(333 Documents)

Group RRRR

(Records Released In Their Entirety)

From: OPA Resource
Sent: Saturday, March 12, 2011 2:27 PM
To: Ash, Darren; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Bollwerk, Paul; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Cutler, Iris; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffry; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Steger (Tucci), Christine; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Thomas, Ann; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy; Zorn, Jason
Subject: Press Release: NRC Experts Deploy to Japan as Part of U.S. Government Response

For immediate release and posting.

Office of Public Affairs
US Nuclear Regulatory Commission
301-415-8200
opa.resource@nrc.gov

RRRR - 1

From: Harrington, Holly
To: Ridge, Christianne
Subject: RE: West Coast Radiation Exposure
Date: Thursday, March 17, 2011 3:45:00 PM

I'm told the time span was 16 hours.

See if that works for him. If not, say you are unable at this time to provide more informaiton

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From: Ridge, Christianne
Sent: Thursday, March 17, 2011 2:31 PM
To: Harrington, Holly
Subject: FW: West Coast Radiation Exposure

Holly, we got a follow-up question about the table in the 3/16 press release. Can the folks who gave you the shed some light?
Thanks.

From: Peter Chang [mailto:pchang@sagientresearch.com]
Sent: Thursday, March 17, 2011 1:42 PM
To: Ridge, Christianne
Subject: West Coast Radiation Exposure

Hi Christianne,

I believe I was speaking with you earlier today on the NRCs estimates for West Coast radiation exposure from Japan. Just had a question on the press release and chart you had referred me to (http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-050_Attchmt.pdf), giving levels closer to the reactor site. Are the T EDE (Total Effective Dose Equivalent) maximum dose (rem) levels in that chart just instantaneous/continuous measures, or is that over a unit of time, and if so, what unit?

Thanks very much.

Peter Chang, MD
Sagient Research Systems
3655 Nobel Drive Suite 540
San Diego, CA 92122
Tel: (858) 200-2347
Fax: (858) 623-1601

RRRR-2

Lee, Richard

From: Gibson, Kathy
Sent: Friday, April 15, 2011 8:43 AM
To: Hoc, PMT12; Hiland, Patrick
Cc: Hart, Michelle; Watson, Bruce; Lee, Richard
Subject: Re: Point of Contact for NARAC (Action Item #4688)

RES agrees and will support NRR if requested.

From: Hoc, PMT12
To: Hiland, Patrick
Cc: Gibson, Kathy; Hart, Michelle; Watson, Bruce
Sent: Fri Apr 15 01:52:57 2011
Subject: Point of Contact for NARAC (Action Item #4688)

Pat,

The Protective Measures Team (PMT) has received a request from NARAC (John Nastrom) to provide a point of contact at NRC to work on updated source terms and reviewing new source terms. This issue has been pushed to the Line due to the staffing down of the Op Center. Bruce Watson and Michelle Hart have agreed to support John Nasstrom at NARAC. As per the Transition Plan for reducing staffing for the Fukushima response you are the designated POC for NRR. I am assuming NRR should be the lead office for this issue, but I cc-ed the RES POC just in case. Please keep the PMT informed of progress on this matter.

Thanks.

Jessica Kratchman
Protective Actions Assistant Director
NRC Operations Center

From: Watson, Bruce
Sent: Thursday, April 14, 2011 2:16 PM
To: Hoc, PMT12; Steve LaVie; Hart, Michelle
Subject: RE: Point of Contact for NARAC

Michele Hart and I had a call with John Nastrum at NARAC. At the request of DOE/OSTP (Dr. Fetter at the White House), NARAC is attempting to recreate the source term/releases from Fukushima using deposition data. NARAC would like to know if the NRC-RST or the Japan Team have tried to recreate the source term/releases and would be share the data with them. John will email the 4/12 Japan press release citing their source term estimate. He will also email the Dr. Fetter's spreadsheet comparing source terms; the Japan estimates, the IAEA estimate, and what he believes is the NRC "Realistic Plausible" case.

Bruce A. Watson, CHP
Chief - Reactor Decommissioning Branch
US Nuclear Regulatory Commission
Rockville, MD 20852
301-415-6221 Office

RRRR/3

From: Hoc, PMT12
Sent: Wednesday, April 13, 2011 8:22 PM
To: Steve LaVie; Hart, Michelle; Watson, Bruce
Subject: Point of Contact for NARAC

All

NRC has had a request from NARAC (John Nastrom) to provide a point of contact at NRC (either HQ or site team) to work on updated source terms and reviewing new source terms. Evidently this request has come from the White House. With reduced positions staffing the Op Ctr, we are to push request back into the line organization. In this case, the PMT felt that going back to individuals that were involved in some of the earlier work with NARAC seemed appropriate. Contacting Lou Brandon, he suggested your names.

Would you be able to be the contact person for this action? Please let the PMT PAAD know as soon as possible if one of you can assist in this manner. Also let the PMT PAAD know if I need to send this request to your management. NRC needs to get back to NARAC soon.

Sandra Wastler
PMT PAAD

From: Harrington, Holly
To: McIntyre, David; Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Janbergs, Holly; Ledford, Joey; Hannah, Roger; Screnci, Diane; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Widomski, Michael; Landau, Mindy; Uselding, Lara
Subject: RE: UCS Talking Point
Date: Thursday, March 17, 2011 3:33:00 PM

I'm sorry, but please use this instead (we are not responding per se, but monitoring)

The NRC is aware that Union of Concerned Scientists issued a report today regarding the safety of U.S. nuclear power plants in 2010. With the NRC monitoring events in Japan, we have not had the opportunity to review the report in depth. The NRC remains confident that our Reactor Oversight Program, which includes both on-site and region-based inspectors, is effectively monitoring the safety of U.S. nuclear power plants.

From: McIntyre, David
Sent: Thursday, March 17, 2011 2:45 PM
To: Brenner, Eliot; Harrington, Holly; Burnell, Scott; Couret, Ivonne; Janbergs, Holly; Ledford, Joey; Hannah, Roger; Screnci, Diane; Sheehan, Neil; Chandrathil, Prema; Mitlyng, Viktoria; Widomski, Michael; Landau, Mindy; Uselding, Lara
Subject: UCS Talking Point

All – Rob Taylor developed this talking point for answering questions on the UCS report. Remember to stick one finger in your nose while speaking it, and flick it out with gusto when saying the word "safety" in the final sentence.

Dave

> The NRC is aware that UCS issued a report today regarding the safety of U.S. nuclear power plants in 2010. With the NRC responding to events in Japan, we have not had time to review the report in depth. The NRC remains confident that our Reactor Oversight Program, which includes both on-site and region-based inspectors, is effectively monitoring the safety of U.S. nuclear power plants.

RRRR-4

From: Harrington, Holly
To: Taylor, Robert; McIntyre, David; Burnell, Scott
Subject: RE: Interview Request: USC NRC Report
Date: Thursday, March 17, 2011 3:26:00 PM

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small edits and then run by someone . . . Eliot is busy. ET maybe just so we have someone signing off . . .

The NRC is aware that Union of Concerned Scientists issued a report today regarding the safety of U.S. nuclear power plants in 2010. With the NRC monitoring events in Japan, we have not had the opportunity to review the report in depth. The NRC remains confident that our Reactor Oversight Program, which includes both on-site and region-based inspectors, is effectively monitoring the safety of U.S. nuclear power plants.

From: Taylor, Robert
Sent: Thursday, March 17, 2011 2:12 PM
To: Harrington, Holly; McIntyre, David; Burnell, Scott
Subject: RE: Interview Request: USC NRC Report

Talking Point for inquiries regarding the latest UCS report on US plants:

The NRC is aware that UCS issued a report today regarding the safety of U.S. nuclear power plants in 2010. With the NRC responding to events in Japan, we have not had time to review the report in depth. The NRC remains confident that our Reactor Oversight Program, which include both on-site and region-based inspectors, is effectively monitoring the safety of U.S. nuclear power plants.

From: Harrington, Holly
Sent: Thursday, March 17, 2011 1:51 PM
To: McIntyre, David; Burnell, Scott
Cc: Taylor, Robert
Subject: RE: Interview Request: USC NRC Report

Yes please

From: McIntyre, David
Sent: Thursday, March 17, 2011 1:49 PM
To: Harrington, Holly; Burnell, Scott
Cc: Taylor, Robert
Subject: RE: Interview Request: USC NRC Report

If Scott doesn't get here would you like me to put Rob on it?

From: Harrington, Holly
Sent: Thursday, March 17, 2011 1:19 PM
To: Burnell, Scott; McIntyre, David
Cc: Taylor, Robert
Subject: FW: Interview Request: USC NRC Report
Importance: High

RRRR-5

I'm assuming we don't have a comment, but just checking to see if anyone has actually read the report enough to say anything.

From: Hannah, Roger
Sent: Thursday, March 17, 2011 12:59 PM
To: Harrington, Holly
Cc: Ledford, Joey
Subject: Fw: Interview Request: USC NRC Report
Importance: High

Do we have an "official" statement?
Roger Hannah, APR
Senior Public Affairs Officer
US Nuclear Regulatory Commission
Region 2, Atlanta, Ga.

This email is being sent from an NRC Blackberry device.

From: Gura, David <dgura@americanpublicmedia.org>
To: Hannah, Roger
Sent: Thu Mar 17 12:56:27 2011
Subject: Interview Request: USC NRC Report

I'm a reporter for Marketplace, the public radio business/economics program.

I'm preparing a report for tomorrow's Marketplace Morning Report on the Union of Concerned Scientists report on The NRC and Nuclear Power Plant Safety in 2010.

Is anyone from the NRC available today, to comment on its findings? In lieu of that, have you issued a statement from which I could quote?

Thanks very much,
David Gura

--
DAVID GURA
Reporter, Marketplace
American Public Media

1750 K Street, NW, Suite 300
Washington, DC 20006

+1 202 263-0201 (office)
+1 202 263-0205 (facsimile)
dgura@marketplace.org
@davidgura

From: Schwartzman, Jennifer
Sent: Saturday, March 19, 2011 8:09 AM
To: LIA03 Hoc; LIA02 Hoc; Fragoyannis, Nancy; Doane, Margaret; Mamish, Nader; Abrams, Charlotte; Wittick, Brian; Afshar-Tous, Mugeh; 'ShafferMR@state.gov'; Smith, Brooke; Foggie, Kirk; Bloom, Steven; Tobin, Jennifer; Mayros, Lauren; Jones, Andrea; English, Lance; Smiroldo, Elizabeth; Young, Francis; Henderson, Karen; Ramsey, Jack; Shepherd, Jill
Subject: RE: 3/19/11 Morning Transition

Clarifying question please, regarding the last item - is the interagency call at 9:30 AM or 9:30 PM?

From: LIA03 Hoc
Sent: Saturday, March 19, 2011 7:13 AM
To: LIA02 Hoc; Fragoyannis, Nancy; Doane, Margaret; Mamish, Nader; Abrams, Charlotte; Wittick, Brian; Afshar-Tous, Mugeh; 'ShafferMR@state.gov'; Smith, Brooke; Foggie, Kirk; Bloom, Steven; Schwartzman, Jennifer; Tobin, Jennifer; Mayros, Lauren; Jones, Andrea; English, Lance; Smiroldo, Elizabeth; Young, Francis; Henderson, Karen; Ramsey, Jack; Shepherd, Jill
Subject: 3/19/11 Morning Transition

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TRANSITION REPORT FOR MARCH 19, 2011 7 AM
Danielle and Elizabeth transitioning to Steve and Lance

GENERAL NOTES. 1) Information pertinent to the team in Japan can be forwarded to new email group, which incorporates Dan Dorman already, "Liaison Japan," in Outlook. **2)** Action: International updates must now be sent to LIA07 (to be put in the HOO Status Update) before the end of every shift as well as posted on the LT status board (different than the LT Log). **3)** 11 PM – 7 AM shift is responsible for the summary call with Kirk and Brooke, scheduled daily at 5 AM EST unless rescheduled. **4)** Kirk and Brooke requested that the international team to sit in on calls with the ET and Chuck to take notes and provide a short summary of what was discussed via email. **5)** Reminder to include names on watch bill emails and inform Brooke and Kirk when shift changes.

1. **Summary of the meeting with Ambassador Fujisaki.** Elizabeth and Danielle sent out email describing the Chairman's 3/18/11 meeting with Ambassador Fujisaki. Jack will also forward this to any other members of the interagency not included in the Ops Center interagency email list.

2. **Discussion with NISA's Emergency Operation Center.** Mr. Koyama and Mr. Sakkuma of NISA's International Office both spoke several times with interpreter Chris Field regarding NRC EOC interest in getting in touch with NISA's EOC. NISA's international office said they'd put us in touch, but needed to see the questions we had first. We send a list of questions compiled by RST and PMT. Later, Kirk Foggie said he would be meeting with NISA's EOC team on Sunday. He said he already had similar question (we also heard that Jack Foster was trying to have similar communication with TEPCO's EOC). We communicated what we had sent to the NISA team (with both Kirk and Jack). Kirk said he would obtain responses and forward them to the NRC EOC. The NISA EOC is prepared to follow up and talk with NRC EOC team members to clarify responses. Action: receive responses from Kirk and coordinate teleconference for follow-up technical exchange with the HQ RST and PMT.

3. **NRC Japan Team Feedback for Margie**. Friday shifts received feedback from Brooke and Kirk. Action: a one-pager has been started and is saved to the M:\LT\weekend notes from Brooke and Kirk.doc. This will

RRR2/6

be used by Margie during her 8:30am Monday morning meeting with the Chairman. During the week, this should be created nightly for the next day. Of particular interest is: general topic of discussion, position/organization of meeting participants, location of meeting, general impression of the discussion, attitude of Japanese, results, important things for the Chairman to know, etc. We are not looking for specific technical information.

4. **Saturday 2 PM Meeting with Industry, DOE, and Naval Reactors.** This meeting will include INPO, other industry, Pete Lyons, Naval reactors, etc., they will physically come to the Operations Center and Chuck Casto will call in. Briefing material has been created for the meeting and a Prep call has been set up for 7:45 AM. Elizabeth and Danielle started a spreadsheet, identifying relevant international players, their role, etc. Action: Continue with any updates necessary for the meeting. The spreadsheet is saved to M:\LT\Key Organizations.

5. **NRC Relief Team to Japan.** The NRC will be sending a relief team to Japan beginning tomorrow (Saturday, March 19). Dan Dorman will serve as deputy head of delegation (and ultimate replacement for Chuck Casto) and will arrive Sunday at 4:35pm (Japan time). Two more staff will depart on Monday to relieve Tony Ulses and Jim Trapp and a larger group will be dispatched Wednesday or Thursday. Aside from Dan Dorman, the group remains unnamed. Dan has been briefed. As of 9:20 pm, Tim Kolb (one of the team members) is feeling ill (headcold and laryngitis) it appears that he will be coming home this weekend (arrival at 3:38 Saturday). The international liaison desk will need to continue its role as liaison between NRC Ops Center and USAID on the details and making sure Dan (and future travelers) has everything he needs. Action: The Japan team has pointed out that Mr. Nakanishi forgot his business cards and asked us to provide Dan with cards for Mr. Nakanishi. We sent an email to Dan in order to verify he has dosimeter, and inquire whether he can come to NRC prior to his flight to pick up the business cards. The NSIR admin team has said they will make cards for Mr. Nakanishi, if Dan is available to pick them up.

6. **DOE Flyover Data.** DOE has released SitReps that include data from flyovers they've conducted. Mark Shaffer advises that the Ambassadors, and their counselors and Attaches from USA, Canada and UK (about 12 people), with whom he and Ambassador Davies have met each morning have heard of this data and would like it to be shared with them. Our DOE representative checked within their infrastructure with the reply that this type of decision is up to the National Security Council and so the Ambassador should work it up through the State Department. Mark responded that he didn't think the Ambassador would be interested in pursuing the NSC approval chain and noted that the other parties have already shared their information with us. The DOE liaison is not staffing the graveyard shift but when they return to the Ops Center, we should convey Mark's message to DOE.

7. **Ongoing communication with the UK**. The daily 0930 call with the UK, Canada and France to discuss current conditions at the plant will occur on the weekends as well. Seprately, this group has a call scheduled for 2:00 PM Saturday to discuss with PMT and source-term-related information sharing. has been. UK and IRSN have already shared information with us. We have shared NUREG 1465 with the group and have stated that we will share our source term data when it becomes available. PMT has advised us that our data has changed and the Chairman must review it before it can be sent anywhere, including the federal family. This should not preclude us ultimately sharing it with our bilateral partners, as long as it includes the caveat about abiding by our bilateral arrangements (no sharing with third parties). There is an email distribution list flagged on the LIA02 inbox (red flag, yellow box) where it should be sent when the time comes. Action 1: Int'l liaison and RST should staff 0930 daily call on Saturday and Sunday. Action 2: Int'l liaison and PMT should staff 2:00 PM health physics call on Saturday and arrange any requested subsequent calls. Action 3: Stay in touch with PMT on when U.S. source term data can be shared.

8. **NHK Query concerning 2000 Sandia Test.** NHK (Japan TV), through NEA, has requested information about Sandia testing done in 2000 related to RPV strength related to pressure and blasts. Email was sent to RES (Dehn, Sangimino, Eisenberg, Calvo). RES has no objection but requested we clear it with OPA. David McIntyre shared the request with Eliot Brenner. We are awaiting response from Eliot. Once

OPA clears off we can reply to NEA (notify ET for info). Followed-up with OPA on their response, then contacted Jeff Dehn in RES.

9. **IAEA Japan Team.** It was determined that the team consisted of DG Amano, Khammar Mrabit and 2 rad monitoring techs, but NRC and Mark Shaffer have been unsuccessful in obtaining names. Mark was pulsed again this evening around 8:00 EST. Action: If names are provided, give them to ET, then inform NRC Team in Japan. They had requested to meet with members of the IAEA team if possible.

10. **ENAC.** Please continue to regularly check ENAC for newly-posted documents. The translators are doing a great job working with the Japanese-language material and communicating with RST and PMT personnel.

11. **Conference Call with State. (+Fed. Family)** NRC on-site team gave a status update of their activities. Chuck Casto wanted help reducing the amount of radiation on the site and need help assessing the affect of seawater on the reactor vessel (and head) especially with regard to heat transfer. They are working on three different systems to cool the pools. The Australians are working on one (flying in equipment). The second one is the TEPCO solution which involves getting cement pumping trucks to pump water instead of cement. The third one is from Tokyo fire department who also have pump system that may be useful. U.S. believes that we should go forward with all 3 paths in the hopes that at least one of them work. They are fairly certain that pools at Units 3 and 4 are dry. Action: Same call tomorrow (Saturday, March 19 at 9:30EST)

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From: Harrington, Holly
To: Wittick, Susan
Subject: Can you come up to eliot"s office now?
Date: Thursday, March 17, 2011 2:55:00 PM

RRR-7

David Decker

From: dailybriefing-service@newsletters.cqrollcall.com [blmailer-dailybriefing-newsletters.cqrollcall.com@biglist.com] on behalf of David Hawkings [dailybriefing-service@newsletters.cqrollcall.com]
Sent: Monday, March 14, 2011 11:38 AM
To: Decker, David
Subject: CQ Roll Call Daily Briefing: Summer School

CQ ROLL CALL

DAILY BRIEFING

Monday, March 14, 2011

Today In Washington

THE WHITE HOUSE: Obama unveiled his proposal for revamping federal aid to public schools this morning and called on Congress to send him a No Child Left Behind law rewrite before the next academic year begins in September. "In the 21st century, it's not enough to leave no child behind," he said at Kenmore Middle School in Arlington, Va. "We need to help every child get ahead."

This afternoon, the president has Oval Office meetings with Danish Prime Minister Lars Lokke Rasmussen and David Petraeus, the top general in Afghanistan, before attending a DNC fundraiser.

THE SENATE: Convenes at 2 and about four hours later will vote on whether to rebuff a potential filibuster on legislation reauthorizing small-business research and development programs. The bill itself isn't controversial, but a group of GOP conservatives is threatening to try to block anything that's not related to deficit and debt reduction.

Senators also will confirm D.C. Superior Court Judge James Boasberg for a seat on the federal bench.

THE HOUSE: Convenes at 2 and will vote to affirm Michigan's decision to make Gerald Ford one of its two favorite sons honored with a statue in the Capitol. (That means the bust of Zachariah Chandler, a 19th century senator and early leader of the Republican Party, will have to go.)

FIRST BELL: It sounds at first like an unrealistically ambitious goal: writing in just 21 weeks a new law guiding federal influence over elementary and secondary education. But if there's any top-shelf domestic goal that could bring the parties together by this summer, it's overhauling No Child Left Behind.

Mainstream Republicans (the ones who don't want to shutter the Department of Education) give Obama more credibility and rhetorical

RRRR-8

support on education than any other policy. Given the profoundly weak political position that public-employee unions are in these days, there's every reason to believe the GOP and the administration will be able to brush back the teachers' unions at the margins. The deadline for rewriting the law is fast approaching. And last week both the GOP chairman of the House's education committee, Jon Kline, and his Senate Democratic counterpart, Tom Harkin, agreed to the accelerated timetable.

So it's very reasonable to bet that the president will be granted today's wish to put his pen down, after signing such a law, before the new school year begins.

The president's plan is essentially a revival of the package Education Secretary Arne Duncan released almost exactly a year ago. It calls for shifting the federal emphasis from proficiency testing in math and reading to measures that gauge gains in student achievement. It would expand formula funding but also boost spending on competitive grants such as the Race to the Top program. It would increase local control by providing greater flexibility for teachers and principals, support the nation's better teacher-preparation programs and offer incentives for the best teachers to serve in the neediest districts.

RELATIVELY QUIET: Congressional leaders have every reason to sound confident about their ability to brush past a pair of Republican obstacles and clear the three-week, $6 billion-in-cuts CR by the end of this week. Obama is confident enough in the outcome that he's planning to start a trip to South America on Friday, just hours before the government will shut down in the absence of another stopgap spending law.

In the House, GOP conservatives are annoyed that the bill they'll be called to pass tomorrow has no policy riders. They're especially keen to prevent funding of the health care overhaul, but few of them are likely to vote against the bill because that language is missing. And in the Senate, John McCain's drive to attach a comprehensive Defense appropriations bill to the CR will slow the debate, but it won't attract enough support to alter the legislation. That effort will likely be supported by many Republicans, and could slow down consideration of the CR extension in the Senate.

The call to use this CR to end all federal spending on public broadcasting appears to be fading, meanwhile, as many Republicans from rural areas are realizing that their constituents genuinely like the signals they get from PBS and NPR.

NOISE ON THE HORIZON: Conservative advocacy groups are worrying that their cause is losing momentum by allowing government operations to continue, more or less as is, for a few weeks at a time. And so a handful of them are pressing for "no" votes this week by declaring that they'll count the CR roll calls in their 2011 scorecards.

But the delay until April 8 pushes the budget debate ever-closer to the time when conservatives think they have their best leverage — the six-week-or-so window, which the Treasury says could open as early as April 15, when the Treasury will reach its $14.3 trillion borrowing limit.

McConnell asserted on "Fox News Sunday" that no Senate Republicans would vote for a stand-alone bill to raise the debt ceiling. Instead, it's "going to have to carry something with it that the markets, foreign countries, the American people believe is a credible effort to begin to get a handle on spending and debt," he said, although he declined to offer specifics.

But on the same show, "Gang of Six" deficit-reduction package negotiator Mark Warner said it was wrong to hold the debt hostage to a grand bargain on deficit reduction, which he suggested had no chance of being reached in a month or two. "I think we want to make sure we get it right more than some arbitrary timeline," he said.

OLD RELIABLES: Even as the mind-boggling dollar figures of the budget battle continue dominate their ideological interest, Republicans are working hard to bring their rhetorical focus down to a couple of familiar, politically ripe places that most voters can readily comprehend: job creation and energy prices.

Although the unemployment rate has slipped below 9 percent, anxiety about jobs remains high, which is a main reason why GOP leaders are trying a new round of message modification — by framing their agenda for fiscal discipline as a way to assure economic prosperity

over the long haul. They're also linking job security to gas prices by intensifying their drive for additional domestic energy production.

The focus has been on offshore oil drilling; an increase in nuclear energy production won't be part of the conversation now that post-earthquake Japan is in a nuclear plant crisis. One longtime leader of the pro-nuke side of the debate in the Senate, independent Joe Lieberman, called yesterday for a halt in nuclear power plant construction "until we understand the ramifications of what's happened in Japan." The most powerful pro-nuke Republican in the House, Energy and Commerce Chairman Fred Upton, said he would summon the head of the Nuclear Regulatory Commission to a heating this week to press him for assurances about the safety of American nuclear sites.

SOFT SELL: The Democratic base was a little bit annoyed when the president said nothing about gun control during his speech two months ago in Tucson after the Gabby Giffords shooting. In response, the White House signaled that the president would make a high-profile speech on the topic in the spring.

So it's unclear whether Obama's op-ed in yesterday's Arizona Daily Star will be substituting for that speech, or will mollify those who say the president remains too timid on the subject — lest he incite the wrath of cultural conservatives. The piece (which drew relatively little coverage in part because of all the focus on Japan) called for an "instant, accurate, comprehensive and consistent system for background checks" in order to "keep those irresponsible, law-breaking few from getting their hands on a gun in the first place."

HAPPY BIRTHDAY: GOP Sen. Tom Coburn of Oklahoma (63).

— David Hawkings, editor

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EDITOR'S PICKS FROM THE CQ ROLL CALL NEWSROOM

GOP Eyes New Jobs Message (Roll Call)

The party's leaders say they could be better at framing the current debate over spending as an economic issue. **» View full article**

Should Unionizing Be a Purely Private Right? (CQ Weekly)

The face-off between Republican governors and the public employee union rank and file appears to defy the normal compromises precisely because the GOP attack is calling into question the very legitimacy of the unions. **» View full article**

Broadcasters Face Angry Reception (Roll Call)

With officials from stations around the country preparing to converge on Capitol Hill the first week of April, the challenge to their lobbying agenda has grown exponentially. **» View full article**

GOP Spotlights Gas Prices (CQ Today)

The GOP offensive includes hearings by the House Natural Resources Committee on offshore drilling and the cost of filling up. **» View full article**

Momentum Drags for Fiscal Deal (CQ Today)

The simmering fight over some policy changes could threaten the behind-the-scenes negotiations on a longer-term bill to fund the government through September. **» View full article**

CONTACT THE EDITOR

David Hawkings
dailybriefing@cqrollcall.com

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From: Harrington, Holly
To: Commission Hearing Room
Subject: Declined: Logistics of Commission Meeting re: Japan

RRRR-9

From: Harrington, Holly
To: NATIONAL JIC
Subject: RE: DRAFT Japan Earthquake Q/As / NICCL Call - 10am (eastern)
Date: Thursday, March 17, 2011 11:32:00 AM

Does this question still need an answer or overcome by events?

From: NATIONAL JIC [mailto:NationalJIC@dhs.gov]
Sent: Wednesday, March 16, 2011 8:16 PM
To: Buffa, Nikki; NATIONAL JIC; Harrington, Holly
Cc: Strong, Jamie; Fetcher, Adam
Subject: RE: DRAFT Japan Earthquake Q/As / NICCL Call - 10am (eastern)

Holly, thoughts about the question below?

From: prvs=049ed9997=Nicole_Buffa@ceq.eop.gov
[mailto:prvs=049ed9997=Nicole_Buffa@ceq.eop.gov] **On Behalf Of** Buffa, Nikki
Sent: Wednesday, March 16, 2011 7:26 PM
To: NATIONAL JIC
Cc: Strong, Jamie
Subject: RE: DRAFT Japan Earthquake Q/As / NICCL Call - 10am (eastern)

We clear, with one note:

The two Qs and As are a bit confusing. Is NRC using the modeling described in the NOAA answer to make its determination? If so, they should clarify. If not, does NRC's modeling "trump" NOAA and DOE's modeling?

DOE Question 6

1. Will radioactive plumes reach US territory and if so when?
    a. According to the Nuclear Regulatory Commission, all the available information indicates weather conditions have taken the small releases from the Fukushima reactors out to sea away from the population. Given the thousands of miles between the two countries, Hawaii, Alaska, the U.S. Territories and the U.S. West Coast are not expected to experience any harmful levels of radioactivity in any of the situations that have been modeled – including worst case scenarios.

NOAA Question 2

1. Is NOAA mapping out possible radioactive plumes heading to the U.S.?
    a. As part of federal and international teams, NOAA contributes its own predictions of atmospheric transport patterns so that multiple predictions are available to assess the uncertainty in the plume forecasts. Other agencies combine the information on transport patterns with information about the amount of radiation released to determine whether and where hazardous conditions exist. NOAA's partners include US Department of Energy (DOE) and International Atomic Energy Agency. DOE is leading the federal team forecasting impacts of a radioactive release. In addition, NOAA is responsible for monitoring and predicting atmospheric issues that affect aviation safety within U.S.-managed airspace.

RRRR-10

From: Taylor, Robert
To: Harrington, Holly; McIntyre, David; Burnell, Scott
Subject: RE: Interview Request: USC NRC Report
Date: Thursday, March 17, 2011 2:12:18 PM

Talking Point for inquiries regarding the latest UCS report on US plants:

The NRC is aware that UCS issued a report today regarding the safety of U.S. nuclear power plants in 2010. With the NRC responding to events in Japan, we have not had time to review the report in depth. The NRC remains confident that our Reactor Oversight Program, which include both on-site and region-based inspectors, is effectively monitoring the safety of U.S. nuclear power plants.

From: Harrington, Holly
Sent: Thursday, March 17, 2011 1:51 PM
To: McIntyre, David; Burnell, Scott
Cc: Taylor, Robert
Subject: RE: Interview Request: USC NRC Report

Yes please

From: McIntyre, David
Sent: Thursday, March 17, 2011 1:49 PM
To: Harrington, Holly; Burnell, Scott
Cc: Taylor, Robert
Subject: RE: Interview Request: USC NRC Report

If Scott doesn't get here would you like me to put Rob on it?

From: Harrington, Holly
Sent: Thursday, March 17, 2011 1:19 PM
To: Burnell, Scott; McIntyre, David
Cc: Taylor, Robert
Subject: FW: Interview Request: USC NRC Report
Importance: High

I'm assuming we don't have a comment, but just checking to see if anyone has actually read the report enough to say anything.

From: Hannah, Roger
Sent: Thursday, March 17, 2011 12:59 PM
To: Harrington, Holly
Cc: Ledford, Joey
Subject: Fw: Interview Request: USC NRC Report
Importance: High

Do we have an "official" statement?
Roger Hannah, APR
Senior Public Affairs Officer
US Nuclear Regulatory Commission
Region 2, Atlanta, Ga.

This email is being sent from an NRC Blackberry device.

RRRR-11

From: Gura, David <dgura@americanpublicmedia.org>
To: Hannah, Roger
Sent: Thu Mar 17 12:56:27 2011
Subject: Interview Request: USC NRC Report

I'm a reporter for Marketplace, the public radio business/economics program.

I'm preparing a report for tomorrow's Marketplace Morning Report on the Union of Concerned Scientists report on The NRC and Nuclear Power Plant Safety in 2010.

Is anyone from the NRC available today, to comment on its findings? In lieu of that, have you issued a statement from which I could quote?

Thanks very much,
David Gura

--
DAVID GURA
Reporter, Marketplace
American Public Media

1750 K Street, NW, Suite 300
Washington, DC 20006

+1 202 263-0201 (office)
+1 202 263-0205 (facsimile)
dgura@marketplace.org
@davidgura

From: LIA02 Hoc
Sent: Saturday, March 19, 2011 8:24 AM
To: Schwartzman, Jennifer; LIA03 Hoc; Fragoyannis, Nancy; Doane, Margaret; Mamish, Nader; Abrams, Charlotte; Wittick, Brian; Afshar-Tous, Mugeh; 'ShafferMR@state.gov'; Smith, Brooke; Foggie, Kirk; Bloom, Steven; Tobin, Jennifer; Mayros, Lauren; Jones, Andrea; English, Lance; Smiroldo, Elizabeth; Young, Francis; Henderson, Karen; Ramsey, Jack; Shepherd, Jill
Subject: RE: 3/19/11 Morning Transition

See my other forwarded email.

Steve

From: Schwartzman, Jennifer
Sent: Saturday, March 19, 2011 8:10 AM
To: LIA03 Hoc; LIA02 Hoc; Fragoyannis, Nancy; Doane, Margaret; Mamish, Nader; Abrams, Charlotte; Wittick, Brian; Afshar-Tous, Mugeh; 'ShafferMR@state.gov'; Smith, Brooke; Foggie, Kirk; Bloom, Steven; Tobin, Jennifer; Mayros, Lauren; Jones, Andrea; English, Lance; Smiroldo, Elizabeth; Young, Francis; Henderson, Karen; Ramsey, Jack; Shepherd, Jill
Subject: RE: 3/19/11 Morning Transition

Also, can someone please forward the email re. the Chairman's meeting with Amb. Fujisaki to this group?

From: LIA03 Hoc
Sent: Saturday, March 19, 2011 7:13 AM
To: LIA02 Hoc; Fragoyannis, Nancy; Doane, Margaret; Mamish, Nader; Abrams, Charlotte; Wittick, Brian; Afshar-Tous, Mugeh; 'ShafferMR@state.gov'; Smith, Brooke; Foggie, Kirk; Bloom, Steven; Schwartzman, Jennifer; Tobin, Jennifer; Mayros, Lauren; Jones, Andrea; English, Lance; Smiroldo, Elizabeth; Young, Francis; Henderson, Karen; Ramsey, Jack; Shepherd, Jill
Subject: 3/19/11 Morning Transition

~~OFFICIAL USE ONLY~~ ~~OFFICIAL USE ONLY~~

TRANSITION REPORT FOR MARCH 19, 2011 7 AM
Danielle and Elizabeth transitioning to Steve and Lance

GENERAL NOTES. 1) Information pertinent to the team in Japan can be forwarded to new email group, which incorporates Dan Dorman already, "Liaison Japan," in Outlook. **2)** Action: International updates must now be sent to LIA07 (to be put in the HOO Status Update) before the end of every shift as well as posted on the LT status board (different than the LT Log). **3)** 11 PM – 7 AM shift is responsible for the summary call with Kirk and Brooke, scheduled daily at 5 AM EST unless rescheduled. **4)** Kirk and Brooke requested that the international team to sit in on calls with the ET and Chuck to take notes and provide a short summary of what was discussed via email. **5)** Reminder to include names on watch bill emails and inform Brooke and Kirk when shift changes.

1. **Summary of the meeting with Ambassador Fujisaki.** Elizabeth and Danielle sent out email describing the Chairman's 3/18/11 meeting with Ambassador Fujisaki. Jack will also forward this to any other members of the interagency not included in the Ops Center interagency email list.

RRRR/12

2. **Discussion with NISA's Emergency Operation Center.** Mr. Koyama and Mr. Sakkuma of NISA's International Office both spoke several times with interpreter Chris Field regarding NRC EOC interest in getting in touch with NISA's EOC. NISA's international office said they'd put us in touch, but needed to see the questions we had first. We send a list of questions compiled by RST and PMT. Later, Kirk Foggie said he would be meeting with NISA's EOC team on Sunday. He said he already had similar question (we also heard that Jack Foster was trying to have similar communication with TEPCO's EOC). We communicated what we had sent to the NISA team (with both Kirk and Jack). Kirk said he would obtain responses and forward them to the NRC EOC. The NISA EOC is prepared to follow up and talk with NRC EOC team members to clarify responses. Action: receive responses from Kirk and coordinate teleconference for follow-up technical exchange with the HQ RST and PMT.

3. **NRC Japan Team Feedback for Margie**. Friday shifts received feedback from Brooke and Kirk. Action: a one-pager has been started and is saved to the M:\LT\weekend notes from Brooke and Kirk.doc. This will be used by Margie during her 8:30am Monday morning meeting with the Chairman. During the week, this should be created nightly for the next day. Of particular interest is: general topic of discussion, position/organization of meeting participants, location of meeting, general impression of the discussion, attitude of Japanese, results, important things for the Chairman to know, etc. We are not looking for specific technical information.

4. **Saturday 2 PM Meeting with Industry, DOE, and Naval Reactors.** This meeting will include INPO, other industry, Pete Lyons, Naval reactors, etc., they will physically come to the Operations Center and Chuck Casto will call in. Briefing material has been created for the meeting and a Prep call has been set up for 7:45 AM. Elizabeth and Danielle started a spreadsheet, identifying relevant international players, their role, etc. Action: Continue with any updates necessary for the meeting. The spreadsheet is saved to M:\LT\Key Organizations.

5. **NRC Relief Team to Japan.** The NRC will be sending a relief team to Japan beginning tomorrow (Saturday, March 19). Dan Dorman will serve as deputy head of delegation (and ultimate replacement for Chuck Casto) and will arrive Sunday at 4:35pm (Japan time). Two more staff will depart on Monday to relieve Tony Ulses and Jim Trapp and a larger group will be dispatched Wednesday or Thursday. Aside from Dan Dorman, the group remains unnamed. Dan has been briefed. As of 9:20 pm, Tim Kolb (one of the team members) is feeling ill (headcold and laryngitis) it appears that he will be coming home this weekend (arrival at 3:38 Saturday). The international liaison desk will need to continue its role as liaison between NRC Ops Center and USAID on the details and making sure Dan (and future travelers) has everything he needs. Action: The Japan team has pointed out that Mr. Nakanishi forgot his business cards and asked us to provide Dan with cards for Mr. Nakanishi. We sent an email to Dan in order to verify he has dosimeter, and inquire whether he can come to NRC prior to his flight to pick up the business cards. The NSIR admin team has said they will make cards for Mr. Nakanishi, if Dan is available to pick them up.

6. **DOE Flyover Data.** DOE has released SitReps that include data from flyovers they've conducted. Mark Shaffer advises that the Ambassadors, and their counselors and Attaches from USA, Canada and UK (about 12 people), with whom he and Ambassador Davies have met each morning have heard of this data and would like it to be shared with them. Our DOE representative checked within their infrastructure with the reply that this type of decision is up to the National Security Council and so the Ambassador should work it up through the State Department. Mark responded that he didn't think the Ambassador would be interested in pursuing the NSC approval chain and noted that the other parties have already shared their information with us. The DOE liaison is not staffing the graveyard shift but when they return to the Ops Center, we should convey Mark's message to DOE.

7. **Ongoing communication with the UK**. The daily 0930 call with the UK, Canada and France to discuss current conditions at the plant will occur on the weekends as well. Seprately, this group has a call scheduled for 2:00 PM Saturday to discuss with PMT and source-term-related information sharing. has been. UK and IRSN have already shared information with us. We have shared NUREG 1465 with the group and have stated that we will share our source term data when it becomes available. PMT has

advised us that our data has changed and the Chairman must review it before it can be sent anywhere, including the federal family. This should not preclude us ultimately sharing it with our bilateral partners, as long as it includes the caveat about abiding by our bilateral arrangements (no sharing with third parties). There is an email distribution list flagged on the LIA02 inbox (red flag, yellow box) where it should be sent when the time comes. Action 1: Int'l liaison and RST should staff 0930 daily call on Saturday and Sunday. Action 2: Int'l liaison and PMT should staff 2:00 PM health physics call on Saturday and arrange any requested subsequent calls. Action 3: Stay in touch with PMT on when U.S. source term data can be shared.

8. **NHK Query concerning 2000 Sandia Test.** NHK (Japan TV), through NEA, has requested information about Sandia testing done in 2000 related to RPV strength related to pressure and blasts. Email was sent to RES (Dehn, Sangimino, Eisenberg, Calvo). RES has no objection but requested we clear it with OPA. David McIntyre shared the request with Eliot Brenner. We are awaiting response from Eliot. Once OPA clears off we can reply to NEA (notify ET for info). Followed-up with OPA on their response, then contacted Jeff Dehn in RES.

9. **IAEA Japan Team.** It was determined that the team consisted of DG Amano, Khammar Mrabit and 2 rad monitoring techs, but NRC and Mark Shaffer have been unsuccessful in obtaining names. Mark was pulsed again this evening around 8:00 EST. Action: If names are provided, give them to ET, then inform NRC Team in Japan. They had requested to meet with members of the IAEA team if possible.

10. **ENAC.** Please continue to regularly check ENAC for newly-posted documents. The translators are doing a great job working with the Japanese-language material and communicating with RST and PMT personnel.

11. **Conference Call with State. (+Fed. Family)** NRC on-site team gave a status update of their activities. Chuck Casto wanted help reducing the amount of radiation on the site and need help assessing the affect of seawater on the reactor vessel (and head) especially with regard to heat transfer. They are working on three different systems to cool the pools. The Australians are working on one (flying in equipment). The second one is the TEPCO solution which involves getting cement pumping trucks to pump water instead of cement. The third one is from Tokyo fire department who also have pump system that may be useful. U.S. believes that we should go forward with all 3 paths in the hopes that at least one of them work. They are fairly certain that pools at Units 3 and 4 are dry. Action: Same call tomorrow (Saturday, March 19 at 9:30EST)

~~OFFICIAL USE ONLY~~

From: Harrington, Holly
To: Tobin, Jennifer
Subject: RE: Email addys at Op Ctr Liaison room- fyi
Date: Thursday, March 17, 2011 3:30:00 PM

Thank hou!!!!

From: Tobin, Jennifer
Sent: Thursday, March 17, 2011 2:31 PM
To: Harrington, Holly
Subject: Email addys at Op Ctr Liaison room- fyi

Liaison Team Computer Assignments for Japanese Response

Computer Name	Assigned Desk
LIA06	LT Director
LIA08	LT Coordinator
LIA04	State Liaison Desk 1
OST05	State Liaison Desk 2
LIA09	LT Technical Advisor
LIA05	FEMA Liaison to the NRC
LIA01	Federal Liaison Desk 1
LIA11	Federal Liaison Desk 2
LIA12	Congressional Liaison Desk
LIA03	International Liaison Desk 1
LIA02	International Liaison Desk 2
LIA10	International Liaison Desk 3 (Interpreter)

RRR -13

From: Hardy, Sally
To: Harrington, Holly
Subject: RE: Call Center Hotline announcement
Date: Thursday, March 17, 2011 3:45:42 PM
Attachments: image004.png
image005.png

Sorry I feel your pain...

From: Harrington, Holly
Sent: Thursday, March 17, 2011 3:45 PM
To: Hardy, Sally
Subject: RE: Call Center Hotline announcement

sigh

From: Hardy, Sally
Sent: Thursday, March 17, 2011 3:41 PM
To: Hernandez, Pete; Harrington, Holly
Cc: Jarriel, Lisamarie
Subject: RE: Call Center Hotline announcement

This information is now live on the public web site:

http://www.nrc.gov/about-nrc/regulatory/allegations/safety-concern.html

thanks
Sally

From: Hernandez, Pete
Sent: Thursday, March 17, 2011 2:04 PM
To: Hardy, Sally; Harrington, Holly
Cc: Jarriel, Lisamarie
Subject: FW: Call Center Hotline announcement

Good afternoon Sally,

Regarding the voicemail I left with you yesterday, OPA has approved the addition of the box below, "Events in Japan", to the Report a Safety or Security Concern page on the external webpage. It should be placed where the red arrow below is pointing. Please let me know how I can expedite this process.

Thank you,

Pete Hernandez

From: Jarriel, Lisamarie
Sent: Wednesday, March 16, 2011 6:59 PM
To: Taylor, Nick; James, Lois; Petrosino, Joseph; Crutchley, Julie; Coker, Shyrl; Tabatabai, Omid; Witt, Kevin; Brown, Carrie; Urban, Richard; McFadden, John; Johnson, Sharon; DeMiranda, Oscar; Lewis, Shani; Checkle, Melanie; Heller, James; Pelke, Paul; Weaver, Judith
Cc: Hernandez, Pete
Subject: RE: Call Center Hotline announcement

RRR-14

Guys, here is what OPA wants added right under "Report a Safety or Security Concern". I'll let you know when it's up.

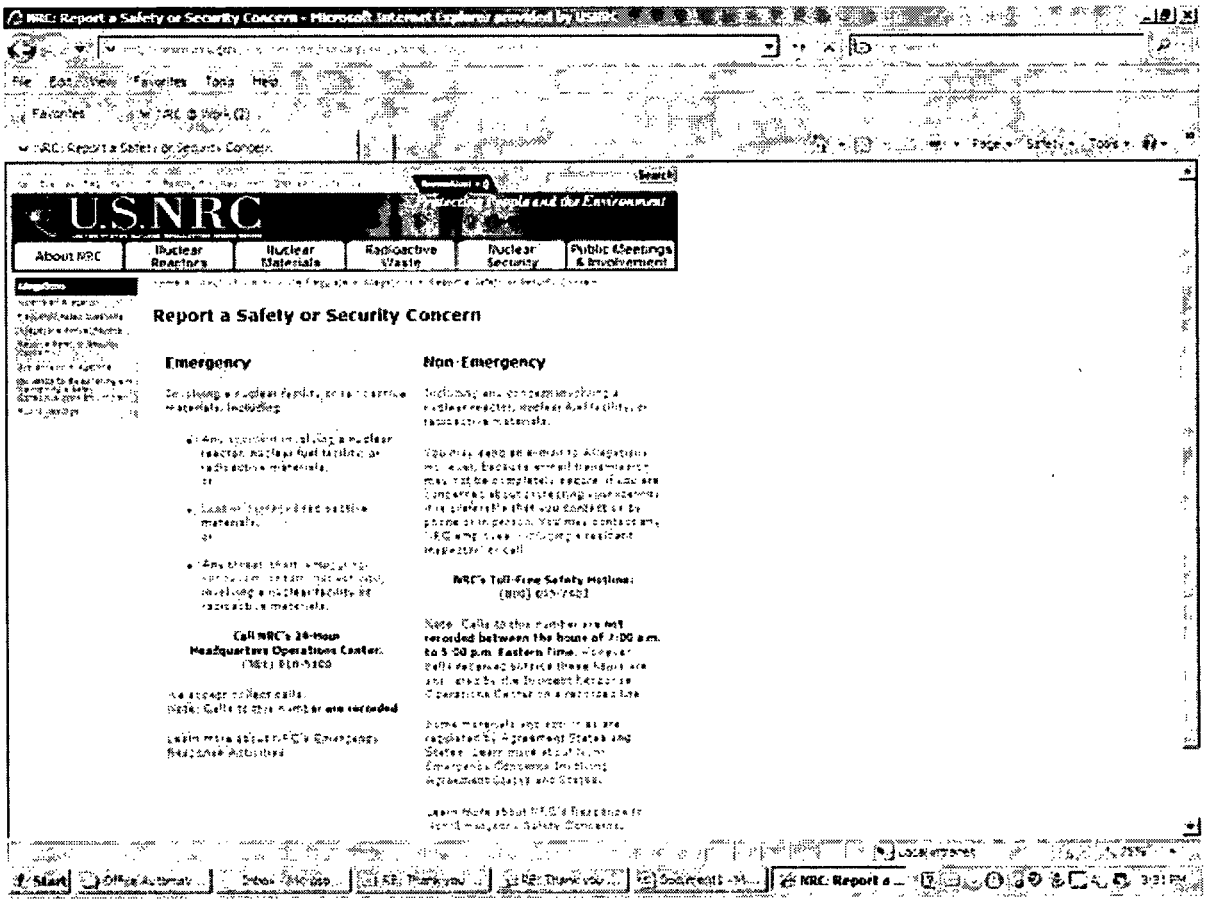
★★★★★★★★★★

Events in Japan

For general questions related to the Japanese reactor events and their potential impact on US facilities please see the NRC's latest press releases at www.nrc.gov or email opa.resource@nrc.gov.

Individuals with a specific nuclear safety concern related to an NRC facility, please see the instructions below.

★★★★★★★★★★



From: Taylor, Nick
Sent: Wednesday, March 16, 2011 4:47 PM
To: Jarriel, Lisamarie; James, Lois; Petrosino, Joseph; Crutchley, Julie; Coker, Shyrl; Tabatabai, Omid; Witt, Kevin; Brown, Carrie; Urban, Richard; McFadden, John; Johnson, Sharon; DeMiranda, Oscar; Lewis, Shani; Checkle, Melanie; Heller, James; Pelke, Paul; Weaver, Judith
Subject: RE: Call Center Hotline announcement

Excellent! When will it go on the website?

Nick

From: Jarriel, Lisamarie
Sent: Wednesday, March 16, 2011 3:16 PM
To: James, Lois; Petrosino, Joseph; Crutchley, Julie; Coker, Shyrl; Tabatabai, Omid; Witt, Kevin; Brown, Carrie; Urban, Richard; McFadden, John; Johnson, Sharon; DeMiranda, Oscar; Lewis, Shani; Checkle, Melanie; Heller, James; Pelke, Paul; Taylor, Nick; Weaver, Judith
Subject: Call Center Hotline announcement

Gang,

Take a quick look at the proposed addition to our "Report a Safety Concern" web page pointing concerned individuals to the newly established hotline for Japan-related issues and provide any comments for improvement.

We (OE) is making the necessary calls to OIS and OPA to get their approval.

Thanks for the suggestion Nick,

Lisa

★★★★★★★★★★

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Individuals with a specific nuclear safety concern related to an NRC facility, please see the instructions below.

★★★★★★★★★★

From:	Hardy, Sally
To:	Harrington, Holly
Subject:	RE: Call Center Hotline announcement
Date:	Thursday, March 17, 2011 3:34:01 PM
Attachments:	image004.png image005.png

SMILE

From: Harrington, Holly
Sent: Thursday, March 17, 2011 3:34 PM
To: Hardy, Sally
Subject: RE: Call Center Hotline announcement

Ha, as far as I'm concerned take your time

From: Hardy, Sally
Sent: Thursday, March 17, 2011 2:47 PM
To: Hernandez, Pete; Harrington, Holly
Cc: Jarriel, Lisamarie
Subject: RE: Call Center Hotline announcement

We will add the box now and we will let you know as soon as its live.

Sally

From: Hernandez, Pete
Sent: Thursday, March 17, 2011 2:04 PM
To: Hardy, Sally; Harrington, Holly
Cc: Jarriel, Lisamarie
Subject: FW: Call Center Hotline announcement

Good afternoon Sally,

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Thank you,

Pete Hernandez

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Cc: Hernandez, Pete
Subject: RE: Call Center Hotline announcement

Guys, here is what OPA wants added right under "Report a Safety or Security Concern". I'll let you know when it's up.

RRRR-15

★★★★★★★★★★

Events in Japan

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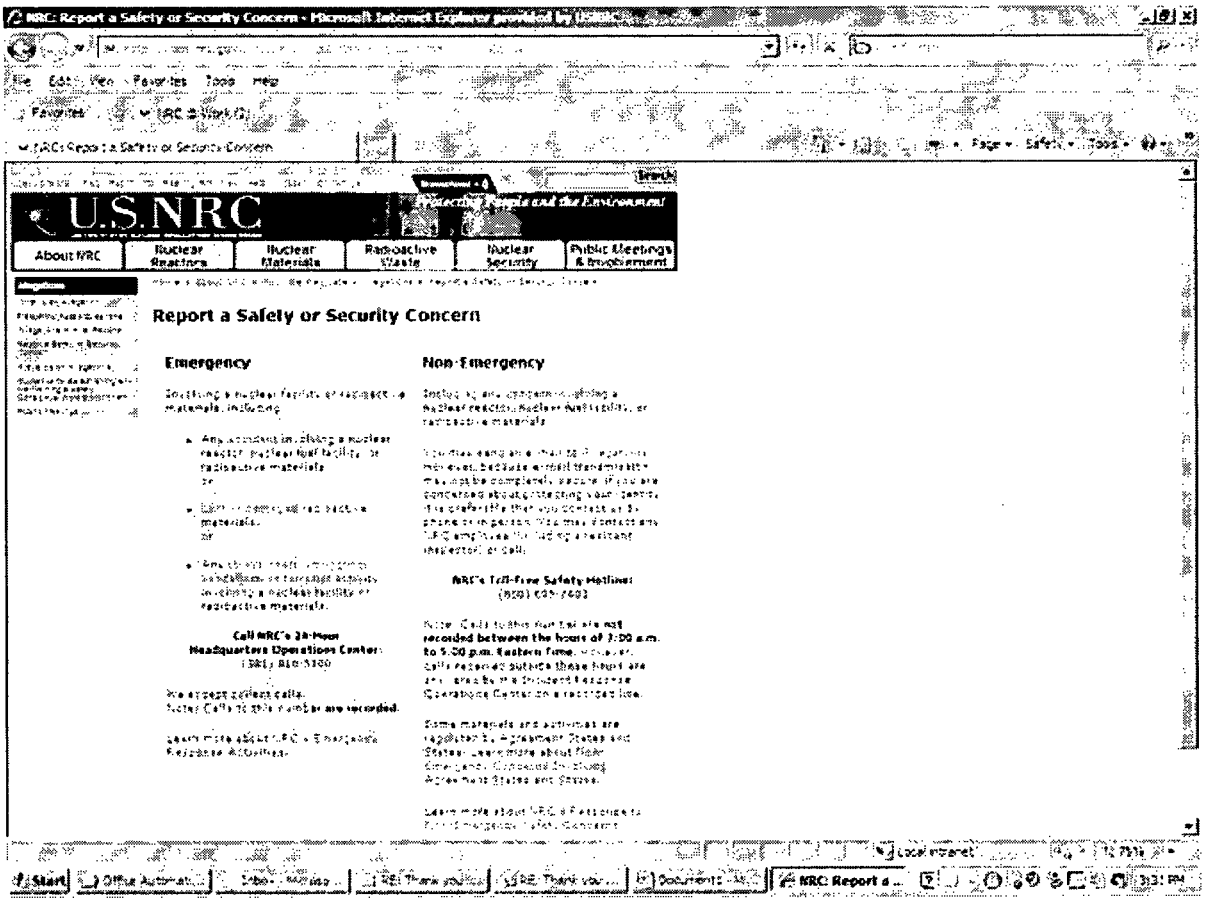
Individuals with a specific nuclear safety concern related to an NRC facility, please see the instructions below.

★★★★★★★★★★



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Thanks for the suggestion Nick,

Lisa

★★★★★★★★★★

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Individuals with a specific nuclear safety concern related to an NRC facility, please see the instructions below.

★★★★★★★★★★

From: Harrington, Holly
To: Tobin, Jennifer
Subject: RE: technical data request
Date: Thursday, March 17, 2011 3:52:00 PM

Not public, sorry

From: Tobin, Jennifer
Sent: Thursday, March 17, 2011 3:47 PM
To: Harrington, Holly
Subject: FW: technical data request

This gentleman is a Certified Health Physicist and wants access to the RASCAL and NARC data that our PMT room is using so that he can do his own analysis for the safety of his workers (he wasn't satisfied with our public information). Do we have any of this technical data that we can share or point him to someone else?

Sorry to bug you with this one!
-Jenny

From: Shannon, Valerie
Sent: Thursday, March 17, 2011 3:35 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call

Name: Matt Arno, Health Physicist
From: Fox Fire Scientific (consulting firm)
Phone: 817-995-6762
E-mail: Arno@foxfirescientific.com
Re: Japan

Val

RRRR-16

From: Harrington, Holly
To: Deavers, Ron
Cc: Bonaccorso, Amy
Subject: RE: Susan Pickering - Senior Manager of Nuclear Safety Technology Group of Sandia National Laboratories
Date: Thursday, March 17, 2011 3:52:00 PM

We'll handle here

From: Deavers, Ron
Sent: Thursday, March 17, 2011 3:50 PM
To: Harrington, Holly
Cc: Bonaccorso, Amy
Subject: FW: Susan Pickering - Senior Manager of Nuclear Safety Technology Group of Sandia National Laboratories
Importance: High

Holly,

Susan (and Sandia) are getting request fro information that require approval from OPA to release.

From: Ghneim, Munira
Sent: Thursday, March 17, 2011 3:26 PM
To: Deavers, Ron
Subject: Susan Pickering - Senior Manager of Nuclear Safety Technology Group of Sandia National Laboratories

Organization - Nuclear Safety Technology Group of Sandia National Laboratories
Contact – Susan Pickering
Phone – 505-284-4800
Email – sypicke@sandia.gov
Request – For emergency technology information

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

RRR-17

From: McIntyre, David
To: Ridge, Christianne; Harrington, Holly
Cc: Tobin, Jennifer
Subject: RE: West Coast Radiation Exposure
Date: Thursday, March 17, 2011 5:20:33 PM

Christianne – I suggest you consult an HP on the Protective Measures Team. Vince Holohan and Don Cool are my go-to guys.

From: Ridge, Christianne
Sent: Thursday, March 17, 2011 5:10 PM
To: McIntyre, David; Harrington, Holly
Cc: Tobin, Jennifer
Subject: RE: West Coast Radiation Exposure

Dave/Holly, I'm sorry to come back to you on this, but these would be extremely high doses for the unevacuated population, even at 30 miles, if they occur every 16 hours. I can the individual I don't have more information at this time unless we can confirm.

From: McIntyre, David
Sent: Thursday, March 17, 2011 3:45 PM
To: Harrington, Holly
Cc: Ridge, Christianne
Subject: RE: West Coast Radiation Exposure

No, that's really just a glossary. I'm told the time span was 16 hours.

From: Harrington, Holly
Sent: Thursday, March 17, 2011 3:31 PM
To: McIntyre, David
Subject: FW: West Coast Radiation Exposure

Does the PMT thingee you e-mailed around earlier address this question?

From: Ridge, Christianne
Sent: Thursday, March 17, 2011 2:31 PM
To: Harrington, Holly
Subject: FW: West Coast Radiation Exposure

Holly, we got a follow-up question about the table in the 3/16 press release. Can the folks who gave you the shed some light?
Thanks.

From: Peter Chang [mailto:pchang@sagientresearch.com]
Sent: Thursday, March 17, 2011 1:42 PM
To: Ridge, Christianne
Subject: West Coast Radiation Exposure

Hi Christianne,

I believe I was speaking with you earlier today on the NRCs estimates for West Coast radiation exposure from Japan. Just had a question on the press release and chart you had referred me to (http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-050_Attchmt.pdf), giving levels closer to

RRRR-18

the reactor site. Are the T EDE (Total Effective Dose Equivalent) maximum dose (rem) levels in that chart just instantaneous/continuous measures, or is that over a unit of time, and if so, what unit?

Thanks very much.

Peter Chang, MD
Sagient Research Systems
3655 Nobel Drive Suite 540
San Diego, CA 92122
Tel: (858) 200-2347
Fax: (858) 623-1601

From: Shoop, Undine
To: Harrington, Holly
Subject: RE: dose chart that might be useful
Date: Thursday, March 17, 2011 4:06:12 PM

Sorry I should have been more clear. It would be more for the OPA folks to use as a reference.
It is not public friendly but I keep a copy by my desk so when something comes up, I can glance at it and quickly find the information.

From: Harrington, Holly
Sent: Thursday, March 17, 2011 3:35 PM
To: Shoop, Undine
Subject: RE: dose chart that might be useful

Oh my. That's not going to make sense to anyone in the public . . .

From: Shoop, Undine
Sent: Thursday, March 17, 2011 2:50 PM
To: Harrington, Holly
Subject: dose chart that might be useful

Holly,

This is the link to the DOE dose chart. It is one stop shopping for NRC, DOE, and DHS dose limits and the biological effects of doses. My branch gave me a laminated copy when I came to the branch and it is really useful for a quick check.

http://lowdose.energy.gov/pdf/DoseRanges.pdf

Undine Shoop
Chief, Health Physics and Human Performance Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation
301-415-2063

RRRR-19

From: Tobin, Jennifer
To: Harrington, Holly
Subject: RE: technical data request
Date: Thursday, March 17, 2011 3:57:05 PM

Dear Matt,
I talked with staff on our Protective Measures Team and they informed me that the information that you requested is not available outside the Federal government at this time. The NRC Chairman has testified before Congress (yesterday) stating that we in the U.S. (including Alaska and Hawaii) are not expected to experience any harmful levels of radioactivity. I'm sorry that I don't have more information available.

Thank you for your inquiry,
-Jenny

From: Shannon, Valerie
Sent: Thursday, March 17, 2011 3:35 PM
To: Bonaccorso, Amy; Deavers, Ron
Subject: Call

Name: Matt Arno, Health Physicist
From: Fox Fire Scientific (consulting firm)
Phone: 817-995-6762
E-mail: Arno@foxfirescientific.com
Re: Japan

Val

RRRR- 20

From: Decker, David
To: Harrington, Holly
Subject: RE: Video of Yesterday"s Energy and commerce Hearing
Date: Thursday, March 17, 2011 4:00:43 PM

Thanks Holly. The link to yesterday's hearing is the fifth one down in that hearings list.

From: Harrington, Holly
Sent: Thursday, March 17, 2011 3:55 PM
To: Decker, David
Subject: RE: Video of Yesterday's Energy and commerce Hearing

I am not personally trying. Not sure if anyone here has been tasked with that. It's news to me. I do not know what to tell you about it. May ask Eliiot?

Is the link the first one about DOE budget . . .not a good name . . .

From: Decker, David
Sent: Thursday, March 17, 2011 3:53 PM
To: Harrington, Holly
Subject: Video of Yesterday's Energy and commerce Hearing

Holly,
The House Committee on Energy and Commerce web-site now has a link to the hearing on its website at www.energycommerce.house.gov/hearings Hopefully the quality may work to have a link to it from our web-site (but I'm not optimistic it will). They are still going to provide a dvd of the hearing – and say it should be ready tomorrow (when I can pick it up).

On a different topic about the hearing, it seems like all the staffers want the transcript of the Chairman's oral statement at the Energy and Commerce hearing. Becky said you were trying to get that? If so, if we could get a copy, or link to it, for the staffers that would be great!

Thanks.

David

RRRR-21

From: Harrington, Holly
To: Couret, Ivonne
Subject: RE: Media - Question
Date: Thursday, March 17, 2011 4:19:00 PM

I don't know what we want to do. Hold and discuss with eliot and some point

---

From: Couret, Ivonne
Sent: Thursday, March 17, 2011 4:01 PM
To: Harrington, Holly
Subject: FW: Media - Question
Importance: High

I've offered her NRC Ops Center b-roll – They want to video at NRC TTC location with trainers...can you follow up different then Chairmen et.al. Ivonne

Ivonne L. Couret
Public Affairs Officer
Office of Public Affairs
Media Desk
opa.resource@nrc.gov
301-415-8200

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

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

From: Royer, Deanna
Sent: Thursday, March 17, 2011 3:34 PM
To: Couret, Ivonne
Subject: Media - Question

Rozalia Haristova
BBC Television – DC
Rozalia.haristova@bbc.co.uk
202-460-6723
Re: film of training center

Deanna Royer
Contract Secretary
301-415-8200

RRRR-22

From: Mullins, Alicia
To: Harrington, Holly
Subject: RE: assignment
Date: Thursday, March 17, 2011 4:17:40 PM

Holly sorry to hear that. If you happen to get a break please come again.- Alicia

---

From: Harrington, Holly
Sent: Thursday, March 17, 2011 3:36 PM
To: Mullins, Alicia
Subject: RE: assignment

Alicia – I am so sorry, but I will not be able to complete the class. I work in OPA and given the Japanese situation, I am not able to continue. I'm sorry. I enjoyed it!

From: Mullins, Alicia
Sent: Thursday, March 17, 2011 3:05 PM
To: Boyd, NancyTurner; Bradbury, John; Davis, Desiree; Dent, Kimberly; Gerke, Laura; Hamilton, Brandi; Harrington, Holly; Kerben, Valerie; Lindsay, Haile; Steger (Tucci), Christine; Warren, Brenett; Wyatt, Melissa; Yarsky, Peter
Subject: assignment

ASL Level II,

Today (3/17) we learned new signs from Chapter 2, reviewed Chapter 4, started worksheet #4 and watched Melissa sign a children's book.

For (3/24) we will review Chapter 2 and learn signs from Chapter 10. Please bring your worksheets #3 and #4 for review. Another team needs to read "sign" a book to the class.

3/31 class we will have a potluck lunch. Start thinking of the food(s) you want to share and learn the signs.

Alicia

Alicia Mullins
American Sign Language Instructor - Level II
signlanguageclub@nrc.gov
VP: 301-703-0989

RRRR-23

From: Harrington, Holly
To: Ousley, Elizabeth
Subject: RE: question
Date: Thursday, March 17, 2011 4:27:00 PM

OK good

From: Ousley, Elizabeth
Sent: Thursday, March 17, 2011 4:20 PM
To: Harrington, Holly
Subject: RE: question

I can see it.

Liz Ousley
Branch Chief, Enterprise Architecture & Standards Branch (EASB)
Business Process Improvement and Applications Division (BPIAD)
301-415-8378

From: Harrington, Holly
Sent: Thursday, March 17, 2011 4:19 PM
To: Ousley, Elizabeth
Subject: question

I can't access this from my computer, but want to make sure if I post it as a link that others will be able to see it . . .

http://www.energycommerce.house.gov/hearings/hearingdetail.aspx?NewsID=8329

RRRR-24

From: Webber, Robert
Sent: Sunday, March 20, 2011 8:26 PM
To: LIA06 Hoc
Subject: FW: Update

From: Wiggins, Jim
Sent: Sunday, March 20, 2011 2:47 PM
To: Borchardt, Bill
Cc: Sheron, Brian; Bergman, Thomas; Webber, Robert
Subject: FW: Update

Not getting closure on the question of phone call participants.

Need some help.

Brian Sheron is taking over and needs the answer.

I'm going fwd with the NR, INPO, DOE, AID, idea at least for now and we can add thru the evening.

From: Doane, Margaret
Sent: Sunday, March 20, 2011 2:34 PM
To: Wiggins, Jim; Sheron, Brian
Subject: Fw: Update

Fyi see below

Sent from an NRC Blackberry
Margaret Doane

From: Doane, Margaret
To: Borchardt, Bill
Sent: Sun Mar 20 14:31:01 2011
Subject: Re: Update

Yes. These are just recommendations. Thought you would interface. Would you like me to go to him directly.
NSC leads all of our interagency efforts and DOS is going to need to be aware of this.
Margie

Sent from an NRC Blackberry
Margaret Doane

From: Borchardt, Bill
To: Doane, Margaret
Sent: Sun Mar 20 14:27:33 2011
Subject: Re: Update

R RRR/25

Margie,
Thanks for the good ideas. It's the Chairman's telephone call so you probably need his buy-in.
Bill Borchardt
Via blackberry

From: Doane, Margaret
To: Borchardt, Bill; Wiggins, Jim; Sheron, Brian
Cc: Weber, Michael; Virgilio, Martin; Mamish, Nader
Sent: Sun Mar 20 14:24:00 2011
Subject: Re: Update

OIP would suggest that on line for NRC call tomorrow add NSC and DOS(Washington), with NSC to decide lead US agency. Do not have clear picture of any US AID role.

