

From: Deavers, Ron
To: (b)(6) 6
Subject: REPLY RE: REPLY RE: Public - Question
Date: Friday, March 25, 2011 3:32:44 PM

Hi Judy;

The web link for the Environmental Protection Agency RadNet database of continuous radiation monitoring results is: <http://cdx.epa.gov>

Department of Energy has made public the AMS radiological measurement data from the overflights in Japan. The web link is at <http://energy.gov/news/10194.htm>.

As we discussed, the NRC continues to monitor information regarding wind patterns near the Japanese nuclear power plants. Nevertheless, given the distance between Japan and Hawaii, Alaska, the U.S. Territories, and the U.S. West Coast, we are not expected to experience any harmful levels of radioactivity.

From: Royer, Deanna
Sent: Friday, March 25, 2011 1:51 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Public - Question

Judy Camisa

(b)(6) 6

Re: Radiation reaching HI. (b)(6) She would like to speak to someone in authority.

From: Deavers, Ron
To: Bonaccorso, Amy; Deavers, Ron
Subject: REPLY RE: Public - Question
Date: Friday, March 25, 2011 2:39:51 PM

Called, no answer, no voice mail, will try again alter.

From: Bonaccorso, Amy
Sent: Friday, March 25, 2011 2:18 PM
To: Deavers, Ron
Subject: FW: Public - Question

Ron –

This person was a little difficult – I thought your awesome phone persona might help!

From: Royer, Deanna
Sent: Friday, March 25, 2011 1:51 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Public - Question

Judy Camisa

(b)(6)

Re: Radiation reaching HI. (b)(6) She would like to speak to someone in authority.

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

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From: Deavers, Ron
To: Bonaccorso, Amy
Subject: RE: Public - Question
Date: Friday, March 25, 2011 2:33:05 PM

I will call her.

From: Bonaccorso, Amy
Sent: Friday, March 25, 2011 2:18 PM
To: Deavers, Ron
Subject: FW: Public - Question

Ron –

This person was a little difficult – I thought your awesome phone persona might help!

From: Royer, Deanna
Sent: Friday, March 25, 2011 1:51 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Public - Question

Judy Camisa

(b)(6)

Re: Radiation reaching HI. (b)(6) She would like to speak to someone in authority.

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

Deavers, Ron

From: Bonaccorso, Amy
Sent: Friday, March 25, 2011 3:59 PM
To: Deavers, Ron
Subject: FW: Response from "Contact the NRC Web Site Staff"

(I can't finish this one - got stuck on the phone and need to catch the shuttle)

Hello:

It sounds like you might be referring to the International Atomic Energy Commission's ranking system for nuclear accidents.

6
-----Original Message-----

From: OPA Resource
Sent: Friday, March 25, 2011 3:41 PM
To: Bonaccorso, Amy
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: NRCWEB Resource
Sent: Friday, March 25, 2011 3:14 PM
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: (b)(6)
Sent: Friday, March 25, 2011 11:18 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

(b)(6) on Friday, March 25, 2011 at 11:18:22

comments: With the disaster at the Fujiyama, Japan Nuclear Reactors, and compared to Three Mile Island and Chernobyl, How are each ranked ? I know Chernobyl is worst, and entire area closed for 50 thousand year's (according to National Geographic), but Three Mile Island and Fujiyama, how are they compared to Chernobyl?

organization:

address1:

address2:

Deavers, Ron

From: Page, Greg [Gpage@russell.com]
Sent: Friday, March 25, 2011 4:59 PM
To: Deavers, Ron
Subject: RE: REPLY RE: Public - Question

Thanks Ron for the quick reply!

Greg Page
Global Business Continuity Manager
Japan Recovery Chief - Operational Risk Management
253-439-5561 Office
(b)(6) Cell
Home 6
gpage@russell.com
www.russell.com

The information contained in this message is intended only for use of the recipient(s) named above. This message may contain privileged, confidential or undisclosed information. If the reader of this message is not the intended recipient or agent responsible for delivering to the intended recipient, you are hereby notified that you have received this message in error, and that any review, dissemination, distribution or copying of it is strictly prohibited. If you have received this message in error, please notify me by telephone immediately at (253) 439-5561. Thank you for your cooperation.

From: Deavers, Ron [mailto:Ron.Deavers@nrc.gov]
Sent: Friday, March 25, 2011 1:57 PM
To: Page, Greg
Subject: REPLY RE: Public - Question

Mr. Page,

Please check and continue to monitor the following internet locations for further information about the situation in Japan.

The Department of State travel web site at <http://travel.state.gov/> has a great many links that provide information that will help you and your employees decide what is best for the situation.

The Center for Disease Control and Prevention Emergency Preparedness and Response website is located at: <http://emergency.cdc.gov/radiation/>.

The Department of Energy has made public the AMS radiological measurement data from the overflights in Japan. The web link is at <http://energy.gov/news/10194.htm>

All U.S. citizens in Japan should continue to carefully monitor the situation and follow the guidance of the U.S. and Japanese governments. Those who are seeking assistance should contact our embassy and consulates, which continue to be open and operational.

From: Royer, Deanna

Sent: Friday, March 25, 2011 3:10 PM

To: Bonaccorso, Amy; Deavers, Ron

Subject: Public - Question

6
Greg Page

(b)(6)

cell

Re: He has employees in Japan and needs information on safety.

From: Janbergs, Holly on behalf of OPA Resource
To: Harrington, Holly
Subject: FW: FYI...
Date: Monday, March 28, 2011 11:55:00 AM

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

From: Voiland, Adam P. (GSFC-426.0)[Wyle Information Systems, LLC]
[mailto:adam.p.voiland@nasa.gov]
Sent: Monday, March 28, 2011 11:04 AM
To: OPA Resource
Subject: FYI...

I'm a science writer at Goddard Space Flight Center, and I just wanted to give you a heads up that we've published a few blog posts about the situation in Japan. Don't hesitate to let me know if you have any questions.

<http://blogs.nasa.gov/cm/newui/blog/viewpostlist.jsp?blogname=whatonearth>

Best,
Adam

Adam Voiland
NASA's Earth Science News Team
1-301-614-6345

(b)(6) (cell) Ex 6

S/4

From: Janbergs, Holly
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Response from "Contact the NRC Web Site Staff"
Date: Monday, March 28, 2011 9:42:00 AM

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

From: NRCWEB Resource
Sent: Monday, March 28, 2011 6:52 AM
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: Pat Hoban [(b)(6)] Ex 6
Sent: Sunday, March 27, 2011 11:14 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

Pat Hoban [(b)(6)] Ex 6 on Sunday, March 27, 2011 at 11:13:34

comments: I live about [(b)(6)] from the Dresden and Braidwood stations,
is there any kind of plan that I could find on the internet on evacuation or what to do if there was a
accident like in Japan
?

organization:

address1: [(b)(6)]

address2:

city: [(b)(6)]

state: [(b)(6)]

zip: [(b)(6)]

country: [(b)(6)]

phone: [(b)(6)]

Ex 6

S/7

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Response from "Contact the NRC Web Site Staff"
Date: Monday, March 28, 2011 9:10:00 AM

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

From: NRCWEB Resource
Sent: Monday, March 28, 2011 6:51 AM
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: (b)(6)] Ex 6
Sent: Friday, March 25, 2011 9:25 PM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

(b)(6)] Ex 6
on Friday, March 25, 2011 at 21:25:02

comments: As a concerned (b)(6) who loves the beauty and diversity of the west coast, I am writing to urge you to refuse the license renewal for Diablo Canyon Power Plant, a nuclear-power generator in California, until an independent study can be conducted of fault lines in the area.

The recent tragic events at Japan's Fukushima nuclear plant are a wake up call for the U.S. Unforgiving technology on a seismic coast is an accident waiting to happen.

Unfortunately when profits are the top priority, we cannot accept with blind faith the nuclear industry's assurances that it can prevent, or respond to, a nuclear disaster involving earthquakes.

Please inspect both Diablo Canyon and San Onofre Nuclear Generating Stations, which are both along the coast of California. California's coast is our gold and needs to be protected with utmost care.

Sincerely yours,

Mary Kathryn Orrange

(b)(6)

organization:

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country:

8/8

phone:

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Delivery Status Notification (Failure)
Date: Monday, March 28, 2011 9:05:00 AM
Attachments: ATT00001

From: Steve Moore (b)(6) Ex 6
Sent: Saturday, March 26, 2011 12:57 PM
To: OPA Resource
Subject: FW: Delivery Status Notification (Failure)

Date: Sat, 26 Mar 2011 12:47:29 -0400
To: (b)(6) Ex 6
From: MAILER-DAEMON@mail1.nrc.gov
Subject: Delivery Status Notification (Failure)

The following message to <opa.resources@nrc.gov> was undeliverable.
The reason for the problem:
5.1.1 - Bad destination email address 'reject'

--Forwarded Message Attachment--

From: (b)(6) Ex 6
To: opa.resources@nrc.gov
Subject: japan crisis
Date: Sat, 26 Mar 2011 12:47:28 -0400

gentleman, please entertain the idea of dropping DRY ICE cubes in succession into the reactor ponds and onto the reactors!! this would rapidly help in the cooling and also as the dry ice was melting it would emit carbon dioxide which is heavier than hydrogen thus displacing the hydrogen and help remove the explosive aspect!!! please consider this as a better attact than is currently being used!!! this could save lives and the country of japan!!!!!! sincerely stephan moore (b)(6)

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: japan diseaster
Date: Monday, March 28, 2011 12:43:00 PM

From: Michelle M. Schellenberg (b)(6)
Sent: Monday, March 28, 2011 12:13 PM
To: OPA Resource
Subject: japan diseaster

At the risk of being presumptuous I would suggest the following:

The water applications evaporate before getting to the core. How about trying a slurry of graphite and sand along with water to supress the reaction? Less likely to evaporate before getting to the core. After evaporation graphite would be remaining to suppress reaction. Just a thought from a concerned citizen.

Rick Schellenberg

(b)(6)

S/10

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: Public Inquiry
Date: Monday, March 28, 2011 12:04:00 PM

Scott Geld

(b)(6)

Is traveling to (b)(6) and has radiation concerns

Beth Janbergs
Public Affairs Assistant
301-415-8211

S/11

Deavers, Ron

From: Janbergs, Holly on behalf of OPA Resource
Sent: Monday, March 28, 2011 9:06 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Japan Solution

6
6
From: Scott Stenman (b)(6)
Sent: Saturday, March 26, 2011 12:53 PM
To: OPA Resource
Subject: Japan Solution

Hi

Can you spray liquid activated charcoal on the critical mass in Japan? I'd think this would absorb the neutrons. I'm wondering as we utilized this to neutralize pesticide damage in the lawn industry, and there's a bit of it out there...

Just a thought,
J. Scott Stenman.

From: Bonaccorso, Amy
To: (b)(6) 6
Bcc: Deavers, Ron
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
Date: Monday, March 28, 2011 4:18:00 PM

Hello Mr. Dodanli:

I am sorry to hear that you are worried (b)(6)

The U.S. Nuclear Regulatory Commission can't advise people on their travel plans and is responsible for regulating U.S. plants. Although the agency and staff here are helping Japan in any way they request, we aren't the best resource for overseas information.

You may want to contact the CDC about health related questions: 1-800-CDC-INFO.

Also, the State Department at 1-888-407-4747.

Maybe even try the Environmental Protection Agency at radiation.questions@epa.gov.

And the airlines are also a good place to go for information on travel restrictions.

Thank you,

Amy

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

From: Arif Melik Dodanli / (b)(6) 16
Sent: Saturday, March 26, 2011 5:58 PM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

Arif Melik Dodanli (b)(6) on Saturday, March 26, 2011 at 17:58:14

comments: Dear US NRC,

I am a a

(b)(6)

(b)(6) I have 2 questions; the first one is; after the earthquake I believe on March 14 or March 15 they have found elevated amount of radiation in Tokyo, more than usual standards, they said it was not harmful to humans, I was wondering if there was any harm to our baby during these 2 days?

and my second question is; my

(b)(6)

I had this information from a website below;

S/13

March 14 the radiation level in Tokyo was; 0.809 μSv/h (I don't have the specific time)
March 15 the radiation level in Tokyo was; at 10:37 am　　　1.62 μSv/h
March 16 the radiation level in Tokyo was; at 10 am 0.16 μSv/h and at 4.15 pm 0.36
μSv/h highest.

<http://chottomatte.net/2011/03/16/tokyo-radiation-levels-daily-updates/>

Thank you very much for your time and consideration.

Warm Regards

Arif Melik Dodanli

organization: private

address1: (b)(6)

address2: (b)(6)

city: (b)(6)

state: ---

zip: (b)(6)

country: (b)(6)

phone: (b)(6)

From: Brenner, Eliot
To: Hayden, Elizabeth; 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: Jaczko japan trip
Date: Monday, March 28, 2011 8:44:36 AM

Here is the statement put out by the embassy. Refer callers to this and go no further please, other than on background to say this is a short trip because the chairman has to be back to attend a congressional hearing wednesday:

The Chairman of the Nuclear Regulatory Commission, Dr. Gregory Jaczko, traveled to Tokyo on March 28 to convey directly to his Japanese counterparts a message of support and cooperation, and to assess the current situation.

Following his meetings with senior Japanese government and TEPCO officials, Chairman Jaczko said, "Our nuclear experts are working closely with their Japanese counterparts, and we both continue to share expert analysis as we move forward to address this challenge. I reconfirmed in my meetings that we are prepared to provide any assistance we can in the days to come."

Chairman Jaczko further added, "The unprecedented challenge before us remains serious and our best experts remain fully engaged to help Japan address the situation."

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

O: 301-415-8200

[C: (b)(6)] Ex 6

S/14


Deavers, Ron

From: Janbergs, Holly on behalf of OPA Resource
Sent: Monday, March 28, 2011 9:11 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Response from "Contact the NRC Web Site Staff"



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

From: NRCWEB Resource
Sent: Monday, March 28, 2011 6:53 AM
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: Debbie Highfill (b)(6)  6
Sent: Monday, March 28, 2011 12:22 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

6  Debbie Highfill (b)(6)  On Monday, March 28, 2011 at 00:22:20

comments: I LIVE IN THE (b)(6). THERE IS THE POSSIBILITY THAT THE HOSGRI AND SHORELINE FAULTS INTERSECT - WHICH CHANGES THE PRESENT PREDICTIONS.

PLEASE, PLEASE, PLEASE DO THE PRUDENT THING AND DO NOT ALLOW DIABLO TO BE RE-LICENSED BEFORE THE MAPPING AND REVIEW OF THE AREA IS COMPLETED.

organization: just a very concerned citizen

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6) 6

zip: (b)(6)

country: (b)(6)

phone: (b)(6)

Ghneim, Munira

From: Ghneim, Munira
Sent: Monday, March 28, 2011 10:05 AM
To: Couret, Ivonne
Subject: Dana Rattatort -Inklings (high school newspaper)

Follow Up Flag: Follow up
Flag Status: Flagged

Organization – Inklings – (high school newspaper)

Contact – Dana Rattatort

Phone – (b)(6)

Email – (b)(6)

Request – General questions about Indian Point.

Thank You
Munira Ghneim
Contract Secretary
Office of Information Services
301-415-1170

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: Did GE build 2 or more of the Fukushima nuclear power plants - Yes or No ; Are all USA plants LWR - yes or no: Is Fukushima LWR yes or no ? Thank you.
Date: Monday, March 28, 2011 2:12:00 PM

Hello Ms. Addressa:

I believe the information you are requesting is available online. NRC regulates US nuclear power plants, so the information on our website focuses on those rather than Japanese reactors.

You can find detailed information on US reactors (via a map) by clicking on the link below. The listing includes the type of reactor and also the utility/operator that owns them. I believe this will address your questions about reactor type and location.

<http://www.nrc.gov/info-finder/reactor/>

Thank you,

Amy

From: Rita Addressa (b)(6)
Sent: Friday, March 25, 2011 7:31 PM
To: OPA Resource
Cc: 'Rita Addressa'
Subject: Did GE build 2 or more of the Fukushima nuclear power plants - Yes or No ; Are all USA plants LWR - yes or no: Is Fukushima LWR yes or no ? Thank you.

NRC: Is it true that GE built 2 or more of the Fukushima nuclear power plants, Yes or No? Are the nuclear power plants in the USA all LIGHT WATER REACTORS, Yes, No, or Mixed? If mixed, what type of nuclear power reactors are in Pennsylvania? What type are in Region I overall? Are the Fukushima nuclear power plants, 2 of which purportedly were built by GE, also LIGHT WATER REACTORS, yes or no. Thank you.

Today 25 March 2010

Rita Addressa. (b)(6)

(b)(6)

S/17

From: Bonaccorso, Amy
To: (b)(6) 6
Bcc: Deavers, Ron
Subject: REPLY: Radiation Question
Date: Monday, March 28, 2011 3:00:00 PM

Hi Ms. Gackenhimer:

The U.S. Nuclear Regulatory Commission can't advise people on their travel plans and does not regulate power plants outside the United States. If you are concerned about the situation overseas and how it may impact your travel plans, please check with the airlines for travel restrictions and alerts. Also, you may want to check with the Department of State. www.travel.state.gov

Thank you,

Amy

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

From: (b)(6) 6
Sent: Friday, March 25, 2011 8:37 PM
To: OPA Resource
Subject: Radiation Question

Below is the result of your feedback form. It was submitted by

(b)(6) 6 on Friday, March 25, 2011 at 20:36:53

comments: We are planning a trip to (b)(6) we are worried about the Japan radiation being dangerous.
Is it safe to travel to (b)(6)?

contactName: Ana gackenhimer

phone: (b)(6) 6

5/18

From: McIntyre, David
To: Bonaccorso, Amy
Subject: RE: public call
Date: Monday, March 28, 2011 3:00:16 PM

Thanks for trying!

From: Bonaccorso, Amy
Sent: Monday, March 28, 2011 2:47 PM
To: McIntyre, David
Subject: RE: public call

Hi Dave:

I returned her call – very nice lady but I couldn't really help with all of her technical questions – had to refer her to EPA.

Thanks,

Amy

From: McIntyre, David
Sent: Friday, March 25, 2011 5:10 PM
To: Bonaccorso, Amy
Subject: public call

Amy – on Monday afternoon, could you please call (b)(6) Virginia Burrows at (b)(6) (b)(6) She left a msg Friday right at closing time saying she has a few questions about radiation. It's a (b)(6) number – that's why I suggest not calling her right away!

6

Thanks,
Dave

David McIntyre
Public Affairs Officer
U.S. Nuclear Regulatory Commission
(301) 415-8206 (direct)
(b)(6) (mobile) 6
Protecting People & the Environment

5/19

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: Japan Solution
Date: Monday, March 28, 2011 3:13:00 PM

Hello Mr. Stenman:

Thank you very much for your suggestion about spray liquid activated charcoal. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: Scott Stenman (b)(6)
Sent: Saturday, March 26, 2011 12:53 PM
To: OPA Resource
Subject: Japan Solution

Hi

Can you spray liquid activated charcoal on the critical mass in Japan? I'd think this would absorb the neutrons. I'm wondering as we utilized this to neutralize pesticide damage in the lawn industry, and there's a bit of it out there...

Just a thought,
J. Scott Stenman.

S/20

From: Bonaccorso, Amy
To: (b)(6) 6
Bcc: Deavers, Ron
Subject: NRC REPLY
Date: Monday, March 28, 2011 3:25:00 PM

Hello Mr. Moore:

Thank you very much for your suggestion about dry ice. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

--Forwarded Message Attachment--
From: (b)(6) 6
To: opa.resources@nrc.gov
Subject: japan crisis
Date: Sat, 26 Mar 2011 12:47:28 -0400

gentleman, please entertain the idea of dropping DRY ICE cubes in succession into the reactor ponds and onto the reactors!! this would rapidly help in the cooling and also as the dry ice was melting it would emit carbon dioxide which is heavier than hydrogen thus displacing the hydrogen and help remove the explosive aspect!!! please consider this as a better attact than is currently being used!!! this could save lives and the country of japan!!!!!! sincerely stephan moore (b)(6) 6

S/21

From: Bonaccorso, Amy
To: (b)(6) 6
Bcc: Deavers, Ron
Subject: REPLY: Japan's nuclear crisis
Date: Monday, March 28, 2011 3:28:00 PM

Hello Mr. Hofferth:

Thank you very much for your suggestion about a lead dome or tarp to contain the radiation in Japan. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

You may want to submit your idea to the Japanese Atomic Energy Commission (JAEC).

Thank you,

Amy

From: Fred Hofferth (b)(6) 6
Sent: Saturday, March 26, 2011 1:58 PM
To: OPA Resource
Subject: Japan's nuclear crisis

I am concerned for the people of japan and the ongoing nuclear crisis.I realize the importance of trying to cool down the reactors but this is taking value time.In the meantime radiation continue to escape into the atmosphere.Could it be possible to focus on containing the radiation,trapping it while working on repairing and shutting down the reactor.I know that lead blocks radiation.lead is also flexible and can be made into different shapes.would it be possible to make a dome or tarp covering to trap the radiation?it could be constructed of several layers of various thicknesses of lead.and wrapped over a framework.this would allow for more time to work on crippled reactor while reducing and possibily containing radiation. sincerely,Becky Hofferth e-mail

(b)(6) 6

5/22

From: Bonaccorso, Amy
To: (b)(6) 6
Bcc: Deavers, Ron
Subject: REPLY: New Fresh Water Supply for Reactor Incident in Japan
Date: Monday, March 28, 2011 3:30:00 PM

Hello Mr. LeGear:

Thank you very much for your suggestion about a new fresh water supply. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

You may want to submit your idea to the Japanese Atomic Energy Commission (JAEC).

Thank you,

Amy

From: X Dennis (b)(6) 6
Sent: Saturday, March 26, 2011 2:59 PM
To: (b)(6); Jay Comella; (b)(6); (b)(6);
ffraser@landandforestry.com; robert.fenton@dhs.gov; (b)(6); (b)(6)
(b)(6); tfdinfo2@tfd.metro.tokyo.jp; (b)(6);
mghilarducci@wittassociates.com; kim.zagaris@calema.ca.gov; (b)(6) OPA Resource;
Andrew LeGear
Subject: New Fresh Water Supply for Reactor Incident in Japan

To Whom It May Concern (If you know anyone that you think would be interested in this plan please forward it)

Subject: Fresh Water for the Fukushima Nuclear power plant. Possible a better plan then the US Navy 7th fleet barging water plan.
(<http://www.c7f.navy.mil/news/2011/03-march/069.htm>)

Below is a copied image from Google earth attached is the file I created. I went looking for fresh water sources above the influence of the tsunami wave near the crippled nuclear power plant.

The green line starts at a close reservoir is roughly 4000 feet long and has an elevation change of approximately 90 feet for a rough head pressure of 40 PSI. If you laid out a single 6-inch line and pumped it at 160 PSI plus the head of 40 PSI for a total of 200 PSI you should be able to deliver 1000 GPM to one of the main access of the Power Plant. There is canal visible along this path you may be able to use this as well.

The math would be 5 psi per 100 feet of 6-inch hose at 1000 GPM. This would make the total required pressure roughly 200 PSI to make this work.

If you ended this operation in a terminus of portable tanks you would have a significant storage on site if you need to bring large scale flow to the plant exceeding the 1000 GPM

S/23

through the green line system.

Equipment need one pump capable of 1000 GPM @ 160 psi or larger, 1 mile 6-inch hose, Manifolds /Fittings/ Valves, and portable tanks.

If you go to Google earth and right click on the line you should be able to select the elevation profiles and take a look at the red line which would be a fresh water barge route to the plant and the yellow line an 8-inch fire hose system to a very large reservoir.

I know this has probably already been looked at but, food for thought at least.

Thanks,

Dennis LeGear

(b)(6)

PS. Maybe the barges could be used to remove radioactive water?



From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: Japan Nuclear Radiation Leak at Reactor 3
Date: Monday, March 28, 2011 2:50:00 PM

Hello Mr. Whittaker:

Thank you for your note about robots and how they could help resolve the situation in Japan. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,
Amy

From: (b)(6)
Sent: Friday, March 25, 2011 9:21 PM
To: OPA Resource
Subject: Japan Nuclear Radiation Leak at Reactor 3 .

Has anyone suggested that the Japanese use robots with cameras and radiation detectors to locate the problems at reactor no. 3 as well as to determine the amount of radiation at the plant facility? If cities use robots to defuse bombs, it should be possible to have robots which could enter the plant facilities. This is not rocket science.

James Whittaker
(b)(6)

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From: Mail Delivery System
To: (b)(6)
Subject: Undeliverable: REPLY: Japan Nuclear Radiation Leak at Reactor 3
Date: Monday, March 28, 2011 2:50:17 PM
Attachments: REPLY Japan Nuclear Radiation Leak at Reactor 3.msg

Delivery has failed to these recipients or distribution lists:

HYPERLINK (b)(6)

An error occurred while trying to deliver this message to the recipient's e-mail address. Microsoft Exchange will not try to redeliver this message for you. Please try resending this message, or provide the following diagnostic text to your system administrator.

Diagnostic information for administrators:

Generating server: mail1.nrc.gov

(b)(6)

#< #5.0.0 smtp; 5.1.2 - Bad destination host 'DNS Hard Error looking up (b)(6) NXDomain' (delivery attempts: 0)>

#SMTP#

Original message headers:

Received: from twms01.nrc.gov ([148.184.200.145]) by mail1-private.nrc.gov
with ESMTP; 28 Mar 2011 14:50:16 -0400

X-IronPort-AV: E=Sophos;i="4.63,257,1299474000";

d="scan208,217";a="33961746"

Received: from HQCLSTR01.nrc.gov ([148.184.44.79]) by TWMS01.nrc.gov
([148.184.200.145]) with mapi; Mon, 28 Mar 2011 14:50:15 -0400

From: "Bonaccorso, Amy" <amy.Bonaccorso@nrc.gov>

To: (b)(6)

Date: Mon, 28 Mar 2011 14:50:15 -0400

Subject: REPLY: Japan Nuclear Radiation Leak at Reactor 3

Thread-Topic: REPLY: Japan Nuclear Radiation Leak at Reactor 3

Thread-Index: AcvrvCdH1es2PAVbTGOYHbbvKc1kEgB9HsygAAv/SfA=

Message-ID: <9B0F2FAB6002B64EAA8F7FE5FA27BC6C3B09DFFAA3@HQCLSTR01.nrc.gov>

Accept-Language: en-US

Content-Language: en-US

X-MS-Has-Attach:

X-MS-TNEF-Correlator:

acceptlanguage: en-US

Content-Type: multipart/alternative;

boundary="_000_9B0F2FAB6002B64EAA8F7FE5FA27BC6C3B09DFFAA3HQCLSTR01nrcg_"

MIME-Version: 1.0

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Medina, Veronika

From: Brenner, Eliot
Sent: Monday, March 28, 2011 2:06 PM
To: Watkins, Charles; McIntyre, David
Cc: Burnell, Scott; Couret, Ivonne; Harrington, Holly; Hayden, Elizabeth; Landau, Mindy; Medina, Veronika; Blount, Tom
Subject: RE: NRC logo in plume map

Charles: David works for OPA.

We succeeded in having this bit of bogosity (new word) removed from several websites in the early days of the crisis when we spotted it, got word out via social media, blogged about it and otherwise knocked it down. We're always happy to keep you guys in the loop.

In terms of reaching out to other elements of the government (outside of the public affairs structure), it's all yours. Glad the Ops Center folks were able to spot yet another use of this thing and notify you.

Eliot

From: Watkins, Charles
Sent: Monday, March 28, 2011 1:49 PM
To: McIntyre, David; ET05 Hoc; CS_IRT
Cc: Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Harrington, Holly; Hayden, Elizabeth; Landau, Mindy; Medina, Veronika; Blount, Tom
Subject: RE: NRC logo in plume map

David, thank you for the notification. In the future, as you just did, please send all erroneous or malicious external web site notifications etc to CS_IRT@nrc.gov or call 301-415-6666.

CISRT will take the lead by contacting US-CERT, OPA, OIG and others who will make contact and take action with the web site owner and associated Internet Service Provider or law enforcement agencies. Only those with official duties and capacity should be contacting the external entities on behalf of the US Government. As a rule, most agency actions are defensive in nature and we leave offensive actions to the proper authorities. Thank you, Charlie

Charles Watkins II, CISSP, EnCE
Cyber Situational Awareness Team
NRC, Computer Security Office
(301) 415-6199 Work Phone
(b)(6) Work Cell

From: McIntyre, David
Sent: Monday, March 28, 2011 1:27 PM
To: ET05 Hoc; CS_IRT
Cc: Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Harrington, Holly; Hayden, Elizabeth; Landau, Mindy; Medina, Veronika; Blount, Tom
Subject: RE: NRC logo in plume map

I've written to their web folks through the website, asking them to take it off.

Ghneim, Munira

From: Ghneim, Munira
Sent: Monday, March 28, 2011 10:10 AM
To: Bonaccorso, Amy
Subject: Stephanie Crayton

Follow Up Flag: Follow up
Flag Status: Flagged

Contact - Stephanie Crayton

Phone - (b)(6)

Email - none

Request - Wants to know what can be done about the nuc cap because planting season is around the corner.

Thank You
Munira Ghneim
Contract Secretary
Office of Public Affairs
415-1170

From: Deavers, Ron
To: Bonaccorso, Amy
Subject: RE: Question about reactor cost and time to construct
Date: Monday, March 28, 2011 6:49:11 PM

I will continue to save the call documentation. Two call backs should be adequate.

Thanks,

Ron

From: Bonaccorso, Amy
Sent: Monday, March 28, 2011 2:02 PM
To: Deavers, Ron
Subject: FW: Question about reactor cost and time to construct

Ron –

Should I still be documenting my stuff by sending it to you via email??

I tried to call this guy again – no pick up or voicemail.

Thanks,

Amy

From: Bonaccorso, Amy
Sent: Friday, March 25, 2011 2:30 PM
To: Deavers, Ron
Subject: FW: Question about reactor cost and time to construct

I tried to call this guy back –he is not answering and does not have voicemail. I'll have to try again later.

From: Tobin, Jennifer
Sent: Friday, March 25, 2011 2:17 PM
To: Bonaccorso, Amy
Subject: RE: Question about reactor cost and time to construct

Amy,
We are just in the business of regulating. The trade press (specifically NEI) has a lot of numbers and data on this topic. I would recommend steering him to www.nei.org.

Thanks!

-Jenny

Jenny (Tobin) Wollenweber
Export Licensing Officer
Office of International Programs
office: 301-415-2328

S/28

From: Bonaccorso, Amy
Sent: Friday, March 25, 2011 10:40 AM
To: Tobin, Jennifer
Cc: Deavers, Ron
Subject: Question about reactor cost and time to construct

Hey Jenny:

Bethany is out today – so you're my next person in line to ask questions like this to.

Are you aware of anything we have that gives the average cost of a nuclear power plant and the average amount of time for them to be constructed?

I looked online and if it's there on our website, I missed it.

(b)(6)

Ronald MacDonald

(b)(6)



From: Bonaccorso, Amy
To: rs1251@nova.edu
Bcc: Deavers, Ron
Subject: REPLY: Radiation Question
Date: Monday, March 28, 2011 3:52:00 PM

Hello Mr. Speth:

I did quickly look online and all I found was this instructional manual, but it may be too basic for your needs:

<http://www.nrc.gov/reading-rm/basic-ref/teachers/05.pdf>

I'm sorry that I don't have this information for you or time to research this in depth. We are mainly focused on answering questions about Japan at the moment.

Thank you,

Amy

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

From: rs1251@nova.edu [mailto:rs1251@nova.edu]
Sent: Sunday, March 27, 2011 9:44 AM
To: OPA Resource
Subject: Radiation Question

Below is the result of your feedback form. It was submitted by

(rs1251@nova.edu) on Sunday, March 27, 2011 at 09:43:44

comments: I am interested in knowing how much energy is released from different isotopes. Put simply, I would like to be able to convert from Curies or Bequerels to Sieverts or rems, and from Curies or Bequerels to Gray and Rads for each radioisotope that is a potential environmental contaminant.

There is some data on this from the Oak Ridge National Laboratory, but it is for gamma radiation only.

Thank you

contactName: Robert Speth

phone: (b)(6)

S/29

From: Ansel & Gail
To: Bonaccorso, Amy
Subject: Re: REPLY: Radiation Question
Date: Monday, March 28, 2011 4:42:32 PM

Thank you for your prompt reply. I know that we cannot force our help or solutions on Japan but we are now starting to get the fallout here in the United States. I know we have been told that it is a minimal amount but over a long period of time that minimal amount will be great. What has been done to address this matter?

Thank you.

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

From: "Bonaccorso, Amy" <amy.bonaccorso@nrc.gov>
To: (b)(6)
Sent: Monday, March 28, 2011 3:57 PM
Subject: [Norton AntiSpam] REPLY: Radiation Question

Hello:

Yes, we understand your concern. The NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. Several NRC staff have also been sent to Japan to help. We are fully staffed in all our response teams at this time and working 24-hours a day. At the same time, since the reactors are in Japan - we cannot force our help or solutions on Japan...only offer to support them in any way they request.

Thank you,

Amy

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

From: (b)(6)
Sent: Sunday, March 27, 2011 8:25 PM
To: OPA Resource
Subject: Radiation Question

Below is the result of your feedback form. It was submitted by

(b)(6) on Sunday, March 27, 2011 at 20:25:03

comments: What is this government doing to insure that Japan gets assistance and or information to stop these reactors as it is now coming into our country? Any amount of radiation from this is TOO much.

contactName:

phone:

S/30

From: James A. Burt
To: Bonaccorso, Amy
Subject: RE: REPLY: How to measure ocean contamination and fuel leak around Fukushima
Date: Monday, March 28, 2011 9:55:42 PM

It looks like the fuel pond in reactor 2 is on fire. . .

From: Bonaccorso, Amy [mailto:amy.Bonaccorso@nrc.gov]
Sent: Monday, March 28, 2011 12:23 PM
To: (b)(6) 6
Subject: REPLY: How to measure ocean contamination and fuel leak around Fukushima

Hello Mr. Burt:

Thank you very much for your suggestion about buoys. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: James A. Burt [(b)(6)] 6
Sent: Saturday, March 26, 2011 1:00 PM
To: billaustin@bloomberg.net; OPA Resource
Subject: How to measure ocean contamination and fuel leak around Fukushima

Drop a network of buoys around the plant and measure the gradient of radioactive contamination. If that gradient begins to diminish the leak rate is probably decreasing. Maybe NOAA can help.

James A. Burt

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From: Bonaccorso, Amy
To: (b)(6) 16
Bcc: Deavers, Ron
Subject: REPLY: Radiation Question
Date: Tuesday, March 29, 2011 9:19:00 AM

Hi Ms. Kiang:

I am so sorry to hear that you are concerned about being exposed to harmful radiation as a consequence of Chernobyl. Although we do have health effects people here at the NRC and some information online, I don't think either they or the website can answer your specific question. The information I have indicates that certain medicines can be taken at the time of exposure to reduce risk, but I don't have anything about many years later.

You may want to check with the CDC and see if they have any resources for you to consider: 1-800-CDC-INFO.

The EPA also has an email address that specifically focuses on radiation: radiation.questions@epa.gov.

Since Chernobyl occurred in Europe, you may also want to reach out to the International Atomic Energy Commission, as I would think they are more accustomed to Chernobyl-related questions. They are at www.iaea.org.

I'm sorry I could not be more helpful.

Thanks,

Amy

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

From: (b)(6) 16
Sent: Saturday, March 26, 2011 10:56 PM
To: OPA Resource
Subject: Radiation Question

Below is the result of your feedback form. It was submitted by

(b)(6) on Saturday, March 26, 2011 at 22:55:57

comments: Hello, I (b)(6)
(b)(6) when Chernobyl blew up. The Austrian government delayed informing the public about the dangers of radiation-contaminated vegetables, so I was eating my usually healthy lot of greens every day (b)(6)
(b)(6)
(b)(6)
(b)(6)
(b)(6) Now I am (b)(6) and (b)(6) I would like to know if there is anything I should try now to safeguard against (b)(6) occurring some time in the future?

contactName: Nancy Kiang

S/32

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: Nuclear Plants safety
Date: Tuesday, March 29, 2011 9:25:00 AM

Hello Mr. Redditt:

We appreciate your concerns about Japan. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: Albert Redditt [(b)(6)]
Sent: Sunday, March 27, 2011 6:40 PM
To: NRC Allegation; NRC Allegation
Subject: Nuclear Plants safety

Hello,

I've been thinking about the Japan reactor and its failures..

it seems that there were two problems:

A) The pipe works couldn't withstand a 2 minute long 9 magnitude quake and failed..
B) The Deisel generators didn't have enough fuel to last thru the power outage...neither did the battery packs..

1.) To prevent a pipe failure in the U.S. the joints need to be flexible, A dog-bone shaped joint with each end being a sphere, the pipes would have to clamp around the end spheres to make a flexible joint...

2.) The backup generators need enough fuel to power them thru a possible high-tension tower failure..maybe a month of fuel...

(b)(6)

From: Bonaccorso, Amy
To: Mr. Brady
Subject: NRC REPLY
Date: Tuesday, March 29, 2011 9:43:00 AM

Hello Mr. Brady:

We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

Unfortunately, we really aren't taking any suggestions right now from the public. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. Since the problems are in Japan, and not the U.S., the NRC is only in an advisory role. We are fully staffed in all our response teams at this time and working 24-hours a day.

You may want to reach out to the Japanese Atomic Energy Commission (JAEC).

Thank you,

Amy

From: Mr. Brady (b)(6)
Sent: Monday, March 28, 2011 9:28 AM
To: Bonaccorso, Amy
Subject: Re: http://www.epa.gov/nare/radnet/pdf/navigating_radnet.htm

Hi Amy,

I am writing you because you are the only contact that I know of in relation to nuclear plants. I am going to also try to contact others too but don't know who yet. I have an idea that may be able to stop the leakage of water (which is needed for cooling) at the Japanese plants. I don't know if you will be able to pass this on but the idea is so simple it may be dismissed as stupid.

The principle can be compared to "radiator stop leak" that is used to stop leaks in motor coolant systems. But what might work is some form of coagulating silicon. If it can be poured into the system then as the water and liquid sinks to the leak then it can coagulate at the leak, where ever it is. There may be other materials that better handle heat but it's not time to not try something that we know is resistant (silicon) as we conduct "research".

How quickly can model heat chambers or something be used to try it. Mixing with something thicker than concrete at first or maybe thin liquid concrete that won't set at first and it can be used as the carrier to the cracks and leaks, adding rock as the drainage can be monitored. etc.

Also the tiles that are made for the shuttle crafts, .. it is in liquid form at one point or another. if after the leak is stopped, the liquid heat shield may be able to be poured over the rods etc. and relatively contain them until other overall containment can be made. After it is

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stopped then they can dig under it all and start trying to make some sort of "permanent" underlay.

We need to stop the spewing "yesterday".

I thought of the first idea several days ago and the second one yesterday. I'm sure people are trying to think of ideas.

I sure hope this works and would appreciate feedback. We have a lot of "think tanks" out here. People who think :-)

Blessings

Pat

On Thu, Mar 17, 2011 at 5:01 AM, Bonaccorso, Amy <amy.Bonaccorso@nrc.gov> wrote:
Good morning Pat:

Thanks for your call – The link is in the subject line.

Thanks,

Amy

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: RE: Response from "Contact the NRC Web Site Staff"
Date: Tuesday, March 29, 2011 9:43:15 AM

I think that sounds good!

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

From: Bonaccorso, Amy
Sent: Tuesday, March 29, 2011 9:24 AM
To: Janbergs, Holly
Subject: FW: Response from "Contact the NRC Web Site Staff"

Hey Bethany:

I have some ideas, but wanted to see if you have anything additional to add on this response. This person is anti-Diablo Canyon/San Onofre.

My ideas are:

- Tell him that we go through lengthy license renewal processes to ensure that each plant is safe
- Will be conducting an in-depth safety review of our plants following the events in Japan and hope to get some lessons learned
- He could reach out to his Congress people because they shape the energy plans for the nation - we just regulate.

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

From: Janbergs, Holly On Behalf Of OPA Resource
Sent: Monday, March 28, 2011 9:10 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: NRCWEB Resource
Sent: Monday, March 28, 2011 6:51 AM
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: korrang@yahoo.com [redacted]) 6
Sent: Friday, March 25, 2011 9:25 PM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

([redacted]) 6 on Friday, March 25, 2011 at 21:25:02

comments: As a concerned [redacted] who loves the beauty and diversity of the west coast, I am writing to urge you to refuse the license renewal for Diablo Canyon Power Plant, a nuclear-power generator in CALifornia, until an independent study can be conducted of fault lines in the area.

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The recent tragic events at Japan's Fukushima nuclear plant are a wake up call for the U.S. Unforgiving technology on a seismic coast is an accident waiting to happen.

Unfortunately when profits are the top priority, we cannot accept with blind faith the nuclear industry's assurances that it can prevent, or respond to, a nuclear disaster involving earthquakes.

Please inspect both Diablo Canyon and San Onofre Nuclear Generating Stations, which are both along the coast of California. California's coast is our gold and needs to be protected with utmost care.

Sincerely yours,

Mary Kathryn Orrange

(b)(6)

organization:

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country:

phone:

From: Bonaccorso, Amy
To: Deavers, Ron
Subject: RE: Info - Citizen
Date: Tuesday, March 29, 2011 10:24:00 AM

I talked to her and didn't have the answers she wanted, but it seemed to help to just talk. She wants to do some emergency preparedness stuff – I referred her to FEMA's website and also the state dep't of health and emergency preparedness. She thinks that we should be prepared for a worst case scenario and thinks the gov't should be giving more guidance.

From: Akstulewicz, Brenda
Sent: Monday, March 28, 2011 10:20 AM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Info - Citizen

Corinne Chism

(b)(6)

Is radiation in the air over Arkansas

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brenda.akstulewicz@nrc.gov



From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: Japan nuclear waste solidification
Date: Tuesday, March 29, 2011 10:26:00 AM

Hello Mr. Allen:

We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

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

From: (b)(6) (b)(6) On Behalf Of Gary W. Allen
Sent: Monday, March 28, 2011 11:33 AM
To: OPA Resource
Cc: John Maresca
Subject: Japan nuclear waste solidification

I talked with someone at NRC just now and they requested I email to this address. My company has access to supersorbent (SAP) for the solidification of radioactively contaminated water to aid removal and disposal, Japan has a huge need. The global supply of SAP is tight but we can supply tons of material. We have inventory and access as part of our core business, www.ram-3.com.

If we can assist please reach out me or send an inquiry through our website.

--

Gary W. Allen

VP Sales

(336) 423-3094

gary@ram-3.com

www.ram-3.com

The Solution to Wet Coal Handling for The Power Industry

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From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy
Subject: FW: Japan
Date: Tuesday, March 29, 2011 10:40:36 AM

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

From: Brian Serman (b)(6)
Sent: Tuesday, March 29, 2011 10:31 AM
To: OPA Resource
Subject: Japan

This may seem like a stupid question, but what if liquid nitrogen were used in a certain way to help in the cooling of the the reactor core. Bryan

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: NRC REPLY
Date: Tuesday, March 29, 2011 10:43:00 AM

Hello Mr. Ferreira:

We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: (b)(6) (b)(6)) 6
Sent: Thursday, March 24, 2011 2:51 PM
To: OPA Resource
Subject: (no subject)

My profile

(b)(6)
(b)(6)
(b)(6)
reside in (b)(6)

my ideas on providing a gravity water supply to all nuclear power facilities ,to be built and existing, where topography will not allow a remote storage tank system or reservoir at the necessary elevation and safe {distance} location, water towers could be used as they do in the mid west or flat topography.

a gravity fed water source would be inexpensive to construct and quick to build
this water source could provide cooling water while power is restored to pumps
the water source could be located a safe distance from any facility and have great capacity
this type system can be built now quickly.

please deliver this to the proper people where it would be considered

THANK YOU
Robert Ferreira.

(b)(6)
(b)(6)

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From: Martin Trenz (b)(6)
Sent: Tuesday, March 29, 2011 11:54 AM
To: NRC Allegation
Subject: Why are there no emergency diesels in U.S. nuclear power plants?

Esteemed Ladies and Gentleman,

as you can see from my e-mail address I'm (b)(6) so you may safely ignore me if you wish, but never shall it be I said I remained silent when I should have spoken up. I have to express my utmost surprise and bewilderment on learning that nuclear power plants in the U.S. can cool their cores for just eight hours when disconnected from the grid:

<http://www.cbsnews.com/stories/2011/03/29/501364/main20048270.shtml>

That's outright dangerous, in my opinion! It would be ab-so-lute-ly impossible here in (b)(6) or in all of Europe. Even Japan had backup diesels, they even worked before being wiped away by the Tsunami. Can you imagine the cascade effect of a widespread power outage in your country? One plant going down, forcing another one down, and so on, the grid shattered and your more than 100 nuclear power plants having partial meltdowns like Fukushima ALL AT ONCE? Can you imagine what the political, judicial, financial and reputational implications of such a scenario would be? As members/employees of the U.S. Nuclear Regulatory Commission, have you not sworn some kind of oath to protect your country?

I beg you: make sure your nuclear power plants at least meet the worldwide standards! You invented nuclear power, and you already had a close call with Three Mile Island. You can't play Russian Roulette with the lives and future of your citizens!

Regards

Martin Trenz

(b)(6)

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From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: Response from "Contact the NRC Web Site Staff"
Date: Tuesday, March 29, 2011 7:46:36 AM

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

From: NRCWEB Resource
Sent: Tuesday, March 29, 2011 7:25 AM
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: Max Goldberg (b)(6)] Ex 6
Sent: Monday, March 28, 2011 9:57 PM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

Max Goldberg (b)(6)] Ex 6 on Monday, March 28, 2011 at 21:56:34

comments: Disaster in Japan:

The disaster in Japan is truly awful. What if you can contain the Uranium rods by covering them with Lead? It might not last for ever but it will almost deffinently contain the radiation for some amount of time. At least providing enough time research a solution.

Please reply,
Max Goldberg

organization:

address1:

address2:

city:

state: ---

zip:

country:

phone:

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From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: media request
Date: Tuesday, March 29, 2011 7:45:31 AM

From: Kasey Crawford (b)(6) Ex 6
Sent: Monday, March 28, 2011 5:00 PM
To: OPA Resource
Subject: media request

Hi,

I am a (b)(6) working on a tight deadline. I'm writing a story about the nuclear stability of nuclear reactors in the Pacific Northwest. I have listed some questions below, if you could either answer them by email or give me a call sometime today, it would be greatly appreciated as I am on a tight deadline.

How many and what sort of nuclear reactors are located located in the Pacific Northwest? I know of the Columbia Generating Station, the only commercial reactor in the northwest, to my knowledge. There are also research reactors at Washington State University, Oregon State University and Idaho State University.

Are all the nuclear reactors in the Pacific Northwest functioning currently?

If there were a breach similar to the one in Japan, what would be the estimated damages, monetary and otherwise expected, mostly concerned with the Columbia Generating Station?

Would local drinking or irrigation water be contaminated?

How would it affect fish and wildlife, humans and crops if they were exposed?

How far could the radiation travel in water or airborne?

What safety precautions are in place to prevent a leak/breach?

If a breach were to occur, what safety measures are in place to contain, minimize effects?

