, March 17, 2011 2:36 AM

To: Kammerer, Annie; Hiland, Patrick; Skeen, David; Case, Michael; RST01 Hoc

Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Giitter, Joseph; Howe, Allen; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael; Orders, William; Santiago, Patricia; Snodderly, Michael; Baggett, Steven; Sosa, Belkys; Davis, Roger; Franovich, Mike; Castleman, Patrick; Sharkey, Jeffry; Boska, John; Ma, John; Tegeler, Bret; Patel, Pravin; Shams, Mohamed; Morris, Scott; Brenner, Eliot; Harrington, Hølly; Seber, Dogan; Ledford, Joey; Johnson, Michael; Virgilio, Martin; Holahan, Vincent; Bergman, Thomas

**Subject:** Seismic Q&As March 17th 2am update

## All.

As promised, a sharepoint site has been set up where our friends in NRR will be posting the latest version of the Seismic Q&A document on an ongoing basis. If someone would prefer to use the sharepoint site, instead of being on this distribution list, please let me know.

http://portal.nrc.qov/edo/nrr/NRR%20TA/FAQ%20Related%20to%20Events%20Occuring%20in%20Japan/Forms/Allitems.aspx

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Happy St. Paddy's Day. May the world (especially our friends in Japan) have the luck of the Irish today.

Cheers, Annie

Dr. Annie Kammerer, PE
Senior Seismologist and Earthquake Engineer
US Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Washington DC 20555
[(b)(6)

(b)(6) mobile BB

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Sent: Tuesday, March 15, 2011 3:41 AM

To: Hiland, Patrick; Skeen, David

Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Giitter, Joseph; Howe, Allen; Case, Michael; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael

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## Annie

## Nelson, Robert

From:

Nelson, Robert

Sent:

Thursday, March 17, 2011 3:32 PM

To: Subject: Harrington, Holly RE: Seismic Q&As

Attachments:

image001.png

I understand. That's why I gave you the heads up.

## **NELSON**

From: Harrington, Holly

Sent: Thursday, March 17, 2011 3:29 PM

To: Nelson, Robert

Subject: RE: Seismic Q&As

Do not post without OPA review and approval

From: Nelson, Robert

Sent: Thursday, March 17, 2011 2:27 PM

**To:** Harrington, Holly **Subject:** FYI: Seismic Q&As

Importance: High

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Robert A. Nelson
Deputy Director
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Office of Nuclear Reactor Regulation

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E-mail: robert.nelson@nrc.gov | Soffice: (301) 415-1453 | Cell (6)(6)
Fax: (301) 415-2102

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Cheers, Annie

Dr. Annie Kammerer, PE Senior Seismologist and Earthquake Engineer US Nuclear Regulatory Commission

Office of Nuclear Regulatory	Research
Washington DC 20555	

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## Annie

Dr. Annie Kammerer, PE Senior Seismologist and Earthquake Engineer US Nuclear Regulatory Commission Office of Nuclear Regulatory Research Washington DC 20555

(b)(6) mobile BB

From:

Weter, Mithael

To:

Sheron, Brian

Cc:

Virgida, Martin; Barchardt, Fill; Havden, Elizabeth; Bosman, Gregory; Wittick, Brian; Leeds, Eric; Boser, Bruce; Unie, Jenesfer

Subject:

Response - NBC deadline question for NRC on seismic hazard estimates

Date:

Thursday, March 17, 2011 9:41:06 PM

Thanks for the headsup, Brian.

---- Original Message -----From: Sheron, Brian

To: Brenner, Eliot; Virgilio, Martin; Weber, Michael

Cc: Uhle, Jennifer

Sent: Thu Mar 17 21:34:28 2011

Subject: FW: NBC deadline question for NRC on seismic hazard estimates

fyi.

From: Bill Dedman [Bill.Dedman@msnbc.com] Sent: Thursday, March 17, 2011 4:49 PM

To: Burnell, Scott

Cc: Manoly, Kamal; Sheron, Brian; Hiland, Patrick; OPA Resource Subject: RE: NBC deadline question for NRC on seismic hazard estimates

Scott,

Reporters from other news organizations are telling me that you're telling them that our numbers are wrong.

Is that true?

I'm making clear to these reporters:

Don't be misled. NRC hasn't said our numbers are wrong. I checked my interpretation with Scott Burnell in Public Affairs, who checked with the NRC technical staff before publication. No challenge from NRC has arrived after publication.

After all, they're NRC's numbers.

What NRC is saying is that it doesn't do rankings. That's right. We did, from NRC's data. That's what the story says. (If the NRC was publishing the American League East standings, it would list them alphabetically. That's OK with me: Yankees would be last.)

You can see for yourself in the NRC report that:

- -- NRC says the risk of quakes in the central and eastern states is higher than previously thought.
- -- It still thinks plants are safe.
- -- but their margin of safety is reduced.
- -- and some plants are now near the point where they should be re-examined, and perhaps retrofitted.

-- and the staff says this should now move from being a research issue to a regulatory issue.

-- and it has made its best estimates of the frequency (chance, odds) of an earthquake that would cause core damage to a plant, and those are in Appendix D, last column on the right.

Here are the links, which are also at the bottom of the article:

#### Resources

These links open in a new window.

The NRC report with new earthquake risk

estimates < <a href="http://nsnbcmedia.msn.com/i/msnbc/Sections/NEWS/quake%20nrc%20nsk%20estimates.pdf">http://nsnbcmedia.msn.com/i/msnbc/Sections/NEWS/quake%20nrc%20nsk%20estimates.pdf</a>, "Generic Issue 199 (GI-199), Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants, Safety/Risk Assessment," August 2010. PDF file. Note: Data for individual reactors are in appendix D. How to interpret the figures: Indian Point 3, in Appendix D, shows a value of 1.0E-04. That's scientific notation for 0.0001, or one out of 10,000. It says 04, and it gets three (04 minus 1) zeros between the decimal place and the value. I converted that to the words 1 in 10,000 chance each year.

An NRC fact sheet<a href="http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html">http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html</a> from November 2010, "Seismic Issues for Existing Nuclear Power Plants."

Earthquake history of each state<a href="http://earthquake.usgs.gov/earthquakes/states/">http://earthquake.usgs.gov/earthquakes/states/</a>, from the USGS.

A USGS brochure describing the changes in the 2008 seismic hazard maps<a href="http://msnbcmedia.msn.com/i/msnbc/Sections/NEWS/usgs%202008%20seismic%20hazard%20maps.pdf">http://msnbcmedia.msn.com/i/msnbc/Sections/NEWS/usgs%202008%20seismic%20hazard%20maps.pdf</a>. PDF

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file.

The NRC database of active nuclear reactors<a href="http://www.nrc.gov/reactors/operating/list-power-reactor-units.html">http://www.nrc.gov/reactors/operating/list-power-reactor-units.html</a> in the U.S. Each reactor name links to technical and safety documents.

Industry response to

questions<a href="msnbcmedia.msn.com/i/msnbc/Sections/NEWS/industry%20fag%20on%20japanese%20situation.pdf">nsnbc/Sections/NEWS/industry%20fag%20on%20japanese%20situation.pdf</a> about the situation in Japan. PDF file.