In a few minutes I'll send another note with added considerations.
Margie

Sent from an NRC Blackberry
Margaret Doane

From: Borchardt, Bill
To: Wiggins, Jim
Cc: Weber, Michael; Virgilio, Martin; Doane, Margaret
Sent: Sun Mar 20 11:24:17 2011
Subject: FW: Update

Please have someone set up the call

From: Jaczko, Gregory
Sent: Sunday, March 20, 2011 11:15 AM
To: Borchardt, Bill
Cc: Batkin, Joshua; Weber, Michael; Virgilio, Martin; Wiggins, Jim
Subject: Re: Update

Set up the pre 2 pm call and include ellis and usaid(??)

From: Borchardt, Bill
To: Jaczko, Gregory
Cc: Batkin, Joshua; Weber, Michael; Virgilio, Martin; Wiggins, Jim
Sent: Sun Mar 20 11:12:17 2011
Subject: Update

Chairman,

1) Just got off the phone with Bill Webster (INPO). INPO has committed to send 2 industry people with logistics type experience to Japan to begin enhanced interactions with TEPCO. They are expected to leave tonight or Monday. I assured him that our in-country team (and the embassy) would help establish points of contact between the US industry reps and the TEPCO/Japan reps.
2) I believe that you are going to have to weigh in on the subject of identifying a lead US Government entity that has the necessary project management and logistics expertise. I raised the topic at the "consortium" meeting Saturday afternoon and privately with DOE (Pete Lyons) and the Naval Reactors representative but did not make any headway. Everyone seems to agree that NRC does not have the necessary skill set but neither of those 2 organizations were immediately willing to assume that

role. There is a 2pm Monday status update teleconference being set up for consortium participants. It might be useful if you, DOE, and ADM Donald could talk before the 2pm call.

Bill

From: Bonaccorso, Amy
To: Harrington, Holly
Cc: Tobin, Jennifer; Ridge, Christianne; Deavers, Ron
Subject: FYI - concerns about Radnet not being public friendly
Date: Thursday, March 17, 2011 4:28:19 PM

Holly:

Christianne just explained to me.....

RadNet isn't all it's cracked up to be. People have to go through a registration process and the Web site does not give dose. It gives a lot of highly technical information that the public would have no chance of interpreting. We had someone go to that site and email us back with the info for an interpretation...so essentially he was going around in a circle...

It also doesn't give info about EPA's monitoring of milk, etc.

It's what is available – but I guess we just need to be careful about promoting it as a public friendly Web site with a lot of information that is easy to understand.

Thanks,

Amy

RRRR-26

From: McIntyre, David
To: Harrington, Holly; Taylor, Robert; Widomski, Michael; Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Hayden, Elizabeth; Chandrathil, Prema; Dricks, Victor; Hannah, Roger; Ledford, Joey; Mitlyng, Viktoria; Screnci, Diane; Sheehan, Neil; Uselding, Lara
Subject: RE: Plume Questions
Date: Thursday, March 17, 2011 4:28:35 PM

Yes, in the conference call with the state rad directors, Josie Piccone mentioned that DOE has been designated as lead agency for monitoring effort in the US. I'm updating the Talking Points accordingly and will add this number.

From: Harrington, Holly
Sent: Thursday, March 17, 2011 4:26 PM
To: Taylor, Robert; Widomski, Michael; Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Hayden, Elizabeth; McIntyre, David; Chandrathil, Prema; Dricks, Victor; Hannah, Roger; Ledford, Joey; Mitlyng, Viktoria; Screnci, Diane; Sheehan, Neil; Uselding, Lara
Subject: Plume Questions

Send plume questions to DOE: 202 586 4940

Per DHS! Yah. We finally have some help!!

RRRR-27

From: Harrington, Holly
To: Mitlyng, Viktoria
Subject: RE: Plume Questions
Date: Thursday, March 17, 2011 5:15:00 PM

Long overdue!!

From: Mitlyng, Viktoria
Sent: Thursday, March 17, 2011 4:46 PM
To: Harrington, Holly; Taylor, Robert; Widomski, Michael; Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Hayden, Elizabeth; McIntyre, David; Chandrathil, Prema; Dricks, Victor; Hannah, Roger; Ledford, Joey; Screnci, Diane; Sheehan, Neil; Uselding, Lara
Subject: RE: Plume Questions

Congratulations on the amazing accomplishment!

From: Harrington, Holly
Sent: Thursday, March 17, 2011 3:26 PM
To: Taylor, Robert; Widomski, Michael; Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Hayden, Elizabeth; McIntyre, David; Chandrathil, Prema; Dricks, Victor; Hannah, Roger; Ledford, Joey; Mitlyng, Viktoria; Screnci, Diane; Sheehan, Neil; Uselding, Lara
Subject: Plume Questions

Send plume questions to DOE: 202 586 4940

Per DHS! Yah. We finally have some help!!

RRRR - 28

From: McIntyre, David
To: Harrington, Holly
Subject: QUAKE_TP_3_17.docx
Date: Thursday, March 17, 2011 4:35:46 PM
Attachments: QUAKE_TP_3_17.docx

Could you please look these over? Additions are in red. I need to check to see if the SFP info is current.

RRRR-29

Quake_TP_3_17.docx

OPA

TALKING POINTS

JAPAN NUCLEAR SITUATION

As of 3/17/2011 4:15 p.m. EDT

Update: Addition of bullets on expanding EPZ to 50 miles, and response to news report ranking plants by vulnerability to earthquakes.

- Based on calculations performed by NRC experts, we now believe that it is appropriate for U.S. residents within 50 miles of the Fukushima reactors to evacuate. Our recommendation is based on NRC guidelines for public safety that would be used in the United States under similar circumstances.

- The 10-mile EPZ reflects the area expected to be affected by design basis accidents at nuclear power plants, and we are confident that it would be adequate even for severe accidents. However, the 10-mile zone was always considered a base for emergency response that could be expanded if the situation warranted. The situation in Japan, with four reactors experiencing exceptional difficulties simultaneously, creates the need to expand the EPZ beyond the normal 10-mile radius.

  We have said from the beginning of this crisis that the NRC would analyze this situation for any lessons that can be derived to improve our oversight of U.S. nuclear power plants. Emergency protection planning will be part of that review.

- Given the results of the monitoring and distance between Japan and Hawaii, Alaska, U.S. Pacific Territories and the U.S. West Coast, the NRC expects the U.S. to avoid any harmful levels of radioactivity. The NRC is aware of various internet postings depicting modeled radiation plumes for the ongoing events at the nuclear power plants in Japan. All of the models the NRC has seen are based on generic assumptions regarding the potential radiation release from the plants and as such are unable to predict actual radiation levels away from the site. The NRC is working closely with our federal partners to monitor radiation releases from the Japanese nuclear power plants.

- The NRC is working with other U.S. agencies to monitor radioactive releases from Japan and to predict their path.

- The NRC continues to believe, based on all available information, that the type and design of the Japanese reactors, combined with how events have unfolded, will prevent radiation at harmful levels from reaching U.S. territory.

- The Department of Energy has been designated the lead agency for communicating information to the States regarding monitoring of radiation heading toward or over the United States. The DOE's Lawrence Livermore National Laboratory (National Atmospheric Release Assessment Center) is monitoring weather patterns over the Pacific Ocean. The Environmental Protection Agency maintains air monitoring stations throughout the country and has reinforced its monitoring effort. DOE will provide aerial monitoring. Questions about this effort should be directed to DOE at 202 586 4940.

- [Status as of 7:00pm on 3/16] The NRC is closely monitoring the condition of the spent fuel pools at the Japanese nuclear power plants. Our current understanding, which is based on the best available information provided to NRC reactor experts in Japan, is the following:

- Unit 4 – The SFP is likely dry and the integrity of the spent fuel pool is in question.
- Units 2 & 3 – Steam is escaping which indicates that boiling is likely occurring in the spent fuel pool. The current water level of the pool is uncertain.
- Unit 1 – The status of the SFP is unknown.

- In accordance with established protocols, U.S. Customs and Border Protection (CBP) employs several types of radiation detection equipment in its operations at both air and sea ports, and uses this equipment, along with specific operational protocols, to resolve any security or safety risks that are identified with inbound travelers and cargo. Out of an abundance of caution, CBP has issued field guidance reiterating its operational protocols and directing field personnel to specifically monitor maritime and air traffic from Japan. CBP will continue to evaluate the potential risks posed by radiation contamination on inbound travelers and cargo and will adjust its detection and response protocols, in coordination with its interagency partners, as developments warrant.

- The Japanese government has formally asked for U.S. assistance in responding to nuclear power plant cooling issues triggered by an earthquake and tsunami on March 11. The NRC has eleven staff on the ground in Japan as part of the USAID team.

- The NRC is coordinating its actions with other federal agencies as part of the U.S. government response. The NRC's headquarters Operations Center was activated at the beginning of the event and has been monitoring the situation on a 24-hour basis ever since.

- The NRC is always looking to learn information that can be applied to U.S. reactors and we will analyze the information that comes from this incident. President Obama has directed the agency to conduct a comprehensive review of the safety of U.S. nuclear plants; the agency will do so.

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

- The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the limitations on historical data. In other words, U.S. nuclear power plants are designed to be safe based on historical data to predict the area's maximum credible earthquake.

- In response to MSNBC report ranking US NPPs according to vulnerability to earthquakes: The NRC does not rank nuclear power plants according to their vulnerability to earthquakes. This "ranking" was developed by an MSNBC reporter using partial information and an even more partial understanding of how we evaluate plants for seismic risk. Each plant is evaluated individually according to the geology of its site, not by a "one-size-fits-all" model - therefore such rankings or comparisons are highly misleading.

From: RMTPACTSU_ELNRC
To: LIA11_Hoc; LIA01_Hoc; LIA07_Hoc; LIA02_Hoc; LIA08_Hoc; LIA12_Hoc; ET07_Hoc; Marshall, Jane; Harrington, Holly; McIntyre, David; Grant, Jeffery
Subject: Remarks by the President on the Situation in Japan
Date: Thursday, March 17, 2011 4:40:37 PM
Attachments: FW Japan Embassy pt. 2.msg

Subject: FW: Remarks by the President on the Situation in Japan

Please see the President's remarks below

Below is the POTUS statement on Japan. He also visited the Japanese Embassy this afternoon to offer condolences (pool reports are attached for color)

From: White House Press Office [mailto:noreply@messages.whitehouse.gov]
Sent: Thursday, March 17, 2011 4:12 PM
To: Trienens, Lillian (E&E.AA)
Subject: Remarks by the President on the Situation in Japan

THE WHITE HOUSE
Office of the Press Secretary

For Immediate Release March 17, 2011

REMARKS BY THE PRESIDENT
ON THE SITUATION IN JAPAN

Rose Garden

3:35 P.M. EDT

THE PRESIDENT: Good afternoon, everyone. Over the last several days, the American people have been both heartbroken and deeply concerned about the developments in Japan.

We've seen an earthquake and tsunami render unimaginable -- an unimaginable toll of death and destruction on one of our closest friends and allies in the world. And we've seen this powerful natural disaster cause even more catastrophe through its impact on nuclear reactors that bring peaceful energy to the people of Japan.

Today, I wanted to update the American people on what we know about the situation in Japan, what we're doing to support American citizens and the safety of our own nuclear energy, and how we are helping the Japanese people contain the damage, recover and rebuild.

First, we are bringing all available resources to bear to closely monitor the situation, and to protect American citizens who may be in harm's way. Even as Japanese responders continue to do heroic work, we know that the damage to the nuclear reactors in Fukushima Daiichi plant poses a substantial risk to people who are nearby. That is why yesterday, we called for an evacuation of American citizens who are within 50 miles of the plant. This decision was based upon a careful scientific evaluation and the guidelines that we would use to keep our citizens safe here in the United States, or anywhere in the world.

RRR-30

Beyond this 50-mile radius, the risks do not currently call for an evacuation. But we do have a responsibility to take prudent and precautionary measures to educate those Americans who may be endangered by exposure to radiation if the situation deteriorates. That's why last night I authorized the voluntary departures of family members and dependents of U.S. officials working in northeastern Japan.

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

Second, I know that many Americans are also worried about the potential risks to the United States. So I want to be very clear: We do not expect harmful levels of radiation to reach the United States, whether it's the West Coast, Hawaii, Alaska, or U.S. territories in the Pacific. Let me repeat that: We do not expect harmful levels of radiation to reach the West Coast, Hawaii, Alaska, or U.S. territories in the Pacific. That is the judgment of our Nuclear Regulatory Commission and many other experts.

Furthermore, the Centers for Disease Control and Prevention and public health experts do not recommend that people in the United States take precautionary measures beyond staying informed. And going forward, we will continue to keep the American people fully updated -- because I believe that you must know what I know as President.

Here at home, nuclear power is also an important part of our own energy future, along with renewable sources like wind, solar, natural gas and clean coal. Our nuclear power plants have undergone exhaustive study, and have been declared safe for any number of extreme contingencies. But when we see a crisis like the one in Japan, we have a responsibility to learn from this event, and to draw from those lessons to ensure the safety and security of our people.

That's why I've asked the Nuclear Regulatory Commission to do a comprehensive review of the safety of our domestic nuclear plants in light of the natural disaster that unfolded in Japan.

Finally, we are working aggressively to support our Japanese ally at this time of extraordinary challenge. Search and rescue teams are on the ground in Japan to help the recovery effort. A disaster assistance and response team is working to confront the aftermath of the earthquake and tsunami. The U.S. military, which has helped to ensure the security of Japan for decades, is working around the clock.

To date, we've flown hundreds of missions to support the recovery efforts, and distributed thousands of pounds of food and water to the Japanese people. We've also deployed some of our leading experts to help contain the damage at Japan's nuclear reactors. We're sharing with them expertise, equipment, and technology so that the courageous responders on the scene have the benefit of American teamwork and support.

And the American people have also opened up their hearts. Many have given generously to support the ongoing relief

efforts. The Red Cross is providing assistance to help meet the immediate needs of those who've been displaced. And I would encourage anybody who wants to lend a hand to go to usaid.gov to learn more -- that's usaid.gov -- to find out how you can be helpful.

As I told Prime Minister Kan last night, and reaffirmed at the Japanese embassy here in Washington today, the Japanese people are not alone in this time of great trial and sorrow. Across the Pacific, they will find a hand of support extended from the United States as they get back on their feet. After all, we have an alliance that was forged more than a half century ago, and strengthened by shared interests and democratic values. Our people share ties of family, ties of culture, and ties of commerce. Our troops have served to protect Japan's shores, and our citizens have found opportunity and friendship in Japan's cities and towns.

Above all, I am confident that Japan will recover and rebuild because of the strength and spirit of the Japanese people. Over the last few days, they've opened up their homes to one another. They've shared scarce resources of food and water. They've organized shelters, provided free medical care, and looked out for their most vulnerable citizens. One man put it simply: "It's a Japanese thing. When hard times hit, we have to help each other."

In these hard times, there remains, nevertheless, hope for the future. In one small town that had been flattened by the tsunami, emergency workers rescued a four-month-old baby who had been swept out of her parents' arms and stranded for days among the debris. No one can say for certain just how she survived the water and the wreckage around her. There is a mystery in the course of human events.

But in the midst of economic recovery and global upheaval, disasters like this remind us of the common humanity that we share. We see it in the responders who are risking their lives at Fukushima. We show it through the help that has poured into Japan from 70 countries. And we hear it in the cries of a child, miraculously pulled from the rubble.

In the coming days, we will continue to do everything we can to ensure the safety of American citizens and the security of our sources of energy. And we will stand with the people of Japan as they contain this crisis, recover from this hardship, and rebuild their great nation.

Thanks very much.

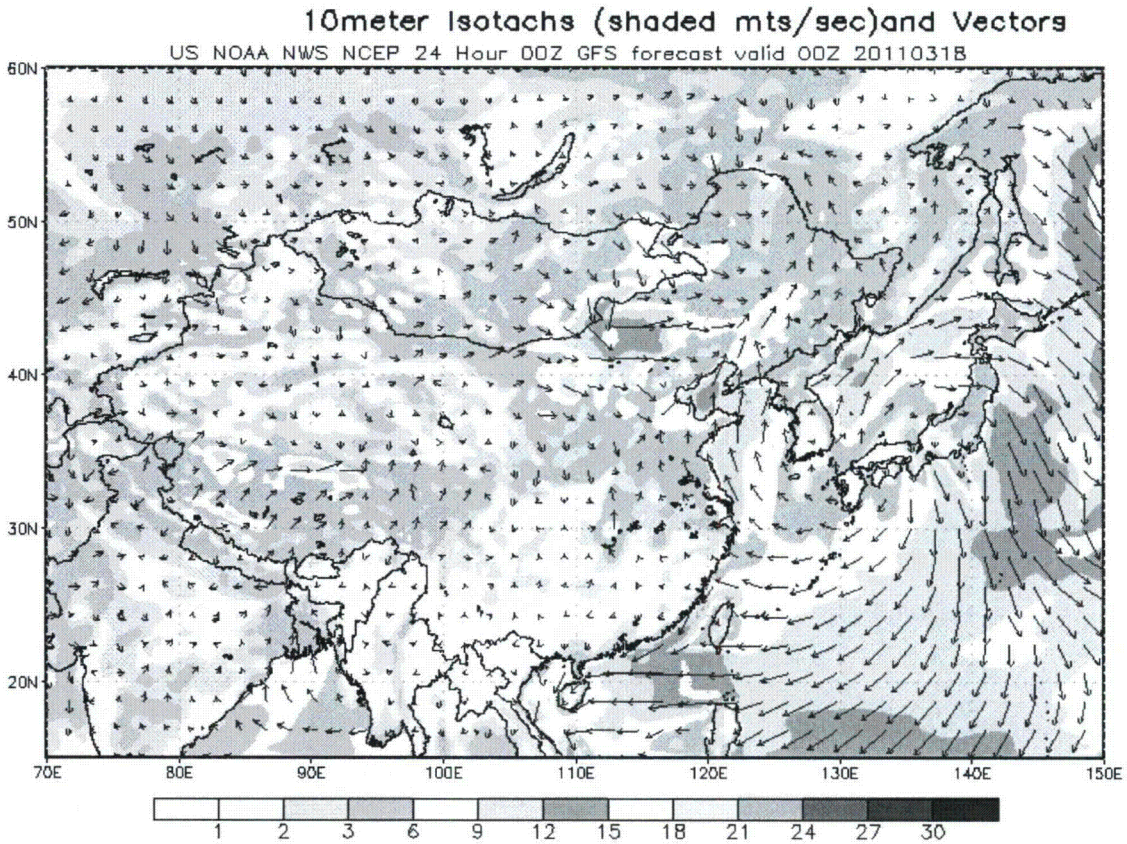
END 3:42 P.M. EDT

Attachment FW Japan Embassy pt. 2.msg (2560 Bytes) cannot be converted to PDF format.

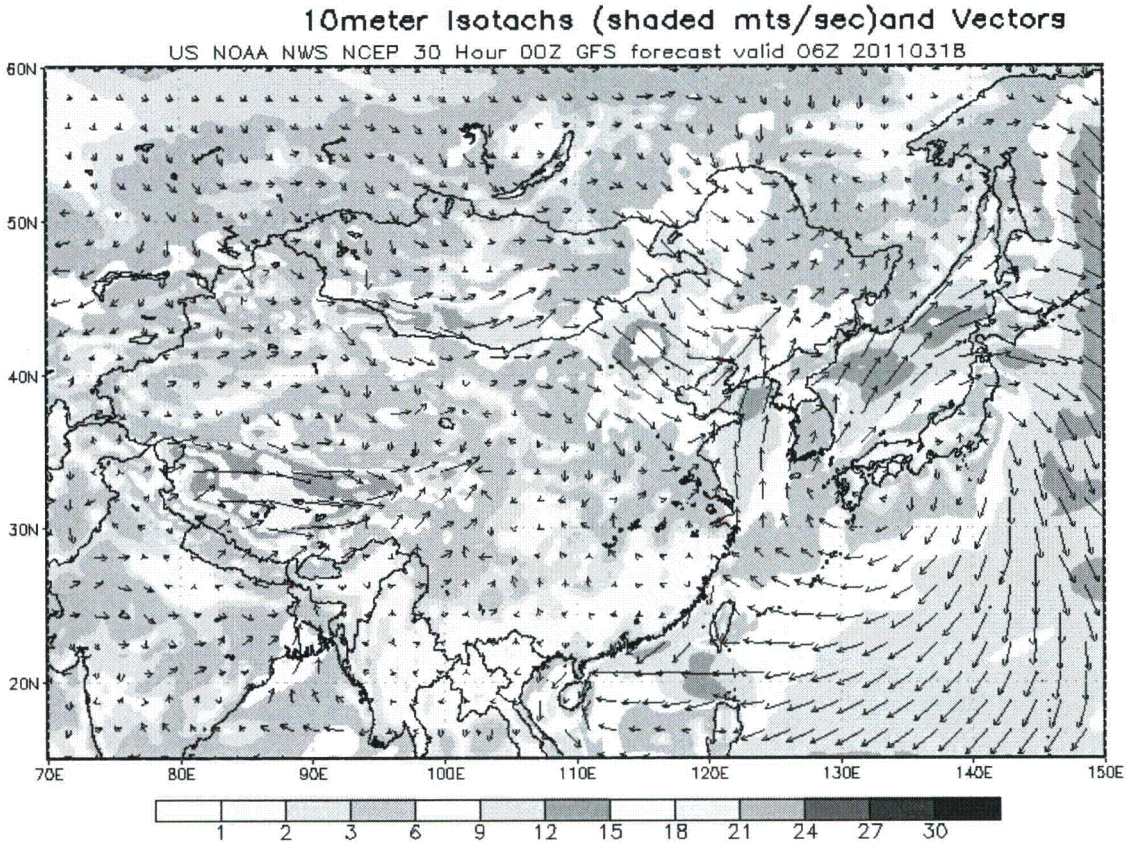
From: RMTPACTSU_ELNRC
To: LIA01 Hoc; LIA11 Hoc; Harrington, Holly; McIntyre, David; Burnell, Scott; PMT01 Hoc; Hoc, PMT12; PMT09 Hoc; Marshall, Jane; Gott, William; Grant, Jeffery
Subject: FYI - Winds in Japan
Date: Thursday, March 17, 2011 4:48:28 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image006.png
image007.png
image008.png
image009.png

Subject: RE: Winds in Japan

Hi,
NOAA created wind forecast field for surface winds at 10m for us. Below is the forecast for the next 3 days in 6 hour intervals. Wind speed is in m/s. Please note that forecast accuracy degrades as we move further into the future. Please let me know if you need any other information (temp max min or winds at different levels or precip) or have any questions.
Sezin
(2-4033)



RRRR-31


10meter Isotachs (shaded mts/sec)and Vectors
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50N
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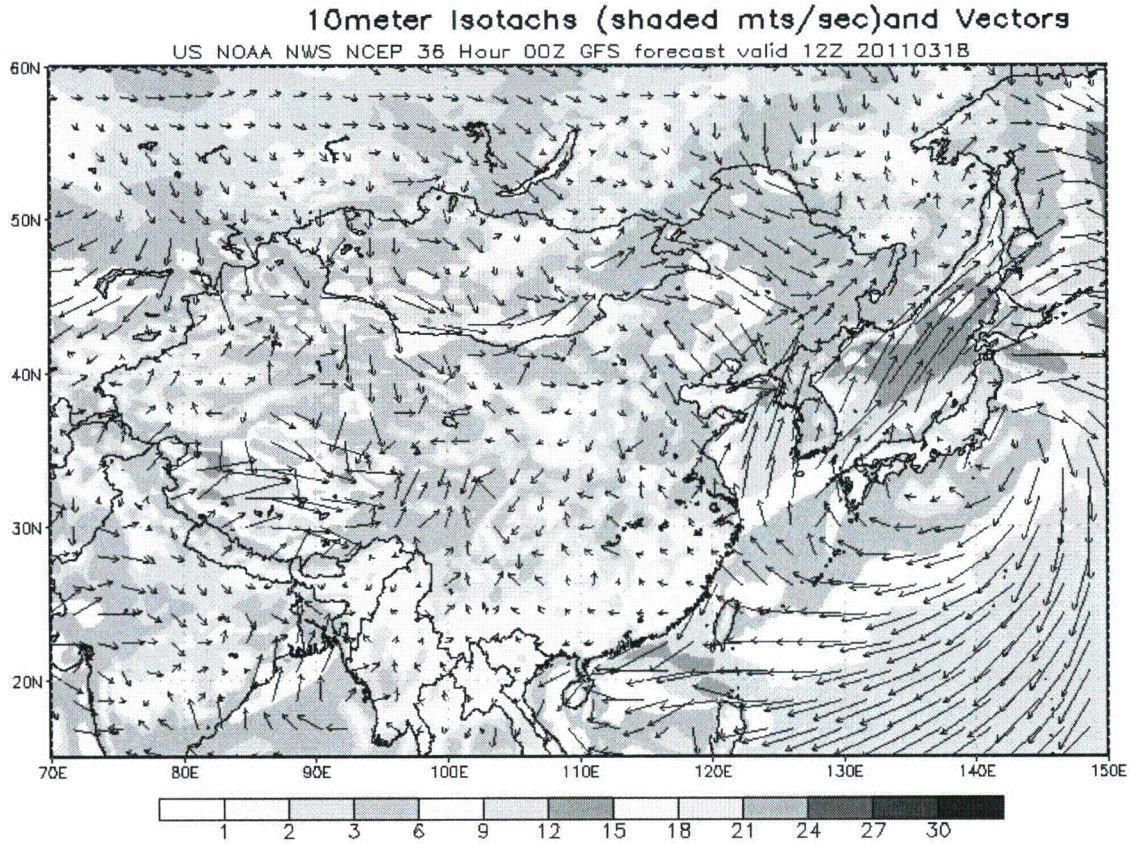
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US NOAA NWS NCEP 36 Hour 00Z GFS forecast valid 12Z 20110318
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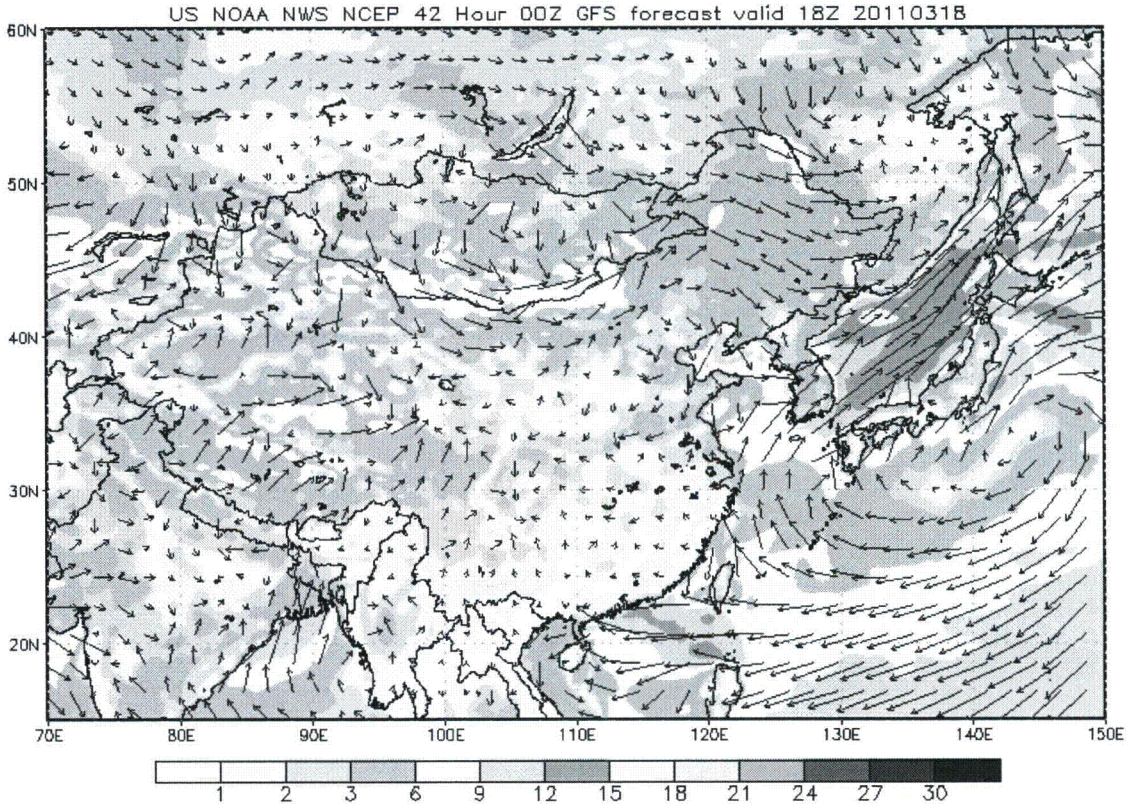
90E
100E
110E
120E
130E
140E
150E
1 2 3 6 9 12 15 18 21 24 27 30

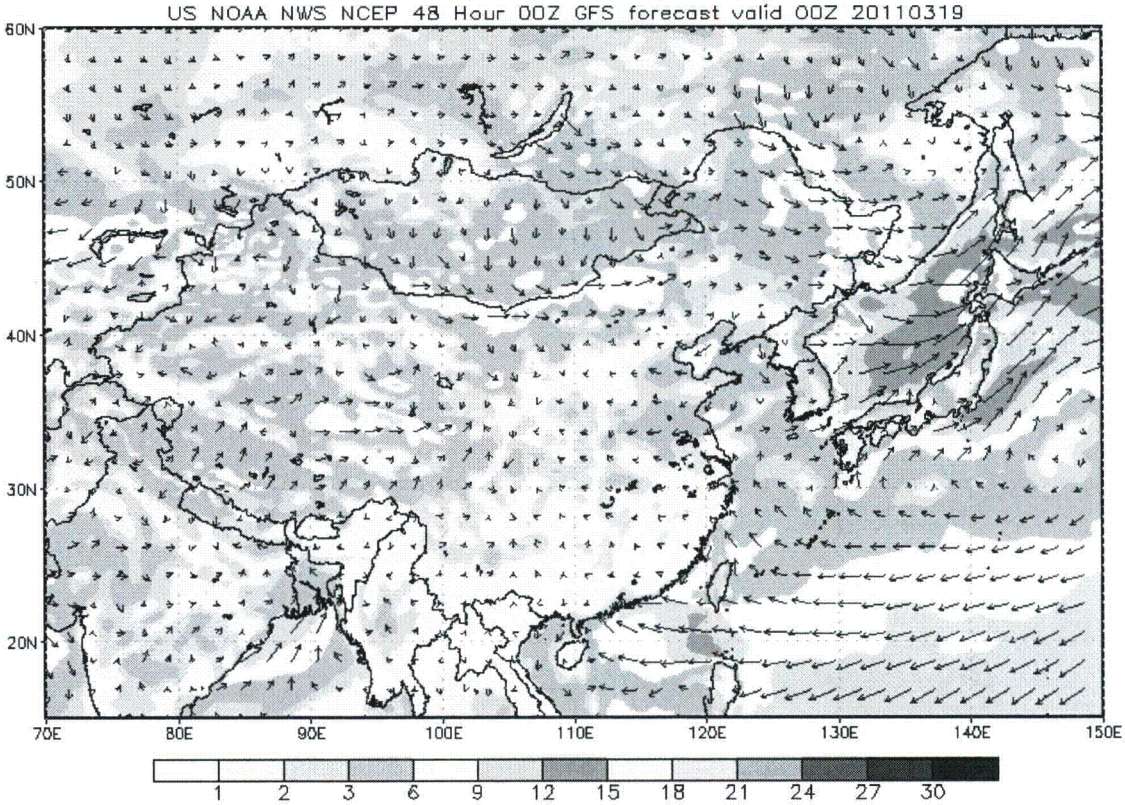
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 42 Hour 00Z GFS forecast valid 18Z 20110318



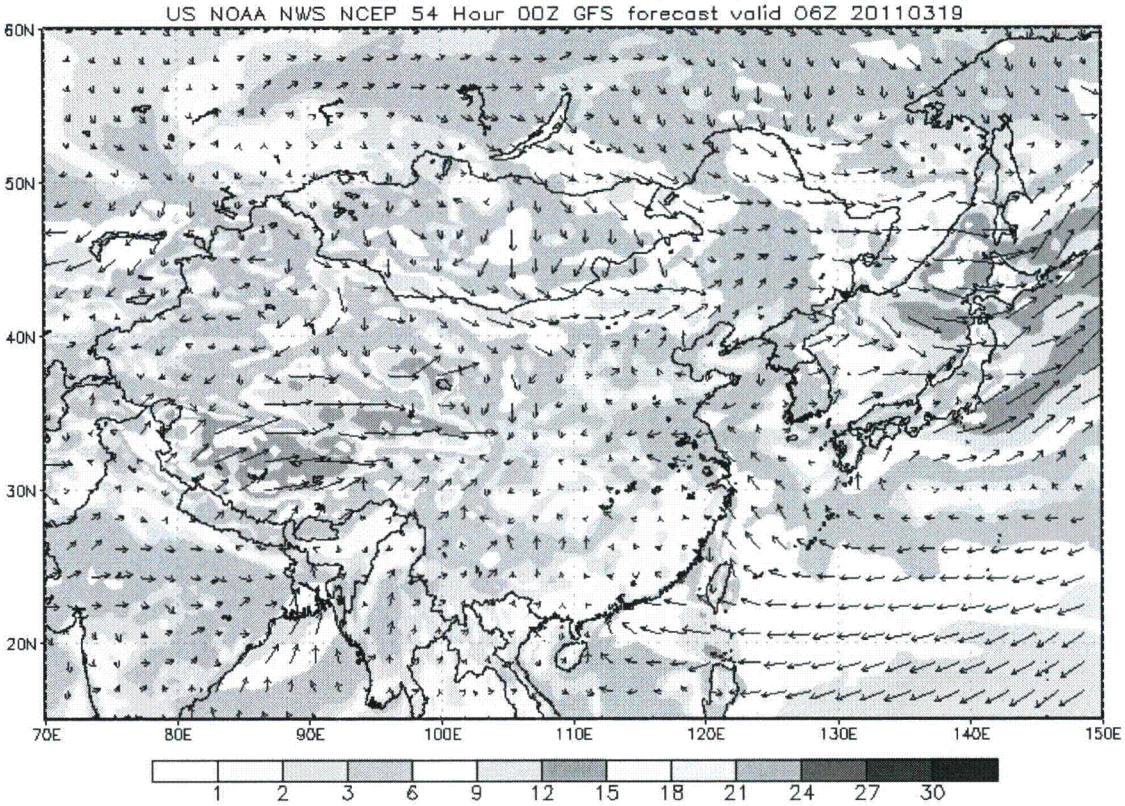
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 48 Hour 00Z GFS forecast valid 00Z 20110319



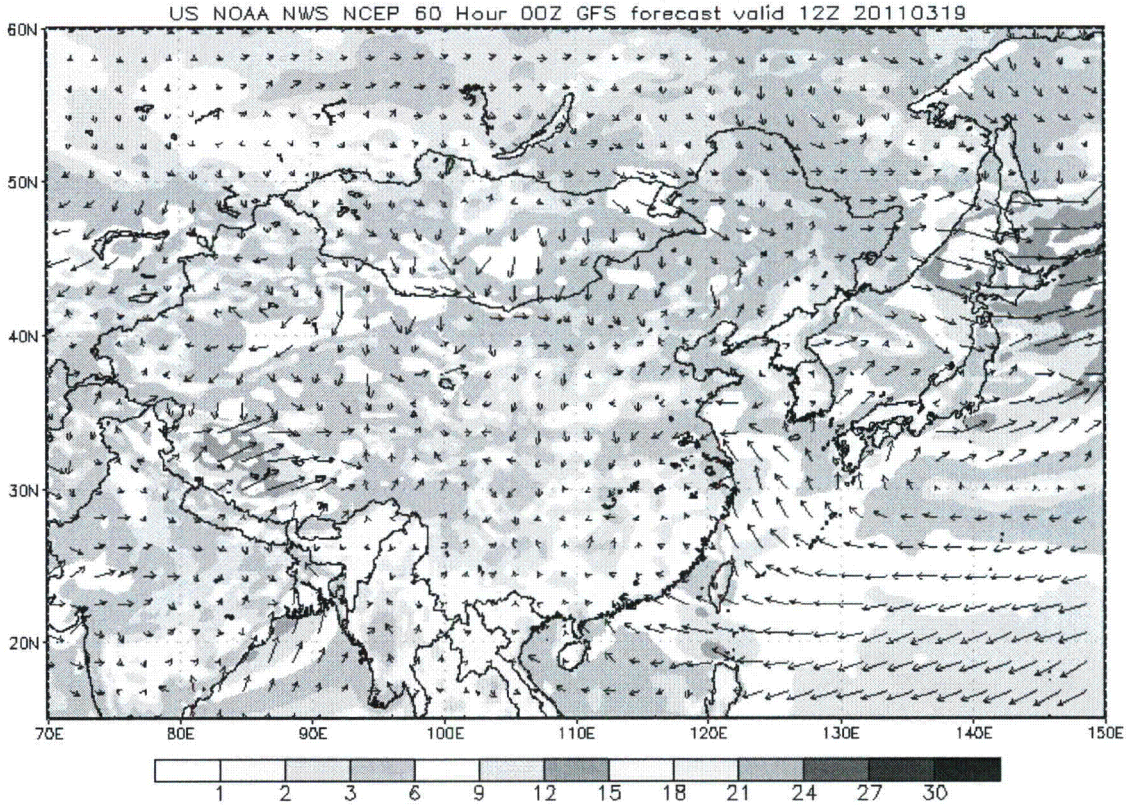
10meter Isotachs (shaded mts/sec)and Vectors

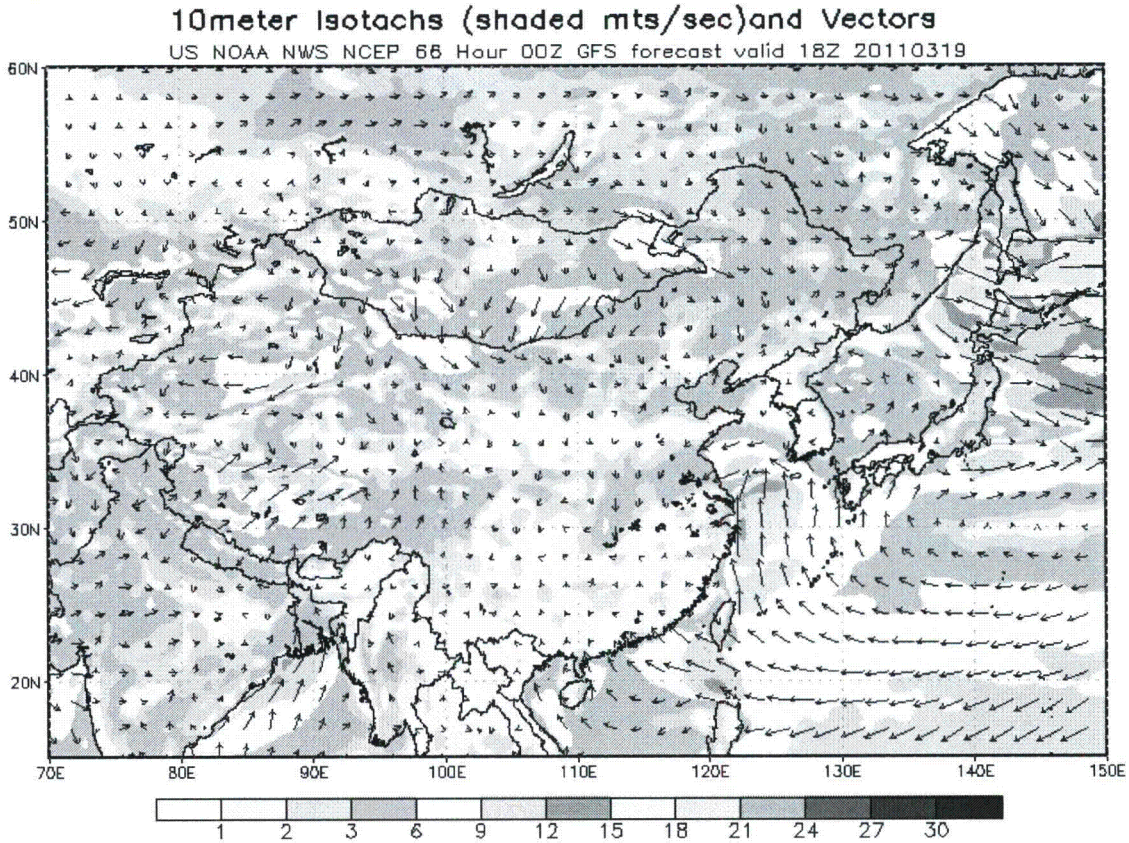
US NOAA NWS NCEP 54 Hour 00Z GFS forecast valid 06Z 20110319

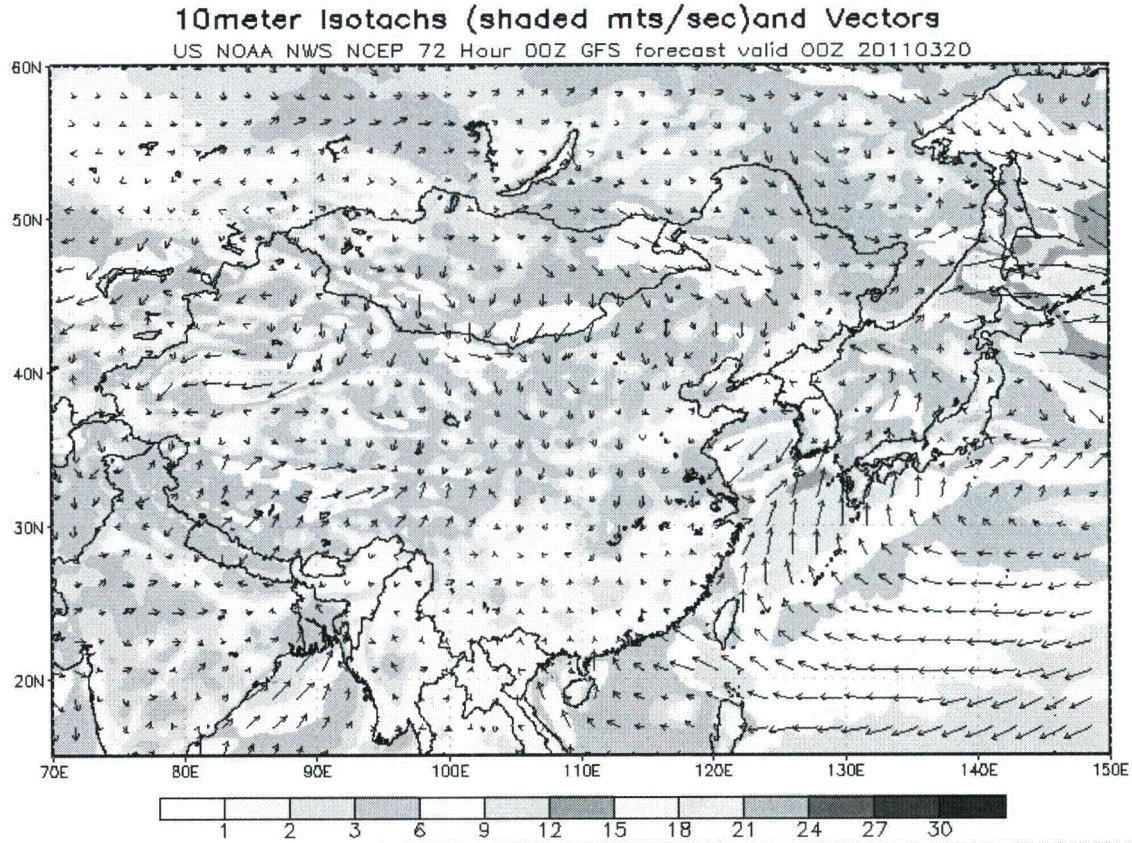


10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 60 Hour 00Z GFS forecast valid 12Z 20110319







From: RMTPACTSU_PRO [mailto:RMTPACTSU_PRO@ofda.gov]
Sent: Tuesday, March 15, 2011 6:08 PM

To: Tokar, Ayse Sezin(DCHA/OFDA)
Cc: RMTPACTSU_ELNRC; OFDAGOV: RMTPACTSU_SRO
Subject: Winds in Japan

Sezin:

The RMT for the Japan EQ would like to start getting reports on the winds (and general weather patterns) in/around Japan. I am copying my two colleagues on the RMT who are especially interested in this information. The ELNRC is our Nuclear Regulatory Commission liaison and the SRO is our search and rescue officer.

I will let you chat with them about what specifically they need, but I wanted to link you guys up sooner rather than later. You can shoot em an email, swing by the 8th floor ops center or call us at 202-712-0039. Both the NRC and the SRO positions are staffed 24/7.

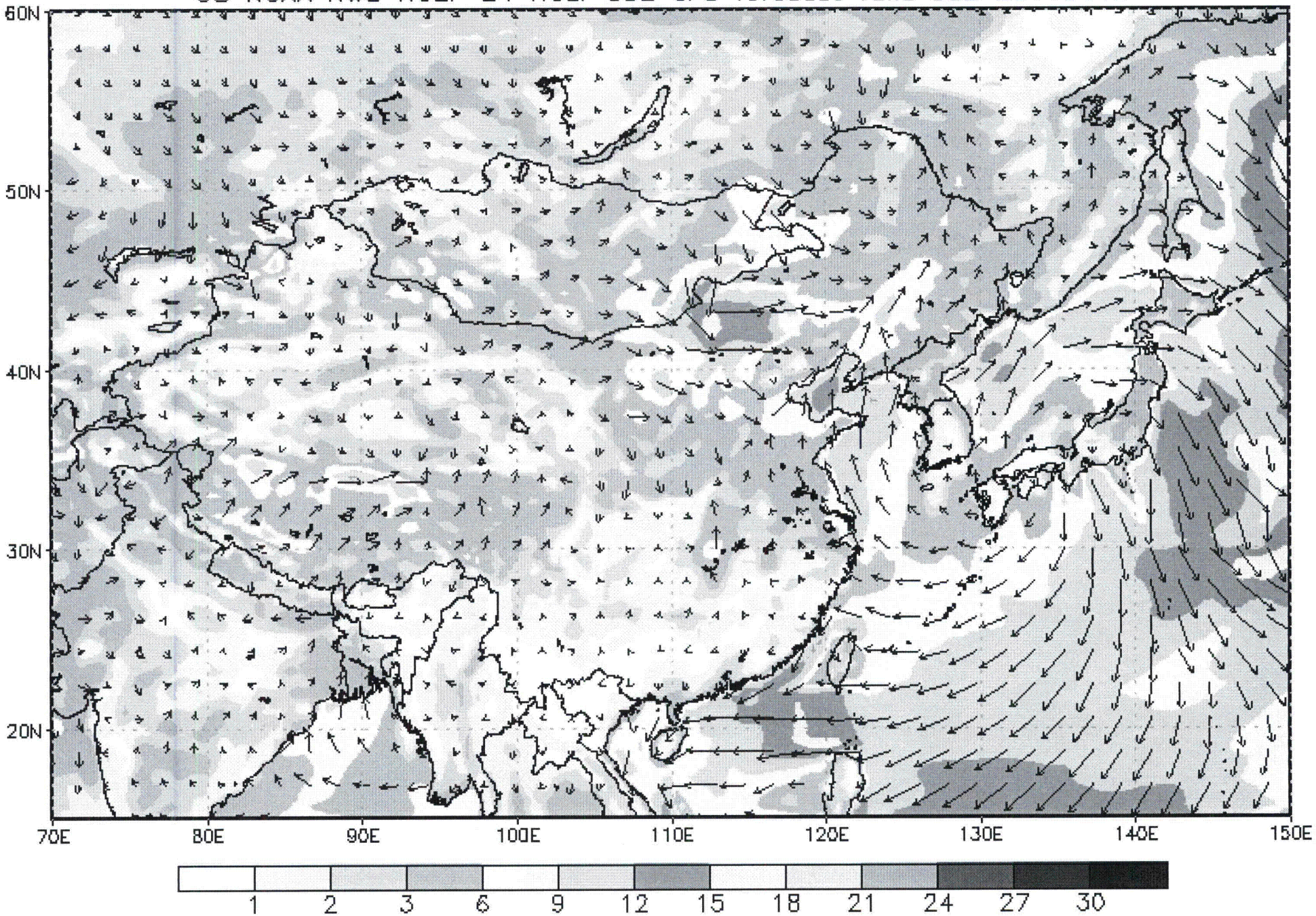
Thanks!

RG

Rebecca Gustafson
Press Officer
USAID Response Management Team (RMT)
Pacific Tsunami and Japan Earthquake
RMT 202-712-0039
Emergency Cell 571-335-6706

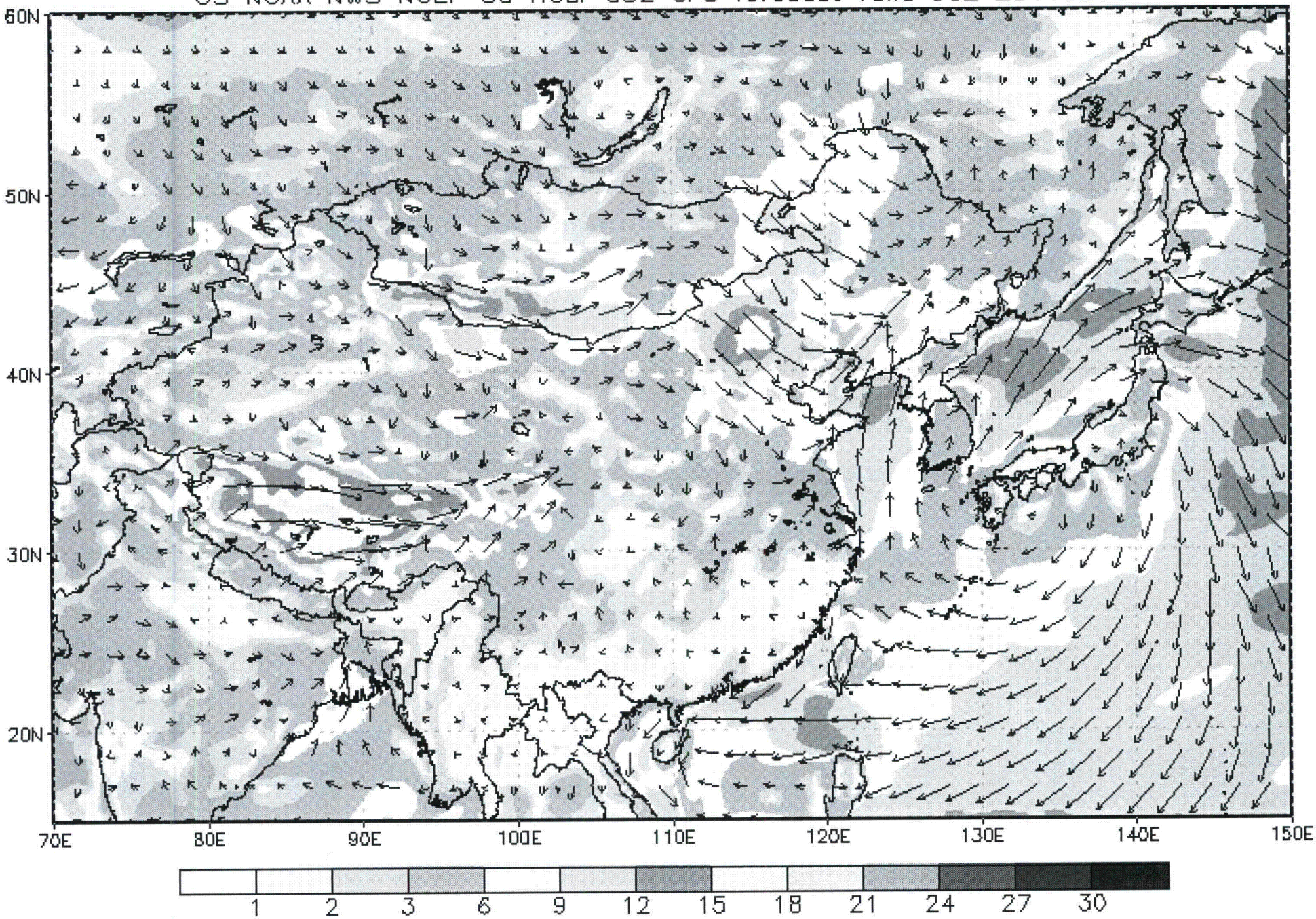
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 24 Hour 00Z GFS forecast valid 00Z 20110318



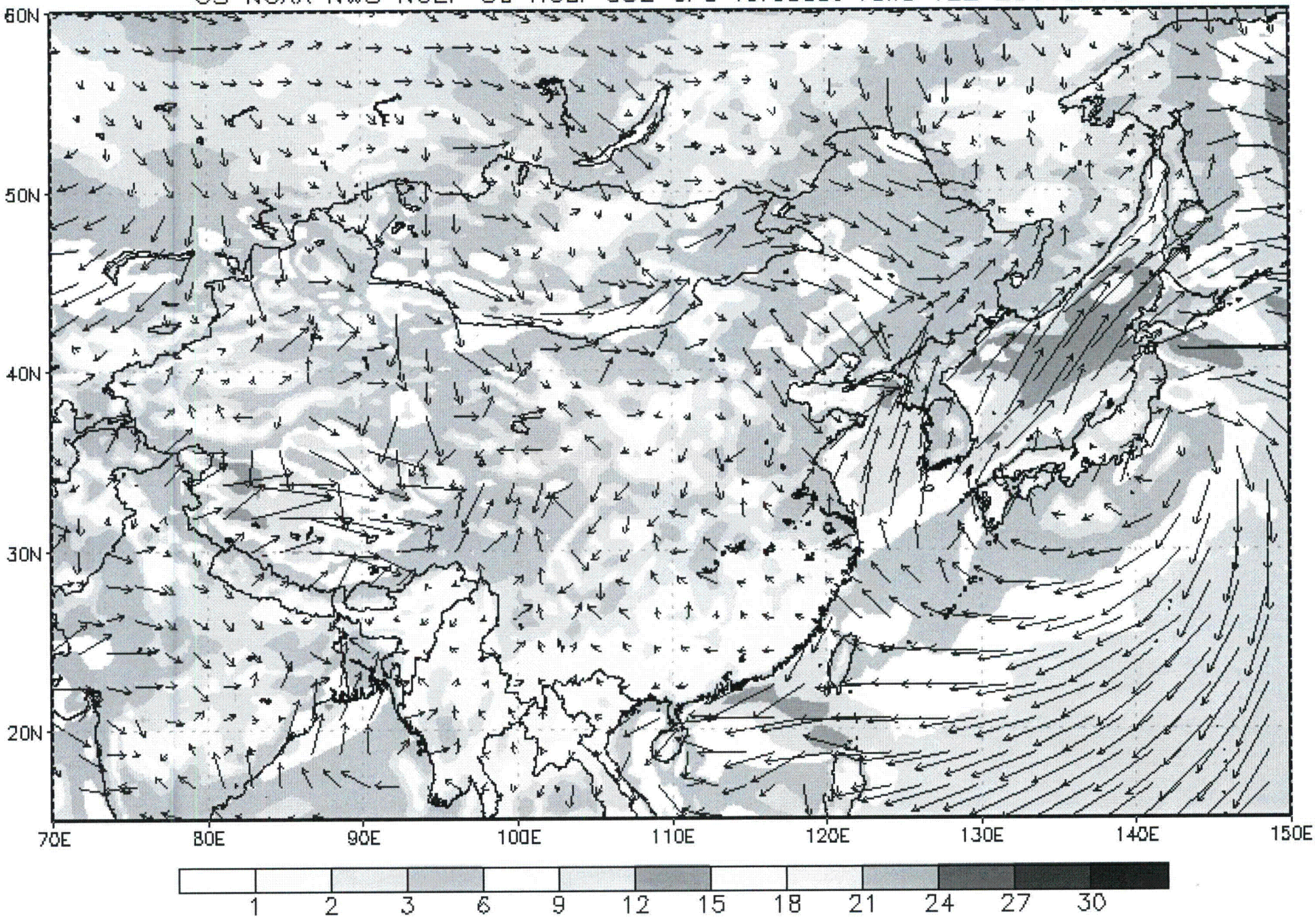
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 30 Hour 00Z GFS forecast valid 06Z 20110318



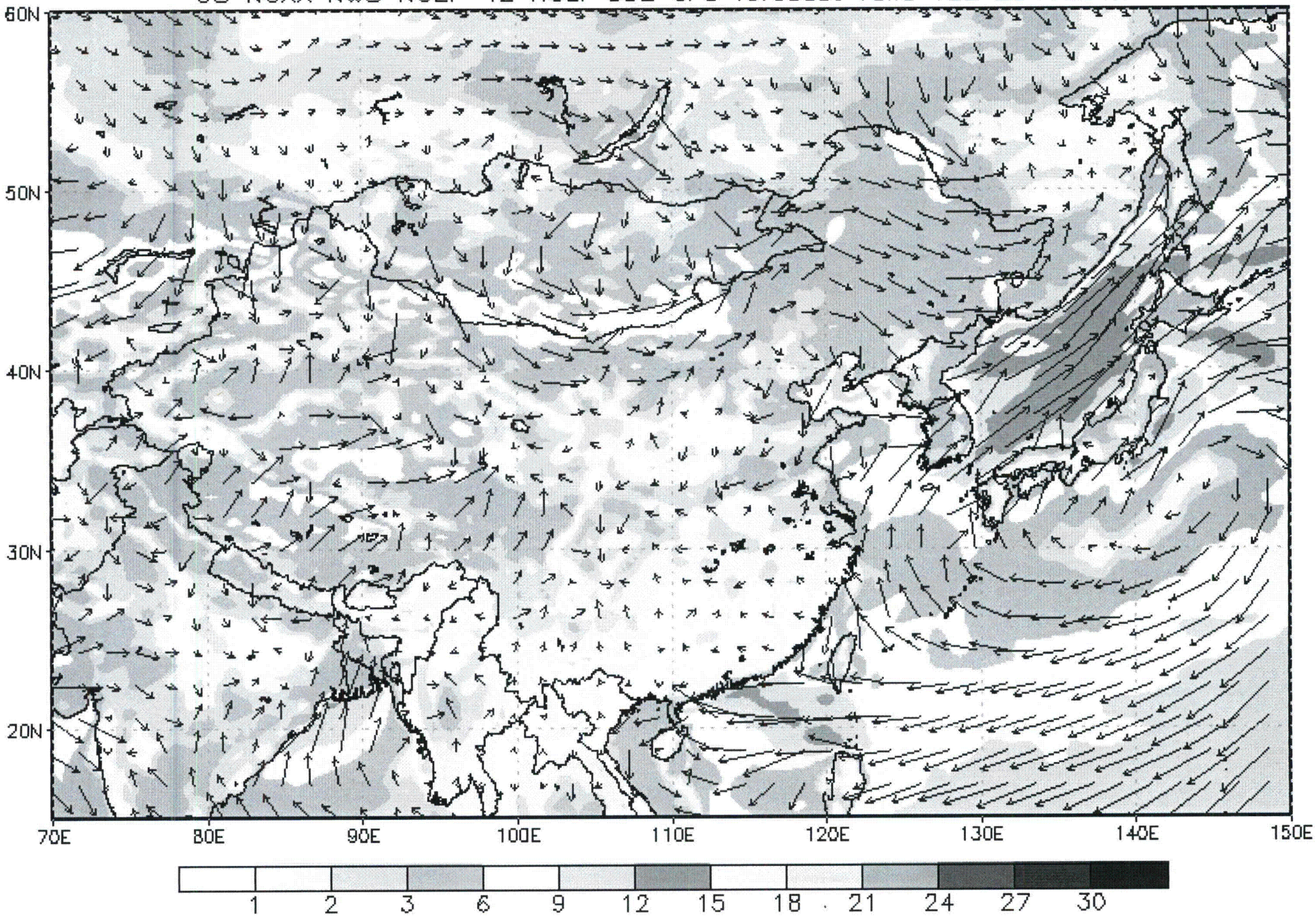
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 36 Hour 00Z GFS forecast valid 12Z 20110318



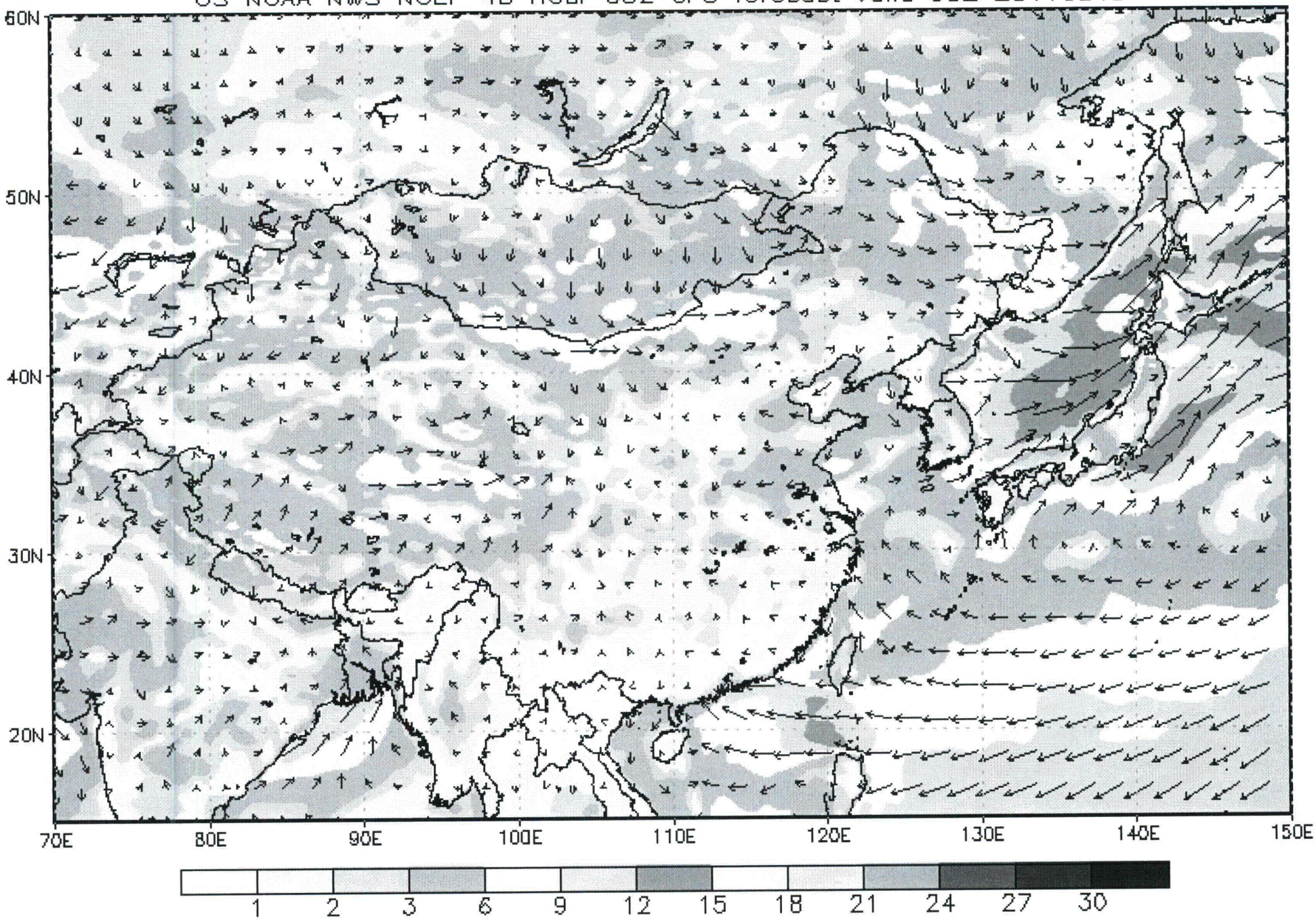
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 42 Hour 00Z GFS forecast valid 18Z 20110318



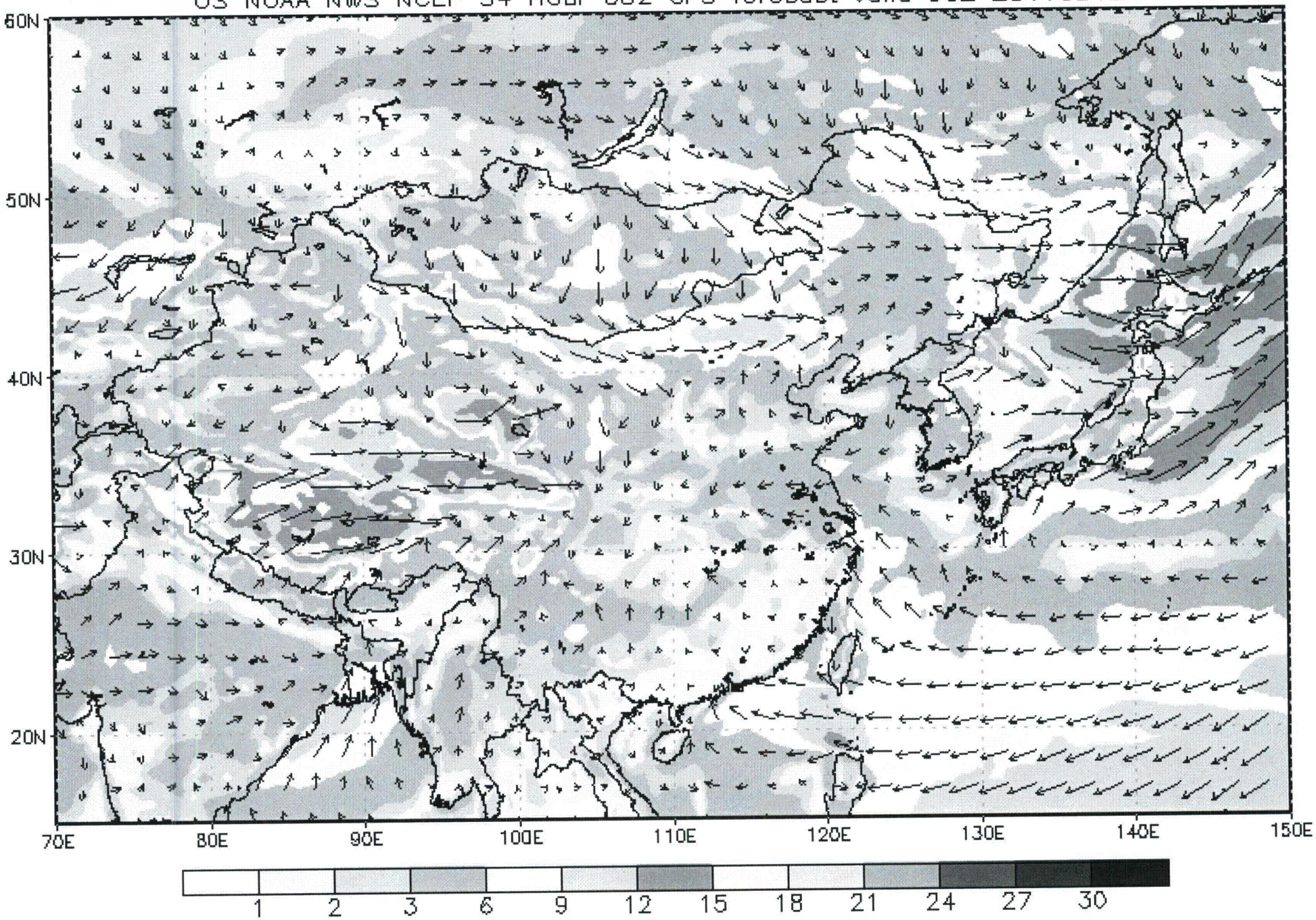
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 48 Hour 00Z GFS forecast valid 00Z 20110319