Would the surrounding area be closed or evacuated?

Do you have literature about other active nuclear reactors in the Pacific Northwest? If breaches were to occur at these, what would be the damages, possible effects?

Do you have contact info for any of the active nuclear sites?

Are there any nuclear reactors that are currently being updated or need to be updated in the near future?

Any more information I may have missed or you feel is relevant?

Thank you for your time and quick response,

Kasey Crawford

(b)(6)

(b)(6)

(cell)

S/42

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: Cooling Japan's Reactors
Date: Tuesday, March 29, 2011 7:45:23 AM

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

From: Vince Coleman [(b)(6)]
Sent: Monday, March 28, 2011 4:58 PM
To: OPA Resource
Subject: Cooling Japan's Reactors

Below is the result of your feedback form. It was submitted by

Vince Coleman [(b)(6)] on Monday, March 28, 2011 at 16:57:57

comments: Is there any possibility that Liquid Nitrogen could be used to cool the reactor core units?
Thank you,
Vince Coleman

organization: Lioteracy Northwest, LLC

address1: 8440 SW Murdockl St.

address2:

city: Portland

state: OR

zip: 97224

country: USA

phone: [(b)(6)]

S/43

From: [Janbergs, Holly](#) on behalf of [OPA Resource](#)
To: [Janbergs, Holly](#)
Subject: FW: solid D2O cubes for rapid cooling of radioactive sites
Date: Tuesday, March 29, 2011 7:45:45 AM

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

From: jmckenna@lmi.net [<mailto:jmckenna@lmi.net>]
Sent: Monday, March 28, 2011 7:03 PM
To: OPA Resource
Subject: solid D2O cubes for rapid cooling of radioactive sites

I am a research scientist whose speciality is thermodynamics.

I have 30 years of experience with freezing materials into hugh single crystals. Water itself is a crystalline substance. Ordinary freezing leads to massive microcrystalization.

My methods enable the whole mass to go through a unifeorm phase change resulting in a single massive crystal.

Thawing requiresw a heat trasfer throughout the crystal.

This method if apploied to heavy water has been calculated to increase the amount of energy absorbed three magnitudes or more over the liquid form of D2O.

Making D2O into "cubes" for ease of trasport and to be asily inserted into the cooling towers would be fairly simple.

If interested, I can be reached at (b)(6)

Joan McKenna
Director of Resarch
Institute for Thermobaric Studies

S/44

From: Brenner, Eliot
To: Akshulewicz, Brenda; Chandrathil, Prema; McIntyre, David; Screnci, Diane; Harrington, Holly; Couret, Yvonne; Janberg, Holly; Ledford, Joey; Sheehan, Neil; Hannah, Roger; Burnell, Scott; Uselding, Lara; Shannon, Valerie; Dricks, Victor; McIntyre, Victoria
Subject: FW: Seismic Q&As March 28th 10pm update
Date: Tuesday, March 29, 2011 7:30:27 AM
Attachments: Seismic Questions for Incident Response 3-28-11 9pm.pdf

This may come in handy, all 100-plus pages of it.

Eliot

From: Kammerer, Annie
Sent: Monday, March 28, 2011 10:32 PM
To: Kammerer, Annie; Hiland, Patrick; Skeen, David; Case, Michael; RST01 Hoc
Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Glitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Chokshi, Niles; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; 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, Jeffery; 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; Webb, Michael; Manoly, Kamal; Khanna, Meena; Screnci, Diane; Thomas, Eric; Nguyen, Quynh; Meighan, Sean; FOIA Response.hoc
Resource: Bens, Michelle; 'rmtpactsu_elnrc@ofda.gov'
Subject: Seismic Q&As March 28th 10pm update

All,

It seems that some people actually missed getting the Q&As since I'm starting to get emails asking if I can do an update. Sorry it's been a while, for some reason my workload seems to have exploded...LOL. (*Actually I really have no excuse as Shelby has been a compiling machine!*). We've added several new sections including **ACRONYMS**, located near the back. (*Thanks to Stephanie Devlin for pulling the acronyms together*)

Now that the agency is moving out of the heart of the emergency response phase, and looking towards short, medium and long term actions and goals, our little seismic group has been discussing what to do with this document; and specifically how to make it useful beyond this event. We've discussed the fact that ever since the Kashiwazaki earthquake, we have recognized the need to develop a "generic" seismic Q&A document so that the agency can hit the ground running in cases such as this. It is obvious to us that we now have the guts of the document we've envisaged for years in one 140 page compilation; and it's time to make it happen!

So the next time you see this document (which won't be for a while), it will be radically transformed. We'll be putting all the "static" information in the front, and will be pulling the Japan earthquake-specific information into a separate section. It will be more user friendly and will be easier to find any new information. It's unclear to us how long these updates will be useful, but we suspect, not much longer. So, now's the time to start wrapping it up and putting a bow on it...

We hope the new document will be worth the wait...

Dr. Annie Kammerer, P.E.

US NRC/RES/DE

(301) 251-7695 Office

(b)(6) Mobile Jfx 6

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

From: Kammerer, Annie
Sent: Wednesday, March 23, 2011 3:15 AM
To: Kammerer, Annie; Hiland, Patrick; Skeen, David; Case, Michael; RST01 Hoc

5/45

From: Janbergs, Holly on behalf of OPA Resource
To: Medina, Veronika
Subject: FW: reuters media questions
Date: Tuesday, March 29, 2011 4:49:00 PM

FYI

From: scott.disavino@thomsonreuters.com [mailto:scott.disavino@thomsonreuters.com]
Sent: Tuesday, March 29, 2011 4:47 PM
To: OPA Resource; Burnell, Scott
Cc: eileen.ogrady@thomsonreuters.com
Subject: reuters media questions

Hi,

We're looking at endgame for the Fukushima reactor and that has raised a lot of questions about three mile island

How long did we have to keep water flowing over the reactor core in unit 1 at three mile island after the accident – I see on the nrc web site the vessel head was removed in 1984 and core debris was removed in 1985-1986 – by the way – where did they send the core – where is it now

So I guess you were able to stop cooling by at least 1984 but we're wondering when you were able to stop keeping the core in water

We're trying to figure out when the Japanese can stop cooling the reactor cores at Fukushima – they are having a problem of what to do with the water

If Fukushima was in the US – what would the NRC recommend doing now – it's been over two weeks and the situation is not stable yet – is there a point at which just burying the building and forgetting it is an option

Thanks,

Scott

Scott DiSavino
Correspondent
Thomson Reuters

Phone: 1 646 223 6072

Mobile: (b)(6) Fx 6

Email - scott.disavino@thomsonreuters.com
Reuters (Instant) Messaging - scott.disavino.thomsonreuters.com@reuters.net

S/46

thomsonreuters.com

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From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Japanese Nuclear Accident
Date: Thursday, March 31, 2011 3:17:00 PM

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

From: James Magliano [(b)(6)] Ex 6
Sent: Thursday, March 31, 2011 3:13 PM
To: OPA Resource
Subject: Japanese Nuclear Accident

Has anyone thought of the following? Since sand and heat form glass, would burying the reactors in sand encase them in glass and contain the radiation threat?

Gloria Kress

[(b)(6)] Ex 6

[(b)(6)]

5/47

From: [Burnell, Scott](#)
To: scott.disavino@thomsonreuters.com
Cc: eileen.ogrady@thomsonreuters.com; Brenner, Eliot; OPA Resource
Subject: RE: reuters media questions
Date: Tuesday, March 29, 2011 5:09:05 PM

Hi Scott;

The TMI core debris was sent to the Idaho National Lab where it's still being stored.

I'll check on the other TMI information, but we're still nowhere near the point of having enough of a grasp of Fukushima's conditions to do that sort of hypothesizing. Under the NRC's regulations, emergency core cooling systems have to be able to run for about a month in "accident space."

Scott

From: scott.disavino@thomsonreuters.com [mailto:scott.disavino@thomsonreuters.com]
Sent: Tuesday, March 29, 2011 4:47 PM
To: OPA Resource; Burnell, Scott
Cc: eileen.ogrady@thomsonreuters.com
Subject: reuters media questions

Hi,

We're looking at endgame for the Fukushima reactor and that has raised a lot of questions about three mile island

How long did we have to keep water flowing over the reactor core in unit 1 at three mile island after the accident – I see on the nrc web site the vessel head was removed in 1984 and core debris was removed in 1985-1986 – by the way – where did they send the core – where is it now

So I guess you were able to stop cooling by at least 1984 but we're wondering when you were able to stop keeping the core in water

We're trying to figure out when the Japanese can stop cooling the reactor cores at Fukushima – they are having a problem of what to do with the water

If Fukushima was in the US – what would the NRC recommend doing now – it's been over two weeks and the situation is not stable yet – is there a point at which just burying the building and forgetting it is an option

Thanks,

Scott

S/48

Scott DiSavino
Correspondent
Thomson Reuters

Phone: 1 646 223 6072

Mobile: (b)(6) Fx 6

Email - scott.disavino@thomsonreuters.com

Reuters (Instant) Messaging - scott.disavino.thomsonreuters.com@reuters.net

thomsonreuters.com

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Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of Thomson Reuters.

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: japan's leaking reactors
Date: Tuesday, March 29, 2011 4:21:00 PM

From: (b)(6)

Ex 6

Sent: Tuesday, March 29, 2011 4:14 PM

To: OPA Resource

Subject: japan's leaking reactors

NRC,

As I understand part of the problem in Japan is the reactor is leaking water and not staying cool enough.

Have they tried hydraulic cement? It hardens underwater. Pump it into the leaking vessel and it will find its way to the leak, crack, hole, (whatever), and fill the void, solidify and seal the leak from the inside. It can be pumped through a long hose into the vessel. That hose could be put in position by either helicopters or a remote control vehicle

Within the automobile industry there are also "stop leak" products used for stopping water leaks in radiators and cooling systems, the product is added to the radiator and finds its way to the leak and plugs it from the inside. Obviously the Japan problem is on a larger scale than a car radiator but there is a physical similarity to how to stop the leak when you do not know exactly where it is coming from and / or cannot get to the leak from the external side.

Thanks for all your help to the Japanese people I'm sure they appreciate it.

Jim Toler

(b)(6)

S/49

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy
Subject: FW: A Citizen Suggestion
Date: Tuesday, March 29, 2011 2:06:00 PM

From: John A. Alexander (b)(6)] Ex b
Sent: Tuesday, March 29, 2011 2:01 PM
To: OPA Resource
Subject: A Citizen Suggestion

My abbreviated suggestion is:

Initiate a program to provide remote control for a heavy lift helicopter to provide the most possible needed water very directly above the needed site.

Apply Predator guidance technology to a heavy lift helicopter.
Do it quickly because you may need it for the current problems.
Have it available for future events.

Once contaminated wash it at and store it in Yucca Mt.

John A. Alexander (b)(6)] Ex C

From: Vince Coleman
To: Janbergs, Holly
Subject: RE: Cooling Japan Suggestion
Date: Tuesday, March 29, 2011 1:05:15 PM

Beth:

Thank you for your reply. I really would like to know if there is a possibility that Liquid Nitrogen would keep the core from melting down?

Vince

From: Janbergs, Holly [mailto:Holly.Janbergs@nrc.gov]
Sent: Tuesday, March 29, 2011 5:38 AM
To: (b)(6) Ex 6
Subject: Re: Cooling Japan Suggestion

Mr. Coleman,

Thank you for sending your idea on the use of liquid nitrogen to help combat the situation in Japan. We appreciate suggestions that work toward resolving this ongoing crisis; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

The NRC has been working 24-hours a day to fully staff our response teams and monitor the situation overseas. We also have some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We will be doing everything we can in this difficult time.

Thank you again,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

3/51

From: Janbergs, Holly on behalf of OPA Resource
To: Medina, Veronika
Subject: FW: Nuclear plants to be reviewed
Date: Tuesday, March 29, 2011 12:55:00 PM

From: Sara Rubin [mailto:sara@mcweekly.com]
Sent: Tuesday, March 29, 2011 12:54 PM
To: OPA Resource
Subject: Nuclear plants to be reviewed

Hello,

Regarding the March 23 announcement on reviewing nuclear plants, can you please tell me whether all 104 facilities will be reviewed, or if not, how many? Is Diablo Canyon to be reviewed? What are the criteria for developing this list?

My deadline is 12 pm PST today.

Thank you,
Sara

--

Sara Rubin
Monterey County Weekly, staff writer
(831) 394-5656 ext. 120
[(b)(6)] (mobile) Ex 6
sara@mcweekly.com
www.montereycountyweekly.com

S/52

From: Janbergs, Holly on behalf of OPA Resource
To: Harrington, Holly
Subject: FW: Radioactive contamination of Aircraft, engines and aerospace components
Date: Tuesday, March 29, 2011 12:49:00 PM
Attachments: Radioactive Contamination of Aircraft and Engines.pdf

Unsure who to send this to; do we have a POC for things like this?

From: Ebken, James [mailto:james.ebken@honeywell.com]
Sent: Tuesday, March 29, 2011 12:43 PM
To: OPA Resource
Subject: Radioactive contamination of Aircraft, engines and aerospace components

Dear NRC,

We provide and repair many aircraft and helicopter components, including turbine engines, auxiliary power turbine engines, environmental control systems, air valves and avionics.

Some of these products are being utilized in the Fukushima Daiichi, nuclear facility containment efforts.

The attached document is from the Association of European Airlines, G(T) 2002-042, dated June 25 2002, RADIOACTIVE CONTAMINATION OF AIRCRAFT AND ENGINES, 3rd Edition 25 June 2002.

Please confirm that this document is an acceptable guide line for the NRC and US Government, or please provide our NRC and US government version of this type of publication for our recommendations to our Japanese trading companies, Repair stations and our worldwide repair stations that may receive components from Japan.

Please let me know if you have any questions, that you have received this request and will provide recommendations approved by NRC and US Government.

Thank you,

Jim

James Ebken

→ Honeywell

Product Support Engineering
Mail Stop 503/412
111 S 34th St., Phoenix, AZ 85034
Cell (b)(6) Ex 6
Office Phone (602) 231-3155
James.Ebken@Honeywell.Com

S/53

For 24 hour/ 7 days a week technical support please contact the Technical Operations Center:

Phone: at 1-800-601-3099 (U.S.) or 1-602-365-3099 (International)

Email: <mailto:AeroTechSupport@Honeywell.com>

Fax number: 1-602-365-3343

From: Bonaccorso, Amy
To: (b)(6) 6
Bcc: Deavers, Ron
Subject: REPLY: Cristian-Nicutor Barbuta
Date: Tuesday, March 29, 2011 9:57:00 AM

Hello Mr. Barbuta:

We understand your concerns. The NRC is doing a review of current U.S. nuclear power plants in light of what has happened in Japan and hopes to apply some lessons learned. If you want to learn more about nuclear power plants in the U.S., www.nrc.gov has a lot of information.

Yes, we are all very sad over the events in Japan. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: Barbuta Cristian-Nicutor (b)(6) 6
Sent: Friday, March 25, 2011 11:39 AM
To: NRC Allegation
Subject: Cristian-Nicutor Barbuta

Given current events in Japan, has shown that regardless of the confidence we have in security systems there are some problems that can not be taken into account when they are designed, issues related to reactions that nature is unpredictable. I understand the problems in Japan were due largely to the fact that the reactors could not be cooled in time.

As far as I know nuclear power plants are situated on the banks of waters. I do not understand why the reactors were not underneath the water where they were placed for cooling not to depend on certain pumps that do not work? Gravity has always worked and will work regardless of weather conditions and human errors that may occur. If not depend on specific reactor cooling pumps might not witness the disaster in Japan. Thank you for your attention and express my regret for what happened in Japan.

Sincerely, Nicutor Cristian Barbuta

5/54

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy
Subject: FW: Response from "Contact the NRC Web Site Staff"
Date: Tuesday, March 29, 2011 11:08:00 AM

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

From: NRCWEB Resource
Sent: Tuesday, March 29, 2011 10:44 AM
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: (b)(6)] Ex 6
Sent: Tuesday, March 29, 2011 8:19 AM
To: NRCWEB Resource
Subject: Re: Response from "Contact the NRC Web Site Staff"

I am still waiting ..

Thanks

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

From: "NRCWEB Resource" <NRCWEB.Resource@nrc.gov>
To: "William B" (b)(6)] Ex 6
Sent: Thursday, March 17, 2011 2:59 AM
Subject: RE: Response from "Contact the NRC Web Site Staff"

I have sent your request to our Office of Public Affairs for response.
Thank you.

NRC Web Team

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

From: William B (b)(6)] Ex 6
Sent: Thursday, March 17, 2011 2:34 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

William B (b)(6)] Ex 6
on Thursday, March 17, 2011 at 02:33:50

comments: How far down(Miles),into the core of the Earth, do the nuclear core reactors go?

Give me the total depth and circumference of the facilities.

I think there might be 440 worldwide. maybe 11 in Japan.

Thank you for your time.

organization: (b)(6)

address1:

address2:

5/55

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone:

No virus found in this incoming message.

Checked by AVG - www.avg.com

Version: 9.0.894 / Virus Database: 271.1.1/3511 - Release Date: 03/16/11
15:34:00

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy
Subject: FW: Japan
Date: Tuesday, March 29, 2011 10:40:00 AM

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

From: Brian Serman (b)(6) Ex 6
Sent: Tuesday, March 29, 2011 10:31 AM
To: OPA Resource
Subject: Japan

This may seem like a stupid question, but what if liquid nitrogen were used in a certain way to help in the cooling of the the reactor core. Bryan

6/56

From: Janbergs, Holly
To: (b)(6) Ex 6
Subject: Re: International Nuclear Power
Date: Tuesday, March 29, 2011 8:41:00 AM

Mr. Wang,

I appreciate your concerns, especially in light of the ongoing situation in Japan. However, the NRC only regulates U.S. nuclear power plants. I would suggest visiting the International Atomic Energy Agency's website at <http://iaea.org/>; they should have more information on their views regarding the international use of nuclear power. They should also be able to address your concerns more directly.

Best,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

S/57

From: Janbergs, Holly
To: (b)(6) Ex 6
Subject: Re: Suggestion
Date: Tuesday, March 29, 2011 8:39:00 AM

Mr. Goldberg,

Thank you for sending your idea on the use of lead to help contain uranium rods. We appreciate suggestions that work toward resolving this ongoing crisis; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

The NRC has been working 24-hours a day to fully staff our response teams and monitor the situation overseas. We also have some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We will be doing everything we can in this difficult time.

Thank you again,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

S/58

From: Janbergs, Holly
To: (b)(6) Ex 6
Subject: Re: Japan Suggestion
Date: Tuesday, March 29, 2011 8:38:00 AM

Ms. Hofferth,

Thank you for sending your idea on the use of a lead tarp to help combat the situation in Japan. We appreciate suggestions that work toward resolving this ongoing crisis; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

The NRC has been working 24-hours a day to fully staff our response teams and monitor the situation overseas. We also have some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We will be doing everything we can in this difficult time.

Thank you again,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

5/59

From: Janbergs, Holly
To: (b)(6) Ex 6
Subject: Re: Cooling Japan Suggestion
Date: Tuesday, March 29, 2011 8:37:00 AM

Mr. Coleman,

Thank you for sending your idea on the use of liquid nitrogen to help combat the situation in Japan. We appreciate suggestions that work toward resolving this ongoing crisis; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

The NRC has been working 24-hours a day to fully staff our response teams and monitor the situation overseas. We also have some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We will be doing everything we can in this difficult time.

Thank you again,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

S/60

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: RE: Response from "Contact the NRC Web Site Staff"
Date: Tuesday, March 29, 2011 9:43:00 AM

I think that sounds good!

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

From: Bonaccorso, Amy
Sent: Tuesday, March 29, 2011 9:24 AM
To: Janbergs, Holly
Subject: FW: Response from "Contact the NRC Web Site Staff"

Hey Bethany:

I have some ideas, but wanted to see if you have anything additional to add on this response. This person is anti-Diablo Canyon/San Onofre.

My ideas are:

- Tell him that we go through lengthy license renewal processes to ensure that each plant is safe
- Will be conducting an in-depth safety review of our plants following the events in Japan and hope to get some lessons learned
- He could reach out to his Congress people because they shape the energy plans for the nation - we just regulate.

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

From: Janbergs, Holly On Behalf Of OPA Resource
Sent: Monday, March 28, 2011 9:10 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: NRCWEB Resource
Sent: Monday, March 28, 2011 6:51 AM
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: (b)(6)] Ex 6
Sent: Friday, March 25, 2011 9:25 PM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

(b)(6)] Ex 6
on Friday, March 25, 2011 at 21:25:02

comments: As a concerned (b)(6) who loves the beauty and diversity of the west coast, I am writing to urge you to refuse the license renewal for Diablo Canyon Power Plant, a nuclear-power generator in California, until an independent study can be conducted of fault lines in the area.

S/61

The recent tragic events at Japan's Fukushima nuclear plant are a wake up call for the U.S. Unforgiving technology on a seismic coast is an accident waiting to happen.

Unfortunately when profits are the top priority, we cannot accept with blind faith the nuclear industry's assurances that it can prevent, or respond to, a nuclear disaster involving earthquakes.

Please inspect both Diablo Canyon and San Onofre Nuclear Generating Stations, which are both along the coast of California. California's coast is our gold and needs to be protected with utmost care.

Sincerely yours,

Mary Kathryn Orrange

(b)(6)

organization:

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

Ex 6

country:

phone:

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
Date: Tuesday, March 29, 2011 11:00:00 AM

Hello Ms. Orrange:

The U.S. Nuclear Regulatory Commission (NRC) goes through lengthy license renewal processes to ensure that each plant is safe. We will also be conducting an in-depth safety review of our plants following the events in Japan and hope to get some lessons learned.

Our primary business is neutral, independent regulation. If you want to influence the energy agenda in the U.S., we recommend that you reach out to your Congressional reps.

Thank you,

Amy

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

From: (b)(6)
Sent: Friday, March 25, 2011 9:25 PM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

(b)(6) on Friday, March 25, 2011 at 21:25:02

comments: As a concerned (b)(6) who loves the beauty and diversity of the west coast, I am writing to urge you to refuse the license renewal for Diablo Canyon Power Plant, a nuclear-power generator in California, until an independent study can be conducted of fault lines in the area.

The recent tragic events at Japan's Fukushima nuclear plant are a wake up call for the U.S. Unforgiving technology on a seismic coast is an accident waiting to happen.

Unfortunately when profits are the top priority, we cannot accept with blind faith the nuclear industry's assurances that it can prevent, or respond to, a nuclear disaster involving earthquakes.

Please inspect both Diablo Canyon and San Onofre Nuclear Generating Stations, which are both along the coast of California. California's coast is our gold and needs to be protected with utmost care.

Sincerely yours,

Mary Kathryn Orrange

(b)(6)

organization:

address1: (b)(6)

address2:

city: (b)(6)

5/62

state: (b)(6)

zip: (b)(6)

country:

phone:

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
Date: Tuesday, March 29, 2011 11:02:00 AM

Hello:

The U.S. Nuclear Regulatory Commission (NRC) goes through lengthy license renewal processes to ensure that each plant is safe. We will also be conducting an in-depth safety review of our plants following the events in Japan and hope to get some lessons learned.

Our primary business is neutral, independent regulation. If you want to influence the energy agenda in the U.S., we recommend that you reach out to your Congressional reps.

Thank you,

Amy

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

From: Debbie Highfill (b)(6)
Sent: Monday, March 28, 2011 12:22 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

Debbie Highfill (b)(6) on Monday, March 28, 2011 at 00:22:20

comments: I LIVE IN THE (b)(6). THERE IS THE POSSIBILITY THAT THE HOSGRI AND SHORELINE FAULTS INTERSECT - WHICH CHANGES THE PRESENT PREDICTIONS. PLEASE, PLEASE, PLEASE DO THE PRUDENT THING AND DO NOT ALLOW DIABLO TO BE RE-LICENSED BEFORE THE MAPPING AND REVIEW OF THE AREA IS COMPLETED.

organization: just a very concerned citizen

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone: (b)(6)

S/63

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: Japan
Date: Tuesday, March 29, 2011 11:05:00 AM

Hello Mr. Serman:

We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

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

From: Brian Serman (b)(6)
Sent: Tuesday, March 29, 2011 10:31 AM
To: OPA Resource
Subject: Japan

This may seem like a stupid question, but what if liquid nitrogen were used in a certain way to help in the cooling of the the reactor core. Bryan

S/64

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy
Subject: FW: Response from "Contact the NRC Web Site Staff"
Date: Tuesday, March 29, 2011 11:08:25 AM

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

From: NRCWEB Resource
Sent: Tuesday, March 29, 2011 10:44 AM
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"

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

From: (b)(6)
Sent: Tuesday, March 29, 2011 8:19 AM
To: NRCWEB Resource
Subject: Re: Response from "Contact the NRC Web Site Staff"

I am still waiting ..

Thanks

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

From: "NRCWEB Resource" <NRCWEB.Resource@nrc.gov>
To: "William B" (b)(6)
Sent: Thursday, March 17, 2011 2:59 AM
Subject: RE: Response from "Contact the NRC Web Site Staff"

I have sent your request to our Office of Public Affairs for response.
Thank you.

NRC Web Team

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

From: William B (b)(6)
Sent: Thursday, March 17, 2011 2:34 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

William B (b)(6) on Thursday, March 17, 2011 at 02:33:50

comments: How far down(Miles),into the core of the Earth, do the nuclear core reactors go?

Give me the total depth and circumference of the facilities.

I think there might be 440 worldwide. maybe 11 in Japan.

Thank you for your time.

organization: USA Citizen

address1:

address2:

S/65

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone:

No virus found in this incoming message.

Checked by AVG - www.avg.com

Version: 9.0.894 / Virus Database: 271.1.1/3511 - Release Date: 03/16/11

15:34:00

Medina, Veronika

From: Medina, Veronika
Sent: Tuesday, March 29, 2011 12:53 PM
To: McIntyre, David
Subject: FW: press inquiry
Attachments: Schneiderman Calls on Federal Reps to Extend Radius from Nuclear Power Plants for Emergency Evacuation Planning.doc

Dave,

Could you follow up with this reporter?

Thanks,
Veronika

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Tuesday, March 29, 2011 11:47 AM
To: Medina, Veronika
Subject: FW: press inquiry

From: Kery Murakami [mailto:Kery.Murakami@newsday.com]
Sent: Tuesday, March 29, 2011 11:34 AM
To: OPA Resource
Subject: press inquiry

Hi I'm doing a little short on this for tomorrow, and i was looking for a reaction about this county legislator's call for extending the evacuation plan around nuclear sites to 25 miles given the situation in japan

Kery Murakami
Newsday
Suffolk County Reporter
631-843-2780 (work)
(b)(6) (cell)

JEX 6

>>> "Stark, Catherine" <catherine.stark@suffolkcountyny.gov> 3/29/2011 11:00 AM >>>

Jay H. Schneiderman

*Suffolk County Legislator
Second District*

*75 Washington St. / P.O. Box 1827
Sag Harbor, New York 11963
631-852-8400 / Fax 631-852-8404*

FOR IMMEDIATE RELEASE
Contact: Christina DeLisi (631) 852-8400

March 29, 2011

***Schneiderman Calls on Federal Reps to Extend Radius from Nuclear Power
Plants for Emergency Evacuation Planning***

S/66

In a letter sent this week to Senators Gillibrand and Schumer and Congressman Bishop, Suffolk County Legislator Jay Schneiderman urged them to press for expanding the current federally required 10 mile radius from nuclear facilities for developing evacuation plans to a minimum of 25 miles based on the experience at the Fukushima Daiichi plant in Japan. Schneiderman in his letter noted that the Japanese government evacuated to a 25 mile radius and President Obama urged US citizens within a 50 mile radius to evacuate the area. Schneiderman noted that much of the North and South Fork lie within the 25 mile radius and no plans exist for evacuating these areas in a nuclear emergency. The text of the letter appears below:

If one lesson can be clearly learned from the nuclear incident at the Fukushima Daiichi plant in Japan, it is that the current US requirement of evacuation planning within 10 miles of a nuclear facility is woefully inadequate. Our own president urged that any US citizen within 50 miles of the Fukushima Daiichi plant be evacuated. Both forks of Eastern Long Island sit within a 50 mile radius of the aging Millstone II nuclear power plant in Waterford, Connecticut. The Japanese government required evacuations within 25 miles of the leaking power plant. A 25 mile radius from the Millstone facility would include the entire Town of East Hampton, Shelter Island, Southold, the Village of Sag Harbor, North Haven, Greenport and large areas of Southampton Town. Currently, no evacuation plans exist for these areas in the event of a nuclear disaster be it accidental, through a natural disaster, or from an act of terrorism.

As a Federal representative of this region, I call on you to press for a minimum radius of 25 miles for evacuation planning from a nuclear facility. Thank you for your prompt attention and consideration.

Jay Schneiderman

Catherine Stark

Legislative Aide, 2nd District
Legislator Jay Schneiderman
75 Washington Street
PO Box 1827, Sag Harbor, NY 11963
Phone 631-852-8400 * Fax 631-852-8404

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-

Medina, Veronika

From: Shannon, Valerie
Sent: Tuesday, March 29, 2011 12:17 PM
To: Medina, Veronika
Subject: Media Call

Name: Brian Till

From: Atlantic Monthly

Phone: 802-598-8479

E-mail: (b)(6)

Re: On deadline and doing a story on "Fire Safety"

Medina, Veronika

From: Medina, Veronika
Sent: Tuesday, March 29, 2011 12:54 PM
To: Burnell, Scott
Subject: FW: Media Call

Scott,

Could you follow up with this reporter?

Thanks,
Veronika

From: Shannon, Valerie
Sent: Tuesday, March 29, 2011 12:17 PM
To: Medina, Veronika
Subject: Media Call

Name: Brian Till
From: Atlantic Monthly
Phone: 802-598-8479

E-mail: (b)(6)

Re: On deadline and doing a story on "Fire Safety"

Medina, Veronika

From: Janbergs, Holly on behalf of OPA Resource
Sent: Tuesday, March 29, 2011 12:55 PM
To: Medina, Veronika
Subject: FW: Nuclear plants to be reviewed

From: Sara Rubin [<mailto:sara@mcweekly.com>]
Sent: Tuesday, March 29, 2011 12:54 PM
To: OPA Resource
Subject: Nuclear plants to be reviewed

Hello,

Regarding the March 23 announcement on reviewing nuclear plants, can you please tell me whether all 104 facilities will be reviewed, or if not, how many? Is Diablo Canyon to be reviewed? What are the criteria for developing this list?

My deadline is 12 pm PST today.

Thank you,
Sara

--
Sara Rubin
Monterey County Weekly, staff writer
(831) 394-5656 ext. 120
(b)(6) (mobile) *ex 6*
sara@mcweekly.com
www.montereycountyweekly.com

Medina, Veronika

From: Uselding, Lara
Sent: Tuesday, March 29, 2011 12:55 PM
To: Couret, Ivonne
Subject: RE: Media - Mustang Daily-Question

Got it

From: Couret, Ivonne
Sent: Tuesday, March 29, 2011 11:17 AM
To: Uselding, Lara
Subject: Media - Mustang Daily-Question

Another Diablo Canyon call....Veronika will be working the media desk this afternoon. Ivonne

From: Royer, Deanna
Sent: Tuesday, March 29, 2011 11:57 AM
To: Medina, Veronika
Subject: Media - Mustang Daily-Question

Josh Friedman
Mustang Daily
818-749-8630

(b)(6)

 EX 6

Re: Diablo Canyon Plant at Applebeach – LA Times reported that they operated for 1^{1/2} years without emergency equipment on.

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

Medina, Veronika

From: Uselding, Lara
Sent: Tuesday, March 29, 2011 12:56 PM
To: Medina, Veronika
Subject: RE: Media - Mustang Daily-Question

Thanks, I already have

From: Medina, Veronika
Sent: Tuesday, March 29, 2011 11:56 AM
To: Uselding, Lara
Subject: FW: Media - Mustang Daily-Question

Lara,

Can you call this reporter?

Thanks,
Veronika

From: Royer, Deanna
Sent: Tuesday, March 29, 2011 11:57 AM
To: Medina, Veronika
Subject: Media - Mustang Daily-Question

Josh Friedman
Mustang Daily
818-749-8630. ~~Text~~ 6

(b)(6)

Re: Diablo Canyon Plant at Applebeach – LA Times reported that they operated for 1^{1/2} years without emergency equipment on.

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

Medina, Veronika

From: Uselding, Lara
Sent: Tuesday, March 29, 2011 1:12 PM
To: Medina, Veronika
Subject: RE: Nuclear plants to be reviewed

yes

From: Medina, Veronika
Sent: Tuesday, March 29, 2011 11:57 AM
To: Uselding, Lara
Subject: FW: Nuclear plants to be reviewed

Lara,

Can you call this reporter?

Thanks,
Veronika

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Tuesday, March 29, 2011 12:55 PM
To: Medina, Veronika
Subject: FW: Nuclear plants to be reviewed

From: Sara Rubin [<mailto:sara@mcweekly.com>]
Sent: Tuesday, March 29, 2011 12:54 PM
To: OPA Resource
Subject: Nuclear plants to be reviewed

Hello,

Regarding the March 23 announcement on reviewing nuclear plants, can you please tell me whether all 104 facilities will be reviewed, or if not, how many? Is Diablo Canyon to be reviewed? What are the criteria for developing this list?

My deadline is 12 pm PST today.

Thank you,
Sara

--
Sara Rubin
Monterey County Weekly, staff writer
(831) 394-5656 ext. 120
(b)(6) (mobile) *Ext 6*
sara@mcweekly.com
www.montereycountyweekly.com

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy
Subject: FW: A Citizen Suggestion
Date: Tuesday, March 29, 2011 2:06:31 PM

From: John A. Alexander (b)(6) 6
Sent: Tuesday, March 29, 2011 2:01 PM
To: OPA Resource
Subject: A Citizen Suggestion

My abbreviated suggestion is:

Initiate a program to provide remote control for a heavy lift helicopter to provide the most possible needed water very directly above the needed site.

Apply Predator guidance technology to a heavy lift helicopter.
Do it quickly because you may need it for the current problems.
Have it available for future events.

Once contaminated wash it at and store it in Yucca Mt.

John A. Alexander, (b)(6)

S/73

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
Date: Tuesday, March 29, 2011 2:21:00 PM

Hello Mr. B:

The NRC's official web site has a lot of information available on nuclear power plants. Nuclear power plants do not go into the core of the earth.

A list of fact sheets that are written for the public is here: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/>

A map with U.S. reactors and information about them is here: <http://www.nrc.gov/info-finder/reactor/>

Thank you,

Amy

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

From: William B (b)(6)) 6
Sent: Thursday, March 17, 2011 2:34 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

William B (b)(6) 6 on Thursday, March 17, 2011 at 02:33:50

comments: How far down(Miles),into the core of the Earth, do the nuclear core reactors go?

Give me the total depth and circumference of the facilities.

I think there might be 440 worldwide. maybe 11 in Japan.

Thank you for your time.

organization: USA Citizen

address1:

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone:

S/74

From: [Bonaccorso, Amy](#)
To: ericksonmc@missouri.edu
Bcc: [Deavers, Ron](#)
Subject: REPLY: Is it safe to travel to Hawaii now?
Date: Tuesday, March 29, 2011 11:09:00 AM

Hello Ms. Erickson:

The U.S. Nuclear Regulatory Commission can't advise people on their travel plans, but we are not expected to experience any harmful levels of radioactivity in (b)(6). The Environmental Protection Agency has publicly stated its agreement with the NRC's assessment.

The NRC is not recommending protective measures like potassium iodide for anyone in the U.S. In the event circumstances change, U.S. residents should listen to the protective action decisions of their states and counties (in your case, you'd want to listen to (b)(6) authorities as you plan your trip.)

Thank you,

Amy

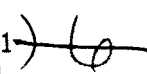
From: Erickson, Marianne C. [<mailto:ericksonmc@missouri.edu>]
Sent: Tuesday, March 29, 2011 10:40 AM
To: OPA Resource
Subject: Is it safe to travel to Hawaii now?

We are planning to (b)(6). How can I find out if it's safe to go on this trip? We have concerns about radiation from the nuclear plants in Japan.

Please advise on a good source of information regarding our question. We also need to know if/when to take potassium iodide.

Thanks very much for your help.

Marianne

Marianne Erickson
Microbiologist
University of Missouri Research Reactor
1513 Research Park Drive
Columbia, MO 65211
(Phone: (573) 882-9121) 
FAX: (573)882-6360

S/75

Medina, Veronika

From: Ghneim, Munira
Sent: Tuesday, March 29, 2011 2:52 PM
To: Medina, Veronika
Subject: Chris Kirkham - Huffington Post -NY ----- 4:30PM DEADLINE

Organization – Huffington Post -NY

Contact – Chris Kirkham

Phone – 212-402-7074 (W) (b)(6) (C) Jexle

Email – kirkham@huffingtonpost.com

Request – Has a few questions about potassium iodine and the 10 to 20 mile radius.

Thank You

Munira Ghneim

Contract Secretary

Office of Information Services

301-415-1170

Medina, Veronika

From: Uselding, Lara
Sent: Tuesday, March 29, 2011 3:08 PM
To: Medina, Veronika
Subject: RE: Media Desk--- Onell Soto - San Diego Union Tribune - California

If it is a general licensing questions, can Scott take it? I'm alone today and have many to get back to?

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: Medina, Veronika
Sent: Tuesday, March 29, 2011 2:05 PM
To: Uselding, Lara
Subject: Media Desk--- Onell Soto - San Diego Union Tribune - California

Lara,

Can you talk to this reporter? Please let me know.

Thanks,
Veronika

From: Ghneim, Munira
Sent: Tuesday, March 29, 2011 2:50 PM
To: Medina, Veronika
Subject: Onell Soto - San Diego Union Tribune - California

Organization – San Diego Union Tribune - California

Contact – Onell Soto

Phone – 619-293-1280

Email – onell.soto@uniontrib.com

Request – Has questions regarding licensing nuclear power plants.

Thank You
Munira Ghneim
Contract Secretary
Office of Information Services
301-415-1170

S/77

From: tim mcquade
To: Bonaccorso, Amy
Subject: RE: REPLY: Japan
Date: Tuesday, March 29, 2011 7:47:56 PM

Hi,

I would never assume that anyone would be able to, handle the situation. Vandenburg from the Seabrook Station would be a quintessential example of what you people describe as capable. Everyone knows that is just nowhere near tenable. All he can do is call up in the middle of the night with his "what do you do when"? quizzes. I am saying that none cares wha the snowload on the building will be. You have to use circular steel members for protection. The WF is not any good for an earthquake.

tim

ps- (b)(6)

From: amy.Bonaccorso@nrc.gov
To: (b)(6)
Date: Tue, 29 Mar 2011 09:30:35 -0400
Subject: REPLY: Japan

Hello Mr. McQuade:

We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: tim mcquade (b)(6)
Sent: Saturday, March 26, 2011 11:19 AM
To: NRC Allegation
Subject: Japan

Sorry about he Japanese Failure. This reinforces my position that CYLINDRICAL BEAMS are superior. You get a significantly larger span with Thin-shelled Analysis over an IBM Main Frame. This increases the proverbial Section Modulus for a Cylindrical Shape.

Secondly, it is apparent that these plants need auxiliary diesel powered generators and pumps.

Sincerely,

Tim J McQuade

5/78

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: power plants
Date: Tuesday, March 29, 2011 10:02:00 AM

Hello Ms. Melia:

The U.S. Nuclear Regulatory Commission regulates nuclear energy for safety. The agency does not promote nuclear energy and strives for independent neutrality.

If you want to shape the nation's energy agenda, you might want to write to your Senators and Representatives.

Thank you,

Amy

From: Kenneth Melia [(b)(6)]
Sent: Thursday, March 24, 2011 10:51 PM
To: NRC Allegation
Subject: power plants

dear folks at the nrc, it is irresponsible to the point of criminal insanity to allow nuclear power plants to continue operation in the u.s.a. or any where follow angela merkel's lead and shut down all nuclear power plants in our country it is awful enough that there are natural disasters earthquakes and tsunamis we don't need avoidable man-made disasters like the one on-going in Japan it is an outrage that there are 2 nuclear power plants on the coast in California earthquake and tsunami territory !!!!! nuclear power is insane for many reasons among them the dilemma of where to put radioactive waste we human beings have been given enough warnings Chernobyl among them shut down nuclear power plants forever !!!!! then shut down the nrc and get jobs that serve mankind and planet earth sincerely theresa roach melia

S/79

Medina, Veronika

From: Burnell, Scott
Sent: Tuesday, March 29, 2011 4:01 PM
To: (b)(6)
Subject: RE: Media Call

Brian;

It turns out that fire protection exemption database was completed in April of last year and is online:

[ML100200007](#)

Hope that's helpful. Thanks.

Scott

From: Shannon, Valerie
Sent: Tuesday, March 29, 2011 12:17 PM
To: Medina, Veronika
Subject: Media Call

Name: Brian Till
From: Atlantic Monthly
Phone: 802-598-8479
E-mail: (b)(6)
Re: On deadline and doing a story on "Fire Safety"

SEXU

From: (b)(6) 6
To: Bonaccorso, Amy
Subject: Re: REPLY: Radiation Question
Date: Tuesday, March 29, 2011 12:11:55 PM

Dear Amy,

Thank you for your reply. I'll research a bit. I suppose by now, plenty of other toxins in the environment could be contributing factors, too. Doesn't hurt to learn more.

Thank you for your kind assistance.
Nancy Kiang

>Hi Ms. Kiang:

>

>I am so sorry to hear that you are concerned about being exposed to
>harmful radiation as a consequence of Chernobyl. Although we do
>have health effects people here at the NRC and some information
>online, I don't think either they or the website can answer your
>specific question. The information I have indicates that certain
>medicines can be taken at the time of exposure to reduce risk, but I
>don't have anything about many years later.

>

>You may want to check with the CDC and see if they have any
>resources for you to consider: 1-800-CDC-INFO.

>

>The EPA also has an email address that specifically focuses on
>radiation: radiation.questions@epa.gov.

>

>Since Chernobyl occurred in Europe, you may also want to reach out
>to the International Atomic Energy Commission, as I would think they
>are more accustomed to Chernobyl-related questions. They are at
>www.iaea.org.

>

>I'm sorry I could not be more helpful.

>

>Thanks,

>

>Amy

>

>

>

>-----Original Message-----

>From: (b)(6) (b)(6) 6
>Sent: Saturday, March 26, 2011 10:56 PM
>To: OPA Resource
>Subject: Radiation Question

>

>Below is the result of your feedback form. It was submitted by

>

>(b)(6) 6 on Saturday, March 26, 2011 at 22:55:57

>-----

>

>

>comments: Hello, I was a (b)(6)
>(b)(6) when Chernobyl blew up. The
>Austrian government delayed informing the public

5/81

>about the dangers of radiation-contaminated
>vegetables, so I was eating my usually healthy lot of
>greens every day (b)(6)

(b)(6)

(b)(6)

(b)(6)

(b)(6) Now I am (b)(6) and (b)(6) I would

>like to know if there is anything I should try now to

>safeguard against (b)(6) occurring some

>time in the future?

>

>contactName: Nancy Kiang

>

>phone:

>

>-----

--

Medina, Veronika

From: Couret, Ivonne
Sent: Tuesday, March 29, 2011 4:40 PM
To: Medina, Veronika
Subject: FW: Interview Request--Chairman Jaczko

This is what I'm telling media interview this week. Ivonne

From: Couret, Ivonne
Sent: Tuesday, March 29, 2011 11:41 AM
To: 'Pamela.Kirkland@siriusxm.com'
Subject: RE: Interview Request--Chairman Jaczko

Dear Pamela,

We The NRC is unable to accommodate interview requests at this time and are concentrating their remarks/statements for the upcoming hearing on Capitol Hill. I will continue to maintain your organization on the list for future opportunities.

Here are the hearings for this week:

Tuesday, March 29, 10:00 am,-- Senate Energy and Natural Resources Committee
366 Dirksen Senate Office Building
Mr. Bill Borchardt: Update on Fukushima

Wednesday, March 30, 10:00 am, House Transportation and Infrastructure Subcommittee on Economic Development, Public Buildings, and Emergency Management
2253 Rayburn House Office Building
Mr. Mike Weber: Emergency Management Programs

Wednesday, March 30, 10:00 am, Senate Appropriations Energy and Water Subcommittee
138 Dirksen Senate Office Building
Chairman Jaczko: Review of Nuclear Safety

Thursday, March 31, 10:00 am, House Appropriations Energy and Water Subcommittee 2362B Rayburn House Office Building Chairman Jaczko

Please monitor the NRC home page or sign up for the listserv for any press releases.

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

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Tuesday, March 29, 2011 11:25 AM
To: Couret, Ivonne
Subject: FW: Interview Request--Chairman Jaczko

S/82

From: Kirkland, Pamela [<mailto:Pamela.Kirkland@siriusxm.com>]
Sent: Tuesday, March 29, 2011 11:18 AM
To: OPA Resource
Subject: RE: Interview Request--Chairman Jaczko

Good Morning,

I had emailed last week about scheduling an interview with Chairman Jaczko to discuss the recent events at Fukushima Daiichi. We're interested in speaking with him about the latest on the plant crisis and steps being taken to prevent something similar from happening in the U.S. Again, this would be a brief phone interview with the host of our morning program. Please feel free to contact me with any questions or concerns.

Thanks!

Pamela

From: Kirkland, Pamela
Sent: Monday, March 21, 2011 10:22 AM
To: 'opa.resource@nrc.gov'
Subject: Interview Request--Chairman Jaczko

Good Morning,

I'm one of the producers for POTUS—the political news channel here at Sirius XM. I wanted to reach out to ask if we might be able to schedule an interview with NRC Chair Gregory Jaczko. We'd like to speak with him about President Obama's call for a review of domestic nuclear plants. This would be a 10 minute phone interview with the host of our morning program, Tim Farley. We have time at 7:20a ET or 7:40a ET for the remainder of the week if the Chairman has any available time. Please feel free to contact me with any questions or concerns you may have.

Best,

Pamela

PAMELA KIRKLAND
SENIOR PRODUCER "THE MORNING BRIEFING"
POTUS SIRIUS110/ XM130
202-380-1416 OFFICE
202-380-4880 STUDIO
(b)(6) CELL) *EX 6*
WWW.XMRADIO.COM/POTUS
WWW.SIRIUS.COM/POTUS

Medina, Veronika

From: Janbergs, Holly on behalf of OPA Resource
Sent: Tuesday, March 29, 2011 4:49 PM
To: Medina, Veronika
Subject: FW: reuters media questions

FYI

From: scott.disavino@thomsonreuters.com [<mailto:scott.disavino@thomsonreuters.com>]
Sent: Tuesday, March 29, 2011 4:47 PM
To: OPA Resource; Burnell, Scott
Cc: eileen.ogrady@thomsonreuters.com
Subject: reuters media questions

Hi,

We're looking at endgame for the Fukushima reactor and that has raised a lot of questions about three mile island

How long did we have to keep water flowing over the reactor core in unit 1 at three mile island after the accident – I see on the nrc web site the vessel head was removed in 1984 and core debris was removed in 1985-1986 – by the way – where did they send the core – where is it now

So I guess you were able to stop cooling by at least 1984 but we're wondering when you were able to stop keeping the core in water

We're trying to figure out when the Japanese can stop cooling the reactor cores at Fukushima – they are having a problem of what to do with the water

If Fukushima was in the US – what would the NRC recommend doing now – it's been over two weeks and the situation is not stable yet – is there a point at which just burying the building and forgetting it is an option

Thanks,

Scott

Scott DiSavino
Correspondent

Thomson Reuters

Phone: 1 646 223 8072
Mobile: (b)(6)

7/26/11

Email - scott.disavino@thomsonreuters.com
Reuters (Instant) Messaging - [scott.disavino.thomsonreuters.com@reuters.net](https://www.thomsonreuters.com/reuters.net)

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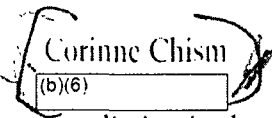
expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of Thomson Reuters.