A scientific paper describing the New Madrid

earthquake<a href="http://articles.adsabs.harvard.edu/full/1996AREPS..24..3391/0000339.000.html">http://articles.adsabs.harvard.edu/full/1996AREPS..24..3391/0000339.000.html</a>, and what can be learned by melding modern science with writings from long ago.

A brochure with a table comparing values for magnitude and peak ground acceleration < <a href="http://www.mgs.md.gov/esic/brochures/earthquake.html">http://www.mgs.md.gov/esic/brochures/earthquake.html</a>>.

The ranking of 104 nuclear plants by risk, by msnbc.com from NRC data, in an Excel spreadsheet file<a href="files/filmsnbcmedia.msn.com/i/msnbc/Sections/NEWS/earthquake%20risk%20table%20msnbc.com%20public%20file.xls">file<a href="files/filmsnbcmedia.msn.com/i/msnbc/Sections/NEWS/earthquake%20risk%20table%20msnbc.com%20public%20file.xls">file<a href="files/filmsnbcmedia.msn.com/i/msnbc/Sections/NEWS/earthquake%20risk%20table%20msnbc.com%20public%20file.xls">file<a href="files/files Bill

[cid:lmage001.jpg@01CBE4C3.554A27F0]<<u>http://form1.static.flickr.com/224/463372630\_3244dd3db2.jpg?</u> v=11.76851663>

Bill Dedman | investigative reporter

msnbc.com, the news site, a joint venture of NBC and Microsoft

bill.dedman@msnbc.com<<u>mailto:bill.dedman@msnbc.com</u>> | cell|(b)(6)

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archive of stories and videos: http://dedman.msnbc.com

blog: http://OpenChannel.msnbc.com

on Twitter: http://twitter.com/billdedman

on Facebook: http://www.facebook.com/investigative.reporter

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From: Burnell, Scott [mailto:Scott\_Burnell@nrc\_gov] Sent: Wednesday, March 16, 2011 7:25 AM

To: Bill Dedman Subject: RE: Numbers

I understand you're making a honest effort to convey the latest research, but I have no doubt the technical staff are going to have significant problems with how you've presented it. I'll pass along whatever specific technical corrections they provide.

Scott

From: Bill Dedman

Sent: Wednesday, March 16, 2011 6:44 AM

To: 'Kamal.Manoly@nrc.gov'; 'brian.sheron@nrc.gov'; 'patrick.hiland@nrc.gov'; 'OPA.Resource@nrc.gov'

Subject: RE: NBC deadline question for NRC on seismic hazard estimates

This story is online now. If you see any error, please let me know right away.

Thanks,

Bill

http://www.msnbc.msn.com/id/42103936/ns/world\_news-asiapacific/

From: Bill Dedman

Sent: Tuesday, March 15, 2011 9:06 AM

To: 'Kamal.Manoly@nrc.gov'; 'brian.sheron@nrc.gov'; 'patrick.hiland@nrc.gov'; 'OPA.Resource@nrc.gov'

Subject: NBC deadline question for NRC on seismic hazard estimates

Good morning,

My name is Bill Dedman. I'm a reporter for NBC News and msnbc.com, writing an article today about:

SAFETY/RISK ASSESSMENT RESULTS FOR GENERIC ISSUE 199, "IMPLICATIONS OF UPDATED PROBABILISTIC SEISMIC HAZARD ESTIMATES IN CENTRAL AND EASTERN UNITED STATES ON EXISTING PLANTS"

I reached out to NRC Public Affairs yesterday but have not heard back, and my deadline is end-of-day today. I'm hoping to get on the phone today with someone from NRC to make sure I'm conveying this information accurately to the public If nothing else, I'm hoping one of the technical people can help clarify the points below. My telephone number is (b)(6)

I've read Director Brian Sheron's memo of Sept. 2, 2010, to Mr. Patrick Hiland; the safety/risk assessment of August 2010; its appendices A through D; NRC Information Notice 2010-18; and the fact sheet from public affairs from November 2010.

#### I have these questions:

- 1. I'd like to make sure that I accurately place in layman's terms the seismic hazard estimates. I need to make sure that I'm understanding the nomenclature for expressing the seismic core-damage frequencies. Let's say there's an estimate expressed as "2.5E-06." (I'm looking at Table D-2 of the safety/risk assessment of August 2010.) I believe that this expression means the same as 2.5 x 10^-06, or 0.0000025, or 2.5 divided by one million. In layman's terms, that means an expectation, on average, of 2.5 events every million years, or once every 400,000 years. Similarly, "2.5E-05" would be 2.5 divided by 100,000, or 2.5 events every 100,000 years, on average, or once every 40,000 years. Is this correct?
- 2. These documents give updated probabilistic seismic hazard estimates for existing nuclear power plants in the Central and Eastern U.S. What document has the latest seismic hazard estimates (probabilistic or not) for existing nuclear power plants in the Western U.S.?
- 3. The documents refer to newer data on the way. Have NRC, USGS et al. released those? I'm referring to this: "New consensus seismic-hazard estimates will become available in late 2010 or early 2011 (these are a product of a joint NRC, U.S. Department of Energy, U.S. Geological Survey (USGS) and Electric Power Research Institute (EPRI) project). These consensus seismic hazard estimates will supersede the existing EPRI, Lawrence Livermore National Laboratory, and USGS hazard estimates used in the GI-199 Safety/Risk Assessment."
- 4. What is the timetable now for consideration of any regulatory changes from this research?

Thank you for your help.

Regards,

Bill Dedman

This e-mail message and attached documents are confidential; intended only for the named recipient(s) above and may contain information that is privileged, confidential, proprietary, and/or exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any unauthorized use, dissemination, distribution or copy of this communication is strictly prohibited. No waiver of privilege, confidence or otherwise is intended by virtue of this communication. If you have received this message in error, or are not the named recipient(s), please immediately notify the sender, destroy all copies and delete this e-mail message from your computer. Thank you.

From:

Brenner, Fliot

To:

Sheron, Brian; Virgilio, Martin; Weber, Michael

Cc:

Uble Jeonifer

Subject: RE: NBC deadline question for NRC on seismic hazard estimates

Date:

Thursday, March 17, 2011 9:43:08 PM

#### Thanks ....

Jennifer and co. are going to give me a few paragraphs to put up on our website tomorrow to put some context to this. We may have blown the guy off because of time constraints, but I don't think so.

#### eliat

----Original Message-----From: Sheron, Brian

Sent: Thursday, March 17, 2011 9:34 PM

To: Brenner, Eliot; Virgilio, Martin; Weber, Michael

Cc: Uhle, Jennifer

Subject: FW: NBC deadline question for NRC on seismic hazard estimates

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estimates http://msnbcmedia.msn.com/i/msnbc/Sections/NEWS/quake%20nrc%20risk%20estimates.pdf>, "Generic Issue 199 (GI-199), Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants, Safety/Risk Assessment," August 2010. PDF file. Note: Data for individual reactors are in appendix D. How to interpret the figures: Indian Point 3, in Appendix D, shows a value of 1.0E-04. That's scientific notation for 0.0001, or one out of 10,000. It says 04, and it gets three (04 minus 1) zeros between the decimal place and the value. I converted that to the words 1 in 10,000 chance each year.