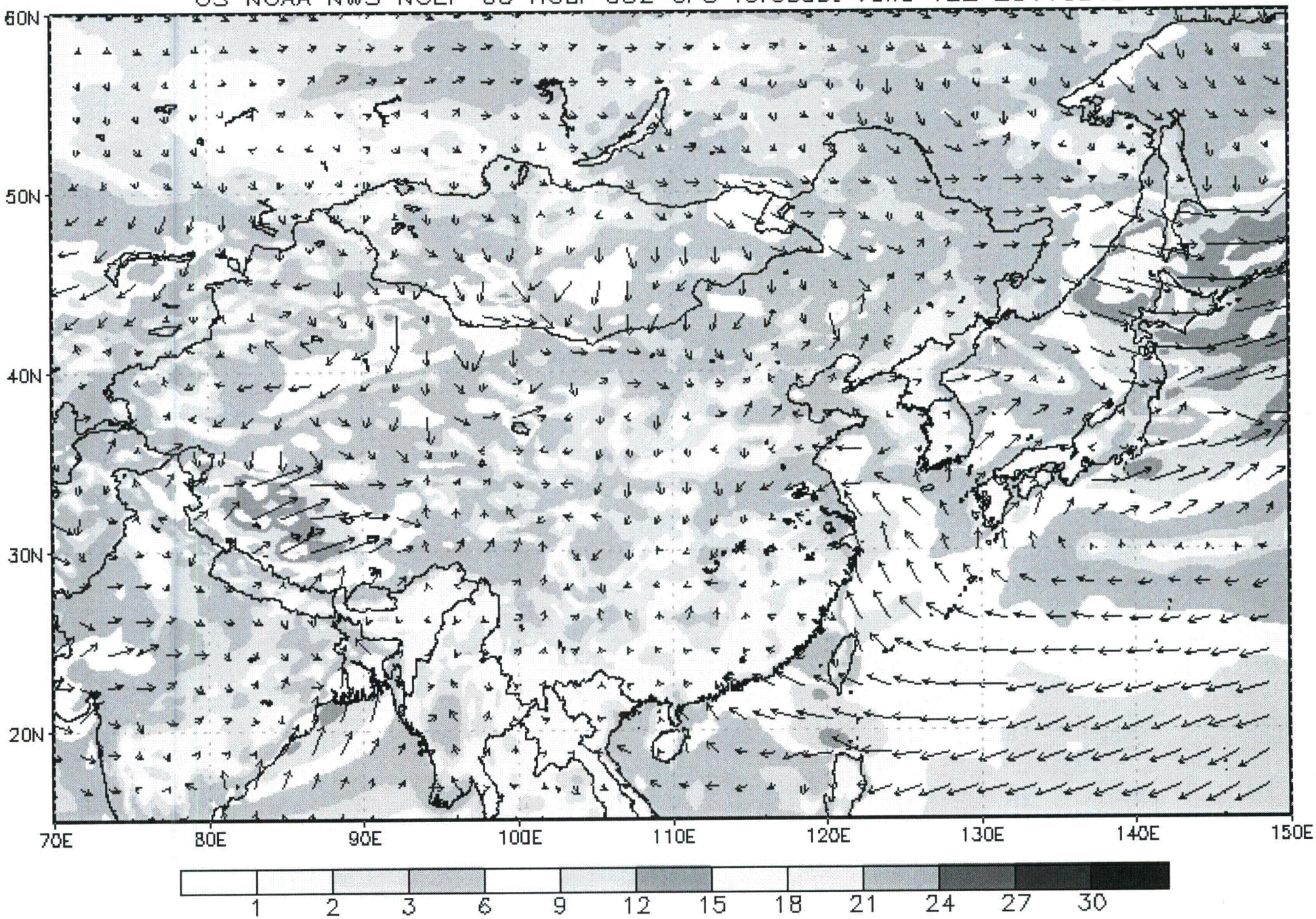
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 54 Hour 00Z GFS forecast valid 06Z 20110319



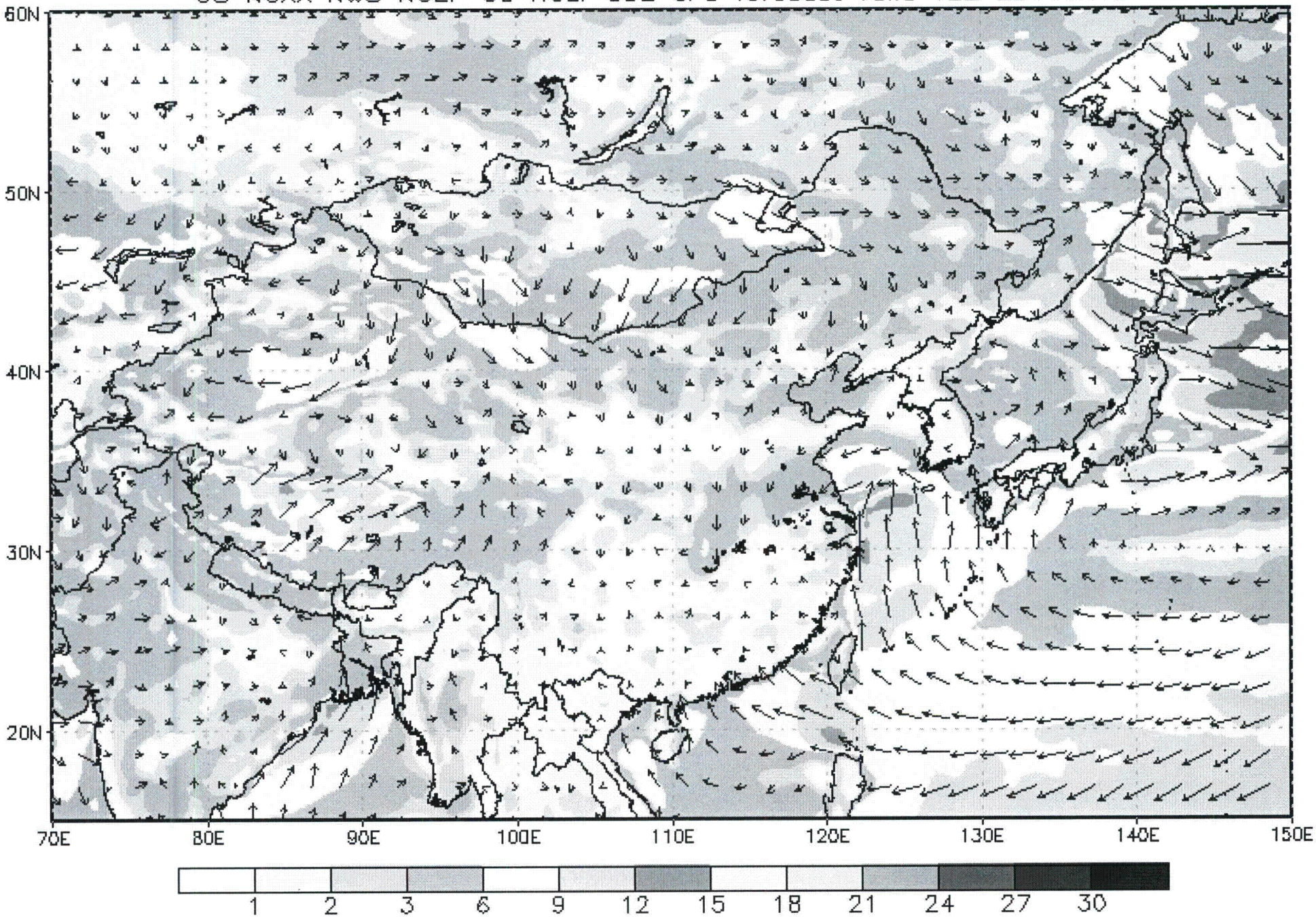
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 60 Hour 00Z GFS forecast valid 12Z 20110319



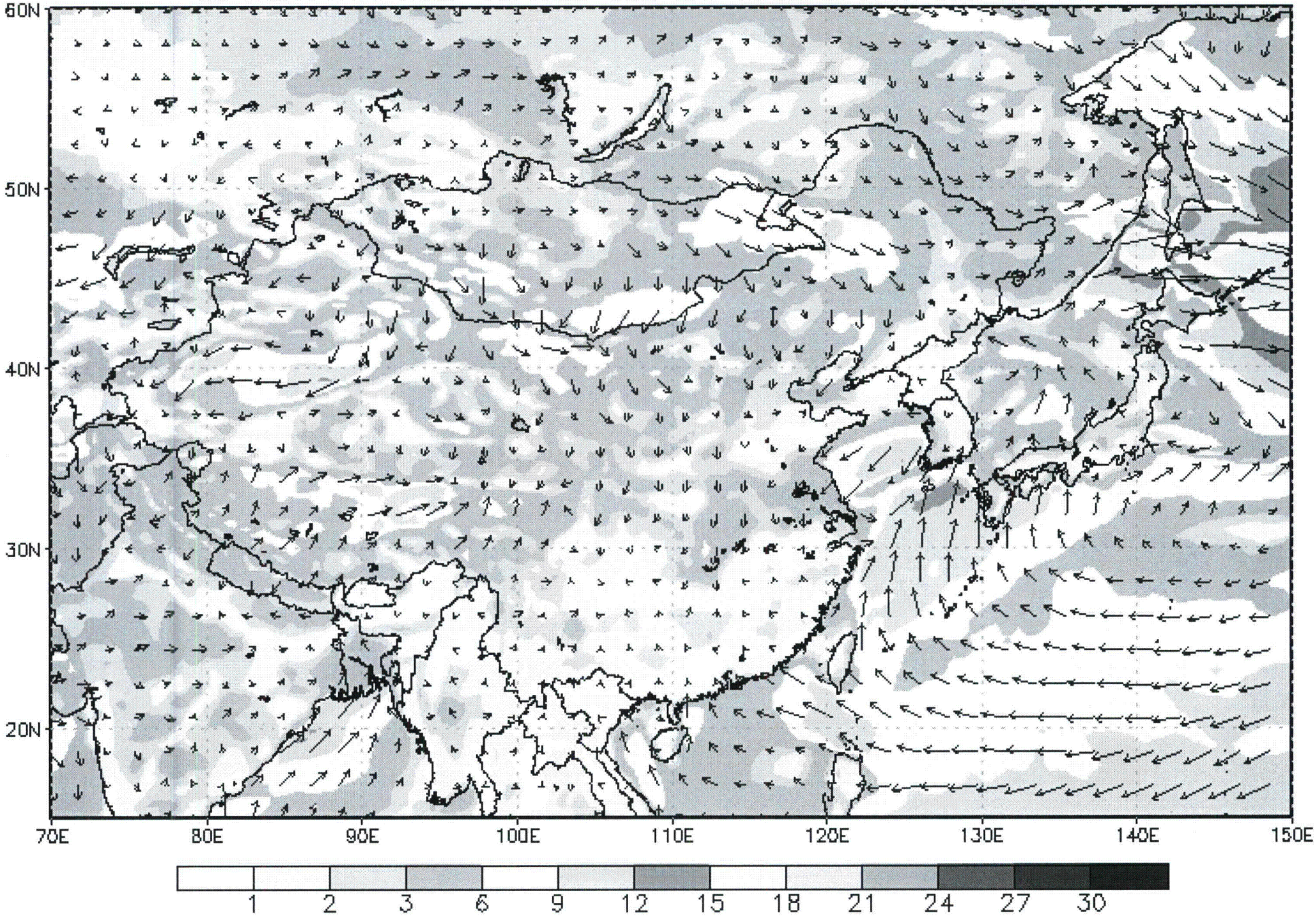
10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 66 Hour 00Z GFS forecast valid 18Z 20110319



10meter Isotachs (shaded mts/sec)and Vectors

US NOAA NWS NCEP 72 Hour 00Z GFS forecast valid 00Z 20110320



From: Harrington, Holly
To: Robert.Davis1@dhs.gov
Subject: I"m sorry
Date: Thursday, March 17, 2011 5:00:00 PM

I didn't get you an answer. My KI expert may be in at 7 p.m. today. I am not sure. You can call 301-816-5100 and ask for the Protective Measures Team to get her

RRRR-32

From:	FEMA-NRCC-doclead
To:	Harrington, Holly
Subject:	Sharing good EPA Fact Sheet/Average U.S. Radiation Doses and Sources; and Doses from Common Radiation Sources
Date:	Thursday, March 17, 2011 4:57:11 PM

Holly,

In case you haven't seen this, it's helpful.
http://www.epa.gov/radiation/understand/perspective.html

All the best,

Zach Kittrie
FEMA Office of External Affairs
Public Affairs Division
500 C Street, SW
Washington, DC 20472

RRRR-33

David Decker

From: Powell, Amy
Sent: Monday, March 14, 2011 10:14 AM
To: Riley (OCA), Timothy
Cc: Decker, David
Subject: FW: Ultimate heat sink info

Tim – David is heading to the Ops Center to make a copy of that Q&A that was on our desk over the weekend that included the # of plants of ***similar*** design (6 of the 104 as I recall). That will help with Laura's question.

From: Haynes, Laura (Carper) [mailto:Laura_Haynes@carper.senate.gov]
Sent: Monday, March 14, 2011 10:10 AM
To: Riley (OCA), Timothy
Cc: Powell, Amy
Subject: RE: Ultimate heat sink info

Do all our plants have an ultimate heat sink? Is that required?
And how many plants have the same design as the GE Fukushima plant? Thanks.

From: Riley (OCA), Timothy [mailto:Timothy.RileyOCA@nrc.gov]
Sent: Sunday, March 13, 2011 9:17 PM
To: Haynes, Laura (Carper)
Cc: Powell, Amy
Subject: NRC: Ultimate heat sink info

Laura,
Earlier, you had asked a question about ultimate heat sink at the US reactors. Here is some information that I hope will be helpful.

> An ultimate heat sink is the means of heat dissipation from the plant to the environment, including the necessary retaining structures (e.g., a dammed lake, cooling tower and any connecting canals or conduits.)
>
> Ultimate heat sinks are maintained at US nuclear reactors to satisfy NRC reactor design requirements. Ensuring that the ultimate heat sink is capable of receiving decay heat is a safety related function. Technical Specifications contained in all power reactor operating licenses require that the ultimate heat sink be operable, or the reactor brought to a cold shut down condition.
>
> There are also non-safety-related methods to remove decay heat. NRC has established new requirements to codify post 9/11 orders to ensure that licensees have equipment and training in place for severe situations in which the ultimate heat sink and associated safety-related systems are not available.
>
> The NRC has confidence that if a reactor plant ultimate heat sink is tested and maintained in accordance with Technical Specification requirements that the reactor can be safely brought to a cold shutdown condition in response to any design based accident. To address accidents or situations that could potentially occur with the ultimate heat sink unavailable, the NRC has ensured that power reactor licensees have equipment, strategies and trained personnel available to provide for nuclear fuel cooling and the dissipation of decay heat.
>
> Regulations:

PRR-34

General Design Criteria 10 CFR 50 Appendix A Criterion 44--Cooling water: A system to transfer heat from structures, systems, and components important to safety, to an ultimate heat sink shall be provided. The system safety function shall be to transfer the combined heat load of these structures, systems, and components under normal operating and accident conditions.

10 CFR 50.54 (hh)(2)
(2) Each licensee shall develop and implement guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with loss of large areas of the plant due to explosions or fire, to include strategies in the following areas:
(i) Fire fighting;
(ii) Operations to mitigate fuel damage; and
(iii) Actions to minimize radiological release.

From: Widomski, Michael
To: Harrington, Holly
Subject: DRAFT Advisory Langauge
Date: Thursday, March 17, 2011 5:23:20 PM
Attachments: NUCLEAR REGULATORY COMMISSION.docx

I have not shared with Elliot or anyone yet...wanted to see if this was on the right track before sending it to him. Also not sure how your protocols work.

RRRR-35

MEDIA ADVISORY

NUCLEAR REGULATORY COMMISSION (NRC) MEETING

CONTACT
NRC Office of Public Affairs
301-415-8200

TITLE: Commission Meeting to Receive a Staff Briefing on the NRC Response to Recent Nuclear Events in Japan

PURPOSE: U.S. Nuclear Regulatory Commission Chairman Gregory B. Jaczko will hold a commission meeting for the NRC to receive a brief in an open forum from the Commission's Executive Director of Operations related to the NRC response to the nuclear event in Japan. The commission meeting will consist of a session open to public observation.

Although the meeting will be open to the public, discussions will be limited to Commission members and scheduled presenters of the NRC staff. The open portion of the meeting will be followed by a closed session for NRC members to conduct internal business.

DATE: Monday, March 21, 2011 at 9:00 am.

LOCATION: NRC Headquarters
Commissioners' Conference Room OWFN
11545 Rockville Pike
Rockville, MD 20852

MEDIA: Camera Broadcast Pool: Due to limited space availability, the meeting will be set up for a broadcast network pool camera crew. Media outlets interested in receiving the feed should contact the network pool.

Direction and Parking Note: The NRC offices are located across the street from the White Flint Metro station. Media should arrive at the Marinelli Road entrance with proper media credentials. Parking is available at the White Flint metro parking garage on Marinelli Road.

From: Daigle, David (CDC/OPHPR/OD)
To: Roebuck, Von (CDC/OD/OADC); Davis, Robert
Cc: Michael, Gretchen (HHS/ASPR/COO); Harrington, Holly; Burden, Bernadette (CDC/OD/OADC)
Subject: RE: KI in states
Date: Thursday, March 17, 2011 4:37:05 PM

Happy to check, Dave

From: Roebuck, Von (CDC/OD/OADC)
Sent: Thursday, March 17, 2011 4:35 PM
To: 'Davis, Robert'
Cc: Daigle, David (CDC/OPHPR/OD); Michael, Gretchen (HHS/ASPR/COO); Harrington, Holly; Burden, Bernadette (CDC/OD/OADC)
Subject: RE: KI in states

Hi Bob, sorry for the delay. I have not heard that CDC is doing but looping in Dave Daigle from our preparedness and response branch for any discussion that might have occurred regarding any tracking of KI supplies. Von.

From: Davis, Robert [mailto:Robert.Davis1@dhs.gov]
Sent: Thursday, March 17, 2011 1:07 PM
To: Harrington, Holly; Roebuck, Von (CDC/OD/OADC)
Subject: FW: KI in states

Holly and Von,

Do either of you know if states have been asked about their KI supply yet? We don't want to ask the same question twice.

And have you heard about this briefing team coordinated by Richard Reed?

Bob

From: Michael, Gretchen (HHS/ASPR/COO) [mailto:Gretchen.Michael@hhs.gov]
Sent: Thursday, March 17, 2011 11:48 AM
To: 'ROBERT.DAVIS1@DHS.GOV'
Subject: Re: KI in states

Check with NRC - they may know. Ccing von roebuck who may know cdc's visability on the issue.

From: Davis, Robert [mailto:Robert.Davis1@dhs.gov]
Sent: Thursday, March 17, 2011 11:42 AM
To: Michael, Gretchen (HHS/ASPR/COO)
Subject: KI in states

Our secretary wants us to reach out to states to find out where KI is. We don't want to ask states a question you all have already asked. Have you all already asked for this information?

Also, have you heard anything about the inter agency briefing team being coordinated through Richard Reed's office?

RRRR-36

Sent using BlackBerry

From: Davis, Robert
To: Harrington, Holly
Subject: Re: KI in states
Date: Thursday, March 17, 2011 5:49:25 PM

True that
Tnx
Sorry to add to your load

Sent using BlackBerry

From: prvs=0505cd20e=Holly.Harrington@nrc.gov <prvs=0505cd20e=Holly.Harrington@nrc.gov>
To: Davis, Robert <Robert.Davis1@dhs.gov>
Sent: Thu Mar 17 17:39:21 2011
Subject: RE: KI in states

Sorry. Trish Milligan. .

And cut from the same cloth although my cloth is a bit less salty!!! ;-)

From: Davis, Robert [mailto:Robert.Davis1@dhs.gov]
Sent: Thursday, March 17, 2011 5:38 PM
To: Harrington, Holly
Subject: RE: KI in states

Will do
What is her name or will they know when I say the KI expert?

You must be exhausted.

I loved your comment the other day about tracking somebody down and beating them senseless. Not sure if you picked that up from Eliot or if you two are just cut from the same cloth.

From: prvs=0505cd20e=Holly.Harrington@nrc.gov [mailto:prvs=0505cd20e=Holly.Harrington@nrc.gov]
On Behalf Of Harrington, Holly
Sent: Thursday, March 17, 2011 5:30 PM
To: Davis, Robert
Subject: RE: KI in states

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---

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RRR-37

And have you heard about this briefing team coordinated by Richard Reed?

Bob

From: Michael, Gretchen (HHS/ASPR/COO) [mailto:Gretchen.Michael@hhs.gov]
Sent: Thursday, March 17, 2011 11:48 AM
To: 'ROBERT.DAVIS1@DHS.GOV'
Subject: Re: KI in states

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Sent using BlackBerry

From: Harrington, Holly
To: Burnell, Scott; Uselding, Lara; McIntyre, David
Cc: Couret, Ivonne; Screnci, Diane; Sheehan, Neil; Mitlyng, Viktoria; Dricks, Victor; Chandrathil, Prema; Ledford, Joey; Hannah, Roger
Subject: RE: UCS Releases U.S. Nuclear Safety Report
Date: Thursday, March 17, 2011 5:31:00 PM

Thanks scott. We already distributed something earlier. Folks – stay with earlier version.

From: Burnell, Scott
Sent: Thursday, March 17, 2011 5:28 PM
To: Uselding, Lara; Harrington, Holly; McIntyre, David
Cc: Couret, Ivonne; Screnci, Diane; Sheehan, Neil; Mitlyng, Viktoria; Dricks, Victor; Chandrathil, Prema; Ledford, Joey; Hannah, Roger
Subject: RE: UCS Releases U.S. Nuclear Safety Report

In case you all haven't seen anything similar, here's my tweak:

The NRC is aware that UCS issued a report today regarding U.S. nuclear power plant safety in 2010. The NRC remains focused on responding promptly and effectively to events in Japan. Once we have completed that important task, we'll review the UCS report in depth. At first blush it doesn't seem to contain any new insights. The NRC remains confident that our Reactor Oversight Program, which includes both on-site and region-based inspectors, is effectively ensuring U.S. nuclear power plants are meeting the NRC's strict requirements and are operating safely.

From: Uselding, Lara
Sent: Thursday, March 17, 2011 1:38 PM
To: Harrington, Holly; Burnell, Scott; McIntyre, David
Cc: Couret, Ivonne; Screnci, Diane; Sheehan, Neil; Mitlyng, Viktoria; Dricks, Victor; Chandrathil, Prema; Ledford, Joey; Hannah, Roger
Subject: FW: UCS Releases U.S. Nuclear Safety Report

FYI and any word yet?

From: Teri Sforza [mailto:tsforza@ocregister.com]
Sent: Thursday, March 17, 2011 12:38 PM
To: Uselding, Lara
Cc: OPA Resource
Subject: FW: UCS Releases U.S. Nuclear Safety Report

Hey Lara -- you guys going to say anything bout this? Thanks --

Teri Sforza
Staff Writer
The Orange County Register
tsforza@ocregister.com
http://www.ocregister.com/watchdogblog

From: Sarah Goldberg [mailto:Sgoldberg@ucsusa.org]
Sent: Thursday, March 17, 2011 7:09 AM

RRRR-38

To: Teri Sforza
Subject: UCS Releases U.S. Nuclear Safety Report

EMBARGOED UNTIL 11 A.M. EDT TODAY, MARCH 17, 2011
CONTACT: media@ucsusa.org or 202-331-5420

UNION OF CONCERNED SCIENTISTS RELEASES REPORT ON THE NRC AND U.S. NUCLEAR PLANT SAFETY IN 2010; AGENCY OVERSIGHT GETS MIXED REVIEWS

WASHINGTON (March 17, 2011) -- Many of the serious safety or security lapses at U.S. nuclear power plants in 2010 happened because plant owners -- and often the Nuclear Regulatory Commission (NRC) -- failed to address known safety problems, according to a report released today by the Union of Concerned Scientists (UCS). Below is the executive summary of the report.
UCS Releases U.S. Nuclear Safety Report
TELEPRESSER TODAY AT 11 A.M.

Report author David Lochbaum, the director of UCS's Nuclear Safety Program, will present an overview of the report this morning at 11 a.m. during a telephone press briefing for reporters. The call-in number in the United States is 866-861-4873. The international number is 703-639-1464. The password is "Japan Nuclear Reactor Update." UCS Senior Scientist Edwin Lyman also will be on the call to talk about recent developments in Japan.

THE NRC AND NUCLEAR POWER PLANT SAFETY IN 2010:
A BRIGHTER SPOTLIGHT NEEDED

David Lochbaum, Union of Concerned Scientists

EXECUTIVE SUMMARY

This report is the first in an annual series on the safety-related performance of the owners of U.S. nuclear power plants and the Nuclear Regulatory Commission (NRC), which regulates the plants. The NRC's mission is to protect the public from the inherent hazards of nuclear power.

In 2010, the NRC reported on 14 special inspections it launched in response to troubling events, safety equipment problems, and security shortcomings at nuclear power plants. This report provides an overview of each of these significant events -- or near-misses.

This overview shows that many of these significant events occurred because reactor owners, and often the NRC, tolerated known safety problems. For example, the owner of the Calvert Cliffs plant in Maryland ended a program to routinely replace safety components before launching a new program to monitor degradation of those components. As a result, an electrical device that had been in use for longer than its service lifetime failed, disabling critical safety components.

In another example, after declaring an emergency at its Brunswick nuclear plant in North Carolina, the owner failed to staff its emergency response teams within the required amount of time. That lapse occurred because workers did not know how to activate the automated system that summons emergency workers to the site.

OUTSTANDING CATCHES BY THE NRC

This report also provides three examples where onsite NRC inspectors made outstanding catches of safety problems at the Oconee, Browns Ferry, and Kewaunee nuclear plants—before these impairments could lead to events requiring special inspections, or to major accidents.

At the Oconee plant in South Carolina, the owner fixed a problem with a vital safety system on Unit 1 that had failed during a periodic test. However, the owner decided that identical components on Units 2

and 3 could not possibly have the same problem. NRC inspectors persistently challenged lame excuse after lame excuse until the company finally agreed to test the other two units. When it did so, their systems failed, and NRC inspectors ensured that the company corrected the problems.

POOR NRC OVERSIGHT

However, the NRC did not always serve the public well in 2010. This report analyzes serious safety problems at Peach Bottom, Indian Point, and Vermont Yankee that the NRC overlooked or dismissed. At Indian Point, for example, the NRC discovered that the liner of a refueling cavity at Unit 2 has been leaking since at least 1993. By allowing this reactor to continue operating with equipment that cannot perform its only safety function, the NRC is putting people living around Indian Point at elevated and undue risk.

The NRC audits only about 5 percent of activities at nuclear plants each year. Because its spotlight is more like a strobe light -- providing brief, narrow glimpses into plant conditions --the NRC must focus on the most important problem areas. Lessons from the 14 near-misses reveal how the NRC should apply its limited resources to reap the greatest returns to public safety.

Because we have not reviewed all NRC actions, the three positive and three negative examples do not represent the agency's best and worst performances in 2010. Instead, the examples highlight patterns of NRC behavior that contributed to these outcomes. The positive examples clearly show that the NRC can be an effective regulator. The negative examples attest that the agency still has work to do to become the regulator of nuclear power that the public deserves.

FINDINGS

Overall, our analysis of NRC oversight of safety-related events and practices at U.S. nuclear power plants in 2010 suggests these conclusions:

- Nuclear power plants continue to experience problems with safety-related equipment and worker errors that increase the risk of damage to the reactor core -- and thus harm to employees and the public.

- Recognized but misdiagnosed or unresolved safety problems often cause significant events at nuclear power plants, or increase their severity.

- When onsite NRC inspectors discover a broken device, an erroneous test result, or a maintenance activity that does not reflect procedure, they too often focus just on that problem. Every such finding should trigger an evaluation of why an owner failed to fix a problem before NRC inspectors found it.

- The NRC can better serve the U.S. public and plant owners by emulating the persistence shown by onsite inspectors who made good catches while eliminating the indefensible lapses that led to negative outcomes.

- Four of the 14 special inspections occurred at three plants owned by Progress Energy. While the company may simply have had an unlucky year, corporate-wide approaches to safety may have contributed to this poor performance. When conditions trigger special inspections at more than one plant with the same owner, the NRC should formally evaluate whether corporate policies and practices contributed to the shortcomings.

The chances of a disaster at a nuclear plant are low. When the NRC finds safety problems and ensures that owners address them -- as happened last year at Oconee, Browns Ferry, and Kewaunee -- it keeps the risk posed by nuclear power to workers and the public as low as practical. But when the NRC tolerates unresolved safety problems -- as it did last year at Peach Bottom, Indian Point, and Vermont Yankee -- this lax oversight allows that risk to rise. The more owners sweep safety problems under the rug and the longer safety problems remain uncorrected, the higher the risk climbs.

While none of the safety problems in 2010 caused harm to plant employees or the public, their frequency -- more than one per month -- is high for a mature industry. The severe accidents at Three Mile Island in 1979 and Chernobyl in 1986 occurred when a handful of known problems -- aggravated by a few worker miscues -- transformed fairly routine events into catastrophes. That plant owners could have avoided nearly all 14 near-misses in 2010 had they corrected known deficiencies in a timely manner suggests that our luck at nuclear roulette may someday run out.

###

The Union of Concerned Scientists is the leading U.S. science-based nonprofit organization working for a healthy environment and a safer world. Founded in 1969, UCS is headquartered in Cambridge, Massachusetts, and also has offices in Berkeley, Chicago and Washington, D.C. For more information, go to www.ucsusa.org.

From: McIntyre, David
To: Burnell, Scott; Uselding, Lara; Harrington, Holly
Cc: Couret, Ivonne; Screnci, Diane; Sheehan, Neil; Mitlyng, Viktoria; Dricks, Victor; Chandrathil, Prema; Ledford, Joey; Hannah, Roger
Subject: RE: UCS Releases U.S. Nuclear Safety Report
Date: Thursday, March 17, 2011 5:35:37 PM

As Holly tweaked earlier, "monitoring" rather than "responding" ...

From: Burnell, Scott
Sent: Thursday, March 17, 2011 5:28 PM
To: Uselding, Lara; Harrington, Holly; McIntyre, David
Cc: Couret, Ivonne; Screnci, Diane; Sheehan, Neil; Mitlyng, Viktoria; Dricks, Victor; Chandrathil, Prema; Ledford, Joey; Hannah, Roger
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Hey Lara -- you guys going to say anything bout this? Thanks --

Teri Sforza
Staff Writer
The Orange County Register
tsforza@ocregister.com
http://www.ocregister.com/watchdogblog

From: Sarah Goldberg [mailto:Sgoldberg@ucsusa.org]
Sent: Thursday, March 17, 2011 7:09 AM
To: Teri Sforza

RRRR-39

Subject: UCS Releases U.S. Nuclear Safety Report

EMBARGOED UNTIL 11 A.M. EDT TODAY, MARCH 17, 2011
CONTACT: media@ucsusa.org or 202-331-5420

UNION OF CONCERNED SCIENTISTS RELEASES REPORT ON THE NRC AND U.S. NUCLEAR PLANT SAFETY IN 2010; AGENCY OVERSIGHT GETS MIXED REVIEWS

WASHINGTON (March 17, 2011) -- Many of the serious safety or security lapses at U.S. nuclear power plants in 2010 happened because plant owners -- and often the Nuclear Regulatory Commission (NRC) -- failed to address known safety problems, according to a report released today by the Union of Concerned Scientists (UCS). Below is the executive summary of the report.
UCS Releases U.S. Nuclear Safety Report
TELEPRESSER TODAY AT 11 A.M.

Report author David Lochbaum, the director of UCS's Nuclear Safety Program, will present an overview of the report this morning at 11 a.m. during a telephone press briefing for reporters. The call-in number in the United States is 866-861-4873. The international number is 703-639-1464. The password is "Japan Nuclear Reactor Update." UCS Senior Scientist Edwin Lyman also will be on the call to talk about recent developments in Japan.

THE NRC AND NUCLEAR POWER PLANT SAFETY IN 2010:
A BRIGHTER SPOTLIGHT NEEDED

David Lochbaum, Union of Concerned Scientists

EXECUTIVE SUMMARY

This report is the first in an annual series on the safety-related performance of the owners of U.S. nuclear power plants and the Nuclear Regulatory Commission (NRC), which regulates the plants. The NRC's mission is to protect the public from the inherent hazards of nuclear power.

In 2010, the NRC reported on 14 special inspections it launched in response to troubling events, safety equipment problems, and security shortcomings at nuclear power plants. This report provides an overview of each of these significant events -- or near-misses.

This overview shows that many of these significant events occurred because reactor owners, and often the NRC, tolerated known safety problems. For example, the owner of the Calvert Cliffs plant in Maryland ended a program to routinely replace safety components before launching a new program to monitor degradation of those components. As a result, an electrical device that had been in use for longer than its service lifetime failed, disabling critical safety components.

In another example, after declaring an emergency at its Brunswick nuclear plant in North Carolina, the owner failed to staff its emergency response teams within the required amount of time. That lapse occurred because workers did not know how to activate the automated system that summons emergency workers to the site.

OUTSTANDING CATCHES BY THE NRC

This report also provides three examples where onsite NRC inspectors made outstanding catches of safety problems at the Oconee, Browns Ferry, and Kewaunee nuclear plants—before these impairments could lead to events requiring special inspections, or to major accidents.

At the Oconee plant in South Carolina, the owner fixed a problem with a vital safety system on Unit 1 that had failed during a periodic test. However, the owner decided that identical components on Units 2

and 3 could not possibly have the same problem. NRC inspectors persistently challenged lame excuse after lame excuse until the company finally agreed to test the other two units. When it did so, their systems failed, and NRC inspectors ensured that the company corrected the problems.

POOR NRC OVERSIGHT

However, the NRC did not always serve the public well in 2010. This report analyzes serious safety problems at Peach Bottom, Indian Point, and Vermont Yankee that the NRC overlooked or dismissed. At Indian Point, for example, the NRC discovered that the liner of a refueling cavity at Unit 2 has been leaking since at least 1993. By allowing this reactor to continue operating with equipment that cannot perform its only safety function, the NRC is putting people living around Indian Point at elevated and undue risk.

The NRC audits only about 5 percent of activities at nuclear plants each year. Because its spotlight is more like a strobe light -- providing brief, narrow glimpses into plant conditions --the NRC must focus on the most important problem areas. Lessons from the 14 near-misses reveal how the NRC should apply its limited resources to reap the greatest returns to public safety.

Because we have not reviewed all NRC actions, the three positive and three negative examples do not represent the agency's best and worst performances in 2010. Instead, the examples highlight patterns of NRC behavior that contributed to these outcomes. The positive examples clearly show that the NRC can be an effective regulator. The negative examples attest that the agency still has work to do to become the regulator of nuclear power that the public deserves.

FINDINGS

Overall, our analysis of NRC oversight of safety-related events and practices at U.S. nuclear power plants in 2010 suggests these conclusions:

- Nuclear power plants continue to experience problems with safety-related equipment and worker errors that increase the risk of damage to the reactor core -- and thus harm to employees and the public.

- Recognized but misdiagnosed or unresolved safety problems often cause significant events at nuclear power plants, or increase their severity.

- When onsite NRC inspectors discover a broken device, an erroneous test result, or a maintenance activity that does not reflect procedure, they too often focus just on that problem. Every such finding should trigger an evaluation of why an owner failed to fix a problem before NRC inspectors found it.

- The NRC can better serve the U.S. public and plant owners by emulating the persistence shown by onsite inspectors who made good catches while eliminating the indefensible lapses that led to negative outcomes.

- Four of the 14 special inspections occurred at three plants owned by Progress Energy. While the company may simply have had an unlucky year, corporate-wide approaches to safety may have contributed to this poor performance. When conditions trigger special inspections at more than one plant with the same owner, the NRC should formally evaluate whether corporate policies and practices contributed to the shortcomings.

The chances of a disaster at a nuclear plant are low. When the NRC finds safety problems and ensures that owners address them -- as happened last year at Oconee, Browns Ferry, and Kewaunee -- it keeps the risk posed by nuclear power to workers and the public as low as practical. But when the NRC tolerates unresolved safety problems -- as it did last year at Peach Bottom, Indian Point, and Vermont Yankee -- this lax oversight allows that risk to rise. The more owners sweep safety problems under the rug and the longer safety problems remain uncorrected, the higher the risk climbs.

While none of the safety problems in 2010 caused harm to plant employees or the public, their frequency -- more than one per month -- is high for a mature industry. The severe accidents at Three Mile Island in 1979 and Chernobyl in 1986 occurred when a handful of known problems -- aggravated by a few worker miscues -- transformed fairly routine events into catastrophes. That plant owners could have avoided nearly all 14 near-misses in 2010 had they corrected known deficiencies in a timely manner suggests that our luck at nuclear roulette may someday run out.

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The Union of Concerned Scientists is the leading U.S. science-based nonprofit organization working for a healthy environment and a safer world. Founded in 1969, UCS is headquartered in Cambridge, Massachusetts, and also has offices in Berkeley, Chicago and Washington, D.C. For more information, go to www.ucsusa.org.

From: Widomski, Michael
To: Harrington, Holly
Subject: RE: DRAFT Advisory Langauge
Date: Thursday, March 17, 2011 5:45:20 PM
Attachments: NUCLEAR REGULATORY COMMISSION.docx

I added a line about print and photo...and also put it on your letterhead (attached). The points mentioned in the advisory are in mostly to try and eleviate any madness and colnfusion the day of the meeting.

of course i must also say i do not have pride in ownership...cut and edit away as needed.

From: prvs=0505cd20e=Holly.Harrington@nrc.gov on behalf of Harrington, Holly
Sent: Thu 3/17/2011 5:32 PM
To: Widomski, Michael
Subject: RE: DRAFT Advisory Langauge

Not our style, but it's fine. We'll fix later.

What about print reporters and photogs?

From: Widomski, Michael [mailto:michael.widomski@dhs.gov]
Sent: Thursday, March 17, 2011 5:22 PM
To: Harrington, Holly
Subject: DRAFT Advisory Langauge

I have not shared with Elliot or anyone yet...wanted to see if this was on the right track before sending it to him. Also not sure how your protocols work.

RRRR-40

NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Telephone: 301/415-8200

Washington, D.C. 20555-0001

E-mail: opa.resource@nrc.gov Site: www.nrc.gov

Blog: http://public-blog.nrc-gateway.gov

March xx, 2011

DRAFT-DRAFT-DRAFT-DRAFT

MEDIA ADVISORY

NUCLEAR REGULATORY COMMISSION (NRC) MEETING

TITLE: Commission Meeting to Receive a Staff Briefing on the NRC Response to Recent Nuclear Events in Japan

PURPOSE: U.S. Nuclear Regulatory Commission Chairman Gregory B. Jaczko will hold a commission meeting for the NRC to receive a brief in an open forum from the Commission's Executive Director of Operations related to the NRC response to the nuclear event in Japan. The commission meeting will consist of a session open to public observation.

Although the meeting will be open to the public, discussions will be limited to Commission members and scheduled presenters of the NRC staff. The open portion of the meeting will be followed by a closed session for NRC members to conduct internal business.

DATE: Monday, March 21, 2011 at 9:00 am.

LOCATION: NRC Headquarters
Commissioners' Conference Room OWFN
11545 Rockville Pike
Rockville, MD 20852

MEDIA: Camera Broadcast Pool: Due to limited space availability, the meeting will be set up for a broadcast network pool camera crew. Broadcast media outlets interested in receiving the feed should contact the network pool.

General Media: Print media and photographers should arrive at the Marinelli Road entrance of the NRC with proper media credentials.

Direction and Parking Note: The NRC offices are located across the street from the White Flint Metro station. Parking is available at the White Flint metro parking garage on Marinelli Road.

# # #

From: LIA07 Hoc
Subject: 1700 EDT (March 17, 2011) USNRC Earthquake/Tsunami SitRep
Date: Thursday, March 17, 2011 5:47:08 PM
Attachments: USNRC Earthquake-Tsunami Update.031711.1700EDT.pdf

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Attached, please find a 1700 EDT situation report from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami on March 17, 2011. Please note that this information is ~~"Official Use Only"~~ and is only being shared within the federal family.
Please call the Headquarters Operations Officer at 301-816-5100 with questions.
-Sara

Sara K. Mroz
Communications and Outreach
Office of Nuclear Security and Incident Response
US Nuclear Regulatory Commission
sara.mroz@nrc.gov
LIA07.HOC@nrc.gov (Operations Center)

RRRR-41

From:	Lee, Jun
To:	Goldberg, Francine; Hardy, Sally; Harrington, Holly; Hayden, Elizabeth; Hoffman, Joan; Main, Jeffrey; Rakovan, Lance; Sheehan, Neil; Ellmers, Glenn; Garrity, Paula
Subject:	Change in redesign launch date
Date:	Thursday, March 17, 2011 5:57:38 PM

Hi all,

Darren has asked us to delay the deployment of the Public Site Redesign until the weekend of April 15th, as a result of the critical situation in Japan.

The closed caption video has been delivered and can be viewed at http://nrcweb:400/NRC-intro-demo.wmv. The request to show the Google Maps earlier in the video has also been made along with updated images for the current redesign site.

Thanks

Jun

RRRR-42

From: LIA06 Hoc
Sent: Sunday, March 20, 2011 6:32 PM
To: LIA08 Hoc
Subject: FW: Update

Liaison Team Director
U.S. Nuclear Regulatory Commission
Operations Center

From: Wiggins, Jim
Sent: Sunday, March 20, 2011 11:32 AM
To: LIA06 Hoc
Cc: Bergman, Thomas; FOIA Response.hoc Resource
Subject: FW: Update

Plz set up the phone call.....Chairman, Ellis, USAID, ADM Donald

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From: Borchardt, Bill
Sent: Sunday, March 20, 2011 11:24 AM
To: Wiggins, Jim
Cc: Weber, Michael; Virgilio, Martin; Doane, Margaret
Subject: FW: Update

Please have someone set up the call

From: Jaczko, Gregory
Sent: Sunday, March 20, 2011 11:15 AM
To: Borchardt, Bill
Cc: Batkin, Joshua; Weber, Michael; Virgilio, Martin; Wiggins, Jim
Subject: Re: Update

Set up the pre 2 pm call and include ellis and usaid(??)

From: Borchardt, Bill
To: Jaczko, Gregory
Cc: Batkin, Joshua; Weber, Michael; Virgilio, Martin; Wiggins, Jim
Sent: Sun Mar 20 11:12:17 2011
Subject: Update

Chairman,

1) Just got off the phone with Bill Webster (INPO). INPO has committed to send 2 industry people with logistics type experience to Japan to begin enhanced interactions with TEPCO. They are expected to leave tonight or Monday. I assured him that our in-country team (and the embassy) would help establish points of contact between the US industry reps and the TEPCO/Japan reps.
2) I believe that you are going to have to weigh in on the subject of identifying a lead US Government entity that has the necessary project management and logistics expertise. I raised the topic at the "consortium" meeting Saturday afternoon and privately with DOE (Pete Lyons) and the Naval Reactors

8888/43

representative but did not make any headway. Everyone seems to agree that NRC does not have the necessary skill set but neither of those 2 organizations were immediately willing to assume that role. There is a 2pm Monday status update teleconference being set up for consortium participants. It might be useful if you, DOE, and ADM Donald could talk before the 2pm call.

Bill

From: Brenner, Eliot
To: Harrington, Holly
Subject: RE: information resources for Japan
Date: Thursday, March 17, 2011 6:10:05 PM

Can you come look at something for me please.

From: Harrington, Holly
Sent: Thursday, March 17, 2011 6:10 PM
To: Brenner, Eliot
Subject: FW: information resources for Japan

Just FYI, I decided for a variety of reasons not to do this

From: OPA Resource
Sent: Thursday, March 17, 2011 6:00 PM
To: Harrington, Holly
Subject: FW: information resources for Japan

From: Deahl, Elizabeth
Sent: Wednesday, March 16, 2011 2:16 PM
To: OPA Resource
Cc: Brenner, Eliot
Subject: FW: information resources for Japan

From: Deahl, Elizabeth
Sent: Wednesday, March 16, 2011 2:15 PM
To: Brenner, Eliot
Cc: Nichols, Russell; Bender, Marianne; Danoff, Karen; Deahl, Elizabeth; Gallien, Paul; Glazer, Adam; Gorday, Charlie; McGowan, Anna; Mendiola, Mary; Resner, Jo Ann; Rhodes, Bebbie; Zuberi, Sardar
Subject: information resources for Japan

Hello Eliot,
The staff in the PDR have put together a list of information resources to help us answer questions about Japan that we are receiving from the public this week.

We thought that it might be useful to post these resources in the NRC public blog, similar to the list that you posted on March 12.

The resources are in our staff SharePoint blog, here. If you like, we can clean it up a bit for a more public posting (e.g., alphabetical order, rewriting the comments). Please let me know if you cannot access our SharePoint site.

We also thought there might be an opportunity to pass on to you questions we are being frequently asked, that could be posted as FAQs to the public blog.

If you have any questions, or would like to discuss, please call our Section Chief, Anna McGowan (301-415-7204).

RRRR -44

Regards,
Beth

Beth Deahl
Technical Information Center Section
Information and Records Services Division
NRC Office of Information Services
elizabeth.deahl@nrc.gov
301.415.5684

From: Couret, Ivonne
To: Harrington, Holly
Subject: FW: suggestion to include backgrounders/fact sheets on NRC blog post or press release
Date: Thursday, March 17, 2011 7:07:02 PM

Blog internal suggestion

Ivonne L. Couret
Public Affairs Officer
Office of Public Affairs
Media Desk
opa.resource@nrc.gov
301-415-8200

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

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

From: Banovac, Kristina
Sent: Thursday, March 17, 2011 2:25 PM
To: OPA Resource
Subject: suggestion to include backgrounders/fact sheets on NRC blog post or press release

Dear OPA representatives,

I wanted to forward along 2 suggestions to post certain fact sheets on the NRC blog or as a press release.

TMI-2: I have heard many inaccuracies about the TMI-2 accident and current state of TMI-2 (some reports saying TMI-2 is still operating) on the radio and television reports, and I am wondering if it would be helpful for the public to have a reference/link to the fact sheets related to the TMI-2 accident in a press release or on the blog:
- TMI-2 accident fact sheet http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/3mile-isle.html, and perhaps the fact sheet on plant safety performance after the TMI-2 accident http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-plant-sfty-after-tmi2.html

Radiation and dose: Also, there are many reports about radiation or dose levels associated with the Japan incident, and I'm wondering if it would be helpful for the public to post either in a press release or on the blog, some "easy to understand" information about radiation and dose. We have a couple backgrounders/fact sheets/brochures on biological effects of radiation (http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/bio-effects-radiation.html, http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0322/,). However, I would also recommend developing a fact sheet (if one doesn't exist already) on certain doses and dose limits, to help the public understand the doses being reported in the media and to put them in perspective. [For example, the fact sheet could include NRC's dose limits for public and workers in Part 20, our accident dose limits in Part 100, average background doses (both from natural and manmade sources), and some data on "high dose effects" (perhaps the 100 rad minimum threshold for acute effects to the blood from high doses of radiation, and perhaps the LD 50/60 value of 400 rad also). The fact sheet could also discuss "time, distance, shielding." Of course, it would be very helpful to

RRRR-45

provide the numbers in both “rem” and “sieverts.”]

Thanks so much,
Kris Banovac
NMSS/SFST
301-492-3571

David Decker

From: Dedrick, Kathy (EPW) [Kathy_Dedrick@epw.senate.gov]
Sent: Monday, March 14, 2011 10:57 AM
To: Powell, Amy
Cc: Decker, David
Subject: Briefing

Amy,

I know you've been in touch with Bettina, but I wanted to make sure you both know we'd like to get the NRC up to the Hill as soon as possible to provide a briefing on the situation in Japan. We'd like to make sure all the facts are getting out. I know you all have a hearing on Wednesday, but we'd like to do it before then. Let me know what you're able to do, I know staff is stretched thin. Thanks for all your help.

-Kathy

Kathy Dedrick
Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510
Phone: 202-224-8832
Fax: 202-224-1273

RRR-A6

David Decker

From: David Decker
Sent: Monday, March 14, 2011 10:38 AM
To: Powell, Amy; Riley (OCA), Timothy
Subject: RE: Ultimate heat sink info

From the Q&A, the public info on this question says:

6 of the 104 US reactors are the GE BWR 3 with Mark 1 containments similar to the design used at Fukushima Unit 1. Those 6 are Dresden 1&2, Monticello1, Pilgrim 1, Quad Cities 1&2.

All other reactors at Fukushima are BWR-4 or BWR-5. Units 1-5 are Mark1 containments, with Unit 6 being Mark 2.

From: Powell, Amy
Sent: Monday, March 14, 2011 10:14 AM
To: Riley (OCA), Timothy
Cc: Decker, David
Subject: FW: Ultimate heat sink info

Tim – David is heading to the Ops Center to make a copy of that Q&A that was on our desk over the weekend that included the # of plants of ***similar*** design (6 of the 104 as I recall). That will help with Laura's question.

From: Haynes, Laura (Carper) [mailto:Laura_Haynes@carper.senate.gov]
Sent: Monday, March 14, 2011 10:10 AM
To: Riley (OCA), Timothy
Cc: Powell, Amy
Subject: RE: Ultimate heat sink info

Do all our plants have an ultimate heat sink? Is that required?
And how many plants have the same design as the GE Fukushima plant? Thanks.

From: Riley (OCA), Timothy [mailto:Timothy.RileyOCA@nrc.gov]
Sent: Sunday, March 13, 2011 9:17 PM
To: Haynes, Laura (Carper)
Cc: Powell, Amy
Subject: NRC: Ultimate heat sink info

Laura,
Earlier, you had asked a question about ultimate heat sink at the US reactors. Here is some information that I hope will be helpful.

> An ultimate heat sink is the means of heat dissipation from the plant to the environment, including the necessary retaining structures (e.g., a dammed lake, cooling tower and any connecting canals or conduits.)
>
> Ultimate heat sinks are maintained at US nuclear reactors to satisfy NRC reactor design requirements. Ensuring that the ultimate heat sink is capable of receiving decay heat is a safety related function. Technical Specifications contained in all power reactor operating licenses require that the ultimate heat sink be operable, or the reactor brought to a cold shut down condition.

RREE-47

There are also non-safety-related methods to remove decay heat. NRC has established new requirements to codify post 9/11 orders to ensure that licensees have equipment and training in place for severe situations in which the ultimate heat sink and associated safety-related systems are not available.

The NRC has confidence that if a reactor plant ultimate heat sink is tested and maintained in accordance with Technical Specification requirements that the reactor can be safely brought to a cold shutdown condition in response to any design based accident. To address accidents or situations that could potentially occur with the ultimate heat sink unavailable, the NRC has ensured that power reactor licensees have equipment, strategies and trained personnel available to provide for nuclear fuel cooling and the dissipation of decay heat.

Regulations:

General Design Criteria 10 CFR 50 Appendix A Criterion 44--Cooling water: A system to transfer heat from structures, systems, and components important to safety, to an ultimate heat sink shall be provided. The system safety function shall be to transfer the combined heat load of these structures, systems, and components under normal operating and accident conditions.

10 CFR 50.54 (hh)(2)
(2) Each licensee shall develop and implement guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with loss of large areas of the plant due to explosions or fire, to include strategies in the following areas:
(i) Fire fighting;
(ii) Operations to mitigate fuel damage; and
(iii) Actions to minimize radiological release.

David Decker

From: Ciarcia, Ray (HSGAC) [Ray_Ciarcia@hsgac.senate.gov]
Sent: Monday, March 14, 2011 10:37 AM
To: Decker, David
Cc: Tamarkin, Eric (HSGAC)
Subject: Nuclear sector security/safety

David,

I am new to Senator Akaka's Subcommittee on Oversight staff under the Senate Homeland Security Committee. Based on Joel's notes, I believe you may have met or corresponded with Joel Spangenberg from our subcommittee on the topic of nuclear sector security. Joel has since moved on and Eric and I are working the issues he had worked in the past, including nuclear security.

I am very interested in meeting with you to continue our efforts to understand the security stance of domestic nuclear facilities, including NRC's collaboration with DHS to understand the threat scenario and assist FEMA in preparing for a nuclear emergency.

Furthermore, in light of recent events in Japan, I am especially interested in understanding the extent to which NRC ensures that domestic reactors are adequately designed and prepared for earthquake and tsunami events. For example, recent news reports have raised concerns about the vulnerability of the California Diablo Canyon plant to both severe earthquakes and tsunamis.

If you are located the DC area, would you be able to meet with us in the near future to discuss the above topics? If so, we are generally free the latter half of this week and next.

Thank you,
-Ray

Raymond Ciarcia
202.228.3901

Subcommittee on Oversight of Government Management,
the Federal Workforce, and the District of Columbia
U.S. Senate Committee on Homeland Security and Governmental Affairs
601 Hart Senate Office Building
Washington, DC 20510

RRRR-48

From: Brenner, Eliot
To: Janbergs, Holly
Cc: Harrington, Holly
Subject: RE:
Date: Thursday, March 17, 2011 7:28:52 PM

Can you somewhat invert the order to read xxx Jaczko testified March 16 to the House Comminttee on etc etch and so forth xxx on the situation in Japan.

I have asked Holly to post the transcript, so it would be good to link to the transcript in the caption.

thanks

From: Janbergs, Holly
Sent: Thursday, March 17, 2011 9:27 AM
To: Harrington, Holly
Cc: Brenner, Eliot
Subject:

Suggested frontpage pic & caption – thoughts?

Chairman Gregory Jaczko gives a statement on the situation in Japan to the House Committee on Energy and Commerce Subcommittees on Energy and Power and Environment and the Economy on March 16, 2011.

Beth Janbergs
Public Affairs Assistant
301-415-8211

RRRR-49

From:	LIA04 Hoc
To:	Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; Maier, Bill; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena
Cc:	Piccone, Josephine; LIA06 Hoc; OST05 Hoc; Harrington, Holly; Collins, Elmo; Dean, Bill; Heck, Jared; McCree, Victor; Pederson, Cynthia; Satorius, Mark; Flannery, Cindy; LIA04 Hoc; Lukes, Kim; Noonan, Amanda; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtil, Richard; Virgilio, Rosetta
Subject:	10 mile EPZ and 50 mile evacuation zone in Japan
Date:	Thursday, March 17, 2011 8:49:12 PM
Importance:	High

RSLOs:

Many of your states and others have inquired about the 10 mile EPZ and the 50 mile evacuation recommendation as stated in the NRC's press release of March 16 (No. 11-050), which states "the NRC believes it is appropriate for U.S. residents within 50 miles of the Fukushima reactors to evacuate."

The following has been provided by OPA on March 17 through its approved Talking Points.

- The 10-mile EPZ reflects the area where projected doses from design basis accidents at nuclear power plants would not exceed the EPA's protective action guidelines, and we are confident that it would be adequate even for severe accidents. However, the 10-mile zone was always considered a base for emergency response that could be expanded if the situation warranted. The situation in Japan, with four reactors experiencing exceptional difficulties simultaneously, creates the need to expand the EPZ beyond the normal 10-mile radius. We have said from the beginning of this crisis that the NRC would analyze this situation 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.

Richard Turtil
State Liaison – Liaison Team
Incident Response Center

RRRR-50

From: Burnell, Scott
To: Sheehan, Neil; McIntyre, David; Brenner, Eliot; Hayden, Elizabeth; Harrington, Holly
Subject: FW: ACTION REQUESTED: Japanese Earthquake-related Information Notice
Date: Friday, March 18, 2011 12:03:59 AM
Attachments: IN 11-xx B5b Earthquake.docx
Quake_IN.docx

All;

I've started a draft press release for the Information Notice so that we can keep track with changes and hopefully issue it as soon as the IN (or Bulletin or whatever it turns out to be) goes out. The "Quake_IN" document is in the "G" drive, the Crisis Communication\Japan Quake Tsunami folder.

Scott

From: Bowman, Eric
Sent: Thursday, March 17, 2011 5:02 PM
To: McDermott, Brian
Cc: LIA08 Hoc; Rosenberg, Stacey; McGinty, Tim; Burnell, Scott; Williamson, Edward; Morris, Scott; Lew, David; Wert, Leonard; Pederson, Cynthia; Howell, Art; Westreich, Barry
Subject: ACTION REQUESTED: Japanese Earthquake-related Information Notice

Brian,

The current version of the IN is attached. We chose to use an IN for this as the fastest generic communications vehicle available in light of our desire to issue it prior to the Commission meeting on the subject scheduled for Monday.

V/R Eric

From: McDermott, Brian
Sent: Thursday, March 17, 2011 2:38 PM
To: McGinty, Tim; Burnell, Scott; Williamson, Edward; Morris, Scott
Cc: LIA08 Hoc; Rosenberg, Stacey; Bowman, Eric
Subject: RE: ACTION REQUESTED: Japanese Earthquake-related Information Notice

Tim,

We've tasked the item for review this evening. With comments due to NRR\Tim McGinty by 0700 on 3/18.

Brian

From: McGinty, Tim
Sent: Thursday, March 17, 2011 12:57 PM
To: Burnell, Scott; Williamson, Edward; McDermott, Brian; Morris, Scott
Cc: LIA08 Hoc; Rosenberg, Stacey; Bowman, Eric
Subject: FW: ACTION REQUESTED: Japanese Earthquake-related Information Notice

We are fast tracking this proposed IN. I will want the ET in the Ops Center to review it. Attached is an early draft. Feedback welcomed. Tim

RRR-51

From: McGinty, Tim
Sent: Thursday, March 17, 2011 12:42 PM
To: Bowman, Eric; Thomas, Eric; Correia, Richard; Mathew, Roy
Cc: Rosenberg, Stacey; Hiland, Patrick; Westreich, Barry; Boger, Bruce; Leeds, Eric; Quay, Theodore; Blount, Tom; Skeen, David
Subject: RE: ACTION REQUESTED: Japanese Earthquake-related Information Notice

My apologies. We have now been tasked to issue the IN tomorrow. Need your comments and concurrence by mid-afternoon today, COB at the latest. Tim

From: Bowman, Eric
Sent: Thursday, March 17, 2011 11:37 AM
To: Thomas, Eric; Correia, Richard; Mathew, Roy
Cc: Rosenberg, Stacey; McGinty, Tim; Hiland, Patrick; Westreich, Barry
Subject: ACTION REQUESTED: Japanese Earthquake-related Information Notice
Importance: High

All,

We plan to issue the attached Information Notice early next week on the implications of the recent Japanese Earthquake. In support of that effort, your comments and Divisional concurrence are requested by tomorrow afternoon.

Very many thanks in advance for your efforts.

V/R; R/ Eric

Eric E. Bowman
Sr. Project Manager
Generic Communications & Power Uprate Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-2963
Eric.Bowman@nrc.gov

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, D.C. 20555-0001

NRC INFORMATION NOTICE 2011-05: TOHOKU-TAIHEIYOU-OKI EARTHQUAKE EFFECTS ON JAPANESE NUCLEAR POWER PLANTS

ADDRESSEES

All holders of operating licensees for nuclear power reactors under the provision of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

PURPOSE

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice (IN) to inform addressees of effects of the Tohoku-Taiheiyou-Oki Earthquake on nuclear power plants in Japan. The NRC expects that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems. Suggestions contained in this IN are not NRC requirements; therefore, no specific action or written response is required.

DESCRIPTION OF CIRCUMSTANCES

On March 11, 2011, the Tohoku-Taiheiyou-Oki Earthquake occurred near the east coast of Honshu, Japan. This magnitude 9.0 earthquake and the subsequent tsunami caused significant damage to at least four of the six units of the Fukushima Daiichi nuclear power station, including damage to the cooling water systems, a sustained loss of both the off-site and on-site power systems, and a loss of spent fuel pooling (SFP) cooling. Efforts to restore power to emergency equipment have been impacted by damage to the surrounding areas due to the tsunami and earthquake.

Units One through Three, which had been operating at the time of the earthquake, scrammed automatically, inserting their neutron absorbing control rods to ensure immediate shutdown of the fission process. With the loss of electric power to normal and emergency core cooling systems and subsequent failure of back-up decay heat removal systems, Tokyo Electric Power Company (TEPCO), the operator of the plant, resorted to injecting sea water and boric acid into the reactor vessels of these three units, in an effort to cool the fuel and ensure they remained shutdown. During this process, the fuel became partially uncovered. Hydrogen gas built up in

ML110760432

units 1 and 3 as a result of overheated fuel reacting with water. When the gas pressure was vented from the primary containment, hydrogen explosions occurred in both units and damaged the secondary containments. It appears that primary containments remain functional. In addition, units 1, 2, and 3 suffered from decreasing SFP levels due to loss of their SFP cooling systems. TEPCO cut a hole in the side of the unit 2 secondary containment to prevent hydrogen buildup following a sustained period when there was no water injection into the core.

Units Four through Six had been shutdown for refueling outages at the time of the earthquake. The fuel assemblies for Unit Four had been offloaded from the reactor core to the SFP. The Unit four SFP suffered a total loss of water along with structural damage affecting its ability to retain water. Significantly elevated radiation levels were measured outside of Unit 4. The SFPs for Units Five and Six appear intact, but have been heating up. Emergency power is available to provide cooling water flow through the SFPs for Units 5 and 6.

The Japanese Government ordered an evacuation out to 20 km for the area surrounding Fukushima Daiichi. Residents out to 30 km were ordered to shelter in place.

The damage to Fukushima Daiichi nuclear power station appears to have been caused by initiating events outside of the design basis for the facilities.

BACKGROUND

Appendix A to 10 CFR Part 50, General design criteria (GDC) 2, "Design Bases for Protection against Natural Phenomena," or, as appropriate, similar requirements in the licensing basis for a reactor facility requires that structures, systems, and components (SSCs) important to safety be designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunami, and seiches without loss of capability to perform their safety functions. The design bases for these SSCs reflects: (1) appropriate consideration of the most severe of the natural phenomena that have been historically reported for the site and surrounding area, with sufficient margin for the limited accuracy, quantity, and period of time in which the historical data have been accumulated, (2) appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena, and (3) the importance of the safety functions to be performed.

As a result of the terrorist events of September 11, 2001, the NRC issued EA-02-026, "Order for Interim Safeguards and Security Compensatory Measures" (the ICM Order) dated February 25, 2002, (designated safeguards information (SGI)), which modified then-operating licenses for commercial power reactor facilities to require compliance with specified interim safeguards and security compensatory measures. Section B.5.b of the ICM Order requires licensees to adopt mitigation strategies using readily available resources to maintain or restore core cooling, containment, and SFP cooling capabilities to cope with the loss of large areas of the facility due to large fires and explosions from any cause, including beyond-design-basis aircraft impacts.

By letter dated February 25, 2005 the NRC staff provided guidance for implementing Section B.5.b of the ICM Order. This guidance, designated as SGI, included best practices for mitigating losses of large areas of the plant and measures to mitigate fuel damage and minimize

releases. Following issuance of the B.5.b Phase 1 Guidance, the NRC staff conducted inspections at operating reactor sites using Temporary Instruction (TI) 2515/164 (SGI) and subsequently TI 2515/168 (SGI) to ensure compliance with Section B.5.b of the ICM Order.

In December 2006, Nuclear Energy Institute (NEI) issued NEI 06-12, Revision 2, "B.5.b Phase 2 & 3 Submittal Guideline." NEI 06-12 is designated for Official Use Only – Security Related Information (OUO-SRI). The NRC endorsed NEI 06-12, Revision 2, by letter dated December 22, 2006, also designated OUO-SRI, as an acceptable means for developing and implementing the mitigation strategies requirement in Section B.5.b of the ICM Order. NEI 06-12, Revision 2 provides guidance for implementing a set of strategies intended to maintain or restore core cooling, containment, and SFP cooling capabilities under the circumstances associated with the loss of a large area of the plant due to explosions or fire, in the following areas:

- Adding make-up water to the SFP,
- Spraying water on the spent fuel,
- Enhanced initial command and control activities for challenges to core cooling and containment, and
- Enhanced response strategies for challenges to core cooling and containment.

The specific strategies covered in NEI 06-12, Revision 2, were developed based on the results of assessments conducted at currently licensed power reactor facilities for the purpose of enhancing plant specific mitigation capability for damage conditions caused by a large explosion or fire. These assessments identified a wide spectrum of potential plant specific strategies. NEI 06-12, Revision 2 specifies one set of strategies applicable to all pressurized-water reactors and another set applicable to all boiling-water reactors. Both sets are derived from the results of the plant specific assessments.