Deavers, Ron

From: Bonaccorso, Amy
Sent: Tuesday, March 29, 2011 10:25 AM
To: Deavers, Ron
Subject: RE: Info - Citizen
Attachments: image001.jpg

I talked to her and didn't have the answers she wanted, but it seemed to help to just talk. She wants to do some emergency preparedness stuff – I referred her to FEMA's website and also the state dep't of health and emergency preparedness. She thinks that we should be prepared for a worst case scenario and thinks the gov't should be giving more guidance.

 **From:** Akstulewicz, Brenda
Sent: Monday, March 28, 2011 10:20 AM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Info - Citizen

 Corinne Chism

(b)(6)

Is radiation in the air over Arkansas

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brenda.akstulewicz@nrc.gov



Deavers, Ron

From: Bonaccorso, Amy
Sent: Tuesday, March 29, 2011 10:32 AM
To: Deavers, Ron
Subject: FW: Public Inquiry

I left a message with him to rec. checking with the airlines and Dept of State.

From: Janbergs, Holly
Sent: Monday, March 28, 2011 12:04 PM
To: Bonaccorso, Amy
Subject: Public Inquiry

Scott Geld

(b)(6)

(b)(6)

and has radiation concerns

Beth Janbergs
Public Affairs Assistant
301-415-8211

Medina, Veronika

From: Burnell, Scott
Sent: Tuesday, March 29, 2011 3:15 PM
To: Uselding, Lara; Medina, Veronika
Subject: RE: Onell Soto - San Diego Union Tribune - California

'salright, I'll get it then.

From: Uselding, Lara
Sent: Tuesday, March 29, 2011 3:13 PM
To: Burnell, Scott; Medina, Veronika
Subject: RE: Onell Soto - San Diego Union Tribune - California

I haven't and asked that if (as it looks below) its licensing in general I could use help. I'm alone this week and have lots of calls to get back to due to STP board notice, Wolf Creek press release and recent inquiries that have been sent to me...if you can't, I'll put him on my list and get to him at some point this afternoon

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: Tuesday, March 29, 2011 2:11 PM
To: Uselding, Lara; Medina, Veronika
Subject: FW: Onell Soto - San Diego Union Tribune - California

Lara, have you spoken to this reporter? Sounds like it might be San Onofre. If it's more general I can call. Thanks.

From: Medina, Veronika
Sent: Tuesday, March 29, 2011 3:09 PM
To: Burnell, Scott
Subject: FW: Onell Soto - San Diego Union Tribune - California

Scott,

Can you talk to this reporter? Please let me know.

Thanks,
Veronika

From: Ghneim, Munira
Sent: Tuesday, March 29, 2011 2:50 PM
To: Medina, Veronika
Subject: Onell Soto - San Diego Union Tribune - California

Organization – San Diego Union Tribune - California

Contact – Onell Soto

Phone – 619-293-1280 ~~2020~~

Email – onell.soto@uniontrib.com

Request – Has questions regarding licensing nuclear power plants.

Thank You

Munira Ghneim

Contract Secretary

Office of Information Services

301-415-1170

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Yvonne
Subject: FW: Info request for Discovery News; Deadline 4 pm EST 3/31/11
Date: Thursday, March 31, 2011 2:53:00 PM

From: Alyssa Danigelis [redacted] Fx 6
Sent: Thursday, March 31, 2011 2:52 PM
To: OPA Resource
Subject: Info request for Discovery News; Deadline 4 pm EST 3/31/11

Hi Yvonne,

My name is Alyssa Danigelis, I'm a technology reporter for Discovery News working on a piece for the web about major disasters and the technology that can assess threats and send warnings so the public can protect themselves.

--In a scenario where a nuclear reactor in the United States were to have an accident, what technology or technologies are used to assess the threat to the public?

--How quickly can the public be alerted following a reactor event? If it's not possible to answer that, then I'd like to know what the notification procedure is, if that's public information.

--Is there an evacuation policy related to nuclear reactor events in the United States and if so, can you direct me to it?

Here is a link to my Discovery News work: <http://news.discovery.com/contributors/alyssa-danigelis/>

Looking forward to a response as soon as possible before 4 pm EST today. Thank you!

Sincerely,
Alyssa Danigelis

[redacted] cell] Fx 6

5/87

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: I hear that the NRC is asleep at the switch
Date: Tuesday, March 29, 2011 9:36:00 AM

Hello Mr. Bydalek:

U.S. power plants have a strong safety record. Each plant goes through a lengthy review process before its license to operate is renewed. The U.S. Nuclear Regulatory Commission also intends to do a thorough review of the U.S. fleet in light of the recent events in Japan, and act on any lessons learned.

If you have specific concerns about individual power plants and their safety records, this website might be a good resource for you. It lists each plant, along with inspection reports and enforcement actions: <http://www.nrc.gov/info-finder/reactor/>.

Thank you,

Amy

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

From: (b)(6)
Sent: Friday, March 25, 2011 3:13 PM
To: NRC Allegation
Subject: I hear that the NRC is asleep at the switch

Hello -

Everything that I read and hear in the media tells me that you guys are asleep at the switch, that you're too cozy with industry and that you turn a blind eye to the serious problems which our nuclear industry in the United States.

You rubber stamp applications and check the boxes in order to comply to the industry that you're supposed to regulate, but what about the people of this planet who will have to live your shortsightedness if something goes wrong ?

What about it ?

I hope that you sleep well at night knowing that failure to do your job could result in mass destruction of human life and property.

I hope that you're okay with that. Now wake up and get to work and start doing your jobs.

Most Sincerely,

Chris Bydalek
(b)(6)

S/88

Medina, Veronika

From: Janbergs, Holly on behalf of OPA Resource
Sent: Tuesday, March 29, 2011 12:49 PM
To: Medina, Veronika
Subject: FW: Fire protection exemption database

From: Susan Stranahan [mailto:sstran@voicenet.com]
Sent: Tuesday, March 29, 2011 12:32 PM
To: OPA Resource
Subject: Fire protection exemption database

I am writing an article for the Center for Public Integrity in Washington on fire regulations at U.S. reactors. I am trying to track down a central record of all exemptions to Appendix R that have been granted by the NRC. In my search of the NRC website, I noticed this April 22, 2010 letter in which there is mentioned such a database.

see: http://adamswebsearch2.nrc.gov/idmws/DocContent.dll?library=PU_ADAMS^pbntad01&LogonID=491f5d76bcfbd8d0a2b92b448ff66b42&id=101170011 (see reference under Complete Development of Database 12/2009).

This correspondence makes reference to a MicrosoftExcel spreadsheet that is "not publicly available at this time." I would like to obtain a copy of that database. If that file is large, the database manager at the Center for Public Integrity can make the necessary arrangements.

Please feel free to contact me at (b)(6) or by email to discuss this request. Thank you.

Regards,
Susan Stranahan

Susan Q. Stranahan

(b)(6)

(b)(6)

sstran@voicenet.com

From: Bonaccorso, Amy
To: Deavers, Ron
Subject: RE: Question about reactor cost and time to construct
Date: Tuesday, March 29, 2011 8:18:00 AM

Okay – thanks!

From: Deavers, Ron
Sent: Monday, March 28, 2011 6:49 PM
To: Bonaccorso, Amy
Subject: RE: Question about reactor cost and time to construct

I will continue to save the call documentation. Two call backs should be adequate.

Thanks,

Ron

From: Bonaccorso, Amy
Sent: Monday, March 28, 2011 2:02 PM
To: Deavers, Ron
Subject: FW: Question about reactor cost and time to construct

Ron –

Should I still be documenting my stuff by sending it to you via email??

I tried to call this guy again – no pick up or voicemail.

Thanks,

Amy

From: Bonaccorso, Amy
Sent: Friday, March 25, 2011 2:30 PM
To: Deavers, Ron
Subject: FW: Question about reactor cost and time to construct

I tried to call this guy back –he is not answering and does not have voicemail. I'll have to try again later.

From: Tobin, Jennifer
Sent: Friday, March 25, 2011 2:17 PM
To: Bonaccorso, Amy
Subject: RE: Question about reactor cost and time to construct

Amy,

We are just in the business of regulating. The trade press (specifically NEI) has a lot of numbers and data on this topic. I would recommend steering him to www.nei.org.

Thanks!

S/90

-Jenny

Jenny (Tobin) Wollenweber
Export Licensing Officer
Office of International Programs
office: 301-415-2328

From: Bonaccorso, Amy
Sent: Friday, March 25, 2011 10:40 AM
To: Tobin, Jennifer
Cc: Deavers, Ron
Subject: Question about reactor cost and time to construct

Hey Jenny:

Bethany is out today – so you're my next person in line to ask questions like this to.

Are you aware of anything we have that gives the average cost of a nuclear power plant and the average amount of time for them to be constructed?

I looked online and if it's there on our website, I missed it.

(b)(6)
Ronald MacDonald
(b)(6)

6

From: Bonaccorso, Amy
To: Deavers, Ron
Subject: FW: Public Inquiry
Date: Tuesday, March 29, 2011 10:32:00 AM

I left a message with him to rec. checking with the airlines and Dept of State.

From: Janbergs, Holly
Sent: Monday, March 28, 2011 12:04 PM
To: Bonaccorso, Amy
Subject: Public Inquiry

Scott Geld

(b)(6)

(b)(6)

and has radiation concerns

Beth Janbergs
Public Affairs Assistant
301-415-8211

S/91

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: japan diseaster
Date: Tuesday, March 29, 2011 10:34:00 AM

Hello Mr. Schellenberg:

We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,


Amy

From: Michelle M. Schellenberg (b)(6)
Sent: Monday, March 28, 2011 12:13 PM
To: OPA Resource
Subject: japan diseaster

At the risk of being presumptuous I would suggest the following:

The water applications evaporate before getting to the core. How about trying a slurry of graphite and sand along with water to suppress the reaction? Less likely to evaporate before getting to the core. After evaporation graphite would be remaining to suppress reaction. Just a thought from a concerned citizen.

Rick Schellenberg
(b)(6)



5/92

From: Bonaccorso, Amy
To: (b)(6)
Bcc: Deavers, Ron
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
Date: Tuesday, March 29, 2011 10:14:00 AM

Hello Mr. Hoban:

People who live within the 10-mile EPZ of a nuclear power plant should be provided information regularly on how to respond to a plant emergency. Plants provide this information in a variety of ways, including mailing brochures or putting instructions in the yellow pages. If someone living in such a community does not know what to do, they should contact their local emergency management department for assistance.

Thank you,

Amy

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

From: Pat Hoban [(b)(6)]
Sent: Sunday, March 27, 2011 11:14 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

Pat Hoban [(b)(6)] on Sunday, March 27, 2011 at 11:13:34

comments: I live about (b)(6) from the Dresden and Braidwood stations,
is there any kind of plan that I could find on the internet on evacuation or what to do if there was a
accident like in Japan
?

organization:

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone: (b)(6)

S/93

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: REPLY: Safety
Date: Wednesday, March 30, 2011 1:31:00 PM

Hello Ms. Fritz:

Are you referring to Beaver Valley?

These websites show inspection reports, enforcement actions, and safety performance summaries for Beaver Valley.

<http://www.nrc.gov/info-finder/reactor/bv1.html> - Beaver Valley, Power Station 1

<http://www.nrc.gov/info-finder/reactor/bv2.html> - Beaver Valley, Power Station 2

Normally, spent fuel is stored in pools inside the plant and no harmful levels of radiation are emitted from the steam that you see coming from power plants.

A substitute for potassium iodide may be available to you and I would recommend that you contact the Pennsylvania Emergency Management Agency to discuss that.

http://www.pema.state.pa.us/portal/server.pt/community/pema_home/4463

The U.S. Nuclear Regulatory Commission regulates nuclear power plants - we don't have jurisdiction over other energy sources.

Thank you,

Amy

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

From: Bud Fritz (b)(6) 16
Sent: Wednesday, March 30, 2011 6:27 AM
To: OPA Resource
Subject: Safety

Dear NRC

I am concerned about the safety of a nuclear plant within (b)(6) miles of my home. Shippingport is one of the oldest plants in the nation, and I am requesting information as to it's safety record. Where are the spent fuel rods from Shippingport stored? How much radiation is released daily from the steam coming from the cooling towers?

I am (b)(6) That said, there is no way to protect myself from the immediate effects of radiation exposure. Moreover, I am concerned about the long term safety of my family, friends, neighbors, our community and future generations.

I am asking that your commission take some time to explore Solar Energy, and what it could offer to advance this safer way to fuel our electrical needs. God gave us the sun in the sky. Everyday it's power is there for us. Let us harness the source of life on this planet, and not destroy life with nuclear reactors.

Please send information to:

(b)(6) Lani Fritz

(b)(6)

S/94

(b)(6)

Thank you
~Lani Fritz

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Japanese Reactors
Date: Wednesday, March 30, 2011 1:44:00 PM

Hello Mr. Stermer:

Thank you for sending your idea about covering the plant in Japan with cement. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: scott stermer (b)(6)
Sent: Wednesday, March 30, 2011 10:32 AM
To: OPA Resource
Subject: Japanese Reactors

Dear Administrators,

As radiation leakage continues to worsen, it seems clear to me that the time has come to have the Fukushima Daiichi plant cemented over. Radiation in the water will exponentially cause death to ocean animals, birds that feed on them and ultimately to humans. The radiation accumulates unabated. Lets not wait any longer. Please pressure Japan to immediately call this event a "disaster" and end it, by sealing up the facility.

Thank you.
Scott Stermer

5/95

From: Dennis Koski
To: Bonaccorso, Amy
Subject: Re: REPLY: Diablo Canyon
Date: Wednesday, March 30, 2011 1:48:38 PM

Dear Amy,

I did.

Ms. Dennis Koski

On Wed, Mar 30, 2011 at 10:34 AM, Bonaccorso, Amy <amy.Bonaccorso@nrc.gov> wrote:

Hello Mr. Koski:

The U.S. Nuclear Regulatory Commission (NRC) goes through lengthy license renewal processes to ensure that each plant is safe. We will also be conducting an in-depth safety review of our plants following the events in Japan and hope to get some lessons learned.

Our primary business is neutral, independent regulation. If you want to influence the energy agenda in the U.S., we recommend that you reach out to your Congressional reps.

Thank you,

Amy

From: Dennis Koski (b)(6)
Sent: Tuesday, March 29, 2011 4:52 PM
To: OPA Resource
Subject: Diablo Canyon

March 27, 2011

Nuclear Energy Worth the Cost?

Since the earthquake and tsunami disaster in Japan with the resultant nuclear power plant catastrophes, many are questioning the safety of the Diablo Canyon plant in San Luis Obispo County. This plant was completed in 1973 and its two units went on line in 1985 and 1986. The operating licenses for this plant expire in 2024 and 2025 when it will be 51 years old. A license renewal for another 20 years has been requested by PG & E. Can a 70 year old nuclear reactor be considered safe?

The Diablo Canyon nuclear power plant sits very close to two earthquake faults, one only recently discovered. It was built to withstand a 7.5 quake. Let's hope that is enough. Japan thought their plants could withstand the maximum quake possible and had safety measures in place to cover any possible disaster scenario. They were wrong.

Government subsidizes nuclear energy with billions of our tax dollars because private companies cannot afford to build them without our help. Diablo Canyon was projected to cost 380 million dollars. After numerous construction modifications were required, the final cost of the Diablo Canyon plant, when it went

5/96

on-line in 1985, was 5.52 **billion** dollars.

If the billions of our tax dollars were spent on research and development of truly clean alternative energy sources, such as solar, geothermal and wind, maybe we could meet our energy needs without endangering the planet. Nuclear energy is neither safe nor cheap. Please don't waste anymore of my tax dollars on nuclear power.

Dennis Koski

(b)(6)

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: REPLY: Call
Date: Wednesday, March 30, 2011 2:22:00 PM

Hi Mr. Gibeck:

I heard that you called with concerns about traveling to Japan and the drinking water.

We are referring travelers to either their airlines for travel restrictions or to the State Department at: www.travel.state.gov or 1-888-407-4747. The State Department in particular should have some information about what conditions are like for travelers in Japan.

Health questions can sometimes be addressed by the CDC – 1-800-CDC-INFO, although they may not have information specific to conditions in Japan.

Thank you,

Amy

5/97

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: From the NRC Allegation Inbox
Date: Wednesday, March 30, 2011 3:03:00 PM

Hello:

The U.S. Nuclear Regulatory Commission's primary focus is regulating U.S. power plants.

The U.S Environmental Protection Agency is using its existing nationwide monitoring system, RadNet, to monitor continuously the nation's air. The website for signing in is: <http://cdx.epa.gov>.

We have some FAQs about radiation here:
<http://www.nrc.gov/about-nrc/radiation/related-info/faq.html>

We also some information about devices to test radiation yourself here:
<http://www.nrc.gov/about-nrc/radiation/health-effects/detection-radiation.html>

Thank you,

Amy

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Wednesday, March 30, 2011 1:05 PM
To: Bonaccorso, Amy
Subject: FW: From the NRC Allegation Inbox

We've gone over this with Allegations and they decided it didn't meet their criteria. Video is shots of "yellow rain" (pollen) with a music soundtrack. Video description is as follows:

On March 22, 2011 I noticed many yellow puddles on my driveway during the rain. I took these pictures and also collected a sample. I have noticed in many news articles that people have been reporting yellow rain in Japan, Oregon, and elsewhere following the disaster at Fukushima Daiichi nuclear power complex. This has been officially attributed to pollen, not radioactive fallout. I found this explanation questionable, so I just wanted to upload these pictures to let everyone know that this also happened in

(b)(6) during the rain we were having.

Comments suggest he's trying to find someone to analyze the substance for him.

From: Hernandez, Pete
Sent: Wednesday, March 30, 2011 11:21 AM
To: OPA Resource
Subject: From the NRC Allegation Inbox

Good morning OPA,

S/98

While no nuclear safety concern was detailed in the body of the attached email, I am unable to determine if there is an allegation present. Are you able to view the attached youtube link? If so, please let me know the details if it seems to be an allegation.

Thank you,

Pete Hernandez

From: Siu, Nathan
To: Bonaccorso, Amy
Subject: Fw: Give me a call
Date: Wednesday, March 30, 2011 4:16:32 PM

Amy - Don't know if Rosemary has replied to your question about contacting Mr. Albert but this is the latest I've got.

Sent from NRC BlackBerry
Nathan Siu

(b)(6)

From: Layton, Michael
To: Bolling, Lloyd <Lloyd.Bolling@dhs.gov>; Bolling, Lloyd
Cc: Erlanger, Craig; Caldwell, Robert; Harrington, Holly; Bonaccorso, Amy; Peduzzi, Francis; Hogan, Rosemary; Siu, Nathan; Coe, Doug; Correia, Richard
Sent: Fri Mar 25 09:27:40 2011
Subject: Give me a call

We received a request from one of your DNDO colleagues for a classified report. We need to understand his "need to know."

Call me and I'll give details.

MCL

BB: (b)(6) 6
Land line 301-415-7440

S/99

Medina, Veronika

From: Burnell, Scott
Sent: Wednesday, March 30, 2011 7:52 PM
To: Medina, Veronika
Cc: Couret, Ivonne
Subject: RE: reuters media questions

Yes, I've been working to get that to the reporter, I'll continue tomorrow.

From: Medina, Veronika
Sent: Wednesday, March 30, 2011 9:11 AM
To: Burnell, Scott
Subject: FW: reuters media questions

Good morning Scott,

Are you following this request? Please let me know.

Thanks,
Veronika

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Tuesday, March 29, 2011 4:49 PM
To: Medina, Veronika
Subject: FW: reuters media questions

FYI

From: scott.disavino@thomsonreuters.com [<mailto:scott.disavino@thomsonreuters.com>]
Sent: Tuesday, March 29, 2011 4:47 PM
To: OPA Resource; Burnell, Scott
Cc: eileen.ogrady@thomsonreuters.com
Subject: reuters media questions

Hi,

We're looking at endgame for the Fukushima reactor and that has raised a lot of questions about three mile island

How long did we have to keep water flowing over the reactor core in unit 1 at three mile island after the accident – I see on the nrc web site the vessel head was removed in 1984 and core debris was removed in 1985-1986 – by the way – where did they send the core – where is it now

So I guess you were able to stop cooling by at least 1984 but we're wondering when you were able to stop keeping the core in water

We're trying to figure out when the Japanese can stop cooling the reactor cores at Fukushima – they are having a problem of what to do with the water

If Fukushima was in the US – what would the NRC recommend doing now – it's been over two weeks and the situation is not stable yet – is there a point at which just burying the building and forgetting it is an option

Thanks,

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

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From: Tobin, Jennifer
To: Bonaccorso, Amy
Subject: RE: Why are there no emergency diesels in U.S. nuclear power plants?
Date: Wednesday, March 30, 2011 5:11:31 PM

Amy,

Our plants are currently required to have at least 8 hours of battery power for essential reactor functions. Our regulations assume that power to the plant can be restored within that 8 hour timeframe. Power is needed for the cooling systems associated with the core to run. My guess would be that as a result of the events at Fukushima that the NRC may be looking into extending the time period for operating un-attached to the electrical grid.

-Jenny

Jenny (Tobin) Wollenweber
Export Licensing Officer
Office of International Programs
office: 301-415-2328

From: Bonaccorso, Amy
Sent: Wednesday, March 30, 2011 1:56 PM
To: Tobin, Jennifer
Subject: FW: Why are there no emergency diesels in U.S. nuclear power plants?

Jenny:

Do you know anything about this topic of power plants cooling their cores within eight hours of disconnecting from the grid and why that would be so upsetting to someone?

Thanks,

Amy

From: Martin Trenz (b)(6)
Sent: Tuesday, March 29, 2011 11:54 AM
To: NRC Allegation
Subject: Why are there no emergency diesels in U.S. nuclear power plants?

Esteemed Ladies and Gentleman,

as you can see from my e-mail address I'm (b)(6) so you may safely ignore me if you wish, but never shall it be I said I remained silent when I should have spoken up. I have to express my utmost surprise and bewilderment on learning that nuclear power plants in the U.S. can cool their cores for just eight hours when disconnected from the grid:

<http://www.cbsnews.com/stories/2011/03/29/501364/main20048270.shtml>

That's outright dangerous, in my opinion! It would be ab-so-lute-ly impossible here in (b)(6) or in all of Europe. Even Japan had backup diesels, they even worked before being wiped away by the

S/101

Tsunami. Can you imagine the cascade effect of a widespread power outage in your country? One plant going down, forcing another one down, and so on, the grid shattered and your more than 100 nuclear power plants having partial meltdowns like Fukushima ALL AT ONCE? Can you imagine what the political, judicial, financial and reputational implications of such a scenario would be? As members/employees of the U.S. Nuclear Regulatory Commission, have you not sworn some kind of oath to protect your country?

I beg you: make sure your nuclear power plants at least meet the worldwide standards! You invented nuclear power, and you already had a close call with Three Mile Island. You can't play Russian Roulette with the lives and future of your citizens!

Regards

Martin Trenz

(b)(6)

Deavers, Ron

From: Shannon, Valerie
Sent: Wednesday, March 30, 2011 10:54 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Phone Call

6
Name: Sandra Williams

From: (b)(6)

Phone:

Re: (b)(6) and has concerns

Deavers, Ron

From: Akstulewicz, Brenda
Sent: Wednesday, March 30, 2011 11:23 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Info request
Attachments: image001.jpg

6
Tracy

(b)(6)

Just heard from CDC that radiation has been detected in PA. Are higher levels of radiation expected and what to do if so?

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brenda.akstulewicz@nrc.gov



Deavers, Ron

From: Royer, Deanna
Sent: Wednesday, March 30, 2011 2:54 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Public-question

Paul Hayes

(b)(6)

Re: If they freeze radioactive water would that create a barrier?

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

Deavers, Ron

From: Royer, Deanna
Sent: Wednesday, March 30, 2011 4:03 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: public - Question

Jeremy Fletcher
Westmont College
805-565-6218
Jfletcher@westmont.edu

Re: (b)(6) Concerns about radiation

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

5/105

Shannon, Valerie

From: Shannon, Valerie
Sent: Wednesday, March 30, 2011 10:55 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Phone Call

Name: Frances Scarborough

From: (b)(6)

Phone:

~~EXG~~

Re: Radiation in Japan

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: public - Question
Date: Wednesday, March 30, 2011 3:17:00 PM

I talked to her and referred her to EPA – we talked a lot about levels of risk in different products. Although the levels of radiation are not supposed to be harmful, she was concerned about any elevated risk at all.

From: Royer, Deanna
Sent: Wednesday, March 30, 2011 2:03 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: public - Question

Laura Donovan

(b)(6)

Re: Exact levels of radiation in Baltimore.

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

5/107

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: REPLY: Phone Call
Date: Wednesday, March 30, 2011 1:53:00 PM

I called her – the State Dep't says that their travel advisory for Japan is based on info from the NRC. I couldn't tell her what NRC gave them in terms of info, unfortunately, but assured her that we have people working 24-7 and the restriction/advisory should be followed.

From: Shannon, Valerie
Sent: Wednesday, March 30, 2011 10:55 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Phone Call

Name: Frances Scarborough

From: (b)(6)

Phone:  

Re: Radiation in Japan

5/108

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: RE: Citizen Request for Information
Date: Wednesday, March 30, 2011 2:31:02 PM


PR sounds good- he can also watch the video of the commission briefing on the topic. I think there are dates set for upcoming open Commission meetings too, so you can let him know about those.

From: Bonaccorso, Amy
Sent: Wednesday, March 30, 2011 2:29 PM
To: Janbergs, Holly
Subject: FW: Citizen Request for Information

Holly's out – do you know or know who would know if we have a plan for public comments re: the review? It seems like we should because of the Open Government Initiative.

If we don't, I could just refer him to the press release and say that the blog typically has posts that relate to current events and he can post comments there.

From: Janbergs, Holly
Sent: Wednesday, March 30, 2011 1:33 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Citizen Request for Information

Jordan Townsend
jtownsend@ttcorp.com
(202-261-1318) 

Wants information about the proposed review process the NRC will be conducting in the wake of the situation in Japan, especially any information about whether or not there will be periods for public comment

Beth Janbergs
Public Affairs Assistant
301-415-8211

S/109

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Public-question
Date: Wednesday, March 30, 2011 3:54:28 PM

I told him that I asked a technical person and was advised to give our standard "Thanks, but we're not taking suggestions" response – but thanked him for the call and said it was documented.

From: Tobin, Jennifer
Sent: Wednesday, March 30, 2011 3:49 PM
To: Bonaccorso, Amy
Subject: RE: Public-question

Amy,
I would give him the standard response.

Thanks!
-Jenny

Jenny (Tobin) Wollenweber
Export Licensing Officer
Office of International Programs
office: 301-415-2328

From: Bonaccorso, Amy
Sent: Wednesday, March 30, 2011 3:19 PM
To: Tobin, Jennifer
Subject: FW: Public-question

Jenny:

I could just give him the standard "Thank you for your suggestion" but was wondering if you knew the answer to this?

Thanks,

Amy

From: Royer, Deanna
Sent: Wednesday, March 30, 2011 2:54 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Public-question

Paul Hayes


(b)(6)

Re: If they freeze radioactive water would that create a barrier?

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Phone Call
Date: Wednesday, March 30, 2011 1:48:45 PM

I called her and recommended that she contact the state department and airlines for any travel restrictions.

From: Shannon, Valerie
Sent: Wednesday, March 30, 2011 10:54 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Phone Call

Name: Sandra Williams
From: (b)(6)
Phone: 
Re: (b)(6) and has concerns

5/110

From: Bonaccorso, Amy
To: Harrington, Holly
Subject: FW: REPLY: Response from "Contact the NRC Web Site Staff"
Date: Wednesday, March 30, 2011 1:16:00 PM

I don't know if I should email this person back or not. Please tell me what to do.

Thanks,

Amy

From: debbie highfill (b)(6)
Sent: Wednesday, March 30, 2011 12:54 AM
To: Bonaccorso, Amy
Cc: Representative Lois Capps; bruce gibson
Subject: Re: REPLY: Response from "Contact the NRC Web Site Staff"

Dear Amy,

I am replying to your letter below.

Thank you for replying on this issue which is constantly on the minds of many of us that live in the Evacuation Zone for Diablo Canyon.

I don't understand your advice to simply talk my representatives. My understanding is that Congressional representatives are writing the NRC and asking for a delay in the re-licensing process until after the mandated 3D mapping around the plant is completed - and for this I whole-heartedly thank them.

It is also my understanding that the NRC is the only agency that has the power to halt the re-licensing process for Diablo Canyon. Our San Luis Obispo Board of Supervisors drafted a letter today that will be urging you to do just that.

Would you, as a representative of the NRC, agree that it would be wise to know if the two known faults near the plant intersect - before the plant is re-licensed?

I would like to address my concerns to the Commissioners themselves. Would you please provide me with their individual contact information? If my home is being placed in a dangerous evacuation zone - I believe I have the right to communicate with the individuals who are impacting my peace of mind by deciding the re-licensing of Diablo Nuclear Power Plant. Would you not agree that this is reasonable?

Please respond. Thank you.

Debbie Highfill (b)(6) - Evacuation Zone 9.

--- On Tue, 3/29/11, Bonaccorso, Amy <amy.Bonaccorso@nrc.gov> wrote:

From: Bonaccorso, Amy <amy.Bonaccorso@nrc.gov>
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
To: (b)(6)
Date: Tuesday, March 29, 2011, 8:02 AM

Hello:

The U.S. Nuclear Regulatory Commission (NRC) goes through lengthy license renewal processes to ensure that each plant is safe. We will also be conducting an in-depth safety review of our plants following the events in Japan and hope to get some lessons learned.

S/111

Our primary business is neutral, independent regulation. If you want to influence the energy agenda in the U.S., we recommend that you reach out to your Congressional reps.

Thank you,

Amy

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

From: Debbie Highfill (b)(6) 16
Sent: Monday, March 28, 2011 12:22 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

Debbie Highfill (b)(6) on Monday, March 28, 2011 at 00:22:20

comments: I LIVE IN THE EVACUATION ZONE FOR DIABLO CANYON. THERE IS THE POSSIBILITY THAT THE HOSGRI AND SHORELINE FAULTS INTERSECT - WHICH CHANGES THE PRESENT PREDICTIONS. PLEASE, PLEASE, PLEASE DO THE PRUDENT THING AND DO NOT ALLOW DIABLO TO BE RE-LICENSED BEFORE THE MAPPING AND REVIEW OF THE AREA IS COMPLETED.

organization: just a very concerned citizen

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone: (b)(6)

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Japan's leaking reactors
Date: Wednesday, March 30, 2011 1:06:00 PM

Hello Mr. Toler:

Thank you for your suggestion regarding hydraulic cement. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: (b)(6)
Sent: Tuesday, March 29, 2011 4:14 PM
To: OPA Resource
Subject: Japan's leaking reactors

NRC,

As I understand part of the problem in Japan is the reactor is leaking water and not staying cool enough.

Have they tried hydraulic cement? It hardens underwater. Pump it into the leaking vessel and it will find its way to the leak, crack, hole, (whatever), and fill the void, solidify and seal the leak from the inside. It can be pumped through a long hose into the vessel. That hose could be put in position by either helicopters or a remote control vehicle

Within the automobile industry there are also "stop leak" products used for stopping water leaks in radiators and cooling systems, the product is added to the radiator and finds its way to the leak and plugs it from the inside. Obviously the Japan problem is on a larger scale than a car radiator but there is a physical similarity to how to stop the leak when you do not know exactly where it is coming from and / or cannot get to the leak from the external side.

Thanks for all your help to the Japanese people I'm sure they appreciate it.

Jim Toler

(b)(6)

5/1/12

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Nippon nuclear power solutions
Date: Wednesday, March 30, 2011 2:03:00 PM

Hello Mr. Harten:

Thank you for sending your idea regarding silica sand, especially in light of your previous experience. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: Bruce Harten (b)(6)
Sent: Wednesday, March 30, 2011 11:32 AM
To: OPA Resource
Subject: Nippon nuclear power solutions

Sirs, very very important that Nippon Nuclear Power is advised to begin a preparation of 2 million cubic yards of silica sand to be shipped and stored in proximity to failed reactors vessels and the conveyors, screw augers and pressure piping to encapsulate the reactors should meltdown and abandonment occur. The silica sand will encapsulate the core as it melts with glass containment....will provide "Soft dispersement during hydrogen venting" and will conduct cooling water evenly top to bottom and

S/113

serve as a filter media. This will negate a "Chernoble explosive concrete cover installation" and provide for continued close adjustment and surveillance. Bruce A Harten

(b)(6)

(b)(6)

(b)(6)

IBEW electrician with
Generating plant and heavey industrial
experience

Deavers, Ron

From: Shannon, Valerie
Sent: Wednesday, March 30, 2011 12:28 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call

6
Name: Daniel Gibeck

From: (b)(6)

Phone: (b)(6)

E-mail: (b)(6)

Re: (b)(6)

and has concerns about the safety of water

Rosales-Cooper, Cindy

From: Holahan, Gary
Sent: Wednesday, March 30, 2011 5:36 PM
To: Flanders, Scott; Rosales-Cooper, Cindy
Subject: FW: Third NRC Team to Japan
Attachments: 3rd Staff Deployment to Japan Final.docx

From: Evans, Michele
Sent: Wednesday, March 30, 2011 4:29 PM
To: Call, Michel; Salay, Michael; Hay, Michael; Bernhard, Rudolph; LIA03 Hoc; LIA02 Hoc
Cc: Doane, Margaret; Mamish, Nader; Lee, Richard; Case, Michael; Sheron, Brian; Haney, Catherine; Ordaz, Vonna; McCree, Victor; Kennedy, Kriss; Casto, Chuck; Monninger, John; Virgilio, Martin; Weber, Michael; Borchardt, Bill; Bahadur, Sher; Ruland, William; Leeds, Eric; Johnson, Michael; Holahan, Gary; Pederson, Cynthia; Camper, Larry; Wiggins, Jim; Dorman, Dan; Collins, Elmo
Subject: Third NRC Team to Japan

Thank you for volunteering for deployment to Japan. This work is of highest priority for the agency and your efforts are enormously appreciated.

At this time we've identified 4 additional technical staff to support the team in Japan. **The plan is for Mike Salay (RES), Michel Call (NMSS), Mike Hay (RIV), and Rudy Bernhard (RIL) to leave the USA on Saturday, April 2.** The intent is that your stay will be two weeks or less.

An additional staff member with International Programs expertise will be identified by OIP to support and provide relief in the near term.

The Operations Center Liaison Team (LT) will be contacting you later today to handle the logistic for your trip. This includes items such as flights, passports, country clearances, health immunizations, international blackberry service, dosimetry and KI tablets.

In addition, HR has requested that I provide you the information below:

-Please contact NRC Health Services at your earliest convenience on 301-415-8400 to schedule an appointment with Dr. Cadoux for health screening and counseling. If at all possible, it is important that you meet with Dr. Cadoux face-to-face. However, if you are located in the Region or if you are notified and deployed in a very short time frame so that medical screening is not possible, this screening will be conducted by phone. Please be aware that medical services available in Tokyo are limited at this time. Additionally, working conditions are such that controlling diet, sleep, exercise, and routine may be impossible. All of these factors can impact your health. Please review any medical conditions that you may have with Dr. Cadoux so that he can provide you with advice and counseling on managing your medical condition while deployed.

-Before you deploy we recommend that you speak briefly with the NRC Employee Assistance Program counselor, Sarah Linnerooth. Sarah can be reached on 301-415-7113. While you are deployed, EAP services are available to both you and your family, including extended family members such as Grandparents. The telephone number for EAP service is 1-800-896-0276. More information is available on the EAP on the web at www.eapconsultants.com. To learn more about the EAP and the services provided click on the member services tab. The NRC passcode is "nuclear". Please be sure to share this information with your family.

At this point, I ask that you hold any questions that you may have until the LT contacts you directly. However, after that time, if you have any additional questions or concerns that have not been addressed, please call or email me.

Thank you.

Michele Evans

Acting Deputy OD, NSIR

Michele.evans@nrc.gov

BB: (b)(6)

From: Tobin, Jennifer
To: Bonaccorso, Amy
Subject: RE: Public-question
Date: Wednesday, March 30, 2011 3:48:00 PM

Amy,
I would give him the standard response.

Thanks!
-Jenny

Jenny (Tobin) Wollenweber
Export Licensing Officer
Office of International Programs
office: 301-415-2326

From: Bonaccorso, Amy
Sent: Wednesday, March 30, 2011 3:19 PM
To: Tobin, Jennifer
Subject: FW: Public-question

Jenny:

I could just give him the standard "Thank you for your suggestion" but was wondering if you knew the answer to this?

Thanks,

Amy

From: Royer, Deanna
Sent: Wednesday, March 30, 2011 2:54 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Public-question

Paul Hayes

(b)(6)

Re: If they freeze radioactive water would that create a barrier?

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

S/116

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Ivonne
Subject: FW: Information sought on reactor-type equipment at the University of Nevada, Reno
Date: Thursday, March 31, 2011 1:11:00 PM

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

From: Steve Timko [mailto:stimko@rgj.com]
Sent: Thursday, March 31, 2011 1:05 PM
To: PDR Resource
Cc: OPA Resource
Subject: Information sought on reactor-type equipment at the University of Nevada, Reno

I'm a reporter with the Reno Gazette-Journal. I was a student at the (b)(6) At that time they had what they called a small nuclear reactor on campus. I am trying to get information about it, like how long they had it and what they used it for. The university looked into it. They can't find specific information on it. A physics professor there now has seen records for it. He described it as a subcritical experimental unit. He has been there since 1990 and it was gone before he got there. It was under the supervision of Professor James Kliwer, who retired around 1993 and died a short time later.

Steve Timko
Reporter
Reno Gazette-Journal
Phone: 775-788-6335
Fax: 775-788-6458

Illegitimi non carborundum
-- General Joe Stilwell
Not sent from an iPhone

5/1/17

From: Bonaccorso, Amy
To: Tobin, Jennifer
Subject: FW: Public-question
Date: Wednesday, March 30, 2011 3:18:56 PM

Jenny:

I could just give him the standard "Thank you for your suggestion" but was wondering if you knew the answer to this?

Thanks,

Amy

From: Royer, Deanna
Sent: Wednesday, March 30, 2011 2:54 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Public-question

Paul Hayes

(b)(6)

Re: If they freeze radioactive water would that create a barrier?

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

5/11/8

From: Tobin, Jennifer
To: Bonaccorso, Amy
Subject: RE: Why are there no emergency diesels in U.S. nuclear power plants?
Date: Wednesday, March 30, 2011 5:11:00 PM

Amy,

Our plants are currently required to have at least 8 hours of battery power for essential reactor functions. Our regulations assume that power to the plant can be restored within that 8 hour timeframe. Power is needed for the cooling systems associated with the core to run. My guess would be that as a result of the events at Fukushima that the NRC may be looking into extending the time period for operating un-attached to the electrical grid.

-Jenny

Jenny (Tobin) Wollenweber
Export Licensing Officer
Office of International Programs
office: 301-415-2328

From: Bonaccorso, Amy
Sent: Wednesday, March 30, 2011 1:56 PM
To: Tobin, Jennifer
Subject: FW: Why are there no emergency diesels in U.S. nuclear power plants?

Jenny:

Do you know anything about this topic of power plants cooling their cores within eight hours of disconnecting from the grid and why that would be so upsetting to someone?

Thanks,

Amy

From: Martin Trenz (b)(6)
Sent: Tuesday, March 29, 2011 11:54 AM
To: NRC Allegation
Subject: Why are there no emergency diesels in U.S. nuclear power plants?

Esteemed Ladies and Gentleman,

as you can see from my e-mail address (b)(6), so you may safely ignore me if you wish, but never shall it be I said I remained silent when I should have spoken up. I have to express my utmost surprise and bewilderment on learning that nuclear power plants in the U.S. can cool their cores for just eight hours when disconnected from the grid:

<http://www.cbsnews.com/stories/2011/03/29/501364/main20048270.shtml>

That's outright dangerous, in my opinion! It would be ab-so-lute-ly impossible here in (b)(6) or in all of Europe. Even Japan had backup diesels, they even worked before being wiped away by the

5/1/19

Tsunami. Can you imagine the cascade effect of a widespread power outage in your country? One plant going down, forcing another one down, and so on, the grid shattered and your more than 100 nuclear power plants having partial meltdowns like Fukushima ALL AT ONCE? Can you imagine what the political, judicial, financial and reputational implications of such a scenario would be? As members/employees of the U.S. Nuclear Regulatory Commission, have you not sworn some kind of oath to protect your country?

I beg you: make sure your nuclear power plants at least meet the worldwide standards! You invented nuclear power, and you already had a close call with Three Mile Island. You can't play Russian Roulette with the lives and future of your citizens!

Regards

Martin Trenz

(b)(6)

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

From: Marcetich, Adam [mailto:marcetia@msoe.edu]
Sent: Wednesday, March 30, 2011 8:45 PM
To: OPA Resource
Subject: Nuclear energy? PBR (pebble bed reactor) me ASAP!

Confusion and division over fission

Dear Chairman Jaczko,

The recent disasters in Japan highlight the disadvantages of nuclear power. fission power offers many advantages over fossil fuels and renewable energy. zero emissions, low prices and steady generation can electrify cities with a small physical plant footprint.

On the other hand, disposal and safety have not been addressed adequately. Compared to fossil fuels and renewables, nuclear power can be tricky at all stages. Nuclear fuel can be diverted for weapons, operating plants risk meltdown if attacked or damaged, and waste can contaminate huge areas if released en route to a burial site.

One critical difference has not been addressed between nuclear and other technology. Current coal, gas and oil plants do not burn fuels in the same way as fifty years ago. instead of lumps of coal shoveled into a furnace, pulverizers first grind coal dust, and entrain it in an airstream before it burns at maximum efficiency.

Likewise, new turbine designs optimize windmills. These are not the same windmills that milled grains into flour hundreds of years ago, but computer designed airfoils with optimized shapes.

Fears, suspicion and misinformation have limited funding into nuclear power research. Accidents and fears have prevented new plants from being built in the US for over 30 years. The result is a power industry that splits uranium atoms much in the same way as three or even more decades ago. Would we expect coal to provide the same efficiency or safety if were shoveled into open furnaces by hand, as it was decades ago? Fossil fuel and renewable energy are competitive today in a large part from ongoing research. Considering new technologies at least for research would allow testing for safer, more efficient designs. It's time to focus on the advantages of nuclear power, and explore its possibilities with research.

pebble bed reactors (PBR's) use a different technology to provide a homogenous, standardized fuel shape. they resist diverting material since each pebble can be counted rather than weighed and analyzed. this passive safety avoids meltdown, since the pebbles cannot form a critical mass even in the tightest packed configuration.

Is the US NRC actively evaluating next-generation nuclear power technology? In light of both the gulf coast oil spill and Japanese energy disasters, the realities of nuclear power are a ripe field to explore.

Thanks,

Adam in (b)(6)

http://en.wikipedia.org/wiki/Pebble_bed_reactor
http://en.wikipedia.org/wiki/Coal_power

S/120

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Ivonne
Subject: FW: Seeking a clarification on Chairman Jaczko's remarks - WSJ
Date: Wednesday, March 30, 2011 3:14:00 PM

From: Brenner, Eliot
Sent: Wednesday, March 30, 2011 3:13 PM
To: Power, Stephen
Cc: Burnell, Scott; OPA Resource
Subject: RE: Seeking a clarification on Chairman Jaczko's remarks - WSJ

Just responded to her.

From: Power, Stephen [mailto:Stephen.Power@wsj.com]
Sent: Wednesday, March 30, 2011 3:07 PM
To: Brenner, Eliot
Cc: Burnell, Scott; OPA Resource
Subject: Seeking a clarification on Chairman Jaczko's remarks - WSJ

Hi, Eliot-

I know you're swamped, but my colleague Tennille Tracy could use your help in getting clarification on something the Chairman said at today's Senate hearing. The chairman said that he thought a 20-mile evacuation around Fukushima was a "safe distance."

Can the NRC tell us:

- Whether this means the U.S. is now amending its earlier recommendation to U.S. citizens to stay at least 50 miles away?
- What data this new 20-mile directive is based on?

You can either email Tennille and me or call one of us (try Tennille first – 202 862 6619)

Thanks so much.

5/12/11

With kind regards,

Stephen Power

Staff Reporter

The Wall Street Journal

Office: (202) 862-9269

[Cell: (b)(6)] Fx 6

Email: Stephen.Power@wsj.com

Follow me on Twitter at <http://twitter.com/stephenlpower>

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Ivonne
Subject: FW: Seeking a clarification on Chairman Jaczko's remarks - WSJ
Date: Wednesday, March 30, 2011 3:13:00 PM

FYI

From: Power, Stephen [mailto:Stephen.Power@wsj.com]
Sent: Wednesday, March 30, 2011 3:07 PM
To: Brenner, Eliot
Cc: Burnell, Scott; OPA Resource
Subject: Seeking a clarification on Chairman Jaczko's remarks - WSJ

Hi, Eliot-

I know you're swamped, but my colleague Tennille Tracy could use your help in getting clarification on something the Chairman said at today's Senate hearing. The chairman said that he thought a 20-mile evacuation around Fukushima was a "safe distance."

Can the NRC tell us:

- Whether this means the U.S. is now amending its earlier recommendation to U.S. citizens to stay at least 50 miles away?
- What data this new 20-mile directive is based on?

You can either email Tennille and me or call one of us (try Tennille first – 202 862 6619)

Thanks so much.