An NRC fact sheet<a href="http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html">http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html</a> from November 2010, "Seismic Issues for Existing Nuclear Power Plants."

Earthquake history of each state<a href="http://earthquake.usgs.gov/earthquakes/states/">http://earthquake.usgs.gov/earthquakes/states/</a>, from the USGS.

A USGS brochure describing the changes in the 2008 seismic hazard maps<a href="http://msnbcmedia.msn.com/i/msnbc/Sections/NEWS/usgs%202008%20seismic%20hazard%20maps.pdf">http://msnbcmedia.msn.com/i/msnbc/Sections/NEWS/usgs%202008%20seismic%20hazard%20maps.pdf</a>. PDF file.

The NRC database of active nuclear reactors<a href="http://www.nrc.gov/reactors/operating/list-power-reactor-units.html">http://www.nrc.gov/reactors/operating/list-power-reactor-units.html</a> in the U.S. Each reactor name links to technical and safety documents.

Industry response to

questions<a href="http://msnbcmedia.msn.com/i/msnbc/Sections/NEWS/industry%20fag%20on%20japanese%20situation.pdf">http://msnbcmedia.msn.com/i/msnbc/Sections/NEWS/industry%20fag%20on%20japanese%20situation.pdf</a> about the situation in Japan. PDF file.

A scientific paper describing the New Madrid

earthquake<<a href="http://articles.adsabs.harvard.edu/full/1996AREPS..24\_339J/0000339.000.html">http://articles.adsabs.harvard.edu/full/1996AREPS..24\_339J/0000339.000.html</a>>, and what can be learned by melding modern science with writings from long ago.

A brochure with a table comparing values for magnitude and peak ground acceleration<a href="http://www.mgs.md.gov/esic/brochures/earthquake.html">http://www.mgs.md.gov/esic/brochures/earthquake.html</a>>.

The ranking of 104 nuclear plants by risk, by msnbc.com from NRC data, in an Excel spreadsheet file<a href="file="

[cid:image001.jpg@01CBE4C3.554A27F0]<a href="http://farm1.static.flickr.com/224/463372630\_3244dd3db2.jpg?">http://farm1.static.flickr.com/224/463372630\_3244dd3db2.jpg?</a> v=1176851663>

Bill Dedman | investigative reporter

msnbc.com, the news site, a joint venture of NBC and Microsoft

bill.dedman@msnbc.com<mailto;bill.dedman@msnbc.com> |

cell (b)(6)

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30 Rockefeller Plaza, Room 4423-7, New York, NY 10112

archive of stories and videos: http://dedman.msnbc.com

blog: http://OpenChannel.msnbc.com

on Twitter: http://twitter.com/billdedman

on Facebook: http://www.facebook.com/investigative.reporter

[cid:image002.gif@01CBE4C3.554A27F0] < http://www.msnbc.com/ > [cid:image003.jpg@01CBE4C3.554A27F0] < http://www.today.msnbc.msn.com/ > [cid:image004.gif@01CBE4C3.554A27F0] < http://www.newsvine.com/ > [cid:image005.jpg@01CBE4C3.554A27F0] < http://www.breakingnews.com/ > [cid:image006.jpg@01CBE4C3.554A27F0] < http://www.breakingnews.com/ >

From: Burnell, Scott [mailto:Scott Burnell@nrc.gov]

Sent: Wednesday, March 16, 2011 7:25 AM

To: Bill Dedman Subject: RE: Numbers

Bill

I understand you're making a honest effort to convey the latest research, but I have no doubt the technical staff are going to have significant problems with how you've presented it. I'll pass along whatever specific technical corrections they provide.

Scott

From: Bill Dedman

Sent: Wednesday, March 16, 2011 6:44 AM

To: 'Kamal.Manoly@nrc.gov'; 'brian.sheron@nrc.gov'; 'patrick.hiland@nrc.gov'; 'OPA.Resource@nrc.gov'

Subject: RE: NBC deadline question for NRC on seismic hazard estimates

This story is online now. If you see any error, please let me know right away.

Thanks,

Bill

http://www.msnbc.msn.com/id/42103936/ns/world\_news-asiapacific/

From: Bill Dedman

Sent: Tuesday, March 15, 2011 9:06 AM

To: 'Kamal.Manoly@nrc.gov'; 'brian.sheron@nrc.gov'; 'patrick.hiland@nrc.gov'; 'OPA.Resource@nrc.gov'

Subject: NBC deadline question for NRC on seismic hazard estimates

Good morning

My name is Bill Dedman. I'm a reporter for NBC News and msnbc.com, writing an article today about:

SAFETY/RISK ASSESSMENT RESULTS FOR GENERIC ISSUE 199, "IMPLICATIONS OF UPDATED PROBABILISTIC SEISMIC HAZARD ESTIMATES IN CENTRAL AND EASTERN UNITED STATES ON EXISTING PLANTS"

I reached out to NRC Public Affairs yesterday but have not heard back, and my deadline is end-of-day today. I'm hoping to get on the phone today with someone from NRC to make sure I'm conveying this information accurately to the public If nothing-else, I'm hoping one of the technical people can help clarify the points below. My telephone number is (b)(6)

I've read Director Brian Sheron's memo of Sept. 2, 2010, to Mr. Patrick Hiland; the safety/risk assessment of August 2010; its appendices A through D; NRC Information Notice 2010-18; and the fact sheet from public affairs from November 2010.

I have these questions:

- 1. I'd like to make sure that I accurately place in layman's terms the seismic hazard estimates. I need to make sure that I'm understanding the nomenclature for expressing the seismic core-damage frequencies. Let's say there's an estimate expressed as "2.5E-06." (I'm looking at Table D-2 of the safety/risk assessment of August 2010.) I believe that this expression means the same as 2.5 x 10^-06, or 0.0000025, or 2.5 divided by one million. In layman's terms, that means an expectation, on average, of 2.5 events every million years, or once every 400,000 years. Similarly, "2.5E-05" would be 2.5 divided by 100,000, or 2.5 events every 100,000 years, on average, or once every 40,000 years. Is this correct?
- 2. These documents give updated probabilistic seismic hazard estimates for existing nuclear power plants in the Central and Eastern U.S. What document has the latest seismic hazard estimates (probabilistic or not) for existing nuclear power plants in the Western U.S.?
- 3. The documents refer to newer data on the way. Have NRC, USGS et al. released those? I'm referring to this: "New consensus seismic-hazard estimates will become available in late 2010 or early 2011 (these are a product of a joint NRC, U.S. Department of Energy, U.S. Geological Survey (USGS) and Electric Power Research Institute (EPRI) project). These consensus seismic hazard estimates will supersede the existing EPRI, Lawrence Livermore National Laboratory, and USGS hazard estimates used in the GI-199 Safety/Risk Assessment."
- 4. What is the timetable now for consideration of any regulatory changes from this research?

Thank you for your help.

Regards,

Bill Dedman

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reader of this message is not the intended recipient, you are hereby notified that any unauthorized use, dissemination, distribution or copy of this communication is strictly prohibited. No waiver of privilege, confidence or otherwise is intended by virtue of this communication. If you have received this message in error, or are not the named recipient(s), please immediately notify the sender, destroy all copies and delete this e-mail message from your computer. Thank you.