The B.5.b Phase 1 Guidance and NEI 06-12, Revision 2, were used by each licensee in preparing information submitted to the NRC that describes a plant specific approach to implementing mitigating strategies and supports each plant specific license condition. The NRC staff has completed its review of the information submitted by each licensee, as well as information obtained during prior NRC inspections, and has issued an OUO-SRI safety evaluation (SE) that documents the bases for its approval of the license condition for each facility. The SE issued for each licensee includes regulatory guidance in Section 3.0 of Appendix A, "Phase 1 Assessment," that recites the generic B.5.b Phase 1 Guidance of Reference 3, as clarified in TI 2515/168, in a form that is designated OUO-SRI rather than SGI.

On March 27, 2009, the NRC amended 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants," and Part 73, "Physical Protection of Plants and Materials," with new requirements published in the *Federal Register* dated March 27, 2009 (74 FR 13926). This rulemaking added paragraph (i) to 10 CFR 50.34, "Contents of applications; technical information," to require submittal of a "description and plans for implementation of the guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with the loss of large areas of the plant due to explosions or fire as required by § 50.54(hh)(2) of this chapter." This rulemaking also added 10 CFR 50.54(hh)(2)

in order to impose the same mitigating strategies requirements on new reactor applicants and licensees as those imposed by the ICM Order and associated license conditions. The Statement of Considerations for this rulemaking specifically noted that the requirements described in Section 50.54(hh) are for addressing certain events that are the cause of large fires and explosions that affect a substantial portion of the nuclear power plant and are not limited or directly linked to an aircraft impact. In addition, the rule contemplates that the initiating event for such large fires and explosions could be any number of beyond-design basis events, including natural phenomena such as those described in GDC 2 (i.e., earthquakes, tornadoes, floods, tsunami, and seiches), without regard to the GDC 2 limitation in magnitude of the design bases for the natural phenomena.

NRC regulations at 10 CFR 50.63 require that light-water-cooled nuclear power plants be capable of withstanding for a specified duration and recovering from a station blackout.

DISCUSSION

The nuclear power industry has taken the actions listed below at each licensed reactor site. Additional information is available in the NEI Fact Sheet, "Industry Taking Action to Ensure Continued Safety at U.S. Nuclear Energy Plants," dated March 16, 2011, available at www.nei.org.

1. Verification of the capability to mitigate conditions that result from severe adverse events, including the loss of significant operational and safety systems due to natural events, fires, aircraft impact and explosions.
2. Verification of the capability to mitigate a total loss of electric power to a nuclear power plant.
3. Verification of the capability to mitigate flooding and the impact of floods on systems inside and outside the plant.
4. Identification of the potential for loss of equipment functions during seismic events appropriate for the site and development of mitigating strategies of potential vulnerabilities.

Assessment of the implications of beyond design-basis natural phenomena, including earthquakes, is continuing as more information becomes available. In the near term, the NRC is considering additional generic communications and additional action that requests operating plants to provide specific information relating to their facilities to enable the NRC staff to complete the Regulatory Assessment. The NRC staff is concurrently developing a TI in order to perform independent assessment of nuclear power plant readiness to address beyond design-basis natural phenomena under the Reactor Oversight Process.

PAPERWORK REDUCTION ACT STATEMENT

This Information Notice does not contain any information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.).

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

CONTACTS

This information notice requires no specific action or written response. Please direct any questions about this matter to the technical contact listed below or the appropriate Office of Nuclear Reactor Regulation (NRR) project manager.

Timothy J. McGinty, Director
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Technical Contact: Eric E. Bowman, NRR
301-415-2963
e-mail: Eric.Bowman@nrc.gov

Note: NRC generic communications may be found on the NRC public Web site, http://www.nrc.gov, under Electronic Reading Room/Document Collections.

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OPA-

PRESS RELEASE

(Source: Draft IN)

NRC INFORMS U.S. NUCLEAR POWER PLANTS

ON JAPAN QUAKE'S EFFECTS

The Nuclear Regulatory Commission has issued an Information Notice to all currently operating U.S. nuclear power plants, describing the effects of the March 11 earthquake and tsunami on Japanese nuclear power plants.

The notice provides a brief overview of how the quake and tsunami are understood to have not only disabled several key safety-related systems at the Fukushima Daiichi nuclear power station, but also hampered efforts to return those systems to service. The notice also lists the known damage to the reactors and associated spent fuel pools as of Friday, March 18.

The notice reflects the current belief that the combined effects of the March 11 quake and tsunami exceeded the Fukushima Daiichi plant's design limits. The notice also recounts the NRC's efforts, post-9/11, to enhance U.S. plants' abilities to properly respond to the loss of large areas of a site following a severe event.

The NRC expects U.S. nuclear power plants will review the entire notice to determine how it applies to their facilities and consider actions, as appropriate, to avoid situations such as those at Fukushima Daiichi.

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David Decker

From: Powell, Amy
Sent: Monday, March 14, 2011 10:06 AM
To: Weil, Jenny
Cc: Schmidt, Rebecca; Decker, David
Subject: Need your writing skills!

When you get back in the office, would you please work on the Chairman's oral statement for Wednesday' hearing? Please pull from the press releases and blog postings – anything that NRC has made public or shared with the Hill to date. We'll also need a paragraph or two on Japan to add to the written testimony in light of the new focus of the hearing.

Check in when you get back – either Becky or I will be around.

Thanks
Amy

Amy Powell
Associate Director
U. S. Nuclear Regulatory Commission
Office of Congressional Affairs
Phone: 301-415-1673

PRR-52

From: Doane, Margaret
Sent: Sunday, March 20, 2011 7:31 AM
To: LIA02 Hoc; LIA03 Hoc; Fragoyannis, Nancy; Mamish, Nader; Abrams, Charlotte; Wittick, Brian; Afshar-Tous, Mugeh; 'ShafferMR@state.gov'; Smith, Brooke; Foggie, Kirk; Bloom, Steven; Schwartzman, Jennifer; Tobin, Jennifer; Mayros, Lauren; Jones, Andrea; English, Lance; Smiroldo, Elizabeth; Young, Francis; Henderson, Karen; Ramsey, Jack; Shepherd, Jill; Baker, Stephen
Subject: RE: 3/20/11 0700 Transition

Last night Josh asked for the interpreter to see whether on any Japanese channels or web, they were reporting dose rates I put in my note. Did we answer that question?

From: LIA02 Hoc
Sent: Sunday, March 20, 2011 6:56 AM
To: LIA03 Hoc; Fragoyannis, Nancy; Doane, Margaret; Mamish, Nader; Abrams, Charlotte; Wittick, Brian; Afshar-Tous, Mugeh; 'ShafferMR@state.gov'; Smith, Brooke; Foggie, Kirk; Bloom, Steven; Schwartzman, Jennifer; Tobin, Jennifer; Mayros, Lauren; Jones, Andrea; English, Lance; Smiroldo, Elizabeth; Young, Francis; Henderson, Karen; Ramsey, Jack; Shepherd, Jill; Baker, Stephen
Subject: 3/20/11 0700 Transition

TRANSITION REPORT FOR MARCH 20, 2011 0700 Charlotte and Jen transitioning to Karen and Steve Baker

GENERAL NOTES. (includes notes from previous updates)
1) Information pertinent to the team in Japan can be forwarded to new email group, which incorporates Dan Dorman already, "Liaison Japan," in Outlook.
2) Action: International updates must now be sent to LIA07 (to be put in the HOO Status Update) before the end of every shift as well as posted on the LT status board (different than the LT Log).
3) 11 PM – 7 AM shift is responsible for the summary call with Kirk and Brooke, scheduled daily at 5 AM EST unless rescheduled.
4) Kirk and Brooke requested that the international team to sit in on calls with the ET and Chuck to take notes and provide a short summary of what was discussed via email.
5) Reminder to include names on watch bill emails and inform Brooke and Kirk when shift changes.
6) RST needs to follow up on Crystallization issue per the 0930 conference call (see item below)
7) Prior to the 2 pm call or any other call you set up, make sure you contact the HOOs to let them know that you are going to have the international call with UK, etc. Might be beneficial to establish a standing bridge.

- 0930 Conference Call (Update). On yesterday's 0930 conference call with UK/Canada/France (with RST), UK asked about crystallization on the fuel as a result of the salt from the sea water. We have so far been unable to get additional information on this from TEPCO. They will likely ask for a follow-up on the 0930 call this morning. RST will be on the line and can respond. Action: International liaison should verify whether the group desires another 2 PM call on health physics issues – if so, contact the HOO to give a heads up.

- NRC Relief Team to Japan (Update). Dan Dorman (NMSS) departed for Tokyo on March 19. Mike Scott (RES) and Alan Blamey (RI) depart on March 22. Todd Jackson (RI) departs March 23. Jack Giessner (RIII), Rob Taylor (NRR), Marie Miller (RI), Syed Ali (RES), Abdul Sheikh (NRR), Ralph Way (NSIR), and Jack Ramsey (OIP) will depart March 24. Action:

KRR/53

New team members should be added to Liaison Japan group. Need Blackberry numbers and e-mail addresses for each traveler. Add new team members, contact information and flight arrival time to NRC traveler table. Dosimeters for team members are in drawer at LIA03 location.

- International request for information. The Indonesian Embassy in Washington requested information on how we arrived at the 50-mile evacuation announcement. We provided some very basic information. They have followed up with a request for a phone call or meeting with NRC and their Minister-Counselor. Action: Call will occur at 5PM on Monday, March 21.

- Business Cards for TeamJapan. Brooke, Kirk and Tony have requested an additional supply of business cards be provided to them. The ADM desk has generated the cards requested but FedEx wouldn't be able to get them out until Monday with delivery Tuesday. Action: Provide to Mike Scott (RES) who is departing on Tuesday March 22. Cards are on LIA03 desk.

- Thumb Drive for Brooke. Brooke has requested that her NRC thumb drive be sent to her. It is in the drawer of station LIA03. Action: Provide to Mike Scott who is departing on Tuesday, March 22.

- Meteorological/Radiation Data. PMT is looking to fill a gap in its data from 3/13-15. We may have received some of it tonight but the translator is still working on it. Action: Any data that comes in with those dates on it should be treated as a top priority for translation and providing to PMT.

- 21:30 Interagency Call. Next call will be 3/21 at 21:30 EST. Based upon information from the Task Force conference call, Chuck Casto had just returned from a meeting with TEPCO and TEPCO was very interested in getting the robots and helicopter from Lockhead Martin. They requested that the specs for these items be forwarded to them as soon as possible. Based upon information from DOS earlier in the call DDTC was working to expedite the licensing for these items in the event they were requested and the passports for Lockhead Martin personnel to accompany the helicopter. Update on the Bechtel trains in Perth for Japan – DOD Paycom has confirmed payment and flight is being prepared. The flight is estimated to arrive late or overnight Japan time on Sunday. One train of pumps and valves is being provided on this flight with a decision on supplying the remaining trains to be determined later based upon need by Japan.

- Radiological Data Request. NRC PMT room requested that we ask NISA to connect with TEPCO regarding getting updated radiological information including offsite plume monitoring data on a routine and expedited frequency. This request was sent to Danielle (Emche) to engage with Kirk and potentially NISA counterpart if appropriate. Action: The answer to this request should be communicated to the PMT room if received.

- International aid/support for Japan. IAEA and Russians have delegations in Japan. The Italians are interested in discussing what the USG is doing, and might be interested in helping in some way. We should receive more information from Roberto Ranieri soon. Spain has sent no one yet but Parliament will review and decide. South Africa and Slovenia

have sent no one. And, as of today, has no plans. The Swiss regulator (as a part of the Swiss government team) has sent one person to do radiation monitoring and transmit the results. Marty Virgilio asked if there was any one coordination point (e.g. IAEA) for assistance going to Japan to avoid duplication of efforts. This does not appear to be the case but we have reached out to various contacts (USAID, Embassy Tokyo). This will likely become an action for future LT shifts (not just int'l).

Rel

- Request regarding calcium bentonite. USAID (see e-mail chain from 3/20, 2:20 am) received an offer from Kevin Johnson (406-490-5004) at a Montana bentonite mine to provide calcium bentonite to Japan to use to suppress leaks at the reactors. Bentonite is an absorbent clay that is used in kitty litter and also is used as to seal (expands as it absorbs liquid). The Montana mine offers to donate the bentonite. Unlikely that clay is a solution at this stage and supplies are likely to be located closer to Japan. Resolved by the RST.

- Use of USAid for Travel. Contacted Joshua Batkin, Chief of Staff for the Chairman, on direction by Nader Mamish to discuss the fact that we are to use USAid and the need for a legal agreement between the NRC and USAid if we are to get additional support. Joshua Batkin has worked it through Steve Burns and Jim Dyer who are interacting directly with USAID, he will let us know if there is anything additional needed from us.

- Call with TEPCO. RST held a call with TEPCO at 02:00. Group reported that TEPCO was not being particularly forthcoming about anything except the specific issue they wanted to talk about (which was the delivery of a train of Bechtel pumps that's on its way to Japan from Australia).

- Pressure increase in Unit 3. The latest NISA press release received contains an attachment with diagrams of all 6 units. It indicates that the pressure in unit 3 primary containment is just under 3x the pressure in units 1 and 2 (340 kilopascal vs 130). It's posted on ENAC in Japanese but our translator has worked it. News outlets were reporting high pressures in unit 3. RST opinion is that unit 3 pressure rise was slight and news media picked up on delta between press releases and called it "pressure increase." Note this is not/not official NRC opinion or statement. News reports subsequently indicated pressure had stabilized.

- Request from NISA regarding 50-mile limit. NISA requested through Kirk how NRC came to the conclusion of a 50-mile evacuation zone, as referenced in NRC press release of March 16. We recommended that Kirk refer them to the attachment to the press release. The attachment contains information from the RASCAL runs.

From: LIA07 Hoc
To: LIA07 Hoc
Subject: USNRC Earthquake-Tsunami Update.031811.0600EDT
Date: Friday, March 18, 2011 6:13:56 AM
Attachments: NRC Status Update 3-18 11--0600am.pdf

Attached, please find a 0600 EDT from March 18 situation report from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami on March 11, 2011.

Please note that this information is ~~"Official Use Only">~~and is only being shared within the federal family.

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

Thank you,

Rebecca Clinton
EBT Coordinator

RRRR-54

From: Feig, Christine Marie
To: Harrington, Holly
Subject: Scenarios
Date: Thursday, March 17, 2011 7:38:57 PM

Hey!
Have you gotten a break yet? I finally did a dinner out with friends tonight at 7p.... Was exhausted but was good to do something besides japan. I have a work question: could you share in absolute confidence your worst case scenarios for the japan sit? Our radiation team sucks and hasn't drawn theirs up yet and I'm desparate for something to use to work with messaging. If you cannot I understand, I'm just tired of working with incompetence.
Best,
C-

Christy Feig
Director of Communications
World Health Organization

Sent from a BB terminal.

RRRR-55

From: Harrington, Holly
To: Bonaccorso, Amy
Subject: FW: NICCL update: Fact Sheets and TPs
Date: Friday, March 18, 2011 11:13:00 AM
Attachments: FDA.doc
DHS FEMA family preparedness and the natl response framework.docx
CBP USPS.docx
EPA monitoring.docx
HHS KI.docx
Domestic Response to Japan TPs v2.docx
NICCL call summary 3-18-11 10 am.docx
USCG Fact Sheet.doc

You can distribute to your folks

From: NATIONAL JIC [mailto:NationalJIC@dhs.gov]
Sent: Friday, March 18, 2011 11:06 AM
To: NATIONAL JIC
Subject: NICCL update: Fact Sheets and TPs

Per today's NICCL call attached are approved fact sheets, Domestic Talking Points, and NICCL call summary. Below is a link to a helpful radiation chart developed by EPA.

http://www.epa.gov/radiation/understand/perspective.html

RRRR-56

Hyperlink: Questions about food safety
Hyperlink: Questions about medical products

What is FDA doing to assess the situation in Japan?

Based on current information, there is no risk to the U.S. food supply. FDA is closely monitoring the situation in Japan and is working with the Japanese government and other U.S. agencies to continue to ensure that imported food remains safe. FDA already has a very robust screening process for imports and has staff in place at the ports to monitor incoming products. We do not have concerns with the safety of imported food products that have already reached the U.S. and that are in distribution. As part of our investigation, we are collecting information on all FDA regulated food products exported to the U.S. from Japan, including where they are grown, harvested, or manufactured, so we can further evaluate whether, in the future, they may pose a risk to consumers in the U.S. As FDA assesses whether there is a potential health risk associated with FDA-regulated food products imported from Japan, we will develop a monitoring strategy that may include increased and targeted product sampling at the border.

What systems does FDA have in place to protect the US food supply?

The U.S. enjoys one of the world's safest food supplies. FDA has systems in place to help assure that our food supply is wholesome, safe to eat, and produced under sanitary conditions.

FDA has a team of more than 900 investigators and 450 analysts in the Foods program who conduct inspections and collect and analyze product samples. FDA oversees the importation of the full range of regulated products, including food and animal feed, among other responsibilities.

Altogether, FDA electronically screens all import entries and performs multiple analyses on about 31,000 import product samples annually. During Fiscal Year (FY) 2010, the Agency performed more than 175,000 food and feed field exams and conducted more than 350 foreign food and feed inspections.

FDA works to inspect the right imports—those that may pose a significant public health threat – by carrying out targeted risk-based analyses of imports at the points of entry.

If unsafe products reach our ports, FDA's imports entry reviews, inspections, and sampling at the border help prevent these products from entering our food supply.

Although FDA doesn't physically inspect every product, the Agency electronically screens 100 percent of imported foods products before they reach our borders. Based on Agency risk criteria, an automated system alerts FDA to any concerns. Then inspectors investigate further and, if warranted, do a physical examination of the product.

FDA also works cooperatively with U.S. Customs and Border Protection and other agencies to help identify shipments that may pose a threat.

What products come to the US from Japan?

Imports from Japan include human and animal foods, medical devices and radiation emitting products, cosmetics, animal and human drugs and biologics, and dietary supplements. Foods imported from Japan make up less than 4 percent of foods imported from all sources. (Food products from Canada and Mexico each make up about 29 percent of all imported foods.) Almost 60 percent of all products imported from Japan are foods. The most common food products imported include seafood, snack foods and processed fruits and vegetables.

Are there dairy products that come from Japan?

Foods imported from Japan constitute less than 4 percent of foods imported from all sources. Dairy products make up only one-tenth of one percent of all FDA-regulated products imported from Japan. Most dairy products in the US market are produced domestically. FDA is consulting with USDA's Animal Plant Health Inspection Service (APHIS) to ensure the continued safety of dairy products.

Are there food harvesting (fields, fisheries) or processing facilities in the area of the Fukushima nuclear reactor?

While FDA does not track fields or fishery areas in foreign countries, it's important to note that the damage caused by the earthquake and ensuing tsunami has reportedly halted production prior to the explosion at the reactor.

Is there any reason for concern about radiation from these products when they are imported into the US?

Right now, due to the damage to the infrastructure in Japan, FDA believes that export activity is severely limited. FDA is monitoring all import records for Japan to determine when importation will resume and will conduct surveillance to assure safety. FDA does not have any concerns for products that were already in transit when the explosion occurred at the reactor.

What are the current procedures for measuring radiation contamination in food? How will these change? How will FDA ensure consumers' safety?

FDA has procedures and laboratory techniques for measuring radionuclide levels in food, and can also utilize the Food Emergency Response Network (FERN) (http://www.fernlab.org/). FERN integrates the nation's food-testing laboratories at the local, state, and federal levels into a network that is able to respond to emergencies involving biological, chemical, or radiological contamination of food. FDA is working with Customs and Border Protection (CPB) to share resources and techniques for measuring contamination. FDA has the ability to measure contamination in products and issued guidance in 1998 regarding safe levels.

Will FDA issue an import bulletin? What sort of techniques will FDA use to measure radiation in food?

FDA will issue an import bulletin or an assignment to the field once an assessment is completed on products and appropriate testing that can be completed. Products travel by vessel, the typical transit time for products to reach the US is about 8 days. FDA and other domestic regulatory labs have validated analytical methods to detect radiological contamination in food.

Is FDA looking at products that might have traveled *through* Japan at the time of the explosion?

FDA will be examining both food products labeled as having originated in Japan or having passed through Japan in transit. The same is true for raw ingredients.

How will the radiation affect fish and seafood that have not yet been fished or harvested?

The great quantity of water in the Pacific Ocean rapidly and effectively dilutes radioactive material, so fish and seafood are likely to be unaffected. However, FDA is taking all steps to evaluate and measure any contamination in fish presented for import into the US.

What are the chances of radiation affecting growing areas in the US? What action will FDA take to ensure the safety of consumers of those products?

At this time, there is no public health threat in the US related to radiation exposure. FDA, together with other agencies, is carefully monitoring any possibility for distribution of radiation to the United States. At this time, theoretical models do not indicate that significant amounts of radiation will reach the US coast or affect US fishing waters. Please see www.epa.gov for more information about monitoring efforts.

Hypothetically, if they were needed, what are the FDA-approved products for radiation exposure?

There are three FDA-approved potassium iodide (KI) products for use as an adjunct to other public health protective measures in the event that radioactive iodine is released into the environment. The three over-the-counter products are:

- Iosat Tablets (130 mg), Anbex, Inc., Williamsburg, Va., http://www.anbex.com
- ThyroSafe Tablets (65 mg), Recipharm AB, Jordbro, Sweden, http://www.thyrosafe.com
- ThyroShield Solution (65 mg/mL), Fleming & Company Pharmaceuticals, Fenton, Mo. http://www.thyroshield.com

When administered in the recommended dose, KI is effective in reducing the risk of thyroid cancer in individuals or populations at risk for inhalation or ingestion of radioactive iodine. KI floods the thyroid with non-radioactive iodine and prevents the uptake of the radioactive molecules, which are subsequently excreted in the urine. Potassium iodide works only to prevent the thyroid from uptaking radioactive iodine. It is not a general radioprotective agent.

Is potassium iodide the only medication available for radiation exposure?

Potassium iodide is the only FDA-approved medication available for exposure to radioactive iodine. There are FDA-approved products available that increase the rate of elimination of other radioactive elements. They include:

- Calcium-DTPA and Zinc DTPA, Hameln Pharmaceuticals
  - Approved to treat known or suspected internal contamination with plutonium, americium, or curium to increase the rates of elimination.
- Radiogardase (Prussian blue insoluble capsules), HEYL Chemisch-Pharmazeutische Fabrik GmbH & Co. KG
  - Approved to treat known or suspected internal contamination with radioactive cesium and/or radioactive or non-radioactive thallium to increase their rates of elimination.

We have heard that potassium iodide is in short supply? Is that correct?

FDA is aware of an increased demand for KI products. FDA is working with these companies to facilitate increased production. We can't provide an exact date on when that might happen, but it will occur as quickly as possible.

Several components of the federal government maintain stockpiles of medical supplies for emergency situations. For instance, the CDC maintains the Strategic National Stockpile for civilian use, while the Department of Defense maintains their own supplies for support of military operations. The respective federal organizations should be contacted with any additional requests about the specific items and quantities in those stockpiles. Deployment of these stockpiles is governed by policies and procedures developed by the individual organizations based on available information and potential benefits and risks to public health.

Does FDA recommend that consumers purchase potassium iodide as a protective step?

No. There is no public health event requiring anyone in the US to take KI because of the ongoing situation in Japan.

With exports from Japan disrupted, is there any possibility that some medical products could be in short supply?

FDA has been contacted by a few companies who receive product from Japan and we are working with them on their supply issues.

If I see web sites advertising potassium iodide or alternative cures, should I buy the products?

Due to the public concern related the nuclear incident in Japan, there has been an increased demand for drugs, such as Potassium iodide (KI), used to prevent and treat the harmful effects of radiation.

According to the Nuclear Regulatory Commission, all the available information continues to indicate that Hawaii, Alaska, the U.S. Territories, and the U.S. West Coast are not expected to experience any harmful levels of radioactivity.

The FDA is alerting consumers to be wary of internet sites and other retail outlets promoting products making false claims to prevent or treat effects of radiation or products that are not FDA-approved. These fraudulent products come in all varieties and could include dietary supplements, food items, or products purporting to be drugs, devices or vaccines.

Consumers should be wary of the following:

- claims that a product not approved by FDA can prevent or treat the harmful effects of radiation exposure;
- suggestions that a potassium iodide product will treat conditions other than those for which it is approved, i.e., KI floods the thyroid with non-radioactive iodine and prevents the uptake of the radioactive molecules, which are subsequently excreted in the urine;
- promotions using words such as "scientific breakthrough," "new products," "miraculous cure," "secret ingredient," and "ancient remedy";
- testimonials by consumers or doctors claiming amazing results;
- limited availability and advance payment requirements;
- promises of no-risk, money-back guarantees;
- promises of an "easy" fix; and,
- claims that the product is "natural" or has fewer side effects than approved drugs.

Don't be fooled by professional-looking Web sites. Avoid Web sites that fail to list the company's name, physical address, phone number, or other contact information. For more tips for online buying, visit Buying Medicines and Medical Products Online. To determine if a particular drug is FDA approved, check The Orange Book (http://www.accessdata.fda.gov/scripts/cder/ob/default.cfm) or Drugs@FDA (http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm).

Consumers and health care professionals are encouraged to report adverse side effects or medication errors from the use of both approved and unapproved radiation exposure products to the FDA's MedWatch Adverse Event Reporting program at www.fda.gov/MedWatch or by calling 800-332-1088.

Personal & Family Preparedness:
As the recent tragic events in Japan have reminded all of us, emergencies can strike at any time – and often when you least expect them. The best way to make sure that your family is taken care of when disaster does strike is to make sure you are prepared. The Ready Campaign encourages all Americans to have an emergency supply kit, an emergency plan, and to be informed about the different emergencies that can happen in your area and the appropriate responses. To make sure your family is ready before disaster strikes, visit Ready.gov today to start building your family's emergency plan today:
http://ready.adcouncil.org/beprepared/fep/index.jsp

National Response Framework:
The Department of Homeland Security, working through the Federal Emergency Management Agency, has developed and maintains the National Response Framework (NRF), a guide that details how the Nation conducts all-hazards responses – from the smallest incident to the largest catastrophe. The NRF makes clear the roles and responsibilities of federal agencies for all domestic incidents, so that every member of the nation's emergency management team understands how the federal response will be coordinated. For more information on the NRF, visit http://www.fema.gov/emergency/nrf/index.htm.

- U.S. Customs and Border Protection (CBP) is monitoring developments in Japan carefully and is specifically assessing the potential for radiological contamination associated with the ongoing impact of the earthquake and tsunami to Japan's nuclear facilities.

- Out of an abundance of caution, CBP has issued field guidance reiterating its operational protocols and providing specific field personnel direction with regard to monitoring of maritime and air traffic from Japan.

- In general, travelers that have been exposed to radiation are not a risk to other persons. When a radiation alarm occurs, CBP has protocols in place to isolate the affected traveler, baggage, or cargo, and resolve the concern. Travelers who manifest signs of radiation sickness will be referred to health authorities and provided appropriate treatment.

- CBP employs several types of radiation detection equipment in its operations at both air and sea ports. CBP frontline personnel are equipped with Personal Radiation Detectors (PRDs) that can detect the presence of radiological materials. All airports and seaports have sensitive Radiation Isotope Identification Devices (RIIDs) to determine both the presence and type of radiation encountered. Upon radiation detection, CBP exercises specific protocols to resolve any security or safety concerns for inbound travelers, baggage, and cargo.

- CBP resolves over half a million radiation alarms per year in the course of their normal duties.

- In addition to airplanes and ports, CBP utilizes radiation portal monitors at international mail facilities as well. The monitors provide a non-intrusive method to screen mail items for the presence of nuclear and radiological materials. The U.S. Postal Service assists Customs and Border Protection officers with response and mitigation of items when radiation is detected to ensure the safety of our employees and the American public.

As the Nuclear Regulatory Commission has said, we do not expect to see radiation at harmful levels reaching the U.S. from damaged Japanese nuclear power plants. As part of the federal government's continuing effort to make our activities and science transparent and available to the public, the Environmental Protection Agency (EPA) will continue to keep all RadNet data available in the current online database. EPA is working with its federal partners and has deployed additional monitors to Hawaii, Alaska, Guam and the Northern Mariana Islands.

As always, EPA is utilizing this existing nationwide radiation monitoring system, RadNet, which continuously monitors the nation's air and regularly monitors drinking water, milk and precipitation for environmental radiation. The RadNet online searchable database contains historical data of environmental radiation monitoring data from all fifty states and U.S. territories.

EPA monitors are not picking up any harmful levels of radiation on our RadNet monitors across the US.

Radiation and Potassium Iodide (KI)

Purpose

This fact sheet from the Centers for Disease Control and Prevention (CDC) gives you some basic information about Radiation and Potassium Iodide (KI). It explains what you should think about before you or a family member takes KI.

What Is Radiation?

Radiation is a form of energy that is present all around us. Different types of radiation exist, some of which have more energy than others.

What Is Radioactive Contamination?

Radioactive contamination occurs when radioactive material is deposited on or in an object or a person. Radioactive materials released into the environment can cause air, water, surfaces, soil, plants, buildings, people, or animals to become contaminated. A contaminated person has radioactive materials on or inside their body.

Key Facts

- At this time, CDC does not recommend that people in the United States take KI or iodine supplements in response to the nuclear power plant explosions in Japan.
- You should only take KI on the advice of emergency management officials, public health officials, or your doctor.
- There are health risks associated with taking KI.

What is KI?

Potassium iodide (also called KI) is a salt of stable (not radioactive) iodine. Stable iodine is an important chemical needed by the body to make thyroid hormones. Most of the stable iodine in our bodies comes from the food we eat. KI is stable iodine in a medicine form.

What does KI do?

If radioactive iodine is released into the air after a radiological or nuclear event it can be breathed into the lungs. In most cases, once radioactive iodine has entered the body, the thyroid gland quickly absorbs it. After it has been absorbed into the thyroid gland, radioactive iodine can then cause thyroid gland injury. Because KI acts to block radioactive iodine from being taken into the thyroid gland, it can help protect this gland from injury.

It is also important to know what KI cannot do. *KI cannot* protect parts of the body other than the thyroid from radioactive iodine. *KI cannot* protect the body from any radioactive elements other than iodine. If radioactive iodine is not present, then taking KI is not protective. To date, no radioactive iodine has been detected in the United States or U.S. territories.

How does KI work?

The thyroid gland cannot tell the difference between stable and radioactive iodine and will absorb both. KI works by blocking radioactive iodine from entering the thyroid. When a person takes KI, the stable iodine in the medicine gets absorbed by the thyroid. There is so much stable iodine in the KI that the thyroid gland becomes "full" and cannot absorb any more iodine—either stable or radioactive—for the next 24 hours.

How well does KI work?

It is important to know that KI may not give a person 100% protection against radioactive iodine. How well KI blocks radioactive iodine depends on:

- How much time passes between contamination with radioactive iodine and taking KI (the sooner a person takes KI after being exposed to radioactive iodine, the better),
- How fast KI is absorbed into the blood, and
- The total amount of radioactive iodine to which a person is exposed.

A single dose of KI protects the thyroid gland for 24 hours. **Taking a higher dose of KI, or taking KI more often than recommended, does not offer more protection and can cause severe illness or death.**

Medical conditions that may make it harmful to take KI

It may be harmful for some people to take KI because of the high levels of iodine in this medicine. You should not take KI if:

- You know you are allergic to iodine (If you are unsure about this, consult your doctor. A seafood or shellfish allergy does not necessarily mean that you are allergic to iodine.) OR
- You have certain skin disorders (such as dermatitis herpetiformis or urticaria vasculitis).

When should I take KI?

After a radiological or nuclear event in the United States, local public health or emergency management officials will tell the public if there is a need to take KI or other protective actions. **After an event in the US, you should follow the instructions given to you by these local authorities.**

At this time, CDC does not recommend that people in the United States take Potassium Iodide (KI) or iodine supplements in response to the nuclear power plant explosions in Japan.

The use of non-FDA approved iodine supplements cannot be guaranteed for safety or efficacy. These products do not have an FDA-approved dosing schedule. The supplements are not necessarily manufactured using FDA-approved quality control methods. Saturated Solution of Potassium Iodide (SSKI or Lugol's Solution) is not an FDA-approved drug.

Scientists are tracking the location of radioactive iodine released from the power plant in Japan. No radioactive iodine has been detected in the U.S. The EPA monitors for radioactivity through a national network of monitoring stations called RADNET.

Other Sources of Information

- General information about the use of Potassium Iodide, including information about use by pregnant women and children (http://www.bt.cdc.gov/radiation/ki.asp).
- CDC Emergency Response Site for Radiation Emergencies (http://www.bt.cdc.gov/radiation/index.asp).
- Guidance for People Living in Japan from the U.S. Embassy in Japan (http://japan.usembassy.gov/)

Domestic Response to Japan TPs

- Over the last several days, the American people have been both heartbroken and deeply concerned about the developments in Japan.

- We've seen an earthquake and tsunami render unimaginable -- an unimaginable toll of death and destruction on one of our closest friends and allies in the world. And we've seen this powerful natural disaster cause even more catastrophe through its impact on nuclear reactors that bring peaceful energy to the people of Japan.

- First, we are bringing all available resources to bear to closely monitor the situation, and to protect American citizens who may be in harm's way. Even as Japanese responders continue to do heroic work, we know that the damage to the nuclear reactors in Fukushima Daiichi plant poses a substantial risk to people who are nearby. That is why, we have called for an evacuation of American citizens who are within 50 miles of the plant. This decision was based upon a careful scientific evaluation and the guidelines that we would use to keep our citizens safe here in the United States, or anywhere in the world.

- Beyond this 50-mile radius, the risks do not currently call for an evacuation. But we do have a responsibility to take prudent and precautionary measures to educate those Americans who may be endangered by exposure to radiation if the situation deteriorates. That's why the President authorized the voluntary departures of family members and dependents of U.S. officials working in northeastern Japan.

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

Here at a home, the government is doing a number of things as well:

- The US Government will be studying every aspect of the Japanese disaster and the Japanese government's response, with the goal of learning as much as possible from that review.

- As the Nuclear Regulatory Commission has said as well as other nuclear and public health experts, we do not expect to see radiation at harmful levels reaching the U.S. from damaged Japanese nuclear power plants. You just aren't going to have any radiological material that, by the time it traveled those large distances, could present any risk to the American public.

- Accordingly, public health experts and the CDC do not recommend that people in the United States take precautionary measures in response to the nuclear power plant explosions in Japan beyond staying informed. And going forward, we will continue to keep the American people fully updated.

- As part of the federal government's continuing effort to make our activities and science transparent and available to the public, the Environmental Protection Agency (EPA) will continue to keep all RadNet data available in the current online database. RadNet is an existing nationwide radiation monitoring system that continuously monitors the nation's air and regularly monitors drinking water, milk and precipitation for environmental radiation. In addition, EPA is working with its federal partners to deploy additional monitoring capabilities to parts of the western U.S. and U.S. territories.

- The FDA, USPS and CBP are of course closely monitoring the situation in Japan and all are working with other U.S agencies and or the Japanese government to continue to ensure that imported food, mail and airplanes remains safe.

- And finally, given the range of potential manmade and natural disasters we can see here in America, the United States Government has in place preparedness and response plans that provide the flexibility and agility we need to respond aggressively and effectively to any hazard, including nuclear accidents. FEMA and the Department of Homeland Security thoroughly and regularly exercise these plans with their federal, state and local partners, and will be working to apply the lessons learned from the current situation in Japan to their planning efforts.

NICCL call summary, 03/18/2011 10:00 a.m

Nick from WH thanked everyone for quick turnaround on all fact sheets. Facts sheets and talking points submitted yesterday on keeping United States safe.

CBP had a great day with the media yesterday. Media assuring citizens we are protected and we are working to protect our citizens.

Secretary of State met with Ireland Deputy Prime Minister/Foreign Minister and gave brief remarks on situation in Japan.

If there is a detection of radiation on the monitors deployed to the West Coast, EPA has the lead for addressing the issue.

Fact sheets and talking points can be made public.

Embassy in Tokyo extended hours and will work over the weekend. Buses are scheduled to evacuate citizens to safety.

Banner included on EPA site to monitor air. Nothing out of the ordinary and site will be updated during the day.

MEDIA: press@epa.gov PUBLIC: radiation.questions@epa.gov

FDA posted questions and answers on food safety and consumer fraud on KI on their site 03/17. Today revising TP on import monitoring. They are increasing monitoring and taking steps to inform public.

HHS is continuing to monitor crisis.

CBP put out information on ports of entry and clarified protocols. Reiterated same monitoring is done daily. Nothing harmful has been detected.

Postal service is assisting CBP on monitoring mail from Japan for radiation.

DOD had previous radiological exercise scheduled. They are working with ABC to show capabilities.

No scheduled calls this weekend. Only if needed. No state call this afternoon. Will push out approved fact sheets to state and local. Approved fact sheets attached

Talking points regarding radiation exposure and seagoing vessels

Q.1. - What is the Coast Guard doing now to assist or prevent [radiation] from getting to U.S. and its territories?

- As the Nuclear Regulatory Commission has said as well as other experts, we do not expect to see radiation at harmful levels reaching the U.S. from damaged Japanese nuclear power plants. As we do every day, the Coast Guard is monitoring and assessing current reports on any possible impacts on the U.S. marine transportation system (U.S. merchant vessels, mariners, and U.S. ports and facilities).

- The Coast Guard is providing a Notice to Mariners recommending, as a precaution, that vessels avoid transiting within 50 miles of the Fukushima Nuclear Power Plant.

In the event a vessel bound for a U.S. port transits within the 50-mile cautionary area, the U.S. Coast Guard will require the vessel's master to submit this information in their routine 96-hour Advanced Notice of Arrival.

If vessels are suspected of being contaminated, the Coast Guard will ensure advanced screening of vessels and exercise control measures as appropriate prior to port entry to assess and mitigate any threat to U.S. ports or population.

Q.2. - Do you have any impacts to your current operations or readiness as a result of this incident?

- The nuclear situation in Japan is not significantly impacting current Coast Guard operations or readiness. All domestic port operations are continuing normally. No Coast Guard assets are operating near the damaged zone or in Japan.

Q.3. – What else is the Coast Guard doing regarding this incident?

- The U.S. Coast Guard will continue to track and monitor commercial shipping operating in the vicinity of Japan, providing precautionary notices to prevent possible nuclear contamination of vessels and cargo.

- The Coast Guard will ensure advanced screening of any vessels suspected of contamination prior to entry in U.S. ports.

Q.4. - What steps will be taken in the event contamination is discovered during your operations as a result of this incident?

- The Coast Guard's Radiation Detection Program is an integral part of our nation's everyday radiation detection architecture. Together with U.S. Customs and Border Protection (CBP) and local port partners, Coast Guard Captains of the Port routinely follow established protocols for responding to a report or detection of radioactive contamination when it is discovered aboard a vessel, on or in a shipping container or within a port facility itself.

- Coast Guard radiation detection resources can be deployed during arriving vessel at-sea boardings, and Coast Guard procedures exist for addressing radiation detected on vessels. These include identification, "zeroing-in" on and isolating potential sources of radiation. Additional radiological detection equipment, including radiation detection portals, is located within US port facilities.

- The Coast Guard has the authority to direct contaminated vessels to a safe location, e.g., keep at sea, or direct to a safe anchorage away from population centers and/or infrastructure, in U.S. waters, until vessels, cargo and personnel are decontaminated. Vessels deemed a possible risk due to known last ports of call or transit routes may be targeted for an at-sea boarding and screening before being allowed to enter port.

- Coast Guard Captains of the Port work with CBP Laboratories and Scientific Services and the Department of Energy Radiological Assistance Program for local assistance in cases of radiation detection.

- The Coast Guard will also be working with the U.S. Department of Homeland Security and other federal government agencies to develop strategies and policies to mitigate any potential risk posed to the U.S. homeland by radiation threats conveyed by commercial shipping.

From:	Harrington, Holly
To:	Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Hayden, Elizabeth; McIntyre, David; Chandrathil, Prema; Dricks, Victor; Hannah, Roger; Ledford, Joey; Mitlyng, Viktoria; Screnci, Diane; Sheehan, Neil; Uselding, Lara
Subject:	FW: NICCL update: Fact Sheets and TPs
Date:	Friday, March 18, 2011 11:12:00 AM
Attachments:	FDA.doc DHS FEMA family preparedness and the natl response framework.docx CBP USPS.docx EPA monitoring.docx HHS KI.docx Domestic Response to Japan TPs v2.docx NICCL call summary 3-18-11 10 am.docx USCG Fact Sheet.doc

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Good stuff. We'll try to condense at some point, but for now here is raw info . . .

From: NATIONAL JIC [mailto:NationalJIC@dhs.gov]
Sent: Friday, March 18, 2011 11:06 AM
To: NATIONAL JIC
Subject: NICCL update: Fact Sheets and TPs

Per today's NICCL call attached are approved fact sheets, Domestic Talking Points, and NICCL call summary. Below is a link to a helpful radiation chart developed by EPA.

http://www.epa.gov/radiation/understand/perspective.html

RRR-57

Hyperlink: Questions about food safety
Hyperlink: Questions about medical products

What is FDA doing to assess the situation in Japan?

Based on current information, there is no risk to the U.S. food supply. FDA is closely monitoring the situation in Japan and is working with the Japanese government and other U.S. agencies to continue to ensure that imported food remains safe. FDA already has a very robust screening process for imports and has staff in place at the ports to monitor incoming products. We do not have concerns with the safety of imported food products that have already reached the U.S. and that are in distribution. As part of our investigation, we are collecting information on all FDA regulated food products exported to the U.S. from Japan, including where they are grown, harvested, or manufactured, so we can further evaluate whether, in the future, they may pose a risk to consumers in the U.S. As FDA assesses whether there is a potential health risk associated with FDA-regulated food products imported from Japan, we will develop a monitoring strategy that may include increased and targeted product sampling at the border.

What systems does FDA have in place to protect the US food supply?

The U.S. enjoys one of the world's safest food supplies. FDA has systems in place to help assure that our food supply is wholesome, safe to eat, and produced under sanitary conditions.

FDA has a team of more than 900 investigators and 450 analysts in the Foods program who conduct inspections and collect and analyze product samples. FDA oversees the importation of the full range of regulated products, including food and animal feed, among other responsibilities.

Altogether, FDA electronically screens all import entries and performs multiple analyses on about 31,000 import product samples annually. During Fiscal Year (FY) 2010, the Agency performed more than 175,000 food and feed field exams and conducted more than 350 foreign food and feed inspections.

FDA works to inspect the right imports—those that may pose a significant public health threat – by carrying out targeted risk-based analyses of imports at the points of entry.

If unsafe products reach our ports, FDA's imports entry reviews, inspections, and sampling at the border help prevent these products from entering our food supply.

Although FDA doesn't physically inspect every product, the Agency electronically screens 100 percent of imported foods products before they reach our borders. Based on Agency risk criteria, an automated system alerts FDA to any concerns. Then inspectors investigate further and, if warranted, do a physical examination of the product.

FDA also works cooperatively with U.S. Customs and Border Protection and other agencies to help identify shipments that may pose a threat.

What products come to the US from Japan?

Imports from Japan include human and animal foods, medical devices and radiation emitting products, cosmetics, animal and human drugs and biologics, and dietary supplements. Foods imported from Japan make up less than 4 percent of foods imported from all sources. (Food products from Canada and Mexico each make up about 29 percent of all imported foods.) Almost 60 percent of all products imported from Japan are foods. The most common food products imported include seafood, snack foods and processed fruits and vegetables.

Are there dairy products that come from Japan?

Foods imported from Japan constitute less than 4 percent of foods imported from all sources. Dairy products make up only one-tenth of one percent of all FDA-regulated products imported from Japan. Most dairy products in the US market are produced domestically. FDA is consulting with USDA's Animal Plant Health Inspection Service (APHIS) to ensure the continued safety of dairy products.

Are there food harvesting (fields, fisheries) or processing facilities in the area of the Fukushima nuclear reactor?

While FDA does not track fields or fishery areas in foreign countries, it's important to note that the damage caused by the earthquake and ensuing tsunami has reportedly halted production prior to the explosion at the reactor.

Is there any reason for concern about radiation from these products when they are imported into the US?

Right now, due to the damage to the infrastructure in Japan, FDA believes that export activity is severely limited. FDA is monitoring all import records for Japan to determine when importation will resume and will conduct surveillance to assure safety. FDA does not have any concerns for products that were already in transit when the explosion occurred at the reactor.

What are the current procedures for measuring radiation contamination in food? How will these change? How will FDA ensure consumers' safety?

FDA has procedures and laboratory techniques for measuring radionuclide levels in food, and can also utilize the Food Emergency Response Network (FERN) (http://www.fernlab.org/). FERN integrates the nation's food-testing laboratories at the local, state, and federal levels into a network that is able to respond to emergencies involving biological, chemical, or radiological contamination of food. FDA is working with Customs and Border Protection (CPB) to share resources and techniques for measuring contamination. FDA has the ability to measure contamination in products and issued guidance in 1998 regarding safe levels.

Will FDA issue an import bulletin? What sort of techniques will FDA use to measure radiation in food?

FDA will issue an import bulletin or an assignment to the field once an assessment is completed on products and appropriate testing that can be completed. Products travel by vessel, the typical transit time for products to reach the US is about 8 days. FDA and other domestic regulatory labs have validated analytical methods to detect radiological contamination in food.

Is FDA looking at products that might have traveled *through* Japan at the time of the explosion?

FDA will be examining both food products labeled as having originated in Japan or having passed through Japan in transit. The same is true for raw ingredients.

How will the radiation affect fish and seafood that have not yet been fished or harvested?

The great quantity of water in the Pacific Ocean rapidly and effectively dilutes radioactive material, so fish and seafood are likely to be unaffected. However, FDA is taking all steps to evaluate and measure any contamination in fish presented for import into the US.

What are the chances of radiation affecting growing areas in the US? What action will FDA take to ensure the safety of consumers of those products?

At this time, there is no public health threat in the US related to radiation exposure. FDA, together with other agencies, is carefully monitoring any possibility for distribution of radiation to the United States. At this time, theoretical models do not indicate that significant amounts of radiation will reach the US coast or affect US fishing waters. Please see www.epa.gov for more information about monitoring efforts.

Hypothetically, if they were needed, what are the FDA-approved products for radiation exposure?

There are three FDA-approved potassium iodide (KI) products for use as an adjunct to other public health protective measures in the event that radioactive iodine is released into the environment. The three over-the-counter products are:

- Iosat Tablets (130 mg), Anbex, Inc., Williamsburg, Va., http://www.anbex.com
- ThyroSafe Tablets (65 mg), Recipharm AB, Jordbro, Sweden, http://www.thyrosafe.com
- ThyroShield Solution (65 mg/mL), Fleming & Company Pharmaceuticals, Fenton, Mo. http://www.thyroshield.com

When administered in the recommended dose, KI is effective in reducing the risk of thyroid cancer in individuals or populations at risk for inhalation or ingestion of radioactive iodine. KI floods the thyroid with non-radioactive iodine and prevents the uptake of the radioactive molecules, which are subsequently excreted in the urine. Potassium iodide works only to prevent the thyroid from uptaking radioactive iodine. It is not a general radioprotective agent.

Is potassium iodide the only medication available for radiation exposure?

Potassium iodide is the only FDA-approved medication available for exposure to radioactive iodine. There are FDA-approved products available that increase the rate of elimination of other radioactive elements. They include:

- Calcium-DTPA and Zinc DTPA, Hameln Pharmaceuticals
    - Approved to treat known or suspected internal contamination with plutonium, americium, or curium to increase the rates of elimination.
- Radiogardase (Prussian blue insoluble capsules), HEYL Chemisch-Pharmazeutische Fabrik GmbH & Co. KG
    - Approved to treat known or suspected internal contamination with radioactive cesium and/or radioactive or non-radioactive thallium to increase their rates of elimination.

We have heard that potassium iodide is in short supply? Is that correct?

FDA is aware of an increased demand for KI products. FDA is working with these companies to facilitate increased production. We can't provide an exact date on when that might happen, but it will occur as quickly as possible.

Several components of the federal government maintain stockpiles of medical supplies for emergency situations. For instance, the CDC maintains the Strategic National Stockpile for civilian use, while the Department of Defense maintains their own supplies for support of military operations. The respective federal organizations should be contacted with any additional requests about the specific items and quantities in those stockpiles. Deployment of these stockpiles is governed by policies and procedures developed by the individual organizations based on available information and potential benefits and risks to public health.

Does FDA recommend that consumers purchase potassium iodide as a protective step?

No. There is no public health event requiring anyone in the US to take KI because of the ongoing situation in Japan.

With exports from Japan disrupted, is there any possibility that some medical products could be in short supply?

FDA has been contacted by a few companies who receive product from Japan and we are working with them on their supply issues.

If I see web sites advertising potassium iodide or alternative cures, should I buy the products?

Due to the public concern related the nuclear incident in Japan, there has been an increased demand for drugs, such as Potassium iodide (KI), used to prevent and treat the harmful effects of radiation.

According to the Nuclear Regulatory Commission, all the available information continues to indicate that Hawaii, Alaska, the U.S. Territories, and the U.S. West Coast are not expected to experience any harmful levels of radioactivity.

The FDA is alerting consumers to be wary of internet sites and other retail outlets promoting products making false claims to prevent or treat effects of radiation or products that are not FDA-approved. These fraudulent products come in all varieties and could include dietary supplements, food items, or products purporting to be drugs, devices or vaccines.

Consumers should be wary of the following:

- claims that a product not approved by FDA can prevent or treat the harmful effects of radiation exposure;
- suggestions that a potassium iodide product will treat conditions other than those for which it is approved, i.e., KI floods the thyroid with non-radioactive iodine and prevents the uptake of the radioactive molecules, which are subsequently excreted in the urine;
- promotions using words such as "scientific breakthrough," "new products," "miraculous cure," "secret ingredient," and "ancient remedy";
- testimonials by consumers or doctors claiming amazing results;
- limited availability and advance payment requirements;
- promises of no-risk, money-back guarantees;
- promises of an "easy" fix; and,
- claims that the product is "natural" or has fewer side effects than approved drugs.

Don't be fooled by professional-looking Web sites. Avoid Web sites that fail to list the company's name, physical address, phone number, or other contact information. For more tips for online buying, visit Buying Medicines and Medical Products Online. To determine if a particular drug is FDA approved, check The Orange Book (http://www.accessdata.fda.gov/scripts/cder/ob/default.cfm) or Drugs@FDA (http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm).

Consumers and health care professionals are encouraged to report adverse side effects or medication errors from the use of both approved and unapproved radiation exposure products to the FDA's MedWatch Adverse Event Reporting program at www.fda.gov/MedWatch or by calling 800-332-1088.

Personal & Family Preparedness:
As the recent tragic events in Japan have reminded all of us, emergencies can strike at any time - and often when you least expect them. The best way to make sure that your family is taken care of when disaster does strike is to make sure you are prepared. The Ready Campaign encourages all Americans to have an emergency supply kit, an emergency plan, and to be informed about the different emergencies that can happen in your area and the appropriate responses. To make sure your family is ready before disaster strikes, visit Ready.gov today to start building your family's emergency plan today:
http://ready.adcouncil.org/beprepared/fep/index.jsp

National Response Framework:
The Department of Homeland Security, working through the Federal Emergency Management Agency, has developed and maintains the National Response Framework (NRF), a guide that details how the Nation conducts all-hazards responses - from the smallest incident to the largest catastrophe. The NRF makes clear the roles and responsibilities of federal agencies for all domestic incidents, so that every member of the nation's emergency management team understands how the federal response will be coordinated. For more information on the NRF, visit http://www.fema.gov/emergency/nrf/index.htm.

- U.S. Customs and Border Protection (CBP) is monitoring developments in Japan carefully and is specifically assessing the potential for radiological contamination associated with the ongoing impact of the earthquake and tsunami to Japan's nuclear facilities.

- Out of an abundance of caution, CBP has issued field guidance reiterating its operational protocols and providing specific field personnel direction with regard to monitoring of maritime and air traffic from Japan.

- In general, travelers that have been exposed to radiation are not a risk to other persons. When a radiation alarm occurs, CBP has protocols in place to isolate the affected traveler, baggage, or cargo, and resolve the concern. Travelers who manifest signs of radiation sickness will be referred to health authorities and provided appropriate treatment.

- CBP employs several types of radiation detection equipment in its operations at both air and sea ports. CBP frontline personnel are equipped with Personal Radiation Detectors (PRDs) that can detect the presence of radiological materials. All airports and seaports have sensitive Radiation Isotope Identification Devices (RIIDs) to determine both the presence and type of radiation encountered. Upon radiation detection, CBP exercises specific protocols to resolve any security or safety concerns for inbound travelers, baggage, and cargo.

- CBP resolves over half a million radiation alarms per year in the course of their normal duties.

- In addition to airplanes and ports, CBP utilizes radiation portal monitors at international mail facilities as well. The monitors provide a non-intrusive method to screen mail items for the presence of nuclear and radiological materials. The U.S. Postal Service assists Customs and Border Protection officers with response and mitigation of items when radiation is detected to ensure the safety of our employees and the American public.

As the Nuclear Regulatory Commission has said, we do not expect to see radiation at harmful levels reaching the U.S. from damaged Japanese nuclear power plants. As part of the federal government's continuing effort to make our activities and science transparent and available to the public, the Environmental Protection Agency (EPA) will continue to keep all RadNet data available in the current online database. EPA is working with its federal partners and has deployed additional monitors to Hawaii, Alaska, Guam and the Northern Mariana Islands.

As always, EPA is utilizing this existing nationwide radiation monitoring system, RadNet, which continuously monitors the nation's air and regularly monitors drinking water, milk and precipitation for environmental radiation. The RadNet online searchable database contains historical data of environmental radiation monitoring data from all fifty states and U.S. territories.

EPA monitors are not picking up any harmful levels of radiation on our RadNet monitors across the US.

Radiation and Potassium Iodide (KI)

Purpose

This fact sheet from the Centers for Disease Control and Prevention (CDC) gives you some basic information about Radiation and Potassium Iodide (KI). It explains what you should think about before you or a family member takes KI.

What Is Radiation?

Radiation is a form of energy that is present all around us. Different types of radiation exist, some of which have more energy than others.

What Is Radioactive Contamination?

Radioactive contamination occurs when radioactive material is deposited on or in an object or a person. Radioactive materials released into the environment can cause air, water, surfaces, soil, plants, buildings, people, or animals to become contaminated. A contaminated person has radioactive materials on or inside their body.

Key Facts

- At this time, CDC does not recommend that people in the United States take KI or iodine supplements in response to the nuclear power plant explosions in Japan.
- You should only take KI on the advice of emergency management officials, public health officials, or your doctor.
- There are health risks associated with taking KI.

What is KI?

Potassium iodide (also called KI) is a salt of stable (not radioactive) iodine. Stable iodine is an important chemical needed by the body to make thyroid hormones. Most of the stable iodine in our bodies comes from the food we eat. KI is stable iodine in a medicine form.

What does KI do?

If radioactive iodine is released into the air after a radiological or nuclear event it can be breathed into the lungs. In most cases, once radioactive iodine has entered the body, the thyroid gland quickly absorbs it. After it has been absorbed into the thyroid gland, radioactive iodine can then cause thyroid gland injury. Because KI acts to block radioactive iodine from being taken into the thyroid gland, it can help protect this gland from injury.

It is also important to know what KI cannot do. *KI cannot* protect parts of the body other than the thyroid from radioactive iodine. *KI cannot* protect the body from any radioactive elements other than iodine. If radioactive iodine is not present, then taking KI is not protective. To date, no radioactive iodine has been detected in the United States or U.S. territories.

How does KI work?

The thyroid gland cannot tell the difference between stable and radioactive iodine and will absorb both. KI works by blocking radioactive iodine from entering the thyroid. When a person takes KI, the stable iodine in the medicine gets absorbed by the thyroid. There is so much stable iodine in the KI that the thyroid gland becomes "full" and cannot absorb any more iodine—either stable or radioactive—for the next 24 hours.

How well does KI work?

It is important to know that KI may not give a person 100% protection against radioactive iodine. How well KI blocks radioactive iodine depends on:

- How much time passes between contamination with radioactive iodine and taking KI (the sooner a person takes KI after being exposed to radioactive iodine, the better),
- How fast KI is absorbed into the blood, and
- The total amount of radioactive iodine to which a person is exposed.

A single dose of KI protects the thyroid gland for 24 hours. **Taking a higher dose of KI, or taking KI more often than recommended, does not offer more protection and can cause severe illness or death.**

Medical conditions that may make it harmful to take KI

It may be harmful for some people to take KI because of the high levels of iodine in this medicine. You should not take KI if:

- You know you are allergic to iodine (If you are unsure about this, consult your doctor. A seafood or shellfish allergy does not necessarily mean that you are allergic to iodine.) OR
- You have certain skin disorders (such as dermatitis herpetiformis or urticaria vasculitis).

When should I take KI?

After a radiological or nuclear event in the United States, local public health or emergency management officials will tell the public if there is a need to take KI or other protective actions. **After an event in the US, you should follow the instructions given to you by these local authorities.**

At this time, CDC does not recommend that people in the United States take Potassium Iodide (KI) or iodine supplements in response to the nuclear power plant explosions in Japan.

The use of non-FDA approved iodine supplements cannot be guaranteed for safety or efficacy. These products do not have an FDA-approved dosing schedule. The supplements are not necessarily manufactured using FDA-approved quality control methods. Saturated Solution of Potassium Iodide (SSKI or Lugol's Solution) is not an FDA-approved drug.

Scientists are tracking the location of radioactive iodine released from the power plant in Japan. No radioactive iodine has been detected in the U.S. The EPA monitors for radioactivity through a national network of monitoring stations called RADNET.

Other Sources of Information

- General information about the use of Potassium Iodide, including information about use by pregnant women and children (http://www.bt.cdc.gov/radiation/ki.asp).
- CDC Emergency Response Site for Radiation Emergencies (http://www.bt.cdc.gov/radiation/index.asp).
- Guidance for People Living in Japan from the U.S. Embassy in Japan (http://japan.usembassy.gov/)

Domestic Response to Japan TPs

- Over the last several days, the American people have been both heartbroken and deeply concerned about the developments in Japan.

- We've seen an earthquake and tsunami render unimaginable -- an unimaginable toll of death and destruction on one of our closest friends and allies in the world. And we've seen this powerful natural disaster cause even more catastrophe through its impact on nuclear reactors that bring peaceful energy to the people of Japan.

- First, we are bringing all available resources to bear to closely monitor the situation, and to protect American citizens who may be in harm's way. Even as Japanese responders continue to do heroic work, we know that the damage to the nuclear reactors in Fukushima Daiichi plant poses a substantial risk to people who are nearby. That is why, we have called for an evacuation of American citizens who are within 50 miles of the plant. This decision was based upon a careful scientific evaluation and the guidelines that we would use to keep our citizens safe here in the United States, or anywhere in the world.

- Beyond this 50-mile radius, the risks do not currently call for an evacuation. But we do have a responsibility to take prudent and precautionary measures to educate those Americans who may be endangered by exposure to radiation if the situation deteriorates. That's why the President authorized the voluntary departures of family members and dependents of U.S. officials working in northeastern Japan.

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

Here at a home, the government is doing a number of things as well:

- The US Government will be studying every aspect of the Japanese disaster and the Japanese government's response, with the goal of learning as much as possible from that review.

- As the Nuclear Regulatory Commission has said as well as other nuclear and public health experts, we do not expect to see radiation at harmful levels reaching the U.S. from damaged Japanese nuclear power plants. You just aren't going to have any radiological material that, by the time it traveled those large distances, could present any risk to the American public.

- Accordingly, public health experts and the CDC do not recommend that people in the United States take precautionary measures in response to the nuclear power plant explosions in Japan beyond staying informed. And going forward, we will continue to keep the American people fully updated.

- As part of the federal government's continuing effort to make our activities and science transparent and available to the public, the Environmental Protection Agency (EPA) will continue to keep all RadNet data available in the current online database. RadNet is an existing nationwide radiation monitoring system that continuously monitors the nation's air and regularly monitors drinking water, milk and precipitation for environmental radiation. In addition, EPA is working with its federal partners to deploy additional monitoring capabilities to parts of the western U.S. and U.S. territories.

- The FDA, USPS and CBP are of course closely monitoring the situation in Japan and all are working with other U.S agencies and or the Japanese government to continue to ensure that imported food, mail and airplanes remains safe.

- And finally, given the range of potential manmade and natural disasters we can see here in America, the United States Government has in place preparedness and response plans that provide the flexibility and agility we need to respond aggressively and effectively to any hazard, including nuclear accidents. FEMA and the Department of Homeland Security thoroughly and regularly exercise these plans with their federal, state and local partners, and will be working to apply the lessons learned from the current situation in Japan to their planning efforts.

NICCL call summary, 03/18/2011 10:00 a.m

Nick from WH thanked everyone for quick turnaround on all fact sheets. Facts sheets and talking points submitted yesterday on keeping United States safe.

CBP had a great day with the media yesterday. Media assuring citizens we are protected and we are working to protect our citizens.

Secretary of State met with Ireland Deputy Prime Minister/Foreign Minister and gave brief remarks on situation in Japan.

If there is a detection of radiation on the monitors deployed to the West Coast, EPA has the lead for addressing the issue.

Fact sheets and talking points can be made public.

Embassy in Tokyo extended hours and will work over the weekend. Buses are scheduled to evacuate citizens to safety.

Banner included on EPA site to monitor air. Nothing out of the ordinary and site will be updated during the day.

MEDIA: press@epa.gov PUBLIC: radiation.questions@epa.gov

FDA posted questions and answers on food safety and consumer fraud on KI on their site 03/17. Today revising TP on import monitoring. They are increasing monitoring and taking steps to inform public.

HHS is continuing to monitor crisis.

CBP put out information on ports of entry and clarified protocols. Reiterated same monitoring is done daily. Nothing harmful has been detected.

Postal service is assisting CBP on monitoring mail from Japan for radiation.

DOD had previous radiological exercise scheduled. They are working with ABC to show capabilities.

No scheduled calls this weekend. Only if needed. No state call this afternoon. Will push out approved fact sheets to state and local. Approved fact sheets attached

Talking points regarding radiation exposure and seagoing vessels

Q.1. - What is the Coast Guard doing now to assist or prevent [radiation] from getting to U.S. and its territories?

- As the Nuclear Regulatory Commission has said as well as other experts, we do not expect to see radiation at harmful levels reaching the U.S. from damaged Japanese nuclear power plants. As we do every day, the Coast Guard is monitoring and assessing current reports on any possible impacts on the U.S. marine transportation system (U.S. merchant vessels, mariners, and U.S. ports and facilities).

- The Coast Guard is providing a Notice to Mariners recommending, as a precaution, that vessels avoid transiting within 50 miles of the Fukushima Nuclear Power Plant.

In the event a vessel bound for a U.S. port transits within the 50-mile cautionary area, the U.S. Coast Guard will require the vessel's master to submit this information in their routine 96-hour Advanced Notice of Arrival.

If vessels are suspected of being contaminated, the Coast Guard will ensure advanced screening of vessels and exercise control measures as appropriate prior to port entry to assess and mitigate any threat to U.S. ports or population.

Q.2. - Do you have any impacts to your current operations or readiness as a result of this incident?

- The nuclear situation in Japan is not significantly impacting current Coast Guard operations or readiness. All domestic port operations are continuing normally. No Coast Guard assets are operating near the damaged zone or in Japan.

Q.3. – What else is the Coast Guard doing regarding this incident?

- The U.S. Coast Guard will continue to track and monitor commercial shipping operating in the vicinity of Japan, providing precautionary notices to prevent possible nuclear contamination of vessels and cargo.

- The Coast Guard will ensure advanced screening of any vessels suspected of contamination prior to entry in U.S. ports.

Q.4. - What steps will be taken in the event contamination is discovered during your operations as a result of this incident?

- The Coast Guard's Radiation Detection Program is an integral part of our nation's everyday radiation detection architecture. Together with U.S. Customs and Border Protection (CBP) and local port partners, Coast Guard Captains of the Port routinely follow established protocols for responding to a report or detection of radioactive contamination when it is discovered aboard a vessel, on or in a shipping container or within a port facility itself.

- Coast Guard radiation detection resources can be deployed during arriving vessel at-sea boardings, and Coast Guard procedures exist for addressing radiation detected on vessels. These include identification, "zeroing-in" on and isolating potential sources of radiation. Additional radiological detection equipment, including radiation detection portals, is located within US port facilities.

- The Coast Guard has the authority to direct contaminated vessels to a safe location, e.g., keep at sea, or direct to a safe anchorage away from population centers and/or infrastructure, in U.S. waters, until vessels, cargo and personnel are decontaminated. Vessels deemed a possible risk due to known last ports of call or transit routes may be targeted for an at-sea boarding and screening before being allowed to enter port.

- Coast Guard Captains of the Port work with CBP Laboratories and Scientific Services and the Department of Energy Radiological Assistance Program for local assistance in cases of radiation detection.

- The Coast Guard will also be working with the U.S. Department of Homeland Security and other federal government agencies to develop strategies and policies to mitigate any potential risk posed to the U.S. homeland by radiation threats conveyed by commercial shipping.

From: Screnci, Diane
To: Mensah, Tanya
Cc: OPA Distribution
Subject: RE: Please immediately close older reactors for inspection
Date: Friday, March 18, 2011 10:26:08 AM

This looks like another 2.206. Do you want me to continue to send these to you?

Diane Screnci
Sr. Public Affairs Officer
USNRC, RI
610/337-5330

-----Original Message-----
From: Fleming, Kreslyon On Behalf Of OHRComments Resource
Sent: Friday, March 18, 2011 10:11 AM
To: OPA Distribution
Subject: FW: Please immediately close older reactors for inspection

-----Original Message-----
From: info@ecologicalinternet.org [mailto:info@ecologicalinternet.org] On Behalf Of Bill Linton
Sent: Wednesday, March 16, 2011 11:09 AM
To: OHRComments Resource
Subject: Please immediately close older reactors for inspection

Dear U.S. Nuclear Regulatory Commission,

Given the worsening Japanese nuclear disaster, I am writing to demand immediate closure of U.S. nuclear energy facilities that remain operational after having exceeded their engineered operable life. Please immediately close these facilities for inspection in an orderly manner as is occurring in Europe. It is the prudent thing to do given many older reactors in the U.S. are of similar design as those melting down in Japan.