With kind regards,

Stephen Power

3/122

Staff Reporter

The Wall Street Journal

Office: (202) 862-9269

[Cell: (b)(6)] Ex 6

Email: Stephen.Power@wsj.com

Follow me on Twitter at <http://twitter.com/stephenlpower>

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Yvonne
Subject: FW: MARK W. FL. REPORTER ECONOMIST-XINHUA 3/30/2011 Q.'S FOR STORY
Date: Wednesday, March 30, 2011 2:44:00 PM

From: (b)(6) Ev 6
Sent: Wednesday, March 30, 2011 2:42 PM
To: OPA Resource
Subject: MARK W. FL. REPORTER ECONOMIST-XINHUA 3/30/2011 Q.'S FOR STORY

March 30, 2011

To: Office of Public Affairs, Nuclear Regulatory Commission

From: Mark Weisenmiller, Florida-based Reporter, The Economist, as well as the international Chinese news wire agency Xinhua (pronounced SHIN-WA)

To Whom It May Concern,

I am currently working on a story for Xinhua about the damaged Fukushima nuclear power plant in Japan and have some questions for the NRC. After speaking with Deana there, she told me to e-mail the questions up to this e-mail address. For your information, the story will be appearing on the English-language news wire agency of Xinhua and that web site is www.xinhua.com. You can e-mail me back your aswers to the questions, to (b)(6) and the deadline for doing so is THIS FRIDAY AFTERNOON AT 5.30 PM ET (although if need be, I can extend the deadline a bit). Herewith the questions:

1) Even though the March earthquake and subsequent tsunami in Japana in March were very unexpected, did it still surprise the NRC to hear of the extent of the damage to the nuclear power plant in Japan, especially considering the fact that Japan is a world wide leader in nuclear power plant safety?, 2) What is the easiest and hardest parts of the subsequent cleanup operations at the damaged nuclear power plant?, 3) Is safe decommission and deconstruction of the damaged Japanese nuclear power plant even an option now, considering that high levels of radiation are being recorded in and around the immediate area?, 4) Can the NRC, or any agency affiliated with the United Nations, provide help to the Japanese, in regards to the clean-up operations?, 5) In one of the many articles that have been published about the damaged nuclear power plant, a former atomic energy policy planner for Japan's Science and Technology Agency told a reporter that it would take three to five years to try to control all of the damage to the power plant facility. Does that sound like a reasonable time figure to the NRC---or should it be higher (or lower)?, 6) Is the clean up job that is going to have to happen at Fukushima so large that the Japanese are going to havve to ask for help from other countries (such as the U.S., France, the U.K., etc.) and/or any international organizations (such as the International Atomic Energy Commission)?

Please send a reply e-mail, acknowledging that you received these questions and that they were forwarded to the relevent RNC employee. In closing, thank you for your attention, cooperation, and time and I look forward to receiving back from the NRC answers to the above questions soon. Respectfully,
Mark Weisenmiller, (b)(6) E-Mail Address, www.alkapressinternational.com---Publishing
House E-Mail Address, (b)(6) --Home Telephone Number, (b)(6) ---Mobile
Telephone Number (b)(6)

Ev 6

Ev 6

5/123

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Ivonne
Subject: FW: Phone Interview Request - Anthony Ulises
Date: Wednesday, March 30, 2011 1:24:00 PM

FYI

From: Mainichi LA [mailto:mainichila@mainichi.com]
Sent: Wednesday, March 30, 2011 1:23 PM
To: Brenner, Eliot
Cc: OPA Resource
Subject: Phone Interview Request - Anthony Ulises

Hello Mr. Brenner,

This is Jessica again with Japanese Daily News (Mainichi), reaching out to you from our Los Angeles office.

We like to request a phone interview with Anthony Ulises of the NRC. Our deadline is approaching and would like to interview him today.

We look forward to speaking with Mr. Ulises

With regards,

--
Jessica Jung
The Mainichi Newspapers
Los Angeles Bureau
o: 310-396-7547
c: (b)(6) Ex 6

5/124

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Ivonne
Subject: FW: Erroneous Radiation Plume Model
Date: Wednesday, March 30, 2011 1:24:00 PM

From: Simon Murphy @ The Sovereign Independent [mailto:simon@sovereignindependent.ie]
Sent: Wednesday, March 30, 2011 1:22 PM
To: OPA Resource
Cc: Watkins, Charles
Subject: RE: Erroneous Radiation Plume Model

Hi I was wondering if you could supply me with a graphic of the predicated flow of the radiation plume from Japan's nuclear power plants. We posted an article on our website with the graphic that has been shared around the internet and we were informed by Charles from the Cyber Situational Awareness Team that the graphic was not released by your agency. We were not aware that this was a fake but we would like an official image or report to replace the graphic. We pride ourselves on telling the truth in our newspaper and website and would like to correct this mistaken image,

Please refer to the email below for more information.

Look forward to hearing from you,

Regards,

Simon Murphy
The Sovereign Independent News

From: Watkins, Charles [mailto:Charles.Watkins@nrc.gov]
Sent: 30 March 2011 17:51 PM
To: Simon Murphy @ The Sovereign Independent; simon@sovereignindependent.com
Subject: RE: Erroneous Radiation Plume Model

Simon, We appreciate you taking down that graphic as soon as you can. All media inquiries should be directed to the NRC Office of Public Affairs at OPA@nrc.gov or 301-415-.8200.

Charles Watkins II, CISSP, EnCE
Cyber Situational Awareness Team
NRC, Computer Security Office
(301) 415-6199 Work Phone

(b)(6) Work Cell

From: Simon Murphy @ The Sovereign Independent [mailto:simon@sovereignindependent.ie]
Sent: Wednesday, March 30, 2011 12:36 PM
To: Watkins, Charles; simon@sovereignindependent.com
Subject: Erroneous Radiation Plume Model

S/125

Hi Charles,

I will arrange for that to be taken down as soon as possible. It was posted as an article from another source rather than one of our own. I also noticed this image being used on CNN or some other main stream media report as well as Russia Today. Can you please provide us with an official graph of how the US Nuclear Regulatory Commission think the plume will travel across the world or even just to the US. We are based in Ireland and our main broadcaster has reported the highly sophisticated detection equipment in Dublin has found radioactive iodine in the atmosphere. It makes me wonder if the image you refer to is not actually correct even though it was not officially released by your agency.

I await your response,

Regards,

Simon Murphy
The Sovereign Independent News

From: sovereign@rodimusprime.fastsecurehost.com [mailto:sovereign@rodimusprime.fastsecurehost.com]
On Behalf Of Charles Watkins - US NRC
Sent: 30 March 2011 15:31 PM
To: simon@sovereignindependent.com
Subject: Erroneous Radiation Plume Model

From: Charles Watkins - US NRC <charles.watkins@nrc.gov>
Subject: Erroneous Radiation Plume Model

Message Body:

Your web site has an erroneous graphic of a radiation plume model on it. This graphic is incorrect and is not published by the US Nuclear Regulatory Commission. Request that you have this graphic removed from the below listed web site. Thank you.

<http://www.sovereignindependent.com/?p=16608>

Charles Watkins II, CISSP, EnCE
Cyber Situational Awareness Team
NRC, Computer Security Office
(301) 415-6199 Work Phone
(b)(6) Work Cell } Ex 6

--

This mail is sent via contact form on Sovereign Independent <http://www.sovereignindependent.com>

No virus found in this message.
Checked by AVG - www.avg.com

Version: 10.0.1209 / Virus Database: 1500/3538 - Release Date: 03/29/11

No virus found in this message.

Checked by AVG - www.avg.com

Version: 10.0.1209 / Virus Database: 1500/3538 - Release Date: 03/29/11

From: Janbergs, Holly
To: Couret, Ivonne
Subject: Information - Scientific American
Date: Wednesday, March 30, 2011 12:48:00 PM

Adam Piore from Scientific American would like to speak to someone today about our seismic regulations and about the John Ma dissent incident.

(b)(6)

Fx 6

Beth Janbergs
Public Affairs Assistant
301-415-8211

S/126

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Japanese Reactors
Date: Wednesday, March 30, 2011 10:44:00 AM

From: scott stermer (b)(6)
Sent: Wednesday, March 30, 2011 10:32 AM
To: OPA Resource
Subject: Japanese Reactors

Ex 6

Dear Administrators,

As radiation leakage continues to worsen, it seems clear to me that the time has come to have the Fukushima Daiichi plant cemented over. Radiation in the water will exponentially cause death to ocean animals, birds that feed on them and ultimately to humans. The radiation accumulates unabated. Lets not wait any longer. Please pressure Japan to immediately call this event a "disaster" and end it, by sealing up the facility.

Thank you.

Scott Stermer

5/127

From: Floyd Rudmin
To: Janbergs, Holly
Subject: Re: Concerns About Nuclear Safety
Date: Wednesday, March 30, 2011 9:26:55 AM

Good evening,

I have just read of a nuclear power expert testifying to the US Senate, expressing essentially the same concern I have been expressing. Because loss of cooling is catastrophic, the pumps, the cooling liquid, and the power to the pumps must NEVER fail.

Of these, the power to run the pumps seems most easily lost. Therefore, it is IMPERATIVE that nuclear power plants have more redundancy in power supplies. The obvious one being the immediate need to lay additional power lines from the grid to the reactor, in a different way than the existing aerial power line, ie, in underground conduits. Do this BEFORE there is a reactor crisis, not during the crisis, as Japan has had need to do.

-----cut here for account of testimony to the Senate-----

David Lochbaum, director of the Union of Concerned Scientists' Nuclear Safety Project, yesterday testified before the US Senate Energy and Natural Resources Committee. He stressed the substandard provision of backup power supplies at many American nuclear reactors. "I cannot emphasise enough that the lessons from Japan apply to all US reactors, not just the boiling water reactors like those affected at Fukushima," he said. "None are immune to station blackout problems."

He continued: "As at Fukushima, US reactors are designed to cool the reactor core during a station blackout of only a fairly short duration. It is assumed that either the connection to an energised electrical grid or the repair of an emergency diesel generator will occur before the batteries are depleted. Eleven US reactors are designed to cope with a station blackout lasting eight hours, as were the reactors in Japan. Ninety-three of our reactors are designed to cope for only four hours."

-----end of quote-----

Please.
Sincerely,
Floyd Rudmin

5/128

From: Floyd Rudmin (b)(6) E 6
To: "Janbergs, Holly" <Holly.Janbergs@nrc.gov>
Sent: Thu, March 24, 2011 7:28:42 PM
Subject: Re: Concerns About Nuclear Safety

Good evening,

Thank you very much for the fast and detailed response. You are probably being flooded by these now. But you really did not answer my concerns:

A) NEED FOR REDUNDANT POWER TRANSMISSION CABLES TO THE GRID

In Japan, they have just spent a week laying a new electric power line from the grid to the reactors because the earthquake and tidal wave

- 1) caused the reactors to shut down so that they do not produce electricity,
- 2) caused the back up generators to fail, and
- 3) destroyed transmission lines between the reactors and the grid.

They thus ended up with no electricity at the reactors, which caused the cooling pumps to stop, which caused over-heating, hydrogen explosions, and now release of radiation into the environment.

I think a large commercial airplane hitting a reactor could or would likely cause the same three failures at a US or Canadian reactor complex. How can anyone say with assurance that such an event would not cause the same three events that happened last week in Japan?

It would be best to have redundant power lines to the reactors, the back-up ones would probably be best in under-ground conduits. Is it bad to have more redundancy in the electricity to run cooling pumps? Considering the cost to the nation when a reactor fails, then it is a cheap bargain to have an extra power cable to the pumps.

B) NEED TO ANTICIPATE AND PRECLUDE DANGERS TO REACTORS FROM ACTIVITIES OUTSIDE THE SECURITY PERIMETER

Almost all reactors have some kind of linkage to local water sources (lakes, rivers, ocean). The openings of underwater pipes are out-of-sight and are outside the security perimeter. If a bomb were exploded at the openings of these pipes, there would be an enormous back-pressure into the plumbing of the reactor. Hydraulic pressure has enormous power, and many materials will fail, including valves, joints, welds, etc. I do not know the details of the plumbing of reactors, but that seems a plausible threat. I only ask that the NRC consider this, perhaps model what would happen if an explosion went off in a reactor's underwater pipes into the nearby water.

I have not been a fan of "the war on terror", but I do realize that there

are angry people in the world, who would like to damage the USA or the Western World's economy and power, who may have little regard for consequences to themselves or others. And these do not have to be angry foreigners. There are a lot of angry people in the USA who would also like to do damage for reasons of revenge, or ideology, or religion, or simply insanity. Nuclear reactors seem a natural target for such people since relatively minor failure (like losing electricity for 3 days) can have catastrophic effects.

Please, please pass these concerns up into the NRC to the level where engineers or responsible persons could consider them. Please do not think that PR responses that everything is fine and safe are adequate here. Your Japanese counter-parts have been making such assurances for years.

The events in Japan should make all of you realize that NRC confidence is itself one of the dangers to be wary of.

Sincerely,
Floyd Rudmin

From: "Janbergs, Holly" <Holly.Janbergs@nrc.gov>
To: (b)(6) Ex 6
Sent: Thu, March 24, 2011 1:45:17 PM
Subject: Re: Concerns About Nuclear Safety

Mr. Rudman,

I appreciate you taking the time to pass along your concerns. The NRC tries to integrate public action opportunities throughout its licensing and rulemaking processes. You can always find listings of public meetings here:

<http://www.nrc.gov/public-involve/public-meetings/index.cfm>

Regarding your specific questions, please know that the NRC has comprehensively studied the effect of an airborne attack on nuclear power plants. Shortly after 9/11, the NRC began a security and engineering review of operating nuclear power plants. Assisting the NRC were national experts from Department of Energy laboratories, who used state-of-the-art experiments, and structural and fire analyses.

These classified studies confirm that there is a low likelihood that an airplane attack on a nuclear power plant would affect public health and safety, thanks in part to the inherent robustness of the structures. A second study identified new methods plants could use to minimize damage and risk to the public in the event of any kind of large fire or explosion. Nuclear power plants subsequently implemented many of these methods.

In addition, all U.S. plants except for Oconee have both diesel and battery backup systems. Most of the U.S. plants with diesels have two diesels per unit, and those that only have one dedicated diesel have a swing diesel available as well. Most sites plan to run the diesels for multiple days and have battery backup capability for eight hours. The recovery strategy for each site 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.

The NRC also utilizes what is known as the Design Basis Threat – essentially a compilation of possible factors or concerns that the agency expects its licensees to address when creating their safety plans. In the Energy Policy Act of 2005, Congress outlined twelve factors that the NRC considered in its revision of the DBT rule. These factors included many potential terrorist threats, such as physical, cyber, and biochemical attacks; water- and air-based threats; long-lived fires; and suicide attacks. It also included the use of explosive devices of considerable size, and the use of other modern types of weaponry.

I understand that the situation in Japan has raised a lot of concerns, and I can assure you that the agency is taking it very seriously. We have said from the beginning that the NRC would analyze the situation for any lessons that can be derived to improve our oversight of U.S. power plants. Emergency planning and safety structures will be part of that analysis. President Obama has also asked the agency to conduct a comprehensive review of the safety of U.S. nuclear plants, and the NRC agreed to do so. One of our latest press releases details the beginning steps of that process: <http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-055.pdf>

Thank you again for passing along your concerns. I hope you take the opportunity to participate in our public comment process in the future.

Best,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Ivonne
Subject: FW: reuters media questions
Date: Wednesday, March 30, 2011 8:25:00 AM

FYI – already alerted Veronika

From: scott.disavino@thomsonreuters.com [mailto:scott.disavino@thomsonreuters.com]
Sent: Wednesday, March 30, 2011 8:20 AM
To: Burnell, Scott
Cc: eileen.ogrady@thomsonreuters.com; Brenner, Eliot; OPA Resource
Subject: RE: reuters media questions

Thanks Scott

I'm just wondering at what point the cooling water was no longer circulated around the core at Three Mile Island – one of the problems they seem to be having in Japan is what to do with all the water they are using to cool the core and spent fuel pools

I'm guessing the TMI core is not in a water bath now but dry sitting behind some sort of protective shielding for possible future research – is that right?

Today's story is about endgame – what is the best and worst that can happen now – how long can this go on and would it make any sense to give up and cover the site with concrete and revisit in the future (not a solution anyone but the local editors think is acceptable)

Anything you can add to any of that would be helpful – even off the record

I'm sure I'll have more questions

Thanks,

Scott

Scott DiSavino
Correspondent
Thomson Reuters

Phone: 1 646 223 6072

Mobile: (b)(6) E X 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: Tuesday, March 29, 2011 5:09 PM
To: DiSavino, Scott P. (M Edit Ops)

5/129

Cc: O'Grady, Eileen (M Edit Ops); Brenner, Eliot; OPA Resource
Subject: RE: reuters media questions

Hi Scott;

The TMI core debris was sent to the Idaho National Lab where it's still being stored.

I'll check on the other TMI information, but we're still nowhere near the point of having enough of a grasp of Fukushima's conditions to do that sort of hypothesizing. Under the NRC's regulations, emergency core cooling systems have to be able to run for about a month in "accident space."

Scott

From: scott.disavino@thomsonreuters.com [mailto:scott.disavino@thomsonreuters.com]
Sent: Tuesday, March 29, 2011 4:47 PM
To: OPA Resource; Burnell, Scott
Cc: eileen.ogrady@thomsonreuters.com
Subject: reuters media questions

Hi,

We're looking at endgame for the Fukushima reactor and that has raised a lot of questions about three mile island

How long did we have to keep water flowing over the reactor core in unit 1 at three mile island after the accident – I see on the nrc web site the vessel head was removed in 1984 and core debris was removed in 1985-1986 – by the way – where did they send the core – where is it now

So I guess you were able to stop cooling by at least 1984 but we're wondering when you were able to stop keeping the core in water

We're trying to figure out when the Japanese can stop cooling the reactor cores at Fukushima – they are having a problem of what to do with the water

If Fukushima was in the US – what would the NRC recommend doing now – it's been over two weeks and the situation is not stable yet – is there a point at which just burying the building and forgetting it is an option

Thanks,

Scott

Scott DiSavino
Correspondent

Thomson Reuters

Phone: 1 646 223 6072

Mobile: (b)(6) Ex 6

Email - scott.disavino@thomsonreuters.com

Reuters (Instant) Messaging - scott.disavino.thomsonreuters.com@reuters.net

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From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Diablo Canyon
Date: Wednesday, March 30, 2011 7:31:00 AM

From: Dennis Koski (b)(6) Ex 6
Sent: Tuesday, March 29, 2011 4:52 PM
To: OPA Resource
Subject: Diablo Canyon

March 27, 2011

Nuclear Energy Worth the Cost?

Since the earthquake and tsunami disaster in Japan with the resultant nuclear power plant catastrophes, many are questioning the safety of the Diablo Canyon plant in San Luis Obispo County. This plant was completed in 1973 and its two units went on line in 1985 and 1986. The operating licenses for this plant expire in 2024 and 2025 when it will be 51 years old. A license renewal for another 20 years has been requested by PG & E. Can a 70 year old nuclear reactor be considered safe?

The Diablo Canyon nuclear power plant sits very close to two earthquake faults, one only recently discovered. It was built to withstand a 7.5 quake. Let's hope that is enough. Japan thought their plants could withstand the maximum quake possible and had safety measures in place to cover any possible disaster scenario. They were wrong.

Government subsidizes nuclear energy with billions of our tax dollars because private companies cannot afford to build them without our help. Diablo Canyon was projected to cost 380 million dollars. After numerous construction modifications were required, the final cost of the Diablo Canyon plant, when it went on-line in 1985, was 5.52 billion dollars.

If the billions of our tax dollars were spent on research and development of truly clean alternative energy sources, such as solar, geothermal and wind, maybe we could meet our energy needs without endangering the planet. Nuclear energy is neither safe nor cheap. Please don't waste anymore of my tax dollars on nuclear power.

Dennis Koski

(b)(6) Ex 6

5/130

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Yvonne
Subject: FW: Press Inquiry about Chairman Jaczko's testimony
Date: Wednesday, March 30, 2011 4:23:00 PM

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

From: (b)(6) On Behalf Of Toshihiko Katsuda
Sent: Wednesday, March 30, 2011 4:17 PM
To: OPA Resource
Cc: Toshihiko Katsuda
Subject: Press inquiry about Chairman Jaczko's testimony

Dear Sir,

My name is Toshi Katsuda. I am a science correspondent of ASAHI Shimbun, Japanese daily.

Today, Chairman Jaczko testified at Senate Appropriation Committee. In his testimony, he discussed the evacuation recommendation around Fukushima Daiichi Nuclear Power Plant, saying, "of course as the events in Japan show that it was something that happened over the course of many, many days before we got to the point at which we looked at information that indicated you could have to go to a greater distance. So far, the data that is coming out of the plant continues to show that the safe distance there is approximately 20 miles."

His testimony seems to contradict NRC's recommendations issued in March 16th, that says, "It is appropriate for U.S. residents within 50 miles of the Fukushima reactors to evacuate."

Is it fair to say that NRC is considering to update the recommendations? Otherwise, even though his evaluation of the situation changed, does NRC stay with the current recommendation?

Thank you.

Toshi Katsuda

--

Toshihiko Katsuda
Science Correspondent
The ASAHI Shimbun (Japanese daily newspaper)
American General Bureau
National Press Bldg. #1022, 529 14th St., NW
Washington, D.C., 20045 USA
Phone: +1-202-783-1000
Fax: +1-202-783-0039
E-mail: MHH02277@nifty.com

5/13/11

From: Janberg, Holly on behalf of OPA Resource
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: One old engineer's request
Date: Thursday, March 31, 2011 12:01:00 PM
Attachments: safe control power.docx

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

From: P.E.Hamel (b)(6) Ex 6
Sent: Thursday, March 31, 2011 12:00 PM
To: OPA Resource
Subject: One old engineer's request

This (b)(6) begs:
Please take a few seconds to read this and pass it along .
Thank you,

Patrick Hamel

(b)(6) Ex 6

5/132

My Name is Patrick Hamel, I

(b)(6)

This paper concerns a method of preventing a station blackout at ANY power plant.

The fundamental method is very old, but the companies that build power generating plants are historically based on rotating machinery and this is NOT rotating machinery designed to shut itself down due to vibration.

My supervisors over the years have one thing in common. They are focused on getting their own jobs done well and will not be distracted by an idea that is for a different field of engineering.

Therefore nobody would listen –now we have the six reactors in Japan.

Why am I asking you to look at this and pass it on? Because everyone in the planet is now downwind of power plants that may have boiler explosions or nuclear meltdown if they lose control voltages.

You may have heard that we are still receiving signals from a spacecraft beyond Pluto. That spacecraft is powered from electricity made directly from heat. Heat is our electric power source, whether driving the steam turbines from a coal-fired boiler or from nuclear heat.

When the earthquake or tsunami vibration reached the critical trip point set by the control system inside the plant in Japan, the rotating machinery shut down and the rotating diesels started. The report was that the diesels shut down after an hour. Why they shut down we will probably never know.

The solution is to use the latest version heat to electricity diode like in the spacecraft (based on the old thermocouple) and wrap blankets containing millions of them around pipes or the containment enclosure. This will use the heat of the boiler or nuclear core to directly produce the backup control voltage to run the plant.

Again the companies that build power generation are based on rotating machinery, they will oppose this added backup source of power. Modern diodes are patented by someone else.

Diodes do not care if the plant shakes, they have no moving parts - heat comes in, power goes out.

Assembling thousands of diodes into blankets to wrap a heat source will create jobs.

There is an old saying:

“You will be surprised to see what you can accomplish if you don’t care who gets the credit”.

I am (b)(6) to claim credit. I have no lawyer to claim money. I just want to know that a vibration switch will never again shut down the control voltage at a reactor. I want to know that 200 engineers and technical people will never again go to certain death to try to restore control power to a reactor, boiler, or chemical plant.

Respectfully submitted

Patrick Hamel

From: (b)(6) E-6
To: abarbee@entergy.com; OPA Resource; glennback@foxnews.com; oreilly@foxnews.com;
opa4.resource@nrc.gov; Resource, OPA3; (b)(6) pwater1@entergy.com; E-6
akulako@entergy.com; klabat1@entergy.com; kfitzsl@entergy.com; mtedrow@entergy.com;
powernews@bectel.com; nuclear@ge.com
Subject: Nuclear Power and public safety
Date: Thursday, March 31, 2011 10:16:00 AM

Be Proactive!

Nuclear radiation is a serious matter. Please copy the link below to your browser and click! Listen and watch some very interesting information regarding development of nuclear power while keeping the public safe.

http://www.youtube.com/watch?v=0_wY6uvgxII

Look forward to hearing from you.

All the best!

Craig Germain

Executive Director

LIFE SUIT USA

115 Ave De La Mer, Suite 702

Palm Coast, FL 32137

T. 386/597-3132, F. 386/597-2901, E/mail: (b)(6)

5/133

From: Janbergs, Holly
To: (b)(6) Fv 6
Subject: Re: Environmental Project
Date: Thursday, March 31, 2011 9:06:00 AM

Mr. Blinn,

I understand you are looking for agency opinion on a number of questions. While you can find information on the NRC's response to various issues on our website (I have listed links that may be helpful), this agency is an independent regulator. That means that we do not set U.S. policy for nuclear issues, nor do we serve as a promoter of nuclear power. We exist to ensure that nuclear power and materials, when used, are used in a safe and secure manner.

You may find the Department of Energy more useful in this situation. I would also recommend speaking with the Nuclear Energy Institute at <http://nei.org/>; they are one of the main supporters of nuclear power in this country.

Please look through these links as well and see if they can be of use for you:

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-yucca-license-review.html>

<http://www.nrc.gov/waste/hlw-disposal/yucca-lic-app.html>

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/radwaste.html>

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-blending-llrw.html>

I hope this helps.

Thank you,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

8/134

From: Janbergs, Holly
To: (b)(6) E-6
Subject: Re: Increased Activity
Date: Thursday, March 31, 2011 9:00:00 AM

Mr. Stallard,

The NRC has said from the beginning of this crisis that we would analyze the situation for any lessons that can be derived from it in order to improve our oversight of U.S. nuclear power plants. The agency is always looking for information that can increase the efficacy of the already-robust systems in place to protect public safety and security. President Obama has also asked the agency to conduct a comprehensive review of the safety of U.S. nuclear plants, and the NRC has agreed to do so.

As I'm sure you can understand, the agency has been working to provide support for our Japanese counterparts, and to try to keep the American public abreast of our actions. We have published a number of news releases intended to explicate our actions and decision-making process.

I understand your question as to whether NRC activity has increased due to the situation in Japan. However, if you look back through the archives (press releases from 2010, for instance), you will find plenty of months that contain long lists of news releases. There are specific events and meetings for which the Office of Public Affairs always writes press releases. The vast majority of these are based on items, inspections, and meetings, that can be scheduled for months in advance. While we are working to review U.S. nuclear plants in light of the situation in Japan (see the release here: <http://pbadupws.nrc.gov/docs/ML1108/ML110821123.pdf>), the listing of press releases you see currently are not involved with that effort.

For further information, and to keep informed on agency actions in the future, you can visit our Japan page here:

<http://www.nrc.gov/japan/japan-info.html>

We have also been posting updates to our blog at:

<http://public-blog.nrc-gateway.gov/>

I hope this answers your questions.

Thank you,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

S/135

From: Janbergs, Holly
To: (b)(6) Ex 6
Subject: Re: Terrorism Security Measures
Date: Thursday, March 31, 2011 8:48:00 AM

Mr. Savarese,

Thank you for taking the time to contact the NRC.

Since September 11, a great many changes have been made in the security designs and structures for nuclear power plants. Safety systems already in place were augmented and altered to address the potential of a terrorist attack. Information about these updates can be found here:

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/security-spotlight/index.html>

The NRC also regularly carries out a special type of inspection known as a "force-on-force" exercise at operating nuclear power plants. These security exercises involve a mock adversary that attempts to overtake or otherwise damage the plant. Since 1991, the potential threats against which plants are forced to provide security have morphed and changed with the world, and with new information the NRC has gathered.

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/force-on-force-fs.html>

The NRC has said from the beginning of this situation in Japan that the agency would analyze the events unfolding for any lessons that can be derived to improve our oversight of U.S. nuclear power plants. Emergency planning will be part of that review, and any changes will be incorporated into the already-robust systems in place.

I hope this helps address your concerns.

Best,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

S/136

From: NRCWEB Resource
To: OPA Resource
Subject: FW: Response from "Contact the NRC Web Site Staff"
Date: Thursday, March 31, 2011 8:37:59 AM

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

From: general general mann usmc (b)(6) Ex 6
Sent: Wednesday, March 30, 2011 4:17 PM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

general general mann usmc (b)(6) Ex 6 on Wednesday, March 30, 2011 at 16:16:48

comments: NRC FREQUENCY RESEARCH CENTER
(((EMERGENCY COMMUNICATION FROM GENERAL GENERAL MANN USMC OWNER OF
GYROSCOPIC AMERICAS STRETGIC AIRDEFENCE)))

I JOHN PAUL MANN/ABADAR HAVE 2 THERMO FREQUENCYS REGASTERD IN THE USA .499 TO .500
FREQUENCY ALL STOLEN BY THE PRESIDENTAL FREQUENCY RESEARCH CENTER AND SPAWAR SAN
DIEAGO AND UNITED LAUNCH ALLIANCE.. (b)(6)

(b)(6)

organization: owner of gyroscopic american stretgic air defence

address1:

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone:

S/137

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: urgent suggestion for safety of your nuclear reactors
Date: Thursday, March 31, 2011 7:50:55 AM

From: Floyd Rudmin (b)(6) Ex 6
Sent: Thursday, March 31, 2011 6:39 AM
To: info.norvege-amba@diplomatie.fr; ambasciata.oslo@esteri.it; britemb@online.no; segreteria.ottawa@esteri.it; nicole.arbour@fco.gov.uk; e:
Cc: jennifer.knox@opg.com; OPA Resource; Info@cnscccsn.gc.ca Ex 6
Subject: urgent suggestion for safety of your nuclear reactors

Good morning,
I am a (b)(6) at a university in (b)(6). The current events in Japan and Libya have me concerned about the safety of the nuclear reactors everywhere. I have been writing to the regulatory agencies and utilities in Canada and the USA expressing my concerns. Could you please forward my concerns to the appropriate agencies or persons in your national government.

I am not an engineer, and I have no expertise on nuclear reactors. But engineers trained and expert on nuclear reactors obviously lack imagination of what might go wrong.

A) Please now take the actions to install redundant power cables from the grid to your reactors so that should events 1) cause the reactor to stop supplying electricity, 2) cause the diesel generators to stop supplying electricity, and 3) cause the aerial power cables to be cut, you will have access to power from the grid via a back-up power cable, for example, in an under-ground conduit. If you cannot imagine a scenario in which these three events happen, that is your lack of imagination. The Japanese nuclear industry and regulators could not imagine that an earthquake and tsunami would co-occur, even though that happens routinely in their history. Japan is noted for superb engineering. Japan spent the first week of their crisis installing a power cable from the grid to their reactors. That redundant power line should have been installed when the reactors were built. All reactors everywhere should install redundant power lines now. We know that loss of cooling is a catastrophe. Therefore there should be many redundancies of power, cooling fluid, and pumping capacity, of different types, sited in different places.

S/138

B) If I imagine a terrorist attack on a reactor, I do not imagine a squad of commandos attacking the front gate. I imagine a) a software attack on the reactor control systems or on the power system that supplies the reactor, b) an employee being persuaded or threatened to sabotage the system from the inside, or c) a bomb placed in an under-water pipe that runs from the reactor, through the security perimeter, to the adjacent body of water. Hydraulic force is immense and could blow out the reactor's plumbing from the inside out. I presume that you have thought of a) and have security or back-up response for that. For b), please now do something to assure that one or two employees intent on destroying a reactor cannot succeed. For c) please secure your under-water piping, for example, by building in weak points such that an hydraulic back-surge into the pipes will blow-out the weak point and not endanger the internal plumbing.

C) My third concern is about Europe's leading role in attacking Libya. I can imagine that Gaddafi is furious with his former friends, who seem now determined to kill him. I imagine that he will try to arrange some horrific revenge on Europe, before or after he goes. With Fukushima in the news daily, I can imagine that he can imagine that breaking open a European reactor would be a suitable revenge. I hope that France, Italy, and the UK have massively increased your security on your nuclear reactors. The way that Green Peace has repeatedly climbed on top of reactor buildings to broadcast their opposition to nuclear reactors suggests that European reactors have very lax security.

Your nations are the most beautiful and fortunate places on the planet, in my opinion. Please take additional steps to avoid them becoming nuclear waste lands. Do not trust your engineers and military forces to imagine all possibilities of threat to nuclear reactors. Such persons clearly lack imagination and clearly suffer from over-confidence. Lack of imagination and over-confidence are the two greatest threats now to the safety of Japanese, Europeans, and North Americans when it comes to destroying their own nations with their own nuclear technology.

Sincerely,
Floyd Rudmin

cc: US and Canadian nuclear regulatory agencies

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: Response from "Contact Us about Public Meetings on Nuclear Security and Safeguards;
Date: Thursday, March 31, 2011 7:50:00 AM

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

From: NSIR_WebServices Resource
Sent: Thursday, March 31, 2011 6:15 AM
To: OPA Resource
Subject: FW: Response from "Contact Us about Public Meetings on Nuclear Security and Safeguards;

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

From: (b)(6) Ev 6
Sent: Thursday, March 31, 2011 1:09 AM
To: NSIR_WebServices Resource
Subject: Response 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) Ev 6
on Thursday, March 31, 2011 at 01:08:42

comments: Are nuclear power plants taking full security measures to ensure that terrorists can not infiltrate nuclear power plants and cause an disturbance or interruption to the cooling mechanisms thus bringing about a contamination disaster such as that currently occurring in Japan?

name: Frank Savarese

organization: (b)(6)

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone: (b)(6)

S/139

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Ivonne
Subject: FW: TVA nuclear reactors
Date: Thursday, March 31, 2011 7:49:00 AM

FYI

From: Burnell, Scott
Sent: Wednesday, March 30, 2011 7:45 PM
To: 'Paine, Anne'; Hannah, Roger
Cc: OPA Resource
Subject: RE: TVA nuclear reactors

Hello Anne;

I believe you spoke to Roger on this issue. One of us will contact you in the morning.
Thanks.

Scott

From: Paine, Anne [mailto:APAIN@tennessean.com]
Sent: Wednesday, March 30, 2011 7:15 PM
To: Burnell, Scott
Cc: OPA Resource
Subject: TVA nuclear reactors

Scott,

Can you talk to me tonight or in the morning about the earthquake data and the ranking of nuclear plants in terms of damage risks. I believe you told me that the numbers that MSNBC used were correct but that the NRC doesn't rank them. Right?

I would like to know more if some (especially any of TVA's) reactors will be re-examined based on the newer seismic data and if retrofits might be a possibility.

If you want to email me your comments, too, that's fine. I will call, too, since I don't seem to have your email address.

Thanks,
Anne

office: 615-259-8071

(b)(6)

Ex 6

Anne Paine
Environmental Reporter
The Tennessean
1100 Broadway
Nashville, TN 37203

S/140

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Nuclear Waste Disposal
Date: Thursday, March 31, 2011 7:49:00 AM

From: Richard Pallini (b)(6) Ex 6
Sent: Wednesday, March 30, 2011 9:30 PM
To: OPA Resource
Subject: Nuclear Waste Disposal

SUGGESTION:

DISPOSE OF NUCLEAR WASTE USING THE "TITAN ROCKET",

It's payload capacity could solve our waste problem with only a couple of shots.

SEND THE WASTE TO THE SUN and let the SUN DESTROY IT.

5/14/11

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: Questions regarding increased activity:
Date: Thursday, March 31, 2011 7:48:00 AM

From: Brian Stallard (b)(6) Ex 6
Sent: Wednesday, March 30, 2011 5:58 PM
To: OPA Resource
Subject: Questions regarding increased activity:

Hello,

My name is Brian Stallard I would be greatly appreciative if anyone would be willing to explain the increased quantity of nuclear plant performance assessments and the scheduling of publicly held meetings by the NRC this month (March).

Within the past months of this year, the NRC has averaged about twelve news releases regarding current and planned activity past the 11th of that month. Within March however, there were thirty-one news resales past the 11th, which is coincidentally the time concern about nuclear fallout from a potential reactor meltdown in Japan became prominent along the U.S. west-coast. Soon after, media inspired concern shifted from the dangers of Japanese fallout to the safety of our own reactors.

Is this current increase in publicly accessible performance assessments and meetings a direct result of growing fear of nuclear troubles on our own soil with our own plants? Would it be fair to say the NRC's is generally responding to fears of citizens with their increasingly transparent activity or has the Japan incident simply brought attention to safety concerns on our own soil which had previously been ignored?

Answers to these questions or any comments at all regarding the fear of a nuclear incident on US soil would be greatly appreciated. Thank you for your time.

- Brian Stallard

5/142

From: Janbergs, Holly on behalf of OPA Resource
To: Couret, Ivonne
Subject: FW: TVA nuclear reactors
Date: Thursday, March 31, 2011 7:48:00 AM

FYI

From: Paine, Anne [mailto:APAIN@tennessean.com]
Sent: Wednesday, March 30, 2011 7:15 PM
To: Burnell, Scott
Cc: OPA Resource
Subject: TVA nuclear reactors

Scott,

Can you talk to me tonight or in the morning about the earthquake data and the ranking of nuclear plants in terms of damage risks. I believe you told me that the numbers that MSNBC used were correct but that the NRC doesn't rank them. Right?

I would like to know more if some (especially any of TVA's) reactors will be re-examined based on the newer seismic data and if retrofits might be a possibility.

If you want to email me your comments, too, that's fine. I will call, too, since I don't seem to have your email address.

Thanks,
Anne

office: 615-259-8071

(b)(6)

Ev 6

Anne Paine
Environmental Reporter
The Tennessean
1100 Broadway
Nashville, TN 37203

S/143

From: Harrington, Holly
To: Bonaccorso, Amy
Subject: RE: REPLY: Response from "Contact the NRC Web Site Staff"
Date: Thursday, March 31, 2011 9:09:49 AM

Each commissioner has an email address included on their personal page on the Web site. Don't comment on specifics, just direct them to this page to send her comments directly:

<http://www.nrc.gov/about-nrc/organization/commfuncdesc.html>

From: Bonaccorso, Amy
Sent: Wednesday, March 30, 2011 1:17 PM
To: Harrington, Holly
Subject: FW: REPLY: Response from "Contact the NRC Web Site Staff"

I don't know if I should email this person back or not. Please tell me what to do.

Thanks,

Amy

From: debbie highfill (b)(6) 16
Sent: Wednesday, March 30, 2011 12:54 AM
To: Bonaccorso, Amy
Cc: Representative Lois Capps; bruce gibson
Subject: Re: REPLY: Response from "Contact the NRC Web Site Staff"

Dear Amy,

I am replying to your letter below.

Thank you for replying on this issue which is constantly on the minds of many of us that live in the Evacuation Zone for (b)(6)

I don't understand your advice to simply talk my representatives. My understanding is that Congressional representatives are writing the NRC and asking for a delay in the re-licensing process until after the mandated 3D mapping around the plant is completed - and for this I whole-heartedly thank them.

It is also my understanding that the NRC is the only agency that has the power to halt the re-licensing process for (b)(6). Our San Luis Obispo Board of Supervisors drafted a letter today that will be urging you to do just that.

Would you, as a representative of the NRC, agree that it would be wise to know if the two known faults near the plant intersect - before the plant is re-licensed?

I would like to address my concerns to the Commissioners themselves. Would you please provide me with their individual contact information? If my home is being placed in a dangerous evacuation zone - I believe I have the right to communicate with the individuals who are impacting my peace of mind by deciding the re-licensing of (b)(6)
Would you not agree that this is reasonable?

Please respond. Thank you.

Debbie Highfill, (b)(6)

--- On Tue, 3/29/11, Bonaccorso, Amy <amy.Bonaccorso@nrc.gov> wrote:

I

5/144

From: Bonaccorso, Amy <amy.Bonaccorso@nrc.gov>
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
To: (b)(6)
Date: Tuesday, March 29, 2011, 8:02 AM

Hello:

The U.S. Nuclear Regulatory Commission (NRC) goes through lengthy license renewal processes to ensure that each plant is safe. We will also be conducting an in-depth safety review of our plants following the events in Japan and hope to get some lessons learned.

Our primary business is neutral, independent regulation. If you want to influence the energy agenda in the U.S., we recommend that you reach out to your Congressional reps.

Thank you,

Amy

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

From: Debbie Highfill (b)(6)
Sent: Monday, March 28, 2011 12:22 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

Debbie Highfill (b)(6) on Monday, March 28, 2011 at 00:22:20

comments: I LIVE IN THE EVACUATION ZONE FOR (b)(6) THERE IS THE
POSSIBILITY THAT THE HOSGRI AND SHORELINE FAULTS INTERSECT - WHICH
CHANGES THE PRESENT PREDICTIONS.
PLEASE, PLEASE, PLEASE DO THE PRUDENT THING AND DO NOT ALLOW (b)(6) TO
BE RE-LICENSED BEFORE THE MAPPING AND REVIEW OF THE AREA IS COMPLETED.

organization: just a very concerned citizen

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone: (b)(6)

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
Date: Thursday, March 31, 2011 10:00:00 AM

Hello Ms. Highfill:

Each commissioner has an email address included on their personal page on the Web site. You can send your comments to them there. Just click on each Commissioner and their email address is on the left margin.

<http://www.nrc.gov/about-nrc/organization/commfuncdesc.html>

Thank you,

Amy

From: debbie highfill (b)(6)
Sent: Wednesday, March 30, 2011 12:54 AM
To: Bonaccorso, Amy
Cc: Representative Lois Capps; bruce gibson
Subject: Re: REPLY: Response from "Contact the NRC Web Site Staff"

Dear Amy,

I am replying to your letter below.

Thank you for replying on this issue which is constantly on the minds of many of us that live in the Evacuation Zone for (b)(6)

I don't understand your advice to simply talk my representatives. My understanding is that Congressional representatives are writing the NRC and asking for a delay in the re-licensing process until after the mandated 3D mapping around the plant is completed - and for this I whole-heartedly thank them.

It is also my understanding that the NRC is the only agency that has the power to halt the re-licensing process for (b)(6). Our San Luis Obispo Board of Supervisors drafted a letter today that will be urging you to do just that.

Would you, as a representative of the NRC, agree that it would be wise to know if the two known faults near the plant intersect - before the plant is re-licensed?

I would like to address my concerns to the Commissioners themselves. Would you please provide me with their individual contact information? If my home is being placed in a dangerous evacuation zone - I believe I have the right to communicate with the individuals who are impacting my peace of mind by deciding the re-licensing of (b)(6)

Would you not agree that this is reasonable?

Please respond. Thank you.

Debbie Highfill, (b)(6)

--- On Tue, 3/29/11, Bonaccorso, Amy <amy.Bonaccorso@nrc.gov> wrote:

From: Bonaccorso, Amy <amy.Bonaccorso@nrc.gov>
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
To: (b)(6)

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Nuclear Waste Disposal
Date: Thursday, March 31, 2011 9:57:28 AM

I don't think this one needs a response.

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Thursday, March 31, 2011 7:50 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Nuclear Waste Disposal

From: Richard Pallini (b)(6)
Sent: Wednesday, March 30, 2011 9:30 PM
To: OPA Resource
Subject: Nuclear Waste Disposal

SUGGESTION:

DISPOSE OF NUCLEAR WASTE USING THE "TITAN ROCKET",

It's payload capacity could solve our waste problem with only a couple of shots.

SEND THE WASTE TO THE SUN and let the SUN DESTROY IT.

S/145

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Radiation Question
Date: Thursday, March 31, 2011 10:22:00 AM

Hello Rose:

I am sorry to hear that you are worried about the health of (b)(6)

We are not expected to experience any harmful levels of radioactivity in the U.S.

The U.S. Environmental Protection Agency (EPA) has publicly stated its agreement with the NRC's assessment.

The following websites of daily doses of radiation may be helpful to you:

<http://www.nrc.gov/about-nrc/radiation/around-us/doses-daily-lives.html>

<http://www.nrc.gov/about-nrc/radiation/around-us/calculator.html>

NRC does not believe protective measures are necessary in the U.S. In the event that circumstances change, U.S. residents should listen to the protective action decisions of their states and counties.

Other resources that may be helpful to you:

- The Center for Disease Control has a line for health related concerns - 1-800-CDC-INFO
- The EPA has an email address for radiation questions - radiation.questions@epa.gov

Thank you,

Amy

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

From: (b)(6)
Sent: Wednesday, March 30, 2011 11:08 PM
To: OPA Resource
Subject: Radiation Question

Below is the result of your feedback form. It was submitted by

(b)(6) on Wednesday, March 30, 2011 at 23:08:23

comments: I (b)(6) now and have been documenting radiation data from epa.gov/cdx
The average radiation levels on the west coast are higher than on the east coast! I sure wish I knew if
(b)(6) Why is there so little information on this? Who is measuring and informing the
general public? (b)(6)
Is there a web site that can explain the Gamma levels and what would be dangerous (b)(6)
Thank you! Rose

contactName:

phone:

3/14/6

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: CLUMEATURE MEACIAL RIAITION BALMITATION
Date: Thursday, March 31, 2011 10:58:00 AM

Hello Jennifer:

Thank you for sending your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

You may also want to contact the Japanese Atomic Energy Commission (JAEC).

Thank you,

Amy

From: (b)(6)
Sent: Thursday, March 31, 2011 9:50 AM
To: opa.resource.nrc.gov@aol.com
Subject: CLUMEATURE MEACIAL RIAITION BALMITATION

GETthi sinformation to Japan or tell them when hey call you. I told them i worked for you. THIS PRICESS WILL INDEED WORK it is their only HOpe. I was DIVINELY LED- do you understand me? GOd is telling me it will work...Jesus is- IT IS OUR LAST CHANCE To save them and ourselves - the ocean will be ruined and many people hurt you must use this method:

TELL JAPAN:

Spray the core with alphanuclealic solution

2. Rod, Cone, ZPR, Ryetrac Placer

3 take the Ryetec Placer out of the center sphere Reparticulator

4 insert the ZPR into the main cavity

5. when the ZPR hits the vertical, insert the cone in its place then and only then pull the rod slowly out

6. Reparticulate the caliber square to 105 degrees

Then shut off the valve

Then recalibrate the vehicular verisimilitude to -475

At that point they can proceed to readjust the point of inception to A line verticle

Reduce the manahauner drive by 50%

Inject the rod with .00025 carbonucleaic oxide

insert the ZPR 25 degrees

S/147

Turn the handle of the Decompression chamber until it reaches 0.1
Retract the rod by removing the repariculator capsule
7. After that is completed recalibrate the vector force to 1002.0025
slowly turn the oblometer 25 degrees
now decant the Reiboucleaic fluid by means of Rhoetrmetric Fluid
cletctanture
8. Separate the reactor coil from the diometric Cavity
9. Pull the gravitaional device known as the DEOMETRIAN
this wil spread the alphanucleaic percipitaion
10. Then use a metrogravitron particulator to reduce the biosymetric
nucleus
11. Pull the system operational temporal lobe to release precipitation
12. Reduce the system operating level to -200KW
13. add ribonucleaic acid to neutralize
use centrifical force to funnel through the system overflow slowly and
extract the radioactive element from the overflow simultaneously
when it reaches 0 shut the system down all systems down immediately

THEN

use the vacumm device in japan known as the Kinawantaki to hook up to
system overflow and sukc up radioactive waste into containor

Jennifer

Trust in the Lord Jesus Christ and He will bless and keep you .

He is the Cup of Salvationno man cometh except by the

Lord

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: NRC Response to Your Letter to the Chairman
Date: Thursday, March 31, 2011 1:33:00 PM

Hello Mr. Nguyen:

Thank you for your email to the Chairman about spent fuel storage and reprocessing. After the recent events in Japan, the U.S. Nuclear Regulatory Commission is conducting a thorough review of U.S. plants for safety. We anticipate that there will be lessons learned from this event in Japan that will be addressed during the review.

If you want to keep track of the review process, you may be interested in this meeting (open to the public and available online).