From:

Landau, Mindy

To:

Hayden, Elizabeth

Cc:

Rakovan, Lance; Wyatt, Melissa; McIntyre, David; Brenner, Eliot; Harrington, Holly; Couret, Ivonne; Janbergs,

Holly; Burnell, Scott

Subject:

RE: Attn: Deanna - A Request for a Speaker for IEEE Power & Enegy Society Conference in Detroit, on July 25,

2011

Date:

Monday, April 18, 2011 2:10:42 PM

## Outstanding!

From: Hayden, Elizabeth

Sent: Monday, April 18, 2011 2:03 PM

To: Landau, Mindy

Cc: Rakovan, Lance; Wyatt, Melissa; McIntyre, David; Brenner, Eliot; Harrington, Holly; Couret, Ivonne;

Janbergs, Holly; Burnell, Scott

Subject: RE: Attn: Deanna - A Request for a Speaker for IEEE Power & Enegy Society Conference in

Detroit, on July 25, 2011

Thanks. I've instructed my staff to forward any speaking requests on Japan to you and Lance.

### Beth

From: Landau, Mindy

Sent: Monday, April 18, 2011 11:12 AM

To: Hayden, Elizabeth

Cc: Rakovan, Lance; Wyatt, Melissa

Subject: RE: Attn: Deanna - A Request for a Speaker for IEEE Power & Enegy Society Conference in

Detroit, on July 25, 2011

Yes, they are fully aligned. Lance and Melissa are working to set up a SharePoint site which should be completed this week, and then we can work on communicating a process out to the offices. I sent them the request from IEEE, along with a couple of others I have already received. Stay tuned — we'll put it on the agenda for this week's Communication Council meeting.

### Mindy

From: Hayden, Elizabeth

Sent: Monday, April 18, 2011 10:39 AM

To: Landau, Mindy

Subject: FW: Attn: Deanna - A Request for a Speaker for IEEE Power & Enegy Society Conference in

Detroit, on July 25, 2011

Did you get a chance to brief the DEDO's on this? If so, what was the outcome?

#### Beth

From: Hayden, Elizabeth

Sent: Thursday, April 14, 2011 6:06 PM

To: Hayden, Elizabeth; Harrington, Holly; Brenner, Eliot

Subject: RE: Attn: Deanna - A Request for a Speaker for IEEE Power & Enegy Society Conference in

Detroit, on July 25, 2011

We met and Mindy agreed to take charge to set up a mini speakers bureau. She will coordinate with us and they will keep track of all requests and briefing material on a sharepoint site. Mindy will run this by the DEDOs tomorrow morning, although I already talked to Marty who was very supportive of the idea.

Beth

From: Hayden, Elizabeth

**Sent:** Tuesday, April 12, 2011 6:38 PM **To:** Harrington, Holly; Brenner, Eliot

Subject: RE: Attn: Deanna - A Request for a Speaker for IEEE Power & Enegy Society Conference in

Detroit, on July 25, 2011

Mindy and I are meeting on Thursday to try to strategize the best way for the agency to handle these requests.

Beth

From: Harrington, Holly

**Sent:** Monday, April 11, 2011 10:44 AM **To:** Brenner, Eliot; Hayden, Elizabeth

Subject: RE: Attn: Deanna - A Request for a Speaker for IEEE Power & Energy Society Conference in

Detroit, on July 25, 2011

It would be ideal IMHO if the EDO worked jointly with us. We can confirm messaging, advise on which conferences meet our needs and help screen appropriate folks, but the actual booking would be done by EDO.

From: Brenner, Eliot

Sent: Monday, April 11, 2011 10:41 AM

**To:** Hayden, Elizabeth **Cc:** Harrington, Holly

Subject: RE: Attn: Deanna - A Request for a Speaker for IEEE Power & Enegy Society Conference in

Detroit, on July 25, 2011

Agreed. Time to seize control, or get control into a single place, is now.

From: Hayden, Elizabeth

Sent: Monday, April 11, 2011 10:40 AM

**To:** Brenner, Eliot **Cc:** Harrington, Holly

Subject: FW: Attn: Deanna - A Request for a Speaker for IEEE Power & Enegy Society Conference in

Detroit, on July 25, 2011

Eliot.

As you work with the Chairman in the near-term to get the word out on NRC actions with regard to Japan, I believe we need to start putting together a strategy/plan to respond to longer-term talking engagements re Japan and decide how we should respond.

This recent request is for the end of July from IEEE which should be enough time for us to

participate in a technical conference such as this one. However, before we accept any of these engagements, I believe the agency could have a pre-determined cadre of people (maybe the LL Task Force) to handle these Japan-related requests, use pre-approved briefing material, and is controlled through a single point of contact (hopefully OPA or OEDO). Otherwise, we're likely to get requests through all parts of the agency, and without a plan or guidelines, decisions will be made on a case-by-case basis and likely without centralized knowledge.

What would you think about talking with the DEDOs to develop a strategy for the next 6-12 months for responding to these type of requests so that we have a consistent message and are knowledgeable about the universe of requests? Obviously this approach would need to be vetted with the Chairman's office, as well.

Beth

From: Janbergs, Holly On Behalf Of OPA Resource

Sent: Monday, April 11, 2011 7:45 AM

To: Hayden, Elizabeth

Subject: FW: Attn: Deanna - A Request for a Speaker for IEEE Power & Energy Society Conference in

Detroit, on July 25, 2011

From: b\_djokic@sympatico.ca [mailto:b\_djokic@sympatico.ca]

Sent: Friday, April 08, 2011 9:54 AM

To: OPA Resource

Subject: Attn: Deanna - A Request for a Speaker for IEEE Power & Energy Society Conference in

Detroit, on July 25, 2011

Hi Deanna,

It was nice speaking with you on the phone this morning.

Power and Energy Society (PES) of IEEE, the largest professional association for advancement of technology (http://www.ieee.org), is organizing a power conference called General Meeting (GM) in Detroit from July 24-28, 2011 (http://pes-gm.org/2011/). In view of the recent tragic events caused by earthquake and tsunami in Japan and the evolving situation with the Fukushima nuclear power plants, the conference organizers deemed that it would be appropriate to address what happened and what impact it is going to have on power industry and, more specifically on the nuclear power industry, in North America and worldwide. I was wondering if US NRC would like to delegate a speaker who would give a talk at the conference on implications of the recent events in Japan on the policies related to nuclear power industry in North America. The talk should be technical and would take place in the Emerging Technologies Coordinating Committee (ETCC) Late Breaking News Session on Smart Grids, on Monday, July 25, sometime between 1-5 pm, probably closer to the beginning, in the duration of about 30 min, including Q&A. In addition to speaker's expertise, his/her speaking capability would also matter. At a later time, a brief abstract of the talk and speaker's bio will be needed.

Looking forward to hearing from you at your earliest convenience.

Thank you.