Japan is facing the worst nuclear crisis since the atomic bombing of Hiroshima and Nagasaki. Multiple explosions have hit the Fukushima Daiichi nuclear plant, several reactors have lost their cooling systems, raising fears of meltdown(s). Radiation levels have been detected as far as 100 miles away. Many people have tested positive for radiation exposure, and hundreds of thousands of have been evacuated, with the numbers expected to rise.

In the United States, some reactors which have recently had their licenses extended are nearly 40 years old, and their owners are asking the Nuclear Regulatory Commission for approval to extend their lives further. No additional extensions should be granted, and these older reactors that have been extended must be taken off line immediately and inspected given recent happenings in Japan. Clearly these 1970s vintage era systems were not adequately engineering for infrequent but large natural disasters and increasingly human exacerbated events.

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Further, it is presumptuous for the federal government to be planning to provide for $36 billion in loan guarantees to build still more nuclear plants, when we do not yet have a permanent waste repository, or even a plan. We are dooming civilizations for hundreds of thousands of years to having to protect and maintain enclosure upon our nuclear waste. Nuclear waste stored on site has caught fire in Japan, and the current on site storage across America is completely unacceptable. It is not a matter of if, it is only one of when will there be a nuclear disaster in America.

All existing nuclear energy plants, waste and weapons are accidents waiting to happen. Nuclear complexity, ecological costs, natural disasters and a conflict ridden world show nukes can never be safe. The price of nuclear fission is potentially enormous when even one accident happens, must less several as now with our Japanese brothers and sisters. In a continually more disorderly world, it is clear that no nuclear materials are secured, and that developing countries embracing nuclear energy will lead to weapon proliferation and yet more great loss of life from accidents and war. Be we could choose to ban nuclear materials in their entirety.

It is time for humanity to choose which technologies they allow based upon full preponderance of the evidence - and as an ecologist I would predict all but certain similar impacts no matter the effort from the introduction of geo-engineering, genetically modified organisms (particularly food), nanotech, etc. Nuclear fission has been shown to be deadly in the field of battle, along Japan's coastal plains, it's unsecured wastes are growing, and through terrorist and militaristic rhetoric regarding their use in an increasingly unstable world.

Please immediately cease extending the licenses of old nuclear power plants, and shut down for inspection those which have been extended. We will be calling upon President Obama to convene an urgent summit to begin fully dismantling global nuclear weaponry. Some technologies such as splitting the atom at their root are anti-human and Earth. Let's get it done, ban the bomb, ban nuclear energy, and commit to climate and energy solutions that are serious and include life-saving energy conservation, efficiency & using only true renewables. This will soon be the only energy at our disposal if we desire a habitable Earth, and we must transform our society accordingly.

With grave concern,

Bill Linton
United Kingdom
bill.linton@blueyonder.co.uk

cc:
President Obama; EPA Administrator, Lisa P. Jackson; Secretary of Agriculture, Tom Vilsack; Secretary of Energy,

Steven Chu; Secretary of Interior, Ken Salazar; NOAA Administrator, Jane Lubchenco; President's Science Advisor, Dr. John Holden; NRC Contacts for Open Government

From: Couret, Ivonne
To: Harrington, Holly
Subject: FW: reference for NRC study
Date: Friday, March 18, 2011 8:44:34 AM

Please handle. Ivonne

Ivonne L. Couret
Public Affairs Officer
Office of Public Affairs
Media Desk
opa.resource@nrc.gov
301-415-8200

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

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

From: Deahl, Elizabeth
Sent: Friday, March 18, 2011 8:29 AM
To: Couret, Ivonne
Subject: RE: reference for NRC study

I wonder if you have also considered posting these Q&As (from the NRR Japan Event Information) to the web for the public? I think they would be very useful.

Beth

From: Deahl, Elizabeth
Sent: Friday, March 18, 2011 8:15 AM
To: Couret, Ivonne
Subject: RE: reference for NRC study

Yes, thanks, I got it.

Do you guys intend to post to the blog the information resources we sent to Holly (see attached)? I know you are busy, but we are getting a lot of calls, too, and it would be very helpful if we could point to those links on nrc.gov.

Thanks
Beth

From: Couret, Ivonne
Sent: Thursday, March 17, 2011 6:09 PM
To: Deahl, Elizabeth
Subject: RE: reference for NRC study

Have we responded to the inquiry, please advise. I'm cleaning out the inbox. Ivonne

Ivonne L. Couret
Public Affairs Officer

RRRR-59

Office of Public Affairs
Media Desk
opa.resource@nrc.gov
301-415-8200

Visit our online photo gallery. Incorporate graphics and photographs to tell your story!
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2010-2011 Information Digest - Where you can find NRC Facts at a Glance
http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

From: Deahl, Elizabeth
Sent: Wednesday, March 16, 2011 2:29 PM
To: OPA Resource
Cc: Mendiola, Mary; Danoff, Karen; Glazer, Adam
Subject: reference for NRC study

Hello OPA,
Can you provide us with a reference to the study mentioned in this article? We are sure that we will get questions about it in the PDR. Thanks.

http://www.msnbc.msn.com/id/42103936/ns/world_news-asia-pacific/#

A ranking of the 104 nuclear reactors is shown at the bottom of this article, listing the NRC estimate of risk of catastrophic failure caused by earthquake.

Based on those new maps, the NRC published in August 2010 new estimates of the earthquake risk at nuclear power reactors in the eastern and central states.

Overall, it took five years and three months from the staff recommendation until the seismic task force submitted its report in August 2010.

Regards,
Beth

Beth Deahl
Technical Information Center Section
Information and Records Services Division
NRC Office of Information Services
elizabeth.deahl@nrc.gov
301.415.5684

From: Casto, Chuck
Sent: Saturday, April 16, 2011 10:57 PM
To: ET07 Hoc; HOO Hoc
Cc: Moore, Scott; Zimmerman, Roy; Virgilio, Martin; Reynolds, Steven
Subject: Final slides for the ET - please pass along
Attachments: JapenGlobalAssessmentFinalApril15.pptx

Attached are the final slides I sent to the Ambassador's secretary. They will have them for the on-site briefing package. If SoS wants a few minutes we will give quick verbal. Otherwise Ast. Sec. Donohue (DOE) is traveling with her and will have these details. We've briefed him and his staff previously so he is up to speed. It is expected that she will at least say something to the NRC folks.....The ambassador recommended to her that she discuss the NRC.

Thanks
chuck

RRR/60

NRC INTERIM COMPREHENSIVE ASSESSMENT of FUKUSHIMA EVENT

Background

- Consortium of U.S. nuclear organizations completed assessment
  - NRC; Department of Energy; Naval Reactors; Institute of Nuclear Power Operations; Electric Power Research Institute; General Electric
- Collaborated to complete technical assessments for safety issues for reactors and spent fuel pools
- Finishing major technical assessments
- Provided results to TEPCO and NISA

Assessment Conclusions

- U.S. Protective Action decisions remain conservative through all scenarios
  - Tokyo is not seriously threatened
- Unknown Ocean impacts
- Active radiation releases ongoing
- Accident conditions static but fragile
- Mitigating features temporary and highly unconventional

Assessment of Conditions

- Fuel Damage estimates: U-1 70%; U-2 30%; U-3 25% (est.)
- Reliance on steam cooling for reactors
- Time to react on a loss of injection is short – less than 10 hours for Unit 1
- Current situation results in a 1-10 to 1-100 probability of future energetic release
- Probability driven by seismic events without diversity or redundancy of injection system
- Can get 1-100,000 probability with training & preplanning of fire equipment and diverse & redundant injection system
- Containment flooding remains primary suggestion – especially for Units 1 & 3
- Flooding reduces consequences by one-to-two orders of magnitude

Next Steps

- Steam cooling assessment recommends more actions to mitigate additional events
  - Diversity and redundancy in feeding system
  - Automation of Giraffes and feeding systems
  - Additional feeding system injection points
  - Additional venting system

- Stability requires more actions
  - Completing actions to Phase 1 and Phase 2 stability
    - For example - decay heat removal system

From:	Laufer, Richard
To:	Kundrat, Christine; Wittick, Susan; Sargent, Kimberly; Fenton, Darlene; Humerick, David; Blakeney, Catherine; Boyd, NancyTurner; Lopez, George; Branch, Richard; Andersen, James; Stenberg, Danita; Shankar, Kala
Cc:	Bates, Andrew; Laufer, Richard; Harrington, Holly; Akstulewicz, Brenda; Merzke, Daniel; Brenner, Eliot; Bavol, Rochelle; Powell, Amy
Subject:	Commission Meeting on Japan Event has been announced for Monday (3/21) at 9:00 a.m.
Date:	Friday, March 18, 2011 9:16:07 AM
Importance:	High

Just wanted to let you know that the meeting has been approved and announced for Monday morning (3/21) at 9:00 a.m. It should be posted to the NRC website shortly.

Thanks,
Rich Laufer
415-1661

RRRR-61

From: LIA02 Hoc
Sent: Sunday, March 20, 2011 4:38 PM
To: LIA02 Hoc; LIA03 Hoc; Fragoyannis, Nancy; Doane, Margaret; Mamish, Nader; Abrams, Charlotte; Wittick, Brian; Afshar-Tous, Mugeh; 'ShafferMR@state.gov'; Smith, Brooke; Foggie, Kirk; Bloom, Steven; Schwartzman, Jennifer; Tobin, Jennifer; Mayros, Lauren; Jones, Andrea; English, Lance; Smiroldo, Elizabeth; Young, Francis; Henderson, Karen; Ramsey, Jack; Shepherd, Jill; Baker, Stephen
Subject: RE: 3/20/11 1500 Transition

TRANSITION REPORT FOR MARCH 20, 2011 1500
Karen and Steve Baker transitioning to Eric and Nancy

GENERAL NOTES. (includes notes from previous updates; red highlight is general instruction to staff; yellow highlights from Jen/Charlotte 2300-0700 shift; current updated action in green highlight)

1) Information pertinent to the team in Japan can be forwarded to new email group, which incorporates Dan Dorman already, "Liaison Japan," in Outlook.
2) Action: International updates must now be sent to LIA07 (to be put in the HOO Status Update) before the end of every shift as well as posted on the LT status board (different than the LT Log).
3) 11 PM – 7 AM shift is responsible for the summary call with Kirk and Brooke, scheduled daily at 5 AM EST unless rescheduled.
4) Kirk and Brooke requested that the international team to sit in on calls with the ET and Chuck to take notes and provide a short summary of what was discussed via email.
5) Reminder to include names on watch bill emails and inform Brooke and Kirk when shift changes.
6) RST needs to follow up on Crystallization issue per the 0930 conference call (see first item below)
7) Prior to the 2 pm call or any other call you set up, make sure you contact the HOOs to let them know that you are going to have the international call with UK, etc. Might be beneficial to establish a standing bridge.

SPECIFIC ISSUES

- **0930 Conference Call (Update).** RST-international LT occurred at 1030 conference call on Sunday 3/20; France was not present. On 3/19 0930 conference call with UK/Canada/France (with RST), UK asked about crystallization on the fuel as a result of the salt from the sea water. We have so far been unable to get additional information on this from TEPCO. It was not raised at the 1030 call this morning. International liaison has verified there will be a 1400 call on health physics issues and has alerted the HOO to the call. ACTION: International liaison should verify if the 0930 call will occur on 3/21 with the RST, and if so, contact the HOO to give a heads up.
    1. Update - The 2:00 meeting on March 20 with Canada and the UK gleaned little information due to the sensitivity of releasing the data. It was however agreed to continue to meet daily at 2:00 pm in hopes that more information sharing would be possible. Neither the UK nor Canada offered a counter proposal of Japan's current evacuation zone of 20K.

- **NRC Relief Team to Japan (Update).** Dan Dorman (NMSS) departed for Tokyo on March 19. Mike Scott (RES) and Alan Blamey (RI) depart on March 22. Todd Jackson (RI) departs March 23. Jack Giessner (RIII), Rob Taylor (NRR), Marie Miller (RI), Syed Ali (RES), Abdul Sheikh (NRR), Ralph Way (NSIR), and Jack Ramsey (OIP) will depart March 24. Action: New team members should be added to Liaison Japan group. Int't liaison sent out an email to the new team members @ 0900 3/20 and is collecting bb numbers, email addresses and PII for the travelers

KKRR/62

and adding them to the traveler list. Still need flight arrival times. Dosimeters for team members are in drawer at LIA03 location.

- **Action from the Chairman's Office 3/19 1625 (Update):** "Please have the interpreter verify if the following is on MEXT public site: AMS information shows that dose rates from ground deposition exist between 20 and 30 km that would result in a whole body dose of greater than 1 REM over continuous exposure for 4 days. This information agrees with Ministry of Education, Culture, Sports, Science and Technology (MEXT) field measurements in the same area. The Government of Japan may want to consider extending their evacuation zone beyond the current 20 km (12 mile) radius." Answer from Int'l liaisons 1100 (provided to Margie via email): Terumi (our interpreter) has scoured the MEXT public website. She did not see where MEXT posted any reports that reflected the Aerial monitoring system's information or any recommendation to increase the size of the evacuation zone beyond 20 km you referenced.

- **Meteorological/Radiation Data.** PMT is looking to fill a gap in its data from 3/13-15. We may have received some of it tonight but the translator is still working on it. Action: Any data that comes in with those dates on it should be treated as a top priority for translation and providing to PMT. Update: Translator has been working continuously on data as it is received.

- **Radiological Data Request.** NRC PMT room requested that we ask NISA to connect with TEPCO regarding getting updated radiological information including offsite plume monitoring data on a routine and expedited frequency. This request was sent to Danielle (Emche) to engage with Kirk and potentially NISA counterpart if appropriate. Action: The answer to this request should be communicated to the PMT room if received. Update: Nothing received during this watch.

- **DOS Operations Center Request.** ISN Desk (202-647-6611, as for ISN desk) contacted International Liaison to have NRC confirm whether information DOS had on their 6 a.m. situation report was NRC information or TEPCO's. The information in question was "NRC representatives in Tokyo state that the spent fuel pools in Fukushima Units 3 and 4 have water." International Liaison team checked with RST, and confirmed that the information was from TEPCO, not NRC. DOS further consulted with NRC to update their situation report with the following bullet: "Regarding the spent fuel pools at the No. 3 and No. 4 reactors, TEPCO (not/not the NRC) reports there is water in both pools. NRC cannot confirm these reports." International team confirmed this bullet with RST and responded to DOS @1100.

- **International aid/support for Japan.** IAEA and Russians have delegations in Japan. The Italians are interested in discussing what the USG is doing, and might be interested in helping in some way. We should receive more information from Roberto Ranieri soon. Spain has sent no one yet but Parliament will review and decide. South Africa and Slovenia have sent no one. And, as of today, has no plans. The Swiss regulator (as a part of the Swiss government team) has sent one person to do radiation monitoring and transmit the results. Marty Virgilio asked if there was any one coordination point (e.g. IAEA) for assistance going to Japan to avoid duplication of efforts. This does not appear to be the case but we have reached out to various contacts (USAID, Embassy Tokyo). This will likely become an action for future LT shifts (not just int'l). Update 3/20 1200: International team contacted Mark Shaffer @0915 to inquire whether, if IAEA were to be requested by Japan under the Convention on Assistance and Notification, whether the IAEA would accept the role as coordinator, and whether the International Emergency Center (IEC) would be able to take on the task. Mark responded that IAEA would respond positively to a Japanese request, but that there are doubts whether the IEC would be able to effectively handle the task.

- **Use of USAid for Travel.** Contacted Joshua Batkin, Chief of Staff for the Chairman, on direction by Nader Mamish to discuss the fact that we are to use USAid and the need for a legal agreement between the NRC and USAid if we are to get additional support. Joshua Batkin has worked it through Steve Burns and Jim Dyer who are interacting directly with USAID, he will let us know if there is anything additional needed from us. Update 3/20: No further dialogue on this issue during 0700-1500 shift.

- **France -** At the request of the PMT, @0830 3/20 International Liaison sent email to France/ASN/Thomas Mieusset (Thomas.MIEUSSET@asn.fr) to inquire about release to the NRC the results of the French simulation on possible source term and plume models.

- **IAEA -** In response to questions from Mark Shaffer (DOS) regarding variations in reports of the status of Reactor 3 and Unit 4's spent fuel storage, the team drafted and cleared a response back to DOS that better characterized their statuses.

- **Conference Room -** Efforts to arrange for a conference room of the US delegation in Japan at the request of the team were subsequently cancelled by the US Delegation. Barbara Gussack of Operations is braced to submit an actual request for a conference room once the delegation agrees they need one.

- **FOIA -** In support of a FOIA all Emails on LIA 02 through noon March 19, 2011 have been forwarded to a FOIA email address dedicated to the request. In some instances, the emails needed to be sent in small increments due to exceeding what Outlook could cope with.

ANTICIPATE ACTION ON 3/21

- **International request for information.** The Indonesian Embassy in Washington requested information on how we arrived at the 50-mile evacuation announcement. We provided some very basic information. They have followed up with a request for a phone call or meeting with NRC and their Minister-Counselor. Action: Call will occur at 5PM on Monday, March 21.

- **Business Cards for TeamJapan.** Brooke, Kirk and Tony have requested an additional supply of business cards be provided to them. The ADM desk has generated the cards requested but FedEx wouldn't be able to get them out until Monday with delivery Tuesday. Action: Provide to Mike Scott (RES) who is departing on Tuesday March 22. Cards are on LIA03 desk.

- **Thumb Drive for Brooke.** Brooke has requested that her NRC thumb drive be sent to her. It is in the drawer of station LIA03. Action: Provide to Mike Scott who is departing on Tuesday, March 22.

- **21:30 Interagency Call.** Next call will be 3/21 at 21:30 EST. Based upon information from the Task Force conference call, Chuck Casto had just returned from a meeting with TEPCO and TEPCO was very interested in getting the robots and helicopter from Lockhead Martin. They requested that the specs for these items be forwarded to them as soon as possible. Based upon information from DOS earlier in the call DDTC was working to expedite the licensing for these items in the event they were requested and the passports for Lockhead Martin personnel to accompany the helicopter. Update on the Bechtel trains in Perth for Japan – DOD Paycom has confirmed payment and flight is being prepared. The flight is estimated to arrive late or overnight Japan time on Sunday. One train of pumps and valves is being provided on this flight with a decision on supplying the remaining trains to be determined later based upon need by Japan.

- **International aid/support for Japan.** IAEA and Russians have delegations in Japan. The Italians are interested in discussing what the USG is doing, and might be interested in helping in some way. We should receive more information from Roberto Ranieri soon. Spain has sent no one yet but Parliament will review and decide. South Africa and Slovenia have sent no one. And, as of today, has no plans. The Swiss regulator (as a part of the Swiss government team) has sent one person to do radiation monitoring and transmit the results. Marty Virgilio asked if there was any one coordination point (e.g. IAEA) for assistance going to Japan to avoid duplication of efforts. This does not appear to be the case but we have reached out to various contacts (USAID, Embassy Tokyo). This will likely become an action for future LT shifts (not just int'l).

From: Harrington, Holly
To: Taylor, Robert
Subject: RE: Fukushima Calculations
Date: Friday, March 18, 2011 12:31:00 PM

No worries, then

From: Taylor, Robert
Sent: Friday, March 18, 2011 12:30 PM
To: Harrington, Holly
Subject: RE: Fukushima Calculations

#2 priority after the IN and press release.

From: Harrington, Holly
Sent: Friday, March 18, 2011 12:29 PM
To: Taylor, Robert
Subject: RE: Fukushima Calculations

Can you gin up a response to Jenny? I don't know what to say. Maybe we never make these things public and it's not just now and timing . . .

From: Taylor, Robert
Sent: Friday, March 18, 2011 12:26 PM
To: Harrington, Holly
Subject: RE: Fukushima Calculations

I agree with your response. The PMT doesn't have time to explain their results. We need to continue to be forward focused. There will be a time to reflect on the calculations. Now is not that time.

From: Harrington, Holly
Sent: Friday, March 18, 2011 12:23 PM
To: Taylor, Robert
Subject: FW: Fukushima Calculations

Any other thoughts on how to respond

From: Janbergs, Holly
Sent: Friday, March 18, 2011 12:12 PM
To: Harrington, Holly
Subject: RE: Fukushima Calculations

He wants to know if/when they would be available in the future and if they won't, why not.

From: Harrington, Holly
Sent: Friday, March 18, 2011 11:10 AM
To: Janbergs, Holly
Subject: RE: Fukushima Calculations

Quote: We are unable to provide you with the specifics you seek at this time.

RRRR-63

From: Janbergs, Holly
Sent: Friday, March 18, 2011 10:59 AM
To: Harrington, Holly
Subject: FW: Fukushima Calculations
Importance: High

Is there any information I can give him behind the calculations we attached to the latest press release? Attachments say it was determined by the Protective Measures Team in the Ops Cr, but I don't want to bother them if unnecessary.

From: Shawn Googins [mailto:sgoogins@googins.org]
Sent: Friday, March 18, 2011 10:02 AM
To: Janbergs, Holly
Subject: RE: Fukushima Calculations
Importance: High

Holly,

Thank you I already have these documents. I want to know the model/modeling software used (what is the program they used for the dispersion modeling) and the SOURCE TERM that was used in the calculations. The two documents that I already have DO NOT have the assumptions and the source terms (how many curies, which radionuclides, etc.)

Please pass this along to technical staff at the NRC thanks.

Shawn

> -------- Original Message --------
> Subject: Re: Fukushima Calculations
> From: "Janbergs, Holly" <Holly.Janbergs@nrc.gov>
> Date: Fri, March 18, 2011 9:29 am
> To: "sgoogins@googins.org" <sgoogins@googins.org>
>
> Mr. Googins,
>
> You can find calculations for the NRC's recommendations regarding the evacuation zone around Fukushima attached to this press release here, available on our public website:
> http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-050.pdf
> The direct link to the calculations is here:
> http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-050_Attchmt.pdf
>
> I hope this answers your questions.
>
> Thank you,
> Bethany
>
> Beth Janbergs
> Public Affairs Assistant
> 301-415-8211

David Decker

From: Repko, Mary Frances [Mary.Frances.Repko@mail.house.gov]
Sent: Monday, March 14, 2011 9:30 AM
To: Powell, Amy
Cc: Shane, Raeann; Schmidt, Rebecca; Droggitis, Spiros; Riley (OCA), Timothy; Decker, David; Dacus, Eugene
Subject: RE: NRC Congressional Affairs contacts, coverage regarding Japanese earthquake and tsunami issues

Thanks Amy, This was really helpful, may we get a schedule for the next few days, and remind me how Members call into the Ops Center if they need to do so? - Mary Frances

---

From: Powell, Amy [mailto:Amy.Powell@nrc.gov]
Sent: Friday, March 11, 2011 7:02 PM
To: Powell, Amy
Cc: Shane, Raeann; Schmidt, Rebecca; Droggitis, Spiros; Riley (OCA), Timothy; Decker, David; Dacus, Eugene
Subject: NRC Congressional Affairs contacts, coverage regarding Japanese earthquake and tsunami issues
Importance: High

Hi all –

In the event that it is needed, NRC's Office of Congressional Affairs is planning to have staff available in the NRC's Operations Center through the weekend as the agency continues to track Japanese earthquake and tsunami issues. Here is the schedule for who will be available and when:

Friday, March 11th

Raeann Shane	until 10:00 pm
Eugene "Gene" Dacus	10:00 pm to 7:00 am

Saturday, March 12th

Rebecca "Becky" Schmidt	7:00 am to 2:00 pm
Spiros Droggitis	2:00 pm to 9:00 pm
David Decker	9:00 pm to 7:00 am

Sunday, March 13th

Amy Powell	7:00 am to 2:00 pm
Tim Riley	2:00pm to 9:00pm

I've cc'ed all of our NRC Congressional Affairs staff on this schedule so that you have their e-mail addresses. If this changes at any point in the weekend, we will notify you.

Amy

Amy Powell
Associate Director
U. S. Nuclear Regulatory Commission
Office of Congressional Affairs
Phone: 301-415-1673

RRR-64

From: Hoc, PMT12
Sent: Saturday, April 09, 2011 1:17 PM
To: PMT03 Hoc
Subject: FW: Fukushima NPP Radiation Health Risks v.1 modified.doc

---

From: Call, Michel
Sent: Saturday, April 09, 2011 10:08 AM
To: PMT02 Hoc; Hoc, PMT12
Subject: RE: Fukushima NPP Radiation Health Risks v.1 modified.doc

Thanks. This looks good. I was curious if there had been anything done regarding fish and cesium being found in fish and to what levels since fishing is an important industry in Japan and sea products (fish, etc.) are a significant part of Japanese diet.

Mike

From: PMT02 Hoc
Sent: Saturday, April 09, 2011 6:37 AM
To: Hoc, PMT12; Call, Michel
Subject: Fukushima NPP Radiation Health Risks v.1 modified.doc

As requested:

Attached is the "Summary of Radiological Hazards in Japan" document.

It has been reviewed by the ET.

Thanks
PMT 02

KKR/65

From: Hoc, PMT12
Sent: Saturday, April 09, 2011 6:54 AM
To: PMT09 Hoc
Subject: FW: Fukushima NPP Radiation Health Risks v.1 modified.doc
Attachments: Fukushima NPP Radiation Health Risks v.1 modified.doc

---

From: PMT02 Hoc
Sent: Saturday, April 09, 2011 6:37 AM
To: Hoc, PMT12; Call, Michel
Subject: Fukushima NPP Radiation Health Risks v.1 modified.doc

As requested:

Attached is the "Summary of Radiological Hazards in Japan" document.

It has been reviewed by the ET.

Thanks
PMT 02

This document is sensitive and should be handled appropriately by the recipients. Therefore, this document is intended to be reviewed by the addressed recipients and is **not** intended to be shared with other stakeholders without NRC approval.

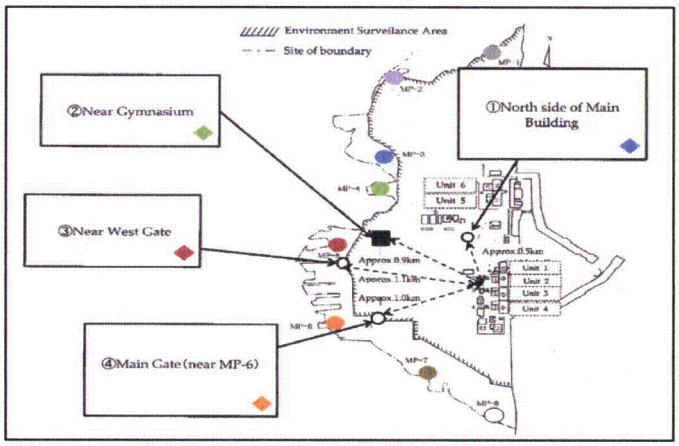
This document should only be used for informational purposes, not for decision-making in changing protective action recommendations. The PMT needs actual field measurements in order to make recommendations to expand or relax the current protective actions or to permit entry into the emergency planning zone. The staff has asked the site team for this data, but has not yet received the information.

Summary of Radiological Hazards in Japan

The situation at the Fukushima Daiichi Nuclear Power Plant remains serious although there are early signs of recovery based on plant conditions and decreasing doses in and around the power plant. This nuclear incident raises concern for the possible impact of radiation on the Japanese public.

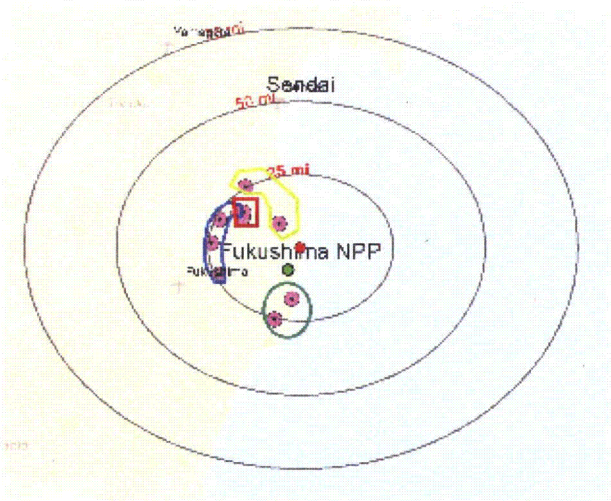
On-site at the Fukushima Daiichi plant, radiation levels in certain areas continue to be life-threatening – 30 Sv/hr (3,000 R/hr) in the dry wells for Units 1 and 2, and 20 Sv/hr (2,000 R/hr) near the drywell of Unit 3. Additionally, debris has been located outside of the reactor building of unit 3 with radiation levels measuring 1 Sv/hr (100 R/hr) [1].

Figure 1



Dose rates are being measured at four different locations around the site, as shown on Figure 1: the gymnasium, west gate, main building and the main gate. The most recent dose rate readings are: 82 μSv/hr (8.2 mrem/hr) at the main gate located west of unit 4; 54 μSv/hr (5.4 mrem/hr) at the west gate; and 645 μSv/hr (64.5 mrem/hr) at the main building. The gymnasium point has not been measured since March 17th. All readings have been decreasing over the past weeks.

Figure 2



The largest radiation plume was observed to pass in the north-west direction as confirmed by MEXT radiation monitoring results [2] and DOE overflights. Four clusters of exposure data were plotted based on 89 measurement locations supplied by MEXT (see Figure 2). The exposure rates plotted were spread across the west, northwest, south and a tight cluster of locations to the northwest. The highest dose rates measured by MEXT are in the northwest cluster (in the red square outline) and have been slowly decreasing from a high of 170 μSv/hr (17 mrem/hr) to a current value of 25 μSv/hr (2.5 rem/hr), 30 km (18.6 miles) from the Fukushima Daiichi plant.

This document is sensitive and should be handled appropriately by the recipients. Therefore, this document is intended to be reviewed by the addressed recipients and is **not** intended to be shared with other stakeholders without NRC approval.

MEXT samples for dust, drinking water and vegetation test positive for both I-131 and Cs-137 contamination [3]. Most of these monitoring points are located at least 18.6 miles (30 km) northwest of the site. While the data on the concentration of I-131 and Cs-137 in dust is inconsistently reported from each sampling location, most locations show I-131 concentrations (measured in Bq/m^3, apparently from air samples) decreasing to the single digits for the first week of April. Typical Cs-137 concentrations within 18.6 miles (30 km) vary from 0.5 to 4.5 Bq/m^3 (13.5 to122 pCi/m^3). Half of the sampling locations beyond 40 km (24.8 miles) show I-131 and Cs-137 below detectable levels, with the highest readings in the north and northwest and do not show a consistent pattern, based on a single daily sample.

Soil samples, taken on April 5 and 6, indicate I-131 in concentrations ranging from 41,000 to 200,000 Bq/kg (1.1E6 to 5.4E6 pCi/kg) and Cs-137 levels 25,000 to 100,000 Bq/kg (6.76E5 to 2.70E6 pCi/kg). Based on conversion to surface contamination, the computer code, Radiological Assessment System for Consequence Analysis (RASCAL), predicts a dose of approximately 4.4 rem in the 1st year, which exceeds the Environmental Protection Agency's relocation Protective Action Guideline of 2 rem in the 1st year.

Deposition of these radionuclides in leafy vegetation, measured at the same locations, are consistently higher than in soil, and show a high value of 300,000 Bq/kg (8.11E6 pCi/kg) for I-131 and 1,440,000 Bq/kg (3.89E7 pCi/kg) for Cs-137 at a distance of 40 km (24.9 miles) northwest of the site. Other sampling locations to the north, south and west show concentrations an order magnitude lower for each radionuclide. The Food and Drug Administration's Derived Intervention Levels (DIL) for food interdiction are 170 Bq/kg for I-131 and 1200 Bq/kg for Cs-137 + Cs-134 [4]. Japanese interdiction levels are 2000 Bq/kg for I-131 and 500 Bq/kg for Cesiums in food. .

In Tokyo, radiation levels are nearly indistinguishable from other man-made background radiation levels, ranging between 0.03 and 0.08 μSv/hr (3 and 8 μrem/hr).

In perspective, these summaries are limited because they are based on a few sample measurements. More sample data and analysis is needed for appropriate protection action decisions.

References:

[1] NRC Emergency Operations Center Status Update dated April 4, 2011.

[2] http://www.mext.go.jp/english/radioactivity level/detail/1304082.htm

[3] http://www.mext.go.jp/english/radioactivity level/detail/1304099.htm

[4]www.fda.gov/downloads/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/UCM094513.pdf

M:\PMT\Fukushima\9 April 2011\Fukushima NPP Radiation Health Risks v.1 modified.doc

From: Bonaccorso, Amy
To: Harrington, Holly
Subject: FW: Earthquake Risk at Nuclear Power Reactors
Date: Friday, March 18, 2011 8:41:20 AM

Media - don't know if this was kicked back last night or not.

-----Original Message-----
From: OPA Resource
Sent: Thursday, March 17, 2011 5:41 PM
To: Deavers, Ron; Bonaccorso, Amy
Subject: FW: Earthquake Risk at Nuclear Power Reactors

-----Original Message-----
From: Christina Cheddar-Berk [mailto:christina.cheddar-berk@nbcuni.com]
Sent: Wednesday, March 16, 2011 12:50 PM
To: OPA Resource
Subject: Earthquake Risk at Nuclear Power Reactors

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

Christina Cheddar-Berk (christina.cheddar-berk@nbcuni.com) on Wednesday, March 16, 2011 at 12:50:05
---

comments: Hi,

I'm seeing reference to a report about estimated of earthquake rise at U.S. nuclear power reactors. Can you send me this information?

It's sited in this article http://www.msnbc.msn.com/id/42103936/ns/world_news-asiapacific/

i am on an immediate deadline. thanks

organization: CNBC.com

address1: 900 Sylvan Ave

address2:

city: Engelwood Cliffs

state: NJ

zip: 07632

country: USA

phone: 201-735-4851

RRRR-66

From: Dembek, Stephen
Sent: Monday, March 21, 2011 1:11 PM
To: LIA02 Hoc
Cc: LIA03 Hoc; CountryClearance Resource; RMTPACTSU_ELNRC
Subject: RE: Country clearance info

Country clearances are still needed. If it's during normal working hours, then OIP staff will do the country clearances. If travel is arranged at night or on the weekends then USAID said they would do it.

Have the travelers give the info on the website shown below to countryclearance@nrc.gov.

Steve

From: LIA02 Hoc
Sent: Monday, March 21, 2011 1:07 PM
To: Dembek, Stephen
Cc: LIA03 Hoc
Subject: Country clearance info

Steve,

Item 4 on the checklist for our Japan travelers says:

4. Country clearance cable information

Format: Format is available at OIP SharePoint (http://portal.nrc.gov/OCM/ip/travel/default.aspx)
Complete the requested items. Place of Birth should be exactly the same as shown in your passport. Include your security clearance information and follow the directions included.

Are the travelers still required to do this even though USAID is handling all arrangements? If there is still a need for the country clearance, who should the travelers be sending the information to? This is not clear from the checklist. If no clearance is required I need to send a clarifying email to the travelers indicating that they should disregard item 4 on the checklist.

Please advise ASAP.

Thank you!

RRRR/67

From: Couret, Ivonne
To: Conatser, Richard; Harrington, Holly
Cc: Shoop, Undine; Burnell, Scott; Taylor, Robert
Subject: RE: Japan -- Radiological Environmental Monitoring Capability in the United States
Date: Friday, March 18, 2011 7:45:42 AM

Richard,
Thanks for sending you the email. I'm forwarding it to Holly Harrington to follow up on your suggestions. Currently strictly trying to punt media in the right direction. Thanks for your support! Ivonne

Ivonne L. Couret
Public Affairs Officer
Office of Public Affairs
Media Desk
opa.resource@nrc.gov
301-415-8200

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

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

From: Conatser, Richard
Sent: Friday, March 18, 2011 7:04 AM
To: Couret, Ivonne
Cc: Shoop, Undine
Subject: Japan -- Radiological Environmental Monitoring Capability in the United States

Ivonne,

I know you are very busy, and I'm sorry to bother you, but I saw the question and response (below) in the "Questions and Answers for OPA: March 15, 2011; 8:50 pm." (You can find it by clicking on the link "Chairman's Q&A at Capitol Hill 3/16/2011" found here http://portal.nrc.gov/edo/nrr/default.aspx).

1. **Has the government set up radiation monitoring stations to track the release?**
   The NRC understands that EPA is utilizing its existing nationwide radiation monitoring system, RadNet, to monitor continuously the nation's air and regularly monitors drinking water, milk and precipitation for environmental radiation. EPA has publicly stated its agreement with the NRC's assessment that we do not expect to see radiation at harmful levels reaching the U.S. from damaged Japanese nuclear power plants. Nevertheless, EPA has stated that it plans to work with its federal partners to deploy additional monitoring capabilities to parts of the western U.S. and U.S.territories.

This looks great but it does not mention anything about the radiological environmental monitoring programs that the NRC regulations require at each commercial nuclear power plant in the US. With 65 commercial nuclear power plants across the country, this represents a significant radiological environmental monitoring capability in the continental US. These environmental monitoring sampling stations are in place because of NRC

RRRR-68

regulations, and one of the primary objectives of these environmental monitoring programs is to monitor radiation in the environment around the commercial nuclear power plants. Licensees collect air samples as often as weekly, and some of those results will be available from the licensees shortly. Please contact Undine or myself if you would like additional information.

Thanks,

Richard L. Conatser
Health Physicist
Nuclear Regulatory Commission
301-415-4039
Richard.Conatser@NRC.gov

David Decker

From: Powell, Amy
Sent: Monday, March 14, 2011 9:51 AM
To: Decker, David; Schmidt, Rebecca
Subject: Re: EPW Request for a Briefing on Japan Before Wednesday's Hearing

Thanks - we're working on a briefing strategy now. I'll get back to Kathy.

Amy Powell
Associate Director
Office of Congressional Affairs
U. S. Nuclear Regulatory Commission
Phone: 301-415-1673

Sent from my Blackberry

From: Decker, David
To: Powell, Amy; Schmidt, Rebecca
Sent: Mon Mar 14 09:37:11 2011
Subject: EPW Request for a Briefing on Japan Before Wednesday's Hearing

Kathy just called to say that EPW wants a briefing on Japan before the Wednesday morning hearing with Energy and Commerce.

RRR-69

From: Virgilio, Rosetta
To: Harrington, Holly
Subject: Out of Office: ACTION: NGA Center in DC Requests NRC Expert Speaker for 3/22 or 3/23 and 4/4
Date: Friday, March 18, 2011 10:17:48 AM

Hello - I am out of the office and working at the NRC's Incident Response Center. If you have a pressing liaison matter, please contact Richard.Turtil@nrc.gov or 301-415-2308, or Deborah.Jackson@nrc.gov, 301-415-5176.

RRRR- 7①

From: Harrington, Holly
To: LIA12 Hoc
Subject: FW: Press release No. 11-050
Date: Thursday, March 17, 2011 6:34:00 PM

Can you run down?

From: OPA Resource
Sent: Thursday, March 17, 2011 6:31 PM
To: Harrington, Holly
Subject: FW: Press release No. 11-050

From: Schwalbach, Bob [mailto:Bob.Schwalbach@mail.house.gov]
Sent: Wednesday, March 16, 2011 5:46 PM
To: OPA Resource
Subject: Press release No. 11-050

Could I get the link to the computer calculations referenced in this press release?

Thanks.

Bob Schwalbach
Chief of Staff

Del. Gregorio Kilili Camacho Sablan (MP-00)
423 Cannon House Office Building
Washington, DC 20515

202.225.2646

Visit Congressman Sablan's virtual office at www.sablan.house.gov.

Keep up-to-date: Click here to subscribe to the e-kilili weekly newsletter.

RRRR-71

From: LIA08 Hoc
To: RMTPACTSU_ELNRC; LIA11 Hoc; LIA01 Hoc; LIA07 Hoc; LIA02 Hoc; LIA12 Hoc; Marshall, Jane; Grant, Jeffery; Gott, William; Harrington, Holly; McIntyre, David; Burnell, Scott
Subject: RE: USAID NRC Liaison - Phone Number
Date: Thursday, March 17, 2011 6:55:36 PM

Thanks, Mike. Contact number has been added to the LT Log.
Rani

From: RMTPACTSU_ELNRC [mailto:RMTPACTSU_ELNRC@ofda.gov]
Sent: Thursday, March 17, 2011 6:52 PM
To: LIA11 Hoc; LIA01 Hoc; LIA07 Hoc; LIA02 Hoc; LIA08 Hoc; LIA12 Hoc; Marshall, Jane; Grant, Jeffery; Gott, William; Harrington, Holly; McIntyre, David; Burnell, Scott
Subject: USAID NRC Liaison - Phone Number

Just wanted to let everyone know that we have a phone now down here at USAID. We can be reached at 202-712-4384.

If you need anything, please don't hesitate to ask.

Michael I. Dudek

RRRR-72

From: Burnell, Scott
To: Harrington, Holly
Subject: FW: Suggested press release on MSNBC article
Date: Thursday, March 17, 2011 7:40:37 PM

Sounds like the start of a blog post...

From: Beasley, Benjamin
Sent: Thursday, March 17, 2011 5:58 PM
To: Burnell, Scott
Cc: Coyne, Kevin; Stutzke, Martin; Ake, Jon; Kauffman, John
Subject: Suggested press release on MSNBC article

Scott,

We (RES) supported Region 1 this afternoon on a conference call with the county executives and state officials for the four counties around Indian Point. The county officials strongly encouraged us to respond to the MSNBC article. Thus, we have drafted a press release for your consideration.

Please let me know if you use this and if we can be of any other assistance.

Regards,
Ben Beasley

Draft Press Release Responding to MSNBC Article

A recent article by MSNBC ("What are the odds? US nuke plants ranked by quake risk", 3/16/2011) cites results of a U.S. Nuclear Regulatory Commission study released in September, 2010. The study investigated the implications of updated seismic hazard estimates in the central and eastern United States.

The study was prepared as a screening assessment to evaluate if further investigations of seismic safety for operating reactors in the central and eastern U.S. are warranted, consistent with NRC directives. The report clearly states that "work to date supports a decision to continue to the [next] stage...; the methodology, input assumptions, and data are not sufficiently developed to support other regulatory actions or decisions." Accordingly, the results were not used to rank or compare plants.

The study produced plant-specific results of the estimated change in risk from seismic hazards. The study did not rely on the absolute value of the seismic risk except to assure that all operating plants are safe. The plant-specific results were used in aggregate to determine the need for continued evaluation and were included in the report for openness and transparency. The use of the absolute value of the seismic hazard-related risk, as done in the MSNBC article, is not the intended use, and the NRC considers it an inappropriate use of the results.

The report reached three main conclusions: 1) Seismic hazard estimates have increased at some operating plants in the central and eastern US; 2) there is no immediate safety concern, plants have significant safety margin and overall seismic risk estimates remain

small; and 3) assessment of updated seismic hazards and plant performance should continue.

From: Harrington, Holly
To: Brenner, Eliot; Burnell, Scott; Couret, Ivonne; Hayden, Elizabeth; McIntyre, David; Chandrathil, Prema; Dricks, Victor; Hannah, Roger; Ledford, Joey; Mitlyng, Viktoria; Screnci, Diane; Sheehan, Neil; Uselding, Lara
Subject: FW: Transcript - NRC - Jaczko
Date: Friday, March 18, 2011 10:41:00 AM
Attachments: 0317nrc-jaczko.doc

Getting posted shortly

From: Brenner, Eliot
Sent: Thursday, March 17, 2011 6:31 PM
To: Harrington, Holly
Subject: FW: Transcript - NRC - Jaczko

Please post tomorrow, and do a short blog post from me...perhaps pegged off the POTUS comment.

Thanks.

eliot

From: Brenner, Eliot
Sent: Thursday, March 17, 2011 5:38 PM
To: Batkin, Joshua; Schmidt, Rebecca; Powell, Amy; Loyd, Susan
Subject: FW: Transcript - NRC - Jaczko

Transcript from yesterday on the house side.

From: Jordan White [mailto:Jordan.White@fednews.com]
Sent: Thursday, March 17, 2011 3:03 PM
To: Shannon, Valerie; Brenner, Eliot
Subject: Transcript - NRC - Jaczko

Hi Valerie,

Please find attached the transcript of the Jaczko panel. If you have any difficulties with the attachment or any further questions, do not hesitate to contact us. We look forward to hearing from you.

With no objections, this will also appear on our newswire.

Thanks!

Jordan D. White,
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RRR-74

NUCLEAR REGULATORY COMMISSION

THE FISCAL YEAR 2012 DEPARTMENT OF ENERGY AND NUCLEAR REGULATORY COMMISSION BUDGET

SPEAKER:
GREGORY B. JACZKO,
CHAIRMAN,
U.S. NUCLEAR REGULATORY COMMISSION

THURSDAY, MARCH 17, 2011

Transcript by
Federal News Service
Washington, D.C.

REPRESENTATIVE ED WHITFIELD (R-KY): OK. I'll call the hearing back into order. We took a recess because Commissioner, you had a – you were called away to the White House, I believe, for a meeting. And we completed with Secretary Chu. So everyone's already given their opening statement. So at this time, that we would recognize you for five minutes for your opening statement.

GREGORY B. JACZKO: Well, thank you, Mr. Chairman, and to you and the other chairmen of the two subcommittees and the ranking members Rush and Green, and members of the – other members of the subcommittee.

I'm honored to appear before you today on behalf of the U.S. Nuclear Regulatory Commission. And given the events that are unfolding overseas, my opening remarks will focus on the crisis in Japan. And I have additional information on the fiscal year 2012 budget that I have submitted for the record.

Of course, I'd be happy to answer questions on those matters. But I'll focus my testimony on the situation in Japan.

I would first like to offer my condolences to all those affected by the earthquake and tsunami in Japan over the last few days. My heart goes out to those who have been dealing with the aftermath of these natural disasters.

I want to publicly acknowledge the tireless efforts, professionalism and dedication of the NRC staff and other members of the federal family in reacting to the events in Japan. This is just another example from my six-and-a-half years on the commission of the dedication of the NRC staff to the mission of protecting public health and safety.

The American people can be proud of the commitment and dedication within the federal workforce exemplified by our staff every day. While the NRC regulates the safe and secure commercial use of radioactive materials in the United States, we also interact with nuclear regulators from around the world.

Since Friday, the NRC's headquarters' operations center has been operating on a 24-hour basis to monitor events unfolding in nuclear power plants in Japan. Since the earthquake hit northeastern Japan last Friday, some reactors at the Fukushima No. 1 plant have lost their cooling functions, leading to hydrogen explosion and rises in radiation levels.

Eleven NRC experts on boiling-water reactors have already been deployed to Japan as part of a U.S. International Agency for – International Development (ph) team. And they are currently in Tokyo.

Within the U.S., the NRC has been coordinating its efforts with other federal agencies as part of the government response to the situation. This includes monitoring radioactive releases and predicting their path. Given the thousands of miles between Japan and the United States, Hawaii, Alaska, the U.S. territories and the West Coast, we are not expected to experience any harmful levels of radioactivity.

Examining all available information is part of the effort to analyze the event and understand its implications both for Japan and the United States. The NRC has been working with several agencies to assist – to assess recent seismic research for the central and eastern part of the country. That work continues to indicate that the U.S. nuclear facilities remain safe. And we will continue to work to maintain that level of protection.

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

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

This basically means that U.S. nuclear power plants are designed to be safe based on historical data from the area's maximum credible earthquake. And the NRC remains attentive to any information that can be applied to U.S. reactors. Our focus is always on keeping plants in this country safe and secure.

As this immediate crisis in Japan comes to an end, we will look at whatever information we can gain from the event and see if there are changes we need to make to our own systems. Within the next few days, I intend to meet with my colleagues on the commission on the current status, and to begin a discussion of how we will systematically and methodically review information from the events in Japan.

In the meantime, we continue to oversee and monitor plants to ensure that the U.S. reactors remain safe. The NRC will continue to monitor the situation and provide updates via press releases and our public blog. The NRC also stands ready to offer further technical assistance as needed. We hope that this situation will be resolved soon so that Japan can begin to recover from this terrible tragedy.

I would like, if possible, to give you a brief update on what we believe the current status of the reactors in Japan is. There are essentially four reactors that we are currently monitoring as best we can. They are all at the Fukushima No. 1 site. Three of those reactors were operating at the time of the earthquake and were shut down following their normal procedures.

We believe that in general for these three reactors, they have suffered some degree of core damage from insufficient cooling caused ultimately by the loss of off-site power and the inability of the on-site diesel generators to operate successfully following the tsunami.

We also believe that for these three reactors, that sea water is being injected with reported stable cooling. The primary containment is described as functional.

Now, I would note that for unit No. 2 at this site, we are – we believe that core cooling is not stable. But also for that site, we believe at this time that primary containment is continuing to function. I would also note that for unit No. 2, we believe that the spent-fuel pool level is decreasing.

For unit No. 3, we believe that the spent-fuel pool integrity has been compromised, and that there has perhaps been a zirc-water interaction.

Now, in addition to the three reactors that were operating at the time of the incident, a fourth reactor is also right now under concern. This reactor was shut down at the time of the earthquake. What we believe at this time is that there has been a hydrogen explosion in this unit due to an uncovering of the fuel in the fuel pool.

We believe that secondary containment has been destroyed and there is no water in the spent-fuel pool. And we believe that radiation levels are extremely high, which could possibly impact the ability to take corrective measures.

For the two remaining units at this site, we have an IAEA report that the water level was down a little bit in this spent-fuel pool as well. And for the final reactor, we don't have any significant information at this time.

Recently, the NRC made a recommendation that based on the available information that we have, that for a comparable situation in the United States, we would recommend an evacuation to a much larger radius than has currently been provided in Japan. As a result of this recommendation, the ambassador in Japan has issued a statement to American citizens that we believe it is appropriate to evacuate to a larger distance up to approximately 50 miles.

The NRC is part of a larger effort that continues to provide assistance to Japan as requested. And we will continue our efforts to monitor the situation with the limited data that we have available. So that provides a general summary of where – of where the incident stands.

And with that, I would end my testimony and be happy to answer questions you may have. Thank you.

REP. WHITFIELD: Well, Commissioner, thank you. We appreciate your being with us this afternoon. In the earlier question-and-answer period with Secretary Chu, the gentleman from Massachusetts, Mr. Markey, had referred to a finding by Mr. John Ma – I believe is his last name – in a – relating to the AP1000 design.

And he had indicated that Mr. Ma had some serious reservations about the design. And I was just curious: Have you all had the opportunity to review his concerns? And have you come to any conclusions about that?

MR. JACZKO: We have done a very thorough review of the AP1000 design relative to a large number of safety issues. As part of that review process, we have had a vibrant discussion among the members of the NRC staff. We have thoroughly reviewed as part of that discussion the concerns by one of our staff members that you indicated. And we believe based on a thorough analysis that that design going forward can be – can be acceptable.

It is right now in a process of additional review. It is right now out for public comment, essentially. We do our designs almost like a regulation. So we allow them to be commented on by the public. And so we're at that stage in the process of that review.

But the concerns, while we believe, would certainly enhance the safety of the design, we don't believe at this time that they're necessary to meet our strict regulations.

REP. WHITFIELD: Right. Well, thank you for that comment. I just wanted to follow up on that. Of course, as a result of what's happened in Japan, the focus is on safety as it relates to nuclear. And I believe this is a safe industry over – historically, it's been a safe industry.

And I know that in France, in Japan and many other countries, a large percentage of their electricity comes from generation by nuclear. In the U.S., it takes – and you can correct me if I'm wrong, because I may be – but it takes roughly 10 years or so to obtain permitting for a nuclear plant. Is that – am I in the ballpark when I say 10 years, or not?

MR. JACZKO: Well, I think right now the process has taken, I would say, closer to about five years right now to go through the permitting. Now of course, we're not finished. But we are getting nearer to the end of our reviews. And I like to think about this in a way like when I went to college. You know, everybody goes to college with – people go to college with the intent to graduate in four years. But as you go through that process, you take your classes. If you do well, you have a chance to get done in four, sometimes a little bit – a little bit sooner. Some people take a little bit longer time, depending on how things go.

So as we continue to work with the – with the licensees, or the applicants, we've, I think, improved our understanding of how to make the process work effectively and efficiently. So right now, this has been the first-of-a-kind effort in something we haven't done in a long time. And it involves a new process.

So I would say at this time, I think we're moving at a relatively effective pace, but again, keeping our focus first and foremost on safety.

REP. WHITFIELD: And in your testimony, you did say that you evaluated these permit applications for seismic as well as tsunami-type activities. Correct?

MR. JACZKO: That's correct. We review all designs against a wide range of natural disasters: tsunamis, earthquakes, tornados, hurricanes. It just depends on the geographic location.

REP. WHITFIELD: Right. Well, with all the publicity surrounding Japan right now, everyone, as I said, is certainly focused on safety – and we do certainly think about the Japanese people, but with more focus on safety.

I'm not a nuclear engineer, but I know that there is some technology based around sodium-cooled reactors. And I've been told that sodium-cooled reactors, that there is not a possibility of a meltdown, and that these are smaller-type plants – maybe 50 (megawatt) to 100 megawatt plants. And I was wondering if you wouldn't mind commenting on that technology of sodium-cooled technology.

MR. JACZKO: Well, we don't currently have any specific applications in front of us for a sodium-cooled design. I would say it's a – it's a different type of technology than what we currently have operating in this country. And it – as a result, it presents its own challenges when it comes to safe operation.

But I wouldn't want to speculate too much on what those kinds of challenges are because we really haven't gone through the specific review of one of these. But in general, with a smaller reactor, a large – a smaller energy output, usually the risks are lower because you just have a smaller amount of radioactive material.

But as I said, the sodium reactors do present slightly different technical challenges because of the way that they operate: The sodium has to be maintained in a liquid form. And there are – there are different types of risks and hazards that you would have on that type of design.

REP. WHITFIELD: But that technology, I guess, was developed in United States at one point. And there are some countries that evidently have at least some of these plants in operation. Is that your understanding?

MR. JACZKO: Yeah, that's my understanding. But we don't currently have any licenses operating in the U.S.

REP. WHITFIELD: OK. Well, thank you very much. My time has expired. I'd like to recognize the gentleman from Illinois, Mr. Rush, the ranking member.

REPRESENTATIVE BOBBY L. RUSH (D-IL): I want to thank you, Mr. Chairman. And Chairman Jaczko, it's good to see you. And welcome to the committee.

I'm going to get my Japan question in first. And the crisis in Japan is first and foremost on the mind of many of my constituents in Illinois for a real specific reason: We've got more reactors in Illinois than any other state.

And my constituents are asking a simple question. And that question was summed up in a Fox – (inaudible) – news headline published on Sunday: Should Illinois be worried about its nuclear plants? And before you answer the question, I want to also note that Illinois lies within the New Madrid earthquake zone. How do we know – we do not have to worry about tsunamis.

But what assurances can we give to the people in my state, who has the highest concentration of nuclear reactors that also sits on an earthquake zone?

And in your answer, would you please speak to the possibilities and to the effect that a tornado – we are in a tornado zone – that tornados could have on nuclear reactors?

MR. JACZKO: Well Congressman, at the NRC we focus every day – the dedicated women and men at the NRC work every day to make sure that nuclear power plants in this country continue to operate safely.

All the nuclear power plants that are in the United States are reviewed against a very significant standard for seismic activity. We take what is – what we can find out from the historical record, from looking at the rocks and the geology and the seismology. We try and determine what we think is the largest earthquake that can happen in an area.

And from that, we do an analysis of what kind of effect we think that will have on the power reactor – namely, how much will the building shake or what kind of forces will it – will it feel. And we require that the nuclear power plants can withstand that kind of event. And we actually go a little bit larger than that just to make sure there's any uncertainties in our analysis (ph).

So that's a part of what we do for every reactor in the country, whether it's in the Midwest – of course, the seismic activity may be different in that part of the country versus another part of the country.

REP. RUSH: Yeah. It seemed to me, though, in Japan, it wasn't just the earthquake that caused the problem, it was the tsunami that really caused the problem. And my question in that – my question is in terms of a tornado.

MR. JACZKO: We look at tornados as well. We actually look at all natural phenomenon: hurricanes, tornados, earthquakes, tsunamis. Although as you indicated, some sites in the country don't experience all of those phenomenon. But we look historically to make sure we've captured all the natural phenomenon that occur.

So in Illinois, we certainly would examine the impacts of tornados and other extreme weather events in Illinois.

REP. RUSH: OK. And it seems to me – I asked this question of the secretary this morning – that the number one threat to nuclear facilities in this nation is terrorist actions and activities and acts. So can you speak to the – how are the – is the NRC handling the threat of terrorists?

MR. JACZKO: Well, we have a very robust program that requires nuclear utilities to ensure that they can protect their plants against terrorist-type attacks. That includes a very strong program to do exercises once every three years to actually participate in a – in a mock terrorist

attack on the facility. And we observe that and oversee that and ultimately use that as a way to – (inaudible, cross talk).

REP. RUSH: Once every three years?

MR. JACZKO: Once every three years. In addition to that, we do conduct our normal inspections at the facilities to make sure that all the security systems are in place and operating effectively.

And I would add that in addition, following September 11th, we required all of the nuclear power plants in this country to look at some of the more severe kinds of impacts and effects you could get at a nuclear power plant from a terrorist attack or other types of severe natural phenomenon.

And as a result, we require –

REP. RUSH: My time is almost over. And I just want to – I'm headed to – on Friday, I'm headed to Dresden to tour the generator station there in a rural county – Grundy, Illinois, and Northern Illinois. And I'm going to be there with some of your resident inspectors on location there. So I'll give them your regards.

MR. JACZKO: Well, good. Well, I appreciate that. And we're very fortunate to have some very fine people at our power reactors overseeing them.

REP. WHITFIELD: At this time, I'll recognize the gentleman from Illinois, Mr. Shimkus, for five minutes.

REPRESENTATIVE JOHN SHIMKUS (R-IL): Thank you, Mr. Chairman and welcome, Mr. Jaczko. When the licensing board return its decision denying the Department of Energy motion to withdraw its Yucca Mountain application?

MR. JACZKO: I believe that was earlier in the – end of June, end of June – thank you.

REP. SHIMKUS: Isn't true that all commissioners participating in the decision-making relating to the license board decision have already filed votes on that matter, including you?

MR. JACZKO: We have filed what I would consider to be preliminary views that we exchange among our colleagues on the commission. Those are views that we use, then, to inform our final decision-making.

REP. SHIMKUS: So you're saying you have not filed votes?

MR. JACZKO: We have not come to a final decision at this point.

REP. SHIMKUS: When – so it's your position – you have not filed final votes.

MR. JACZKO: That is correct. We have not reached a final decision on our – unlike perhaps here, you're familiarity with voting, I would consider votes to be more akin almost to prepared statements and remarks of members of the commission. The practice of the commission is to circulate those prepared remarks on any of the things that we do and then based on those circulated views, we work to see if there's a majority position.

REP. SHIMKUS: So you're saying, then, on October 29th, 2010, there wasn't final votes cast by all commissioners?

MR. JACZKO: On October 29th, believe we had all prepared our final – we had prepared our written statements that we circulated amongst us.

REP. SHIMKUS: So those written statements are considered votes?

MR. JACZKO: They are considered votes, but they are not the final decision of the commission.

REP. SHIMKUS: Okay, so since you have written statements that are considered votes, when do you plan to schedule a commission meeting?

MR. JACZKO: We will have a meeting an issue an order when we have, per statute, a majority position.

REP. SHIMKUS: And so you have these statements. They're considered votes, but you don't have a majority position?

MR. JACZKO: Correct. As I indicated, the terminology here, I think, is unfortunate. These votes are not, as I said, the final statement of the commission. In an adjudicatory matter, which is what this is, a formal hearing that we issue, the final statement of –

REP. SHIMKUS: Is there a minority decision already rendered by commissioners?

MR. JACZKO: There is no decision by the commission at this point.

REP. SHIMKUS: By the chairman?

MR. JACZKO: There is no decision by the commission.

REP. SHIMKUS: Was the NRC decision to close out Yucca review and hearing activities yours alone or one made by the full commission?

MR. JACZKO: That was a decision that I made as chairman of the agency, consistent with the budget that was prepared by the commission – (inaudible, cross talk).

REP. SHIMKUS: Okay, but let me ask you this question: What was your legal authority to do so?

MR. JACZKO: My legal authority was as chairman of the commission. And it was – the decision was fully consistent with appropriate law.

REP. SHIMKUS: No, I think your position is the budget zeroed it out, but I – I would beg to differ that you had the legal authority to do that.

MR. JACZKO: I would respectfully disagree with you on that.

REP. SHIMKUS: Well, I think we will review that and follow up.

MR. JACZKO: And I would add, if I could, that following that decision –

REP. SHIMKUS: I mean you wouldn't do anything that would be illegal, would you?

MR. JACZKO: Of course I wouldn't. Following – following the decision to begin the closedown activities of the Yucca Mountain project –

REP. SHIMKUS: Begging to differ, I think it's a stated federal position by law that Yucca Mountain should be open. That's the legal authority. There's no legal authority to close Yucca Mountain. The only authority that's been rendered is the administration, in compliance with Majority Leader Reid to pull funding. But there's no legal authority to close Yucca Mountain, by law.

MR. JACZKO: As I indicated, our action is consistent with all appropriate – appropriations law and any other statutes that we have.

REP. SHIMKUS: I would – you better – you better be double-checking your facts because we're not through with this debate on legal authority and I hope you're well-prepared. We had been told that the courts may not rule on whether or not the commission's position is legally defensible until the full commission takes a position. But you seem to be preventing that vote from occurring. If the court runs out of patience and does rule, will you abide by the court's decision and act promptly to carry it out?

MR. JACZKO: The agency will act according to any legal decision by the courts or any act of Congress.

REP. SHIMKUS: Thank you, Mr. Chairman, I yield back.

REP. WHITFIELD: This time, I'll recognize the gentleman from California for – Mr. Green – for five minutes.

REPRESENTATIVE GENE GREEN (D-TX): Thank you, Mr. Chairman. Welcome, Mr. Jaczko and I know you're busy and I appreciate you coming back to our committee. And I know last week, you and I talked about the president's budget and the proposals that go back to FY '08 for your funding and we both expressed concerns about the layoff of hundreds of workers

and particularly what happened in Japan. Obviously, this is not the time to go after our Nuclear Regulatory Commission. So I share that and hopefully, that message will get to the folks.

Let me talk about a local issue because I think all politics is local and what's happening in Japan. Texas has one proposed nuclear plant that's pending at the OMB. And they're receiving their funding from CPS Energy, NRG and Tokyo Electric Power Company, which presents part of the problem. One of the sites experienced problems – they own one of the sites that's experiencing the problems in Japan.

And so knowing what may happen with their potential investment, CPS Energy and NRG have announced they have trouble finding new investors. Again, part of it's the market. We have low natural-gas prices and for someone to buy into a long-term investment of nuclear power, which our country needs, but we may not be able to get the investors.

Can you talk about the review process for new plants like Texas and how long NRC and OMB process is taking? It seems like I've worked on the congressional side, now, for a number of years to get the expansion at the South Texas plant that's just southwest of Houston and just some information on how long it took, for example, for that expansion that goes through both your process and the OMB.

MR. JACZKO: Well, right now, the South Texas Project was one of the first applications that we received for new licensing. That project – the review that we do for that project will be focused, for sure, on safety and security. That's always our primary focus. We're continuing to do that review. We're nearing some significant milestones as we work to complete the actual design reviews for that type of reactor.

That design review, right now, is out for public comment as part of our process and we anticipate having that back in and working to resolve the comments over the summer. If we resolve those comments in a successful way, then we would move forward with completing the final reviews that are necessary, possibly, perhaps by – within – within 12 months or so. But we – as I said – I want to reiterate. Our focus, fundamentally, is first and foremost, is on the safety and security of these designs.

REP. GREEN: When you said it was one of the first applications, can you tell me the time frame when that was filed?

MR. JACZKO: It was approximately, I believe, 2007. However, we immediately or within several months, had to suspend our review because the applicant in that case made a change in the vendor that they were using to support the design. So that took about a year, a year-and-a-half to work through that particular issue on the part of the applicant.

REP. GREEN: I know the concern, literally for the whole world and particularly for our own country, if what we're doing – making sure we're learning from what's happened to Japan. And I understand the south – the Texas plant southwest of Houston has actually three safety backup systems instead of two.

And it's my understanding that Texas emergency power sources are separate and watertight. We don't have a problem on the Gulf Coast with you know, tsunamis or earthquakes. We do have a hurricane every once in a while and tornados. But I understand that they have watertight concrete buildings that would withstand a hurricane or storm surges and even earthquakes.

But like I said, I don't think in geological time we've had an earthquake along the Gulf Coast. Our soil's too soft. But the – the agency actually looked at that plant and all the applications, like you said, for safety.

MR. JACZKO: That's correct. We look at all the plants for a variety of natural phenomena and on the Gulf Coast, that can include seismic activity, hurricanes and other types of events. And we do have some analyses to look at tsunamis along the Gulf Coast and portions of the Atlantic Coast. Those wouldn't be expected to be tsunamis that are the same magnitude as ones we could see in –

REP. GREEN: Those have particular plants about 11 miles inland. It's not right on the coast. I know there've been technological advances and I'm almost out of time, but sometime, I'd like if your staff could present – provide to the committee separately some of the technological advances in the current and proposed plants in the United States as compared to, for example, what's happened in Japan with the tsunami and also the earthquakes.

MR. JACZKO: We can certainly provide that.

REP. GREEN: Thank you. Thank you, Mr. Chair.

REP. WHITFIELD: The gentleman from Michigan, Mr. Upton, is recognized for five minutes.

REPRESENTATIVE FRED UPTON (R-MI): Thank you, Mr. Chairman. And again, Mr. Chairman, we welcome you here today. And I just want to say a couple things at the beginning. First of all, I certainly did appreciate our meeting that we had several weeks ago. I know we both discussed Yucca. We may have a different view, but we're going to have ample time in Mr. Shimkus' subcommittee with all the commissioners sometime this spring to fully talk about that and ask a good number of questions.