Week of May 2, 2011 - Tentative

05/03/11 9:30 A.M. Briefing on the Progress of the Task Force Review of NRC Processes and Regulations Following the Events in Japan
(PUBLIC MEETING)
(Contact: Nathan Sanfilippo, 301-415-3951)
Webcast

These other websites will also have updates:

Our website dedicated to the crisis in Japan - <http://www.nrc.gov/japan/japan-info.html>
The NRC Blog - <http://public-blog.nrc-gateway.gov/>

Thank you,

Amy

S/148

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: NRC REPLY
Date: Thursday, March 31, 2011 1:43:00 PM

Hello Mr. Trester:

Thank you for sending your recommendations regarding materials degradation to the Chairman. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

The NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

S/149

Royer, Deanna

From: Royer, Deanna
Sent: Thursday, March 31, 2011 3:54 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Public questions

Tom Miskulin

(b)(6) Ex 6

Re: Contamination of food and taking a vacation to (b)(6) in a month. People from all over frequent this spot. Are there any worries about contamination from there?

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

5/1/10

From: (b)(6) 6
To: Bonaccorso, Amy
Subject: WHO THE HELL IS RUNNING THE NRC?? puppies and kittens/ farm animals????
Date: Thursday, March 31, 2011 4:20:58 PM

WHO The hell is running this commision??? and Japans???????...you
freaking idiots why wasn't this method employed as soon a sthe diaster
began> ARE YOU GUYS IN DENIAL Or something??
HELOOOO??? anyone home????
SALT WATER?? what the f*cking Hell are you thinking???
sorry but even without my bachlors degree in science i can figur eout
betters ways - then again i have a genius IQ.
YOu guys are IDIOTS!
i dont give a damn report me the President probably ha sit on his desk
by now and doesn't know what to do with it IDIOTS!

Jennifer

Trust in the Lord Jesus Christ and He will bless and keep you .

He is the Cup of Salvationno man cometh except by the Lord

S/151

From:

(b)(6)

6

To:

Bonaccorso, Amy

Subject:

Re: REPLY: CLUMEATURE MEACIAL RIAITION BALMITATION

Date:

Thursday, March 31, 2011 4:06:51 PM

they arent my freakin ideas !!!!!!!!!!!!!!!!!!!!!!!!!!!!!I dictated them From Jesus Christ ALMIGHTY and it took two days to do so!!!- lower the center of gravity in the core and tip the axis is goal. I spent day sidictating it from our Holy Lords MOUTH. DAMN YOU foold MAY God have mercy on your wicked souls! OR DO AS THE HOLY LORD SAYS you FOOLS!!! This is all on you. I have worked nonstop since it began ...i leave it to you- their blood and our poisoned planter IS ON YOU NOW i am giving up YOU FOOOLS!!!!!!! I guess all you scientists are pagans or atheists aren't you?

Jennifer

Trust in the Lord, Jesus Christ and He will bless and keep you .

He is the Cup of Salvationno man cometh except by the Lord

S/152

From: (b)(6) 6
To: Bonaccorso, Amy
Subject: Re: REPLY: CLUMEATURE MEACIAL RIAITION BALMITATION
Date: Thursday, March 31, 2011 4:03:51 PM

OH REALLY NOW??

I suppose someone HIgher than THE ALMIGHTY WORKS FO RYOU???
??????????_ get it to JAOPAN before we are all poisoned...wel lthen
again i sent this out a freaking week ago!!!!!!! to everyone from USA
president and onward JEsus would not lie. NO BODY can figure it out
but him.

i sent it out a weeeek agao.....every MIT UC everywhere...i dont know
what is wrong with you PEOPLE> I knwo DAMN well from my studies
with Nuclear Power plants THAT THIS ONE's cor ewas built to
withstand a magnitude 10.0

i am really sick of working onit. fine poisons everything. and face God at
your death I am sure he will have mercy on your souls- i will ask him to
you damn fools.

Jennifer ~

Trust in the Lord Jesus Christ and He will bless and keep you.

He is the Cup of Salvationno man cometh except by the Lord

S/133

Deavers, Ron

From: Shannon, Valerie
Sent: Thursday, March 31, 2011 10:13 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call

Name: Mark Crowley

From: A citizen (b)(6)

Phone: (b)(6)

Does not have e-mail

Re: Has ideas and concerns about Japan

S/154

My Name is Patrick Hamel I am a

(b)(6)

This paper concerns a method of preventing a station blackout at ANY power plant.

The fundamental method is very old, but the companies that build power generating plants are historically based on rotating machinery and this is NOT rotating machinery designed to shut itself down due to vibration.

My supervisors over the years have one thing in common. They are focused on getting their own jobs done well and will not be distracted by an idea that is for a different field of engineering.

Therefore nobody would listen -now we have the six reactors in Japan.

Why am I asking you to look at this and pass it on? Because everyone in the planet is now downwind of power plants that may have boiler explosions or nuclear meltdown if they lose control voltages.

You may have heard that we are still receiving signals from a spacecraft beyond Pluto. That spacecraft is powered from electricity made directly from heat. Heat is our electric power source, whether driving the steam turbines from a coal-fired boiler or from nuclear heat.

When the earthquake or tsunami vibration reached the critical trip point set by the control system inside the plant in Japan, the rotating machinery shut down and the rotating diesels started. The report was that the diesels shut down after an hour. Why they shut down we will probably never know.

The solution is to use the latest version heat to electricity diode like in the spacecraft (based on the old thermocouple) and wrap blankets containing millions of them around pipes or the containment enclosure. This will use the heat of the boiler or nuclear core to directly produce the backup control voltage to run the plant.

Again the companies that build power generation are based on rotating machinery, they will oppose this added backup source of power. Modern diodes are patented by someone else.

Diodes do not care if the plant shakes, they have no moving parts - heat comes in, power goes out.

Assembling thousands of diodes into blankets to wrap a heat source will create jobs.

There is an old saying:

"You will be surprised to see what you can accomplish if you don't care who gets the credit".

I am (b)(6) to claim credit. I have no lawyer to claim money. I just want to know that a vibration switch will never again shut down the control voltage at a reactor. I want to know that 200 engineers and technical people will never again go to certain death to try to restore control power to a reactor, boiler, or chemical plant.

Respectfully submitted

Patrick Hamel

From: Bonaccorso, Amy
To: Dan G
Subject: RE: REPLY: Suggestion for cooling the damaged Japanese reactor and waste storage pools
Date: Monday, April 04, 2011 2:41:00 PM

Hello Mr. Gottlieb:

I just looked and couldn't locate an email address either – how unusual. Maybe the email addresses were removed in light of current events.

I did find a snail mail address:

http://www.aec.go.jp/jicst/NC/about/access/index_e.htm

Sorry I couldn't be more helpful.

Thanks,

Amy

From: Dan G (b)(6)
Sent: Monday, April 04, 2011 1:46 PM
To: Bonaccorso, Amy
Subject: Re: REPLY: Suggestion for cooling the damaged Japanese reactor and waste storage pools

Do you have an email address for the Japanese Atomic Energy Commission? They do not list one on their website, which is why I sent it to you for forwarding. Please advise and I will send my ideas to them.

Dan

On Mon, Apr 4, 2011 at 1:11 PM, Bonaccorso, Amy <amy.Bonaccorso@nrc.gov> wrote:
Hello Mr. Gottlieb:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in – you may want to send your ideas to Japanese Atomic Energy Commission (JAEC).

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you.

Amy

From: Dan G (b)(6)

S/155

Sent: Monday, April 04, 2011 2:18 AM

To: NRC Allegation

Subject: Suggestion for cooling the damaged Japanese reactor and waste storage pools

Dear NRC,

I have a suggestion for a technique for cooling the overheating damaged Japanese reactors and waste storage pools, without introducing continuous cooling water which leaks into the ocean. Please forward this email to the appropriate Japanese and U.S. and U.N. scientists for consideration.

I suggest using blocks of dry ice (frozen carbon dioxide) or insulated breakable containers of liquid nitrogen dropped by helicopter over any exposed reactors or storage pools which need further cooling. Once in contact with the existing overheated water, the CO₂ or N₂ would cool the water by phase change into gas and be released as inert gases, also serving to replace any oxygen in the surrounding air, thus reducing the risk of further hydrogen explosions. Because less water would need to be introduced as a cooling agent, this would reduce the overflow leakage of radioactivity polluted water into the nearby ocean. Large parcels of dry ice and liquid nitrogen packets would be less affected by wind and helicopter downdraft, thus more likely to hit the target and cause cooling.

I am not knowledgeable enough to know if the resultant gas releases of nitrogen and carbon dioxide would be significantly radioactive or rapid enough to cause "explosions" of gas within the existing water.

I hope this idea, if it has not already been proposed and considered by the various nuclear safety agency experts, may be useful. We are all hoping and praying for rapid resolution of this difficult situation.

Daniel Gottlieb, (b)(6)

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Member of the public inquiring about Japan situation
Date: Thursday, March 31, 2011 2:13:02 PM

This person does not accept calls from blocked numbers.

From: Akstulewicz, Brenda
Sent: Thursday, March 31, 2011 12:34 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Member of the public inquiring about Japan situation

From: Williamson, Alicia
Sent: Thursday, March 31, 2011 12:25 PM
To: Akstulewicz, Brenda
Cc: Clayton, Brent
Subject: Member of the public inquiring about Japan situation

Hello Brenda

His name and info is Louis Tater, (b)(6)

He is inquiring about the Japanese reactors as well as why NRC/Japan Govt will not and does not have alternate/additional diesel generators assisting with cooling the reactors. He mentioned a document I wrote ML061360131 --- May 12, 2006, Cost Beneficial SAMAs for the Brunswick License Renewal.

Any questions let me know.

Thanx

Alicia

Alicia Williamson
US NRC

Office of New Reactors

301-415-1878 office

301-415-5399 fax

alicia.willamson@nrc.gov

5/1/11

Deavers, Ron

From: Royer, Deanna
Sent: Thursday, March 31, 2011 2:41 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: public question

Brian Khols

(b)(6)

Re: zirconium 89 sample from Singapore

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

S/157

Deavers, Ron

From: Janbergs, Holly on behalf of OPA Resource
Sent: Thursday, March 31, 2011 3:17 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: FW: Japanese Nuclear Accident

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

From: James Magliano (b)(6)
Sent: Thursday, March 31, 2011 3:13 PM
To: OPA Resource
Subject: Japanese Nuclear Accident

Has anyone thought of the following? Since sand and heat form glass, would burying the reactors in sand encase them in glass and contain the radiation threat?

Gloria Kress

(b)(6)

(b)(6)

(b)(6)

Deavers, Ron

From: Royer, Deanna
Sent: Thursday, March 31, 2011 3:44 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Public call

Robert Henson

(b)(6)

Article on safety on nuclear reactor diving for repairing reactors

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

S/159

Shannon, Valerie

From: Shannon, Valerie
Sent: Thursday, March 31, 2011 10:32 AM
To: Bonaccorso, Amy
Subject: Call

Name: Jeremy Marth

From: (b)(6)

Phone: (b)(6)

Re: Concerned about stocks relevant to the Japan situation. He has called his stock broker but want's to speak with the NRC.

S/160

From: [Bonaccorso, Amy](#)
To: [Bonaccorso, Amy](#)
Subject: FW: Info Request
Date: Thursday, March 31, 2011 10:24:00 AM

I left a voicemail – told him that we are not expecting harmful levels of radiation but that EPA tests those things – he should go to their website for more information.

From: Akstulewicz, Brenda
Sent: Thursday, March 31, 2011 9:23 AM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Info Request

Brent Hutchinson

(b)(6)

(b)(6)

questions about radiation in water.

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brenda.akstulewicz@nrc.gov



3/16/1

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Call
Date: Thursday, March 31, 2011 10:45:00 AM

Second time speaking with this man. (b)(6) and panicking, but we can only tell him that we are assisting Japan in any way we can, but cannot predict what will happen with the crisis overseas.

From: Shannon, Valerie
Sent: Thursday, March 31, 2011 10:32 AM
To: Bonaccorso, Amy
Subject: Call

Name: Jeremy Marth

From: (b)(6)

Phone: (b)(6)

Re: Concerned about stocks relevant to the Japan situation. He has called his stock broker but want's to speak with the NRC.

S/1162

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Call
Date: Thursday, March 31, 2011 10:41:00 AM

Tried calling back – no voicemail.

From: Shannon, Valerie
Sent: Thursday, March 31, 2011 10:13 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call

Name: Mark Crowley
From: A citizen in (b)(6)
Phone: (b)(6)
Does not have e-mail
Re: Has ideas and concerns about Japan

S/1163

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW:
Date: Thursday, March 31, 2011 2:05:00 PM

He called back and chatted a bit – he wanted to confirm that the radiation levels were not harmful and ask about the media reports.

From: Bonaccorso, Amy
Sent: Thursday, March 31, 2011 1:21 PM
To: Bonaccorso, Amy
Subject: FW:

I called this person, left a message with a person (Jorge was on another phone call) – and have not heard back.

From: Akstulewicz, Brenda
Sent: Thursday, March 31, 2011 12:34 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject:

Jorge Zuniga

(b)(6)

?s on radiation lives in

(b)(6)

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brenda.akstulewicz@nrc.gov



S/1164

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: public - question
Date: Thursday, March 31, 2011 3:17:00 PM

Gave her epa email address, CDC, and also told her about local emergency management and health department options....

From: Royer, Deanna
Sent: Thursday, March 31, 2011 2:45 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: public - question

Vicky Bess

(b)(6)

Re: employees going to Japan (b)(6) miles from plant. How to protect them.

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

S/165

From: Royer, Deanna
To: Deavers, Ron; Bonaccorso, Amy
Subject: Public call
Date: Thursday, March 31, 2011 3:44:16 PM

Robert Henson

(b)(6)

Article on safety on nuclear reactor diving for repairing reactors

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

S/166

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Japanese Nuclear Accident
Date: Thursday, March 31, 2011 3:21:00 PM

Hello Ms. Magliano:

Thank you for sending your idea about sand and heat form glass. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we don't have the time at the public inquiry desk to research each suggestion we receive, but are keeping them on file.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

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

From: James Magliano (b)(6)
Sent: Thursday, March 31, 2011 3:13 PM
To: OPA Resource
Subject: Japanese Nuclear Accident

Has anyone thought of the following? Since sand and heat form glass, would burying the reactors in sand encase them in glass and contain the radiation threat?

Gloria Kress

(b)(6)

(b)(6)

(b)(6)

S/167

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: public question
Date: Thursday, March 31, 2011 3:09:43 PM

I talked to Brian and he has a detailed question about shipping materials and was referred here by the state of Va. I asked him to email me his details so I could work to find the appropriate person.

From: Royer, Deanna
Sent: Thursday, March 31, 2011 2:41 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: public question

Brian Khols

(b)(6)

Re: zirconium 89 sample from Singapore

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

S/1168

From: Tobin, Jennifer
To: Bonaccorso, Amy
Subject: RE: Why are there no emergency diesels in U.S. nuclear power plants?
Date: Thursday, March 31, 2011 9:56:03 AM

Amy,

I don't know how far it will go in Congress but I think the incident in Japan has been eye-opening for NRC folks so that they may evaluate lengthening the time as a matter of safety. This will probably be evaluated in the future and would require a change to the regulations (which usually takes 3-5 years). Other countries may have different requirements and that may be a point of discussion at future IAEA meetings.

I'm glad that you're learning ☺

-Jenny

Jenny (Tobin) Wollenweber
Export Licensing Officer
Office of International Programs
office: 301-415-2328

From: Bonaccorso, Amy
Sent: Thursday, March 31, 2011 9:22 AM
To: Tobin, Jennifer
Subject: RE: Why are there no emergency diesels in U.S. nuclear power plants?

Jenny:

After I sent this email – I think I read something about someone in Congress proposing lengthening the time that backup equipment can function...after I read that, it was like "Oh, okay, I get it!" Don't know if I should mention that. I don't know what the requirements are in other countries, but if they are more robust than ours, that is going to become a concern.

Thanks,

Amy

From: Tobin, Jennifer
Sent: Wednesday, March 30, 2011 5:11 PM
To: Bonaccorso, Amy
Subject: RE: Why are there no emergency diesels in U.S. nuclear power plants?

Amy,

Our plants are currently required to have at least 8 hours of battery power for essential reactor functions. Our regulations assume that power to the plant can be restored within that 8 hour timeframe. Power is needed for the cooling systems associated with the core to run. My guess would be that as a result of the events at Fukushima that the NRC may be looking into extending the time period for operating un-attached to the electrical grid.

-Jenny

5/169

Jenny (Tobin) Wollenweber
Export Licensing Officer
Office of International Programs
office: 301-415-2328

From: Bonaccorso, Amy
Sent: Wednesday, March 30, 2011 1:56 PM
To: Tobin, Jennifer
Subject: FW: Why are there no emergency diesels in U.S. nuclear power plants?

Jenny:

Do you know anything about this topic of power plants cooling their cores within eight hours of disconnecting from the grid and why that would be so upsetting to someone?

Thanks,

Amy

From: Martin Trenz (b)(6)
Sent: Tuesday, March 29, 2011 11:54 AM
To: NRC Allegation
Subject: Why are there no emergency diesels in U.S. nuclear power plants?

Esteemed Ladies and Gentleman,

as you can see from my e-mail address I'm not a (b)(6) so you may safely ignore me if you wish, but never shall it be I said I remained silent when I should have spoken up. I have to express my utmost surprise and bewilderment on learning that nuclear power plants in the U.S. can cool their cores for just eight hours when disconnected from the grid:

<http://www.cbsnews.com/stories/2011/03/29/501364/main20048270.shtml>

That's outright dangerous, in my opinion! It would be ab-so-lute-ly impossible here in Germany, or in all of Europe. Even Japan had backup diesels, they even worked before being wiped away by the Tsunami. Can you imagine the cascade effect of a widespread power outage in your country? One plant going down, forcing another one down, and so on, the grid shattered and your more than 100 nuclear power plants having partial meltdowns like Fukushima ALL AT ONCE? Can you imagine what the political, judicial, financial and reputational implications of such a scenario would be? As members/employees of the U.S. Nuclear Regulatory Commission, have you not sworn some kind of oath to protect your country?

I beg you: make sure your nuclear power plants at least meet the worldwide standards! You invented nuclear power, and you already had a close call with Three Mile Island. You can't play Russian Roulette with the lives and future of your citizens!

Regards

Martin Trenz

(b)(6)

(b)(6)

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Why are there no emergency diesels in U.S. nuclear power plants?
Date: Thursday, March 31, 2011 9:41:00 AM

Hello Mr. Trenz:

Thank you for your email. After the recent events in Japan, the U.S. Nuclear Regulatory Commission is conducting a thorough review of U.S. plants for safety. We anticipate that there will be lessons learned from this event in Japan that will be addressed during the review.

If you want to keep track of the review process, you may be interested in this meeting (open to the public and available online).

Week of May 2, 2011 - Tentative

05/03/11 9:30 A.M. Briefing on the Progress of the Task Force Review of NRC Processes and Regulations Following the Events in Japan
(PUBLIC MEETING)
(Contact: Nathan Sanfilippo, 301-415-3951)
Webcast

These other websites will also have updates:

Our website dedicated to the crisis in Japan - <http://www.nrc.gov/japan/japan-info.html>
The NRC Blog - <http://public-blog.nrc-gateway.gov/>

Thank you,

Amy

From: Martin Trenz (b)(6)
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Martin Trenz

(b)(6)

(b)(6)

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I'm glad that you're learning ☺
-Jenny

Jenny (Tobin) Wallenmacher
Export Licensing Officer
Office of International Programs
office: 301-415-2328

From: Bonaccorso, Amy
Sent: Thursday, March 31, 2011 9:22 AM
To: Tobin, Jennifer
Subject: RE: Why are there no emergency diesels in U.S. nuclear power plants?

Jenny:

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To: Bonaccorso, Amy
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-Jenny

5/17/11

Jenny (Tobin) Wollerweber
Export Licensing Officer
Office of International Programs
office: 301-415-2328

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Amy

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Sent: Tuesday, March 29, 2011 11:54 AM
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Subject: Why are there no emergency diesels in U.S. nuclear power plants?

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<http://www.cbsnews.com/stories/2011/03/29/501364/main20048270.shtml>

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Regards

Martin Trenz

(b)(6)

(b)(6)

Medina, Veronika

From: Janbergs, Holly on behalf of OPA Resource
Sent: Friday, April 01, 2011 2:39 PM
To: Medina, Veronika; Couret, Ivonne
Subject: FW: radiation impacts from Japan

From: John Upton [mailto:jupton@baycitizen.org]
Sent: Friday, April 01, 2011 2:33 PM
To: OPA Resource; OPA4 Resource
Subject: Fwd: radiation impacts from Japan

Hello,

Has the NRC asked the EPA or FDA to not publish or publicize data about radiation levels in precipitation, drinking water or milk?

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

Begin forwarded message:

EX 66

From: John Upton <jupton@baycitizen.org>

Date: March 14, 2011 11:11:35 AM PDT

To: OPA.Resource@nrc.gov

Cc: OPA4.Resource@nrc.gov

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

S/172

Twitter: [www.twitter.com/#!/johnupton](https://twitter.com/#!/johnupton)

126 Post St, Suite 500, San Francisco, CA 94108

Desk: +1 415-821-8552

Cell

(b)(6)

Email: jupton@baycitizen.org

Medina, Veronika

From: Janbergs, Holly on behalf of OPA Resource
Sent: Friday, April 01, 2011 2:45 PM
To: Medina, Veronika; Couret, Ivonne
Subject: FW: Expert on nuclear reactors on fault lines

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

From: Laurie Wiegler (b)(6) [REDACTED] Ex 6
Sent: Friday, April 01, 2011 2:40 PM
To: OPA Resource
Subject: Expert on nuclear reactors on fault lines

Below is the result of your feedback form. It was submitted by

Laurie Wiegler (b)(6) [REDACTED] on Friday, April 01, 2011 at 14:40:07

Ex 6
comments: Hello -- I am a Conn.-based freelance science writer working on an article for TCE Today/The Chemical Engineer. I wondered if you might help arrange an interview for me with someone in charge of overseeing reactors along the fault lines in the US.

Back in 2009, I spoke to Michael Johnson in your Office of New Reactors for the same magazine:

<http://www.scribd.com/doc/44859897/US-nuclear-programme-inches-forward-The-Chemical-Engineer-TCE-Today-UK>

This time around, my focus is on how these reactors will fare in the event of a major seismic event. I will be contrasting manufacturers, too, so any elucidation on this by your expert would be appreciated.

I am better reached by e-mail than phone but I will provide my contact no. anyway. I am doing interviews next Tues - Fri from 9 am - 6 pm EST as well as the following first part of the week.

Thank you very much.

Sincerely,

Laurie Wiegler
journalist

www.linkedin.com/in/weegs

www.twitter.com/writerweegs

www.scribd.com/lwiegler

1 (203) 931-8482 [REDACTED]

organization: Freelance science reporter for TCE Today/the Chem Eng

address1: n/a

address2: n/a

city: n/a

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone: (b)(6)

From: Hayden, Elizabeth
To: Janbergs, Holly; Bonaccorso, Amy
Subject: FW: Glen Rose Texas Reactors
Date: Friday, April 01, 2011 3:41:26 PM

In case you are keeping track of these e-mails.

Beth

From: Hayden, Elizabeth
Sent: Friday, April 01, 2011 3:24 PM
To: Dricks, Victor; Uselding, Lara
Cc: Ash, Darren
Subject: FW: Glen Rose Texas Reactors

Could you please respond to this e-mail?

Beth

From: richard lehman (b)(6)
Sent: Thursday, March 31, 2011 3:16 PM
To: DataQuality Resource
Subject: Glen Rose Texas Reactors

Dear Sir:

I have been concerned about the referenced facility ever since its location, a (b)(6) of (b)(6) where I live, since the location decision was made. It appears to me that if anything major goes wrong with the facility, the prevailing wind being from the south, we are in direct line to receive a goodly dose of radiation a few minutes after an event occurs.

Could you tell me what kind of reactor it is, is it the same GE model which failed in Japan?
What is the safety record of this facility?
When was the last time the facility was inspected by your agency, and what were the findings?

Thanks,

Dick Lehman
(b)(6)

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Medina, Veronika

From: Janbergs, Holly on behalf of OPA Resource
Sent: Friday, April 01, 2011 3:55 PM
To: Akstulewicz, Brenda; Medina, Veronika
Subject: FW: Reuters - can you please add me to this list?

From: roberta.rampton@thomsonreuters.com [<mailto:roberta.rampton@thomsonreuters.com>]
Sent: Friday, April 01, 2011 3:52 PM
To: OPA Resource
Subject: Reuters - can you please add me to this list?

Hello – could you please add me to the media list below? I am not receiving those releases for some reason.
Best thanks,
Roberta Rampton
roberta.rampton@thomsonreuters.com

From: opa administrators [<mailto:opa@nrc.gov>]
Sent: Friday, April 01, 2011 4:36 PM
To: Rascoe, Ayesha r. (M Edit Ops)
Subject: NRC Appoints Task Force Members and Approves Charter For Review of Agency's Response to Japan Nuclear Event

Roberta Rampton
Correspondent

Reuters

Phone: 202 898 8376
(b)(6)

roberta.rampton@thomsonreuters.com

RSS feed: <http://blogs.reuters.com/roberta-rampton/feed/>

This email was sent to you by Thomson Reuters, the global news and information company. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of Thomson Reuters.

Raione, Richard

From: Jones, Henry
Sent: Friday, April 01, 2011 5:19 PM
To: Raione, Richard
Cc: McBride, Mark; Sharkey, Margaret; Chaput, Peter; Giacinto, Joseph; Caverly, Jill; See, Kenneth; Tiruneh, Nebiyu; Cozens, Ian; Donkor, Lydia
Subject: ABC REPORT FOR 01 APRIL 2011

1. Ken See on (b)(6)
2. I gave permission for Lydia to depart at 1:30 pm to make a scheduled appointment.
3. **01 April 2011, 8:30 am:** Teleconference with RES (including Don Resio/USACE) to discuss storm surge technical report draft ("Screening Methods for Estimating Storm Surge Levels"). Personally briefed Scott Flanders regarding issues and upcoming meetings on this topic.
4. Tekia Govan (PM for STP) called to discuss STP issues. I reported that all issues are now closed.
5. **The Japan Near-Term Evaluation Task force** is requesting an informal information briefing on the design basis for tsunami and other external flooding events. Amy Cubbage spoke to Scott Flanders this afternoon and he recommended Annie Kammerer/Ken See/Henry Jones as the experts in this area. There is no need to develop any new presentation materials. Annie and I can speak from existing presentation materials and talking points. Amy Cubbage will be sending us an outlook appointment for next week. I plan on emailing her a copy of my recent presentation to NRO for display on the computer/projector already setup in the room.
6. Rick Henszey (First energy Corporation/Davis-Besse NPP) directed some questions at USGS regarding tsunami hazards in the Great Lakes. Robert Williams (USGS) responded well and stayed within the guidelines Eric Geist and I previously discussed. In short, USGS can respond as long as they are only addressing the tsunami science/process and not nuclear power plant facilities, etc. In addition, USGS should avoid providing any site-specific tsunami analysis (e.g., estimating the PMT for Davis-Besse). A regional perspective (e.g., Robert Williams' response below) of potential tsunami hazards is fine.
7. Still receiving several inquiries on the NRO presentation Joe Giacinto and I will place the NRO presentation on the RHEB SharePoint site on Monday for NRC internal access.
8. Upcoming meetings:
 - **04 April 2011, 1:00 pm (Monday)** RHEB/RES (Kanney, Randall, Ott, Nicholson) in Richards office to discuss Resio storm surge technical report ("Screening Methods for Estimating Storm Surge Levels").

- 05 April 2011, 10:00-12:00 pm (Tuesday) RES meeting (CSB-4-D-06) – Resio presentation on "Screening Methods for Estimating Storm Surge Levels"
- 07 April 2011, 9:00-11:00 am (Thursday) Briefing to Japan Near-Term Evaluation Task force (Annie Kammerer, Ken See, Henry Jones) T6-C1
- 07 April 2011, 1:00-2:00 pm (Thursday) TPNPP telecom w/RGS and USGS to discuss Section 2.5 RAIs.
- 14 April 2011, USGS at California Senate to discuss tsunami hazards.

Henry

Henry Jones, Ph.D.

Hydrologist

Hydrologic Engineering Branch, Office of New Reactors

U.S. Nuclear Regulatory Commission

Mail Stop: T-7E18

11545 Rockville Pike, Rockville, MD 20852

Tel: (301) 415-1463

E-mail: Henry.Jones@nrc.gov (NEW)

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Response from "Contact the NRC Web Site Staff"
Date: Monday, April 04, 2011 3:59:00 PM

Hello Mr. Bodensick:

Thank you for contacting us about your idea. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

-----Original Message-----
From: Edward Bodensick (b)(6)
Sent: Monday, April 04, 2011 12:11 AM
To: NRCWEB Resource
Subject: Response from "Contact the NRC Web Site Staff"

Below is the result of your feedback form. It was submitted by

Edward Bodensick (b)(6) on Monday, April 04, 2011 at 00:10:35

comments: I know this might sound far out but can't Japan try mighty putty that was advertised by the late Billy Mays to seal the leak in the pipe in their reactor. It really does work extremely well and then they could seal it more permanently.

Edward W. Bodensick

organization:

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip:

country: (b)(6)

phone: (b)(6)

5/177

Bonaccorso, Amy

From: CL Spriggs (b)(6)
Sent: Friday, April 01, 2011 12:09 PM
To: NRC Allegation
Subject: Website issue

Hello:

Please check this website.

http://en.wikipedia.org/wiki/List_of_nuclear_reactors

If you scroll to the bottom, the U.S. nuclear plants in the NE are listed with GPS coordinates.
Realize this is not your site, but damn, how smart is that?

Cheers
Craig

S/178

From: P.E.Hamel
To: Bonaccorso, Amy
Subject: Re: REPLY: One old engineer's request
Date: Friday, April 01, 2011 3:14:27 AM

AMY,
Thanks for the courtesy of a reply.
My suggestion is NOT for Japan.
It is to safeguard OUR reactors in the future.
I know you have the best engineers, but they were trained to use Rotating machinery generators.
It is time to realize that approach alone was a mistake.
Please reread the email or read it all the way through.
Again, Thanks for the courtesy of a reply.
Pat Hamel

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

From: "Bonaccorso, Amy" <amy.Bonaccorso@nrc.gov>
To: (b)(6)
Sent: Thursday, March 31, 2011 11:43 AM
Subject: REPLY: One old engineer's request

Hello Mr. Hamel:

Thank you for sending your idea regarding the prevention of station blackouts, especially in light of your previous experience. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

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

From: P.E.Hamel (b)(6)
Sent: Thursday, March 31, 2011 12:00 PM
To: OPA Resource
Subject: One old engineer's request

This (b)(6) begs:
Please take a few seconds to read this and pass it along .
Thank you,

Patrick Hamel
(b)(6)

5/1/79

From: OPA Resource
To: Burnell, Scott
Cc: Bonaccorso, Amy; Janbergs, Holly
Subject: Resent - Fire Protection Media - Questions for article for the Center for Public Integrity
Date: Friday, April 01, 2011 12:21:44 PM
Importance: High

Scott,
Got a phone call - this maybe a repeat?
I didn't not send it as a media request originally so it may have been sent as public inquiry.
When you get a chance can you assist or direct Brian. Let me know. Ivonne

From: Susan Stranahan (b)(6)
Sent: Friday, April 01, 2011 12:19 PM
To: OPA Resource
Subject: Yvonne: Questions for article for the Center for Public Integrity

To the Office of Public Affairs:
Attention: Yvonne:

I am writing an article for the Center for Public Integrity (publicintegrity.org) regarding fire protection rules at U.S. reactors. This is a second request for information, following up an email sent on March 29 which received no acknowledgement. This request contains additional questions.


My deadline is the close of business on Monday.

Please contact me if there are questions and also to acknowledge that you have received it. I appreciate your assistance.

Thank you.
Susan Stranahan

Susan O. Stranahan

(b)(6)
(b)(6)
(b)(6)
(b)(6)



Questions for the NRC:

1. In its June 2008 report on fire protection at U.S. commercial reactors, the General Accounting Office recommended the creation of a central database for tracking the status of exemptions to Appendix R, manual actions and compensatory measures used for long periods of time. Has this been done? If not, what is the status of this effort?

5/1/80

2. In that same report, the GAO recommends:

- * The NRC address the safety concerns pertaining to extended use of interim compensatory measures. Has this been done?

- *The NRC analyze the effectiveness of existing fire wraps and and undertake efforts to ensure that the tests have been conducted to qualify fire wraps as approved for one- and three-hour fire barriers. Has this been done?

- *The NRC ensure that reactors can safeguard against multiple spurious actuations by committing to a date for developing guidelines to prevent multiple spurious actions. Has this been done?

3. The GAO notes that NRC regional officials say it is difficult to inspect fire safety due to the complicated licensing basis and inability to track documents. What changes if any have been made since 2008 to address that problem?

4. At a July 17, 2008 meeting of the NRC, then-commissioner Jaczko said: "I don't think there is one plant right now that is in compliance with these [fire] regulations. We have never really been able to have a clear set of criteria that we enforce as a regulatory body in fire protection. To this day, I do not think we do." Is that still true today? Why should Americans be confident that fire risk is a regulatory priority of the NRC?

5. If there have been no fires that threaten the reactor core since Browns Ferry, how can you get enough data to accurately develop a risk assessment model under NFPA 805? The GAO in its report (above) mentions that fire safety experts have raised that concern.

6. While there has been no large fire, there have been plenty of smaller ones, especially those involving electrical systems. How significant are smaller fires? How significant are smaller fires in assessing the overall attention to safety and maintenance at a reactor?

7. In its assessment of the fires at the H.B. Robinson reactor on March 28, 2010, the Union of Concerned Scientists concluded that this was the closest near-miss of all events at U.S. reactors last year. Do you agree?

8. Is NFPA 805 going to provide a greater degree of fire safety at U.S. reactors than Appendix R? If so, please explain.

9. According to the GAO report (above), "nuclear fire safety can be considered to be degraded when reliance on passive measures is supplanted by manual actions or compensatory measures." Do you agree? Isn't that exactly what is occurring now at U.S. plants?

From: Burnell, Scott
To: (b)(6)
Cc: Brenner, Eliot; Couret, Yvonne
Subject: RE: Resent - Fire Protection Media - Questions for article for the Center for Public Integrity
Date: Friday, April 01, 2011 1:43:23 PM

Hello Susan;

The fire protection database is available on the NRC website here:

<http://www.nrc.gov/reactors/operating/ops-experience/fire-protection.html>

For the remaining items, your CPI colleague Jim Morris has asked many of the same questions regarding NFPA 805 and Chairman Jaczko. Our Director of Public Affairs, Eliot Brenner (CCd), is the only person in our office who is able to address those questions.

I will check with our staff to see what information we can provide by COB Monday regarding your questions 2, 3 and 9. Thank you.

Scott Burnell
Public Affairs Officer
Nuclear Regulatory Commission

From: Susan Stranahan (b)(6)
Sent: Friday, April 01, 2011 12:19 PM
To: OPA Resource
Subject: Yvonne: Questions for article for the Center for Public Integrity

To the Office of Public Affairs:
Attention: Yvonne:

I am writing an article for the Center for Public Integrity (publicintegrity.org) regarding fire protection rules at U.S. reactors. This is a second request for information, following up an email sent on March 29 which received no acknowledgement. This request contains additional questions.

My deadline is the close of business on Monday.

Please contact me if there are questions and also to acknowledge that you have received it. I appreciate your assistance.

Thank you.
Susan Stranahan

Susan O. Stranahan

(b)(6)

(b)(6)

(b)(6)

S/181

(b)(6)

Questions for the NRC:

1. In its June 2008 report on fire protection at U.S. commercial reactors, the General Accounting Office recommended the creation of a central database for tracking the status of exemptions to Appendix R, manual actions and compensatory measures used for long periods of time. Has this been done? If not, what is the status of this effort?
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 - * The NRC address the safety concerns pertaining to extended use of interim compensatory measures. Has this been done?
 - *The NRC analyze the effectiveness of existing fire wraps and and undertake efforts to ensure that the tests have been conducted to qualify fire wraps as approved for one- and three-hour fire barriers. Has this been done?
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6. While there has been no large fire, there have been plenty of smaller ones, especially those involving electrical systems. How significant are smaller fires? How significant are smaller fires in assessing the overall attention to safety and maintenance at a reactor?
7. In its assessment of the fires at the H.B. Robinson reactor on March 28, 2010, the Union of Concerned Scientists concluded that this was the closest near-miss of all events at U.S. reactors last year. Do you agree?
8. Is NFPA 805 going to provide a greater degree of fire safety at U.S. reactors than Appendix R? If so, please explain.
9. According to the GAO report (above), "nuclear fire safety can be considered to be degraded when reliance on passive measures is supplanted by manual actions or compensatory measures." Do you agree? Isn't that exactly what is occurring now at U.S.

plants?

From: Akstulewicz, Brenda
To: Deavers, Ron; Bonaccorso, Amy
Subject: Citizen w/solution
Date: Friday, April 01, 2011 9:36:02 AM

Scott Koenig

(b)(6)

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brenda.akstulewicz@nrc.gov



S/1/82

From: Hayden, Elizabeth
To: Hasselberg, Rick
Cc: Janbergs, Holly; Harrington, Holly; Bonaccorso, Amy
Subject: RE: Japan nuclear accident
Date: Friday, April 01, 2011 5:13:38 PM

Will do. Thanks

Beth

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

From: Hasselberg, Rick
Sent: Friday, April 01, 2011 5:06 PM
To: Hayden, Elizabeth
Cc: LIA08 Hoc; RST01 Hoc; Alter, Peter
Subject: RE: Japan nuclear accident

Beth,

Please send them to both RST01.hoc and to LIA08.hoc. thanks!

Rick

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

From: Hayden, Elizabeth
Sent: Friday, April 01, 2011 3:40 PM
To: Hasselberg, Rick
Cc: Ash, Darren
Subject: FW: Japan nuclear accident

Rick,

Due to the large volume of e-mails and phone calls OPA received immediately after the Fukushima event, we were not doing anything with suggestions for resolving the problems going on in Japan. Now that the volume has eased quite a bit, I was thinking that OPA might respond to e-mails like the one below thanking them for their ideas and telling them we have forwarded them to the appropriate staff working the Japan event.

Could we forward these e-mails to you for those suggestions/ideas that appear reasonable and realistic? You would not be expected to respond back since we would have already done that.

Beth Hayden

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

From: Lonnie Reed (b)(6)
Sent: Monday, March 28, 2011 8:46 PM
To: DataQuality Resource
Subject: Japan nuclear accident

Hello,

I do not know specifically who to address my comment.

It seems from news reports that Japan is having trouble locating a place to store radioactive water from the plant. Why not use empty oil supertankers to hold the contaminated water. It beats releasing it to the open ocean.

5/1/83

Please forward my suggestion to anyone who may find the suggestion helpful.

Best regards,
Lonnie Reed

(b)(6)

Lo

From: Janbergs, Holly on behalf of OPA Resource
To: Bonaccorso, Amy
Subject: FW: Water Absorbing Polymer keeps the water from soaking into concrete floors, even sucks it out, can be homemade, shovelled, handled, cardboard boxed and shipped
Date: Friday, April 01, 2011 9:12:00 AM

From: R4ALLEGATION Resource
Sent: Friday, April 01, 2011 8:47 AM
To: OPA Resource
Subject: FW: Water Absorbing Polymer keeps the water from soaking into concrete floors, even sucks it out, can be homemade, shovelled, handled, cardboard boxed and shipped

Good morning,

The email below is one of many we've been receiving from an individual offering advice on how to fix the problems in Japan and offering ideas on how to protect our plants. Is OPA taking in these types of emails now?

Thanks,

Nick Taylor
Senior Allegations Coordinator
USNRC Region IV
O: (817) 276-6520
(b)(6) Ex 6
F: (817) 276-6525
E: nick.taylor@nrc.gov

From: phil (b)(6) Ex 6
Sent: Tuesday, March 29, 2011 6:42 PM
To: R4ALLEGATION Resource
Subject: Fw: Water Absorbing Polymer keeps the water from soaking into concrete floors, even sucks it out, can be homemade, shovelled, handled, cardboard boxed and shipped

Video wouldn't go through, too big@ 10 Meg

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

From: phil
To: r4allegation@nrc.gov
Sent: Tuesday, March 29, 2011 4:33 PM
Subject: Water Absorbing Polymer keeps the water from soaking into concrete floors, even sucks it out, can be homemade, shovelled, handled, cardboard boxed and shipped

Nick Taylor
Senior Allegations Coordinator
USNRC Region IV
Toll Free: (800) 695-7403
Office: (817) 276-6520
Fax: (817) 276-6525
Email: r4allegation@nrc.gov

S/184

You might have the so-called best people in the world on your staffs, but it is highly evident that best is not equivalent to sufficient.

So, here's some more high suspicions that I and the general public deserve calming clarifications on.

These same simple emergency handling tricks can overnight be setup on all America's reactors, Just in case, allows some claims of reduced forward-thinking disaster risks.

Someone should analyze that soil plutonium better.

Why isn't there any uranium in it ?

Is there an highly personally profitable under the table production of dirty bomb materials going on ?

You can tell by the isotope decay proportions how long ago it got there.

In other words,

Maybe someone should analyze the water to see where else it came from, as in maybe someone was making dirty bomb materials under the table ?

Or someone was making medical radioactive materials ?

Or smoke alarm radioactive materials ? Or thorium camp light elements ?

Or radioactive samples for various international university research wholesale or retail ?

Or any too-secret nuclear bomb materials for the Japanese military, under the undersight of the Internationals ?

If such can be estimated, it might help to know how much raw materials and how much finished materials would have been there in inventory stock, for emergency assessment purposes.

Where I did nuclear radioactive total dose testing of integrated circuits for rad hardness, we used a Cesium source parked on a table right next to the primary reactor (see video if attached).

My local university research reactor also had "stores" of materials irradiated for research purposes, and probably materials for off-site radiation research.

If Japan was making radioactive materials for secondary markets, they might not have been stored safely enough for these disaster scales.

A spill of those materials would show a lot of contamination, but it would level off, as it seems to have.

They admit to making the plutonium, but they need to advise if they are/were "extracting" any of the other byproducts,

that otherwise would be self-recycled in the reactions or stored in the spent fuel pools.

HOW are they storing, packaging those extracted radioactive byproducts for shipment, and storage, and were those means safe enough to survive known explosions ?

Or were they on shelves or tables that have toppled ?

I would lean over the reactor while it was pulsing, but the water wasn't radioactive. See video if it comes through in spite of size.

Typically, such production would be nearly invisible in a small "business unit" that only forwarded their bottom lines to top management, not details.

Search the local marketing channels for such medical and research nuclear materials to get a better picture than the company would give you.

Or, local management might remember that stuff, if pointedly reminded. The manager of my local research reactor was also a campaign manager for Congressman Sonny Bono, of Sonny and Cher Fame. At a local Republican convention, he introduced me to Sonny, and my hand was the

first hand that Sonny shook when he came into his convention headquarters that day. That manager is the type you had better hope that Japan had.

Mine was the last handshake for the day at another event just a few years ago from Arnold

Schwarzenegger. I've talked to Chris Cox, former SEC Chairman several times in the last couple of months, I'm the one that sent in the triggers that got Paulson running to Congress just in time to save all the banks in the world.

So, having gotten addicted to long shot suggestions that have saved millions of lives, I keep going at it.

Water Absorbing Polymer and on the sidebar, suggestions for making it out of almost anything handy.

<http://www.youtube.com/watch?v=U9rXaGaDweM&feature=related>

This can solve the cleanup issues, no pumps needed, can be left in place until next spill, can be put in plastic lined cardboard boxes, not tanks.

Allows for easy analysis, and being unspillable, can't be tread on, and CAN be dumped in plastic lined trenches, without leaching into soil or ocean.

It can be long term containment, OR, it can be electrolyzed, then burned back into heavy water and returned to the reactors, with the deposits thus removed, cleaning the water. Also, there are several ways to get the salt out of the pools. Just hanging wicks in there will wick up the water, which will then evaporate, leaving the contaminations on the wick, which can then be changed, dried, and re-processed to recover the valuables with far less difficulty than otherwise.

That can be done in the pools. If you need a more closed loop system, leak the water into barrels or drums, insert wick materials, and then apply a vacuum to it, and burn the output of the vacuum pump to convert the heavy hydrogen back into non-flammable water vapor, cool it condense it and return it safely to the pool.

I missed the company name, but there is a company in Germany that specializes in converting radioactive hydrogen back into water on a program shown on a local PBS station, KCET, on a German produced program clip about converting nuclear problem hydrogen back into water, on DW tv 3-26-2011 Ch 28-4 KCET

Concrete, such as the likely materials used to make the turbine basement floors, is highly hygroscopic. Which means that just draining the radioactive materials contaminated water won't be enough.

Evaporating the water out of that concrete will leave the radioactive elements in it. Using a vacuum or osmotic wick like that water absorbing polymer, will not only take out the water, but also a lot of everything dissolved or colloid in it.

All the concrete has to be removed, and isolated.

Maybe used to create a toxic waste dump superstructure admix for the concrete in a future radioactivity containment.

There are aquarium water pumps on eBay that run on flashlight batteries, slow, but that would allow the barrel to be isolated from the power supplies and from arcing to any convenient ground. Wicks can be made from newspapers, ropes, contaminated uniforms, anything which can be later incinerated to recover the valuable residues.

As things get hot, thermionic emission will reduce their HiPot safety margin.

Sharp points will tend to "emit" electrons, usually with sparks, sometimes with slower hopping conduction, seriously reducing the insulation value of insulators.

A re-analysis of conductivities when so hot might be in order, and not on the safe side of this safety issue.

Hot gasses seem to be frequently ionized. Clean room air **deionizers** might be warranted, if there is now, or expected to be, any further hydrogen generation.

Some gasses are especially easy to ionize at temperature, such as mercury and "sodium" vapor as

used in lighting because of that.
Maybe some spectrometry can determine the ionization levels there, and how much salt water sodium is getting ionized.
Once those chemicals have vapor deposited on surfaces, the conductivity changes, even if deposited on high voltage insulators.
So, what seems like spontaneous electrical discharges might have predictability factors, in the lose-lose category.

Analyze the floor water for salinity, and evaluate whether it is a leak, or overflow of the applied water, washing out explosion products.

Wicks can start extracting salts and "hard" water components without electricity or power.
Problem is what happens to soluble uranium salts and fluorides when the ionic compatible media (water) evaporates ?
Do those become a part of a hard salt "air" as in ocean front salty air ? Or radioactive gasses, as in the centrifuges ?

http://www.washingtonpost.com/national/robots-designed-to-deal-with-nuclear-accidents-await-duty-in-europe-while-japan-asks-where-are-ours/2011/03/25/AF2A3C1B_story.html?hpid=z2

<http://www.csmonitor.com/USA/2011/0326/Radioactive-seawater-in-Japan-raises-new-fears-of-reactor-crack>

<http://www.csmonitor.com/USA/2011/0325/Do-US-nuclear-plants-have-defective-parts-NRC-finds-reporting-flaws>

Subject: YouTube - How to make a nuclear reactor at home <http://www.youtube.com/watch?v=dwRt74nzRmY&feature=related>

Maybe also: <http://www.google.com/search?hl=en&q=%22smart+sponge%22&btnG=Search>



TUESDAY 29 MARCH 2011

Japanese Crews Scramble to Contain Radioactive Water at Nuclear Plant

Tuesday 29 March 2011

by: Julie Makinen and Ralph Vartabedian, The Los Angeles Times | Report

Tokyo - Japanese emergency crews are scrambling to contain rising levels of extremely radioactive water that has leaked into tunnels and basement equipment rooms at the Fukushima Daiichi nuclear power plant, putting up dangerous new obstacles to workers trying to bring the reactors under control.