Regards,

Branislav Djokic, Ph.D., P.Eng. Chair, IEEE PES ETCC Work: 613-990-5371 H5me: (b)(6)

From:

LIA02 Hoc

To:

Borchardt, Bill; Virgillo, Martin; Weber, Michael; Pace, Patti; Speiser, Herald; Gibbs, Catina; Loyd, Susan; Leeds, Eric; Cohen, Shari; Schwarz, Sherry; Haney, Catherine; Walls, Lorena; Sheron, Brian; Wallser, Dwight; Johnson,

Michael; Flory, Shirley

Subject:

Update for Go Books - 1800 EDT, March 17, 2011

Date: Attachments: Thursday, March 17, 2011 6:05:21 PM Remarks by President on Japan Situation oct

ET Chronology 3-17-11 532pm.pdf

USNRC Earthquake-Tsunami Update.031711.1700EDT.pdf Talking Points Two Pager. 031711.1700 EDT.docx

TEPCO Press Release 47.pdf TEPCO Press Release 46.pdf

Please find attached updated information for the "Go Books".

## The updates include:

- The 1700, 3/17/11 Status Update
- The 1700, 3/17/11 Talking Points "Two-Pager"
- The latest ET Chronology
- The latest TEPCO Press Releases
- Remarks by President Obama on the Japan situation

Please let me know if you have any questions or concerns.

-Sara

Sara Mroz
Office of Nuclear Security and Incident Response
US Nuclear Regulatory Commission
Sara Mroz@nrc.gov
LIA07.HOC@nrc.gov (Operations Center)

000 300

## OST04 Hoc

From:

LIA07 Hoc

Sent:

Thursday, March 17, 2011 5:07 PM

To:

OST04 Hoc

Subject:

FW: Remarks by the President on the Situation in Japan

Attachments:

FW: Japan Embassy pt. 2

For books ... Also for go books

From: RMTPACTSU\_ELNRC [mailto:RMTPACTSU\_ELNRC@ofda.gov]

**Sent:** Thursday, March 17, 2011 4:41 PM

To: LIA11 Hoc; LIA01 Hoc; LIA07 Hoc; LIA02 Hoc; LIA08 Hoc; LIA12 Hoc; ET07 Hoc; Marshall, Jane; Harrington, Holly;

McIntyre, David; Grant, Jeffery

Subject: Remarks by the President on the Situation in Japan

Subject: FW: Remarks by the President on the Situation in Japan

Please see the President's remarks below

Below is the POTUS statement on Japan. He also visited the Japanese Embassy this afternoon to offer condolences (pool reports are attached for color)

From: White House Press Office [mailto:noreply@messages.whitehouse.gov]

**Sent:** Thursday, March 17, 2011 4:12 PM

To: Trienens, Lillian (E&E.AA)

**Subject:** Remarks by the President on the Situation in Japan

THE WHITE HOUSE Office of the Press Secretary

For Immediate Release

March 17, 2011

REMARKS BY THE PRESIDENT ON THE SITUATION IN JAPAN

Rose Garden

3:35 P.M. EDT

THE PRESIDENT: Good afternoon, everyone. Over the last several days, the American people have been both heartbroken and deeply concerned about the developments in Japan.

We've seen an earthquake and tsunami render unimaginable -- an unimaginable toll of death and destruction on one of our closest friends and allies in the world. And we've seen this powerful natural disaster cause even more catastrophe through its impact on nuclear reactors that bring peaceful energy to the people of Japan.

Today, I wanted to update the American people on what we know about the situation in Japan, what we're doing to support American citizens and the safety of our own nuclear energy, and how we are helping the Japanese people contain the damage, recover and rebuild.

First, we are bringing all available resources to bear to closely monitor the situation, and to protect American citizens who may be in harm's way. Even as Japanese responders continue to do heroic work, we know that the damage to the nuclear reactors in Fukushima Daiichi plant poses a substantial risk to people who are nearby. That is why yesterday, we called for an evacuation of American citizens who are within 50 miles of the plant. This decision was based upon a careful scientific evaluation and the guidelines that we would use to keep our citizens safe here in the United States, or anywhere in the world.

Beyond this 50-mile radius, the risks do not currently call for an evacuation. But we do have a responsibility to take prudent and precautionary measures to educate those Americans who may be endangered by exposure to radiation if the situation deteriorates. That's why last night I authorized the voluntary departures of family members and dependents of U.S. officials working in northeastern Japan.

All U.S. citizens in Japan should continue to carefully monitor the situation and follow the guidance of the U.S. and Japanese governments. And those who are seeking assistance should contact our embassy and consulates, which continue to be open and operational.

Second, I know that many Americans are also worried about the potential risks to the United States. So I want to be very clear: We do not expect harmful levels of radiation to reach the United States, whether it's the West Coast, Hawaii, Alaska, or U.S. territories in the Pacific. Let me repeat that: We do not expect harmful levels of radiation to reach the West Coast, Hawaii, Alaska, or U.S. territories in the Pacific. That is the judgment of our Nuclear Regulatory Commission and many other experts.

Furthermore, the Centers for Disease Control and Prevention and public health experts do not recommend that people in the United States take precautionary measures beyond staying informed. And going forward, we will continue to keep the American people fully updated -- because I believe that you must know what I know as President.

Here at home, nuclear power is also an important part of our own energy future, along with renewable sources like wind, solar, natural gas and clean coal. Our nuclear power plants have undergone exhaustive study, and have been declared safe for any number of extreme contingencies. But when we see a crisis like the one in Japan, we have a responsibility to learn from this event, and to draw from those lessons to ensure the safety and security of our people.

That's why I've asked the Nuclear Regulatory Commission to do a comprehensive review of the safety of our domestic nuclear plants in light of the natural disaster that unfolded in Japan.

Finally, we are working aggressively to support our Japanese ally at this time of extraordinary challenge. Search and rescue teams are on the ground in Japan to help the recovery effort. A disaster assistance and response team is working to confront the aftermath of the earthquake and tsunami. The U.S. military, which has helped to ensure the security of Japan for decades, is working around the clock.

To date, we've flown hundreds of missions to support the recovery efforts, and distributed thousands of pounds of food and water to the Japanese people. We've also deployed some of our leading experts to help contain the damage at Japan's nuclear reactors. We're sharing with them expertise, equipment, and technology so that the courageous responders on the scene have the benefit of American teamwork and support.

And the American people have also opened up their hearts. Many have given generously to support the ongoing relief efforts. The Red Cross is providing assistance to help meet the immediate needs of those who've been displaced. And I would encourage anybody who wants to lend a hand to go to usaid.gov to learn more -- that's usaid.gov -- to find out how you can be helpful.

As I told Prime Minister Kan last night, and reaffirmed at the Japanese embassy here in Washington today, the Japanese people are not alone in this time of great trial and sorrow. Across the Pacific, they will find a hand of support extended from the United States as they get back on their feet. After all, we have an alliance that was forged more than a half century ago, and strengthened by shared interests and democratic values. Our people share ties of family, ties of culture, and ties of commerce. Our troops have served to protect Japan's shores, and our citizens have found opportunity and friendship in Japan's cities and towns.

Above all, I am confident that Japan will recover and rebuild because of the strength and spirit of the Japanese people. Over the last few days, they've opened up their homes to one another. They've shared scarce resources of food and water. They've organized shelters, provided free medical care, and looked out for their most vulnerable citizens. One man put it simply: "It's a Japanese thing. When hard times hit, we have to help each other."

In these hard times, there remains, nevertheless, hope for the future. In one small town that had been flattened by the tsunami, emergency workers rescued a four-month-old baby who had been swept out of her parents' arms and stranded for days among the debris. No one can say for certain just how she survived the water and the wreckage around her. There is a mystery in the course of human events.