As you know I'm – as you do – we both support safe nuclear power. We both support appropriate and rigorous oversight of all of our 104 sites around the country. I'm – and I, too, appreciated the visit that I paid to the NRC several years ago and viewed, firsthand, the NRC operations center and looked in, in terms of your day-to-day activities to make sure that things are safe.

Could you tell us what, specifically, the functions are of the 11 folks that you've sent to Japan and what they're doing? And they're reporting back to you and some of the information you might have received?

MR. JACZKO: The 11 individuals that we have in Japan are providing a variety of services. They are helping to organize the look at the reactors, the nuclear look at the reactors and helping to provide a good, coordinated team to provide assistance to the embassy in Japan.

REP. UPTON: So does Japan have a similar operation like we have in terms of the operations center that I visited in Maryland there?

MR. JACZKO: It's my understanding they do, but I'm not terribly familiar –

REP. UPTON: But they're in Tokyo, right? They're not at the Fukushima site?

MR. JACZKO: Our staff is in Tokyo, working to interface with their counterparts in the Japanese nuclear regulatory authority.

REP. UPTON: And as you announced that you had urged – our ambassador now has urged all Americans to move at least 50 miles away. What reaction have you – did you receive from your counterparts in Japan and the government there?

MR. JACZKO: I'm not familiar of any reactor –

REP. UPTON: But that's a recent – I mean that announcement was made very shortly, right?

MR. JACZKO: It was made like an hour ago – about 45 minutes ago.

REP. UPTON: You talked about the four different reactor vessels and the status of the four. Do you know where the hydrogen explosion was in the fourth reactor?

MR. JACZKO: At this point, we don't know that kind of specific information, but we believe that there was a hydrogen explosion at some point, likely because the spent fuel in that reactor has lost its cooling and at some point, then, was producing some degree of hydrogen. And that ultimately accumulated and led to an explosion.

REP. UPTON: And was that explosion today? U.S. time? Today?

MR. JACZKO: No, it occurred several days earlier. We can get you the exact date and time as we – as we know it.

REP. UPTON: Okay. As it relates to your budget – remember, that was the original ask for you to be here today – what is your budget for safety oversight as part of the NRC?

MR. JACZKO: The number we have – the bulk of our budget, probably about three-quarters of our budget goes to the reactor safety work, about 77 percent. So it's slightly over – approximately $800 million.

REP. UPTON: So does that include the personnel because I've visited my two sites in my district and I'd welcome you and although you indicated a willingness to come out, but on all of my visits, I've always stopped to say and welcome the oversight of your staff that's been there.

MR. JACZKO: Yeah, most of our budget does go to our staff. We have – mostly salaries and benefits. We have a small portion of our budget that's contracting dollars, but the bulk of it, about 80 percent, is the – I'm sorry, it's about 60 percent is the salaries and benefits of the staff.

REP. UPTON: And do you have any reason to believe that your proposed budget is not adequate to assess and monitor the nuclear power plant safety systems? I mean do you feel that it fits the bill?

MR. JACZKO: At this time, we believe it is – it's a sufficient request that will allow us to do the work we need to make sure the plant stays safe. The only caveat I would add is if as we continue to review the situation in Japan, it becomes apparent that we would need additional resources to address issues related to the situation in Japan, then we would perhaps have to come back and ask for additional resources for that.

REP. UPTON: Well, I was going to ask you if you thought you were going to need – will you be able to determine that within the next couple of weeks?

MR. JACZKO: I intend to meet with the commission within the next several days and begin looking at the kinds of questions we have to answer and I think that will be one of the first. But first, we want to kind of systematically figure out what it is that we need to look at and what are the important sources of information.

REP. UPTON: But you don't really have a reserve cushion today to do that, is that right – for fiscal year 2011.

MR. JACZKO: At this time, I would say we don't necessarily have that. But again, I'd like to take a look at that first before I make any conclusions.

REP. UPTON: Okay, well, again, I appreciate your willingness to be up here on a day – as tough as it is today to – and we appreciate your answers and look forward to working with you on a host of issues. Thank you. I yield back.

REP. WHITFIELD: I recognize the gentleman from California for five minutes, Mr. Waxman.

REPRESENTATIVE HENRY WAXMAN (D-CA): Thank you, Mr. Chairman. Mr. Jaczko, you've described a pretty dire situation in Japan. I want to ask you about this. An official from the European Union today used the word "apocalypse" to describe the potential damage that could occur in Japan. What is your reaction to this comment? Could Japan be facing widespread devastation from a nuclear meltdown or a radiation release?

MR. JACZKO: Well, I don't really want to speculate too much at this point on what could happen. I think people are working really, very diligently to try and address the situation. It is a very serious situation, without a doubt and that's part of the reason why I thought it was important for the agency to make the statement it did that we thought in a comparable situation in the United States, we would have issued evacuation instructions to a larger distance away from the plant. So it is a very serious situation and efforts are ongoing to try and resolve it. But it will be some time, I think, before it's finally resolved.

REP. WAXMAN: Well, you said that you're recommending an evacuation of U.S. citizens within 50 miles. What are the risks that are causing you to make this recommendation?

MR. JACZKO: Well, it's based on an assessment of the current conditions of the site. Because of the damage to the spent fuel pool, we believe that there's very significant radiation levels likely around the site.

And given that the reactors, the three reactors that were operating – given that they are operating with a – more of a backup to a backup, if you will, safety cooling system, if anything goes wrong with that, it would be very difficult for emergency workers to get into the site and perform emergency actions to help maintain that cooling.

So there is the likelihood that the cooling functions could be lost and if they are lost, it may be difficult to replace them and that could lead to a more significant damage to the fuel and potentially some type of release. So as a prudent measure with a comparable system situation here in the United States, we would likely be looking at an evacuation to a larger distance.

REP. WAXMAN: So it is the – is it the spent fuel problem in this Unit 4 where there's water covering the fuel rods – is that the greatest concern you have at the moment?

MR. JACZKO: Well, I think it's all of the factors together, really. It's the combination. And so you know, there's the possibility of this progressing further. And so as I said, in this country, we would probably take the prudent step of issuing evacuation to a larger distance.

REP. WAXMAN: High levels of radiation are being released from the pool – is that right?

MR. JACZKO: We believe that around the reactor's site, that there are high levels of radiation. Again, we have very limited data so I don't want to speculate –

REP. WAXMAN: And what would be the significance of that?

MR. JACZKO: The significance would – well, first and foremost, it would mean that it would be very difficult for emergency workers to get near to the reactors. The doses that they could experience would potentially be lethal doses in a very short period of time. So that is a very significant development and largely, is what prompted the agency to make the statement that it did.

REP. WAXMAN: And if they can't – if the emergency workers cannot get in there because of the danger to themselves, what would be the possibility, then, to deal with this problem of the spent fuels?

MR. JACZKO: Well, again, I don't want to speculate too much because again, we don't have direct information about the conditions on the ground. But it's certainly a difficult situation and one that needs to be addressed.

REP. WAXMAN: Well, you describe serious risks at these facilities. Can you describe what you think are the highest risks and why?

MR. JACZKO: At the sites in Japan?

REP. WAXMAN: Yeah. I think right now, as I think has been the situation from the beginning, the efforts are to continue to keep the reactors cool – the three reactors that were operating at the time of the earthquake. And that is, right now, being done with a variety of different systems. And again, in more a nontraditional way because they have lost a lot of their electrical power and their off-site power capabilities.

In addition, the other risk is really to the spent fuel that may be in the spent fuel pools for possibly up to six of the reactors at the site. So keeping those pools filled with water and keeping that fuel cool is also, then, the primary concerns.

REP. WAXMAN: And what's the significance of the report of a crack in the unit itself, in the containing – the containment unit?

MR. JACZKO: I want to be clear. Certainly, the indication that I was referring to was a crack, possibly, in the spent fuel pool on one of the other units. And the significance of that would be if there is a crack, then there's the possibility of water draining from that pool and perhaps an inability to maintain the appropriate level of water in the pool, which could lead to a damage of the fuel in that pool.

REP. WAXMAN: What would you say is the best case now for Japan and what do you think might be the worst case?

MR. JACZKO: Well, I think – certainly, the efforts are to continue to provide cooling of the reactors and to do everything possible to provide cooling to the spent fuel pools. Again, I don't want to speculate on what could happen because you know, it is a very dynamic situation and there are – you know, certainly a lot of efforts that are being undertaken with efforts of the U.S. government, in particular.

I want to emphasize that this is really a U.S. government response. The NRC is playing one small part, but other assets have been located from other parts of the U.S. government and are being provided to help provide this cooling and do what we can.

REP. WAXMAN: Thank you very much.

REP. WHITFIELD: The gentleman from Texas, Mr. Barton is recognized for five minutes.

REPRESENTATIVE JOSEPH BARTON (R-TX): Thank you, Mr. Chairman and thank you, Chairman, for being here on what's obviously a very difficult day for you. You may have answered some of these questions before or you may have even commented on them in your opening statements so I apologize if I ask something that has already been addressed.

My understanding is that the systems at – the safety systems at the power plants or the reactors in Japan are an older technology that requires an active backup and that the licenses that you're reviewing now have a different system that is a passive backup, i.e. if something happens catastrophic, the system automatically shuts itself down and the cooling system can perpetuate itself without outside power. Is that correct?

MR. JACZKO: Well, I wouldn't necessarily want to comment too much on the Japanese sites because I'm not – their designs are a little bit different from the designs we have that are similar in this country. But we are reviewing new reactors that do operate on what they call a passive cooling system.

It is not all of the designs that we're reviewing, however. It's only two of the designs that we're looking at, but –

REP. BARTON: Well, my understanding is that there's – and correct me if I'm wrong, that there's one new nuclear power plant under construction and that's the Southern Company facility in Georgia and that their safety system is a passive safety system that if you were to – of course, you won't have a tsunami in Central Georgia, but you could have an earthquake.

And if there were to be an earthquake, that it would automatically shut itself down without outside intervention and the coolant is a gravity-flow cooling system that perpetuates itself, again, without any outside power. Is that correct?

MR. JACZKO: That is correct. The system that is used for that particular design, which is the AP1000 does essentially rely on gravity to initiate circulation of water through the reactor and then naturally circulate based on the heat flow. It will circulate without the use of off-site power. However, there are other safety systems that do rely on the off-site power.

REP. BARTON: But we could say, in the instance of the one new plant that's currently under construction, what happened in Japan, assuming the construction of the plant is robust enough that the containment is not destroyed by the earthquake, that in terms of cooling the reactors and shutting down the reactors, they would be shut down and they would stay cool.

MR. JACZKO: Well, again, I wouldn't necessarily want to speculate on everything. We don't really know what happened in Japan. We obviously know there was an earthquake. We know that there was a tsunami. We know a lot of safety systems haven't functioned as would be

needed. So you know, at this point, I don't really want to speculate on how that applies to any U.S. facilities until we have a chance to really do a methodical and systematic –

REP. BARTON: I'm not asking you to speculate on what happened in Japan. I'm asking, specifically, if an earthquake hit the power plant in Georgia, based on your agency's review of their safety design, would it withstand that earthquake?

MR. JACZKO: All of the plants that we've licensed and all of the plants that we are currently reviewing will meet strict safety standards for earthquakes and other natural phenomena. So certainly, for the existing plants, we believe absolutely that they can withstand an earthquake and they can meet the high standards that we've put in place. In the new plants, we're still continuing our review. We haven't completed our review, so I don't want to – I don't want to prejudge the outcome of that by making any final determinations.

REP. BARTON: Okay. But you are allowing this plant in Georgia to be constructed. So you've approved something.

MR. JACZKO: It's a preliminary approval for a limited amount of construction activity that's not related to the most safety-significant systems at this time.

REP. BARTON: Now, in general, for each plant in the United States, regardless of where it's located, does it have a minimum safety requirement to withstand an earthquake?

MR. JACZKO: That's true. All the plants have a requirement to be designed to deal with the kinds of earthquakes we would expect in about a 200-mile radius from that nuclear power plant.

REP. BARTON: Now, obviously, if a plant is in an area that's more prone to earthquakes, it might have a higher requirement than a plant that's in a location that's never had an earthquake in 500 years, but they all have to withstand some base-case earthquake design criteria.

MR. JACZKO: That's correct. They all have to withstand what we think is the maximum expected earthquake from the historical record within about 200 miles of that site.

REP. BARTON: Now, I'm told that the earthquake that hit Japan is order of magnitude, the fifth most powerful, ever-recorded anywhere in the world. So that's obviously a very powerful earthquake. In the United States, is the design criteria currently for that level of an earthquake that would be – say the standard the earthquake that hit San Francisco in 1906?

MR. JACZKO: Would like me to answer?

REP. BARTON: I would like you to answer. (Laughter.)

MR. JACZKO: I think it's important – I want to try and give a demonstration. I think we – we talk a lot about the magnitude of the earthquake and that's not really what the NRC

looks at. If I – if you look at the cup of water that I have over here and you think of that as the nuclear reactor, the earthquake would be – I probably shouldn't fill up the water glass.

REP. BARTON: This is going to make TV, so do it right. (Laughter.)

MR. JACZKO: I practiced it before I started, so – so if you think of this as the nuclear power plant, the earthquake and when you talk about the magnitude of the earthquake, it would be like me hitting the table with my first. So something like that. And you'll see that it makes the glass over here vibrate.

That's what we actually measure and we design our nuclear power plants around is that shaking of the power plant. So the actual impact depends upon where I hit in relation to the glass. So you have a large earthquake like this that's very far away, may not have the same impact on a site as an earthquake that's maybe a little bit less but much closer, so something like that.

So we actually worry more about – we look at all of the different earthquakes that could happen in this region and we look at what that shaking is and we make sure that that shaking can handle what we think are the maximum historical earthquakes in that region. Now –

REP. BARTON: No, go ahead. Summarize.

MR. JACZKO: (Chuckles.) In addition to that, we know that we don't always know everything. So we've done a lot of studies over the years to look at earthquakes and phenomena beyond that kind of design earthquake and we've had the plants go back and look and see if there are things that they could do to ensure that they would be able to better withstand some possible earthquake that nobody's thought of or seen at this point.

And so we have what we call severe accident programs that all of the utilities have where they have procedures and they have ability to mitigate that kind of more severe event that may not ever have occurred in a particular region. So it's a multilayered system of defense. And if I could just briefly summarize one other point.

In addition to that, following, September 11th, we required all of the nuclear reactors in this country to pre-stage equipment that can perform this emergency last – kind of – ditch effort cooling to the reactor and the spent fuel. And that's a – that's a variety of procedures and different types of equipment that are required to be at the reactor sites. And we've inspected the reactors to make sure that they have that. So you know, that gives you another level of defense beyond really just what the design of the reactor is.

REP. BARTON: Thank you and thank you for the chair's courtesy in letting him answer that question.

REP. WHITFIELD: The gentlelady from California is recognized for five minutes.

REPRESENTATIVE LOIS CAPPS (D-CA): And Mr. Chairman, if you wouldn't mind granting me a little consideration – I represent Diablo Canyon nuclear facility and I have three packed questions, but something was stated earlier that I believe needs to be clarified just for the record. If I could ask the chairman, in addition to thanking him for his testimony, did you say that Unit 4 in Japan, in the incident there, that there was no water in Unit 4 surrounding the spent fuel and that Unit 3 was in danger of losing the water source?

MR. JACZKO: We believe, at this point, that Unit 4 may have lost a significant inventory, if not lost all of its water.

REP. CAPPS: And that Unit 3 is in danger?

MR. JACZKO: Well, I would say what we know at Unit 3 is that there's possibly – again, our information is limited, so we do – well, we believe that there's a crack in the spent fuel pool for Unit 3 as well, which could lead to a loss of water in that pool.

REP. CAPPS: Thank you. Diablo Canyon nuclear facility in my congressional district sits on the Hosgri fault zone. Then in 2008, the U.S. Geological Survey informed the utility that a new fault had been found near Diablo Canyon. It's called the Shoreline fault. You're well-aware about the California law requiring the energy commission to perform reviews of the seismic issues associated with our state's nuclear plants, I'm sure.

The energy commission recommended – and our state PUC directed that independent, peer-reviewed advanced seismic studies be performed prior to applying for re-licensure. So you think the NRC should take advantage of the talent, expertise and resources available in California so that all information on seismic issues could be analyzed with the goal of avoiding costly duplication?

MR. JACZKO: Well, we – ultimately, we have to make decisions, as an agency, based on the technical review that we, as an agency, do. And again, I can't get too far into some of these issues because we do have an ongoing hearing related to some of the very points that you've raised. So in our hearing process, we are prohibited from discussing those things outside the context of the commission.

REP. CAPPS: All right, I'll tell you what it seems to me and my constituents, that having the best eyes and minds in our country working together, looking at the seismic issues, makes the most sense. First and foremost, for my constituents, this is about safety. But seismic concerns also impact affordability and regional – reliable generation as well. So I hope that this issue can be revisited, not to take away from the responsibility and authority of the federal agency, but to work with other agencies. And I look forward to working with you as we go along in this area.

MR. JACZKO: Well, Congresswoman, if I could just briefly say.

REP. CAPPS: Sure.

MR. JACZKO: We actually did host a workshop within the last year, actually, that brought together a lot of these technical experts to have a discussion for the point that you said. We certainly are always open to hearing information from any technical expert that can provide information to us. So I just want to make the point that in the end, the decision-making has to come from our expert staff.

REP. CAPPS: Great. All right. Here's another question: My constituents have become increasingly concerned about the preparation for a station blackout event. If power is lost, they want to be assured that backup power will be available throughout the duration of an accident in order to prevent fuel melting.

In the last half-decade, both California reactors have been cited by you, by the NRC, for instances in which both backup diesel generators were down or there were problems involving battery power availability. In such instances, merely citations were given to the utilities. Should the NRC reevaluate its regulations and perhaps increase the penalties for such infractions in light of the accident in Japan as an incentive to force better compliance from the nuclear operators?

MR. JACZKO: Well, as I said, we intend to do a very systematic and methodical look at any lessons we can learn from this Japanese incident. And I certainly will keep your suggestion in mind as something for us to take a look at.

REP. CAPPS: Finally, I'd like you to address some safety issues in the event of an earthquake and a simultaneous accident at a nuclear plant. Diablo Canyon has a workable evacuation plan. They wouldn't be able to operate without one.

But as you may know, there's basically only one way in and out of San Luis Obispo, narrow Highway 1 along the coast. The NRC has ruled that it was non-credible that there could ever be multiple catastrophes such as an earthquake and a meltdown at the plant.

This is the quote from the NRC: "The commission has determined that the chance of such a bizarre concentration of events occurring is extremely small. Not only is this conclusion well-supported by the record evidence, it accords most eminently with commonsense notions of statistical probability." That's the end of their quote.

Now, we have just witnessed an earthquake, a tsunami and a nuclear meltdown all occurring in sequence. I want to ask the commission, if you would on my behalf, do they still believe the chance of this bizarre concentration of events is merely hypothetical? Do you think this decision should be revisited in light of the events in Japan?

MR. JACZKO: Well, I certainly will take your suggestion back to the commission. I would want to review that entire document in its entirety because certainly, we do – we do examine the possibility of earthquakes as an initiating event for a possible reactor problem. Of course, we believe we have systems in place that would, one, really prevent any kind of core damage from that, but two, if there is subsequent problems, we have mitigating strategies in other ways to cope with those. So I would just be happy to take a look at that document in its entirety.

REP. CAPPS: Thank you and just in conclusion, Mr. Chairman, you know, that's what they said two weeks ago, no doubt, in Japan as well. Enormous anxiety and sadness over the events that happened there. And here, we have seen in the past year, our three major sources of energy that this country uses, coal, oil and nuclear, all experiencing tragic accidents. And I do look forward to working with you – your committee – your commission on the number-one goal of keeping our energy sources safe. Thank you.

MR. JACZKO: Thank you. And Congressman, if I could just add, of course, you understand we have not had any nuclear incidents in the last year in this country. The incidences were in other countries.

REP. WHITFIELD: The gentleman from West Virginia, Mr. McKinley, is recognized for five minutes.

REPRESENTATIVE DAVID MCKINLEY (R-WV): Thank you, Mr. Chairman. Does the NRC still have the authority, given – in light of what's happened in Japan, I assume you still have the authority to grant the permits for continuing the design implementation of nuclear facilities?

MR. JACZKO: Certainly, the agency is an independent regulatory –

REP. MCKINLEY: Given – is there any delay or are you hearing anything that would set up – I would expect some extension might be necessary, but what would you suggest is a reasonable time frame for someone making an application?

MR. JACZKO: Well, as I said, I think the process of reviewing an application for a nuclear power plant's a very complicated process and this is the first time we're doing this, the first time we've done it in a long time. So I think there's going to be some lessons that we learn, but the applicant and the agency. I'm sorry, I don't want to get into kind of speculating how long or surmising how long I think it should happen. I would just say that, you know, we will do the thorough job we have to do to ensure safety of – (inaudible, cross talk).

REP. MCKINLEY: Do you have, given that this also is for budgeting, I haven't seen – do you have some R&D money allocated for researching alternate uses for spent fuel rods?

MR. JACZKO: We currently, in our budget right now, have a significant amount of resources that we are using to look at spent fuel, the safety and security of spent fuel and transportation. We have a small piece of our budget that's looking at reprocessing and developing a framework for reprocessing, which would be, perhaps, what you're referring to as alternate uses.

REP. MCKINLEY: If you could send more to me, I'd like to know a little bit more about – and let's go to the Yucca Mountain just for a moment. I don't know whether it's anecdotal or fact, but I know, of course, that the application has been withdrawn. But it was my

understanding that consumers are still paying on their utility bills funds for that project. Is that accurate?

MR. JACZKO: I believe it is, although I would add that that's not an area that the NRC has authority over.

REP. MCKINLEY: But is that accurate?

MR. JACZKO: I believe it is, but again, I don't follow that very closely other than generally what I read in the press.

REP. MCKINLEY: Okay, I'm just curious because if – from what I understand, we're collecting money for something that's never going to happen. You don't understand that. What about Shippingport? I think that was the first facility we had in this country, isn't it? Given – I think it was maybe – was that '65 – '63? When was Shippingport opened?

MR. JACZKO: I don't have the exact date of the initial license, but it was very early on in the U.S. nuclear program.

REP. MCKINLEY: In light of the circumstances and maybe you don't want to do a kneejerk reaction at all to this, but will you be looking at some of the older facilities to see what new technology – has Shippingport been upgraded all along?

MR. JACZKO: Shippingport is no longer an operating reactor.

REP. MCKINLEY: Is no longer in operation at all. So what happens when Shippingport goes out of operation – it goes out?

MR. JACZKO: Any of the reactors, when they go on a service are eventually decommissioned. We've decommissioned a large number of reactors in this country.

REP. MCKINLEY: Okay. There was also a story in the media that one of our naval vessels sailed through a cloud off Japan's – were you aware of that?

MR. JACZKO: Yes. We did have indications that in the early days of this incident, the reactor was going through a process that involves venting steam that accumulates in the reactor containment structure. And that steam needs to be released in order to reduce the pressures in that – in that containment vessel, which is one of the important – (inaudible, cross talk).

REP. MCKINLEY: Could that have been avoided – the ship going through that? Could that have been avoided?

MR. JACZKO: Well, my understanding was, they were performing activities to support search-and-rescue efforts in Japan, and that the doses that they were experiencing were from that particular plume, were not doses that would have a significant impact to health and safety.

REP. MCKINLEY: That's all I – and I yield back my time. Thank you very much.

REP. WHITFIELD: Thank you. This time, I recognize the gentleman from Massachusetts, Mr. Markey, for five minutes.

REPRESENTATIVE ED MARKEY (D-MA): Thank you, Mr. Chairman. Welcome. What interim safety measures are you going to require while you study the issue? In Germany, they're taking interim steps right now, as well as Switzerland, China, Venezuela. Are there any steps you would like to announce that you are going to take in order to ensure that the plants in our country are safe?

MR. JACZKO: Well, we – Congressman, we continue every day to make sure that the plants are safe. And at this time, we don't have any specific actions that we think are necessary to add to the safety of the facilities beyond what we do.

REP. MARKEY: Are there any interim advisories that you are going to send out? After 9/11, the NRC sent out some interim advisories. After Fukushima, are you – are you planning on doing that?

MR. JACZKO: We do intend to send out what we refer to as a regulatory information summary that will – that will generally characterize the event at the – in Japan. Again, at this point we don't have detailed information. But that will remind licensees of, of course, their obligations under their existing license – but as well as these additional measures that I talked about to these severe-accident-types of strategies, as well as the efforts that we implemented after 9/11 – to put in place these systems and procedures to ensure that they could provide emergency cooling to the reactor if necessary.

REP. MARKEY: Going back to the question which Chairman Whitfield asked you about Dr. Ma and his concern about the AP1000 design, you said in your – with your vote that "while it is clear that the use of ductile material in all areas of the shield building would provide an additional enhancement to safety, that I am not convinced that such a design requirement exists."

After what's going on in Japan right now, would you reconsider that in order to, perhaps, consider adding that ductile material as part of the process – the construction of AP1000 plants?

MR. JACZKO: As I said, I think we'll do a very thorough review of the information from Japan. But we don't anticipate getting to a final decision on that design for at least until the end of the summer. So I think there'll be plenty of information from our review at that time to inform that decision.

REP. MARKEY: Yeah. As you know, I authored legislation in 2002 that required the distribution of potassium iodide to residents living within a 20-mile radius of nuclear power plants, based upon a Sandia study. Because we learned after Chernobyl that this cheap medication can prevent cancers caused by radioactive iodine.

The Bush White House ignored my language and blocked an effort by HHS to implement it. In fact, they even took away HHS' power to complete – to complete its KI distribution guidelines. The Obama administration has not implemented it even though the surgeon general has just said yesterday that she thought it was worthwhile precaution for West Coast residents.

Don't you think that this distribution of potassium iodide to residents within 20 miles of nuclear power plants is a common-sense measure that should be implemented?

MR. JACZKO: Well, the particular protective actions that would be issued for any nuclear power plant incident are ultimately the responsibilities of the state and local governments. They have that primary on-the-ground responsibility to decide how to deal with an accident. So –

REP. MARKEY: But the plants are licensed by the Nuclear Regulatory Commission, not by the states. You're the agency of expertise in terms of the spread of nuclear materials, not state officials. Do you believe that it is advisable to look at a 20-mile radius for distribution of potassium iodide?

MR. JACZKO: The current policy of the commission is that potassium iodide would be one of the protective action that could be considered within what we call our emergency –

REP. MARKEY: The Bush guideline was that for 10 (miles) to 20 miles, people should just stop running or ducking under their bed. Do you think that's – there is no other medicine. So is there – is there a recommendation from you that they should look at potassium iodide for the 10- to 20-mile radius?

MR. JACZKO: Again, I would, really in many ways, defer to state and local governments as they believe that that's appropriate. I think that there certainly are many protective actions that could be taken – (inaudible, cross talk).

REP. MARKEY: I just don't think that they have the expertise looking at the probabilistic risk assessment of the likelihood of an accident in terms of having KI there.

Now, the San Onofre reactor is also rated to withstand a 7.0 earthquake. Should we – should we be retrofitting those reactors to ensure that they can withstand much stronger earthquakes? The IAEA warned Japan two years ago that their nuclear power plants were not designed well-enough to withstand a strong earthquake, and they were only able to withstand a 7.0 earthquake. That's what San Onofre is designed to. Should we be looking at retrofitting of the San Onofre plant and plants like that?

MR. JACZKO: Well, as I said, the plants are actually designed to the ground motion and the shaking that you would get at any facility. And that's based on what we think are the most, or, well, what are really the – what's the maximum earthquake that's occurred in any particular area.

So it doesn't directly necessarily mean a 7.0 earthquake. It's what we think is the maximum credible earthquake. And I continue to believe that that's the appropriate standard for the agency. But again, we will – we will take a look at all of the information we have from Japan as that comes in. And if we have to make modifications to our requirements, we will.

REP. MARKEY: I would just hope that maximum credible earthquake would be re-examined after what's happened in Chile, New Zealand and Japan, that we'd be in the other part of that earthquake zone – that as you have to have an earthquake, and so that we do have the proper protections.

REP. WHITFIELD: The gentleman from Louisiana, Mr. Cassidy, is recognized for five minutes.

REPRESENTATIVE BILL CASSIDY (R-LA): Thank you, sir. Are you all – just from a – I'm a physician, so I'm going to speak about it and sound like a physician. In effect, there's going to be a post-mortem done on that accident. And folks are going to go in there and see what went wrong, and learn from it to ideally keep it from occurring again.

Now, are there going to be people from industry invited to that party, if you will, or to that post-mortem? Or it only will be academia and government? It seems all three need to be there. And so I don't think I've heard you mention having industry there to kind of – yeah, what do we do? Thoughts?

MR. JACZKO: Well, we haven't – we haven't yet decided how we'll go about our review. But I want it to be systematic and methodical. Those are the two words that I think are most important right now. And in our normal practice as an agency, we always reach out to stakeholders – not just industry, but public-interest groups and other members of the public. So I would expect that whatever we do as part of this process will have a significant public involvement.

REP. CASSIDY: Now, let me ask. Because when I toured the nuclear power plant near my home – I live in – I'm from Louisiana, so it's the River Bend nuclear power plant. As I recall, they were coming up with a fail-safe mechanism to keep the generators running even if there was something dire that happened to the plant.

I gather what has happened here is that the tsunami – because the diesel was on the ground – washed away the diesel, so they were unable to run the generators. So just for the reassurance of folks here – and frankly, my city, if you will – it seems that we've been proactive on that particular issue so that there is a backup to the backup to the backup to keep the generators running, to pump the water in case – you see where I'm going with that.

MR. JACZKO: Well, we do – and again, I don't want to speculate on exactly what happened in Japan because we really just don't know – (inaudible, cross talk).

REP. CASSIDY: I think I'm channeling CNN right now. (Laughter.)

MR. JACZKO: All the diesel generators at nuclear power plants in this country are considered vital equipment. The emergency diesel generators are vital pieces of equipment. So they are designed as with the other safety-significant structures and components to be able to withstand the natural phenomenon.

So if – depending on the plant, that could be hurricanes, tornados, tsunamis, earthquakes – whatever the natural phenomena are that are relevant to a particular site.

REP. CASSIDY: So I – but is – not knowing that you – that we're not speculating on what happened in Japan, but just to go to the point. The backup generators to keep those cooling units running, we do have – we have proactively addressed this in this country. And there is a way if a Hurricane Katrina comes through and hits my state and one system goes out, there's another system to keep it running. Is that my understanding?

MR. JACZKO: That's correct. Each reactor has at least two diesel generators. In the event that one of them can't perform its function, that will be an additional – in addition to that, many states have – I'm sorry, many sites have what we call a station-blackout diesel or some other type of electrical power supply that can function in the event that those primary emergency diesel generators are not operating.

And then of course in addition to that, as I've referred to, all of the plants in this country have been required to look at pre-staging other additional emergency equipment that could deal with this kind of situation.

REP. CASSIDY: You mentioned that –

MR. JACZKO: In some cases, that would be electrical power supplies or portable generators, and things like that.

REP. CASSIDY: Got you. You may have answered this next question. I'm sorry, I was out of the room for a bit. Clearly, we're talking not just natural disasters, but man-made. Do I understand that new nuclear power plants – or do I not understand correctly – that they have to be built so that if there is a terrorist attack and a plane is driven into them, that somehow it is still protected?

MR. JACZKO: For the existing fleet of reactors, we have required them to be able to deal with the – with large fires and explosions that could occur at that – at the plant. And some of that was related to the possibilities of terrorist attacks involving aircraft.

For new plants, what we've required them – the new designs that are required to be able to withstand an aircraft-type impact at the site.

REP. CASSIDY: Now, the containment structure – again, you may have said this; I apologize – the containment structure, though – even if there is a meltdown, how effectively can that containment structure keep it contained?

MR. JACZKO: Well, that's the purpose of the containment structure – is again – in the event that – the very unlikely event that all of the safety systems fail and we're not able to keep cooling to the core, and were it to eventually have significant fuel damage or some kind of melting, that any radiological material would be contained within that structure.

REP. CASSIDY: Given that there's some that would be vented off – but nonetheless, if there's a disaster, it's a disaster within the containment?

MR. JACZKO: That would be – that's the design goal and the expectation. And of course, if that were to fail, we have very robust programs in place to do emergency evacuations – (inaudible, cross talk).

REP. CASSIDY: So this is a 1970s-circa plant. So I presume since it dates from the '70s since, we have even more robust protections?

MR. JACZKO: We've looked at all of these plants over the years. And in some cases – well actually, in the late '80s and early '90s we did systematic evaluations of the plants to see how they would deal with these kind of very severe accidents. In some cases, plants took the step of low-cost modifications that would deal with these more severe kinds of events.

So we have a lot of – a lot of things that have been done. The plants are certainly not the same plants that they were when they were originally built and designed.

REP. CASSIDY: Thank you very much.

REP. WHITFIELD: The gentleman from Michigan, Mr. Dingell, is recognized for five minutes.

REPRESENTATIVE JOHN D. DINGELL (D-MI): Mr. Chairman, I thank you for your courtesy. Mr. Chairman, I'm sure you are making a careful review of the events that are going forward in Japan with regard to the nuclear facility over there and the attendant circumstances. Will you make such a review?

MR. JACZKO: We certainly do intend to.

REP. DINGELL: All right.

MR. JACZKO: Once we have good, credible information, we'll do a thorough and systematic review.

REP. DINGELL: Good. Now, I would assume that when you have – well first of all, one, would you submit to this committee your plans with regard to that, as to how you intend to go into that to ascertain what happened?

MR. JACZKO: We certainly will. We'll make – (inaudible, cross talk).

REP. DINGELL: And then, would you see that we're informed as events go forward so we know what's taking place over there?

MR. JACZKO: We'll certainly do that.

REP. DINGELL: And would you also submit to us for the record how NRC is going to go about defining the lessons that you have learned about events in Japan, and how you will incorporate them into your regulatory requirements? You'd do that for us – (inaudible, cross talk).

MR. JACZKO: We'll certainly do that.

REP. DINGELL: Now, does the NRC regularly use new information about the different types of risk as these different types of risks and information become available? Yes, or no?

MR. JACZKO: Yes.

REP. DINGELL: Would you provide for the record the process by which NRC does this risk assessment?

MR. JACZKO: Well, there's a variety of –

REP. DINGELL: No, just for the record.

MR. JACZKO: Oh, of course.

REP. DINGELL: Our time, Mr. Chairman, is very limited.

MR. JACZKO: Please. Of course.

REP. DINGELL: And I have a lot of questions here. Mr. Chairman, do the NRC's licensing standard for nuclear plants take into account the risk of earthquake or tsunami?

MR. JACZKO: They incorporate all natural hazards, including earthquakes and tsunamis.

REP. DINGELL: I would – I would note with distress. I think you probably remember Diablo Canyon some years ago where they were going to build right on a fault. Are you more careful about that than your predecessors were in that particular –

MR. JACZKO: Right now – well, we look at all the nuclear power plants in the country. We look at seismic activity from all of them because while not all plants are in high-seismic areas, almost all plants could experience some seismic activity from lower-level earthquake activity. So we consider that for all plants.

REP. DINGELL: Now Mr. Chairman, would you provide a list of the kinds of disasters for which NRC takes account of in terms of its licensing standards? Just submit that for the record please.

MR. JACZKO: We'll provide that.

REP. DINGELL: Now Mr. Chairman, it's my understanding that one of the main problems in Japan has been inadequate access to emergency power to keep the reactors cool. And that poses some substantial ongoing risk. Do NRC's licensing standards include adequate access to emergency power? And are you satisfied that they do so?

MR. JACZKO: We believe that our requirements are very strong in this area. And we continue actively in our inspection program to ensure that licensees have the appropriate equipment such as diesel generator, and that it operates successfully.

REP. DINGELL: Now Mr. Chairman, you have an unholy mess on your hands – you and the Department of Energy – with regard to Yucca Mountain. You've spent, as near as I can gather, something like 17 billion (dollars) on this that's been collected from rate payers for long-term storage of nuclear waste. The administration opposes going forward. You've got this nuclear waste that's piling up all over the country. Some of it is going into cooling ponds. They're talking about putting the rest in dry cask storage.

Do you have any kind of long-term plan to address what you're going to do with this infernal mess, and how you're going to deal with the problem?

MR. JACZKO: Well right now, we're looking at a longer time frame for storage of spent fuel than we have in the past. But right now, we believe that spent fuel certainly can be – can be stored safely and securely with the existing systems over several decades –

REP. DINGELL: But you don't have – but you don't have a plan for how you're going to deal with it. You're being sued by the electrical utilities because they're collecting monies from their rate payers that are not being spent on the purposes for which they're being collected. The stuff keeps piling up. And you've doubled the amount that you can store in a single pool, but that's running out. You're running out of pools in which to store it.

And as these plants close, you're going to – you're going to perhaps lose the responsibility of the persons who are storing this thing. And the stuff just keeps piling up. Is there a long-term plan anywhere in government, in your agency, in the Department of Energy, in the Office of Management or Budget, or in any other agency of the federal government as to what we're going to do about this infernal mess?

MR. JACZKO: Well, although it's not an area that we are directly working, the Secretary of Energy has convened a blue-ribbon commission to look at some of those longer-term options and see what an optimal approach should be –

REP. DINGELL: The answer – the answer, Mr. Chairman, is no. Is it not?

MR. JACZKO: I –

REP. DINGELL: Go ahead.

MR. JACZKO: I believe there are plans through this blue-ribbon commission to look long-term. And we believe, certainly from the agency, that the existing systems are –

REP. DINGELL: But the answer – the answer, my beloved friend, is no. And I say this with respect and affection. But the simple fact of the matter is, you're sitting on a – you're sitting on a mighty fine mess that nobody knows what to do with. And each and every one of those situations offers unique opportunity for terrifying mischief to the – to the private-public interest and to the people in the – in the area. And the cost of this whole sorry-ass mess keeps growing up – and going up.

REP. WHITFIELD: : And we agree with you, Mr. Dingell. At this point, I'd like to recognize the gentleman from Texas, Mr. Burgess, for five minutes.

REPRESENTATIVE MICHAEL BURGESS (R-TX): Thank you, Mr. Chairman. And Mr. Chairman, thank you for being here and spending so long with us today. Thank you for speaking with me yesterday at the end of what obviously was a very long day for you. And I appreciate your willingness to make yourself to members of both sides of the dais during this crisis in Japan.

Recently, an e-mail has been circulating – and I think it came to the committee staff – that suggested a much higher level of radioactivity at one of the plants than has previously been reported. Do you know anything about that?

MR. JACZKO: Well, we are continuing to monitor the situation as best we can. Again, I'm not familiar with the e-mail that you're talking about. But we do believe that certainly with one of the spent-fuel pools, that there have been certainly elevated radiation readings. And over the last several days, there have been times based on certain incidents in the site where radiation levels have gone up and come back down.

REP. BURGESS: But when you say elevated, ballpark – are you talking about chest X-ray, CAT scan, multiple CAT scans? What sort of numbers are you talking about?

MR. JACZKO: Right now, we have indications at the site of radiation levels that would be levels that would be lethal within a fairly short period of time. So they're very significant radiation levels.

REP. BURGESS: Very significant. OK. And that's different from kind of what we've been hearing before. Is that correct?

MR. JACZKO: Again, I'm not – I would say it's certainly a more recent development that we've seen these very, very high readings.

REP. BURGESS: OK. Now, you were very good to provide us with written testimony. You were very good to provide us with some updates on the situation. It's obviously a very fluid situation in Japan. Would you be good enough to give us in written form what you described to us as you are finishing up your prepared testimony this afternoon, so that there's no confusion over what we – when we quote you? The press is here, and we'll all be asked questions as you finish up.

Could you provide us the written information that you would like us to have?

MR. JACZKO: We'll provide that for you.

REP. BURGESS: Because some of it – and I think Ms. Capps on the other side talked about it a little bit. I mean, you talked about the spent-fuel pool being dry and the radiation being high, and again, things that were different from what I had been gathering from the – just of the press reports just prior to coming in here.

And it – and it would be good to see that – again, what is factual and what is not.

MR. JACZKO: We'll be happy to provide that. And I would just say that our information is limited. So we've been very careful to only provide information that we believe is very reliable.

REP. BURGESS: Well now, we're here to talk – (chuckles) – about the budget. And the budget you prepared, obviously, was before all this happened. Do you anticipate submitting an addendum to the request in light of things that have happened this past week?

MR. JACZKO: That's something we'll review at this point. I don't – I don't have an answer for you. But I will certainly come back to the committee if we do.

REP. BURGESS: Can you give us just kind of a back-of-the-envelope estimate: In a perfect world, what would be the percentage of electricity in this country – in this country produced by nuclear power?

MR. JACZKO: It's approximately 20 percent.

REP. BURGESS: What is being produced now?

MR. JACZKO: Currently? I would have to look. But I would take an estimate of about probably – about that number. I'm not aware of any significant plant outages right now.

REP. BURGESS: So it would be your position as chairman of the Nuclear Regulatory Commission that the percentage of electricity produced in America would not increase over what it is today? Do I understand that correctly?

MR. JACZKO: I'm sorry.

REP. BURGESS: In an ideal world, this country maximizing all of the different energy production possibilities that we have, how much – what percentage – would be nuclear?

MR. JACZKO: Well, it's really not up to us to decide that. I think the agency's responsibility is to make sure that if there are nuclear power plants in this country, that they continue to operate safely and securely.

REP. BURGESS: Do you have a concept of what would be the ideal number of nuclear plants in this country in the next 10, 20, 30 years?

MR. JACZKO: That's really not – certainly, as an agency, we don't have a concept of an ideal number. Our job is to make sure it's safe and secure.

REP. BURGESS: How many would be too many for you to keep up with to ensure that they were safety (ph)?

MR. JACZKO: Right now, we think – certainly, we're planning for the possibility of new plants to be under construction in the next several years. So we believe with the budgets that we've developed, we would have the resources we need to handle those additional units if they're licensed.

REP. BURGESS: All right. Chairman Dingell described in very colorful terms "an infernal mess" at Yucca Mountain. If you were the king of the nuclear – (chuckles) – regulatory world, the sole decision-maker on nuclear waste, what would be the ideal solution, the sine qua non? What would you do?

MR. JACZKO: Well, I – as I said, I really – I can't get too much into that because we do have an ongoing proceeding with regard to Yucca Mountain. And you know, the job of keeping plants and the materials and all the things that we regulate safe is pretty much a job that – in particular, these days – keeps me awake almost 24 hours a day.

So I'll worry about – let somebody else worry about some of those other broader policy questions.

REP. BURGESS: We thank you for your activities during this crisis. Thank you.

REP. WHITFIELD: This time, I'll recognize the gentleman from Pennsylvania, Mr. Doyle, for five minutes.

REPRESENTATIVE MICHAEL F. DOYLE (D-PA): Thank you, Mr. Chairman. Chairman, thanks for your patience and endurance today. Given what's happened in Japan, I'm sure this has been a reminder to all of us that everyone agrees that certifying new nuclear designs is a crucial and important task to make sure these reactors are durable and can be safely operated.

And I understand that the new reactor design certification process involves not only professional and accredited NRC staff, but there's also an outside expert advisory committee that oversees the review and recommendations of the NRC staff. Is that correct?

MR. JACZKO: We do have an – it's an outside – or it's a agency-independent advisory committee.

REP. DOYLE: Yeah. That's right. The ACRS. And then ultimately, you and your colleagues also evaluate and make your own independent judgments. Correct?

MR. JACZKO: Correct.

REP. DOYLE: So I want to address this situation to get more clarification and more on the record about concerns raised by my good friend, Ed Markey, regarding Westinghouse's AP1000. I want you to helpfully provide some more clarification to the process that was involved certifying this reactor.

Now, is it true that Dr. Ma's nonconcurrence issues during the deliberation for the Westinghouse AP1000 advanced final safety evaluation report were, in fact, given due consideration by his NRC staff colleagues?

MR. JACZKO: I believe that they were.

REP. DOYLE: And also, the members of the independent Advisory Committee for Reactor Safeguards?

MR. JACZKO: They did. As part of their review, they did specifically receive a presentation from Mr. Ma about this – (inaudible, cross talk).

REP. DOYLE: And you and your commission colleagues?

MR. JACZKO: I don't want to speak for the actions of all of my colleagues. But I personally met with him and talked to him about his concerns. And –

REP. DOYLE: And can you tell us what happened after Dr. Ma made his presentation and raised his concerns? So he raised these concerns. And tell us what happened after that.

MR. JACZKO: Well, they were – I think they were looked at by certainly all of – or the staff at the agency that were reviewing the design. This advisory committee also did look at his perspectives. And they came to their own conclusions that, I think, ultimately, no one disputes that the recommendations that he has would make the design safer. But we think that the design, as it is right now, would appear to meet our standards. But I would add that it was also Mr. Ma who originally raised concerns with a previous iteration of the design.

And as a result of those concerns, the agency did indicate to Westinghouse that significant changes would need to be made. They in fact did make significant changes and I

think in some sense, Mr. Ma believes that – and I don't want to speak for him directly – but my understanding of his position is that he thinks that those changes are not necessarily enough to satisfy his initial concerns.

REP. DOYLE: But it's true that his concerns were put forward and that the NRC team of reviewers that throughout the drafting of the AFSER, they evaluated it and they basically overruled his concerns, basically, as did the subcommittee, as did – I mean this went through a process. I just want to make clear for the record that we don't have a person at the department who's raised concerns and they were swept under the rug or ignored. I mean these concerns were addressed. Is that not correct?

MR. JACZKO: Yeah, I feel very strongly that we create an environment at the agency where people can raise concerns and those concerns can be thoroughly reviewed and vetted. And I believe, in this case, that that's what happened.

REP. DOYLE: Thank you very much. That's all I have, Mr. Chairman.

REP. WHITFIELD: The gentleman from Nebraska, Mr. Terry, is recognized for five minutes.

REPRESENTATIVE LEE TERRY (R-NE): Thank you for being here. I'm just as curious – there's two power plants – Mr. Barton talked about one in Georgia, but there's on in Georgia, one in South Carolina that sometime this year or early next year should be issued their combined construction and operating license. My question, first, is: Are there any discussions occurring to delay that COL now because of the Japanese disaster?

MR. JACZKO: Well, right now, all of the – those two plants – potential plants that you've referenced are all based around the AP1000 design. That design is currently undergoing a public review process. I expect we'll get comments as a result of that public process related to the situation in Japan. So we'll evaluate those as we get them.

REP. TERRY: So it's yes and maybe no.

MR. JACZKO: At this point, we haven't done – we're following our normal path with the reviews at this point.

REP. TERRY: All right. It sounds like there may be some uncertainty in that process of whether they'll get their combined construction, operating license in '11 or early '12.

MR. JACZKO: Well, we – we're proceeding down a path to continue the reviews. As I said earlier –

REP. TERRY: There's no reason to repeat the answer. I'm curious to how many other applications have been made for the early site permits. Do you know how many are sitting with you all?

MR. JACZKO: We currently have, I believe, one or two new early site permits in front of the agency are expected to come.

REP. TERRY: All right. Are there any that have been – have been provided their early site permit and now on course to go to the next level of permitting? I'm just trying to figure out how many are in the pipeline?

MR. JACZKO: Right now, we have 12 applications in front of us for approximately 20 reactors. Those are actual combined license applications and then we have, I believe, it's two early site permits that are not yet tied specifically to an actual license for a plant.

REP. TERRY: All right. I've studied a lot over the last couple years the small modular reactors. I just want to know what your personal opinion is, where the process is in reviewing the technology, how close we are to perhaps even rolling out a pilot project?

MR. JACZKO: Well, we – I like to think of the small modular reactors in three groupings. We have the small modular reactors which are very much based on the existing type of reactors that we have now, but smaller. For that type of design, which we call (integral ?) light water reactors – we would anticipate, in the next year or so, an application for the construction of a small modular reactor type.

We also anticipate one or more applications for designs related to those smaller modular reactors. The second category we have are what are basically called high-temperature gas reactors. So it's a slightly different technology. That is mostly work that's tied to the Next Generation Nuclear Plant project and that is an activity that's a little bit farther away, probably more like 2013, where we might see an application.

The area in which probably there's the least certainty is with more of the nontraditional reactor types – (inaudible, cross talk).

REP. TERRY: The one that the chairman may have raised earlier with you.

MR. JACZKO: Exactly. Those are much more, right now, in what I would call the conceptual stage. So they haven't progressed to the point where we really have detailed discussions about possible reviews of applications.

REP. TERRY: All right. I appreciate that. I'll yield my 59 seconds back to the chairman.

REP. WHITFIELD: Thank you. At this time, I recognize the gentleman from Louisiana, Mr. Scalise, for five minutes.

REPRESENTATIVE STEVE SCALISE (R-LA): Thank you, Mr. Chairman and Mr. Jaczko. I appreciate you being before our committee. I know we have some votes on the House floor, so I'll try to be brief and ask direct questions. I think the secretary had indicated that the United States was helping Japan, doing some testing on contamination on the ground. Are you

familiar – what types of testing's currently being done that we're involved in and have you all found anything right now of concern?

MR. JACZKO: Well, right now, my understanding is we have – are working to provide the ability to do air sampling of radiation. We have some readings of – as I said, of very high levels of contamination around some of the reactor sites and at this point, I'm not sure of the origin of that, whether that's coming from U.S. assistance to Japan or whether that's coming directly from the Japanese.

REP. SCALISE: Okay, thanks. I would imagine, right now, there are a number of applications that are pending before your agency at various levels, awaiting decisions. Do you anticipate that those decisions will still go forward at the current pace or do you see anything changing there?

MR. JACZKO: Right now, we don't – we don't have any intention to change the approach we're taking. But as I've said, we're – we're going to do a very systematic and methodical review of the information coming from Japan. And if there's some information that would require us to revise our approach, then we'll certainly do that.

REP. SCALISE: Thank you. And I would imagine – you know, as with any crisis. I mean we've experienced more than our fair share in South Louisiana, but there will be an evaluation in general just to see what lessons can be learned and I imagine we'll – you know, we'll make sure that if we learn some things from how they did things right, maybe how they did things wrong if they did that we can incorporate that. But in the end, to still move forward and not retreat from energy production in this country.

MR. JACZKO: Well, we'll certainly do that type of review. And again, I don't want to prejudge what comes out of it. If we get information that tells us we need to make a change, we will if we get information that tells us that things are good, then we'll continue to proceed as we are.

REP. SCALISE: Thank you for your time. I appreciate it. Thank you. Mr. Chairman, I yield back.

REP. WHITFIELD: Mr. Jaczko, I just want to ask for clarification. In response to Mr. Terry's question, you talked about on the small modulars, there are three or four different categories, the existing type, the third type was NGNP 2013 conceptual. What determines what category a design would be in? Is that based on actual applications or is that just on general knowledge or –

MR. JACZKO: It's really the – I would say the state of readiness of the designers and the vendors themselves. So –

REP. WHITFIELD: The state of readiness of the vendors and the designers?

MR. JACZKO: Yes.

REP. WHITFIELD: Okay. Thank you. Mr. Rush, do you have anything else?

REP. RUSH: Mr. Chairman, Administrator – I would like to know if, in fact, over the last five years, can you furnish this committee with the infractions or violations or emergency conditions where the NRC had to send an emergency crew to any of the facilities that operates within the continental United States?

MR. JACZKO: We can certainly send you that information.

REP. RUSH: Yeah, I'd like to just know what level of responses and what level of issues that you've dealt with over the last five years.

MR. JACZKO: We will send you that information.

REP. WHITFIELD: Thank you very much. Mr. Rush, you and I have three minutes to go vote. Mr. Commissioner, thank you for your time today. We appreciate it very much. We look forward to working with you as we move forward on nuclear energy and safety and look forward to future opportunities.

MR. JACZKO: Thank you.

REP. WHITFIELD: With that, the hearing is ended.

(END)

From: Harrington, Holly
To: WebContractor Resource; WebWork Resource; Hardy, Sally
Cc: Janbergs, Holly
Subject: FW: Transcript - NRC - Jaczko
Date: Friday, March 18, 2011 10:41:00 AM
Attachments: 0317nrc-jaczko.doc

Please post asap as a highlight. Let me know when it's up.

Bethany – then we'll add the link to the photo

From: Brenner, Eliot
Sent: Thursday, March 17, 2011 6:31 PM
To: Harrington, Holly
Subject: FW: Transcript - NRC - Jaczko

Please post tomorrow, and do a short blog post from me...perhaps pegged off the POTUS comment.

Thanks.

eliot

From: Brenner, Eliot
Sent: Thursday, March 17, 2011 5:38 PM
To: Batkin, Joshua; Schmidt, Rebecca; Powell, Amy; Loyd, Susan
Subject: FW: Transcript - NRC - Jaczko

Transcript from yesterday on the house side.

From: Jordan White [mailto:Jordan.White@fednews.com]
Sent: Thursday, March 17, 2011 3:03 PM
To: Shannon, Valerie; Brenner, Eliot
Subject: Transcript - NRC - Jaczko

Hi Valerie,

Please find attached the transcript of the Jaczko panel. If you have any difficulties with the attachment or any further questions, do not hesitate to contact us. We look forward to hearing from you.

With no objections, this will also appear on our newswire.

Thanks!

Jordan D. White,
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NUCLEAR REGULATORY COMMISSION

THE FISCAL YEAR 2012 DEPARTMENT OF ENERGY AND NUCLEAR REGULATORY COMMISSION BUDGET

SPEAKER:
GREGORY B. JACZKO,
CHAIRMAN,
U.S. NUCLEAR REGULATORY COMMISSION

THURSDAY, MARCH 17, 2011

Transcript by
Federal News Service
Washington, D.C.

REPRESENTATIVE ED WHITFIELD (R-KY): OK. I'll call the hearing back into order. We took a recess because Commissioner, you had a – you were called away to the White House, I believe, for a meeting. And we completed with Secretary Chu. So everyone's already given their opening statement. So at this time, that we would recognize you for five minutes for your opening statement.

GREGORY B. JACZKO: Well, thank you, Mr. Chairman, and to you and the other chairmen of the two subcommittees and the ranking members Rush and Green, and members of the – other members of the subcommittee.

I'm honored to appear before you today on behalf of the U.S. Nuclear Regulatory Commission. And given the events that are unfolding overseas, my opening remarks will focus on the crisis in Japan. And I have additional information on the fiscal year 2012 budget that I have submitted for the record.

Of course, I'd be happy to answer questions on those matters. But I'll focus my testimony on the situation in Japan.

I would first like to offer my condolences to all those affected by the earthquake and tsunami in Japan over the last few days. My heart goes out to those who have been dealing with the aftermath of these natural disasters.

I want to publicly acknowledge the tireless efforts, professionalism and dedication of the NRC staff and other members of the federal family in reacting to the events in Japan. This is just another example from my six-and-a-half years on the commission of the dedication of the NRC staff to the mission of protecting public health and safety.

The American people can be proud of the commitment and dedication within the federal workforce exemplified by our staff every day. While the NRC regulates the safe and secure commercial use of radioactive materials in the United States, we also interact with nuclear regulators from around the world.

Since Friday, the NRC's headquarters' operations center has been operating on a 24-hour basis to monitor events unfolding in nuclear power plants in Japan. Since the earthquake hit northeastern Japan last Friday, some reactors at the Fukushima No. 1 plant have lost their cooling functions, leading to hydrogen explosion and rises in radiation levels.

Eleven NRC experts on boiling-water reactors have already been deployed to Japan as part of a U.S. International Agency for – International Development (ph) team. And they are currently in Tokyo.

Within the U.S., the NRC has been coordinating its efforts with other federal agencies as part of the government response to the situation. This includes monitoring radioactive releases and predicting their path. Given the thousands of miles between Japan and the United States, Hawaii, Alaska, the U.S. territories and the West Coast, we are not expected to experience any harmful levels of radioactivity.

Examining all available information is part of the effort to analyze the event and understand its implications both for Japan and the United States. The NRC has been working with several agencies to assist – to assess recent seismic research for the central and eastern part of the country. That work continues to indicate that the U.S. nuclear facilities remain safe. And we will continue to work to maintain that level of protection.

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

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

This basically means that U.S. nuclear power plants are designed to be safe based on historical data from the area's maximum credible earthquake. And the NRC remains attentive to any information that can be applied to U.S. reactors. Our focus is always on keeping plants in this country safe and secure.

As this immediate crisis in Japan comes to an end, we will look at whatever information we can gain from the event and see if there are changes we need to make to our own systems. Within the next few days, I intend to meet with my colleagues on the commission on the current status, and to begin a discussion of how we will systematically and methodically review information from the events in Japan.

In the meantime, we continue to oversee and monitor plants to ensure that the U.S. reactors remain safe. The NRC will continue to monitor the situation and provide updates via press releases and our public blog. The NRC also stands ready to offer further technical assistance as needed. We hope that this situation will be resolved soon so that Japan can begin to recover from this terrible tragedy.

I would like, if possible, to give you a brief update on what we believe the current status of the reactors in Japan is. There are essentially four reactors that we are currently monitoring as best we can. They are all at the Fukushima No. 1 site. Three of those reactors were operating at the time of the earthquake and were shut down following their normal procedures.

We believe that in general for these three reactors, they have suffered some degree of core damage from insufficient cooling caused ultimately by the loss of off-site power and the inability of the on-site diesel generators to operate successfully following the tsunami.

We also believe that for these three reactors, that sea water is being injected with reported stable cooling. The primary containment is described as functional.

Now, I would note that for unit No. 2 at this site, we are – we believe that core cooling is not stable. But also for that site, we believe at this time that primary containment is continuing to function. I would also note that for unit No. 2, we believe that the spent-fuel pool level is decreasing.

For unit No. 3, we believe that the spent-fuel pool integrity has been compromised, and that there has perhaps been a zirc-water interaction.

Now, in addition to the three reactors that were operating at the time of the incident, a fourth reactor is also right now under concern. This reactor was shut down at the time of the earthquake. What we believe at this time is that there has been a hydrogen explosion in this unit due to an uncovering of the fuel in the fuel pool.

We believe that secondary containment has been destroyed and there is no water in the spent-fuel pool. And we believe that radiation levels are extremely high, which could possibly impact the ability to take corrective measures.

For the two remaining units at this site, we have an IAEA report that the water level was down a little bit in this spent-fuel pool as well. And for the final reactor, we don't have any significant information at this time.

Recently, the NRC made a recommendation that based on the available information that we have, that for a comparable situation in the United States, we would recommend an evacuation to a much larger radius than has currently been provided in Japan. As a result of this recommendation, the ambassador in Japan has issued a statement to American citizens that we believe it is appropriate to evacuate to a larger distance up to approximately 50 miles.

The NRC is part of a larger effort that continues to provide assistance to Japan as requested. And we will continue our efforts to monitor the situation with the limited data that we have available. So that provides a general summary of where – of where the incident stands.

And with that, I would end my testimony and be happy to answer questions you may have. Thank you.

REP. WHITFIELD: Well, Commissioner, thank you. We appreciate your being with us this afternoon. In the earlier question-and-answer period with Secretary Chu, the gentleman from Massachusetts, Mr. Markey, had referred to a finding by Mr. John Ma – I believe is his last name – in a – relating to the AP1000 design.

And he had indicated that Mr. Ma had some serious reservations about the design. And I was just curious: Have you all had the opportunity to review his concerns? And have you come to any conclusions about that?

MR. JACZKO: We have done a very thorough review of the AP1000 design relative to a large number of safety issues. As part of that review process, we have had a vibrant discussion among the members of the NRC staff. We have thoroughly reviewed as part of that discussion the concerns by one of our staff members that you indicated. And we believe based on a thorough analysis that that design going forward can be – can be acceptable.

It is right now in a process of additional review. It is right now out for public comment, essentially. We do our designs almost like a regulation. So we allow them to be commented on by the public. And so we're at that stage in the process of that review.

But the concerns, while we believe, would certainly enhance the safety of the design, we don't believe at this time that they're necessary to meet our strict regulations.

REP. WHITFIELD: Right. Well, thank you for that comment. I just wanted to follow up on that. Of course, as a result of what's happened in Japan, the focus is on safety as it relates to nuclear. And I believe this is a safe industry over – historically, it's been a safe industry.

And I know that in France, in Japan and many other countries, a large percentage of their electricity comes from generation by nuclear. In the U.S., it takes – and you can correct me if I'm wrong, because I may be – but it takes roughly 10 years or so to obtain permitting for a nuclear plant. Is that – am I in the ballpark when I say 10 years, or not?

MR. JACZKO: Well, I think right now the process has taken, I would say, closer to about five years right now to go through the permitting. Now of course, we're not finished. But we are getting nearer to the end of our reviews. And I like to think about this in a way like when I went to college. You know, everybody goes to college with – people go to college with the intent to graduate in four years. But as you go through that process, you take your classes. If you do well, you have a chance to get done in four, sometimes a little bit – a little bit sooner. Some people take a little bit longer time, depending on how things go.

So as we continue to work with the – with the licensees, or the applicants, we've, I think, improved our understanding of how to make the process work effectively and efficiently. So right now, this has been the first-of-a-kind effort in something we haven't done in a long time. And it involves a new process.

So I would say at this time, I think we're moving at a relatively effective pace, but again, keeping our focus first and foremost on safety.

REP. WHITFIELD: And in your testimony, you did say that you evaluated these permit applications for seismic as well as tsunami-type activities. Correct?

MR. JACZKO: That's correct. We review all designs against a wide range of natural disasters: tsunamis, earthquakes, tornados, hurricanes. It just depends on the geographic location.

REP. WHITFIELD: Right. Well, with all the publicity surrounding Japan right now, everyone, as I said, is certainly focused on safety – and we do certainly think about the Japanese people, but with more focus on safety.

I'm not a nuclear engineer, but I know that there is some technology based around sodium-cooled reactors. And I've been told that sodium-cooled reactors, that there is not a possibility of a meltdown, and that these are smaller-type plants – maybe 50 (megawatt) to 100 megawatt plants. And I was wondering if you wouldn't mind commenting on that technology of sodium-cooled technology.

MR. JACZKO: Well, we don't currently have any specific applications in front of us for a sodium-cooled design. I would say it's a – it's a different type of technology than what we currently have operating in this country. And it – as a result, it presents its own challenges when it comes to safe operation.

But I wouldn't want to speculate too much on what those kinds of challenges are because we really haven't gone through the specific review of one of these. But in general, with a smaller reactor, a large – a smaller energy output, usually the risks are lower because you just have a smaller amount of radioactive material.

But as I said, the sodium reactors do present slightly different technical challenges because of the way that they operate: The sodium has to be maintained in a liquid form. And there are – there are different types of risks and hazards that you would have on that type of design.

REP. WHITFIELD: But that technology, I guess, was developed in United States at one point. And there are some countries that evidently have at least some of these plants in operation. Is that your understanding?

MR. JACZKO: Yeah, that's my understanding. But we don't currently have any licenses operating in the U.S.

REP. WHITFIELD: OK. Well, thank you very much. My time has expired. I'd like to recognize the gentleman from Illinois, Mr. Rush, the ranking member.

REPRESENTATIVE BOBBY L. RUSH (D-IL): I want to thank you, Mr. Chairman. And Chairman Jaczko, it's good to see you. And welcome to the committee.

I'm going to get my Japan question in first. And the crisis in Japan is first and foremost on the mind of many of my constituents in Illinois for a real specific reason: We've got more reactors in Illinois than any other state.

And my constituents are asking a simple question. And that question was summed up in a Fox – (inaudible) – news headline published on Sunday: Should Illinois be worried about its nuclear plants? And before you answer the question, I want to also note that Illinois lies within the New Madrid earthquake zone. How do we know – we do not have to worry about tsunamis.

But what assurances can we give to the people in my state, who has the highest concentration of nuclear reactors that also sits on an earthquake zone?

And in your answer, would you please speak to the possibilities and to the effect that a tornado – we are in a tornado zone – that tornados could have on nuclear reactors?

MR. JACZKO: Well Congressman, at the NRC we focus every day – the dedicated women and men at the NRC work every day to make sure that nuclear power plants in this country continue to operate safely.

All the nuclear power plants that are in the United States are reviewed against a very significant standard for seismic activity. We take what is – what we can find out from the historical record, from looking at the rocks and the geology and the seismology. We try and determine what we think is the largest earthquake that can happen in an area.

And from that, we do an analysis of what kind of effect we think that will have on the power reactor – namely, how much will the building shake or what kind of forces will it – will it feel. And we require that the nuclear power plants can withstand that kind of event. And we actually go a little bit larger than that just to make sure there's any uncertainties in our analysis (ph).

So that's a part of what we do for every reactor in the country, whether it's in the Midwest – of course, the seismic activity may be different in that part of the country versus another part of the country.

REP. RUSH: Yeah. It seemed to me, though, in Japan, it wasn't just the earthquake that caused the problem, it was the tsunami that really caused the problem. And my question in that – my question is in terms of a tornado.

MR. JACZKO: We look at tornados as well. We actually look at all natural phenomenon: hurricanes, tornados, earthquakes, tsunamis. Although as you indicated, some sites in the country don't experience all of those phenomenon. But we look historically to make sure we've captured all the natural phenomenon that occur.

So in Illinois, we certainly would examine the impacts of tornados and other extreme weather events in Illinois.

REP. RUSH: OK. And it seems to me – I asked this question of the secretary this morning – that the number one threat to nuclear facilities in this nation is terrorist actions and activities and acts. So can you speak to the – how are the – is the NRC handling the threat of terrorists?

MR. JACZKO: Well, we have a very robust program that requires nuclear utilities to ensure that they can protect their plants against terrorist-type attacks. That includes a very strong program to do exercises once every three years to actually participate in a – in a mock terrorist

attack on the facility. And we observe that and oversee that and ultimately use that as a way to – (inaudible, cross talk).

REP. RUSH: Once every three years?

MR. JACZKO: Once every three years. In addition to that, we do conduct our normal inspections at the facilities to make sure that all the security systems are in place and operating effectively.

And I would add that in addition, following September 11th, we required all of the nuclear power plants in this country to look at some of the more severe kinds of impacts and effects you could get at a nuclear power plant from a terrorist attack or other types of severe natural phenomenon.

And as a result, we require –

REP. RUSH: My time is almost over. And I just want to – I'm headed to – on Friday, I'm headed to Dresden to tour the generator station there in a rural county – Grundy, Illinois, and Northern Illinois. And I'm going to be there with some of your resident inspectors on location there. So I'll give them your regards.