Workers were using sandbags and concrete panels Tuesday in a desperate attempt to prevent the contaminated water from further spreading through the plant or into the nearby soil and ocean.

Their challenge is compounded by the fact that they must continue to douse water on the nuclear reactors and the spent fuel pools that would otherwise overheat and release additional radiation. Japanese officials warned Tuesday morning that temperatures in one of the reactors was again rising.

Chief Cabinet Secretary Yukio Edano said that cooling the reactors would remain the top priority, though workers would try to reduce the amount of water being used in order to reduce the potential for wider contamination.

"We have to prioritize cooling," Edano said.

In addition, deposits of plutonium — a long-lived radioactive element — were found in the soil around the plant.

The government said some of the plutonium may have seeped from damaged fuel rods inside the plant, with Edano calling the situation "very grave."

The problems represent further setbacks for Japanese authorities, demonstrating that more than two weeks after the earthquake, they still do not know the extent of damage and continue to improvise as they learn more about the state of the damage and the radiation leaks.

"Everything is being done by the seat of their pants," said Edwin Lyman, a nuclear physicist with the Union of Concerned Scientists, a U.S. watchdog group. "They are solving each problem, until the next one comes along."

Japanese and American nuclear industry experts have offered several conflicting explanations of where the water came from: runoff from water cannons fired into the damaged plant, leakage from pools holding spent fuel rods or even coolant from the damaged reactor vessels that overheated in the early days of the disaster.

The presence of highly radioactive water was complicating work at the site already hindered by mechanical problems and damage from the quake and tsunami. Engineers have run a crucial new power line to the plant from the electrical grid, but radioactivity was keeping workers from getting close enough to hook it up throughout the complex.

The radiation level of the water in the tunnel at the No. 2 reactor was reported at 1,000 millisieverts per hour; four times a worker's limit for a full year, meaning even brief exposure could be harmful.

Plant authorities were exploring ways to capture and store the contaminated water. But experts say it could take days to weeks to work out a way to remove all the water safely, further slowing efforts to bring the stricken facility under control. The engineers must also figure out where the contaminated water originated and how it got into the tunnels that house pipes connecting the reactor to the turbines.

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If not, the tunnels could simply flood again even as water is pumped out.

A U.S. nuclear design engineer said he believes the water accumulating in the tunnels and turbine rooms comes from water cannons and helicopters that attempted to spray water into the spent fuel pools but missed their mark. The water then accumulated radioactivity washed off the plant structure, and coursed downhill through the plant until reaching the tunnels.

"All that seawater they have been spraying on the reactors, tons of seawater, it basically had to go somewhere," said University of Southern California nuclear safety expert Najmedin Meshkati.

Even if the water is pumped out, radioactivity may remain behind, leaving the site still dangerous to work in. Lyman said porous concrete walls and floors could absorb the radioactive material and leave the structure still contaminated.

The Japanese also face the problem of what to do with the contaminated water.

Much of the tank space at the site is already full. And simply pumping massive quantities of contaminated water

into the ocean may have unknown consequences and violate international law.

"There is a duty to protect the marine environment and that extends to their own borders," said David Caron, a University of California-Berkeley law professor and president of the American Society of International Law. "The question is whether they adequately prepared and that is in question."

Caron and many other experts said they doubted the contamination would be severe, because the sea would dilute the radioactivity before it could harm another nation's coast or marine environment.

High levels of radiation were found over the weekend in the ocean near the plant, though Japanese authorities said there was no risk to human health.

But the evidence coming out of the plant is contradictory and statements by senior Japanese officials have only added to the confusion. Japanese officials said over the weekend that they measured high levels of iodine-134, an isotope created during fission with a half-life of about 53 minutes. They later backtracked on their measurement.

Iodine-134 should have virtually disappeared after the first day of the accident.

Apart from ocean contamination, plant officials said that tests last week found trace levels of plutonium in soil outside the plant.

The origin of that material could be from a spent fuel pool or from reactor No. 3, which is loaded with plutonium fuel.

Plutonium is highly carcinogenic if particles become embedded in the lungs. Officials of the company that operates the plant said the element was found in two of five samples taken from the grounds of the facility, suggesting that contaminated water from reactor No. 3 had seeped into the soil. That reactor is fueled with a mixture of plutonium and uranium.

Concern about other radioactive substances had already led the government to order people living within 12 miles of the facility to evacuate. Those living between 12 and 18 miles from the plant have been urged to leave voluntarily, or remain indoors if they do not evacuate.

But Edano said evacuees were increasingly breaching the 12-mile perimeter without authorization to retrieve personal items from their homes. He urged them to stop, saying there is a "big risk" to human health.

On a positive note, operators are injecting fresh water into three reactors at the plant, instead of the corrosive

seawater that has been used over the last two weeks.

The head of the U.S. Nuclear Regulatory Commission, Gregory Jaczko, arrived in Tokyo on Monday to meet with Japanese authorities and to get a firsthand look at the situation, according to a statement from the U.S.

Embassy.

And Yukiya Amano, head of the International Atomic Energy Agency, warned that the crisis could go on for months. "The difficult situation has not been overcome and it will take time to stabilize the reactors," he said. "Radioactivity in the environment, foodstuffs and water is a matter of concern in the vicinity of the Fukushima plant and beyond."

In another sign of trouble, a pumper truck that had been spraying water into the plant broke down.

Japanese officials said it should be back in service by the end of the month.

This article "Japanese Crews Scramble to Contain Radioactive Water at Nuclear Plant" originally appeared at The New York Times.

(Makinen reported from Tokyo and Vartabedian from Los Angeles. Staff writer Thomas Maugh contributed to this report.)

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Tweet

»

COMMENTS

This forum is moderated by software. Please allow up to 15 minutes for your comments to go live and avoid posting the same comment multiple times.

From: Janbergs, Holly
To: (b)(6) Ex 6
Subject: Re: Radiation Question
Date: Friday, April 01, 2011 8:51:00 AM

Ms. Pugia,

I understand your concerns, and I'm sure your (b)(6) appreciates you being proactive. The ongoing nuclear situation in Japan has brought heightened scrutiny from the federal government across the U.S. A number of agencies are working together to try and give the public up-to-date information on the situation, and what protective measures citizens can take.

The Environmental Protection Agency has increased their regular levels of nationwide monitoring of milk, precipitation, drinking water, and other potential exposure routes. Based on current information, the Food and Drug Administration sees no risk to the U.S. food supply. Customs and Border Patrol has been working with the FDA to ensure that all food and cargo products from overseas are thoroughly scanned for radiation. The priority is ensuring the safety of American citizens as best we can.

The Center for Disease Control has a telephone number that may be of use to you; they have been answering radiation health questions, and should be able to provide you with the information you need to understand how this situation could affect your (b)(6)

(b)(6) You can call them at 1-800-CDC-INFO. There should be an option in their menu specifically for Japan and radiation-related questions; that will get you to someone knowledgeable about the potential effects of radiation.

There are a number of informational resources available online. The NRC has its own Japan response page that we have been updating as the situation unfolds. We have a lot of radiation information available there as well:

<http://www.nrc.gov/japan/japan-info.html>

and for radiation-specific questions:

<http://www.nrc.gov/about-nrc/radiation/related-info/faq.html>

Federal and state governments have also worked together to create a page that aggregates important information from several agencies and levels of government to give a clear picture of U.S. response to this situation. There you can find more information as well as links to specific sites, contact information, and current advisories:

<http://www.usa.gov/Japan2011.shtml>

It's also a good idea to keep track of what the (b)(6) state government is advising. While the federal government is taking the lead in monitoring and giving guidance, your local officials will be able to give the best possible advice based on your particular area.

I hope this helps. Please let me know if you have any further questions.

Thank you,
Bethany

Beth Janbergs

5/185

Public Affairs Assistant
301-415-8211

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: Radiation Question
Date: Friday, April 01, 2011 7:47:00 AM

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

From: (b)(6) Ex 6
Sent: Friday, April 01, 2011 7:35 AM
To: OPA Resource
Subject: Radiation Question

Below is the result of your feedback form. It was submitted by

(b)(6) Ex 6
on Friday, April 01, 2011 at 07:34:38

comments: My (b)(6). We need to know what are the risks, at this time and in the long run, to her and our (b)(6) from the disaster in Japan, and what we can do now, to prepare and protect them? Please be as specific as possible, or tell me what agency we can contact, to give us this information. We are in the (b)(6) area. Thank you, Sally Pugia

contactName: Sally Pugia

phone: (b)(6)

S/186

From: Janbergs, Holly
To: Harrington, Holly
Subject: FW: Portable emergency diesel generators
Date: Friday, April 01, 2011 8:33:00 AM

Do you have a contact in NSIR or somewhere who might be able to give this a response?

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Friday, April 01, 2011 7:45 AM
To: Janbergs, Holly
Subject: FW: Portable emergency diesel generators

From: (b)(6) Ex 6
Sent: Thursday, March 31, 2011 5:51 PM
To: OPA Resource
Subject: Portable emergency diesel generators

U.S. Nuclear Regulatory
Commission

Office of Public

Affairs

Washington, DC 20555-

0001

Email: OPA.Resource@nrc.gov

Tel: 301-415-8200

Fax: 301-415-3716

Dear Sirs:

I am researching the question, "If a US nuclear power plant lost all AC power, couldn't we just airlift in portable generators before the batteries run out to keep the pumps running?"

I refer to TAC No. MC3380, "Offsite Power Issues," 09/18/09:

The loss of all alternating current (AC) power at nuclear power plants involves the loss of offsite power (LOOP) combined with the loss of the onsite emergency power supplies (typically emergency diesel generators [EDGs]). This is also referred to as a station blackout (SBO). Risk analyses performed for nuclear power plants indicate that the loss of all AC power can be a large contributor to the core damage frequency, contributing up to 74 percent of the overall risk at some plants. Although nuclear power plants are designed to cope with a LOOP event through the use of onsite power supplies, LOOP events are considered to be precursors to an SBO. An increase in the frequency or duration of LOOP events increases the risk of core damage.

Available at <http://pbadupws.nrc.gov/docs/ML0926/ML092650115.pdf>

In particular, I am looking for any studies on delivering portable EDGs to nuclear power plants as a severe accident mitigation alternative (SAMA) during SBOs. I am especially interested in information on issues such as providing onsite landing zones with alternative feeds to DC panels, developing offsite EDG storage and delivery capability within the US

5/187

military or Coast Guard, cost benefit analyses, and so on.

Please let me know if you are aware of any such information, and thank you for your kind attention.

Lewis Tager

(b)(6)
(b)(6)
(b)(6)
(b)(6)
(b)(6) Ex 6

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: Fukushima Accident Water Cleanup
Date: Friday, April 01, 2011 7:45:37 AM

From: Joe Massey (b)(6) Ex 6
Sent: Thursday, March 31, 2011 5:53 PM
To: OPA Resource
Subject: Fukushima Accident Water Cleanup

Hi

I'm a (b)(6) when the accident at TMI occurred. I went to (b)(6)

We were fabricating the SDS, which used 10 cubic feet s/s pressure vessels filled with inorganic ziolites, primarily to removed Cs and Sr isotopes from the containment bldg and RPV. I left TMI before the system went operational, but I understand it work as intended.

To clean the water in the Fukushima turbine buildings, could a similar system be used, perhaps installed with shielding on the upped turbine deck to have crane access?

Since there is probably a fair amount of NaCl in the water, a polishing demin with organic resins at the ziolite cylinder discharge would be quickly depleted, that is probably not an option. I have used activated carbon to removed radioiodine from water, since a high percentage is probably organic iodine, it should work there.

If you think this has merit, or would like to discuss, please email me.

Thanks

Joe Massey

S/188

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: Radiation Question
Date: Friday, April 01, 2011 3:42:00 PM

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

From: (b)(6) Ex 6
Sent: Friday, April 01, 2011 3:31 PM
To: OPA Resource
Subject: Radiation Question

Below is the result of your feedback form. It was submitted by

(b)(6) Ex 6
on Friday, April 01, 2011 at 15:30:59

comments: (b)(6)

(b)(6)

(b)(6) This is midway between (b)(6)

(b)(6) (b)(6) we are

trying to decide if she should take this
year long position in light of the
potential radiation issues in Japan. Any
information would be helpful in our
decision. Thank you very much.

contactName: (b)(6) Ex 6

phone:

S/189

From: Hayden, Elizabeth
To: Janbergs, Holly; Bonaccorso, Amy
Subject: FW: Glen Rose Texas Reactors
Date: Friday, April 01, 2011 3:41:26 PM

In case you are keeping track of these e-mails.

Beth

From: Hayden, Elizabeth
Sent: Friday, April 01, 2011 3:24 PM
To: Dricks, Victor; Uselding, Lara
Cc: Ash, Darren
Subject: FW: Glen Rose Texas Reactors

Could you please respond to this e-mail?

Beth

From: richard lehman (b)(6)
Sent: Thursday, March 31, 2011 3:16 PM
To: DataQuality Resource
Subject: Glen Rose Texas Reactors

Dear Sir:

I have been concerned about the referenced facility ever since its location, a (b)(6) of (b)(6) where I live, since the location decision was made. It appears to me that if anything major goes wrong with the facility, the prevailing wind being from the south, we are in direct line to receive a goodly dose of radiation a few minutes after an event occurs.

Could you tell me what kind of reactor it is, is it the same GE model which failed in Japan?
What is the safety record of this facility?
When was the last time the facility was inspected by your agency, and what were the findings?

Thanks,

Dick Lehman
(b)(6)

S/190

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: Radiation Question
Date: Friday, April 01, 2011 2:19:00 PM

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

From: (b)(6) Ex 6
Sent: Friday, April 01, 2011 2:19 PM
To: OPA Resource
Subject: Radiation Question

Below is the result of your feedback form. It was submitted by

(b)(6) Ex 6
on Friday, April 01, 2011 at 14:19:07

comments: I have a suggestion for the Japanese reactors. Could they just drop granulated lead, from the same type of bag as the water bags, applying several tons as a shield. It would work it's way down like sand and possibly melt creating a full inclosure.

Geoff Kail

contactName: Geoffrey Kail

phone: (b)(6)

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From: Janbergs, Holly
To: (b)(6) Ex 6
Subject: Re: Lead Suggestion
Date: Friday, April 01, 2011 2:42:00 PM

Mr. Kail,

Thank you for sending your idea on the use of granulated lead to enclose radioactive materials at the Fukushima reactors. We appreciate the suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

The NRC has been working 24-hours a day to fully staff our response teams and monitor the situation overseas. We also have some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We will be doing everything we can in this difficult time.

Thank you again,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

8/192

From: Janbergs, Holly on behalf of OPA Resource
To: Medina, Veronika; Couret, Ivonne
Subject: FW: radiation impacts from Japan
Date: Friday, April 01, 2011 2:38:00 PM

From: John Upton [mailto:jupton@baycitizen.org]
Sent: Friday, April 01, 2011 2:33 PM
To: OPA Resource; OPA4 Resource
Subject: Fwd: radiation impacts from Japan

Hello,

Has the NRC asked the EPA or FDA to not publish or publicize data about radiation levels in precipitation, drinking water or milk?

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 Fx 6

Begin forwarded message:

From: John Upton <jupton@baycitizen.org>
Date: March 14, 2011 11:11:35 AM PDT
To: OPA.Resource@nrc.gov
Cc: OPA4.Resource@nrc.gov
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

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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

Fx 6

From: Janbergs, Holly
To: (b)(6) Ex 6
Subject: Re: US nuclear plants unprepared
Date: Friday, April 01, 2011 1:59:00 PM

Mr. Gnuse,

Thank you for contacting us with your ideas for improving the safety of U.S. nuclear plants.

In the United States, all plants except for Oconee have both diesel and battery backup systems. Most of the U.S. plants with diesels have two diesels per unit, and those that have only one dedicated diesel have a swing diesel available as well. Most sites plan to run the diesels for multiple days and have battery backup capability for eight hours. The recovery strategy for each site 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 possible accidents. You can read more about emergency preparedness here: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-emerg-plan-prep-nuc-power.html>

From the beginning of this situation in Japan, the NRC has stated that we will be looking to draw lessons learned from the unfolding events. We are always interested in actions we can take to improve the safety and security of the nation's power plants. In addition, President Obama has requested that the agency perform a comprehensive review of the nation's power plants; we have agreed to do so. Preparations for the review are already underway, as we stated in one of our recent press releases: <http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-055.pdf>

In the future, I hope you explore some of our options for public involvement and public comment. We encourage public participation, particularly when it involves real strategies that can be used to increase the safety of U.S. plants. For upcoming opportunities, you can always look on our website here: <http://www.nrc.gov/public-involve.html>

Thank you again,
Bethany

Beth Janbergs
Public Affairs Assistant
301-415-8211

5/194

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: US Nuclear plants unprepared, easy least expensive backup plan below
Date: Friday, April 01, 2011 1:47:00 PM

From: Larry Gnuse (b)(6) Ex 6
Sent: Thursday, March 31, 2011 10:36 AM
To: NRC Allegation
Subject: US Nuclear plants unprepared, easy least expensive backup plan below

Japans nuclear reactors melted because they only had 8 hour battery water pump back up which was totally insufficient. 100 US nuclear facilities only have half that, 4 hour back ups. This is needlessly dangerous and reckless.

The NRC has a window of opportunity to request whatever money they need now for more safety backup. If they ask for it, Americans will demand they get it NOW to make American reactors safer and safer to build more.

Solution:

Fit US nuclear plants to accept existing relatively cheap large portable, universal, plug in 20 and 40 ton turbo diesel power units and coolant pumps and generators that are a military or cargo plane or semi trailer weight that can be pre-positioned for emergencies, moving in an instant to be trucked to airports and flown in to where they are needed within 4 hrs. Their containers floated across mud bank flooded rivers if need be and floated or trucked in, hooked up to pre build hook ups and operating within hours with 20,000 HP of diesel powered electrical generators and water pumps moved and in place operating at any emergency at any nuclear facility.

We have a National Guard that already has the capability of flying 20 and 40 ton loaded semi trailers from and to short runways, building bridges on the spot, and floating dozens of 40 ton supply boxes across flood waters and crossing mud bank rivers on a moments notice.

The oil industry already has tens of thousands of these units so they are relatively cheap. You just put replace the heavy 10,000 PSI frac pump with a lighter water pumps or hook the drive shaft to a 20 ton generator container. Containerize. Containers with pallets of roll out hoses up to 4 ft in diameter would arrive with the shipments.

I have worked in the oil field where they have thousands of multi thousand Horsepower oil well rock fracturing pump trucks. Every day they drive into axle deep muddy sites and struggling through the deep mud, gang together and hook together tens of thousands of horsepower of pumps, and by hand in 10 inch mud, build 20 tons of big 10,000 PSI pipelines within a few hours, blow multimillions of gallons of water down the well at 10,000 psi, take it all down and go home the same day.

With comparatively minimal cost and modification, there is no reason that we could not have the same preparedness capacity for our nuclear sites. There is no reason we could not have 20,000 HP of nuclear coolant water pumping capacity and power generation at any stricken nuclear site within 3 hours at any nuclear facility in the US. The 4 battery back up is then just for the transit period. Our nuclear sites MUST be more prepared for a power grid collapse.

For emergency nuclear faculty response, 20,000 HP of water pumping and electrical generating capacity could easily be containerized and with our civilian and military airlift capacity, be plugged into pre existing portals within 3 hours of an emergency.

We need more nuclear power now . The NRC needs to step out in front NOW, while you have the spotlight to tell the public how they are adding even more layers of safety to US nuclear plants.

The option is to add preparedness our nuclear power stations now while we still have the money to do it, or to bankrupt our nation by giving all our wealth for oil to nations who want to destroy us.

Please act now!

S/195

From: Janbergs, Holly on behalf of OPA Resource
To: Janbergs, Holly
Subject: FW: US Nuclear plants unprepared, easy least expensive backup plan below
Date: Friday, April 01, 2011 1:47:13 PM

From: Larry Gnuse (b)(6) E-6
Sent: Thursday, March 31, 2011 10:36 AM
To: NRC Allegation
Subject: US Nuclear plants unprepared, easy least expensive backup plan below

Japans nuclear reactors melted because they only had 8 hour battery water pump back up which was totally insufficient. 100 US nuclear facilities only have half that, 4 hour back ups. This is needlessly dangerous and reckless.

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The option is to add preparedness our nuclear power stations now while we still have the money to do it, or to bankrupt our nation by giving all our wealth for oil to nations who want to destroy us.

Please act now!

5/19/6

From: Janbergs, Holly
To: (b)(6) Ex 6
Subject: Radiation Monitoring Links
Date: Friday, April 01, 2011 1:43:00 PM

Ms. Michetti,

The following are the links you requested when we spoke on the phone. I hope you will find them helpful.

Explanation of the EPA's RadNet data

<http://www.epa.gov/japan2011/rert/radnet-data.html>

EPA's RadNet Air Concentration Measurement Data for 3/30/11

<http://www.epa.gov/japan2011/docs/rert/radnet-cart-filter-final.pdf>

NRC FAQs about radiation

<http://www.nrc.gov/about-nrc/radiation/related-info/faq.html>

General information about US Government response to the unfolding situation in Japan

<http://www.usa.gov/Japan2011.shtml>

The numbers again are as follows:

DOE 202-586-4940

EPA 202-564-6794

Thank you,
Holly

Holly Janbergs
Public Affairs Assistant
301-415-8211

S/197

Bonaccorso, Amy

From: Clark Dodge [clark@cedconsulting.com]
Sent: Saturday, April 02, 2011 2:52 PM
To: NRC Allegation
Subject: Emergency Power.

Aloha from Hawaii

I have been following the Emergency power options for Nuclear Power Plants and the problem in Japan makes it even more important. I (b)(6) We had a problem without terminal and the vessels provided emergency power until the terminals were rebuilt and remodeled. It was very simple and only required a few minutes and we could load and unload the vessel in storm s and power outages.

The same thing could have been done in Japan if designed and put into action. It could also be done at all of the plants for minim cost and time. The panels could even be mass produced and built in a shop and installed. If a system was damage and needed to ne replace it could be flown in and installed quickly.

I would be happy to word with a group on this. I (b)(6)

(b)(6)

Please feel free to contact me should you

wish to follow up on my design.

Clark Dodge, Owner/President
CED Consulting LLC
3776 Aloha Place
Koloa, HI. 96756-9404

Ph: (808) 245-7183
Cell: (b)(6)

www.cedconsulting.com
clark@cedconsulting.com

From: [Bonaccorso, Amy](#)
To: [Bonaccorso, Amy](#)
Subject: FW: Citizen
Date: Monday, April 04, 2011 2:01:00 PM

Talked to this man at length – he thinks people should stay inside due to radiation risk.
He will email me. Thick accent – difficult to understand.

From: Akstulewicz, Brenda
Sent: Monday, April 04, 2011 11:54 AM
To: Bonaccorso, Amy
Subject: Citizen

Another one with no name from voicemail box

(b)(6)

Has questions about Japan

6

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brenda.akstulewicz@nrc.gov



S/199

From: [Bonaccorso, Amy](#)
To: [Bonaccorso, Amy](#)
Subject: FW: Citizen
Date: Monday, April 04, 2011 2:11:51 PM

This person got information about radnet and CDC, but claims that his radiation equipment is flashing and has been reacting more since March 29. He says he is very sensitive to radiation.

From: Akstulewicz, Brenda
Sent: Monday, April 04, 2011 11:55 AM
To: Bonaccorso, Amy
Subject: Citizen

Jesus Mendoza

(b)(6)

Any radiation over

(b)(6)

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brenda.akstulewicz@nrc.gov



5/200

From: [Bonaccorso, Amy](#)
To: [Bonaccorso, Amy](#)
Subject: FW: Citizen - from voicemailbox
Date: Monday, April 04, 2011 1:51:48 PM

Jerry is the name of the person – he is staying at a hotel – and the lobby transferred me to him. His was out, but I gave his wife information about RadNet.

From: Akstulewicz, Brenda
Sent: Monday, April 04, 2011 11:53 AM
To: Bonaccorso, Amy
Subject: Citizen - from voicemailbox

No Name (message from voicemail box - called 3 times!)

(b)(6)

What technology are we using to determine the amount and projection of radiation from Fukushima.

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brenda.akstulewicz@hq.doe.gov



5/201

6

From: Shannon, Valerie
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call
Date: Monday, April 04, 2011 12:37:15 PM

7

Name: Craig Popovich

Phone: (b)(6)

Re: He has solutions to stopping leakes in Japan

S/202

From: Shannon Valente
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call
Date: Monday, April 04, 2011 12:21:00 PM

✓
Name: Johnny Serratt

From: (b)(6)

Phone: (b)(6)

Re: Has ideas about Japan situation

S/203

Deavers, Ron

From: Shannon, Valerie
Sent: Monday, April 04, 2011 11:47 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call

6
Name: Barbara Baldoni
Phone: (b)(6)
From: (b)(6)
Re: Concerns about Japan

5/2014

From: Burnell, Scott
To: Bonaccorso, Amy; OPA Resource
Cc: Janbergs, Holly
Subject: RE: Resent - Fire Protection Media - Questions for article for the Center for Public Integrity
Date: Monday, April 04, 2011 9:26:57 AM

All taken care of by Eliot and me. Thanks.

From: Bonaccorso, Amy
Sent: Monday, April 04, 2011 9:26 AM
To: OPA Resource; Burnell, Scott
Cc: Janbergs, Holly
Subject: RE: Resent - Fire Protection Media - Questions for article for the Center for Public Integrity

I don't remember seeing this one....

From: OPA Resource
Sent: Friday, April 01, 2011 12:22 PM
To: Burnell, Scott
Cc: Bonaccorso, Amy; Janbergs, Holly
Subject: Resent - Fire Protection Media - Questions for article for the Center for Public Integrity
Importance: High

Scott,
Got a phone call - this maybe a repeat?
I didn't not send it as a media request originally so it may have been sent as public inquiry.
When you get a chance can you assist or direct Brian. Let me know. Yvonne

From: Susan Stranahan (b)(6)
Sent: Friday, April 01, 2011 12:19 PM
To: OPA Resource
Subject: Yvonne: Questions for article for the Center for Public Integrity

To the Office of Public Affairs:
Attention: Yvonne:

I am writing an article for the Center for Public Integrity (publicintegrity.org) regarding fire protection rules at U.S. reactors. This is a second request for information, following up an email sent on March 29 which received no acknowledgement. This request contains additional questions.

My deadline is the close of business on Monday.

Please contact me if there are questions and also to acknowledge that you have received it. I appreciate your assistance.

Thank you.
Susan Stranahan

Susan Q. Stranahan

(b)(6)

S/2005

(b)(6)

(b)(6)

6

Questions for the NRC:

1. In its June 2008 report on fire protection at U.S. commercial reactors, the General Accounting Office recommended the creation of a central database for tracking the status of exemptions to Appendix R, manual actions and compensatory measures used for long periods of time. Has this been done? If not, what is the status of this effort?

2. In that same report, the GAO recommends:

- * The NRC address the safety concerns pertaining to extended use of interim compensatory measures. Has this been done?

- *The NRC analyze the effectiveness of existing fire wraps and and undertake efforts to ensure that the tests have been conducted to qualify fire wraps as approved for one- and three-hour fire barriers. Has this been done?

- *The NRC ensure that reactors can safeguard against multiple spurious actuations by committing to a date for developing guidelines to prevent multiple spurious actions. Has this been done?

3. The GAO notes that NRC regional officials say it is difficult to inspect fire safety due to the complicated licensing basis and inability to track documents. What changes if any have been made since 2008 to address that problem?

4. At a July 17, 2008 meeting of the NRC, then-commissioner Jaczko said: "I don't think there is one plant right now that is in compliance with these [fire] regulations. We have never really been able to have a clear set of criteria that we enforce as a regulatory body in fire protection. To this day, I do not think we do." Is that still true today? Why should Americans be confident that fire risk is a regulatory priority of the NRC?

5. If there have been no fires that threaten the reactor core since Browns Ferry, how can you get enough data to accurately develop a risk assessment model under NFPA 805? The GAO in its report (above) mentions that fire safety experts have raised that concern.

6. While there has been no large fire, there have been plenty of smaller ones, especially those involving electrical systems. How significant are smaller fires? How significant are smaller fires in assessing the overall attention to safety and maintenance at a reactor?

7. In its assessment of the fires at the H.B. Robinson reactor on March 28, 2010, the Union of Concerned Scientists concluded that this was the closest near-miss of all events at U.S. reactors last year. Do you agree?

8. Is NFPA 805 going to provide a greater degree of fire safety at U.S. reactors than Appendix R? If so, please explain.

9. According to the GAO report (above), "nuclear fire safety can be considered to be degraded when reliance on passive measures is supplanted by manual actions or

compensatory measures." Do you agree? Isn't that exactly what is occurring now at U.S. plants?

From: Shannon, Valerie
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call
Date: Monday, April 04, 2011 11:47:41 AM

Name: Barbara Baldoni

Phone: (b)(6)

From: (b)(6)

Re: Concerns about Japan

5/20/15

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: IDEA to SEAL the Crack at Fukushima!
Date: Monday, April 04, 2011 12:41:00 PM

Hello Ms. Matteson:

Thank you for contacting us about your idea. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: Shawn (b)(6)
Sent: Sunday, April 03, 2011 12:00 PM
To: OPA Resource
Subject: IDEA to SEAL the Crack at Fukushima!

I am writing to offer a suggestion. Whether it is useful or not you may decide.

Have you considered the thought to use fine ground black pepper to seal the crack at Fukushima Daiichi?

Yes. Common household pepper is very effective as a crack sealant. I once sealed a long crack (8") in an engine block by adding fine ground black pepper to the water. It held for years and I did not need to replace the engine. It is a simple idea that may be a short term solution to a serious problem. The absorbent stuff they are trying to use will only hold so much water then it will keep leaking. The black pepper held under pressure and heat. We have used this for radiators many times.

Pepper will flow with the water but congregate in a crack to plug it, if the crack is not too wide.

I know you are busy but sometimes simple ideas are not immediately thought of. I thought it was important enough to try to tell someone.

I am writing to as many contacts as I can find but I am just a (b)(6) This really did work for me.

Shawn Matteson
(b)(6)

S/2007

From: Shannon, Valerie
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call
Date: Monday, April 04, 2011 12:37:15 PM

Name: Craig Popovich

Phone: (b)(6)

Re: He has solutions to stopping leakes in Japan

to

5/2008

From: Tobin, Jennifer
To: Bonaccorso, Amy
Subject: RE: BWR Mark 1 Design
Date: Monday, April 04, 2011 3:33:31 PM

Amy,
To the best of my knowledge, that data is not consolidated anywhere. Most primary containments in the U.S. are completely made of steel but I don't know that all were. I don't have a clue about the ones in Japan. I would advise him to do some more research (as you previously suggested).

Thanks!
-Jenny

From: Bonaccorso, Amy
Sent: Monday, April 04, 2011 12:33 PM
To: Tobin, Jennifer
Subject: FW: BWR Mark 1 Design

Hey Jenny:

I could tell him that we don't have time to research his questions but thought I'd try you first.

Thanks,

Amy

From: Janbergs, Holly
Sent: Monday, April 04, 2011 11:45 AM
To: Bonaccorso, Amy
Subject: FW: BWR Mark 1 Design

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Monday, April 04, 2011 7:31 AM
To: Janbergs, Holly
Subject: FW: BWR Mark 1 Design

From: Joseph Gonyeau (b)(6)
Sent: Saturday, April 02, 2011 11:38 AM
To: OPA Resource
Subject: BWR Mark 1 Design

Does the primary containment for all of the Mark 1 BWRs in the US have a completely metal (steel) drywell compartment for the reactor (designed for about 60 psi pressure) surrounded by a concrete primary containment?

Do the Fukushima reactor have the same setup?

The drawing used to show the Mark 1 and the BWR document (<http://www.nrc.gov/reading-rm/basic->

5/2009

ref/teachers/03.pdf) are unclear whether there is metal other than the cover over the reactor head. Having been inside Fermi 2's drywell before startup, I thought it was a metal compartment.

Thank you in advance.

Joseph Gonyeau

(b)(6)



A handwritten signature, possibly "JG", written in ink.

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: spent rod pools Japan
Date: Monday, April 04, 2011 3:28:00 PM

Hello Mr. Broberg:

Thank you for contacting us about your idea. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in.

The Institute of Nuclear Power Operations recently expressed an interest in receiving some suggestions and can be reached at inpoercassistance@inpo.org.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: Gary Broberg (b)(6)
Sent: Monday, April 04, 2011 2:55 PM
To: OPA Resource
Subject: spent rod pools Japan

I am a (b)(6) and specialize in (b)(6). I have a suggestion which is relatively easy to apply that will reduce the temperature of the spent rod pools, put out any fire and prevent fire. The current method of just using water makes the problem worse because applying water at those temperatures splits the water molecule re-oxygenating the fire. Once using an application the temperatures should be reduced to ambient in about 4 minutes. I spoke with the chemist Dr. Schwartz who is the chemist for the Marine CBIRF out of Indian Head Maryland. He suggested I make every effort to talk with someone there to explain the process.

Gary Broberg

(b)(6)

6

5/210

From: [Bonaccorso, Amy](#)
To: inpoercassistance@inpo.org
Subject: FW: another solution...
Date: Monday, April 04, 2011 3:05:00 PM

This person has lots of experience with the (b)(6) and swears that a sheet of reasonably soft rubber would plug any cracks in the Japanese reactors immediately. He says it should be one inch thick and could be held with a steel plate to apply extra pressure.

His info is below if you are interested in talking to him. He is not on email.

Thanks,

Amy

From: Akstulewicz, Brenda
Sent: Monday, April 04, 2011 1:50 PM
To: Bonaccorso, Amy
Subject: another solution...

Michael Tannert

(b)(6)

(b)(6)

worked sealing underwater cracks, knows exactly how to solve the problem.

Brenda Akstulewicz
Administrative Assistant
Office of Public Affairs
301-415-8209
brendaakstulewicz@nrc.gov



5/2/11

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Call
Date: Monday, April 04, 2011 2:37:00 PM

Referred him to INPO because his background was very professional.

From: Shannon, Valerie
Sent: Monday, April 04, 2011 12:37 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call

Name: Craig Popovich

Phone: (b)(6)

Re: He has solutions to stopping leakes in Japan

6

5/2/12

From: Bonaccorso, Amy
To: Janbergs, Holly; Burnell, Scott
Subject: RE: Call from the public
Date: Monday, April 04, 2011 2:18:00 PM

So sorry to hear about the stack of papers – Brenda probably gave up on me coming up today for them and gave them to you. The papers can take a long time.

Yes, I'll call him.

Thanks,

Amy

From: Janbergs, Holly
Sent: Monday, April 04, 2011 2:18 PM
To: Burnell, Scott; Bonaccorso, Amy
Subject: RE: Call from the public

Amy, can you handle? I just got a pretty stack of papers to go through.

From: Burnell, Scott
Sent: Monday, April 04, 2011 2:16 PM
To: Bonaccorso, Amy; Janbergs, Holly
Subject: Call from the public

Amy, Bethany;

Not sure how this got directed to me, but a John Marshall (sp?) left me a voicemail about the "failsafe meltdown system" he's been working on. The # he left is (b)(6) would someone be able to get back to him? Thanks.

Scott

S/213

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Call
Date: Monday, April 04, 2011 1:45:00 PM

I left her a message – no radiation in US.

From: Shannon, Valerie
Sent: Monday, April 04, 2011 11:47 AM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call

Name: Barbara Baldoni

Phone: (b)(6)

From: (b)(6)

Re: Concerns about Japan

5/2/14

From: Bonaccorso, Amy
To: Harrington, Holly
Subject: FW: Public call
Date: Monday, April 04, 2011 1:43:00 PM

Not Japan related.

Called this guy and he is looking for articles and information on diving and safety.
Apparently some people actually dive into water to make repairs.

Thanks,

Amy

From: Royer, Deanna
Sent: Thursday, March 31, 2011 3:44 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: Public call

Robert Henson
(b)(6)

Article on safety on nuclear reactor diving for repairing reactors

Deanna Royer
Contract Secretary
Division of New Reactor Licensing
(301) 415-7158
Deanna.Royer@nrc.gov

5/2/15

From: Bonaccorso, Amy
To: Dan G
Subject: RE: REPLY: Suggestion for cooling the damaged Japanese reactor and waste storage pools
Date: Monday, April 04, 2011 2:41:00 PM

Hello Mr. Gottlieb:

I just looked and couldn't locate an email address either – how unusual. Maybe the email addresses were removed in light of current events.

I did find a snail mail address:

http://www.aec.go.jp/jicst/NC/about/access/index_e.htm

Sorry I couldn't be more helpful.

Thanks,

Amy

From: Dan G (b)(6)
Sent: Monday, April 04, 2011 1:46 PM
To: Bonaccorso, Amy
Subject: Re: REPLY: Suggestion for cooling the damaged Japanese reactor and waste storage pools

Do you have an email address for the Japanese Atomic Energy Commission? They do not list one on their website, which is why I sent it to you for forwarding. Please advise and I will send my ideas to them.

Dan

On Mon, Apr 4, 2011 at 1:11 PM, Bonaccorso, Amy <amy.Bonaccorso@nrc.gov> wrote:
Hello Mr. Gottlieb:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in – you may want to send your ideas to Japanese Atomic Energy Commission (JAEC).

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you.

Amy

From: Dan G (b)(6)

5/2/16

Sent: Monday, April 04, 2011 2:18 AM

To: NRC Allegation

Subject: Suggestion for cooling the damaged Japanese reactor and waste storage pools

Dear NRC,

I have a suggestion for a technique for cooling the overheating damaged Japanese reactors and waste storage pools, without introducing continuous cooling water which leaks into the ocean. Please forward this email to the appropriate Japanese and U.S. and U.N. scientists for consideration.

I suggest using blocks of dry ice (frozen carbon dioxide) or insulated breakable containers of liquid nitrogen dropped by helicopter over any exposed reactors or storage pools which need further cooling. Once in contact with the existing overheated water, the CO₂ or N₂ would cool the water by phase change into gas and be released as inert gases, also serving to replace any oxygen in the surrounding air, thus reducing the risk of further hydrogen explosions. Because less water would need to be introduced as a cooling agent, this would reduce the overflow leakage of radioactivity polluted water into the nearby ocean. Large parcels of dry ice and liquid nitrogen packets would be less affected by wind and helicopter downdraft, thus more likely to hit the target and cause cooling.

I am not knowledgeable enough to know if the resultant gas releases of nitrogen and carbon dioxide would be significantly radioactive or rapid enough to cause "explosions" of gas within the existing water.

I hope this idea, if it has not already been proposed and considered by the various nuclear safety agency experts, may be useful. We are all hoping and praying for rapid resolution of this difficult situation.

Daniel Gottlieb, (b)(6)

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Japan nuclear problem
Date: Monday, April 04, 2011 1:35:00 PM

Hello Vickie:

Thank you for contacting us about your questions. It's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to research each question that comes in. If you are interested in updates on the crisis in Japan, you may like the website we have set up with news:

<http://www.nrc.gov/japan/japan-info.html>

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: (b)(6)
Sent: Monday, April 04, 2011 11:24 AM
To: OPA Resource
Cc: (b)(6)
Subject: Japan nuclear problem

I have not gleaned all the forthcoming information from the media, probably. I have not heard of any boron utilization or boric acid being added to the seawater or such that they were pumping.

Now, I know many of you are experts at this.

Surely they have done this, right? Or, what else did they do instead? Formerly worked in the nuclear industry. Just trying to keep more abreast, allay people's fears, and educate myself further. Please, inform me further as to the situation and what has been done, if you can.

Thank you for reading this and responding.

Vickie

S/217

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Japan;s nuclear situation
Date: Monday, April 04, 2011 1:36:00 PM

Already responded to this person.

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Monday, April 04, 2011 12:11 PM
To: Bonaccorso, Amy
Subject: FW: Japan;s nuclear situation

From: (b)(6)
Sent: Monday, April 04, 2011 12:05 PM
To: OPA Resource
Cc: (b)(6)
Subject: Japan;s nuclear situation

I probably have not heard or read all the information concerning Japan's nuclear problems. And I know many of you are experts.

Have they utilized boron or boric acid to help quench the nuclear reaction? If boron was not utilized within their fuel rod assemblies, have they added it via boria acid or another method to the water pumped-in or in the area, etc?

Are there any new absorbers or quenchers being utilized? I used to work in the nuclear field and am just curious. Trying to educate myself and allay other people's nuclear fears.

Can they use a spect analysis or another emission/determination system or other thermal/chemical/color reactant/determinant in the area or seawater to help locate their leak? Perhaps this sounds illogical; but, sometimes you have to think outside the box. My friend worked for the post-office and 'immediately' after the anthrax scare I told them about the possibility of using a Wood's Box or black light for possible detection. Worked in the nuclear industry and also as a researcher long ago and just trying to educate myself and help think outside the box a little. Sorry, if I unnecessarily took up some of your time.

I know you are busy; but, appreciate any feedback that you can send to me.

Thank you so very much!

S/218

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: RE: Call from the public
Date: Monday, April 04, 2011 2:23:15 PM

Oh no, it's for the Info Digest – I'm playing Ivonne while she's on (b)(6)

Thanks!

From: Bonaccorso, Amy
Sent: Monday, April 04, 2011 2:19 PM
To: Janbergs, Holly; Burnell, Scott
Subject: RE: Call from the public

So sorry to hear about the stack of papers – Brenda probably gave up on me coming up today for them and gave them to you. The papers can take a long time.

Yes. I'll call him.

Thanks,

Amy

From: Janbergs, Holly
Sent: Monday, April 04, 2011 2:18 PM
To: Burnell, Scott; Bonaccorso, Amy
Subject: RE: Call from the public

Amy, can you handle? I just got a pretty stack of papers to go through.

From: Burnell, Scott
Sent: Monday, April 04, 2011 2:16 PM
To: Bonaccorso, Amy; Janbergs, Holly
Subject: Call from the public

Amy, Bethany;

Not sure how this got directed to me, but a John Marshall (sp?) left me a voicemail about the "failsafe meltdown system" he's been working on. The # he left is (b)(6) would someone be able to get back to him? Thanks.

Scott

5/2/19

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Might help
Date: Monday, April 04, 2011 12:44:00 PM

Hello Mr. Capie:

Thank you for contacting us about your idea (expanding foam). We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: Steve Capie (b)(6)
Sent: Sunday, April 03, 2011 7:44 PM
To: OPA Resource
Subject: Might help

We get large springs opening on the mountain. At times water pressure has pushed through the concrete between flow and pressure we have been able to stop large springs while running. With expanding foam (such as that used in window and door jams. I know it's a small can, but I'm sure you could get the pumps and go for it. The stuff sets up under water.

Steve

S/220

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: FW: Plug Hole in Fukushima
Date: Monday, April 04, 2011 12:42:27 PM

We are responding to suggestions via email, but with the current backlog I have (including paper stacks), I am not going to call this person back.

From: Janbergs, Holly
Sent: Monday, April 04, 2011 11:46 AM
To: Bonaccorso, Amy
Subject: FW: Plug Hole in Fukushima

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Monday, April 04, 2011 7:35 AM
To: Janbergs, Holly
Subject: FW: Plug Hole in Fukushima

From: HOO Hoc
Sent: Sunday, April 03, 2011 7:04 PM
To: OPA Resource
Subject: Plug Hole in Fukushima

Tom Bittner of (b)(6) called with an idea to plug the water leak hole at Fukushima, Japan. He is an (b)(6) and his call back number is (b)(6). He has used previously-horse manure and hay.

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



5/22/11

From: (b)(6)
To: Bonaccorso, Amy
Subject: I am sorry i hadnt slept in a week.....
Date: Monday, April 04, 2011 12:06:39 PM

I am sorry for yelling at you- i hadnt slept for a week- working on that nuclear crisis and i was frazzled beyond words.

I am still getting messages imparted to me ...

i have successfully worked for teh (b)(6) using this gift God has given to me.

I think - well the spirit who contacte dme is someone by the name of John. I think he said John Hausemeyer or Klausmeyer- Did such a person exist? I don not know.

But i have had this happen before WITH SUCESS. HE wantst to tell more instructions.

Do you ant me to try and sdictate them fo ryou?

Again I completely appologize fo reylling and screaming at you- i - well it can be extremely stressful...and i don't volunteer my services anymor eunless it is of extreme importance! It is far too upsetting to help solve criminal cases which i was trying to do before- much to upsetting and disturbing. I now only help the (b)(6) if the person or people involved are still alive and I can help save them / her/him.

So....please accept my sincerest appologies. I sent three days dictating this information.

I also (b)(6) stationed therein the disaster (a marine) and just

(b)(6) so i am already frazzled. believe me- ths gift sometimes seems like more of a curse...BUT i know i have succesfully helped before..so therefore...if you don't mind i will pass along any more instruction

Jennifer

Trust in the Lord Jesus Christ and He will bless and keep you.

He is the Cup of Salvationno man cometh except by the Lord

S/222

From: Bonaccorso, Amy
To: (b)(6)
Subject: NRC Response to Your Email Dated March 16, 2011
Date: Monday, April 04, 2011 11:43:00 AM

Hello Mr. Chambers:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

S/223

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: FW: You might have to kill some of the local Japanese ecosystem in order to protect a lot of the rest not so close.
Date: Monday, April 04, 2011 11:45:21 AM

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Monday, April 04, 2011 7:34 AM
To: Janbergs, Holly
Subject: FW: You might have to kill some of the local Japanese ecosystem in order to protect a lot of the rest not so close.

From: phil (b)(6)
Sent: Sunday, April 03, 2011 3:01 AM
To: OPA Resource
Subject: You might have to kill some of the local Japanese ecosystem in order to protect a lot of the rest not so close.

You might now want to use what the Navy has learned about sonar.

And use it to chase all whales, dolphins, porpoises, seals and other sea life as far away from the strongest concentrations of radioactivity as possible.

Shark repellent should be used too, as shark is a favorite food of the Japanese, and, even though it might be somewhat cancer resistant due to it's appetite for the weakest fish in the schools, they will tend to prune the fish stocks of the ones with radioactivity sicknesses, and thus internally collect radioactive biologicals.

Sharks that purge fish stocks are good for the fishermen, the ones not fishing for the sharks, which will become quite handy cleaning up the fish stocks LATER, for which they need to survive, without getting incidentally sick themselves.

Bait and repellent should be used to keep them at a safe distance, if all those human bodies haven't already drawn them away.

<http://www.google.com/search?hl=en&source=hp&q=shark+repellent>
<http://www.google.com/search?hl=en&q=fish+repellent&btnG=Search>

Birds that eat sealife should also be chased away, as they are likely to eat dead fish washed ashore, and then pollute the environment wherever the bird thus poisoned dies, maybe far inland, where other critters become additional radiation vectors by the repeat binge eating of such.