But in the midst of economic recovery and global upheaval, disasters like this remind us of the common humanity that we share. We see it in the responders who are risking their lives at Fukushima. We show it through the help that has poured into Japan from 70 countries. And we hear it in the cries of a child, miraculously pulled from the rubble.

In the coming days, we will continue to do everything we can to ensure the safety of American citizens and the security of our sources of energy. And we will stand with the people of Japan as they contain this crisis, recover from this hardship, and rebuild their great nation.

Thanks very much.

END

3:42 P.M. EDT

# Unsubscribe

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## OST04 Hoc

From:

White House Press Office [noreply@messages.whitehouse.gov]

Sent:

Thursday, March 17, 2011 3:17 PM Trienens, Lillian (E&E.AA) [USAID]

To: Subject:

FW: Japan Embassy pt. 2

----Original Message----

From: Leary@sptimes.com [mailto:Leary@sptimes.com]

Sent: Thursday, March 17, 2011 3:01 PM

To: Finkenbinder, Benjamin N.; Hughes, Caroline E.

Subject: Japan Embassy pt. 2

President Chama visited the Japan Embassy, in an unannounced trip, and signed a condolence book.

POTUS sat at a table covered in white cloth with the book before him. He sat for about 4 minutes 30 seconds. In front of him, on another table, were flowers and handwritten cards. "We are thinking of you," one read. "Sorry," read another.

POTUS wrote: "My heart goes out to the people of Japan during this enormous tragedy. Please know that America will always stand by one of its greatest allies during this time of need. Because of the strength and wisdom of its people, we know that Japan will recover, and indeed will emerge stronger than ever. And as it recovers, the memory of those who have been lost will remain in our hearts, and will serve only to strengthen the relationship between our two countries. May God bless the people of Japan." He signed his name and wrote "March 2011" after his signature.

Then POTUS addressed the pool saying the purpose was to communicate how "heartbroken," America is over the tragedy. "We are doing everything we can to stand by our great friend and ally, Japan, in this hour of need," he said. He offered sympathy for lives lost and those who are now displaced.

POTUS said he was "confident" Japan will rebuild, praising its "strong" and "dedicated"

Said Ambassador of Japan Ichiro Eujisaki: "We are so grateful to the president and the people of the United States."

Alex Leary Staff Writer

St. Petersburg Times [(b)(6)

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Leary@sptimes.com

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## OFFICIAL USE ONLY FEDERAL AND FOREIGN GOVERNMENT CONTROLLED INFORMATION

NRC "Talking Points" - Current as of March 17, 2011, 1700 EDT

## Reactor Status

- Fukushima Daiichi Units 1 6
  - TEPCO is working to restore site power and anticipates restoration to Units 2,5, and 6 today and Units 1, 3, and 4 tomorrow.

### Unit 1

- Core damage occurred due to insufficient cooling water caused by loss of offsite power and onsite diesel generators following the tsunami
- As of 2200 JST (0900 EDT) on March 14, it is reported that sea water is being injected with reported stable cooling
- Primary containment described as "functional"
- Hydrogen explosion from overheated fuel-water reaction has damaged reactor building (secondary containment)
- The spent fuel pool level is unknown.
- Radiation levels 150-1000 mrem/hour at 1000 EDT on March 16, 2011, at site gate. (Site gate is same for each unit.)
- Core cooling is via the core spray header.

#### Unit 2

- Core damage occurred due to insufficient cooling water caused by loss of offsite power and onsite diesel generators following the tsunami
- Reactor Core Isolation Cooling (RCIC) has failed
- Secondary containment: Cut hole in the side of the reactor building superstructure to reduce likelihood of hydrogen gas buildup
- Sea water injection restarted with core cooling reported as not stable
- Primary containment is intact
- Radiation levels 150-1000 mrem/hour at 1000 EDT on March 16, 2011, at site gate. (Site gate is same for each unit.)
- The spent fuel pool level is unknown: Some water is available as evidenced by steam emanating from hole.

### Unit 3

- Core damage due to insufficient cooling water caused by loss of offsite power and onsite diesel generators following the tsunami
- Sea water is being injected with reported stable cooling
- Hydrogen explosion from overheated fuel-water reaction has severely damaged reactor building (secondary containment)
- Primary containment described as "functional"
- The spent fuel pool level is unknown. Stopped attempt to dump water from helicopter.
- Radiation levels 150-1000 mrem/hour at 1000 EDT on March 16, 2011, at site gate. (Site gate is same for each unit.)
- Unit 3 spent fuel pool is currently TEPCO's priority
- Water cannon did not work, stopped use.

### Unit 4

- Unit was in a refueling outage at the time of the event and core was off loaded to the SFP
- First fire in the reactor building was a small generator lube oil fire. IAEA reports that fire was put out at 2200 EDT, March 14.
- Radiation levels 150-1000 mrem/hour at 1000 EDT on March 16, 2011, at site gate. (Site gate is same for each unit.)
- Second fire began at 1645 EDT, March 15, 2011 in reactor building. Spent fuel reported to be uncovered.
- Radiation level outside Unit 4 reported to be 30R/hour following second fire.

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## OFFICIAL USE ONLY - FEDERAL AND FOREIGN GOVERNMENT CONTROLLED INFORMATION

- High radiation dose rates measured between Units 3 and 4, source is suspected to be the Unit 4 spent fuel pool. May have debris on ground. When removed, dose rates lowered.
- The spent fuel pool's ability to retain water is in doubt, no steam may be dry.

#### Unit 5

- The reactor core is in vessel. Unit in protracted outage.
- IAEA Reports Temperature of pool at 64.5 degrees C at 1500 EDT, March 16, 2011.
- Unit 6 diesel generator is providing power to cool Units 5 and 6 spent fuel pools.

#### Unit 6

- The reactor <u>core is in vessel</u>. <u>Unit in protracted outage</u>.
- IAEA Reports Temperature of pool at 61.0 degrees C at 1300 EDT, March 16, 2011.
- Unit 6 emergency diesel generator available. Power made available to both units 5 and 6. Power being used to cool spent fuel pools.

## Other Japanese Nuclear Sites:

- Fukushima Daini Units 1 4: As of 7:15 am on March 15 (Japan), Tepco press release reports reactors in cold shutdown and offsite power available.
- Onagawa Units 1 3: shutdown, stable, turbine building basement fire extinguished.
- Kashiwazaki Kariwa Nüclear Power Station (Advanced Reactors): Units 1, 5, 6, 7: normal operation / Units 2 to 4: regular outage
- Rokkasho: all units continue safe operations without malfunctions, impacts from earthquake quickly mitigated (emergency diesel generators used, spilt SFP liquid drained and recovered in liquid waste treatment)

## Protective Action Recommendations

- For Fukushima Daiichi site, Japanese national government issued a protective action recommendation that instructed evacuation for local residents within a 20km radius of the site boundary and sheltering in place out to 30km for residents who stayed behind
- Japan has imposed no-fly zone (30km radius, altitude unlimited) over Daiichi plants.
- A RASCAL run at 06:54AM (EDT) on March 16, 2011 for hypothetical combined core based on the following
  assumptions: Units 2 & 3 each, 33% core melt & no containment; Unit 4, full core offload 100% melt in the Spent
  Fuel Pool (SFP) with no roof; wind direction from West Northwest blowing out to the ocean. Results: PAG
  exceded at 50 miles (80.5 km) with TEDE of 24.0 rem, and CDE thyroid of 130 rem.
- Based upon the degrading situation at the Daiichi plant, the US NRC recommends that Americans within 50 miles of the Daiichi plant to evacuate the area.
- The US State Department has approved voluntary authorized departure of family members at the U.S. Embassy in Tokyo, the U.S. Consulate in Nagoya and the Foreign Service Institute in Yokohama.