MR. JACZKO: Well, good. Well, I appreciate that. And we're very fortunate to have some very fine people at our power reactors overseeing them.

REP. WHITFIELD: At this time, I'll recognize the gentleman from Illinois, Mr. Shimkus, for five minutes.

REPRESENTATIVE JOHN SHIMKUS (R-IL): Thank you, Mr. Chairman and welcome, Mr. Jaczko. When the licensing board return its decision denying the Department of Energy motion to withdraw its Yucca Mountain application?

MR. JACZKO: I believe that was earlier in the – end of June, end of June – thank you.

REP. SHIMKUS: Isn't true that all commissioners participating in the decision-making relating to the license board decision have already filed votes on that matter, including you?

MR. JACZKO: We have filed what I would consider to be preliminary views that we exchange among our colleagues on the commission. Those are views that we use, then, to inform our final decision-making.

REP. SHIMKUS: So you're saying you have not filed votes?

MR. JACZKO: We have not come to a final decision at this point.

REP. SHIMKUS: When – so it's your position – you have not filed final votes.

MR. JACZKO: That is correct. We have not reached a final decision on our – unlike perhaps here, you're familiarity with voting, I would consider votes to be more akin almost to prepared statements and remarks of members of the commission. The practice of the commission is to circulate those prepared remarks on any of the things that we do and then based on those circulated views, we work to see if there's a majority position.

REP. SHIMKUS: So you're saying, then, on October 29th, 2010, there wasn't final votes cast by all commissioners?

MR. JACZKO: On October 29th, believe we had all prepared our final – we had prepared our written statements that we circulated amongst us.

REP. SHIMKUS: So those written statements are considered votes?

MR. JACZKO: They are considered votes, but they are not the final decision of the commission.

REP. SHIMKUS: Okay, so since you have written statements that are considered votes, when do you plan to schedule a commission meeting?

MR. JACZKO: We will have a meeting an issue an order when we have, per statute, a majority position.

REP. SHIMKUS: And so you have these statements. They're considered votes, but you don't have a majority position?

MR. JACZKO: Correct. As I indicated, the terminology here, I think, is unfortunate. These votes are not, as I said, the final statement of the commission. In an adjudicatory matter, which is what this is, a formal hearing that we issue, the final statement of –

REP. SHIMKUS: Is there a minority decision already rendered by commissioners?

MR. JACZKO: There is no decision by the commission at this point.

REP. SHIMKUS: By the chairman?

MR. JACZKO: There is no decision by the commission.

REP. SHIMKUS: Was the NRC decision to close out Yucca review and hearing activities yours alone or one made by the full commission?

MR. JACZKO: That was a decision that I made as chairman of the agency, consistent with the budget that was prepared by the commission – (inaudible, cross talk).

REP. SHIMKUS: Okay, but let me ask you this question: What was your legal authority to do so?

MR. JACZKO: My legal authority was as chairman of the commission. And it was – the decision was fully consistent with appropriate law.

REP. SHIMKUS: No, I think your position is the budget zeroed it out, but I – I would beg to differ that you had the legal authority to do that.

MR. JACZKO: I would respectfully disagree with you on that.

REP. SHIMKUS: Well, I think we will review that and follow up.

MR. JACZKO: And I would add, if I could, that following that decision –

REP. SHIMKUS: I mean you wouldn't do anything that would be illegal, would you?

MR. JACZKO: Of course I wouldn't. Following – following the decision to begin the closedown activities of the Yucca Mountain project –

REP. SHIMKUS: Begging to differ, I think it's a stated federal position by law that Yucca Mountain should be open. That's the legal authority. There's no legal authority to close Yucca Mountain. The only authority that's been rendered is the administration, in compliance with Majority Leader Reid to pull funding. But there's no legal authority to close Yucca Mountain, by law.

MR. JACZKO: As I indicated, our action is consistent with all appropriate – appropriations law and any other statutes that we have.

REP. SHIMKUS: I would – you better – you better be double-checking your facts because we're not through with this debate on legal authority and I hope you're well-prepared. We had been told that the courts may not rule on whether or not the commission's position is legally defensible until the full commission takes a position. But you seem to be preventing that vote from occurring. If the court runs out of patience and does rule, will you abide by the court's decision and act promptly to carry it out?

MR. JACZKO: The agency will act according to any legal decision by the courts or any act of Congress.

REP. SHIMKUS: Thank you, Mr. Chairman, I yield back.

REP. WHITFIELD: This time, I'll recognize the gentleman from California for – Mr. Green – for five minutes.

REPRESENTATIVE GENE GREEN (D-TX): Thank you, Mr. Chairman. Welcome, Mr. Jaczko and I know you're busy and I appreciate you coming back to our committee. And I know last week, you and I talked about the president's budget and the proposals that go back to FY '08 for your funding and we both expressed concerns about the layoff of hundreds of workers

and particularly what happened in Japan. Obviously, this is not the time to go after our Nuclear Regulatory Commission. So I share that and hopefully, that message will get to the folks.

Let me talk about a local issue because I think all politics is local and what's happening in Japan. Texas has one proposed nuclear plant that's pending at the OMB. And they're receiving their funding from CPS Energy, NRG and Tokyo Electric Power Company, which presents part of the problem. One of the sites experienced problems – they own one of the sites that's experiencing the problems in Japan.

And so knowing what may happen with their potential investment, CPS Energy and NRG have announced they have trouble finding new investors. Again, part of it's the market. We have low natural-gas prices and for someone to buy into a long-term investment of nuclear power, which our country needs, but we may not be able to get the investors.

Can you talk about the review process for new plants like Texas and how long NRC and OMB process is taking? It seems like I've worked on the congressional side, now, for a number of years to get the expansion at the South Texas plant that's just southwest of Houston and just some information on how long it took, for example, for that expansion that goes through both your process and the OMB.

MR. JACZKO: Well, right now, the South Texas Project was one of the first applications that we received for new licensing. That project – the review that we do for that project will be focused, for sure, on safety and security. That's always our primary focus. We're continuing to do that review. We're nearing some significant milestones as we work to complete the actual design reviews for that type of reactor.

That design review, right now, is out for public comment as part of our process and we anticipate having that back in and working to resolve the comments over the summer. If we resolve those comments in a successful way, then we would move forward with completing the final reviews that are necessary, possibly, perhaps by – within – within 12 months or so. But we – as I said – I want to reiterate. Our focus, fundamentally, is first and foremost, is on the safety and security of these designs.

REP. GREEN: When you said it was one of the first applications, can you tell me the time frame when that was filed?

MR. JACZKO: It was approximately, I believe, 2007. However, we immediately or within several months, had to suspend our review because the applicant in that case made a change in the vendor that they were using to support the design. So that took about a year, a year-and-a-half to work through that particular issue on the part of the applicant.

REP. GREEN: I know the concern, literally for the whole world and particularly for our own country, if what we're doing – making sure we're learning from what's happened to Japan. And I understand the south – the Texas plant southwest of Houston has actually three safety backup systems instead of two.

And it's my understanding that Texas emergency power sources are separate and watertight. We don't have a problem on the Gulf Coast with you know, tsunamis or earthquakes. We do have a hurricane every once in a while and tornados. But I understand that they have watertight concrete buildings that would withstand a hurricane or storm surges and even earthquakes.

But like I said, I don't think in geological time we've had an earthquake along the Gulf Coast. Our soil's too soft. But the – the agency actually looked at that plant and all the applications, like you said, for safety.

MR. JACZKO: That's correct. We look at all the plants for a variety of natural phenomena and on the Gulf Coast, that can include seismic activity, hurricanes and other types of events. And we do have some analyses to look at tsunamis along the Gulf Coast and portions of the Atlantic Coast. Those wouldn't be expected to be tsunamis that are the same magnitude as ones we could see in –

REP. GREEN: Those have particular plants about 11 miles inland. It's not right on the coast. I know there've been technological advances and I'm almost out of time, but sometime, I'd like if your staff could present – provide to the committee separately some of the technological advances in the current and proposed plants in the United States as compared to, for example, what's happened in Japan with the tsunami and also the earthquakes.

MR. JACZKO: We can certainly provide that.

REP. GREEN: Thank you. Thank you, Mr. Chair.

REP. WHITFIELD: The gentleman from Michigan, Mr. Upton, is recognized for five minutes.

REPRESENTATIVE FRED UPTON (R-MI): Thank you, Mr. Chairman. And again, Mr. Chairman, we welcome you here today. And I just want to say a couple things at the beginning. First of all, I certainly did appreciate our meeting that we had several weeks ago. I know we both discussed Yucca. We may have a different view, but we're going to have ample time in Mr. Shimkus' subcommittee with all the commissioners sometime this spring to fully talk about that and ask a good number of questions.

As you know I'm – as you do – we both support safe nuclear power. We both support appropriate and rigorous oversight of all of our 104 sites around the country. I'm – and I, too, appreciated the visit that I paid to the NRC several years ago and viewed, firsthand, the NRC operations center and looked in, in terms of your day-to-day activities to make sure that things are safe.

Could you tell us what, specifically, the functions are of the 11 folks that you've sent to Japan and what they're doing? And they're reporting back to you and some of the information you might have received?

MR. JACZKO: The 11 individuals that we have in Japan are providing a variety of services. They are helping to organize the look at the reactors, the nuclear look at the reactors and helping to provide a good, coordinated team to provide assistance to the embassy in Japan.

REP. UPTON: So does Japan have a similar operation like we have in terms of the operations center that I visited in Maryland there?

MR. JACZKO: It's my understanding they do, but I'm not terribly familiar –

REP. UPTON: But they're in Tokyo, right? They're not at the Fukushima site?

MR. JACZKO: Our staff is in Tokyo, working to interface with their counterparts in the Japanese nuclear regulatory authority.

REP. UPTON: And as you announced that you had urged – our ambassador now has urged all Americans to move at least 50 miles away. What reaction have you – did you receive from your counterparts in Japan and the government there?

MR. JACZKO: I'm not familiar of any reactor –

REP. UPTON: But that's a recent – I mean that announcement was made very shortly, right?

MR. JACZKO: It was made like an hour ago – about 45 minutes ago.

REP. UPTON: You talked about the four different reactor vessels and the status of the four. Do you know where the hydrogen explosion was in the fourth reactor?

MR. JACZKO: At this point, we don't know that kind of specific information, but we believe that there was a hydrogen explosion at some point, likely because the spent fuel in that reactor has lost its cooling and at some point, then, was producing some degree of hydrogen. And that ultimately accumulated and led to an explosion.

REP. UPTON: And was that explosion today? U.S. time? Today?

MR. JACZKO: No, it occurred several days earlier. We can get you the exact date and time as we – as we know it.

REP. UPTON: Okay. As it relates to your budget – remember, that was the original ask for you to be here today – what is your budget for safety oversight as part of the NRC?

MR. JACZKO: The number we have – the bulk of our budget, probably about three-quarters of our budget goes to the reactor safety work, about 77 percent. So it's slightly over – approximately $800 million.

REP. UPTON: So does that include the personnel because I've visited my two sites in my district and I'd welcome you and although you indicated a willingness to come out, but on all of my visits, I've always stopped to say and welcome the oversight of your staff that's been there.

MR. JACZKO: Yeah, most of our budget does go to our staff. We have – mostly salaries and benefits. We have a small portion of our budget that's contracting dollars, but the bulk of it, about 80 percent, is the – I'm sorry, it's about 60 percent is the salaries and benefits of the staff.

REP. UPTON: And do you have any reason to believe that your proposed budget is not adequate to assess and monitor the nuclear power plant safety systems? I mean do you feel that it fits the bill?

MR. JACZKO: At this time, we believe it is – it's a sufficient request that will allow us to do the work we need to make sure the plant stays safe. The only caveat I would add is if as we continue to review the situation in Japan, it becomes apparent that we would need additional resources to address issues related to the situation in Japan, then we would perhaps have to come back and ask for additional resources for that.

REP. UPTON: Well, I was going to ask you if you thought you were going to need – will you be able to determine that within the next couple of weeks?

MR. JACZKO: I intend to meet with the commission within the next several days and begin looking at the kinds of questions we have to answer and I think that will be one of the first. But first, we want to kind of systematically figure out what it is that we need to look at and what are the important sources of information.

REP. UPTON: But you don't really have a reserve cushion today to do that, is that right – for fiscal year 2011.

MR. JACZKO: At this time, I would say we don't necessarily have that. But again, I'd like to take a look at that first before I make any conclusions.

REP. UPTON: Okay, well, again, I appreciate your willingness to be up here on a day – as tough as it is today to – and we appreciate your answers and look forward to working with you on a host of issues. Thank you. I yield back.

REP. WHITFIELD: I recognize the gentleman from California for five minutes, Mr. Waxman.

REPRESENTATIVE HENRY WAXMAN (D-CA): Thank you, Mr. Chairman. Mr. Jaczko, you've described a pretty dire situation in Japan. I want to ask you about this. An official from the European Union today used the word "apocalypse" to describe the potential damage that could occur in Japan. What is your reaction to this comment? Could Japan be facing widespread devastation from a nuclear meltdown or a radiation release?

MR. JACZKO: Well, I don't really want to speculate too much at this point on what could happen. I think people are working really, very diligently to try and address the situation. It is a very serious situation, without a doubt and that's part of the reason why I thought it was important for the agency to make the statement it did that we thought in a comparable situation in the United States, we would have issued evacuation instructions to a larger distance away from the plant. So it is a very serious situation and efforts are ongoing to try and resolve it. But it will be some time, I think, before it's finally resolved.

REP. WAXMAN: Well, you said that you're recommending an evacuation of U.S. citizens within 50 miles. What are the risks that are causing you to make this recommendation?

MR. JACZKO: Well, it's based on an assessment of the current conditions of the site. Because of the damage to the spent fuel pool, we believe that there's very significant radiation levels likely around the site.

And given that the reactors, the three reactors that were operating – given that they are operating with a – more of a backup to a backup, if you will, safety cooling system, if anything goes wrong with that, it would be very difficult for emergency workers to get into the site and perform emergency actions to help maintain that cooling.

So there is the likelihood that the cooling functions could be lost and if they are lost, it may be difficult to replace them and that could lead to a more significant damage to the fuel and potentially some type of release. So as a prudent measure with a comparable system situation here in the United States, we would likely be looking at an evacuation to a larger distance.

REP. WAXMAN: So it is the – is it the spent fuel problem in this Unit 4 where there's water covering the fuel rods – is that the greatest concern you have at the moment?

MR. JACZKO: Well, I think it's all of the factors together, really. It's the combination. And so you know, there's the possibility of this progressing further. And so as I said, in this country, we would probably take the prudent step of issuing evacuation to a larger distance.

REP. WAXMAN: High levels of radiation are being released from the pool – is that right?

MR. JACZKO: We believe that around the reactor's site, that there are high levels of radiation. Again, we have very limited data so I don't want to speculate –

REP. WAXMAN: And what would be the significance of that?

MR. JACZKO: The significance would – well, first and foremost, it would mean that it would be very difficult for emergency workers to get near to the reactors. The doses that they could experience would potentially be lethal doses in a very short period of time. So that is a very significant development and largely, is what prompted the agency to make the statement that it did.

REP. WAXMAN: And if they can't – if the emergency workers cannot get in there because of the danger to themselves, what would be the possibility, then, to deal with this problem of the spent fuels?

MR. JACZKO: Well, again, I don't want to speculate too much because again, we don't have direct information about the conditions on the ground. But it's certainly a difficult situation and one that needs to be addressed.

REP. WAXMAN: Well, you describe serious risks at these facilities. Can you describe what you think are the highest risks and why?

MR. JACZKO: At the sites in Japan?

REP. WAXMAN: Yeah. I think right now, as I think has been the situation from the beginning, the efforts are to continue to keep the reactors cool – the three reactors that were operating at the time of the earthquake. And that is, right now, being done with a variety of different systems. And again, in more a nontraditional way because they have lost a lot of their electrical power and their off-site power capabilities.

In addition, the other risk is really to the spent fuel that may be in the spent fuel pools for possibly up to six of the reactors at the site. So keeping those pools filled with water and keeping that fuel cool is also, then, the primary concerns.

REP. WAXMAN: And what's the significance of the report of a crack in the unit itself, in the containing – the containment unit?

MR. JACZKO: I want to be clear. Certainly, the indication that I was referring to was a crack, possibly, in the spent fuel pool on one of the other units. And the significance of that would be if there is a crack, then there's the possibility of water draining from that pool and perhaps an inability to maintain the appropriate level of water in the pool, which could lead to a damage of the fuel in that pool.

REP. WAXMAN: What would you say is the best case now for Japan and what do you think might be the worst case?

MR. JACZKO: Well, I think – certainly, the efforts are to continue to provide cooling of the reactors and to do everything possible to provide cooling to the spent fuel pools. Again, I don't want to speculate on what could happen because you know, it is a very dynamic situation and there are – you know, certainly a lot of efforts that are being undertaken with efforts of the U.S. government, in particular.

I want to emphasize that this is really a U.S. government response. The NRC is playing one small part, but other assets have been located from other parts of the U.S. government and are being provided to help provide this cooling and do what we can.

REP. WAXMAN: Thank you very much.

REP. WHITFIELD: The gentleman from Texas, Mr. Barton is recognized for five minutes.

REPRESENTATIVE JOSEPH BARTON (R-TX): Thank you, Mr. Chairman and thank you, Chairman, for being here on what's obviously a very difficult day for you. You may have answered some of these questions before or you may have even commented on them in your opening statements so I apologize if I ask something that has already been addressed.

My understanding is that the systems at – the safety systems at the power plants or the reactors in Japan are an older technology that requires an active backup and that the licenses that you're reviewing now have a different system that is a passive backup, i.e. if something happens catastrophic, the system automatically shuts itself down and the cooling system can perpetuate itself without outside power. Is that correct?

MR. JACZKO: Well, I wouldn't necessarily want to comment too much on the Japanese sites because I'm not – their designs are a little bit different from the designs we have that are similar in this country. But we are reviewing new reactors that do operate on what they call a passive cooling system.

It is not all of the designs that we're reviewing, however. It's only two of the designs that we're looking at, but –

REP. BARTON: Well, my understanding is that there's – and correct me if I'm wrong, that there's one new nuclear power plant under construction and that's the Southern Company facility in Georgia and that their safety system is a passive safety system that if you were to – of course, you won't have a tsunami in Central Georgia, but you could have an earthquake.

And if there were to be an earthquake, that it would automatically shut itself down without outside intervention and the coolant is a gravity-flow cooling system that perpetuates itself, again, without any outside power. Is that correct?

MR. JACZKO: That is correct. The system that is used for that particular design, which is the AP1000 does essentially rely on gravity to initiate circulation of water through the reactor and then naturally circulate based on the heat flow. It will circulate without the use of off-site power. However, there are other safety systems that do rely on the off-site power.

REP. BARTON: But we could say, in the instance of the one new plant that's currently under construction, what happened in Japan, assuming the construction of the plant is robust enough that the containment is not destroyed by the earthquake, that in terms of cooling the reactors and shutting down the reactors, they would be shut down and they would stay cool.

MR. JACZKO: Well, again, I wouldn't necessarily want to speculate on everything. We don't really know what happened in Japan. We obviously know there was an earthquake. We know that there was a tsunami. We know a lot of safety systems haven't functioned as would be

needed. So you know, at this point, I don't really want to speculate on how that applies to any U.S. facilities until we have a chance to really do a methodical and systematic –

REP. BARTON: I'm not asking you to speculate on what happened in Japan. I'm asking, specifically, if an earthquake hit the power plant in Georgia, based on your agency's review of their safety design, would it withstand that earthquake?

MR. JACZKO: All of the plants that we've licensed and all of the plants that we are currently reviewing will meet strict safety standards for earthquakes and other natural phenomena. So certainly, for the existing plants, we believe absolutely that they can withstand an earthquake and they can meet the high standards that we've put in place. In the new plants, we're still continuing our review. We haven't completed our review, so I don't want to – I don't want to prejudge the outcome of that by making any final determinations.

REP. BARTON: Okay. But you are allowing this plant in Georgia to be constructed. So you've approved something.

MR. JACZKO: It's a preliminary approval for a limited amount of construction activity that's not related to the most safety-significant systems at this time.

REP. BARTON: Now, in general, for each plant in the United States, regardless of where it's located, does it have a minimum safety requirement to withstand an earthquake?

MR. JACZKO: That's true. All the plants have a requirement to be designed to deal with the kinds of earthquakes we would expect in about a 200-mile radius from that nuclear power plant.

REP. BARTON: Now, obviously, if a plant is in an area that's more prone to earthquakes, it might have a higher requirement than a plant that's in a location that's never had an earthquake in 500 years, but they all have to withstand some base-case earthquake design criteria.

MR. JACZKO: That's correct. They all have to withstand what we think is the maximum expected earthquake from the historical record within about 200 miles of that site.

REP. BARTON: Now, I'm told that the earthquake that hit Japan is order of magnitude, the fifth most powerful, ever-recorded anywhere in the world. So that's obviously a very powerful earthquake. In the United States, is the design criteria currently for that level of an earthquake that would be – say the standard the earthquake that hit San Francisco in 1906?

MR. JACZKO: Would like me to answer?

REP. BARTON: I would like you to answer. (Laughter.)

MR. JACZKO: I think it's important – I want to try and give a demonstration. I think we – we talk a lot about the magnitude of the earthquake and that's not really what the NRC

looks at. If I – if you look at the cup of water that I have over here and you think of that as the nuclear reactor, the earthquake would be – I probably shouldn't fill up the water glass.

REP. BARTON: This is going to make TV, so do it right. (Laughter.)

MR. JACZKO: I practiced it before I started, so – so if you think of this as the nuclear power plant, the earthquake and when you talk about the magnitude of the earthquake, it would be like me hitting the table with my first. So something like that. And you'll see that it makes the glass over here vibrate.

That's what we actually measure and we design our nuclear power plants around is that shaking of the power plant. So the actual impact depends upon where I hit in relation to the glass. So you have a large earthquake like this that's very far away, may not have the same impact on a site as an earthquake that's maybe a little bit less but much closer, so something like that.

So we actually worry more about – we look at all of the different earthquakes that could happen in this region and we look at what that shaking is and we make sure that that shaking can handle what we think are the maximum historical earthquakes in that region. Now –

REP. BARTON: No, go ahead. Summarize.

MR. JACZKO: (Chuckles.) In addition to that, we know that we don't always know everything. So we've done a lot of studies over the years to look at earthquakes and phenomena beyond that kind of design earthquake and we've had the plants go back and look and see if there are things that they could do to ensure that they would be able to better withstand some possible earthquake that nobody's thought of or seen at this point.

And so we have what we call severe accident programs that all of the utilities have where they have procedures and they have ability to mitigate that kind of more severe event that may not ever have occurred in a particular region. So it's a multilayered system of defense. And if I could just briefly summarize one other point.

In addition to that, following, September 11th, we required all of the nuclear reactors in this country to pre-stage equipment that can perform this emergency last – kind of – ditch effort cooling to the reactor and the spent fuel. And that's a – that's a variety of procedures and different types of equipment that are required to be at the reactor sites. And we've inspected the reactors to make sure that they have that. So you know, that gives you another level of defense beyond really just what the design of the reactor is.

REP. BARTON: Thank you and thank you for the chair's courtesy in letting him answer that question.

REP. WHITFIELD: The gentlelady from California is recognized for five minutes.

REPRESENTATIVE LOIS CAPPS (D-CA): And Mr. Chairman, if you wouldn't mind granting me a little consideration – I represent Diablo Canyon nuclear facility and I have three packed questions, but something was stated earlier that I believe needs to be clarified just for the record. If I could ask the chairman, in addition to thanking him for his testimony, did you say that Unit 4 in Japan, in the incident there, that there was no water in Unit 4 surrounding the spent fuel and that Unit 3 was in danger of losing the water source?

MR. JACZKO: We believe, at this point, that Unit 4 may have lost a significant inventory, if not lost all of its water.

REP. CAPPS: And that Unit 3 is in danger?

MR. JACZKO: Well, I would say what we know at Unit 3 is that there's possibly – again, our information is limited, so we do – well, we believe that there's a crack in the spent fuel pool for Unit 3 as well, which could lead to a loss of water in that pool.

REP. CAPPS: Thank you. Diablo Canyon nuclear facility in my congressional district sits on the Hosgri fault zone. Then in 2008, the U.S. Geological Survey informed the utility that a new fault had been found near Diablo Canyon. It's called the Shoreline fault. You're well-aware about the California law requiring the energy commission to perform reviews of the seismic issues associated with our state's nuclear plants, I'm sure.

The energy commission recommended – and our state PUC directed that independent, peer-reviewed advanced seismic studies be performed prior to applying for re-licensure. So you think the NRC should take advantage of the talent, expertise and resources available in California so that all information on seismic issues could be analyzed with the goal of avoiding costly duplication?

MR. JACZKO: Well, we – ultimately, we have to make decisions, as an agency, based on the technical review that we, as an agency, do. And again, I can't get too far into some of these issues because we do have an ongoing hearing related to some of the very points that you've raised. So in our hearing process, we are prohibited from discussing those things outside the context of the commission.

REP. CAPPS: All right, I'll tell you what it seems to me and my constituents, that having the best eyes and minds in our country working together, looking at the seismic issues, makes the most sense. First and foremost, for my constituents, this is about safety. But seismic concerns also impact affordability and regional – reliable generation as well. So I hope that this issue can be revisited, not to take away from the responsibility and authority of the federal agency, but to work with other agencies. And I look forward to working with you as we go along in this area.

MR. JACZKO: Well, Congresswoman, if I could just briefly say.

REP. CAPPS: Sure.

MR. JACZKO: We actually did host a workshop within the last year, actually, that brought together a lot of these technical experts to have a discussion for the point that you said. We certainly are always open to hearing information from any technical expert that can provide information to us. So I just want to make the point that in the end, the decision-making has to come from our expert staff.

REP. CAPPS: Great. All right. Here's another question: My constituents have become increasingly concerned about the preparation for a station blackout event. If power is lost, they want to be assured that backup power will be available throughout the duration of an accident in order to prevent fuel melting.

In the last half-decade, both California reactors have been cited by you, by the NRC, for instances in which both backup diesel generators were down or there were problems involving battery power availability. In such instances, merely citations were given to the utilities. Should the NRC reevaluate its regulations and perhaps increase the penalties for such infractions in light of the accident in Japan as an incentive to force better compliance from the nuclear operators?

MR. JACZKO: Well, as I said, we intend to do a very systematic and methodical look at any lessons we can learn from this Japanese incident. And I certainly will keep your suggestion in mind as something for us to take a look at.

REP. CAPPS: Finally, I'd like you to address some safety issues in the event of an earthquake and a simultaneous accident at a nuclear plant. Diablo Canyon has a workable evacuation plan. They wouldn't be able to operate without one.

But as you may know, there's basically only one way in and out of San Luis Obispo, narrow Highway 1 along the coast. The NRC has ruled that it was non-credible that there could ever be multiple catastrophes such as an earthquake and a meltdown at the plant.

This is the quote from the NRC: "The commission has determined that the chance of such a bizarre concentration of events occurring is extremely small. Not only is this conclusion well-supported by the record evidence, it accords most eminently with commonsense notions of statistical probability." That's the end of their quote.

Now, we have just witnessed an earthquake, a tsunami and a nuclear meltdown all occurring in sequence. I want to ask the commission, if you would on my behalf, do they still believe the chance of this bizarre concentration of events is merely hypothetical? Do you think this decision should be revisited in light of the events in Japan?

MR. JACZKO: Well, I certainly will take your suggestion back to the commission. I would want to review that entire document in its entirety because certainly, we do – we do examine the possibility of earthquakes as an initiating event for a possible reactor problem. Of course, we believe we have systems in place that would, one, really prevent any kind of core damage from that, but two, if there is subsequent problems, we have mitigating strategies in other ways to cope with those. So I would just be happy to take a look at that document in its entirety.

REP. CAPPS: Thank you and just in conclusion, Mr. Chairman, you know, that's what they said two weeks ago, no doubt, in Japan as well. Enormous anxiety and sadness over the events that happened there. And here, we have seen in the past year, our three major sources of energy that this country uses, coal, oil and nuclear, all experiencing tragic accidents. And I do look forward to working with you – your committee – your commission on the number-one goal of keeping our energy sources safe. Thank you.

MR. JACZKO: Thank you. And Congressman, if I could just add, of course, you understand we have not had any nuclear incidents in the last year in this country. The incidences were in other countries.

REP. WHITFIELD: The gentleman from West Virginia, Mr. McKinley, is recognized for five minutes.

REPRESENTATIVE DAVID MCKINLEY (R-WV): Thank you, Mr. Chairman. Does the NRC still have the authority, given – in light of what's happened in Japan, I assume you still have the authority to grant the permits for continuing the design implementation of nuclear facilities?

MR. JACZKO: Certainly, the agency is an independent regulatory –

REP. MCKINLEY: Given – is there any delay or are you hearing anything that would set up – I would expect some extension might be necessary, but what would you suggest is a reasonable time frame for someone making an application?

MR. JACZKO: Well, as I said, I think the process of reviewing an application for a nuclear power plant's a very complicated process and this is the first time we're doing this, the first time we've done it in a long time. So I think there's going to be some lessons that we learn, but the applicant and the agency. I'm sorry, I don't want to get into kind of speculating how long or surmising how long I think it should happen. I would just say that, you know, we will do the thorough job we have to do to ensure safety of – (inaudible, cross talk).

REP. MCKINLEY: Do you have, given that this also is for budgeting, I haven't seen – do you have some R&D money allocated for researching alternate uses for spent fuel rods?

MR. JACZKO: We currently, in our budget right now, have a significant amount of resources that we are using to look at spent fuel, the safety and security of spent fuel and transportation. We have a small piece of our budget that's looking at reprocessing and developing a framework for reprocessing, which would be, perhaps, what you're referring to as alternate uses.

REP. MCKINLEY: If you could send more to me, I'd like to know a little bit more about – and let's go to the Yucca Mountain just for a moment. I don't know whether it's anecdotal or fact, but I know, of course, that the application has been withdrawn. But it was my

understanding that consumers are still paying on their utility bills funds for that project. Is that accurate?

MR. JACZKO: I believe it is, although I would add that that's not an area that the NRC has authority over.

REP. MCKINLEY: But is that accurate?

MR. JACZKO: I believe it is, but again, I don't follow that very closely other than generally what I read in the press.

REP. MCKINLEY: Okay, I'm just curious because if – from what I understand, we're collecting money for something that's never going to happen. You don't understand that. What about Shippingport? I think that was the first facility we had in this country, isn't it? Given – I think it was maybe – was that '65 – '63? When was Shippingport opened?

MR. JACZKO: I don't have the exact date of the initial license, but it was very early on in the U.S. nuclear program.

REP. MCKINLEY: In light of the circumstances and maybe you don't want to do a kneejerk reaction at all to this, but will you be looking at some of the older facilities to see what new technology – has Shippingport been upgraded all along?

MR. JACZKO: Shippingport is no longer an operating reactor.

REP. MCKINLEY: Is no longer in operation at all. So what happens when Shippingport goes out of operation – it goes out?

MR. JACZKO: Any of the reactors, when they go on a service are eventually decommissioned. We've decommissioned a large number of reactors in this country.

REP. MCKINLEY: Okay. There was also a story in the media that one of our naval vessels sailed through a cloud off Japan's – were you aware of that?

MR. JACZKO: Yes. We did have indications that in the early days of this incident, the reactor was going through a process that involves venting steam that accumulates in the reactor containment structure. And that steam needs to be released in order to reduce the pressures in that – in that containment vessel, which is one of the important – (inaudible, cross talk).

REP. MCKINLEY: Could that have been avoided – the ship going through that? Could that have been avoided?

MR. JACZKO: Well, my understanding was, they were performing activities to support search-and-rescue efforts in Japan, and that the doses that they were experiencing were from that particular plume, were not doses that would have a significant impact to health and safety.

REP. MCKINLEY: That's all I – and I yield back my time. Thank you very much.

REP. WHITFIELD: Thank you. This time, I recognize the gentleman from Massachusetts, Mr. Markey, for five minutes.

REPRESENTATIVE ED MARKEY (D-MA): Thank you, Mr. Chairman. Welcome. What interim safety measures are you going to require while you study the issue? In Germany, they're taking interim steps right now, as well as Switzerland, China, Venezuela. Are there any steps you would like to announce that you are going to take in order to ensure that the plants in our country are safe?

MR. JACZKO: Well, we – Congressman, we continue every day to make sure that the plants are safe. And at this time, we don't have any specific actions that we think are necessary to add to the safety of the facilities beyond what we do.

REP. MARKEY: Are there any interim advisories that you are going to send out? After 9/11, the NRC sent out some interim advisories. After Fukushima, are you – are you planning on doing that?

MR. JACZKO: We do intend to send out what we refer to as a regulatory information summary that will – that will generally characterize the event at the – in Japan. Again, at this point we don't have detailed information. But that will remind licensees of, of course, their obligations under their existing license – but as well as these additional measures that I talked about to these severe-accident-types of strategies, as well as the efforts that we implemented after 9/11 – to put in place these systems and procedures to ensure that they could provide emergency cooling to the reactor if necessary.

REP. MARKEY: Going back to the question which Chairman Whitfield asked you about Dr. Ma and his concern about the AP1000 design, you said in your – with your vote that "while it is clear that the use of ductile material in all areas of the shield building would provide an additional enhancement to safety, that I am not convinced that such a design requirement exists."

After what's going on in Japan right now, would you reconsider that in order to, perhaps, consider adding that ductile material as part of the process – the construction of AP1000 plants?

MR. JACZKO: As I said, I think we'll do a very thorough review of the information from Japan. But we don't anticipate getting to a final decision on that design for at least until the end of the summer. So I think there'll be plenty of information from our review at that time to inform that decision.

REP. MARKEY: Yeah. As you know, I authored legislation in 2002 that required the distribution of potassium iodide to residents living within a 20-mile radius of nuclear power plants, based upon a Sandia study. Because we learned after Chernobyl that this cheap medication can prevent cancers caused by radioactive iodine.

The Bush White House ignored my language and blocked an effort by HHS to implement it. In fact, they even took away HHS' power to complete – to complete its KI distribution guidelines. The Obama administration has not implemented it even though the surgeon general has just said yesterday that she thought it was worthwhile precaution for West Coast residents.

Don't you think that this distribution of potassium iodide to residents within 20 miles of nuclear power plants is a common-sense measure that should be implemented?

MR. JACZKO: Well, the particular protective actions that would be issued for any nuclear power plant incident are ultimately the responsibilities of the state and local governments. They have that primary on-the-ground responsibility to decide how to deal with an accident. So –

REP. MARKEY: But the plants are licensed by the Nuclear Regulatory Commission, not by the states. You're the agency of expertise in terms of the spread of nuclear materials, not state officials. Do you believe that it is advisable to look at a 20-mile radius for distribution of potassium iodide?

MR. JACZKO: The current policy of the commission is that potassium iodide would be one of the protective action that could be considered within what we call our emergency –

REP. MARKEY: The Bush guideline was that for 10 (miles) to 20 miles, people should just stop running or ducking under their bed. Do you think that's – there is no other medicine. So is there – is there a recommendation from you that they should look at potassium iodide for the 10- to 20-mile radius?

MR. JACZKO: Again, I would, really in many ways, defer to state and local governments as they believe that that's appropriate. I think that there certainly are many protective actions that could be taken – (inaudible, cross talk).

REP. MARKEY: I just don't think that they have the expertise looking at the probabilistic risk assessment of the likelihood of an accident in terms of having KI there.

Now, the San Onofre reactor is also rated to withstand a 7.0 earthquake. Should we – should we be retrofitting those reactors to ensure that they can withstand much stronger earthquakes? The IAEA warned Japan two years ago that their nuclear power plants were not designed well-enough to withstand a strong earthquake, and they were only able to withstand a 7.0 earthquake. That's what San Onofre is designed to. Should we be looking at retrofitting of the San Onofre plant and plants like that?

MR. JACZKO: Well, as I said, the plants are actually designed to the ground motion and the shaking that you would get at any facility. And that's based on what we think are the most, or, well, what are really the – what's the maximum earthquake that's occurred in any particular area.

So it doesn't directly necessarily mean a 7.0 earthquake. It's what we think is the maximum credible earthquake. And I continue to believe that that's the appropriate standard for the agency. But again, we will – we will take a look at all of the information we have from Japan as that comes in. And if we have to make modifications to our requirements, we will.

REP. MARKEY: I would just hope that maximum credible earthquake would be re-examined after what's happened in Chile, New Zealand and Japan, that we'd be in the other part of that earthquake zone – that as you have to have an earthquake, and so that we do have the proper protections.

REP. WHITFIELD: The gentleman from Louisiana, Mr. Cassidy, is recognized for five minutes.

REPRESENTATIVE BILL CASSIDY (R-LA): Thank you, sir. Are you all – just from a – I'm a physician, so I'm going to speak about it and sound like a physician. In effect, there's going to be a post-mortem done on that accident. And folks are going to go in there and see what went wrong, and learn from it to ideally keep it from occurring again.

Now, are there going to be people from industry invited to that party, if you will, or to that post-mortem? Or it only will be academia and government? It seems all three need to be there. And so I don't think I've heard you mention having industry there to kind of – yeah, what do we do? Thoughts?

MR. JACZKO: Well, we haven't – we haven't yet decided how we'll go about our review. But I want it to be systematic and methodical. Those are the two words that I think are most important right now. And in our normal practice as an agency, we always reach out to stakeholders – not just industry, but public-interest groups and other members of the public. So I would expect that whatever we do as part of this process will have a significant public involvement.

REP. CASSIDY: Now, let me ask. Because when I toured the nuclear power plant near my home – I live in – I'm from Louisiana, so it's the River Bend nuclear power plant. As I recall, they were coming up with a fail-safe mechanism to keep the generators running even if there was something dire that happened to the plant.

I gather what has happened here is that the tsunami – because the diesel was on the ground – washed away the diesel, so they were unable to run the generators. So just for the reassurance of folks here – and frankly, my city, if you will – it seems that we've been proactive on that particular issue so that there is a backup to the backup to the backup to keep the generators running, to pump the water in case – you see where I'm going with that.

MR. JACZKO: Well, we do – and again, I don't want to speculate on exactly what happened in Japan because we really just don't know – (inaudible, cross talk).

REP. CASSIDY: I think I'm channeling CNN right now. (Laughter.)

MR. JACZKO: All the diesel generators at nuclear power plants in this country are considered vital equipment. The emergency diesel generators are vital pieces of equipment. So they are designed as with the other safety-significant structures and components to be able to withstand the natural phenomenon.

So if – depending on the plant, that could be hurricanes, tornados, tsunamis, earthquakes – whatever the natural phenomena are that are relevant to a particular site.

REP. CASSIDY: So I – but is – not knowing that you – that we're not speculating on what happened in Japan, but just to go to the point. The backup generators to keep those cooling units running, we do have – we have proactively addressed this in this country. And there is a way if a Hurricane Katrina comes through and hits my state and one system goes out, there's another system to keep it running. Is that my understanding?

MR. JACZKO: That's correct. Each reactor has at least two diesel generators. In the event that one of them can't perform its function, that will be an additional – in addition to that, many states have – I'm sorry, many sites have what we call a station-blackout diesel or some other type of electrical power supply that can function in the event that those primary emergency diesel generators are not operating.

And then of course in addition to that, as I've referred to, all of the plants in this country have been required to look at pre-staging other additional emergency equipment that could deal with this kind of situation.

REP. CASSIDY: You mentioned that –

MR. JACZKO: In some cases, that would be electrical power supplies or portable generators, and things like that.

REP. CASSIDY: Got you. You may have answered this next question. I'm sorry, I was out of the room for a bit. Clearly, we're talking not just natural disasters, but man-made. Do I understand that new nuclear power plants – or do I not understand correctly – that they have to be built so that if there is a terrorist attack and a plane is driven into them, that somehow it is still protected?

MR. JACZKO: For the existing fleet of reactors, we have required them to be able to deal with the – with large fires and explosions that could occur at that – at the plant. And some of that was related to the possibilities of terrorist attacks involving aircraft.

For new plants, what we've required them – the new designs that are required to be able to withstand an aircraft-type impact at the site.

REP. CASSIDY: Now, the containment structure – again, you may have said this; I apologize – the containment structure, though – even if there is a meltdown, how effectively can that containment structure keep it contained?

MR. JACZKO: Well, that's the purpose of the containment structure – is again – in the event that – the very unlikely event that all of the safety systems fail and we're not able to keep cooling to the core, and were it to eventually have significant fuel damage or some kind of melting, that any radiological material would be contained within that structure.

REP. CASSIDY: Given that there's some that would be vented off – but nonetheless, if there's a disaster, it's a disaster within the containment?

MR. JACZKO: That would be – that's the design goal and the expectation. And of course, if that were to fail, we have very robust programs in place to do emergency evacuations – (inaudible, cross talk).

REP. CASSIDY: So this is a 1970s-circa plant. So I presume since it dates from the '70s since, we have even more robust protections?

MR. JACZKO: We've looked at all of these plants over the years. And in some cases – well actually, in the late '80s and early '90s we did systematic evaluations of the plants to see how they would deal with these kind of very severe accidents. In some cases, plants took the step of low-cost modifications that would deal with these more severe kinds of events.

So we have a lot of – a lot of things that have been done. The plants are certainly not the same plants that they were when they were originally built and designed.

REP. CASSIDY: Thank you very much.

REP. WHITFIELD: The gentleman from Michigan, Mr. Dingell, is recognized for five minutes.

REPRESENTATIVE JOHN D. DINGELL (D-MI): Mr. Chairman, I thank you for your courtesy. Mr. Chairman, I'm sure you are making a careful review of the events that are going forward in Japan with regard to the nuclear facility over there and the attendant circumstances. Will you make such a review?

MR. JACZKO: We certainly do intend to.

REP. DINGELL: All right.

MR. JACZKO: Once we have good, credible information, we'll do a thorough and systematic review.

REP. DINGELL: Good. Now, I would assume that when you have – well first of all, one, would you submit to this committee your plans with regard to that, as to how you intend to go into that to ascertain what happened?

MR. JACZKO: We certainly will. We'll make – (inaudible, cross talk).

REP. DINGELL: And then, would you see that we're informed as events go forward so we know what's taking place over there?

MR. JACZKO: We'll certainly do that.

REP. DINGELL: And would you also submit to us for the record how NRC is going to go about defining the lessons that you have learned about events in Japan, and how you will incorporate them into your regulatory requirements? You'd do that for us – (inaudible, cross talk).

MR. JACZKO: We'll certainly do that.

REP. DINGELL: Now, does the NRC regularly use new information about the different types of risk as these different types of risks and information become available? Yes, or no?

MR. JACZKO: Yes.

REP. DINGELL: Would you provide for the record the process by which NRC does this risk assessment?

MR. JACZKO: Well, there's a variety of –

REP. DINGELL: No, just for the record.

MR. JACZKO: Oh, of course.

REP. DINGELL: Our time, Mr. Chairman, is very limited.

MR. JACZKO: Please. Of course.

REP. DINGELL: And I have a lot of questions here. Mr. Chairman, do the NRC's licensing standard for nuclear plants take into account the risk of earthquake or tsunami?

MR. JACZKO: They incorporate all natural hazards, including earthquakes and tsunamis.

REP. DINGELL: I would – I would note with distress. I think you probably remember Diablo Canyon some years ago where they were going to build right on a fault. Are you more careful about that than your predecessors were in that particular –

MR. JACZKO: Right now – well, we look at all the nuclear power plants in the country. We look at seismic activity from all of them because while not all plants are in high-seismic areas, almost all plants could experience some seismic activity from lower-level earthquake activity. So we consider that for all plants.

REP. DINGELL: Now Mr. Chairman, would you provide a list of the kinds of disasters for which NRC takes account of in terms of its licensing standards? Just submit that for the record please.

MR. JACZKO: We'll provide that.

REP. DINGELL: Now Mr. Chairman, it's my understanding that one of the main problems in Japan has been inadequate access to emergency power to keep the reactors cool. And that poses some substantial ongoing risk. Do NRC's licensing standards include adequate access to emergency power? And are you satisfied that they do so?

MR. JACZKO: We believe that our requirements are very strong in this area. And we continue actively in our inspection program to ensure that licensees have the appropriate equipment such as diesel generator, and that it operates successfully.

REP. DINGELL: Now Mr. Chairman, you have an unholy mess on your hands – you and the Department of Energy – with regard to Yucca Mountain. You've spent, as near as I can gather, something like 17 billion (dollars) on this that's been collected from rate payers for long-term storage of nuclear waste. The administration opposes going forward. You've got this nuclear waste that's piling up all over the country. Some of it is going into cooling ponds. They're talking about putting the rest in dry cask storage.

Do you have any kind of long-term plan to address what you're going to do with this infernal mess, and how you're going to deal with the problem?

MR. JACZKO: Well right now, we're looking at a longer time frame for storage of spent fuel than we have in the past. But right now, we believe that spent fuel certainly can be – can be stored safely and securely with the existing systems over several decades –

REP. DINGELL: But you don't have – but you don't have a plan for how you're going to deal with it. You're being sued by the electrical utilities because they're collecting monies from their rate payers that are not being spent on the purposes for which they're being collected. The stuff keeps piling up. And you've doubled the amount that you can store in a single pool, but that's running out. You're running out of pools in which to store it.

And as these plants close, you're going to – you're going to perhaps lose the responsibility of the persons who are storing this thing. And the stuff just keeps piling up. Is there a long-term plan anywhere in government, in your agency, in the Department of Energy, in the Office of Management or Budget, or in any other agency of the federal government as to what we're going to do about this infernal mess?

MR. JACZKO: Well, although it's not an area that we are directly working, the Secretary of Energy has convened a blue-ribbon commission to look at some of those longer-term options and see what an optimal approach should be –

REP. DINGELL: The answer – the answer, Mr. Chairman, is no. Is it not?

MR. JACZKO: I –

REP. DINGELL: Go ahead.

MR. JACZKO: I believe there are plans through this blue-ribbon commission to look long-term. And we believe, certainly from the agency, that the existing systems are –

REP. DINGELL: But the answer – the answer, my beloved friend, is no. And I say this with respect and affection. But the simple fact of the matter is, you're sitting on a – you're sitting on a mighty fine mess that nobody knows what to do with. And each and every one of those situations offers unique opportunity for terrifying mischief to the – to the private-public interest and to the people in the – in the area. And the cost of this whole sorry-ass mess keeps growing up – and going up.

REP. WHITFIELD: : And we agree with you, Mr. Dingell. At this point, I'd like to recognize the gentleman from Texas, Mr. Burgess, for five minutes.

REPRESENTATIVE MICHAEL BURGESS (R-TX): Thank you, Mr. Chairman. And Mr. Chairman, thank you for being here and spending so long with us today. Thank you for speaking with me yesterday at the end of what obviously was a very long day for you. And I appreciate your willingness to make yourself to members of both sides of the dais during this crisis in Japan.

Recently, an e-mail has been circulating – and I think it came to the committee staff – that suggested a much higher level of radioactivity at one of the plants than has previously been reported. Do you know anything about that?

MR. JACZKO: Well, we are continuing to monitor the situation as best we can. Again, I'm not familiar with the e-mail that you're talking about. But we do believe that certainly with one of the spent-fuel pools, that there have been certainly elevated radiation readings. And over the last several days, there have been times based on certain incidents in the site where radiation levels have gone up and come back down.

REP. BURGESS: But when you say elevated, ballpark – are you talking about chest X-ray, CAT scan, multiple CAT scans? What sort of numbers are you talking about?

MR. JACZKO: Right now, we have indications at the site of radiation levels that would be levels that would be lethal within a fairly short period of time. So they're very significant radiation levels.

REP. BURGESS: Very significant. OK. And that's different from kind of what we've been hearing before. Is that correct?

MR. JACZKO: Again, I'm not – I would say it's certainly a more recent development that we've seen these very, very high readings.

REP. BURGESS: OK. Now, you were very good to provide us with written testimony. You were very good to provide us with some updates on the situation. It's obviously a very fluid situation in Japan. Would you be good enough to give us in written form what you described to us as you are finishing up your prepared testimony this afternoon, so that there's no confusion over what we – when we quote you? The press is here, and we'll all be asked questions as you finish up.

Could you provide us the written information that you would like us to have?

MR. JACZKO: We'll provide that for you.

REP. BURGESS: Because some of it – and I think Ms. Capps on the other side talked about it a little bit. I mean, you talked about the spent-fuel pool being dry and the radiation being high, and again, things that were different from what I had been gathering from the – just of the press reports just prior to coming in here.

And it – and it would be good to see that – again, what is factual and what is not.

MR. JACZKO: We'll be happy to provide that. And I would just say that our information is limited. So we've been very careful to only provide information that we believe is very reliable.

REP. BURGESS: Well now, we're here to talk – (chuckles) – about the budget. And the budget you prepared, obviously, was before all this happened. Do you anticipate submitting an addendum to the request in light of things that have happened this past week?

MR. JACZKO: That's something we'll review at this point. I don't – I don't have an answer for you. But I will certainly come back to the committee if we do.

REP. BURGESS: Can you give us just kind of a back-of-the-envelope estimate: In a perfect world, what would be the percentage of electricity in this country – in this country produced by nuclear power?

MR. JACZKO: It's approximately 20 percent.

REP. BURGESS: What is being produced now?

MR. JACZKO: Currently? I would have to look. But I would take an estimate of about probably – about that number. I'm not aware of any significant plant outages right now.

REP. BURGESS: So it would be your position as chairman of the Nuclear Regulatory Commission that the percentage of electricity produced in America would not increase over what it is today? Do I understand that correctly?

MR. JACZKO: I'm sorry.

REP. BURGESS: In an ideal world, this country maximizing all of the different energy production possibilities that we have, how much – what percentage – would be nuclear?

MR. JACZKO: Well, it's really not up to us to decide that. I think the agency's responsibility is to make sure that if there are nuclear power plants in this country, that they continue to operate safely and securely.

REP. BURGESS: Do you have a concept of what would be the ideal number of nuclear plants in this country in the next 10, 20, 30 years?

MR. JACZKO: That's really not – certainly, as an agency, we don't have a concept of an ideal number. Our job is to make sure it's safe and secure.

REP. BURGESS: How many would be too many for you to keep up with to ensure that they were safety (ph)?

MR. JACZKO: Right now, we think – certainly, we're planning for the possibility of new plants to be under construction in the next several years. So we believe with the budgets that we've developed, we would have the resources we need to handle those additional units if they're licensed.

REP. BURGESS: All right. Chairman Dingell described in very colorful terms "an infernal mess" at Yucca Mountain. If you were the king of the nuclear – (chuckles) – regulatory world, the sole decision-maker on nuclear waste, what would be the ideal solution, the sine qua non? What would you do?

MR. JACZKO: Well, I – as I said, I really – I can't get too much into that because we do have an ongoing proceeding with regard to Yucca Mountain. And you know, the job of keeping plants and the materials and all the things that we regulate safe is pretty much a job that – in particular, these days – keeps me awake almost 24 hours a day.

So I'll worry about – let somebody else worry about some of those other broader policy questions.

REP. BURGESS: We thank you for your activities during this crisis. Thank you.

REP. WHITFIELD: This time, I'll recognize the gentleman from Pennsylvania, Mr. Doyle, for five minutes.

REPRESENTATIVE MICHAEL F. DOYLE (D-PA): Thank you, Mr. Chairman. Chairman, thanks for your patience and endurance today. Given what's happened in Japan, I'm sure this has been a reminder to all of us that everyone agrees that certifying new nuclear designs is a crucial and important task to make sure these reactors are durable and can be safely operated.

And I understand that the new reactor design certification process involves not only professional and accredited NRC staff, but there's also an outside expert advisory committee that oversees the review and recommendations of the NRC staff. Is that correct?

MR. JACZKO: We do have an – it's an outside – or it's a agency-independent advisory committee.

REP. DOYLE: Yeah. That's right. The ACRS. And then ultimately, you and your colleagues also evaluate and make your own independent judgments. Correct?

MR. JACZKO: Correct.

REP. DOYLE: So I want to address this situation to get more clarification and more on the record about concerns raised by my good friend, Ed Markey, regarding Westinghouse's AP1000. I want you to helpfully provide some more clarification to the process that was involved certifying this reactor.

Now, is it true that Dr. Ma's nonconcurrence issues during the deliberation for the Westinghouse AP1000 advanced final safety evaluation report were, in fact, given due consideration by his NRC staff colleagues?

MR. JACZKO: I believe that they were.

REP. DOYLE: And also, the members of the independent Advisory Committee for Reactor Safeguards?

MR. JACZKO: They did. As part of their review, they did specifically receive a presentation from Mr. Ma about this – (inaudible, cross talk).

REP. DOYLE: And you and your commission colleagues?

MR. JACZKO: I don't want to speak for the actions of all of my colleagues. But I personally met with him and talked to him about his concerns. And –

REP. DOYLE: And can you tell us what happened after Dr. Ma made his presentation and raised his concerns? So he raised these concerns. And tell us what happened after that.

MR. JACZKO: Well, they were – I think they were looked at by certainly all of – or the staff at the agency that were reviewing the design. This advisory committee also did look at his perspectives. And they came to their own conclusions that, I think, ultimately, no one disputes that the recommendations that he has would make the design safer. But we think that the design, as it is right now, would appear to meet our standards. But I would add that it was also Mr. Ma who originally raised concerns with a previous iteration of the design.

And as a result of those concerns, the agency did indicate to Westinghouse that significant changes would need to be made. They in fact did make significant changes and I

think in some sense, Mr. Ma believes that – and I don't want to speak for him directly – but my understanding of his position is that he thinks that those changes are not necessarily enough to satisfy his initial concerns.

REP. DOYLE: But it's true that his concerns were put forward and that the NRC team of reviewers that throughout the drafting of the AFSER, they evaluated it and they basically overruled his concerns, basically, as did the subcommittee, as did – I mean this went through a process. I just want to make clear for the record that we don't have a person at the department who's raised concerns and they were swept under the rug or ignored. I mean these concerns were addressed. Is that not correct?

MR. JACZKO: Yeah, I feel very strongly that we create an environment at the agency where people can raise concerns and those concerns can be thoroughly reviewed and vetted. And I believe, in this case, that that's what happened.

REP. DOYLE: Thank you very much. That's all I have, Mr. Chairman.

REP. WHITFIELD: The gentleman from Nebraska, Mr. Terry, is recognized for five minutes.

REPRESENTATIVE LEE TERRY (R-NE): Thank you for being here. I'm just as curious – there's two power plants – Mr. Barton talked about one in Georgia, but there's on in Georgia, one in South Carolina that sometime this year or early next year should be issued their combined construction and operating license. My question, first, is: Are there any discussions occurring to delay that COL now because of the Japanese disaster?

MR. JACZKO: Well, right now, all of the – those two plants – potential plants that you've referenced are all based around the AP1000 design. That design is currently undergoing a public review process. I expect we'll get comments as a result of that public process related to the situation in Japan. So we'll evaluate those as we get them.

REP. TERRY: So it's yes and maybe no.

MR. JACZKO: At this point, we haven't done – we're following our normal path with the reviews at this point.

REP. TERRY: All right. It sounds like there may be some uncertainty in that process of whether they'll get their combined construction, operating license in '11 or early '12.

MR. JACZKO: Well, we – we're proceeding down a path to continue the reviews. As I said earlier –

REP. TERRY: There's no reason to repeat the answer. I'm curious to how many other applications have been made for the early site permits. Do you know how many are sitting with you all?

MR. JACZKO: We currently have, I believe, one or two new early site permits in front of the agency are expected to come.

REP. TERRY: All right. Are there any that have been – have been provided their early site permit and now on course to go to the next level of permitting? I'm just trying to figure out how many are in the pipeline?

MR. JACZKO: Right now, we have 12 applications in front of us for approximately 20 reactors. Those are actual combined license applications and then we have, I believe, it's two early site permits that are not yet tied specifically to an actual license for a plant.

REP. TERRY: All right. I've studied a lot over the last couple years the small modular reactors. I just want to know what your personal opinion is, where the process is in reviewing the technology, how close we are to perhaps even rolling out a pilot project?

MR. JACZKO: Well, we – I like to think of the small modular reactors in three groupings. We have the small modular reactors which are very much based on the existing type of reactors that we have now, but smaller. For that type of design, which we call (integral ?) light water reactors – we would anticipate, in the next year or so, an application for the construction of a small modular reactor type.

We also anticipate one or more applications for designs related to those smaller modular reactors. The second category we have are what are basically called high-temperature gas reactors. So it's a slightly different technology. That is mostly work that's tied to the Next Generation Nuclear Plant project and that is an activity that's a little bit farther away, probably more like 2013, where we might see an application.

The area in which probably there's the least certainty is with more of the nontraditional reactor types – (inaudible, cross talk).

REP. TERRY: The one that the chairman may have raised earlier with you.

MR. JACZKO: Exactly. Those are much more, right now, in what I would call the conceptual stage. So they haven't progressed to the point where we really have detailed discussions about possible reviews of applications.

REP. TERRY: All right. I appreciate that. I'll yield my 59 seconds back to the chairman.

REP. WHITFIELD: Thank you. At this time, I recognize the gentleman from Louisiana, Mr. Scalise, for five minutes.

REPRESENTATIVE STEVE SCALISE (R-LA): Thank you, Mr. Chairman and Mr. Jaczko. I appreciate you being before our committee. I know we have some votes on the House floor, so I'll try to be brief and ask direct questions. I think the secretary had indicated that the United States was helping Japan, doing some testing on contamination on the ground. Are you

familiar – what types of testing's currently being done that we're involved in and have you all found anything right now of concern?

MR. JACZKO: Well, right now, my understanding is we have – are working to provide the ability to do air sampling of radiation. We have some readings of – as I said, of very high levels of contamination around some of the reactor sites and at this point, I'm not sure of the origin of that, whether that's coming from U.S. assistance to Japan or whether that's coming directly from the Japanese.

REP. SCALISE: Okay, thanks. I would imagine, right now, there are a number of applications that are pending before your agency at various levels, awaiting decisions. Do you anticipate that those decisions will still go forward at the current pace or do you see anything changing there?

MR. JACZKO: Right now, we don't – we don't have any intention to change the approach we're taking. But as I've said, we're – we're going to do a very systematic and methodical review of the information coming from Japan. And if there's some information that would require us to revise our approach, then we'll certainly do that.

REP. SCALISE: Thank you. And I would imagine – you know, as with any crisis. I mean we've experienced more than our fair share in South Louisiana, but there will be an evaluation in general just to see what lessons can be learned and I imagine we'll – you know, we'll make sure that if we learn some things from how they did things right, maybe how they did things wrong if they did that we can incorporate that. But in the end, to still move forward and not retreat from energy production in this country.

MR. JACZKO: Well, we'll certainly do that type of review. And again, I don't want to prejudge what comes out of it. If we get information that tells us we need to make a change, we will if we get information that tells us that things are good, then we'll continue to proceed as we are.

REP. SCALISE: Thank you for your time. I appreciate it. Thank you. Mr. Chairman, I yield back.

REP. WHITFIELD: Mr. Jaczko, I just want to ask for clarification. In response to Mr. Terry's question, you talked about on the small modulars, there are three or four different categories, the existing type, the third type was NGNP 2013 conceptual. What determines what category a design would be in? Is that based on actual applications or is that just on general knowledge or –

MR. JACZKO: It's really the – I would say the state of readiness of the designers and the vendors themselves. So –

REP. WHITFIELD: The state of readiness of the vendors and the designers?

MR. JACZKO: Yes.

REP. WHITFIELD: Okay. Thank you. Mr. Rush, do you have anything else?

REP. RUSH: Mr. Chairman, Administrator – I would like to know if, in fact, over the last five years, can you furnish this committee with the infractions or violations or emergency conditions where the NRC had to send an emergency crew to any of the facilities that operates within the continental United States?

MR. JACZKO: We can certainly send you that information.

REP. RUSH: Yeah, I'd like to just know what level of responses and what level of issues that you've dealt with over the last five years.

MR. JACZKO: We will send you that information.

REP. WHITFIELD: Thank you very much. Mr. Rush, you and I have three minutes to go vote. Mr. Commissioner, thank you for your time today. We appreciate it very much. We look forward to working with you as we move forward on nuclear energy and safety and look forward to future opportunities.

MR. JACZKO: Thank you.

REP. WHITFIELD: With that, the hearing is ended.

(END)

From: LIA07 Hoc
Subject: USNRC Earthquake-Tsunami Update - 1800 EDT (March 18, 2011)
Date: Friday, March 18, 2011 6:37:01 PM
Attachments: USNRC Earthquake-Tsunami Update.031811.1800EDT.pdf

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Attached, please find an 1800 EDT March 18, 2011 status update from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami.

Please note that this information is "~~Official Use Only~~" and is only being shared within the federal family.

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

Sara K. Mroz
Communications and Outreach
Office of Nuclear Security and Incident Response
US Nuclear Regulatory Commission
Sara.Mroz@nrc.gov
LIA07.HOC@nrc.gov (Operations Center)

RRRR-76

From: Harrington, Holly
To: WebContractor Resource
Subject: RE: Transcript - NRC - Jaczko
Date: Friday, March 18, 2011 12:08:00 PM

Thank you

From: WebContractor Resource
Sent: Friday, March 18, 2011 12:03 PM
To: Harrington, Holly
Subject: RE: Transcript - NRC - Jaczko

Hi Holly,

The transcript was added to Jaczko's Speeches and Testimony page.

Thank You,
David
Web Team

From: Harrington, Holly
Sent: Friday, March 18, 2011 11:12 AM
To: WebContractor Resource
Subject: RE: Transcript - NRC - Jaczko

Yes, please add to Speeches and Testimony, and yes, add link to existing caption.

From: WebContractor Resource
Sent: Friday, March 18, 2011 11:01 AM
To: Harrington, Holly
Subject: RE: Transcript - NRC - Jaczko

Hi Holly,

Highlight is posted:
http://148.184.174.31/

Can we do the photo caption now? Also, should this transcript go on one of Chairman Jaczko's pages?.....Speeches and Testimony or Meetings and Events?

Thank You,
David
Web Team

From: Harrington, Holly
Sent: Friday, March 18, 2011 10:41 AM
To: WebContractor Resource; WebWork Resource; Hardy, Sally
Cc: Janbergs, Holly
Subject: FW: Transcript - NRC - Jaczko

RRRR-77

Please post asap as a highlight. Let me know when it's up.

Bethany – then we'll add the link to the photo

From: Brenner, Eliot
Sent: Thursday, March 17, 2011 6:31 PM
To: Harrington, Holly
Subject: FW: Transcript - NRC - Jaczko

Please post tomorrow, and do a short blog post from me...perhaps pegged off the POTUS comment.

Thanks.

eliot

From: Brenner, Eliot
Sent: Thursday, March 17, 2011 5:38 PM
To: Batkin, Joshua; Schmidt, Rebecca; Powell, Amy; Loyd, Susan
Subject: FW: Transcript - NRC - Jaczko

Transcript from yesterday on the house side.

From: Jordan White [mailto:Jordan.White@fednews.com]
Sent: Thursday, March 17, 2011 3:03 PM
To: Shannon, Valerie; Brenner, Eliot
Subject: Transcript - NRC - Jaczko

Hi Valerie,

Please find attached the transcript of the Jaczko panel. If you have any difficulties with the attachment or any further questions, do not hesitate to contact us. We look forward to hearing from you.

With no objections, this will also appear on our newswire.

Thanks!

Jordan D. White,
Director, Transcription Services,
Federal News Service
202-216-2707
1000 Vermont Ave., NW, Ste. 500
Washington, D.C., 20005
http://www.fednews.com

From: Bubar, Patrice
To: Harrington, Holly
Subject: RE: Received follow up call from TV1
Date: Friday, March 18, 2011 12:09:47 PM

Holly – I think I owe you a Frappe or something very special. Thanks for being so easy to work with
.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Harrington, Holly
Sent: Friday, March 18, 2011 12:07 PM
To: Bubar, Patrice; Hayden, Elizabeth; Brenner, Eliot
Subject: RE: Received follow up call from TV1

Thank you, Patty. We'll handle

From: Bubar, Patrice
Sent: Friday, March 18, 2011 11:31 AM
To: Harrington, Holly; Hayden, Elizabeth; Brenner, Eliot
Subject: Received follow up call from TV1

Hello folks.

I may have transferred this information to you but our office received a call from Roland Martin – TV1 – asking for an interview. Their offices are somewhere in DC.

The person who called is Jackie Clark 202-742-4492.

They called again this morning so we referred them back to you.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Janbergs, Holly
To: Brenner, Eliot; Harrington, Holly
Subject: RE: Transcript - NRC - Jaczko
Date: Friday, March 18, 2011 10:40:06 AM

Thanks, will attach

From: Brenner, Eliot
Sent: Friday, March 18, 2011 10:37 AM
To: Harrington, Holly; Janbergs, Holly
Subject: FW: Transcript - NRC - Jaczko

From: Jordan White [mailto:Jordan.White@fednews.com]
Sent: Thursday, March 17, 2011 3:03 PM
To: Shannon, Valerie; Brenner, Eliot
Subject: Transcript - NRC - Jaczko

Hi Valerie,

Please find attached the transcript of the Jaczko panel. If you have any difficulties with the attachment or any further questions, do not hesitate to contact us. We look forward to hearing from you.

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Thanks!

Jordan D. White,
Director, Transcription Services,
Federal News Service
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1000 Vermont Ave., NW, Ste. 500
Washington, D.C., 20005
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RRRR-78

From: RST01 Hoc
Sent: Monday, April 04, 2011 12:46 PM
To: Weber, Michael; Carpenter, Cynthia
Cc: McDermott, Brian; Sheron, Brian; ET05 Hoc; ET01 Hoc; OST02 HOC; FOIA Response.hoc Resource; PMT01 Hoc; Hoc, PMT12; LIA06 Hoc; LIA08 Hoc; LIA07 Hoc; Virgilio, Martin; Borchardt, Bill
Subject: RE: QUERY - NRC's Daily Assesment of Conditions at Fukushima Daiichi

RST will work this with the site team in Japan.