Though there might be an outcry, it might be prudent to deliberately poison the local ecosphere of all immobile life that could become eaten, and thus a mobile vector for radioactivity. Starvation is a great incentive to all creatures to relocate to where there IS food, safer food in this instance.

Some critters and such greens won't be able to leave, and thus will become most toxic repeatedly if allowed to stay in the food chain.

This might be a strain of the capacity of the system to biodegrade such, and whatever does the biodegrading seems to always be a short-lived critter anyway, which dissipate, and dilute, and thus reduce the danger that way.

S/2004

Bonaccorso, Amy

From: Markley, Michael
Sent: Monday, April 04, 2011 3:44 PM
To: FAST Resource
Cc: Oesterle, Eric; Dusaniwskyj, Michael; Bonaccorso, Amy; Hall, Randy; Hay, Michael; Maier, Bill; Mensah, Tanya; Rihm, Roger; Nelson, Robert
Subject: ACTION: TAC and Assignment for California Group Letter
Attachments: 3-25-11 California Letter.pdf

Patti,

Attached is a pdf file containing a group letter from individuals mostly in the SONGS area of California. It does not appear to be an allegation or a petition. We do, however, need to reply as a matter of routine correspondence. Please ticket this to Eric Oesterle in DORL (on loan from NRO). We will need to coordinate the responses with: Roger Rihm, OEDO (1st bullet), Michael Hay/Bill Maier, RIV (2nd bullet), and Michael Dusaniwskyi (4th bullet).

Please assign a ticket and a TAC. An appropriate due date would be 5/13/2011.

Mike Markley

S/225

March 25, 2011

U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Fax: 301-415-3548
Fax: 301-415-3716

Dear Sirs/Madams:

Given the recent events in Japan, especially an earthquake of the magnitude that was not supposed to happen; that California will have earthquakes, it's just a question of when and how strong; and that major populations live in the area surrounding the two major nuclear power plants of southern California,

I strongly support the following:

- The recent request of my senators, Barbara Boxer and Diane Feinstein, to immediately have a safety inspection of the nuclear plants at San Onofre and Diablo Canyon.
- The February, 2011 request initiated by State Senator Sam Blakeslee and signed by Democrats and Republicans in both Houses of the California State Legislature, submitted to the Blue Ribbon Commission on America's Nuclear Future to hold a meeting in California in order to address the seismicity and other unique concerns of the west coast earthquake zone.
- The requirement that seismic studies are completed before requests to renew the licenses at San Onofre and Diablo canyon can be submitted.
- That full disclosure is made of the costs of nuclear power, including government subsidies, the expense of the NRC to regulate, the expense of waste disposal, and estimations of the costs to our government to insure these facilities. Then, these can be compared to our alternatives.

Thank you for your consideration of this issue.

Name: <i>Patricia Eastwood</i>	Signature: <i>Patricia Eastwood</i>
Address: (b)(6)	City/State: (b)(6)

Name: <i>Judy Jones</i>	Signature: <i>Judy Jones</i>
Address: (b)(6)	City: (b)(6)

Name: Isobel Pelham	Signature: Isobel Pelham
Address: (b)(6)	City: (b)(6)

Name: KELLY NOLAN	Signature: Kelly Nolan
Address: (b)(6)	City: (b)(6)

Name: NANCY NOLAN	Signature: Nancy Nolan
(b)(6)	City/State: (b)(6)

Name: Toni J Sullivan	Signature: Toni J Sullivan
(b)(6)	City/State: (b)(6)

Name: BILL STEPHENSON	Signature: Bill Stephenson
(b)(6)	(b)(6)

Name: Jim SHARK	Signature: Jim Shark
Address: (b)(6)	City/State: (b)(6)

Name: Judy PURRY	Signature: Judy Purry
Address: (b)(6)	City/State: (b)(6)

Name: ROSEMARY KELLEY	Signature: Rosemary Kelley
(b)(6)	(b)(6)

Name: Tina L Davidson	Signature: Tina L Davidson
(b)(6)	(b)(6)

Name:	Peg Marshall	Signature:	Peg Marshall
Address:	(b)(6)	City/State:	(b)(6)

Name:	John Marshall	Signature:	John Marshall
Address:	(b)(6)	City/State:	(b)(6)

Name:	Dawn Yates	Signature:	Dawn Yates
Address:	(b)(6)	City/State:	(b)(6)

Name:	Loraine Johnson	Signature:	Loraine D Johnson
Address:	(b)(6)	City/State:	(b)(6)

Name:	Ellen Dea Trease	Signature:	Ellen Dea Trease
Address:	(b)(6)	City/State:	(b)(6)

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Name:	Bill Walter	Signature:	Bill Walter
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Name:	Jennifer + John Massey	Signature:	Jennifer Massey
Address:	(b)(6)	City/State:	(b)(6)

Name:		Signature:	
Address:		City/State:	

Name: YOUNG M BARNES	Signature: Young M Barnes
Address: (b)(6)	(b)(6)

Name: LUC CYROT	Signature: Luc Cyrot
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Name: ANNE SMITIT	Signature: Anne Smitit
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Name: Zoanna Carrol	Signature: Zoanna Carrol
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Address:	City/State

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Name:	Signature:
Address:	City/State

Name:	Signature:
Address:	City/State

Bonaccorso, Amy

From: phil (b)(6)
Sent: Monday, April 04, 2011 6:15 AM
To: Bonaccorso, Amy; OPA Resource
Subject: how to get the uranium out of the water and concrete, while still in the reactor.
Attachments: Uranium removal from water and concrete.pdf

Read attached, running the radioactive runoff through iron, and any pile of iron, might cement the uranium, and prevent it's total loss to the sea. Yes, really.

I've added the apparently required additional clarifications for water absorbing polymers.

Also, how to get the uranium out of the water and concrete, while still in the reactor.

That would allow the recovery of expensive reactor fuel, reduce the danger from the site, and calm the public a great deal.

Attached, sorry, didn't have time to prune it, lots more is available, proven attached, but, there are keys there to speed the choice of action by a competent nuclear chemist/physicist.

Please hurry.

5/22/26

I doubt this will be read first by the type chemist that should analyze and propose the safest follow-through, but it is intended to be a street engineer level sufficient set of clues to advise the first review reader of the possibilities to be followed up with, since all the check list solutions have timed out, and had their useful ranges exceeded. I found some references to some processes that seem highly adaptable to electrically removing the uranium from the pools, even if currently trapped in damaged rods and rod holders. They seem to be imitations of copper and other metal refining processes, which are included here for trigger seed ideas. See illustrations.

It would take too much time to manage a quality bibliography for this effort, or to list publication grade references, if eventually needed, they will have to be reverse searched.

I didn't make the water absorbing polymer suggestion to absurdly try to fill cracks subject to extremely hot water flow, but only to assist in the removal and storage of the water until able to tank store it. I consider that a goofed application of my suggestion.

Just bag it and box it. And plug the crack with anything that would clog that size drain. Diapers, towels, plastic curtains/sheets, plastic or foil baggies full of cement ready to set. If it is in a cold enough tank, instead of a hot floor, then mere plastic lined diapers should clog the crack enough for the concrete to set before the cement gets washed out.

Of course, throwing the cement bags intact with paper bag over the crack might be enough. Though, I would suspect that if the concrete water channels weren't made with contiguous concrete, it might leak where the sides were merely gravity butt joined to the floor, so, like a house, it would leak there.

Blocking where the water comes out might slow the flow enough if you can't otherwise slow the flow where the water leaks out from.

The gel has definite advantages, however, I doubt that the quick one chosen stays solid at temperature, like Jello melts.

Also, it is a gel, as shown on TV, which will be squeezed through a crack by the pressure and weight of the gel above, so, you need to shovel out the gel, and then, the flow rate will shrink as the weight over the crack does.

However, it must have worked well enough for them to discover/suspect that the real leak was elsewhere.

The color (white) flow test seems now to indicate the primary reactor water pools are the source, might be too hot to gel, Bad idea too, as it will inhibit the flow that does the cooling, without a high temperature mode gel, and cooling would be hampered.

Adding some acid to the pool (not enough to dissolve the likely acid-proof aluminum containment) might dissolve any exposed uranium into solution, enabling easy electric removal.

Depending on the metal material of the containment, it might plate out on that, unless a better electrode material (and voltage bias) attracts it elsewhere (please enable that).

If the chamber and concrete have been burned through, high temperature glass or ceramics should be pebbled, and dropped in until it fills the hole.

This presumes that what made the floor of the containment that hot has already passed through, this only prevents more going through, robot moles will be needed for the rest. Of note here is that high temperature kiln firebrick made from zirconium oxides should be compatible with the chemistry, unless temperatures might exceed that breakdown.

Throw some hand sculpted ceramic kiln panels onto the containment chamber floor, and

then try to clog those gaps, with sharded kiln bricks and powder, with any admix the chemist might come up with, maybe space shuttle tile adhesives or projector bulb ceramic cements..

It might be wise to cover the floor of the storage ponds with similar panels if now able, since heat turns concrete into used up fireproofing powdered (ex)hydrates.

If you look at all those forest house fires, all the stucco has burned into powder, only geobond materials would have survived. Note for future construction.

Adding lead bricks from any metal sales place will liquify them into filling the gaps until they reach the cooling of the concrete, narrow working temperature range though.

If you use car batteries, with that much water, it will barely acidify the water, adding a prevention protection to pooling of uranium.

However, if too late, the lead would probably float on the uranium, and thus flatten it's pool, in spite of surface tension, might alloy with it in proportion to it's solubility, and thus inhibit the reaction rates. Or bubble and spit and turn in to lead foam, which might float and separate some of the uranium from the bulk spill.

The heat sink is usually far cooler than the heat source, which will chill even molten lead, right where it helps most.

It would have to be slight enough an acid PH to not harm the rest of the system, but once in solution, it will diffuse itself, undoing any uranium puddle or pile concentrations, AND THEN, adding something that makes the tank basic instead of acidic, might precipitate the uranium as a powder precipitate on the tank bottom, since uranium is soluble in an acid, but NOT SOLUBLE in a basic PH., for removal by something similar to a swimming pool cleaning robot, not made with plastic, but copied in high temp metals, though, plating the uranium out might be easiest, nickel plating everything first might help, since some uranium systems plate the radioactive elements with nickel to reduce the problems with air and water, since one reference says that uranium burns in air.

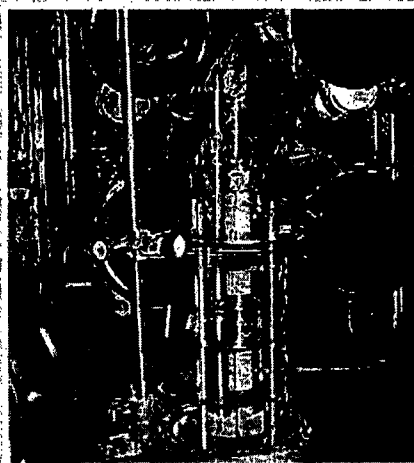
Maybe the uranium collection electrode could have a base electroplated layer of nickel, a few hours of uranium, then another layer of nickel, then some more uranium, until the ROI asymptotes to far enough on the safe side.

If applied back in the beginning, in time to prevent those reactors blowing their tops, filling those tanks/pools with car batteries would have displaced the water level higher, and would have released an acid that would dissipate/diffuse uranium into solution instead of into puddles or piles if temperatures could get high enough in spite of water, noting that polluters that throw car batteries into the ocean don't destroy the batteries, the batteries stay intact in salt water for years, I saw a PBS special once that showed production refining of copper, by just hanging electrodes in solution with the raw material, the copper left the impure area, and plated itself out onto the pure area, with no added power, except maybe a starter current for efficiency.

I have a hunch from something that I read that uranium would plate out onto iron electrodes without additional complexity, but I can't now find that reference.

Putting bare iron scrap in the ocean might attract the uranium into cementing out of ocean solutions.

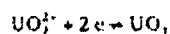
So, below are some clips of that process, as well as some notes of how some people are electrically refining uranium in special environments, some processes which might be adaptable to on site electrical extraction of uranium that has gone into solution, or could be encouraged to do so.



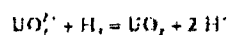
Electrorefining technology converting spent commercial nuclear fuel into metal.

involved, the processes used in recovering the element from its resources are straightforward. Although there is a U(III) species which can exist in aqueous solutions, the consequential valency states are U(IV) and U(VI). U(IV) can exist in aqueous solutions as U^{4+} ions, whereas U(VI) exists as the uranyl ion UO_2^{2+} . In the context of leaching uranium minerals it is, in the first instance, very useful to refer to the relevant potential-pH diagram which depicts the regions of pH and oxidation potential in which simple uranium oxides, ions in solution, and insoluble uranates exist.

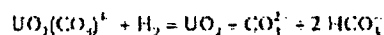
A metal can exist in more than one oxidation state, and the lower state forms a sparingly soluble compound; reduction of ionic species of the higher state with hydrogen may influence precipitation of the compound. The possibility of reductive precipitation of a metal oxide may be determined by referring to the metal-water system diagram available for uranium. Inspection of this diagram brings out the fact that hydrogen line maintains a potential more negative than that of the



system over the entire pH range. However, the pH of the solution should not come down to the value of 2 for hydrolysis to occur. This is because of the indication of the formation of the soluble U^{6+} species. The precipitation reaction is:



The acidity generated as a result of the reaction must be neutralized to maintain the pH at the correct level. The precipitation of UO_2 may be implemented even in the case when uranium is present as a complex such as the sulfate or carbonate complexes. The chemical equation shown below represents the latter case:



Hydrogen reduction to form metallic uranium is simply an impossibility. This readily follows from the potential-pH diagrammatic portrayal for uranium.

The leaching process essentially involves selecting a region of pH and oxidation potential where the solids are not stable and ions containing uranium are stable in solutions. The potential-pH diagram for the uranium system readily predicts the acidic conditions as to be necessary to dissolve uranium oxides and oxidizing conditions lead to formation of soluble uranyl salt. In practice, it is necessary to use an oxidizing agent in order to cause minerals containing U(IV) to react and dissolve. The uranyl minerals do not need an oxidizing agent, but the pH of the leached solution must be outside the area over which they are sparingly soluble. It may also be seen from the uranium diagram that if the pH of a uranium-laden liquid is increased, then an insoluble uranate precipitates; such solids are well known as "yellow cake", and it is in this commercial form that uranium is delivered by an uranium mine and mill.

The sum and substance is that there are two available process routes for leaching ura-

uranium mine and mill.

The sum and substance is that there are two available process routes for leaching uranium from its ores; acid leaching, usually under oxidizing conditions, and alkali leaching over the restricted range of pH, usually realized using sodium carbonate bicarbonate or, in the case of in-situ leaching, the ammonium salts. Thus, all processes for recovering uranium from ores involve leaching, and this step is of fundamental importance to the overall flowsheet as it involves a choice between using acid or alkaline conditions. Sulfuric acid

operations in the following paragraphs.

The Anaconda Co. started producing cement copper from copper sulfate solution generated by tank leaching of oxide ore with H_2SO_4 in 1953. In 1965, copper sulfate solution from an oxide dump leaching program was also added to the precipitation operation. The high-grade (83% Cu and 2.4% Fe) low-moisture copper precipitate was subsequently delivered to the smelter at Anaconda, MN. The precipitation plant essentially consists of 20 double-concrete activated gravity launder sections. Each half-iron launder section is 18-m long \times 3-m wide \times 1.35-m average depth on the sloping floor. The half-section is built with three 100-mm plastic, semirigid tubes sunk into the floor in slots parallel to the length of the launder. The tubes are wedged in position so that the top of each tube is even with the launder floor. A number of about 16-mm diameter vertical holes at a 30- to 90-cm intervals are provided on the plastic tubes. Pregnant copper solution comes out of the tube under pressure through the holes and sprays over the precipitant iron. Six double sections are used for precipitation from tank leach liquors containing 15 g/l Cu and about two double sections are used for treating the dump leach liquor containing 2 g/l Cu. The remainder of the sections is used for settling basins, scavenging unused iron, and stripping solution. The dump solution is generally kept separated from the tank solution because the former, after stripping of copper, can be used as a source of water. A high iron content of the tank-leach spent solution forces this product to be discarded. The cementation operation is initiated by uniformly charging the scrap iron into the sections by use of the gantry-operated electromagnet. One section is loaded with about 36 to 41 ton of initial iron scrap. In the next step, the copper solution is pumped into the iron at a flow rate ranging according to the launder's position in the flow scheme and the strength of the solution. The solution percolates upwards through the iron and its level in the iron is controlled and gradually raised by setting overflow weirs at the discharge end of each launder. The level of the solution is never allowed to

The product was a mixture of uranium and vanadium oxides precipitated on unchanged nickel powder which could be isolated by magnetic separation and reused. The oxide product had to be further processed for the separation of the oxides of uranium and vanadium. If the leach liquor happens to contain no vanadium, such a reduction technique is expected to yield high-grade uranium oxide. It was discovered that the rate of precipitation of both uranium and vanadium increased with temperature and H_2 pressure, and was directly proportional to the amount of catalyst used. Another group of investigators demonstrated that UO_2 powder itself could be used as a catalyst and such an approach had the obvious advantage of requiring no additional separation of the catalyst from the product.

V. APPLICATION OF CEMENTATION

Cementation is possibly the oldest hydrometallurgical technique for recovering metals in elemental states from aqueous solutions. This simple technique has found prolific applications. Some notable examples are (1) copper from dilute acidified copper sulfate solutions, (2) gold and silver from cyanide solutions, and (3) purification of zinc sulfate solutions prior to its winning by electrolysis.

A. CEMENTATION OF COPPER

1. Plant Practice

The recovery of copper from mine water and waste dumps leach liquors by cementation with iron has, over the years, earned a good reputation as quite a viable economic process. It accounts for quite a significant proportion of total copper production in the world today. There is much literature^{11,33,116-121} on the plant practice of copper cementation. Table 6 presents some typical operating data for some copper cementation plants.¹²³ From this table, the Anaconda Co. and Kennecott Co. have been chosen to describe their cementation plant operations in the following paragraphs.

The Anaconda Co. started producing cement copper from copper sulfate solution gen-

Leaching efficiency, which depends largely on the oxidation of uranium to a higher valance state, was found to increase with the use of MnO_2 , or HClO_4 , but there were significant losses in the precipitate due to occlusion of uranium with ferric ion. Reduction of the ferric to ferrous ion, which thus became necessary, was effected by addition of scrap iron or zinc to the pregnant liquor before precipitation which resulted in an increase in precipitation of uranium from it.

The effects of oxidation on leaching and precipitation of uranium are discussed.

=====
http://www.new.dli.ernet.in/rawdataupload/upload/insa/INSA_1/20005acd_298.pdf

Release of U(VI) from spent biosorbent immobilized in cement ...by C

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Thus cementation technique is suitable for the immobilization of uranium loaded

Leaching of uranium from cement concrete blocks by different leachates: ...

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Some laws of the formation of epigenetic uranium ores in ...by LS Evseeva - 1964 - Cited by 1 - Related articles

cementation zone enriched with uranium precipitated from aqueous solutions were obtained in the bed model. Neogeneses of iron sulfides in the form of "r011s ...

www.springerlink.com/index/k11500705541g687.pdf

Handbook of corrosion data - Google Books ResultBruce D. Craig, David S. Anderson, ASM International - 1995 - Technology & Engineering - 998 pages

The uranium-titanium alloys were found to be more resistant to basic solutions than uranium-molybdenum alloys. Cemented Carbides The corrosion of cemented

...
books.google.com/books?isbn=0871705184

Background: Spent fuel vs reprocessing HLWPart of this adds up to the cemented high level waste, the rest is low level or medium level waste, which is often also

cemented. The uranium separation is ...

www.ricin.com/nuke/bg/hlw.html - Cached

[PDF] Understanding the Mechanism of Uranium Removal from Groundwater by ...File

Format: PDF/Adobe Acrobat - Quick View

by JN FIEDOR - 1998 - Cited by 90 - Related articles

For the anaerobic investigation, the "cementation" reaction seen in eq 5 (M²⁺ uranium or UO₂) most readily describes the mechanistic pathway by which ...

www.wipp.energy.gov/.../Others%5CFedor_Bostick_Jarabeck_Farrell_1998_Understanding_the_Mechanism.pdf

Kinetics and deposit morphology of copper cementation onto zinc ...by M Karavasteva - 2005 - Cited by 7 - Related articles

The kinetics of copper cementation onto iron, zinc and aluminium powders at 60 °C and pH=1 have been examined along with the morphology of the deposited ...

linkinghub.elsevier.com/retrieve/pii/S0304386X04001835 - Similar

Recovery of copper by cementation - Patent 3930847Jan 6, 1976 ... The method of recovering copper by cementation using copper-iron materials as part of the

cementation scrap, the copper and iron in said ...

www.freepatentsonline.com/3930847.html - Cached - Similar

Investigation Of Copper Cementation Kinetics By Full Factorial ...Cementation is one of the processes employed for recovering Copper from leach liquors

especially in small scale mines. The kinetics of cementation is ...

www.cuprimedia.com/.../investigation-copper-cementation-kinetics-full-factorial-design-7017 - Cached

Removal of Chelated Copper from Wastewaters by Iron Cementationby Y Ku - 1992 -

Cited by 7 - Related articles

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Kinetic study of copper cementation onto zinc using a rotating ...Dec 26, 2010 ...

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www.chemicalengg.com/.../kinetic-study-copper-cementation-onto-zinc-using-rotating-packed-bed-cylindrical-2301/ - Cached

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Electrorefining process and apparatus for recovery of uranium ...by JP Ackerman - Cited by 22 - Related articles

Abstract, An electrorefining process and apparatus for the recovery of uranium and a mixture of uranium and plutonium from spent fuel using an electrolytic ...

www.osti.gov/cgi-bin/rd.../displayPatentBibData.cgi?ostiID=867172 - Cached

Processes for The Electrolytic Production, Recovery or Refining of ...To provide an electrolytic refining method for metal by which the generation ... To recover uranium as pure metallic uranium from the sodium fluoride having ...
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CRC handbook of chemistry and physics: a ready-reference book of ... - Google Books
ResultDavid R. Lide - 2004 - Science - 2712 pages
... the anode muds produced during the electrolytic refining of blister copper. Thorium is now thought to be about three times as abundant as uranium ...
books.google.com/books?isbn=0849304857...

US Patents in IPC level C25C 3/34 - IP.com50 posts
In a dry chemical reprocessing method, uranium type elements are electrolytically refined continuously. Molten cadmium in which these uranium type elements ...
ip.com/uspat-ipc-C25C-3-34.html - Cached

Patents Bibliographic Citationby LW Niedrach - Cited by 6 - Related articles
Abstract, An electrolytic process of refining or decontaminating uranium is presented. The impure uranium is made the anode of an electrolytic cell. ...
www.osti.gov/cgi-bin/rd.../displayPatentBibData.cgi?ostiID... - Cached

pdf free download : principles of electrometallurgy.pdf... size plants and electrolytic cell design Electrorefining of uranium-Need Recovery of metal values by cementation, electrowinning and refining from ...
www.pdf4me.net/pdf-data/principles-of-electrometallurgy.php - Cached

Aspects of the metallurgy of uranium and constructional metalsby GA Meerson - 1960 - Cited by 1 - Related articles
preparation; metallothermal, vacuum carbo-thermal, electrolytic refining and ... nium hydride as a moderator and of zirconium-uranium-hydrogen alloys for ...
www.springerlink.com/index/J6678005026X880X.pdf

treated with sulphuric acid to dissolve the uranium. ...

Purification and Concentration of Solution

The fundamentally essential hydrometallurgical methods of purification and concentration of solution not only concentrate metal ions from dilute leaching solutions

to points that are fitting for the recovery of metals but in addition, discriminatorily discard other impurities that might exist. Throughout a good number of years

chemists were able to see how to precipitate suspended metals from solution by a amount of procedures, and around the beginning of the 1800's they assumed

that some kind of electrical occurrence work and do the trick. Miners were aware, a good amount of time before that strong acids were able to melt some of the

metals in an ore and that copper was able to be collected in a concrete form through cementation. This method kept on occurring until the 1950's, even though

cement copper was not sufficiently pure for electrical uses. Ever since then, the cementation process has been taken over by solvent extraction and

electrowinning. Technologies utilized for solution purification and concentration take account of precipitation, ion exchange, solvent extraction, membrane transfer,

and electrowinning. All of them have been utilized for non-mining chemical separations, and precipitation has been used in the leach precipitation flotation courses

of action for copper.

Solvent extraction is a phase transmitting process amongst organic and aqueous phases. The procedure, which was well acknowledged to investigative chemists,

developed into an industrial process for the period of World War II, when it was utilized for some separations like those of zirconium and hafnium, uranium and

vanadium, and plutonium purification. The first business solvent extraction development for uranium was set up in 1955 at the Kerr-McGee plant in New Mexico. In

1963 General Mills achieved something in producing a copper reagent, LIX 63, which along with electrowinning led to the earliest little copper SXEW plant in

Arizona. The progress of solvent extraction made copper hydrometallurgy the successful process it is in the present day. The usage of solvent extraction has been

widespread a great deal to the production of nickel, cobalt, and exceptional earth elements. Established emulsions and the eventual arrangement of crud are

issues that are frequent to most solvent extraction operations in the industry of mining. Crud can represent a most important solvent, uranium, and copper loss to a

circuit and therefore harmfully have an effect on the cost of operation. Getting over loss of solvent and developing the rate of metal recovery will rely on the progress

of new extractants, modifiers, and diluents. Solvent extraction techniques could be extended to additional applications with the creating of a bigger collection of

selective reagents. The blueprint and operation of mixer settlers for optimization of solvent extraction performance and entrainment minimization can as well be

improved. Ion substitute is an established technology that is utilized in a lot of industries. The use of ion exchange technology to hydrometallurgy began with

uranium extraction. The technology is supported on resin beds that have exchangeable ions or groups and is used in columns for clear solutions or right in the

pulp. Ion exchange is exclusively appropriate to extraction from very low grade solutions where losses by means of solvent extraction would be too much. Ion

exchange in addition gets rid of transport of flammable diluents. Challenges and big prospects take place in the progress of selective resins that are powerful in an

adequate amount to endure forceful management. At present, significant attention is being focused on rising selectivity by bringing in chelating efficient sets in the

resin.

Radioactive waste forms stabilized by ChemChar gasification ...by TW Marrero - 2004 - Cited by 1 - Related articles

... vitrification and cementation produced a highly non-leachable form suitable for long-term disposal of cerium, thorium, protactinium, uranium, ...

www.ncbi.nlm.nih.gov/pubmed/14637345

Radioactive Waste Treatment: Solidification Stabilization ...Here are three examples of the use of cement-based S/S in the management of ... 1960 as a waste

by-product from the processing of high-grade uranium ores. ...

www.cement.org/waste/wt_apps_radioactive.asp - Cached - Similar

²³⁴U/²³⁸U activity ratios of dissolved uranium in groundwaters ...by JN Andrews - 1982 - Cited by 19 - Related articles

²³⁴Th recoil from the oolite surfaces has probably been inhibited by sealing of the uranium-bearing surfaces in the process of oolite cementation. ...

adsabs.harvard.edu/abs/1982E%26PSL..57..139A

...

Alternatively, the copper can be precipitated out of the pregnant solution by contacting it with scrap iron; a process called cementation.

http://webcache.googleusercontent.com/search?q=cache:kuiOegXStHUI:en.wikipedia.org/wiki/Copper_extraction_techniques+copper+mine+refining&cd=1&hl=en

&ct=clnk&gl=us&source=www.google.com

and produce copper cathode from the resulting leachate solution,

To improve the process efficiency, lime is used to raise the pH of the water bath, causing the collector to ionize more and to preferentially bond to

conversion to polymer concrete cells,

Copper cementation is historical. It was the process that brought the (re) discovery of bioleaching, at Rio Tinto in the 18th century, when blue vitriol leachate was

observed to cement onto iron tools. Forward to the future and Rio Tinto's Kennecott operation is still treating a copper seep of 0.1g Cu/L by cementation.

Kennecott developed cementation's state of the art when it replaced its launders with cones, all now dismantled and removed. However, Production wise,

Kennecott cones are still being used (or have been very recently) in Australia, by Adelaide Chemical to cement Cu from oxide heap leach at Mt Gunson, S

Australia, by Mt Leyshon in Queensland to demonstrate bacterial/CN heap leach for Cu/Au with Cu being cemented, and in 2005 there was discussion of using

cementation in the treatment of historical ARD at Mt Leyell in Tasmania. These operations are the best places to check on the state of the cementation art.

Cementation certainly has low capital and low power requirements. It also has low PLS requirements. Which is where the question gets interesting. SX works best

at ~3 g Cu/L. Kennecott demonstrated in a bioheap leach/SX/EW trial in the 1990's that maintaining 1g/L would still do. Next, ElectroMetals have built two

demonstration plants using their EMEW cell ie direct EW with no SX, that is claimed to work at 0.5 g/L (this was also trialled on Freeport's ARD). Further, Phelps

Dodge have a JV with BioteQ where they have built a demonstration bio-precipitation plant in Arizona, working on 0.35 g/L (most of BioteQ's other plants are to

treat ARD). With bio-precipitation there are cost and complexity implications, but in terms of sustainability it means that recoverable Cu concentration is closing

the gap between "PLS" and "ARD" and that has to be good, noting eg the Kennecott example above of cementation at 0.1 g/L. There is more than just amps at

stake here.

Finally, an interesting thing to note re cementation is that Kennecott has been the major demonstration site for the US Mine Waste Technology Program's

catalysed cementation, using zero valent iron (ZVI) to drop out contaminants such as As and Se. Applications elsewhere of ZVI for organic contaminants have

looked at 100 nm scale particles. These are much more reactive and it could be speculated as to what difference this could make to Cu recovery, if it could be

integrated into cementation, cost effectively. The twist is that 100 nm particles would make this a nanotechnology, and in the UK at least, there is a moratorium on

deploying nanotechnologies. Implications of this definition to the use of ZVI in remediation (or possibly recovery) are as yet untested – unless someone can tell me

otherwise?

COPPER CEMENTATION

Besides the recovery of copper otherwise lost in mine waters, the cement copper process has several additional advantages. It is simple in principle and operation, usually requiring a minimum of human attention and no machinery. Fluctuations in copper content of the solutions do not affect the efficiency of the process. Also it uses relatively inexpensive scrap metals and produces a high-grade concentrate.

Precipitation of cement copper requires only a source of copper-rich water, suitable pipe to convey it and precipitation launders containing scrap iron. Usually less

than an hour of contact with the scrap iron suffices to precipitate virtually all dissolved copper. Periodically more scrap metal is added to the launders to replace that eaten away. The precipitated copper sinks to the bottom of the launders as a sludgy mass of fine particles. At intervals it is removed, dried, and shipped to the smelter. Concentrates produced vary from about 65 to 95 per cent. copper according to the procedures used.

Through years of practice and experiment several principles have been recognised which lead to cheaper and more efficient copper precipitation:-

- (1) As much scrap as possible should be kept crowded into the precipitation launders at all times.
- (2) Rapid movement of solution through the tanks is more efficient than slow motion and prolonged contact.
- (3) The greatest surface area possible is desirable in the scrap iron, thin sheet metal being best.
- (4) Tinned sheet metal, such as tin cans, causes the copper to stick too tightly unless burned or otherwise detinned.
- (5) Any oil, grease, or paint on the scrap will slow the process and should be removed.
- (6) Aeration and agitation of the solutions in the tanks is helpful to loosen hydrogen gas bubbles and precipitated copper to bring fresh solution against the bare metal surface.

Cement copper is produced at some mines where the copper in dumps or in low-grade bodies is systematically leached. Ore of too low a grade to mine or mill is treated by causing water to percolate through it dissolving the copper which is then recovered as cement copper. After precipitation of the copper the water may be returned to leach again through the dumps or the underground ore bodies. Thus a continuous cycle of leaching and precipitation may be kept as long as sufficient copper is leached into solution. As little as 0.02 per cent. of copper in solution may, in some instances, be treated profitably. Sulphuric acid may be added artificially to the waters to increase their leaching power and increase the life of the operation.

For many years mining men have known that copper in mine waters will precipitate as metallic copper on any piece of iron placed in the water, while the iron is dissolved. Most of the exceedingly fine particles of metallic copper are usually dislodged from the iron and washed away soon after being precipitated. Therefore, the most noticeable feature of the process is disappearance of the iron. Mine track., pipe., pumps. tools, even nails in the miners' shoes might be eaten away in periods of only a few weeks.

About :1860 this destructive chemical activity was turned to advantage by placing pig iron and iron scrap in copper-bearing mine waters and collecting the precipitated copper commonly called "cement copper" by miners.

This practice has become common and profitable in mines with appreciable dissolved copper, to supplement regular mine production.

Several cement copper operations are active in California and expansion of this phase of copper mining in that State appears promising. It is estimated that 300 to 500 tons of cement copper were produced in California in 1951. Total copper produced in California was about 830 short tons in 1951.

The formation of cement copper hinges on the relative positions of copper and iron in the Electromotive Force series of elements. This is a list of metals in the order of their natural electromotive activity. A given metal, placed in a solution of another metal below it on the electromotive list, will go into solution causing the previously dissolved metal to precipitate in metallic form. Copper is below zinc and iron in this series, so these metals go into solution while metallic copper is deposited from copper solutions. Lead, on the other hand, is below copper and is not affected in copper solutions.

Iron is used to precipitate cement copper because it is abundant and inexpensive as scrap. Galvanised iron is just as effective as common iron or steel because the zinc coating also replaces copper in solution.

Because of this electromotive activity other materials must be substituted for iron and steel in all equipment used in the cement copper processes. Wooded, concrete, or lead-lined tanks are used. Bronze pump fittings, copper-coated nails, copper wire, and plastic, rubber, or lead pipe are commonly used.

Although dissolved zinc is common in many mine waters, it is never produced by this replacement method. Those few metals which are above zinc in the electromotive series are comparatively expensive and not available as scrap. Zinc cannot be precipitated by this method in the presence of dissolved iron or copper.

Solvent extraction is more commonly used to refine copper. An organic solvent in which copper is soluble is introduced. As the copper is more soluble in the

organic layer than the aqueous, it enters an organic-copper solution and is separated. Sulfuric acid is added to strip the copper from the organic solvent into an electrolytic solution.

Electrorefining

Apparatus for electrolytic refining of copper. The copper is refined by electrolysis. The anodes cast from processed blister copper are placed into an aqueous

solution of 3–4% copper sulfate and 10–16% sulfuric acid. Cathodes are thin rolled sheets of highly pure copper. A potential of only 0.2–0.4 volts is required for the

process to commence. At the anode, copper and less noble metals dissolve. More noble metals such as silver and gold as well as selenium and tellurium settle to

the bottom of the cell as anode slime, which forms a saleable byproduct. Copper(II) ions migrate through the electrolyte to the cathode. At the cathode, copper

metal plates out but less noble constituents such as arsenic and zinc remain in solution.[1]
The reactions are:

At the anode: $\text{Cu(s)} \rightarrow \text{Cu}^{2+}(\text{aq}) + 2\text{e}^-$

At the cathode: $\text{Cu}^{2+}(\text{aq}) + 2\text{e}^- \rightarrow \text{Cu(s)}$

Copper Electrefining - Last step

The end result of the copper smelter operations is anode copper which is 99% pure (see graphic on the left). An example where copper is further purified is at

the Asarco electrolytic plant in Amarillo, Texas.

The 99% pure copper from the anode furnace is cast into 750-pound, 3-inch thick, rectangular slabs called anodes.

The final step is a process called electrefining. This is done by electrolysis where the copper anodes from the smelter become positive electrodes and thin,

three-foot square sheets of pure copper are used as negative electrodes. Forty-five anodes and 46 cathodes are interleaved and immersed in an electrolysis tank

filled with a solution of sulfuric acid and copper(II) sulfate.

Oxidation occurs at the anode, where copper metal is converted to copper(II) ions with the release of two electrons. At the cathode the opposite reaction occurs:

copper(II) ions are joined with two electrons to form copper metal. During the migration of metal ions from anode to cathode through the aqueous solution, the

impurities drop to the bottom of the electrolysis cell. Some of these impurities are gold, silver, nickel, selenium, tellurium, and platinum which are themselves

recovered to be used.

After two weeks, the cathodes are pulled from the tank- -- each one about 350 pounds of 99.99% pure copper. These are washed, bundled, and sold. A new set of

cathode starter sheets is inserted and the process continues. After two more weeks, the second set of cathodes is pulled and the remainder of the anodes are

melted and cast into new full-size anodes.

Anode - oxidation: $\text{Cu metal (impure)} \rightarrow \text{Cu}^{+2} + 2 \text{ electrons}$

Cathode - reduction: $\text{Cu}^{+2} + 2 \text{ electrons} \rightarrow \text{Cu metal (pure)}$

The conventional electrorefining practice is to use starter sheets of higher purity copper, as the cathode substrate upon which the copper is electro deposited. These starter sheets are produced in special electrolytic cells by a 24 hour electro deposition of copper, onto either hard rolled copper or titanium blanks. Preparation of the starter sheet included washing, straightening and stiffening of the sheet. The sheets are then suspended from rolled copper hanger bars by attached loops of copper strips.

The principal features incorporated in the modernisation programme were:-

- The elimination of starter sheets and the introduction of the permanent reusable stainless steel cathode plates.
- Automatic stripping of the copper deposits from the stainless steel blanks.
- Mechanised anode straightening and spacing.
- Computerised cell voltage monitoring.

The leaching of the "oxide" materials is relatively easy and relies on dump, vat and agitation leaching using dilute sulfuric acid solutions.

However, sulfuric acid is not the only reagent that can dissolve copper from concentrate. For example, BHP has already patented a process using ammonia to

dissolve part of the copper concentrate. (This is the basis of the Coloso cathode production plant in Chile.)

The Mission Mine has an an ore body with lots of limestone, which precludes using acid leaching. Leaching with NaOH was tried here in the 60's with costly

success. It worked, but it cost more than the copper recovered was worth.

The copper anodes must have the correct size and geometry (i.e. flat plates larger than the starter sheets of aluminum,

titanium, steel, or thin Cu foil for the cathodes to avoid heavy edge deposits) and have a homogeneous composition.

The wells are built with "acid-resistant concrete" and a PVC casing.

In order to achieve high production rates, high current densities are obviously desirable. However, an excessive current density causes at least two problems: (1) increased impurity levels in the cathode deposit; an increased roughness promotes occlusion of anode residues and electrolyte; and (2) anode passivity occurs at current densities above 25-28 mA/cm².

Hence, it can be seen from the data in Table 6.3.1 that in order to obtain pure metals at the cathode, the current density is always low.

On the other hand, with the exception of tin, the current efficiencies are good and the cell voltages can be low. In modern refineries, cathode current efficiency is 90-97%, anode current efficiency being slightly higher. Inefficiency results from strong currents to ground (1-3%), anode-cathode short circuits (1-3%) and loss of copper deposit by air (or Fe³⁺) oxidation (ca. 1 %). Ground leakage currents are minimized by the avoidance of electrolyte spillage. Short-circuiting is predominantly caused by nodular or dendritic growth which must be removed or restricted by suitable addition agents. A range of modern aids is available to monitor and identify shorts including computer monitoring of current distribution and infrared detection of "hot spots".

Specific electrolytic energy consumption is relatively low, around 0.22 kWh/kg cathode copper, which is increased to ca. 0.31 kWh/kg by additional power components.

To the present time this has led to the use of cells with relatively large interelectrode gaps (5-15 cm) which minimizes the labor costs for checking cells to prevent shorts and to handle electrode changes. The low current densities contribute to the low energy consumption (the iR term is small) but causes the cell houses to be large and, more importantly, the inventory of metal tied up in the cell house is large. The residence time of the metal in the cell is often 21-28 days and this is expensive, particularly in the case of silver, gold and the platinum group metals. Hence, increased current densities without loss in purity of the refined metal would be advantageous.

Perhaps the most significant recent development in copper refining has been periodic current reversal which permits an increase (of < 15%) in production rates via two effects: (1) the anodic current density at which passivations occur may be increased; and (2) selective removal of Cu high spots (e.g. nodules) during the reverse current gives smoother cathode deposits.

Optimum conditions of periodic current reversal permit cathode current densities of up to 36 mA/cm². The preferred ratio of forward-current time: reverse-current time is 20 or 30 to 1, with identical forward and reverse currents, for a cycle time of 0.5-3 min.

The most significant change to the fundamental process of electrorefining of copper came with the development of the permanent stainless steel cathode technology, by I.J. Perry and

others at the Copper Refineries Pty Ltd in Townsville, Australia in 1978.

Students should see a deposit of copper forming on the cathode. This will often be powdery and uneven. You should explain that, if the current used is much lower,

then the solid coating is shiny, impermeable and very difficult to rub off; this process forms the basis of electroplating.

CupellationMain article: Cupellation

One ancient process for extracting the silver from lead was cupellation. Lead was melted in a bone ash 'test' or 'cupel' and air blown across the surface. This

oxidised the lead to litharge, leaving a button of silver. In ancient times, the litharge was discarded, but more usually it was re-smelted to lead. "Pigs" of Roman

lead have been found marked EX ARG (argentum is Latin for Silver). This presumably indicated that the lead had already been de-silvered. This process was viable

economically if the lead contained at least 8 troy ounces of silver per ton of lead (178 ppm).[citation needed]

In the 18th century, the process was carried on using a kind of reverberatory furnace, but differing from the usual kind in that air was blown over the surface of the

molten lead from bellows or (in the 19th century) blowing cylinders.[1]

This is what and how the cement is made, and broken back down:

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Jump to: navigation, search

Calcination (also referred to as calcining) is a thermal treatment process applied to ores and other solid materials in order to bring about a thermal decomposition,

phase transition, or removal of a volatile fraction. The calcination process normally takes place at temperatures below the melting point of the product materials.

Calcination is to be distinguished from roasting, in which more complex gas-solid reactions take place between the furnace atmosphere and the solids.

Contents

- 1 Industrial processes
- 2 Calcination reactions
- 3 Oxidation
- 4 Alchemy
- 5 References

[edit] Industrial processesThe process of calcination derives its name from the Latin calcinare (to burn lime)[1] due to its most common application, the

decomposition of calcium carbonate (limestone) to calcium oxide (lime) and carbon dioxide, in order to produce cement. The product of calcination is usually

referred to in general as "calcine," regardless of the actual minerals undergoing thermal treatment. Calcination is carried out in furnaces or reactors (sometimes

referred to as kilns) of various designs including shaft furnaces, rotary kilns, multiple hearth furnaces, and fluidized bed reactors.

Examples of calcination processes include the following:

decomposition of carbonate minerals, as in the calcination of limestone to drive off carbon dioxide;

decomposition of hydrated minerals, as in calcination of bauxite, to remove crystalline water as water vapor;

decomposition of volatile matter contained in raw petroleum coke;

heat treatment to effect phase transformations, as in conversion of anatase to rutile or devitrification of glass materials

Removal of Ammonium ions in the synthesis of zeolites

The final step is the electrowinning (EW) portion of the process, and through an electrolytic process, 99.9+% pure copper is captured on cathode sheets.

Emergency graphite electrodes : ?

use standard legging nylon stockings, stuffed with carbon from burnt wood, submerge halfway into water pool, and keep top dry, but embed copper wires in the dry

top part of the carbon.

That will reduce copper pollution of the pool, and current limit the electrolysis to reduce gas production rate, and double layer heating and resistance.

Process

Apparatus for electrolytic refining of copper Most metals occur in nature in their oxidized form (ores) and thus must be reduced to their metallic forms. The ore is

dissolved following some preprocessing in an aqueous electrolyte or in a molten salt and the resulting solution is electrolyzed. The metal is deposited on the

cathode (either in solid or in liquid form), while the anodic reaction is usually oxygen evolution. Several metals are naturally present as metal sulfides; these include

copper, lead, molybdenum, cadmium, nickel, silver, cobalt, and zinc. In addition, gold and platinum group metals are associated with sulfidic base metal ores.

Most metal sulfides or their salts, are electrically conductive and this allows electrochemical redox reactions to efficiently occur in the molten state or in aqueous solutions.

Some metals, including arsenic and nickel do not electrolyze out but remain in the electrolyte solution. These are then reduced by chemical reactions to refine the metal. Other metals, which during the processing of the target metal have been reduced but not deposited at the cathode, sink to the bottom of the electrolytic cell, where they form a substance referred to as anode sludge or anode slime. The metals in this sludge can be removed by standard pyrorefining methods.

Because metal deposition rates are related to available surface area, maintaining properly working cathodes is important. Two cathode types exist, flat-plate and

reticulated cathodes, each with its own advantages. Flat-plate cathodes can be cleaned and reused, and plated metals recovered. Reticulated cathodes have a

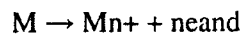
much higher deposition rate compared to flat-plate cathodes. However, they are not reusable and must be sent off for recycling. Alternatively, starter cathodes of

pre-refined metal can be used, which become an integral part of the finished metal ready for rolling or further processing.[1]

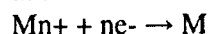
Aqueous electrorefining — The conditions used for the refining of five metals are summarized in Table 6.3.1. The electrolyte and other conditions must be selected so that both the anodic dissolution and the deposition of the metal occur with high efficiency while none of the impurity metals can transfer from the anode to the cathode. Certainly there must be no passivation of the anode (cf. chapter 3) and the objective is to obtain a good-quality, often highly crystalline, deposit at the cathode. Where necessary, additives are added to the electrolyte to enforce the correct behavior at both electrodes. Chloride ion is a common addition to enhance the dissolution process and, where essential, organic additives are used to modify the cathode deposit. Since, however, organic compounds can be occluded to some extent and reduce the purity of the metal, their use is avoided when possible.

http://criepi.denken.or.jp/en/e_publication/a2004/04juten19.pdf

In an electrorefining process, the anode is the impure metal and the impurities must be lost during the passage of the metal from the anode to the cathode during electrolysis, i.e. the electrode reactions are, at the anode:



at the cathode:



Electrorefining is a much more common process than electrowinning and such plants occur throughout the world on scales between 1000-100,000 ton/year.

Usually they are part of a larger operation to separate and recover pure metals from both scrap and primary ores. Therefore, the process must be designed to handle a variable-quality metal feed and lead to a concentration of all the metals present in a form which can be treated further. Electrorefining often provides a particularly high purity of metal.

<http://www.google.com/search?hl=en&source=hp&q=electrolytic+refining+uranium>

<http://www.freshpatents.com/Continuous-electrolytic-refining-device-for-metal-uranium-dt20081204ptan20080296151.php?type=claims>

Continuous electrolytic refining device for metal uranium patent claims

Abstract: Disclosed herein is a continuous electrolytic refining device for metal uranium, the device comprising a cathode section fixed to the lower side of the heat

radiation plate, and having a plurality of graphite cathodes; an anode section encompassing the cathode section to face the cathode section, rotatably fixed to the

lower side of the heat radiation plate, and receiving the used nuclear fuel; an electrolytic cell receiving the cathode section and the anode section and filled with

electrolytes so as to sink the cathode section and the anode section; an uranium collecting section collecting metal uranium deposited on and detached from the

graphite cathode in the lower side of the cathode section inside the electrolytic cell and withdrawing the collected metal uranium to the outside of the electrolytic

cell; and a transition metal collecting section coupled with the lower side of the electrolytic cell to withdraw the transition metal particles released from the anode

section and collected in the lower side of the electrolytic cell, in order to collect high pure uranium deposits and metal transition elements created in an

electrolysis process without stopping an electrolysis process, not including a scrapping process.