## Meteorological Conditions:

Forecast meteorological data for the 24 hour period (<u>until 2000 EDT on March 18, 2011</u>) indicates wind headed offshore (from NW/westerly).

## General Talking Points

- TEPCO and US Forces in Japan (USFJ) are working together to allocate firefighting and heavy equipment capable of pumping seawater from the ocean into containments.
  - o TEPCO abandoned efforts to supply water via helicopter and water cannon.
  - A list of additional equipment to provide for accident mitigation has been developed by NRC and provided to USAID.
  - o Five portable pumps arrived at the Daiichi facility Thursday (1130 SST) from Yokota Air Force Base. Additional equipment to connect pumps is being coordinated.
    - DEFICIAL USE ONLY FEDERAL AND FOREIGN GOVERNMENT CONTROLLED INFORMATION

# OFFICIAL USE ONLY - FEDERAL AND FOREIGN GOVERNMENT CONTROLLED INFORMATION

- Disaster Assistance Response Team arrived Sunday:
  - o 11 NRC staff are in Tokyo with the Ambassador and getting information from Japanese officials.
- NRC continues to develop projections of the accident's progression, dose estimates and Q&As, including those addressing the safety of reactors in operation in the US.
- Government of Japan has accepted US offer to conduct aerial/ground monitoring and also requested potassium iodide tablets. DOE Aerial Measurement Teams have completed fly over the Daiichi site. <u>Data received. PMT working to correlate AMS data with limited survey data from Japan.</u>
- The NRC has been asked to provide recommendations for solutions to the spent fuel pool issues during conference call with NISA and TEPCO.

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#### Press Releases

Press Release (Mar 17,2011)

Plant Status of Fukushima Dalichi Nuclear Power Station (as of 0:00 pm Mar 17th)

#### All 6 units of Fukushima Daiichi Huclmar Power Station have been shut down

#### Unit 1 (Shut down)

nat lishut down. Reserver, the explicitor round and white make were confirmed after the big quake countred at 1:36fH Mar (2th. 1), we abtuined to be hydrogen explosion and durantly under the coverigation. We have come impertung set when into the reserver presume vessel.

#### Unit 2(Shut down)

- Next related down) Results has been shot down and Results Core Irolation Coming System has been injecting water to the resistor. However, reacter pressure has increased obscure the system stopped, massing teaster water level to diop. Following the tooksention by the government and with fully securing early, measure to lever the pressure level within the resulter containment vased and injection of one water were taken, resulter pressure and water level returned.
- We are continuing the injection of sea water into the reactor.

  At approximately fidder, as should notice negat establish for nearby Presente Suppleasion Chamber and the piscoure within this chamber. ueci eased.
- While we montinus real water injection operations, the temperaty transfer of TERMS employees and workers from which Companies not directly levelsed in this work has begun.

## Unit 3 (Shut down)

- nat dishut down)

  Reactor has been plut Hown. Howover, the explorive wound and whare aroke were confirmed at 11:01AM Mar 14th. It was sessmed to be hydroged explosion and contractly under the leader contractor. He confirmed for life steam from reactor building at 8:20AM on March 18th. As it was reported that the pressure of the Suppression Charger torputally increased to scopial filbAM on March 18th, we will continue mendioning.
- tompetally increased to drown riches on material and, we want program monitoring.

  In order to upon spent fuel pool of Unit 3 we conducted water spray by helicopters of Self-Delence Force at approximately 9265 and We size condinguisty monitoring the spent field pool and plan to conduct water spray to other Units.

  We have been injusting due water into the reactor pressure veisel.

# Unit 4 (shut down due to regular inspection) - Equation has been about down, However, was had

- Eguages has base shat down, However, was have senficeed the sostained damage around the 5th 17oor confitop area of the hypokear Seanton
- ACCOUNTING. Afterwards, we confirmed the outbreak of this at the contemestors pure of Bources Genetic Boilding, we breedintely reported this matter to the five department and the release authorities. However, it approximately Hisboxa, when ISBOD exploses mirred at the seas to continue, the fire had already condition. At hisbox as born' lattle, we confirmed the eathership in the large again but cold our statism it at 6:10AM. We will continue to monitor the situation carefully.

### Unit 5 (outage due to regular inspection)

- Percent has been that down and definition level of machor contant to entors defety of maintained. Contently, we do not believe there is any swarter exclusion toakage introducts the resonant consequences worse).

- Unit 6 (outage due to regular inspection)

   Reactor has been that down and sufficient level of leactor coplant to enable safety is empirically.

   Currently, we do not believe there is any reactor coplant leakage inside

## the resetor containment vessel.

- Casualty 2 workers of adoptionable firm were injured at the occurrence of

- 2 Workers at cooperative firm were injured at the constrained of the centrhysise, and were transported to the heapthal.

   3 YERO employee who was not while to stand by his owe with his land holding lett chest was transported to the besourch by an administrate where it important earthquake principle was unabsection and transported to the heapthal by an administrate was unabsection and transported to the heapthal by an administrate was the research exposed to the heapthal by an administrate was the research to the property of the property of the property of the property of the heapthal.

   2 SERCO recovers but build during their operation in the control countries record to finit 1 and 2 while warring fait mayer, and were transported to finit has a standard acciser.

   4 workers were injured and transported to the heapthal after explosive sound and white makes were confirmed apportant to Public.

Station after explosive sound and white smake were confirmed around the Unit 3.0me of the injured, workers got medical transpent on March 16th, but the worker reported a Hamk pain. We re quired to the offsite ochter that the worker should be transported to the hospital. After that, the helicopter at 3500 arrived and transported the worker to the FUNUSHIMA Medical University Rospital. at 10:56AM

- Presence of 2 TEPCO employees at the site is not confirmed.

- We are contently considerating with the polevant authorities and departments on new to secure the scaling water to cool down the water in the spenh nativer facil post of the point.

  We measured radioactive materials loaded of the nuclear power of sticn area (catious) by most wind gar and confirm; that redicantive materials level is getting higher sham thannary level. As itsed below, we have determined that specific innegative the plant of a strain 15, clause (Abnormal increase in radiation down measured at size boundary) have occurred.

  \*\*Cottendard of 4:17 pm Mar 12th (Atound Monitoring Post 4)
  \*\*Cottendard of 2:18 pm Mar 13th (Around Monitoring Post 4)
  \*\*Cottendard of 2:18 pm Mar 13th (Around Monitoring Post 6)
  \*\*Cottendard at 2:18 pm Mar 13th (Around Monitoring Post 6)
  \*\*Cottendard of 2:18 pm Mar 14th (Around Monitoring Post 2)
  \*\*Cottendard at 9:27 pm Mar 14th (Around Monitoring Post 3)
  \*\*Cottendard at 9:27 pm Mar 14th (Around Monitoring Post 3)
  \*\*Cottendard at 9:38 pm Mar 15th (Around Monitoring Post 3)
  \*\*Cottendard at 9:39 pm Mar 15th (Around main entrance)
  \*\*Cottendard at 9:39 pm Mar 15th (Around main entrance)
  \*\*Cottendard at 9:39 pm Mar 15th (Around main entrance)
  \*\*Cottendard at 9:39 pm Mar 15th (Around main entrance)
  \*\*Cottendard at 9:39 pm Mar 15th (Around main entrance)
  \*\*Cottendard at 9:39 pm Mar 15th (Around main entrance)

- We will continue to make announcements when it was determined that a specific intrinsic powersent has nestracted evaluation for those local testational government has nestracted evaluation for those local testations within 10 mm radius of the perightery and evaluation to inside for this consents from 30km to Form iddius of the nerochery, because this powerful that radioactive materials are discharged. Today, at approximately form, we objected 40cm/90km at the inland side of the Unit 3 reactor building and 180s/90km at the inland size of the Unit 4 reactor sadidag.

  We will consider to take all measures to restore the security of the side and to most out the environment of the date periphery.

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#### Press Releases

Press Relanse (Mar 17,2011) Plant Status of Fukushima Daischi Nuclear Power Station (as of 0:00 pm Mar 17th)

#### All 6 units of Fukushima Dalichi Nuclear Power Station have been shut down.

#### Unit 1 (Shut down)

- or has maps sout down. However, the explosive sound and white smoke were nonlined after the big quake nothered it bi36PR Mai lith it was described to be hydrogen explosion and currently usder the investigation. We have been intectung the water into the reactor pressure versel.

- int Z (Shut down)

  Readtor has been fruit down and Peactor Core Inclusion Cooling System has been interesting water to the reactor. However, reactor produce has increased because the system stopped, causing react; water level for arms. Patients of he instruction by the obserment and with fully securing strety, measure to lower the pressure level within the reactor exponential beauty and superior of sea water were lavel, reactor pressure and water level covered.

  We are constructed to imperior of sea water were lavel, reactor. At approximately 804ms, an absorbed in the began scanning from nearly fundance. Suppression Charbor and for pressure within this charber decreased.
- entended.

   While we continue our water injection operations, the temperary trinsfer of 12200 amployees and workers from other companies not directly
- involved in this work has begin.

### Unit 3(Shut down)

- Unit 3(Shut down)

  \*\*Reactor has been shot shan, Bowever, the explosive sound and white stake well confirmed at little Mar 16th, it was boomed to be Tydrhann exploring and obtainly moder the investigation.

  \*\*We confirmed fee like steam for teactor butleing at bislaw on Moran White As it was togative that the presented the Suppression Charder temporally intressed at stood 615AM on March 17th, we will continue contention.
- monitoring.
- In order to cool spent fuel pool of Unit ( we conducted water appray by Leicopters of Scale Potents, Force of approximately 9:45 of, economic continuously positioning the great fuel pool and plot to conduct water approximate to the Unit.
- apply to other Waltr. We have been injecting sea walms into the reactor pressure vestel.

- Unit 4 (shut down due to regular inspection)

   Reactor has been shest down. Sowever, we have continued the essential damage around the line finer reactor area at the Realest Reactor. Smilding
- Allerwoids, we continued the mathreak of fire at the continuenters part of Nuclear Feactor Emilding. We immediately reported this ratter to the fine capactment god the related authorities.
- ince department don the related authoritates. Before employee arrived at the however, at approximately lifedam, when TEPDO employee arrived at the seen to centism, the life had discould used them. At StateM on Barch 16th, we contismed the outlinesk of the time again but could not confirm at at StateM. We will confirm to monitor the nituation parafelly.

## Unit 5 (outage due to regular inspection)

- Fearby has been that dear and sufficient level of reactor contant to ensity the maintained.

  Our really, we do not become these is any reactor one last tasked testing the reactor contained research.

#### Unit 6 (outage due to regular inspection)

- nac o (outage due to requier inspection)
  Reparton has been abit doen and autilizioni level of reactor schient to
  espero safety is maintained.
  Cartenily, we do not believe there is any reactor contant leakage inside
  the reportor contratement reseal.

- Casualty

  2 workers of cooperative firm wars injured at the agons sense of the earthquake, and were transported to the badgitual.

  1 TEPCO supleyes who was not this to stand by his own with his hard herding left cheat was transported to the baggitud of an arbulance.

  1 succontract worker at important warthquakenpood building was unconscious and transported to the dispitual by an arbulance.

  1 the radiation exposure of 1 TEPC employer, who was working issued the reactor beliefung, exposured that have an exposured to the hospitual by an embulance.

  2 TEPCO employees test and desired their specialism in the central control remained to their and 2 which working full makes, and went transported to Pekuchina Defen fewer Centing for conscitution with a medical advisor.

  4 workers were injured out transported by the hospitud advisor explication and and white spoke were confirmed around the Poil verse expectations and the source and and write spoke were confirmed around the Poil.

Station after explosive sound and which which were confirmed around Station after explosive sound and which maken were confirmed around the Unit 3.One of the injured wherens got medical treatment on March 18th, but the worker reported a flow path, Were quities in the offsite denier that the worker should be transported to the hospital. After that, the helicopter of JRDP arrived and transported the worker to the FDRUSHIMA Medical University Hospital of 10.554M

- Presence of 2 TEPGO employees at the sate is not confirmed.

- Others

  We are currently originated with the relevant authorities and departments as to how to occure the cooling water to cool down the water in the spend nuclear last pool of the plant.

  We meastered radioantive materials invide of the modesor power station area (outdoor) by sunitaring our and annihmmed that radioactive materials lawd) is oetfore higher than addicary level. As listed below, we have determined that specifies incodence supplied in actions of a lite boundary) have scoursed.

  \*\*Clause I(Absormal increase in radiation dose measured at site boundary) have scoursed.

  \*\*Determined at \$120 pm Mar 12th (Around Monitoring Post 4)

  \*\*Determined at \$125 pm Mar 12th (Around Monitoring Post 4)

  \*\*Determined at \$125 pm Mar 14th (Around Monitoring Post 4)

  \*\*Determined at \$125 up Mar 14th (Around Monitoring Post 5)

  \*\*Determined at \$127 up Mar 14th (Around Monitoring Post 3)

  \*\*Determined at \$127 up Mar 14th (Around Monitoring Post 3)

  \*\*Determined at \$127 up Mar 14th (Around Monitoring Post 3)

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- We wish continue to make announcements when it was determined this We will continue to make ancomponents when it was contextions this a specific including stippidates in artificial fluids a base incorred. The matical government has instructed evacuation for those local context actions within 20km realist or the periphery and evacuation to inside for those resident time 20km realist or the periphery and evacuation to inside for those resident time folks in 20km resides the periphery, held senting positions that read-continues into action grow. Indiany, it approximately 10km, we also reveal actions in a his land side of the first first reactor building and IndeSv/h at the infinite content outling. We will continue to take mil measures to instance the action periphery.

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