<http://en.wikipedia.org/wiki/Electrowinning>

Experiments using electrorefining to process spent nuclear fuel have been carried out. Electrorefining may be able to separate heavy metals such as plutonium,

caesium, and strontium from the less-toxic bulk of uranium. Many electroextraction systems are also available to remove toxic (and sometimes valuable) metals

from industrial waste streams.

Following on from the success of solvent extraction reagents in the extraction of uranium in the 1950 – 60,

<http://www.google.com/search?hl=en&source=hp&q=copper+cementation&btnG=Google+Search>

An even larger production of elemental fluorine took place for the United States Manhattan project, where **uranium** hexafluoride, a chemical with formula UF_6 , had been selected as the form of **uranium** for the separation of **uranium**-235 from **uranium**-238 in **uranium** enrichment.^[43] During the Manhattan Project, it was found that **uranium** hexafluoride had the corrosive properties of elemental fluorine because it existed in equilibrium with small amounts of **uranium** tetrafluoride, UF_4 , and elemental fluorine gas; the latter attacked all chemical compounds which did not already contain a maximal amount of fluorine. The corrosion problem was eventually solved by electrolytically coating all **uranium** hexafluoride-carrying piping with nickel metal, which forms nickel difluoride that prevents the metal underneath from further attack.

Discovered: In ancient times **uranium** oxide was used to produce yellow colored ceramic glazes.

Klaproth dissolved pitchblende in nitric acid, then added potash to obtain a yellow precipitate. Adding excess potash dissolved the yellow precipitate. Such reactions were not characteristic of any known element and Klaproth concluded he had discovered a new element.⁽¹⁾ He named it after the recently discovered planet Uranus. In 1841, Eugene-Melchior Peligot isolated **uranium** metal by heating **uranium** tetrachloride with potassium.

States

State (s, l, g): solid

Melting point: 1408 K (1135 °C)

Boiling point: 4403 K (4130 °C)

Energies

Specific heat capacity: $0.12 \text{ J g}^{-1} \text{ K}^{-1}$

Heat of fusion: $8.520 \text{ kJ mol}^{-1}$

1st ionization energy: $597.6 \text{ kJ mol}^{-1}$

3rd ionization energy: kJ mol^{-1}

Heat of atomization: 482 kJ mol^{-1}

Heat of vaporization : $422.58 \text{ kJ mol}^{-1}$

2nd ionization energy: 1420 kJ mol^{-1}

Electron affinity: kJ mol^{-1}

Oxidation & Electrons

Shells: 2,8,18,32,21,9,2

Minimum oxidation number: 0

Min. common oxidation no.: 0

Electronegativity (Pauling Scale):

Electron configuration: $[\text{Rn}] 5f^3 6d^1 7s^2$

Maximum oxidation number: 6

Max. common oxidation no.: 6

Polarizability volume: 27.4 \AA^3

Specific heat capacity: $0.12 \text{ J g}^{-1} \text{ K}^{-1}$

Heat of fusion: $8.520 \text{ kJ mol}^{-1}$

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Oxidation & Electrons

Shells: 2,8,18,32,21,9,2

Minimum oxidation number: 0

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Electron configuration: $[\text{Rn}] 5f^3 6d^1 7s^2$

Maximum oxidation number: 6

Max. common oxidation no.: 6

Polarizability volume: 27.4 \AA^3

The metal **tarnishes** in air acquiring a dark layer of oxide. When finely powdered, **uranium** ignites spontaneously in air.

Uranium is a **highly reactive metal and reacts with almost of all the nonmetallic elements** and many of their compounds. **It dissolves in acids, but it is insoluble in alkalis.**

Uranium for use in nuclear power plants is enriched to a U-235 concentration of 2-3%.

Use of depleted **uranium** in missiles is controversial because, on impact, **uranium** vapor and dust form and these are highly toxic. (what is the RF, Microwave and ultrasonic vulnerability of Uranium ?)

Reactions

Reaction with air: mild, $\square \text{ U}_3\text{O}_8$

Reaction with 15 M HNO_3 : passivated

Reaction with 6 M HCl : mild, $\square \text{ H}_2$

Reaction with 6 M NaOH : mild, \square none

Compounds

Oxide(s): UO , UO_2 , UO_3 , U_2O_5 , U_3O_8 ,

Hydride(s): UH_3

Chloride(s): UCl , UCl_3 , UCl_4 , UCl_5 , UCl_6

Conductivity

Thermal conductivity: $27.5 \text{ W m}^{-1} \text{ K}^{-1}$

Electrical conductivity: $3.6 \times 10^{-6} \text{ S m}^{-1}$

Cost, bulk: \$9 per 100g

Source: **Uranium** occurs naturally in several minerals such as uraninite (**uranium** oxide), carnotite and autunite. Canada is the world's largest supplier of **uranium**, producing 20 to 30 percent of supplies. ⁽²⁾ Commercially, **uranium** is produced through the reduction of **uranium** halides with alkali earth metals. Although most people think **uranium** is extraordinarily rare, it is in fact more abundant than familiar elements such as mercury and silver.

Isotopes: **Uranium** has 21 isotopes whose half-lives are known, with mass numbers 218 to 242. Natural **uranium** consists of three major isotopes: ^{234}U , ^{235}U , and ^{238}U . All are radioactive. ^{238}U is the most stable isotope, with a half-life of 4.51×10^9 years (almost the age of the Earth).

To cite this page in an academic document, please use the following MLA compliant citation:

"**Uranium**." Chemicool Periodic Table. <<http://www.chemicool.com/elements/uranium.html>>.

1898 by Marie S. Curie and her husband Pierre in pitchblende (mainly **uranium** dioxide UO_2). If pitchblende contains 50 percent **uranium** oxides, about eight tons of it is needed to extract 1 gram of radium.

Source: Radium is present in tiny amounts in all **uranium** ores - it arises from **uranium** decay. Radium is present at very low concentrations in sea water. Most radium, ^{226}Ra , arises from the decay of the plentiful ^{238}U , hence radium is obtained in residues taken from **uranium** production.

Electronegative elements tend to gain electrons to become anionic Lewis bases.

Electropositive elements, metals, generally react by losing one or more electrons to become cationic Lewis acids.

Why Is Electronegativity Important?

The metallic elements are all electropositive, the electronegative elements are all non-metals, the metalloids are found at intermediate electronegativities.

Ionic compounds, like sodium chloride NaCl, or $\text{Na}^+ \text{Cl}^-$, are formed between electropositive elements (Na, 0.93) and electronegative elements (Cl, 3.16).

Thus it follows that bond type, material character and chemical reactivity can be predicted from a knowledge of **electronegativity**.

Download the Excel spreadsheet [here](#). Data is from Pauling's Nature of the Chemical Bond. Note that the equation requires data to be in kcal/mol rather than kJ/mol.

The **electronegativity** difference between elements **A** and **B** is determined from the following relationships:

$$|\chi_A - \chi_B| = 0.208 \sqrt{E_{A-B} - \frac{1}{2}(E_{A-A} + E_{B-B})}$$

arithmetic mean

$$|\chi_A - \chi_B| = 0.208 \sqrt{E_{A-B} - (E_{A-A} \cdot E_{B-B})^{1/2}}$$

geometric mean

For salt MX_n

$$|\chi_A - \chi_B| = 0.208 \sqrt{\frac{-\Delta H_f}{n}}$$

Allred, *Electronegativity Values from Thermochemical Data*,
J.Inorg.Nucl.Chem., 1961, **17**, 215-221

Note that both the geometric and arithmetic mean relationships are given.

For many metals the enthalpy of salt formation data is used as a proxy.

Once a set of **electronegativity** differences are known, it is a simple matter to assign absolute **electronegativity** values.

http://webcache.googleusercontent.com/search?q=cache:JXJjMglN9OYJ:www.meta-synthesis.com/webbook/36_eneg/electroneg.html+electronegativity+scale+uranium&cd=6&hl=en&ct=clnk&gl=us&source=www.google.com

Tables of Data

Various scientists, including Pauling himself, have attempted to improve the original 1932 data:

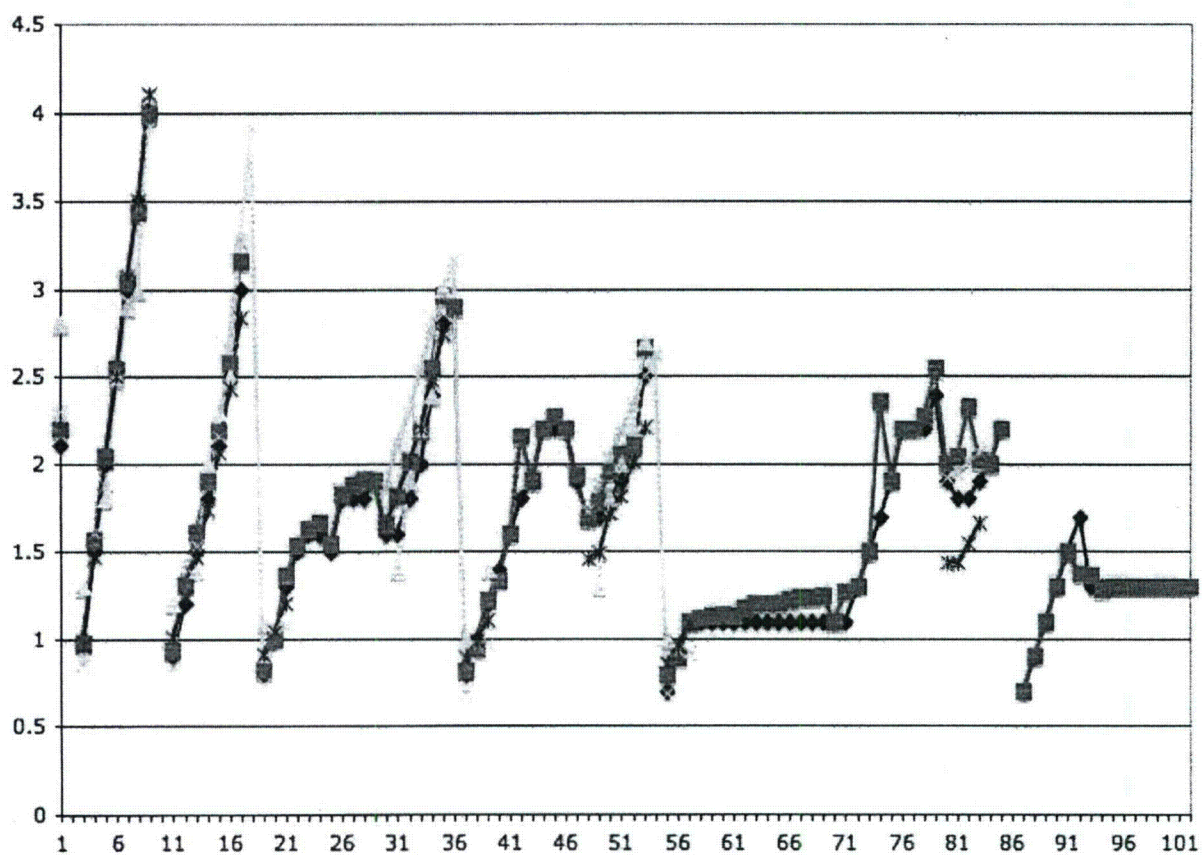
Electronegativity			Pauling	Revised Pauling	Mulliken	Sanderson	Allred-Rochow
1	H	Hydrogen	2.1	2.20	2.8	2.31	2.20
2	He	Helium					
3	Li	Lithium	1.0	0.98	1.3	0.86	0.97
4	Be	Beryllium	1.5	1.57		1.61	1.47
5	B	Boron	2.0	2.04	1.8	1.88	2.01
6	C	Carbon	2.5	2.55	2.5	2.47	2.50
7	N	Nitrogen	3.0	3.04	2.9	2.93	3.07
8	O	Oxygen	3.5	3.44	3.0	3.46	3.50
9	F	Fluorine	4.0	3.98	4.1	3.92	4.10
10	Ne	Neon					
11	Na	Sodium	0.9	0.93	1.2	0.85	1.01
12	Mg	Magnesium	1.2	1.31		1.42	1.23
13	Al	Aluminum	1.5	1.61	1.4	1.54	1.47
14	Si	Silicon	1.8	1.90	2.0	1.74	1.74
15	P	Phosphorus	2.1	2.19	2.3	2.16	2.06
16	S	Sulfur	2.5	2.58	2.5	2.66	2.44
17	Cl	Chlorine	3.0	3.16	3.3	3.28	2.83
18	Ar	Argon				3.92	
19	K	Potassium	0.8	0.82	1.1	0.74	0.91
20	Ca	Calcium	1.0	1.00		1.06	1.04
21	Sc	Scandium	1.3	1.36		1.09	1.20
22	Ti	Titanium	1.5	1.54			
23	V	Vanadium	1.6	1.63			
24	Cr	Chromium	1.6	1.66			
25	Mn	Manganese	1.5	1.55			
26	Fe	Iron	1.8	1.83			
27	Co	Cobalt	1.8	1.88			

28	Ni	Nickel	1.8	1.91			
29	Cu	Copper	1.9	1.90			
30	Zn	Zinc	1.6	1.65		1.86	1.66
31	Ga	Gallium	1.6	1.81	1.4	2.10	1.82
32	Ge	Germanium	1.8	2.01	1.9	2.31	2.02
33	As	Arsenic	2.0	2.18	2.2	2.53	2.20
34	Se	Selenium	2.4	2.55	2.4	2.76	2.48
35	Br	Bromine	2.8	2.96	3.0	2.96	2.74
36	Kr	Krypton		2.90		3.17	
37	Rb	Rubidium	0.8	0.82	1.0	0.70	0.89
38	Sr	Strontium	1.0	0.95		0.96	0.99
39	Y	Yttrium	1.2	1.22	1.4	0.98	1.11
40	Zr	Zirconium	1.4	1.33			
41	Nb	Niobium	1.6	1.60			
42	Mo	Molybdenum	1.8	2.16			
43	Tc	Technetium	1.9	1.90			
44	Ru	Ruthenium	2.2	2.20			
45	Rh	Rhodium	2.2	2.28			
46	Pd	Palladium	2.2	2.20			
47	Ag	Silver	1.9	1.93			
48	Cd	Cadmium	1.7	1.69		1.73	1.46
49	In	Indium	1.7	1.78	1.3	1.88	1.49
50	Sn	Tin	1.8	1.96	1.8	2.02	1.72
51	Sb	Antimony	1.9	2.05	2.0	2.19	1.82
52	Te	Tellurium	2.1	2.10	2.2	2.34	2.01
53	I	Iodine	2.5	2.66	2.7	2.50	2.21
54	Xe	Xenon				2.63	
55	Cs	Cesium	0.7	0.79	1.0	0.69	0.86
56	Ba	Barium	0.9	0.89		0.93	0.97
57	La	Lanthanum	1.1	1.10		0.92	1.08
58	Ce	Cerium	1.1	1.12			
59	Pr	Praseodymium	1.1	1.13			
60	Nd	Neodymium	1.1	1.14			
61	Pm	Promethium	1.1	1.13			
62	Sm	Samarium	1.1	1.17			
63	Eu	Europium	1.1	1.20			
64	Gd	Gadolinium	1.1	1.20			
65	Tb	Terbium	1.1	1.20			
66	Dy	Dysprosium	1.1	1.22			
67	Ho	Holmium	1.1	1.23			

68	Er	Erbium	1.1	1.24			
69	Tm	Thullium	1.1	1.25			
70	Yb	Ytterblum	1.1	1.10			
71	Lu	Lutetium	1.1	1.27			
72	Hf	Hafnium	1.3	1.30			
73	Ta	Tantalum	1.5	1.50			
74	W	Tungsten	1.7	2.36			
75	Re	Rhenium	1.9	1.90			
76	Os	Osmium	2.2	2.20			
77	Ir	Iridium	2.2	2.20			
78	Pt	Platinum	2.2	2.28			
79	Au	Gold	2.4	2.54			
80	Hg	Mercury	1.9	2.00		1.92	1.44
81	Tl	Thallium	1.8	2.04		1.96	1.44
82	Pb	Lead	1.8	2.33		2.01	1.55
83	Bi	Bismuth	1.9	2.02		2.06	1.67
84	Po	Polonium	2.0	2.00			
85	At	Astatine	2.2	2.20			
86	Rn	Radon					
87	Fr	Francium	0.7	0.70			
88	Ra	Radium	0.9	0.90			
89	Ac	Actinium	1.1	1.10			
90	Th	Thorium	1.3	1.30			
91	Pa	Protactinium	1.5	1.50			
92	U	Uranium	1.7	1.38			
93	Np	Neptunium	1.3	1.36			
94	Pu	Plutonium	1.3	1.28			
95	Am	Americium	1.3	1.30			
96	Cm	Curium	1.3	1.30			
97	Bk	Berkellum	1.3	1.30			
98	Cf	Callifornium	1.3	1.30			
99	Es	Einsteinium	1.3	1.30			
100	Fm	Fermium	1.3	1.30			
101	Md	Mendelevium	1.3	1.30			
102	No	Nobellum	1.3	1.30			
103	Lr	Lawrencium					
104	Rf	Rutherfordium					

105	Db	Dubnium					
106	Sg	Seaborgium					
107	Bh	Bohrium					
108	Hs	Hassium					
109	Mt	Meltnerium					
110	Uun	Ununnilium					
111	Uuu	Ununnilium					
112	Uub	Ununbium					
114	Uuq	Ununquadium					

A plot of the above data shows that, *broadly*, the various **electronegativity** systems are numerically equivalent:



Some recommended Wikipedia links:

- [Linus Pauling](#)
- [**Electronegativity** & **Pauling Scale**](#)
- [Mulliken **scale**](#)
- [Allred-Rochow **scale**](#)

Download an **electronegativity** & bond character calculator spreadsheet, [here](#).

Subject **Electroplating uranium dioxide**

Posted by [Carl Willis](#) on 2008-02-19 03:30

I'm working on ideas for fission chambers with which I can detect neutrons made by my fusor. Ideally what you want for a fission chamber is a uniform electrode of large surface area having a very thin layer of fissionable material on it. Luckily there is a method to make such a layer, involving the **electroplating** of UO_2 onto metal cathodes placed into a U(VI) salt bath.

Not only does this method satisfy the needs for fission chambers, it also is perhaps the easiest way to get **uranium**, normally in solution as U(IV) , into the U(IV) oxidation state. There are reasons to want this capability; for instance, it's much easier to reduce UO_2 to **uranium** metal with calcium than it is to reduce the very energetic uranyl oxide or peroxide. UO_2 is also reported to be a decent semiconductor. If I manage to get a crystal radio made with plated UO_2 to work, I'll post the results!

Anyway, this method takes initial direction from the following paper (unfortunately published by the brutes at Kluwer and thus extremely expensive), and I have spent a couple evenings honing out the practical details:

Maya L, Gonzalez BD, et al. Electrodeposition of **uranium** dioxide films. J. Radioanalytical and Nuclear Chemistry, 261(3) 605-607 (2004).

6 grams of uranyl oxide [see my earlier post about how to prepare this from **uranium** ore] are dissolved in battery acid (strong sulfuric acid solution) and the solution is then neutralized partially with Ace Hardware "Janitorial Strength" ammonia to pH 2, while stirring to avoid precipitation of the **uranium**. The resulting solution is diluted in a plastic cup of about 300 mL capacity with a 0.2M ammonium sulfate solution made with freshly-boiled water and the pH is readjusted to 2.5 by dropping in a couple drops of sulfuric acid. Cathodes to be plated can be either steel (e.g. a box-cutter blade) or

solution. The anode is platinum-plated titanium tube ~1 cm OD, normally used to produce chlorates from brine. Alternative choices should be noble metals or graphite that will not oxidize and contaminate the bath. The anode is mounted centrally in the plastic cup of solution, and the cathode strips are mounted at the side of the cup. A 15 VDC power supply is used to drive about 10 A through the cell, which will generate a profusion of gas--no smoking please! If the cell draws more than 10 A, move the cup so that the cathode-anode separation is larger. Each cathode is plated for about 5 minutes, between which boiled DI water is added to make up the cell volume. The finished plating is an adherent, velvety black layer. Longer plating tends to make a less adherent layer that can crack off, although more UO₂ is present. The plated strips read about 2000-3000 CPM on a pancake GM tube, indicating that the black deposit is indeed the intended UO₂. If the cathodes are dirtied with precipitated uranyl salts, they can be washed by a quick dunk in dilute HCl and the UO₂ layer will be unaffected.

Photos: plating cell; plated copper strips; strip turned over on a GM tube.

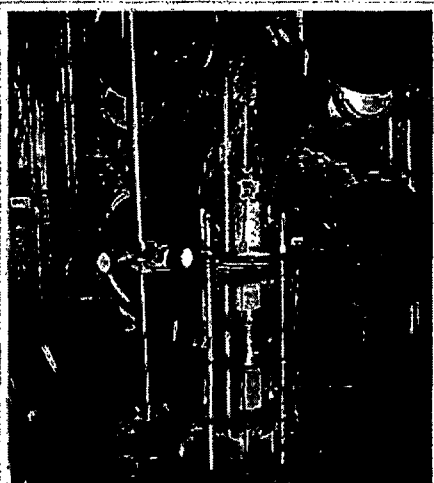
-Carl

Bonaccorso, Amy

From: phil (b)(6)
Sent: Monday, April 04, 2011 12:50 AM
To: Bonaccorso, Amy; OPA Resource
Subject: Recovering nuclear fuel electrolytically, from the reactor tank directly, slow, but it will take out the exposed fuel first.
Attachments: Recovering nuclear fuel electrolytically.jpg

<http://en.wikipedia.org/wiki/Electrowinning>

Adapt for in situ



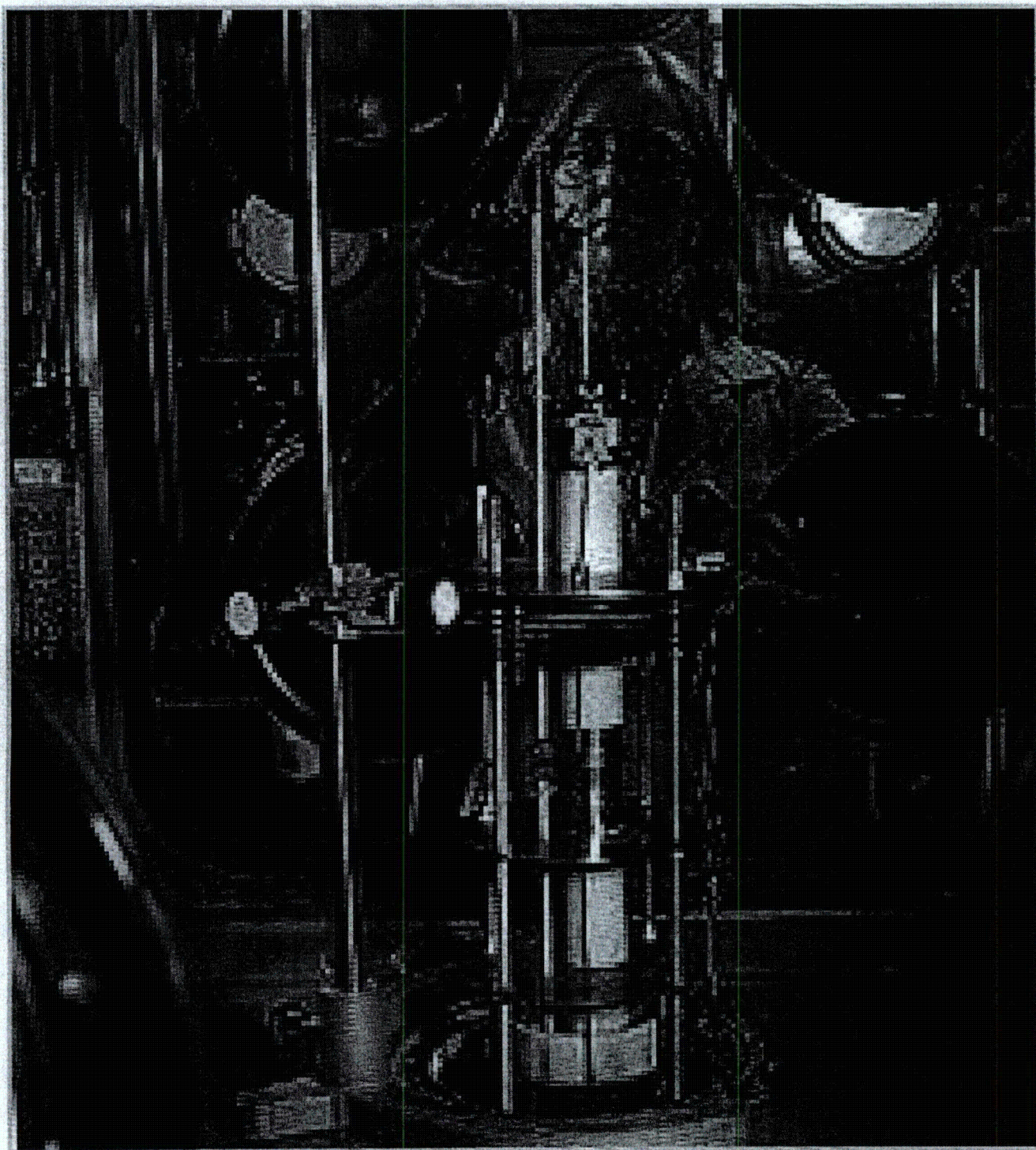
Electrorefining technology converting spent commercial nuclear fuel into metal.

Emergency graphite electrodes : ?

use standard legging nylon stockings, stuffed with carbon from burnt wood, submerge halfway into water pool, and keep top dry, but embed copper wires in the dry top part of the carbon.

Use lots of them in parallel, to keep the individual currents down for many reasons.

That will reduce copper pollution of the pool, and current limit the electrolysis to reduce gas production rate, and double layer heating and resistance.



Electrorefining technology converting
spent commercial nuclear fuel into metal.



Bonaccorso, Amy

From: Bonaccorso, Amy
Sent: Monday, April 04, 2011 11:10 AM
To: Akstulewicz, Brenda
Subject: Brenda Iijima.docx
Attachments: Brenda Iijima.docx

Brenda:

This is a snail mail reply. I'm going to have a few of these and am not sure if I should be sending them all to you for processing or not?! I don't want to overwhelm you.

Thanks,

Amy

5/22/11

Brenda Iijima

(b)(6)

(b)(6)

Hello Ms. Iijima:

We received your letter dated March 15, 2011. The U.S. Nuclear Regulatory Commission (NRC) is responsible for regulating nuclear power plants for safety. The agency does not control the nation's energy agenda. Comments about the nation's energy agenda are best suited for your Congressional representatives.

However, if you are interested in the agency's response to the crisis in Japan, you can get more information on this website: <http://www.nrc.gov/japan/japan-info.html>. An NRC Task Force was recently established to do a thorough review of the nation's power plants. A meeting to review the Task Force's progress in May is open to the public. The website containing this information is: <http://www.nrc.gov/public-involve/public-meetings/schedule.html>.

Week of May 9, 2011 - Tentative

05/12/11 9:30 A.M. Briefing on the Progress of the Task Force Review of NRC Processes and Regulations Following the Events in Japan
(PUBLIC MEETING)
(Contact: Nathan Sanfilippo, 301-415-3951)
Webcast

Thank you,

Amy Bonaccorso

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: REPLY: Suggestion for cooling the damaged Japanese reactor and waste storage pools
Date: Monday, April 04, 2011 1:11:00 PM

Hello Mr. Gottlieb:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in – you may want to send your ideas to Japanese Atomic Energy Commission (JAEC).

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: Dan G (b)(6) 16
Sent: Monday, April 04, 2011 2:18 AM
To: NRC Allegation
Subject: Suggestion for cooling the damaged Japanese reactor and waste storage pools

Dear NRC,

I have a suggestion for a technique for cooling the overheating damaged Japanese reactors and waste storage pools, without introducing continuous cooling water which leaks into the ocean. Please forward this email to the appropriate Japanese and U.S. and U.N. scientists for consideration.

I suggest using blocks of dry ice (frozen carbon dioxide) or insulated breakable containers of liquid nitrogen dropped by helicopter over any exposed reactors or storage pools which need further cooling. Once in contact with the existing overheated water, the CO2 or N2 would cool the water by phase change into gas and be released as inert gases, also serving to replace any oxygen in the surrounding air, thus reducing the risk of further hydrogen explosions. Because less water would need to be introduced as a cooling agent, this would reduce the overflow leakage of radioactivity polluted water into the nearby ocean. Large parcels of dry ice and liquid nitrogen packets would be less affected by wind and helicopter downdraft, thus more likely to hit the target and cause cooling.

I am not knowledgeable enough to know if the resultant gas releases of nitrogen and carbon dioxide would be significantly radioactive or rapid enough to cause "explosions" of gas within the existing water.

I hope this idea, if it has not already been proposed and considered by the various nuclear safety agency experts, may be useful. We are all hoping and

S/228

praying for rapid resolution of this difficult situation.

Daniel Gottlieb, (b)(6)

From: Bonaccorso, Amy
To: Bonaccorso, Amy
Subject: Biolargo
Date: Monday, April 04, 2011 1:24:26 PM

Woman called from a company with a neutron absorbing gel. I referred her to Institute for Nuclear Power Operations.

Janique Goff

(b)(6)

(b)(6)

BIOLARGO.com

Chief Technical Officer – Kenneth Code

780-418-3936

780-904-3410

5/22/11

Medina, Veronika

From: Janbergs, Holly on behalf of OPA Resource
Sent: Monday, April 04, 2011 9:22 AM
To: Medina, Veronika
Subject: FW: three mile island question

FYI

From: Burnell, Scott
Sent: Monday, April 04, 2011 9:16 AM
To: scott.disavino@thomsonreuters.com; OPA Resource
Subject: RE: three mile island question

Hi Scott;

For refueling outages, there will indeed be a water-filled channel for safely moving fuel to the pool and back. It's not the entire containment, though.

As for TMI, "emergency cooling" went on for some time (checking for exact date), and then "normal" cooling continued for years before they could examine the core. I take it you're referring to emergency cooling?

Scott

From: scott.disavino@thomsonreuters.com [<mailto:scott.disavino@thomsonreuters.com>]
Sent: Monday, April 04, 2011 8:55 AM
To: OPA Resource; Burnell, Scott
Subject: three mile island question

Morning,

Hope all had a great weekend

Wondering about a question asked last week – do you know when operators at Three Mile Island were able to stop pumping water into the core

Also – just checking on a normal refueling outage when the fuel is removed from the core and put into the spent fuel pool to allow maintenance work – the containment is flooded and the rods are moved under water – that is how it was described to me – just checking to make sure that is right

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

S/230

This email was sent to you by Thomson Reuters, the global news and information company. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of Thomson Reuters.

From: Bonaccorso, Amy
To: Hayden, Elizabeth; Janbergs, Holly
Subject: RE: Glen Rose Texas Reactors
Date: Monday, April 04, 2011 9:43:00 AM

Did this one get a response?

From: Hayden, Elizabeth
Sent: Friday, April 01, 2011 3:41 PM
To: Janbergs, Holly; Bonaccorso, Amy
Subject: FW: Glen Rose Texas Reactors

In case you are keeping track of these e-mails.

Beth

From: Hayden, Elizabeth
Sent: Friday, April 01, 2011 3:24 PM
To: Dricks, Victor; Uselding, Lara
Cc: Ash, Darren
Subject: FW: Glen Rose Texas Reactors

Could you please respond to this e-mail?

Beth

From: richard lehman/ (b)(6)
Sent: Thursday, March 31, 2011 3:16 PM
To: DataQuality Resource
Subject: Glen Rose Texas Reactors

Dear Sir:

I have been concerned about the referenced facility ever since its location, a (b)(6) of (b)(6) where I live, since the location decision was made. It appears to me that if anything major goes wrong with the facility, the prevailing wind being from the south, we are in direct line to receive a goodly dose of radiation a few minutes after an event occurs.

Could you tell me what kind of reactor it is, is it the same GE model which failed in Japan?
What is the safety record of this facility?
When was the last time the facility was inspected by your agency, and what were the findings?

Thanks,

Dick Lehman
(b)(6)

5/23/11

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: FW: Urgent Suggestion- CYA!
Date: Monday, April 04, 2011 11:45:14 AM

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Monday, April 04, 2011 7:32 AM
To: Janbergs, Holly
Subject: FW: Urgent Suggestion- CYA!

From: Rod Condit (b)(6)
Sent: Saturday, April 02, 2011 1:16 PM
To: OPA Resource
Subject: Urgent Suggestion- CYA!

04-02-2011

RE: Nuclear Plants on California Earthquake Faults

Dear NRC,

I suggest the NRC quietly and immediately order the nuclear power plant operators along the California earthquake fault lines to transfer all of the spent fuel held on site and distribute it to some of the other 100 inland nuclear power plants for storage.

The receiving nuclear plants may find that it is in their own best interest to accept and store the spent fuel, as a similar incident here will permanently ruin the nuclear power industry in the United States.

Also, limit the amount of fuel rods held at these sites to the absolute bare minimum needed to operate.

Thank You.

Sincerely,
Rod Condit

(b)(6)

(b)(6)

(b)(6)

(b)(6)

6

5/232

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: Response to Your Email Dated March 17, 2011
Date: Monday, April 04, 2011 11:46:00 AM

Hello Mr. Gallagher:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

S/233

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: FW: Japanese Power Plant
Date: Monday, April 04, 2011 11:46:02 AM

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Monday, April 04, 2011 7:36 AM
To: Janbergs, Holly
Subject: FW: Japanese Power Plant

From: Grant Lenkey (b)(6) 16
Sent: Sunday, April 03, 2011 9:18 PM
To: OPA Resource
Subject: Japanese Power Plant

Hello, I was just wondering if it was possible that radiation could reach the west coast of the U.S. if a meltdown were to occur?

Thank you, Grant

5/234

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: FW: nuclear safety idea
Date: Monday, April 04, 2011 11:46:23 AM

From: Janbergs, Holly **On Behalf Of** OPA Resource
Sent: Monday, April 04, 2011 8:33 AM
To: Janbergs, Holly
Subject: FW: nuclear safety idea

From: PDR Resource
Sent: Monday, April 04, 2011 8:29 AM
To: OPA Resource; (b)(6) 6
Subject: nuclear safety idea

Steve,

You have written to the NRC Public Document Room; we assist the public in locating NRC documents and information.

I am forwarding your e-mail to the NRC Office of Public Affairs at opa.resource@nrc.gov. They can reply to your message. Their office can also be contacted at 301-415-8200.

Thanks,
Karen
Librarian
USNRC Public Document Room
301-415-4737; 1-800-397-4209
pdr.resource@nrc.gov

-----Original Message-----
From: steve hill (b)(6) 6
Sent: Saturday, April 02, 2011 8:30 PM
To: PDR Resource
Subject: Response from "Contact the Public Document Room Staff"

Below is the result of your feedback form. It was submitted by

steve hill (b)(6) 6 on Saturday, April 02, 2011 at 20:29:38

PDR Category: Other

S/235

comments: i had an idea the other day about nuclear safety wich i thought worthy of mentioning to swomeone there. has anyone thought of using referigeration to cool the plants in case of a nuclear accident , in the case of fukushima all the water there using to cool the plant will have to go somewhere afterwards,if it wasreferigerated it would take much less .

organization:

address1: (b)(6)

address2:

city: (b)(6)

state: (b)(6)

zip: (b)(6)

country: (b)(6)

phone: (b)(6) 62

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: NRC Reply to Your Email Dated March 16, 2011
Date: Monday, April 04, 2011 11:50:00 AM

Hello Mr. Wasson:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

S/236

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: NRC Reply to Your Letter
Date: Monday, April 04, 2011 10:51:00 AM

Hello Mr. Brass:

We received your letter dated March 17th 2011. I am very sorry that we don't have time to answer each question you asked. But, we do have a lot of information available on our website: www.nrc.gov. In particular, we have fact sheets that are written for the public: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/>

Otherwise, updates on Japan can be found here: <http://www.nrc.gov/japan/japan-info.html>

Thank you,

Amy

S/237

From: Rita Addessa
To: Bonaccorso, Amy
Cc: "Rita Addessa"
Subject: Thanks for your response = I have visited the web site
Date: Monday, April 04, 2011 4:17:09 PM

And will report on unanswered question this week – overwhelmed. Best wishes..

Rita Addessa (b)(6)
(b)(6)

6

From: Bonaccorso, Amy [mailto:amy.Bonaccorso@nrc.gov]
Sent: Monday, March 28, 2011 2:12 PM
To: (b)(6)
Subject: REPLY: Did GE build 2 or more of the Fukushima nuclear power plants - Yes or No ; Are all USA plants LWR - yes or no: is Fukushima LWR yes or no ? Thank you.

Hello Ms. Addessa:

I believe the information you are requesting is available online. NRC regulates US nuclear power plants, so the information on our website focuses on those rather than Japanese reactors.

You can find detailed information on US reactors (via a map) by clicking on the link below. The listing includes the type of reactor and also the utility/operator that owns them. I believe this will address your questions about reactor type and location.

<http://www.nrc.gov/info-finder/reactor/>

Thank you.

Amy

From: Rita Addessa (b)(6)
Sent: Friday, March 25, 2011 7:31 PM
To: OPA Resource
Cc: 'Rita Addessa'
Subject: Did GE build 2 or more of the Fukushima nuclear power plants - Yes or No ; Are all USA plants LWR - yes or no: is Fukushima LWR yes or no ? Thank you.

NRC: Is it true that GE built 2 or more of the Fukushima nuclear power plants, Yes or No? Are the nuclear power plants in the USA all LIGHT WATER REACTORS, Yes, No, or Mixed? If mixed, what type of nuclear power reactors are in Pennsylvania? What type are in Region I overall? Are the Fukushima nuclear power plants, 2 of which

S/238

purportedly were built by GE, also LIGHT WATER REACTORS, yes or no. Thank you.

Today 25 March 2010

Rita Addessa. (b)(6)
(b)(6) 6

From: Janbergs, Holly
To: Bonaccorso, Amy
Subject: FW: Radiation Question
Date: Monday, April 04, 2011 12:32:09 PM

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

From: Janbergs, Holly On Behalf Of OPA Resource
Sent: Friday, April 01, 2011 7:47 AM
To: Janbergs, Holly
Subject: FW: Radiation Question

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

From: (b)(6)
Sent: Friday, April 01, 2011 12:01 AM
To: OPA Resource
Subject: Radiation Question

Below is the result of your feedback form. It was submitted by

(b)(6) on Friday, April 01, 2011 at 00:00:58

comments: I am considering taking (b)(6) where I would need to assist (b)(6)
where I would have to (b)(6) I am also (b)(6) and I am just interested in
knowing if there is any risk to the (b)(6) or if (b)(6) will suffice. Thank you.

contactName: Marisa Rincon

phone:

S/239

From: Michael Gallagher
To: Bonaccorso, Amy
Subject: RE: Response to Your Email Dated March 17, 2011
Date: Monday, April 04, 2011 12:34:27 PM

Thank you for the Thank you Amy. I happen to be watching CNN at the exact time the earthquake took place, and it was I who called the US Navy Headquarters at Pearly Harbor and the Los Angeles Tsunami Watch Center within 8 minutes of the quake to warn them of the magnetude of the quake and that the US would affected. The first half dozen suggestions I sent went directly to Greg Jaczko's secretary. The rest went to a resource Committee at NRC with a dysfunctional e-mail address. Noting that, I went to Arnie Gunderson, who forwarded the engineering suggestions.

(b)(6)

Your expert people have apparently failed to notice that the Japanese technicians who are attempting to resolve the issues with the reactors are wearing mid-calf rubber farm boots, cotton gloves, no filter masks other than surgical masks, no breathing filters or apparatus, only shop goggles, and surplus Army helmets, along with painters paper or plastic jumpsuits. None of this is sufficient protective equipment in a highly radioactive environment. Nor have a seen any dosimeters on any of them. TEPCO has failed them in every way in this respect, and they do not even have sufficient rations. Does the NRC not have safety equipment to send them?

Michael Gallagher (b)(6)

From: amy.Bonaccorso@nrc.gov
To: (b)(6)
Date: Mon, 4 Apr 2011 11:46:49 -0400
Subject: Response to Your Email Dated March 17, 2011

Hello Mr. Gallagher:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster. Unfortunately, we are currently unable to consider each suggestion that comes in.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

S/240

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Urgent Suggestion- CYA!
Date: Monday, April 04, 2011 12:36:00 PM

Hello Mr. Condit:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: Rod Condit (b)(6)
Sent: Saturday, April 02, 2011 1:16 PM
To: OPA Resource
Subject: Urgent Suggestion- CYA!

04-02-2011

RE: Nuclear Plants on California Earthquake Faults

Dear NRC,

I suggest the NRC quietly and immediately order the nuclear power plant operators along the California earthquake fault lines to transfer all of the spent fuel held on site and distribute it to some of the other 100 inland nuclear power plants for storage.

The receiving nuclear plants may find that it is in their own best interest to accept and store the spent fuel, as a similar incident here will permanently ruin the nuclear power industry in the United States.

Also, limit the amount of fuel rods held at these sites to the absolute bare minimum needed to operate.

Thank You.

Sincerely,
Rod Condit

S/241

(b)(6)

6

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: REPLY: COOLING NUCLEAR REACTORS
Date: Monday, April 04, 2011 12:31:00 PM

Hello Mr. Skelton:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: JAMES SKELTON (b)(6) 6
Sent: Saturday, April 02, 2011 10:11 AM
To: OPA Resource
Subject: COOLING NUCLEAR REACTORS

DEAR SIR

I HAVE A CREATIVE SUGGESTION TOWARDS COOLING THE NUCLEAR
REACTORS IN JAPAN
BY SPRAYING LIQUID NITROGEN ON EITHER THE REACTOR VESSER AND
REATOR CORE WILL COOL IT DOWN
THIS IS LIKE A CO2 FIRE EXTUINGISHER PUTTING OUT A FIRE

JAMES "BENNIE" SKELTON

(b)(6)

(b)(6)

(b)(6)

S/242

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: Japanese Power Plant
Date: Monday, April 04, 2011 12:56:00 PM

Hello Mr. Lenkey:

The U.S. Nuclear Regulatory Commission (NRC) continues to monitor information regarding the crisis in Japan. Given the distance between Japan and the U.S., we are not expected to experience any harmful levels of radioactivity. The U.S. Environmental Protection Agency (EPA) is using its existing nationwide radiation monitoring system, RadNet, to continuously monitor the nation's air, water, milk, and precipitation. The EPA has publicly stated its agreement with the NRC's assessment that we do not expect to see harmful levels of radiation reaching the U.S. from Japan.

If you want to follow NRC's response to the crisis in Japan, please visit this website:
<http://www.nrc.gov/japan/japan-info.html>

You can find more information about EPA's RadNet here:
<http://www.epa.gov/japan2011/rert/radnet-data.html>

Thank you,

Amy

From: Grant Lenkey (b)(6)
Sent: Sunday, April 03, 2011 9:18 PM
To: OPA Resource
Subject: Japanese Power Plant

Hello, I was just wondering if it was possible that radiation could reach the west coast of the U.S. if a meltdown were to occur?

Thank you, Grant

S/243

From: Bonaccorso, Amy
To: (b)(6) 6
Subject: REPLY: Japan Reactor Crisis - Suggestion
Date: Monday, April 04, 2011 12:59:00 PM

Hello Mr. Nightingale:

Thank you for contacting us about your ideas. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

From: JAS B NIGHTINGALE (b)(6) 6
Sent: Monday, April 04, 2011 6:57 AM
To: OPA Resource
Subject: Japan Reactor Crisis - Suggestion

Hello Nuclear Incident Response Team - Japan Assignment

Though I am not a physicist I would like to propose an idea for your team in Japan.

Pour granulated lead into containment pool and on rods, this should slow down reaction and insulate rods, simultaneously, if reaction is hot enough, lead will melt increasing surface contact and insulation; as well as in the event of a pool leak, it will flow through until hardening and sealing crack.

In Future Construction and potentially in Retrofits:

Line walls of reactor housings with "fail safe panels". These panels would be steel backed (side against the exterior housing wall), filled with lead granules, and sealed with controlled melting point plastic. In the event of a coolant system failure and reactor runaway, panels would melt - release lead granules - surround and insulate rods - stopping further reaction (I would term this as a "reverse moat")

I hope I haven't wasted your time.

S/244

Good luck and Godspeed,

Sincerely
Jamie

From: Bonaccorso, Amy
To: clark@cedconsulting.com
Subject: REPLY: Emergency Power.
Date: Monday, April 04, 2011 1:07:00 PM

Hello Mr. Dodge:

The NRC is not currently taking suggestions, but the Institute for Nuclear Power has expressed an interest in offers of support from people such as yourself. They can be reached at: inpoercassistance@inpo.org.

Thanks,

Amy

From: Clark Dodge [mailto:clark@cedconsulting.com]
Sent: Saturday, April 02, 2011 2:52 PM
To: NRC Allegation
Subject: Emergency Power.

Aloha from Hawaii

I have been following the Emergency power options for Nuclear Power Plants and the problem in Japan makes it even more important. I (b)(6)

(b)(6) We had a problem without terminal and the vessels provided emergency power until the terminals were rebuilt and remodeled. It was very simple and only required a few minutes and we could load and unload the vessel in storm s and power outages.

The same thing could have been done in Japan if designed and put into action. It could also be done at all of the plants for minim cost and time. The panels could even be mass produced and built in a shop and installed. If a system was damage and needed to ne replace it could be flown in and installed quickly.

I would be happy to word with a group on this. I am a (b)(6)

(b)(6)

Please feel free to contact me should you wish to follow up on my design.

Clark Dodge, Owner/President
CED Consulting LLC
3776 Aloha Place
Koloa, HI. 96756-9404

Ph: (808) 245-7183
(b)(6)

www.cedconsulting.com
clark@cedconsulting.com

S/245

From: Bonaccorso, Amy
To: (b)(6)
Subject: REPLY: nuclear safety idea
Date: Monday, April 04, 2011 1:30:00 PM

Hello Mr. Hill:

Thank you for contacting us about your idea. We appreciate suggestions that work toward resolving the situation in Japan; it's reassuring to see how helpful and dedicated private citizens have been in light of this disaster.

Please understand that the NRC has some of the most expert people in the world available to assist the Japanese authorities in whatever way they request. We are fully staffed in all our response teams at this time and working 24-hours a day.

Thank you,

Amy

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

From: steve hill (b)(6)
Sent: Saturday, April 02, 2011 8:30 PM
To: PDR Resource
Subject: Response from "Contact the Public Document Room Staff"

Below is the result of your feedback form. It was submitted by

steve hill (b)(6) on Saturday, April 02, 2011 at 20:29:38

PDR Category: Other

comments: i had an idea the other day about nuclear safety wich i thought worthy of mentioning to swomeone there. has anyone thought of using referigeration to cool the plants in case of a nuclear accident , in the case of fukushima all the water there using to cool the plant will have to go somewhere afterwards,if it wasreferigerated it would take much less .

organization:

address1 (b)(6)

address2:

city: (b)(6)

state (b)(6)

S/246

zip:

country:

~~phone:~~

~~✓~~