RST Coordinator

From: Weber, Michael
Sent: Monday, April 04, 2011 7:00 AM
To: Carpenter, Cynthia
Cc: McDermott, Brian; Sheron, Brian; ET05 Hoc; ET01 Hoc; OST02 HOC; FOIA Response.hoc Resource; RST01 Hoc; PMT01 Hoc; Hoc, PMT12; LIA06 Hoc; LIA08 Hoc; LIA07 Hoc; Virgilio, Martin; Borchardt, Bill
Subject: QUERY - NRC's Daily Assesment of Conditions at Fukushima Daiichi

Good morning, Cindi. Has the attached two-page summary been coordinated with the Ops Center staff? Are we aligned with our team in Japan?

From: Taylor, Robert
Sent: Monday, April 04, 2011 2:56 AM
To: Jaczko, Gregory
Cc: Borchardt, Bill; Virgilio, Martin; Weber, Michael; Holahan, Vincent; Casto, Chuck; Leeds, Eric
Subject: NRC's Daily Assesment of Conditions at Fukushima Daiichi

Dear Mr. Chairman,

Attached please find the NRC Japan Team's Daily Assessment of conditions at the Fukushima Daiichi nuclear power plants and spent fuel pools.

There is only one change of note for today. This involves TEPCO's throttling back of injection flow to the Unit 1 reactor. The team's assessment is that this reduces the margin available to ensure adequate cooling flow to the core and is reflected with a down arrow on the attached.

If you have any questions, please don't hesitate to ask.

Best regards,
Rob Taylor
NRC Japan Team

LLL/79

NRC's Daily Assessment of Conditions at Fukushima Daiichi Nuclear Power Plant

Unit 1		Today	Yesterday
Vessel	Cooling	Challenged	Challenged
		↓	↔
	Integrity	Intact	Intact
		↔	↔
Containment	Flooding	Inc./Needed	Inc./Needed
		↔	↔
	Integrity	Challenged	Challenged
		↔	↓
Spent Fuel Pool	Cooling/Level	Adequate	Adequate
		↔	↔
	Integrity	Intact	Intact
		↔	↔

Unit 2		Today	Yesterday
Vessel	Cooling	Challenged	Challenged
		↔	↔
	Integrity	Failed	Failed
		↔	↔
Containment	Flooding	Inc./Needed	Inc./Needed
		↔	↔
	Integrity	Failed	Failed
		↔	↔
Spent Fuel Pool	Cooling/Level	Adequate	Adequate
		↔	↔
	Integrity	Intact	Intact
		↔	↔

Unit 3		Today	Yesterday
Vessel	Cooling	Adequate	Adequate
		↔	↔
	Integrity	Failed	Failed
		↔	↔
Containment	Flooding	Challenged	Challenged
		↔	↔
	Integrity	Failed	Failed
		↔	↔
Spent Fuel Pool	Cooling/Level	Challenged	Challenged
		↔	↔
	Integrity	Challenged	Challenged
		↔	↔

Unit 4		Today	Yesterday
Spent Fuel Pool	Cooling/Level	Challenged	Challenged
		↔	↑
	Integrity	Failed	Failed
		↔	↔

		Today	Yesterday
Protective Measures	Exposure Risk	Low	Low
		↔	↔

Methodology for Developing the Fukushima Daiichi Daily Assessment Report

PURPOSE: The report is prepared to provide a qualitative high level assessment of daily conditions at Fukushima Daiichi that the U.S. Ambassador can use to assess the safety of American citizens in Japan.

DISCLAIMER: The development of the daily assessment report includes a number of inputs. Some of these are objective, such as plant data provided by TEPCO, while others are subjective, such as engineering insights from the NRC's reactor and protective measures specialists in Japan. It should be recognized that there are many unknowns and uncertainties associated with having a complete understanding of conditions in each of the Daiichi reactors and spent fuel pools. As such, this tool represents the collective judgment of the NRC staff in Japan based on all available data.

For each of the major plant parameters listed below, the NRC staff assesses its status daily and bins it into one of the three categories listed. The staff uses the listed plant information and conditions in making its assessment. The arrows on the report indicate the relative trend in plant conditions from the previous day.

1. Reactor Pressure Vessel
    a. Cooling – Adequate, Challenged, or Inadequate.
        i. Flow or Injection Rate
        ii. Reliability of Injection
        iii. Source of Water
    b. Integrity – Intact, Challenged, or Failed.
        i. Temperature indications
        ii. Pressure readings
2. Primary Containment
    a. Flooding Status – Complete/Not needed, Challenged, or Incomplete/Needed.
        i. Water Level
        ii. Sources
        iii. Injection capacity/rate
    b. Integrity - Intact, Challenged, or Failed.
        i. Pressure readings
        ii. Bypass evaluations
        iii. Temperature indications
3. Spent Fuel Pools
    a. Cooling/Level – Adequate, Challenged, or Inadequate.
        i. Flow or Injection Rate
        ii. Reliability of Injection
        iii. Source of Water
    b. Integrity – Intact, Challenged, or Failed. Due to limited available data, this assessment relies strongly on the NRC team's engineering judgment.
4. Protective Measures – Exposure Risk to American citizens in Japan outside the U.S. government's recommended 50-mile evacuation zone.
    a. Low – 50-mile recommendation remains sufficient
    b. Medium – New information has raised questions regarding the sufficiency of the 50-mile recommendation.
    c. High – 50-mile recommendation is no longer sufficient due to changing plant condition

From: RST06 Hoc
Sent: Monday, April 04, 2011 6:03 AM
To: McDermott, Brian; RST01 Hoc
Subject: RST Briefing Sheet-4/4/11-0600 EDT

Brian,

For the ET Briefing Sheet you can replace the top 2 bullets with the following and keep the last bullet the same:

RST working with industry consortium to resolve questions from TEPCO/NISA regarding the technical assumptions for hydrogen concentrations contained in RST assessment revision 1.

RST issued draft document to industry consortium and site team on possible additional measures to maximize the success of their current feed-and-bleed strategy. Comments expected 4/4/11 day shift.

RST responding to request from site team to provide criteria regarding what a stable reactor condition (no further energetic events or major radiation releases) looks like.

RRRR/80

From: Bubar, Patrice
To: Harrington, Holly; Hayden, Elizabeth; Brenner, Eliot
Subject: Received follow up call from TV1
Date: Friday, March 18, 2011 11:30:55 AM

Hello folks.

I may have transferred this information to you but our office received a call from Roland Martin – TV1 – asking for an interview. Their offices are somewhere in DC.

The person who called is Jackie Clark 202-742-4492.

They called again this morning so we referred them back to you.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

RRRR-81

From: McIntyre, David
To: Harrington, Holly
Subject: RE: FEMA EPZ Fact Sheet
Date: Friday, March 18, 2011 12:00:11 PM

Was too!

From: Harrington, Holly
Sent: Friday, March 18, 2011 10:23 AM
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet

If NsIR people like it, should we post? Or use as talking points?

From: McIntyre, David
Sent: Friday, March 18, 2011 10:22 AM
To: Harrington, Holly; Widomski, Michael; Brenner, Eliot; Burnell, Scott; Sheehan, Neil; Screnci, Diane; Couret, Ivonne; Hayden, Elizabeth
Subject: FW: FEMA EPZ Fact Sheet

Those nice Public Affairs folks over at FEMA (I've heard good things about them!) have prepared the attached fact sheet on EPZs.

From: OST05 Hoc
Sent: Friday, March 18, 2011 10:20 AM
To: McIntyre, David; Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; Maier, Bill; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena; Collins, Elmo; Dean, Bill; Heck, Jared; McCree, Victor; Pederson, Cynthia; Satorius, Mark; Easson, Stuart; Flannery, Cindy; LIA04 Hoc; Lukes, Kim; Maupin, Cardelia; Noonan, Amanda; OST05 Hoc; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtil, Richard; Virgilio, Rosetta
Subject: FEMA EPZ Fact Sheet

FYI –

Attached is a FEMA-generated fact sheet on EPZs that can be used for immediate use.

Kim Lukes
State Liaison – Liaison Team
Incident Response Center

RRRR-82

EMERGENCY PLANNING ZONES

EPZs in Brief

Federal Emergency Management Agency (FEMA) and Nuclear Regulatory Commission (NRC) emergency preparedness planning guidance provides for two emergency planning zones (EPZs) for U.S. commercial nuclear power plants (NPPs):

- **Plume** Exposure Pathway (apx. 10 Miles in radius)
    - Designed to safeguard the population most at risk from **direct exposure** to radiation levels in excess of Environmental Protection Agency Protective Action Guidelines (PAGs)
- **Ingestion** Exposure Pathway (apx. 50 Miles in radius)
    - **Designed to pr**otect the public from **secondary exposure** to radiation through the food chain or public water supplies

The planning zones are intended to be scalable over time to account for changing conditions that could possibly extend outside the initial EPZ.

Specifically, NUREG-0654/FEMA-REP-1 states: "In a particular emergency, protective actions might well be restricted to a small part of the planning zone. On the other hand, for the worst possible accidents, protective actions would need to be taken outside the planning zones" (I.D., p.11) **i.e., the EPZs are the base areas requiring emergency planning – they are designed to be expanded (beyond the base of 10, 50 miles), as necessary, during emergencies**.

Note: The 10 & 50 mile EPZs are the Federally required minimum. FEMA and NRC regulations state that the exact size and shape of the EPZs shall be determined by the State and local governments – in consultation with FEMA and the NRC, taking into account such local conditions as demography, topography, land characteristics, access routes and local jurisdiction boundaries.(44 CFR § 350.7).

EPZ Evacuations

FEMA affirms that evacuation of the public is the preferred initial protective action in the event of a severe (core damage) emergency occurring (or likely to occur) at NPPs. Federal requirements for NPPs include the establishment of EPZs at 10 and 50-mile distances surrounding the site that detail evacuation routes. Evacuation planning includes the development and incorporation of periodic evacuation time estimate studies to inform evacuation strategies such that prompt and effective actions can be taken by offsite response organizations to protect the public in the event of a radiological emergency. This includes accounting for both permanent and transient populations, persons with disabilities and access/functional needs, those whose mobility may be impaired because of institutional or other confinement as well as provisions for the monitoring, decontamination and congregate care of evacuees, as necessary.

Where immediate evacuation of an affected population within the EPZ is not practical due to impediments (e.g., debris blocking evacuation routes, severe weather, etc.) or where evacuation could pose a greater potential health risk, temporary sheltering-in-place of the public is the preferred protective action. State, Tribal and local evacuation plans and

procedures for NPP communities are reviewed and approved by FEMA. While actual evacuations of the public are not required in biennial FEMA evaluations, appropriate demonstrations by State, Tribal and local response agencies to direct and control a public evacuation is assessed.

EPZs in Detail

The Emergency Planning Zone (EPZ) is the area surrounding an commercial nuclear power plant (NPP) for which plans/procedures have been made to ensure that prompt and effective actions are taken to protect the health and safety of the public in case of an incident at the NPP. The Federal Emergency Management Agency (FEMA) recognizes two types of EPZs for planning purposes: the plume exposure pathway EPZ and the ingestion exposure pathway EPZ. The characteristics of these two types of EPZs are summarized in Exhibit I. Each EPZ is a roughly circular area, with the NPP at the center.

The EPZs sizes represent a technical judgment based on the type and quantity of hazardous materials present (source term) and the potential risks where detailed planning is needed to ensure adequate response to an emergency. An EPZ may include more than one State. "Split" jurisdictions (i.e., part of the jurisdiction is included in the EPZ and part is not) also exist. In these cases, EPZ boundaries are determined based on consultation with all parties involved, including OROs, FEMA, and the NRC. In some cases, a conservative option is taken and the entire jurisdiction is included in the EPZ.

Exhibit I: Plume and Ingestion EPZ Characteristics

Type of EPZ	Exposure Sources	Size
Plume Exposure Pathway	• Whole-body external exposure to gamma radiation from the passing plume and from deposited material • Thyroid exposure through inhalation from the passing plume • Committed effective dose equivalent exposure to other critical organs through inhalation	Approximately 10-mile radius
Ingestion Exposure Pathway	• Ingestion of contaminated water or foods, such as milk, fresh vegetables, and aquatic foodstuffs, may result in increased risk of radiation-induced cancer to the thyroid, bone marrow, and other organs	Approximately 50-mile radius

The size of the **plume exposure pathway** EPZ, about 10 miles in radius, is based on the following considerations from NUREG-0654/FEMA-REP-1:

- Projected doses from traditional design-basis accidents/incidents would not exceed the Environmental Protection Agency Protective Action Guidline (PAG) levels outside the zone;
- Projected doses from most core damage sequences would not exceed PAG levels outside the zone;
- For the worst-case core damage sequences, immediate life-threatening doses would generally not occur outside the zone; and

- **Detailed planning within approximately 10 miles would provide a substantial base for expansion of response efforts to a larger area, if necessary.**

The size of the **ingestion exposure pathway** EPZ, about 50 miles in radius, including the 10-mile radius plume exposure pathway EPZ, is based on the following considerations:

- The downwind range within which contamination may potentially exceed the PAGs is limited to about 50 miles from an NPP because of wind shifts during the release and travel periods;
- Atmospheric iodine (i.e., iodine suspended in the atmosphere for long periods) may be converted to chemical forms that do not readily enter the ingestion pathway; and
- Much of the particulate material in a radioactive plume would have been deposited on the ground within about 50 miles from the NPP.

The likelihood of exceeding ingestion exposure pathway PAG levels at 50 miles is comparable to the likelihood of exceeding plume exposure pathway PAG levels at 10 miles.

From: Harrington, Holly
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet
Date: Friday, March 18, 2011 11:59:00 AM

Was not!!!!!!!!!!!!!

From: McIntyre, David
Sent: Friday, March 18, 2011 11:24 AM
To: Harrington, Holly
Subject: RE: FEMA EPZ Fact Sheet

It was your idea, remember!

From: Harrington, Holly
Sent: Friday, March 18, 2011 11:09 AM
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet

I sent around for us to talk from. A bit nervous about posting since we already have something up . . . I'm not sure we should at this point . . . Am willing to be talking into it, though.

From: McIntyre, David
Sent: Friday, March 18, 2011 10:26 AM
To: Harrington, Holly
Subject: RE: FEMA EPZ Fact Sheet

Are we OK posting another agency's piece? I don't see why not, though of course we should credit it. Gives added legitimacy in my eyes. And they back up what we were saying yesterday about expanding the EPZ if circumstances warrant.

From: Harrington, Holly
Sent: Friday, March 18, 2011 10:23 AM
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet

If NsIR people like it, should we post? Or use as talking points?

From: McIntyre, David
Sent: Friday, March 18, 2011 10:22 AM
To: Harrington, Holly; Widomski, Michael; Brenner, Eliot; Burnell, Scott; Sheehan, Neil; Screnci, Diane; Couret, Ivonne; Hayden, Elizabeth
Subject: FW: FEMA EPZ Fact Sheet

Those nice Public Affairs folks over at FEMA (I've heard good things about them!) have prepared the attached fact sheet on EPZs.

From: OST05 Hoc
Sent: Friday, March 18, 2011 10:20 AM
To: McIntyre, David; Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; Maier, Bill; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena; Collins, Elmo; Dean, Bill; Heck,

Jared; McCree, Victor; Pederson, Cynthia; Satorius, Mark; Easson, Stuart; Flannery, Cindy; LIA04 Hoc; Lukes, Kim; Maupin, Cardelia; Noonan, Amanda; OST05 Hoc; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtil, Richard; Virgilio, Rosetta
Subject: FEMA EPZ Fact Sheet

FYI –

Attached is a FEMA-generated fact sheet on EPZs that can be used for immediate use.

Kim Lukes
State Liaison – Liaison Team
Incident Response Center

From: Harrington, Holly
To: Deegan, George; Wittick, Susan
Cc: Virgilio, Rosetta; Piccone, Josephine; Jackson, Deborah
Subject: RE: Q&A for MONDAY"S COMM BRIEF
Date: Friday, March 18, 2011 12:06:00 PM

For whatever it's worth:

White House's stance has been that each agency should stick to what it's area of responsibility is, but that, frankly, had not been occurring, which has caused us issues when the NWS is sending us weather questions and NOAA is sending me ship captains who want to know where to sail.

There has never been an attempt to "speak with one voice" in this event except for the statement that "The NRC does not expect harmful levels of radiation to affect the U.S." Other than that everyone is supposed to talk about what they're doing i.e. epa monitoring, doe plume models, hhs questions about public health, etc.

I've lost track of what you need from me. If it's approval, consider it approved

---

From: Deegan, George
Sent: Friday, March 18, 2011 11:29 AM
To: Wittick, Susan; Harrington, Holly
Cc: Virgilio, Rosetta; Piccone, Josephine; Jackson, Deborah
Subject: RE: Q&A for MONDAY'S COMM BRIEF

Holly-

I've been outside this process, so I have no direct knowledge, but I suspect you are right and that the communication challenges are multi-layered. However, it appears that the opposite may also be true (that other agencies are feeling the need to fill a void and communicate in areas where NRC should be weighing in. I base this on what Rosetta Virgilio sent me last night. In her email she indicated that "*States also noted that other Feds (DHS, FEMA, CDC) were holding calls with States without NRC participation. States felt the calls would have benefited from NRC participation*". She got this from an email from Julia Schmitt (Nebraska) to Charlie Miller. Based on this, and based on your observations below, which seems 180 degrees different, I'd suggest we not include either of these additional pieces, but I will defer to you all as the liaison and communication experts for the final word. That's what we were intending with oru last key message "a desire for one voice in the Federal message on these topics"

From: Wittick, Susan
Sent: Friday, March 18, 2011 11:17 AM
To: Deegan, George
Cc: Harrington, Holly
Subject: FW: Q&A for MONDAY'S COMM BRIEF

George,
Please see comments below.
Susan

RRRR-84

From: Harrington, Holly
Sent: Friday, March 18, 2011 11:08 AM
To: Wittick, Susan
Subject: RE: Q&A for MONDAY'S COMM BRIEF

This is fine, as far as it goes. It does not talk about the challenge of other agencies not being forthcoming with information and forcing states to look for us for information that is not in our mission or area of responsibility, such as plume mapping, ocean currents and health questions. This appears to be changing, however, with DOE, HHS and EPA working together to provide such information.

From: Wittick, Susan
Sent: Friday, March 18, 2011 10:26 AM
To: Harrington, Holly
Subject: FW: Q&A for MONDAY'S COMM BRIEF

Holly, can you review and approve for OPA?
Thanks,
Susan

From: Deegan, George
Sent: Friday, March 18, 2011 9:28 AM
To: Wittick, Susan
Cc: Piccone, Josephine; Jackson, Deborah; Rivera, Alison; Virgilio, Rosetta; Turtil, Richard; Noonan, Amanda; Miller, Charles; Moore, Scott; Camper, Larry
Subject: Q&A for MONDAY'S COMM BRIEF

Susan-

Our staff has provided me the attached information that we thought could be provided as a question/answer in support of Monday's Commission briefing. Since it relates to communications with the States, I wanted to make sure OPA was comfortable with it before I provide it to Allen Howe and his team. I added an item in the third paragraph --- emergency planning zones---but otherwise this is the same as what I sent you at 8:42 a.m.. If you'd like to make changes, please send them to me and I'll coordinate within FSME. Thanks.

From: Ousley, Elizabeth
To: Leong, Edwin; Harrington, Holly
Subject: RE: Japan Incident page on usa.gov
Date: Friday, March 18, 2011 11:40:27 AM

Thanks Edwin.

Liz Ousley
Branch Chief, Enterprise Architecture & Standards Branch (EASB)
Business Process Improvement and Applications Division (BPIAD)
301-415-8378

From: Leong, Edwin
Sent: Friday, March 18, 2011 11:40 AM
To: Ousley, Elizabeth; Harrington, Holly
Subject: RE: Japan Incident page on usa.gov

Holly and Liz,

Just received an updated from GSA regarding the Japan incident page on the USA.gov web site. GSA is still awaiting approval from the White House to publish this page. GSA is hoping to have this page go live today and will notify me when this happens. I'll keep you informed.

Edwin

From: Ousley, Elizabeth
Sent: Thursday, March 17, 2011 11:04 AM
To: Harrington, Holly
Cc: Leong, Edwin
Subject: RE:

I'll have Edwin work on it.

Liz Ousley
Branch Chief, Enterprise Architecture & Standards Branch (EASB)
Business Process Improvement and Applications Division (BPIAD)
301-415-8378

From: Harrington, Holly
Sent: Thursday, March 17, 2011 10:50 AM
To: Ousley, Elizabeth
Subject:

Liz – Can you have someone monitor for when this occurs and let me now? And also facilitate widget

Thanks,

Holly

Federal and State government website WWW.USA.GOV for Japan Incident
USA.gov will create a page at http://www.usa.gov/Japan2011 to aggregate high-value information from across federal and state governments. The site should be live by noon, 3/17

RRRR-85

USA.gov team will create a widget for the page and share code with the Federal web managers forum. The widget should be live by noon, 3/18

Sarah Crane (USA.gov) will act as main point of contact for agencies wishing to include or update information on the page. Sarah.crane@gsa.gov or 202-208-5855 or 202-309-4661 cell

From: Harrington, Holly
To: Leong, Edwin
Subject: RE: Japan Incident page on usa.gov
Date: Friday, March 18, 2011 12:07:00 PM

Thank you

From: Leong, Edwin
Sent: Friday, March 18, 2011 11:40 AM
To: Ousley, Elizabeth; Harrington, Holly
Subject: RE: Japan Incident page on usa.gov

Holly and Liz,

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To: Harrington, Holly
Cc: Leong, Edwin
Subject: RE:

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Liz Ousley
Branch Chief, Enterprise Architecture & Standards Branch (EASB)
Business Process Improvement and Applications Division (BPIAD)
301-415-8378

From: Harrington, Holly
Sent: Thursday, March 17, 2011 10:50 AM
To: Ousley, Elizabeth
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RRRR-86

From: Harrington, Holly
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet
Date: Friday, March 18, 2011 12:08:00 PM

See the question mark!!!!???

Hey are you done with the blog post for Eliot?

From: McIntyre, David
Sent: Friday, March 18, 2011 12:00 PM
To: Harrington, Holly
Subject: RE: FEMA EPZ Fact Sheet

Was too!

From: Harrington, Holly
Sent: Friday, March 18, 2011 10:23 AM
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet

If NsIR people like it, should we post? Or use as talking points?

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Subject: FEMA EPZ Fact Sheet

FYI –

Attached is a FEMA-generated fact sheet on EPZs that can be used for immediate use.

Kim Lukes
State Liaison – Liaison Team
Incident Response Center

From: McIntyre, David
To: Harrington, Holly; Brenner, Eliot
Subject: MSNBC blog post.docx
Date: Friday, March 18, 2011 10:25:04 AM
Attachments: MSNBC blog post.docx

Attached is my proposed blog post on the MSNBC.com earthquake rankings. It uses my talking point from yesterday, which was OK'd by Annie Kemmerer, and some points from her Qs&As.

RRRR-87

Many news reports during this chaotic week have questioned the safety of U.S. nuclear power plants in the wake of the terrible events in Japan. These reports raise issues such as design flaws in reactor containments and spent fuel pools, and of course whether our plants would be able to withstand an earthquake and tsunami like the ones that devastated Japan.

Nuclear power is a complicated, technical subject, and we naturally try to simplify it to make it understandable to the general public. Sometimes, however, simplification leads to misunderstanding, and misunderstanding causes fear.

An egregious example was an "investigative report" on MSNBC.com that ranked nuclear power plants according to their "vulnerability" to major earthquakes. The reporter concluded that the Indian Point plant, 24 miles north of New York City, was "the most vulnerable" in the nation. Instant headlines. You may have heard a local news report that your neighborhood nuclear plant ranked "on the NRC's Top Ten List" of the plants most likely to tumble in a temblor.

Let's be clear: The NRC does not rank nuclear power plants according to their vulnerability to earthquakes. This "ranking" was developed by the MSNBC.com reporter using partial information and an even more partial understanding of how we evaluate plants for seismic risk. Each plant is evaluated individually according to the geology of its site, not by a "one-size-fits-all" model - therefore such rankings or comparisons are highly misleading.

We are also frequently asked whether Plant A can withstand a quake of magnitude X. The reporters always want a yes-or-no answer, but again, it's not that simple. Nuclear plants are designed to withstand a certain level of "ground shaking," to use a technical term. But the way the ground shakes in an earthquake is a factor of the magnitude and the distance from the epicenter. So we can't give a simple answer to such a simple question.

From: RMTPACTSU_ELNRC
To: Harrington, Holly; Burnell, Scott; McIntyre, David; LIA11 Hoc; LIA01 Hoc
Subject: Information for NGO"s
Date: Friday, March 18, 2011 10:25:15 AM

Folks,

The lead for the NGO's at USAID looking for a source of information for domestic NGO's on the radiological situation in Japan. Where have we been directing folks to? These are members of the public.

Thanks,

Jason

RRRR-88

From: Wittick, Susan
To: Harrington, Holly
Subject: FW: Q&A for MONDAY"S COMM BRIEF
Date: Friday, March 18, 2011 10:25:59 AM
Attachments: japanq&a.docx

Holly, can you review and approve for OPA?
Thanks,
Susan

From: Deegan, George
Sent: Friday, March 18, 2011 9:28 AM
To: Wittick, Susan
Cc: Piccone, Josephine; Jackson, Deborah; Rivera, Alison; Virgilio, Rosetta; Turtil, Richard; Noonan, Amanda; Miller, Charles; Moore, Scott; Camper, Larry
Subject: Q&A for MONDAY'S COMM BRIEF

Susan-

Our staff has provided me the attached information that we thought could be provided as a question/answer in support of Monday's Commission briefing. Since it relates to communications with the States, I wanted to make sure OPA was comfortable with it before I provide it to Allen Howe and his team. I added an item in the third paragraph --- emergency planning zones---but otherwise this is the same as what I sent you at 8:42 a.m.. If you'd like to make changes, please send them to me and I'll coordinate within FSME. Thanks.

RRRR-89

Q. How are we reaching out to the States and what are the associated challenges?

A. We are reaching out to the State primarily through the Regional State Liaison Officers and Regional State Agreements Officers. NRC had a teleconference with the Organization of Agreement States, the Conference of Radiation Control Program Directors, and all of the Agreement States last week to provide some status information.

The largest challenge with the States relates to the timeliness of the NRC's responses to their questions. Because we need to place an emphasis on clear, consistent, and accurate communications during an ongoing and quickly-changing crisis, and because of the international nature of this event, NRC has been cautious in the delivery of information. This has, in some cases, been frustrating to the States.

We have been able to provide some immediate information (e.g., we did say "at this time" it does not appear that harmful levels of radiation will reach any part of the United States including Alaska and Hawaii). However, the States want more details, with particular interest in issues such as potassium iodine, plume projections, radiation monitoring, dose modeling, and emergency planning zones.

The NRC's State Liaison team has received a request from the National Governors' Association Center for Best Practices, Environmental, Energy, and Transportation, to participate in a panel on March 21 or 22 to provide senior state officials (governor energy advisors) with an update on the event and to answer questions related to the event.

NRC has also been asked to provide a 10-15 minute presentation to the governor senior energy advisors in early April.

From: Skolnik, Aaron
To: Widomski, Michael; Harrington, Holly; Luke, Paul
Cc: Brenner, Eliot
Subject: RE: broadcast operations conversation
Date: Friday, March 18, 2011 10:26:24 AM

Oh, I know... You caught me in the middle of my commute and I was thinking of how much I'd actually like to be working in Rockville. ;)

Eliot: Is there a particular time that's better for you to have this discussion?

From: Widomski, Michael [mailto:michael.widomski@dhs.gov]
Sent: Friday, March 18, 2011 10:16 AM
To: Harrington, Holly; Skolnik, Aaron; Widomski, Michael; Luke, Paul
Cc: Brenner, Eliot
Subject: RE: broadcast operations conversation

Aaron.

Just to be clear I think Eliot just needs to first have a conversation about overall pitfalls he needs to be aware of. If anything, he may just ask that you attend a meeting with him in order to provide guidance. I don't expect a detail...just guidance.

Thanks,
Michael

From: prvs=05168de55=Holly.Harrington@nrc.gov on behalf of Harrington, Holly
Sent: Fri 3/18/2011 10:15 AM
To: Skolnik, Aaron; Widomski, Michael; Luke, Paul
Cc: Brenner, Eliot
Subject: RE: broadcast operations conversation

This is Eliot's deal. If he needs help, I assume he'll respond directly or ask Michael to do so . . . would be great to see either of your smiling faces!

From: Skolnik, Aaron [mailto:aaron.skolnik@dhs.gov]
Sent: Friday, March 18, 2011 7:12 AM
To: Widomski, Michael; Luke, Paul
Cc: Harrington, Holly; Brenner, Eliot
Subject: Re: broadcast operations conversation

Will call this morning. Would certainly love a short detail to Rockville. Nice short commute. And an excuse to hang out with Holly again. :)

Aaron Skolnik (Wireless E-mail)

From: Widomski, Michael
To: Luke, Paul; Skolnik, Aaron

RRR-90

Cc: 'Holly.Harrington@nrc.gov' <Holly.Harrington@nrc.gov>; 'eliot.brenner@nrc.gov' <eliot.brenner@nrc.gov>
Sent: Thu Mar 17 19:17:21 2011
Subject: Re: broadcast operations conversation

Resending with Eliot's correct email.

Sent from my BlackBerry Wireless Handheld

From: Widomski, Michael
To: Luke, Paul; Skolnik, Aaron
Cc: elliot.brenner@nrc.gov <elliot.brenner@nrc.gov>; Holly.Harrington@nrc.gov <Holly.Harrington@nrc.gov>
Sent: Thu Mar 17 18:35:34 2011
Subject: broadcast operations conversation

Aaron and/or Paul,

Could one of you please reach out to NRC's Director of Public Affairs Elliot Brenner in the next day or so? I told him that I thought one of you could offer him some of your expert knowledge about specifications that need to be considered when building out a press briefing center. NRC is looking into taking the steps in this direction and he could use some advice in providing information on some of the pitfalls to avoid. He may even ask you to attend a meeting up in Rockville next Tuesday, but I thought it made sense if you had a conversation first.

You can reach him by calling the main Public Affairs number (301-415-8200) and tell who ever answers that you are calling from FEMA's Broadcast Operations section. Elliot knows that you will be calling...but of course please understand that he is a very busy man these days.

I greatly appreciate your assistance.

Michael

Michael Widomski
Deputy Director of Public Affairs
FEMA
202-744-1052

From: Harrington, Holly
To: Widomski, Michael
Subject: RE: broadcast operations conversation
Date: Friday, March 18, 2011 10:22:00 AM

Let me now later what I'm not listening to

From: Widomski, Michael [mailto:michael.widomski@dhs.gov]
Sent: Friday, March 18, 2011 10:21 AM
To: Harrington, Holly
Subject: RE: broadcast operations conversation

yes...i'm on.

From: prvs=05168de55=Holly.Harrington@nrc.gov on behalf of Harrington, Holly
Sent: Fri 3/18/2011 10:20 AM
To: Widomski, Michael
Subject: RE: broadcast operations conversation

Michael. Are you monitoring NICCL? I have it on but am not paying attention . . .

From: Widomski, Michael [mailto:michael.widomski@dhs.gov]
Sent: Friday, March 18, 2011 10:16 AM
To: Harrington, Holly; Skolnik, Aaron; Widomski, Michael; Luke, Paul
Cc: Brenner, Eliot
Subject: RE: broadcast operations conversation

Aaron.

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Sent from my BlackBerry Wireless Handheld

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To: Luke, Paul; Skolnik, Aaron
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I greatly appreciate your assistance.

Michael

Michael Widomski
Deputy Director of Public Affairs
FEMA
202-744-1052

From: Screnci, Diane
To: Brenner, Eliot; Harrington, Holly
Cc: Sheehan, Neil; Mitlyng, Viktoria
Subject: RE: MEDIA FW: Questions about SAMA
Date: Friday, March 18, 2011 10:26:31 AM

I'll send him a message.

Diane Screnci
Sr. Public Affairs Officer
USNRC, RI
610/337-5330

-----Original Message-----
From: Brenner, Eliot
Sent: Friday, March 18, 2011 9:46 AM
To: Screnci, Diane; Harrington, Holly
Cc: Sheehan, Neil; Mitlyng, Viktoria
Subject: RE: MEDIA FW: Questions about SAMA

I would suggest for the moment tell him that while we are wholly consumed with dealing with the Japan situation and woud be happy to assist him later down the road.

eliot

-----Original Message-----
From: Screnci, Diane
Sent: Friday, March 18, 2011 9:40 AM
To: Harrington, Holly; Brenner, Eliot
Cc: Sheehan, Neil; Mitlyng, Viktoria
Subject: FW: MEDIA FW: Questions about SAMA
Importance: High

THIS NEEDS A PLAN....
This is a huge research project. I don't know the answers to any of these.

Diane Screnci
Sr. Public Affairs Officer
USNRC, RI
610/337-5330

-----Original Message-----
From: Couret, Ivonne
Sent: Thursday, March 17, 2011 7:18 PM
To: Screnci, Diane
Subject: MEDIA FW: Questions about SAMA

Can you respond to this inquiry - Thanks, Ivonne

-----Original Message-----
From: Carl Prine [mailto:cprine@tribweb.com]
Sent: Wednesday, March 16, 2011 2:51 PM
To: OPA Resource
Subject: Questions about SAMA

RRRR-92

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

Carl Prine (cprine@tribweb.com) on Wednesday, March 16, 2011 at 14:51:18
---

comments: Hello. My name is Carl Prine and I'm a reporter for the Pittsburgh Tribune-Review.

Some questions:

1. I've become intrigued by staffing levels at NRC's nuclear reactor safety program over time. In 1987, for example, there were 1,640 staffers divided between the regional offices and HQ, skewed toward those in the field (850 to 790 at HQ). Cuts in the 1990s reduced that to 679 in the regions and 651 at HQ.

Today, the national staff numbers divide 3:1 HQ to regions. What are the numbers for the Nuclear Reactor Safety division? How many inspectors, for example, do you have at the plants today? And how does that compare to, say, the 1980s?

2. Proponents of the nuclear power industry like to speak of the "gold standard" of safety at the regulators and power companies. But the NRC's own reports seem to dispute this. The NRC IG investigating the oversight of Davis-Besse by NRC and FENOC concluded that financial considerations for the utility overcame safety concerns, to the point that even the back-up systems in the event of reactor vessel head failure were unlikely to have worked. Should we be concerned about the "gold standard" of safety in the industry and NRC when he look at Davis-Besse, Millstone and other problem plants?

3. NRC often analyzes "safety culture survey" returns at plants. When certain facilities have shown more than 10 percent of a staff reluctant to share safety concerns with regulators, NRC steps in to bring the culture up to standards. In 2002, half of NRC's own employees voiced concerns about raising safety or security issues without fear of retaliation. Did NRC continue to do these surveys and what are the results for both plants and NRC employees from 2002 through 2010?

4. Given the complex scenario that developed with coastal Japanese nuclear plants, in re earthquake, tsunami, the loss of power and back-up mitigating technologies, do the Severe Accident Mitigation Alternative (SAMA) plans fully take into account a "double whammy" of two or more simultaneous or linked events that could lead to facility failure and core meltdown?
I mention this because in the most recent ACRS report, the panel asked NRC again to develop better SAMA modeling for potentially catastrophic events. Why has NRC had problems doing this?

5. Does NRC have the ability to overwrite "cost-beneficial" decisions when considering SAMA/ worst case scenario implications?

6. Noting that FENOC failed to properly include all relevant information in the 2005 license reapplication for Beaver Valley Power Station Units 1 and 2, critics asked NRC to either fine the utility $50,000 or move it to the back of the line for renewing its license. But NRC chose not to go down either path. Why not? How satisfied is NRC that BV 1&2 will withstand a serious accident or disaster?

7. In its recent SAMA ER, Besse-Davis owner FENOC on page E-21 wrote that it deleted the reactor vessel rupture event AV because the "event lacks a justifiable frequency." Given LOCA frequencies in NUREG/CR-5750, FENOC concluded that the event should be a "negligible contributor to the total CDF."

But it was at Davis-Besse itself that NRC IG and others realized that the reactor pressure vessel lid had corroded to the point that it nearly led to a loss of coolant accident, one that might not have had the mitigations of the back-up technology, which also likely would've failed.

What has been the role of NRC in ensuring that FENOC and other operators take real world examples into account when developing likely SAMAs and ERs?

organization: Pittsburgh Tribune-Review

address1: 503 Martindale St

address2:

city: Pittsburgh

state: PA

zip: 15212

country: USA

phone: 412-320-7826

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Friday, March 18, 2011

NRC Warning On Japan Nuclear Accident Raise Doubts On EPA Guidelines

Posted: March 17, 2011

Nuclear Regulatory Commission (NRC) calls for Americans in Japan to take extra precautions to prevent radiation exposure are raising questions about EPA's corresponding guidelines for domestic nuclear power plant disasters and are adding to existing concerns about the agency's limited role in the Japanese crisis.

NRC on March 16 issued a statement urging Americans in Japan to evacuate if they were within 50 miles of the ailing Fukashima reactors.

But EPA's manual of protective action guides (PAGs) for nuclear incidents -- which the agency published in 1992 -- calls for only a 10-mile emergency planning zone if a similar nuclear power plant disaster occurred in the U.S. Similarly, the NRC and the Federal Emergency Management Agency (FEMA) only require nuclear power plant operators to develop evacuation plans for a 10-mile area surrounding their plants.

NRC's recommendation for a wider evacuation area for Americans in Japan is underscoring environmentalists' long-standing argument that EPA's PAGs and the NRC requirements are inadequate, activists say. "NRC should not be making different statements for Americans abroad than for Americans at home," Ed Lyman, of the activist group Union of Concerned Scientists, said during a March 17 conference call on the Japan crisis.

EPA in recent years has been trying to amend the PAGs, but a draft of the proposed changes obtained by *Inside EPA* in 2007 also recommended a 10-mile emergency planning zone. The draft created a firestorm amongst environmentalists and some EPA and state officials for other reasons, including that it suggested cleanup and drinking water guidelines dramatically less protective than the agency's traditional regulations and guidelines.

In addition to concerns about the size of the evacuation area NRC is recommending, the fact that NRC is the federal agency making such announcements is adding to environmentalists' concerns that NRC is fulfilling a role in the crisis that EPA should be handling.

EPA traditionally relies on more stringent radiation guidelines than NRC and other federal agencies, and activists fear limiting EPA's role is part of a political maneuver designed to allow the Obama administration to continue its support for domestic nuclear power expansion.

While NRC's main responsibilities are to license and regulate domestic nuclear power plants, EPA is meant to be "the Coordinating Federal Agency for the U.S. government's response to foreign nuclear accidents," according to information long available on the agency's website. Further, the Nuclear/Radiological Incident Annex to the federal government's National Response Framework says EPA is the lead agency in dealing with foreign nuclear incidents, except in "certain areas of the coastal zone" that would be handled by the Coast Guard.

An EPA spokesman did not respond to multiple requests for comment, but EPA quietly posted a statement on its website March 15 saying that, as the NRC "has said, we do not expect to see radiation at harmful levels reaching the U.S. from damaged Japanese nuclear power plants."

Environmentalists' concerns about EPA's role come as the Obama administration has agreed to a request from Sens. Barbara Boxer (D-CA) and Thomas Carper (D-DE) to review the ability of domestic nuclear facilities to withstand natural disasters.

"Any time there's a significant event like this anywhere in the world, or even something like this in the United States, we're going to take a look at what happened, we're going to do a systematic and a methodical review of the information, and if we need to make changes to our program we'll make changes to our program," NRC Chairman Greg Jaczko told reporters at the White House March 17.

EPA Support For NRC 'Outrageous'

An environmentalist calls EPA's endorsement of NRC's position that radiation is unlikely to reach the U.S. at harmful levels "outrageous" given that EPA's "official position for decades [has been] that there is no safe level of" radiation. In addition, the EPA statement does not make a distinction between short-term harms, such as radiation sickness and deaths, and long-term harms like latent cancers, the second activist notes.

"Are they misleading people by merely saying that no radiation at levels sufficient to produce acute radiation syndrome will reach here?" the activist asks. "They know perfectly well the cloud of radiation is so intense that if it reaches the U.S. there will be cancers."

That EPA is quietly endorsing NRC's position is, in the second activists' view, worse than if EPA had made no statement at all, because it suggests a precedent under which EPA is willing -- during such nuclear incidents -- to defer to the NRC, which relies on significantly less stringent radiation standards than EPA.

The ctivist notes that in a March 15 statement, NRC suggests that radiation dose limits as high as 1,000 millirem to the entire body and 5,000 millirem to the thyroid are acceptable. While EPA's PAGs suggest similar guidelines in emergency situations, such levels would "certainly not be acceptable in normal times," the activist, says, noting that EPA, under its uranium fuel cycle rules, normally does not permit exposures from nuclear power plants above 25 millirem for the entire body and 75 millirem for the thyroid.

In addition, environmentalists continue to be frustrated by a lack of available data from EPA and other federal agencies regarding levels of radiation approaching U.S. soil. EPA says in its March 15 statement that it is conducting monitoring to collect such data and that the data is publicly available, but agency officials have not explained how to access the data. -- *Douglas P. Guarino*

Related News: Energy Waste

2358136

From: Harrington, Holly
To: Feig, Christine Marie
Subject: RE: Scenarios
Date: Friday, March 18, 2011 10:33:00 AM

Worst case scenario basically going on now

From: Feig, Christine Marie [mailto:feigc@who.int]
Sent: Thursday, March 17, 2011 7:39 PM
To: Harrington, Holly
Subject: Scenarios

Hey!
Have you gotten a break yet? I finally did a dinner out with friends tonight at 7p.... Was exhausted but was good to do something besides japan. I have a work question: could you share in absolute confidence your worst case scenarios for the japan sit? Our radiation team sucks and hasn't drawn theirs up yet and I'm desparate for something to use to work with messaging. If you cannot I understand, I'm just tired of working with incompetence.
Best,
C-

Christy Feig
Director of Communications
World Health Organization

Sent from a BB terminal.

RRRR-94

From:	Bonaccorso, Amy
To:	Harrington, Holly
Subject:	FW: Half retraction for Salt encrustacion. REPLY: Aren"t those rods going to be so salt encrusted that they can"t cool
Date:	Friday, March 18, 2011 10:35:26 AM

Holly:

How do you deal with pen pals? It's one danger of email responses.

From: phil [mailto:phillipmarx@sbcglobal.net]
Sent: Friday, March 18, 2011 8:17 AM
To: Bonaccorso, Amy
Subject: Re: Half retraction for Salt encrustacion. REPLY: Aren't those rods going to be so salt encrusted that they can't cool

Notice that NONE of those reactors would have blown their tops if they had dumped enough common lead and NiCad batteries or better into those in time. NONE.

I heard that there are at least 42 Mark I reactors in America, I think all of them should be checked to see if their containment pressure release valves are safe for high oxygen atmospheres, with no grease or oil in their mechanism or even valve stem, that can incinerate. See Below. Hydrogen is harmless enough to fly Zeppelins for the millions of hours that they did. The only reasons these are exploding is because of the high oxygen levels. Match lighting hydrogen filled balloons is a common classroom physics demonstration of a weak explosion. Note that the exclusively hydrogen filled Zeppelin didn't explode, it just burned.

All of the world's reactors (yours too, and you should raise your tusnami fence and place surge diffusers underwater to divert the direct shocks, if not the surge, a 45' angle is the same as making that wall 1.4 times thicker) should have supplemental reaction quenchers added, with quenching agents that won't evaporate, like the high rise buildings have water tanks on their roofs for fire fighting, so that it can be gravity fed when all power fails. Else, shut them down. My home-built Geiger counter is already ticking maybe 50% faster. Once every 3-4 seconds average. Some early reactors used liquid fluoride salts for coolants, "The ARE went critical for the first time on November 3, 1954 using a mixture of sodium **fluoride**, zirconium **fluoride**, and uranium tetrafluoride. It operated for a total of 100 hours at a maximum temperature of 1600°F " and the zirconium salt probably implies compatibility with the zirconium reactor rods' ceramics, maybe it will plate out on the rods making them stronger, unless it is a solvent for them, but even then, it will still precipitate if it surpasses saturation, and precipitate where concentration would be highest, such as on the hottest surfaces of the rods.... But if it is, maybe it is a solvent for the uranium, meaning the uranium tetrafluoride could be pumped out, anyway, probably not profitable to make reactors that can be made that inexpensively, http://energyfromthorium.com/2006/04/22/a-brief-history-of-the-liquid-fluoride-reactor/

Half retraction for Salt encrustacion.

That particular salt that dominates sea water is sodium chloride which will break down into sodium and chlorine, both exothermically incendiary, sodium especially in contact with water.
However, if the salt is a cadmium salt, it might precipitate metallically on the zirconium or salt crust overlay, and prevent it's burning, and be structural enough if eventually thick enough to hold up the pellets in the stack.

Maybe a clay can be included in the water, that will also precipitate on the hottest surfaces first, unless it's coefficients of expansion are so different that it slakes off, but the cadmium will cut down the

RRRR-95

explode spontaneously upon contact with air, water or steam. The only other major commercial use of zirconium through the years has been in flashbulbs used in photography. A speck of it, on a flashbulb, ignites to provide a flash of light.

But in a nuclear plant, we're not talking about specks, but tons and tons of zirconium, put together as a compound called "zircaloy" that clads tens of thousands of fuel rods. Heat - a great deal of heat - builds up in a very short time with any interruption of coolant flow in a nuclear power plant. This was the problem at Fukushima after the earthquake that struck Japan. Zirconium, with the explosive power, pound for pound, of nitroglycerine, will catch fire and explode at a temperature of 2,000 degrees Fahrenheit, well below the 5,000 degree temperature of a meltdown. Before then, however, zirconium reacts to the heat by drawing oxygen from water and steam and letting off hydrogen, which itself can explode and is said to have done so at Fukushima. As a result of such a hydrogen explosion, there is additional heat, bringing the zirconium itself closer and closer to its explosive level.Whether in addition to being a hydrogen explosion, zirconium also exploded at Fukushima remains to be known.
But what has happened regarding hydrogen at Fukushima, like the "hydrogen bubble" when the Three Mile Island plant in Pennsylvania underwent its near partial meltdown, is no mystery, but precisely what is expected in a loss-of-coolant accident.

It is described in U.S. government and nuclear industry accident studies as a "metal-water" reaction. It's a reaction, the research has long stated, that can easily trigger a meltdown. Using tons of a material otherwise used as the speck that explodes in a flashbulb in nuclear power plants is absolutely crazy.
Moreover, in the spent fuel pools usually situated next to nuclear power plants, there are large numbers of additional fuel rods, used ones, disposed of as waste. There must be constant water circulation in the spent fuel pools. In what is labeled a "loss-of-water' accident in a spent fuel pool, the zirconium cladding of the fuel rods is projected as exploding, sending into the environment the lethal nuclear poisons in a spent fuel pool.
***
Karl Grossman, professor of journalism at the State University of New York/College at Old Westbury, has long specialized in doing investigative reporting on nuclear technology. He is the author of Cover Up: What You Are Not Supposed to Know About
Nuclear Power. He is the host of the nationally aired TV program, Enviro Close-Up (envirovideo.com).

NUCLEAR POWER ISN'T THE PROBLEM
Submitted by Skinny Dog on Wed, 03/16/2011 - 11:57pm.
Nuclear power isn't the problem. The problem is the reactors we've been using to make it.
Karl is absolutely right - using zirconium in a reactor is insane. So is using water. And so is using Uranium.
LFTRs (Liquid Fluoride Thorium Reactors) have none of the problems Uranium reactors have. If the reactors in Japan were LFTRs, none of this would be happening. NONE of it. At all. See this article: http://www.wired.com/magazine/2009/12/ff_new_nukes/

----- Original Message -----
From: Bonaccorso, Amy
To: phillipmarx@sbcglobal.net
Cc: Deavers, Ron
Sent: Wednesday, March 16, 2011 9:54 AM
Subject: REPLY: Aren't those rods going to be so salt encrusted that they can't cool, won't the gas&steam pressure be too high for the cooling pumps ?

reaction chain efficiency better than anything else, but a clay that will increase standup strength, without decreasing cooling, not an asbestos. You are going to have to use robots with chisels anyway, to relocate all that material someday, might as well make it as safe as possible to work around. I did radiation total dose testing for Strategic Defense Initiative CMOS circuits, proof testing the Rad Hard designs at a local research reactor, back in the early 90s, and even was shown that I could handle reactor rods with mere gloved hands safely (new ones) and the rad badge didn't budge. Circuits are available now that can enable robots to function in higher radioactivity to prevent the need to Chernobly encrypt it there. If we can move the London Bridge, we can move all that stuff and re-refine it or, re-dilute it safely.

I think a robot should place a lot of perforated cadmium tubing over those plutonium mox rods, many tubes, coaxially concentric, perforated to allow steam cooling, with the holes oriented so that there are no straight lines of sight for radioactivity. Once those are covered, the rest should also be done, most unspent rods first.
Or, better, those rods should be pulled, and relocated on some unsinkable barge(s) until best dispositions resolve. New reactors should be designed for robot access, and old reactors should be retrofitted for robot management. Put some aquariums on wheels in there, and put maybe 4 rods in each and then pull them out of the building, starting with rods that are spaced closest to each other. Japan has a lot of man-like robots, but I doubt they've been built with the rad-hard circuits my company invented.

Silicon clays from sand risk breakdown into Silane, which is extremely flammable.
However, silicon carbide isn't, and silicon nitride probably isn't, but any nitrogen it releases might be.

2) Also, you are forming a supersonic hydrogen combustor at the same time you open the pressure release valves, you can probably find a better, more relevant reference, but I found this one in just a few seconds. When you release pressures that high, you can probably burn air into Nox.
http://deepblue.lib.umich.edu/bitstream/2027.42/76611/1/AIAA-24093-582.pdf

3) Thus, trying to bleed that Brown's gas mix through non-ignition damping hardware is going to result in drastic, unplanned and hard to explain explosions.
http://www.google.com/search?hl=en&q=Brown%27s+Gas

The Insanity of Zirconium in a Nuclear Power Plant
Submitted by BuzzFlash on Wed, 03/16/2011 - 10:21pm.
· Guest Commentary
KARL GROSSMAN FOR BUZZFLASH AT TRUTHOUT
The explosion at the Fukushima nuclear power plant is being described as caused by a "hydrogen build-up" The situation harks back to the "hydrogen bubble" that was feared would explode when the Three Mile Island plant in 1979 underwent a partial meltdown. The hydrogen explosion problem at nuclear power plants involves a story as crazy as can be. As nuts as using nuclear fission to boil water to generate electricity is, the hydrogen problem and its cause cap the lunacy. Eruption of hydrogen gas as a first reaction in a loss-of-coolant accident has been discussed with great worry in U.S. government and nuclear industry literature for decades.

That is because ***a highly volatile substance called zirconium*** was chosen back in the 1940's and 50's, when plans were first developed to build nuclear power plants, as the material to be used to make the rods into which radioactive fuel would be loaded. There are 30,000 to 40,000 rods-composed of twenty tons of zirconium in an average nuclear power plant. Many other substances were tried, particularly stainless steel, but only zirconium worked well. That's because zirconium, it was found, allows neutrons from the fuel pellets in the rods to pass freely between the rods and thus a nuclear chain reaction to be sustained.
But there's ***a huge problem with zirconium - it is highly volatile and when hot will***

Dear Mr. Marx:

We appreciate the suggestions of folks with ideas to resolve the situation 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

David Decker

From: David Decker
Sent: Monday, March 14, 2011 9:37 AM
To: Amy Powell; Rebecca Schmidt
Subject: EPW Request for a Briefing on Japan Before Wednesday's Hearing

Kathy just called to say that EPW wants a briefing on Japan before the Wednesday morning hearing with Energy and Commerce.

RRR-96

From: Brenner, Eliot
To: Janbergs, Holly; Harrington, Holly
Subject: RE:
Date: Friday, March 18, 2011 10:36:37 AM

I have the transcript that OPA bought. That is what I was referring to. Give me a minute and I can forward it.

From: Janbergs, Holly
Sent: Friday, March 18, 2011 10:35 AM
To: Harrington, Holly; Brenner, Eliot
Subject: RE:

I'll change caption. Already contacted OCA for transcript – they will let me know ASAP when ready, probably Monday. Full hearing transcripts may take longer

---

From: Harrington, Holly
Sent: Friday, March 18, 2011 10:34 AM
To: Brenner, Eliot; Janbergs, Holly
Subject: RE:

Bethany – pls change caption.

Eliot – I do not have the transcript. Bethany – can you track down?

From: Brenner, Eliot
Sent: Thursday, March 17, 2011 7:29 PM
To: Janbergs, Holly
Cc: Harrington, Holly
Subject: RE:

Can you somewhat invert the order to read xxx Jaczko testified March 16 to the House Comminttee on etc etch and so forth xxx on the situation in Japan.

I have asked Holly to post the transcript, so it would be good to link to the transcript in the caption.

thanks

From: Janbergs, Holly
Sent: Thursday, March 17, 2011 9:27 AM
To: Harrington, Holly
Cc: Brenner, Eliot
Subject:

Suggested frontpage pic & caption – thoughts?

Chairman Gregory Jaczko gives a statement on the situation in Japan to the House Committee on Energy and Commerce Subcommittees on Energy and Power and Environment and the Economy on March 16, 2011.

Beth Janbergs
Public Affairs Assistant
301-415-8211

From: Harrington, Holly
To: Hayden, Elizabeth
Subject: FW: questions about containment testing
Date: Friday, March 18, 2011 9:54:00 AM

I can't quite follow this. Does this person still need an answer? If so, it goes to lia04.hoc@nrc.gov

---

From: OPA Resource
Sent: Friday, March 18, 2011 9:24 AM
To: Harrington, Holly
Subject: FW: questions about containment testing

From: Thadani, Mohan
Sent: Friday, March 18, 2011 7:26 AM
To: OPA Resource
Subject: FW: questions about containment testing

From: Thadani, Mohan
Sent: Friday, March 18, 2011 7:24 AM
To: Hayden, Elizabeth
Subject: FW: questions about containment testing

Beth:

Yesterday's email said that enquiries from State officials should be forwarded to OPA. Therefore, I am forwarding the email traffic below for OPA's information.

Mohan

From: Thadani, Mohan
Sent: Thursday, March 17, 2011 11:18 AM
To: 'Cowley, Richard (DOH)'
Subject: RE: questions about containment testing

"Overall integrated leakage rate" means the leakage rate which obtains from a summation leakage through all potential leakage paths. Including containment welds, valves, fittings, and components that penetrate containment.

"Type A Test" means tests intended to measure the primary reactor containment overall integrated leakage rate, after the containment is first ready for operation and at periodic intervals thereafter.

From: Cowley, Richard (DOH) [mailto:Richard.Cowley@DOH.WA.GOV]
Sent: Wednesday, March 16, 2011 8:05 PM
To: Thadani, Mohan
Subject: questions about containment testing

RRRR-98

Mohan,

It's been too long for me to remember but what are the differences between Integrated Leak Rate Testing and Containment Type A testing and what are the frequencies for this type of testing?

I see that Columbia had to complete a Type A test by July of 2009 and I assume they did that during the 2009 outage. The Wall Street Journal article about the German reactors has prompted these questions in attempt to address the "stress testing" mentioned in that article.

Thanks for your help on this.

Richard Cowley

Richard Cowley

Nuclear Engineer

Office of Radiation Protection

PO Box 47827

Olympia, WA 98504-7827

(360) 236-3272

richard.cowley@doh.wa.gov

From:	RMTPACTSU_ELNRC
To:	LIA11 Hoc; LIA01 Hoc; LIA07 Hoc; LIA08 Hoc; LIA02 Hoc; LIA12 Hoc; LIA04 Hoc; Harrington, Holly; McIntyre, David; Burnell, Scott; ET07 Hoc; Marshall, Jane
Subject:	Cable: TOKYO 00838 |DAILY SUMMARY OF JAPANESE PRESS 110316
Date:	Friday, March 18, 2011 9:30:19 AM

Subject: Cable: TOKYO 00838 |DAILY SUMMARY OF JAPANESE PRESS 110316

UNCLAS SECTION 01 OF 10 TOKYO 000838

SIPDIS
DEPT FOR E, P, EB, EAP/J, EAP/P, EAP/PD, PA WHITE HOUSE/NSC/NEC JUSTICE
FOR STU CHEMTOB IN ANTI-TRUST DIVISION TREASURY/OASIA/IMI/JAPAN DEPT
PASS USTR/PUBLIC AFFAIRS OFFICE SECDEF FOR JCS-J-5/JAPAN
DASD/ISA/EAPR/JAPAN DEPT PASS ELECTRONICALLY TO USDA FAS/ITP FOR
SCHROETER PACOM HONOLULU FOR PUBLIC DIPLOMACY ADVISOR CINCPAC FLT/PA/
COMNAVFORJAPAN/PA JOINT STAFF FOR J5 HQ PACAF HICKAM AFB FOR CC/PA USFJ
FOR J5/JO21 DEPARTMENT FOR INR

E.O. 13526: N/A
TAGS: OIIP, KMDR, KPAO, PGOV, ECON, ELAB, JA
SUBJECT: DAILY SUMMARY OF JAPANESE PRESS 110316

DAILY SUMMARY OF JAPANESE PRESS

MARCH 16, 2011

ARTICLES:

(1) RADIATION 7 TO 110 TIMES HIGHER THAN NORMAL LEVELS DETECTED IN KANTO

MAINICHI (PAGE 1) (ABRIDGED)

MARCH 16, 2011

RADIATION 7 TO 110 TIMES HIGHER THAN THE AVERAGE LEVEL WAS DETECTED IN THE AIR IN TOKYO AND THE SIX PREFECTURES IN THE KANTO REGION, THE MAINICHI SHIMBUN HAS LEARNED. "ON MARCH 15, THE WIND WAS BLOWING IN AN INLAND DIRECTION, INCLUDING TOWARD THE KANTO REGION," THE JAPAN METEOROLOGICAL AGENCY SAID. RADIOACTIVE MATERIAL FROM THE FUKUSHIMA NO. 1 NUCLEAR POWER PLANT IS BELIEVED TO HAVE BEEN BLOWN TO THE KANTO REGION BY THE WIND.

HIGH READINGS WERE REGISTERED IN SUCH PLACES AS KITAIBARAKI CITY AND KANAGAWA'S YOKOSUKA CITY AFTER 5:00 A.M. THERE IS A POSSIBILITY THAT RADIOACTIVE MATERIALS WERE LEAKING FROM THE TIME BEFORE THE EXPLOSIONS OCCURRED SHORTLY AFTER 6:00 A.M. AT THE 2ND AND THE 4TH REACTORS. RADIATION ABOUT 10 TIMES HIGHER THAN THE NORMAL LEVEL WAS ALSO DETECTED IN YAMAMOTO TOWN, MIYAGI PREFECTURE, ON MARCH 14.

FUKUSHIMA PREFECTURE, WHERE THE 1ST REACTOR IS LOCATED, ANNOUNCED ON MARCH 15 THE CHANGE IN RADIATION LEVELS IN SEVEN AREAS IN THE PREFECTURE. RADIATION OF 23.72 MICRO SIEVERTS PER HOUR WAS REGISTERED IN

RRRR-99

IWAKI CITY, WHICH IS LOCATED SOUTH OF THE POWER PLANT AT 4:00 A.M. ON MARCH 15. THE LEVEL ALSO ROSE TO 20.18 MICRO SIEVERTS IN FUKUSHIMA CITY AT 6:00 P.M. ON MARCH 15.

ALL RELEVANT LOCAL GOVERNMENTS ARE CALLING ON THE RESIDENTS TO ACT CALMLY, SAYING THAT THE RADIATION IS NOT AT A LEVEL THAT WOULD HAVE IMMEDIATE ADVERSE EFFECTS ON HUMAN HEALTH. THEY WILL CONTINUE MONITORING THE RADIATION LEVELS. READINGS IN KOSHIN, CHUBU, AND WESTERN JAPAN WERE NORMAL.

ACCORDING TO DATA COLLECTED AT THE "MONITORING POSTS" SET UP IN ALL PREFECTURES BY THE EDUCATION, CULTURE, SPORTS, SCIENCE AND TECHNOLOGY MINISTRY, RADIATION LEVELS BETWEEN 0.069 AND 1.318 MICRO SIEVERTS WERE DETECTED IN TOKYO, TOCHIGI, GUNMA, SAITAMA, CHIBA, KANAGAWA, YAMANASHI, AND SHIZUOKA BETWEEN 9:00 A.M. AND 5:00 P.M. ON MARCH 15.
ALTHOUGH THOSE READINGS ARE THE HIGHEST ON RECORD SINCE THE MINISTRY FIRST BEGAN COLLECTING DATA IN THE LATE 1950S, THEY ARE NOT HIGH ENOUGH TO CAUSE ANY HEALTH DAMAGE. EVEN SO, THE MINISTRY INSTRUCTED ALL PREFECTURES TO CONTINUE MONITORING RADIATION LEVELS AND REPORT THE DATA TO THE MINISTRY AT LEAST TWICE DAILY.
(11031605STSU)

(2)GREAT EAST JAPAN EARTHQUAKE: 3,700 DEAD, 22,000 MISSING

MAINICHI (PAGE 26) (EXCERPTS)

MARCH 16, 2011

NUMBER OF FATALITIES, MISSING PERSONS, AND EVACUEES

(DATA COMPILED BY MAINICHI SHIMBUN; VALID AS OF 12:00 A.M. ON MARCH 16)

FATALITIES

MISSING PERSONS

EVACUEES

HOKKAIDO

1

0

0

AOMORI

3

1

478
IWATE

1193

OVER 10,000

APPROX. 45,400

MIYAGI

1979 - 2079

OVER 10,000

APPROX. 309,300

AKITA

0

0

3

YAMAGATA

1

0

528

FUKUSHIMA

494

OVER 2,069

APPROX. 107,600

IBARAKI

19

1

APPROX. 22,500

TOCHIGI

4

0

492

GUNMA

1

0

449

CHIBA

15

9

1,568

KANAGAWA

3

0

0

TOKYO

7

0
0

TOTAL

OVER 3,700

OVER 20,000

APPROX. 488,300

(11031603YKSU)

(3)GOVERNMENT'S POOR CRISIS MANAGEMENT EVIDENT

NIKKEI (PAGE 3) (ABRIDGED)

MARCH 16, 2011

THE GOVERNMENT ON MARCH 15 FINALLY SET UP AN INTEGRATED HEADQUARTERS WITH TOKYO ELECTRIC POWER COMPANY (TEPCO) TO CALIBRATE A MORE COORDINATED RESPONSE TO THE SERIES OF ACCIDENTS AT THE FUKUSHIMA NO. 1 NUCLEAR POWER PLANT WHICH WAS HEAVILY DAMAGED IN FRIDAY'S MASSIVE EARTHQUAKE. THROUGH THE HEADQUARTERS, THE GOVERNMENT AND THE UTILITY WILL SHARE UP-TO-THE MINUTE INFORMATION ON DEVELOPMENTS AT THE POWER PLANT WITH THE AIM OF PREVENTING THE DETERIORATION OF THE SITUATION. BUT THE MOVE, WHICH CAME FIVE DAYS AFTER THE QUAKE, SERVED TO HIGHLIGHT THE SLOW REACTION BY THE GOVERNMENT, WHICH HAS LEFT EVERYTHING TO TEPCO.

SHORTLY AFTER 4:00 P.M. ON MARCH 15, PRIME MINISTER NAOTO KAN MET WITH TEPCO PRESIDENT MASATAKA SHIMIZU TO DISCUSS THE RESPONSE. AT 5:30 A.M.,

KAN GATHERED REPORTERS AND DECLARED THE ESTABLISHMENT OF THE INTEGRATED GOVERNMENT-TEPCO HEADQUARTERS, TELLING THEM THAT HE HEADS THE HEADQUARTERS IN ORDER TO PULL THROUGH THE CRITICAL SITUATION.

LATER, KAN HEADED TO THE TEPCO HEAD OFFICE AND LASHED OUT AT EXECUTIVES THERE, RAGING THAT "AN EXPLOSION WAS NOT REPORTED TO THE PRIME MINISTER'S OFFICIAL RESIDENCE [KANTEI] FOR AN HOUR. WHAT'S GOING ON HERE?" HE WENT ON: "WITHDRAWING [FROM THE POWER PLANTS AND THEIR PROBLEMS] IS SIMPLY NOT AN OPTION. IF YOU PULL OUT NOW, THAT WILL BE THE END OF TEPCO."

KAN HEADS THE CONTROL CENTER AND ECONOMY, TRADE AND INDUSTRY MINISTER BANRI KAIEDA AND TEPCO PRESIDENT SHIMIZU SERVE AS ITS DEPUTY HEADS. "IT HAS NO LEGAL BASIS. IT WAS LAUNCHED ONLY FOR FORM'S SAKE," A GOVERNMENT SOURCE SAID. SOME TAKE THE VIEW THAT THE HEADQUARTERS WAS LAUNCHED FOR THE GOVERNMENT TO "CREATE AN EXCUSE" TO LAY THE BLAME ON TEPCO FOR THE GOVERNMENT'S SLOW REACTION.

CHIEF CABINET SECRETARY YUKIO EDANO IN A PRESS CONFERENCE ON THE AFTERNOON OF MARCH 15 COMPLAINED ABOUT A LACK OF INFORMATION FROM TEPCO, SAYING, "THEY'RE TRYING, BUT THEY MUST DO BETTER." KAIEDA AND GOSHI HOSONO, A SPECIAL ADVISER TO KAN, WILL BE STATIONED FULL TIME AT THE HEADQUARTERS, WITH HOSONO SERVING AS LIAISON TO THE KANTEI.
BUT A LACK OF COMMUNICATION BETWEEN THE GOVERNMENT AND TEPCO AGAIN BECAME EVIDENT AT A PRESS CONFERENCE ON THE NIGHT OF MARCH 15. TEPCO SAID A HYDROGEN EXPLOSION IS A "POSSIBILITY THAT CANNOT BE RULED OUT" AS A CAUSE FOR A FIRE AT THE FUKUSHIMA PLANT'S 4TH REACTOR. BUT EDANO HAD TOLD AN EARLIER NEWS CONFERENCE THAT IT WAS "HIGHLY LIKELY" THAT THE FIRE WAS CAUSED BY A HYDROGEN EXPLOSION. SUCH CONFLICTING VIEWS COULD ADD TO THE FRUSTRATION GRIPPING AN ALREADY PANIC-STRICKEN PUBLIC.

TEPCO DEFENDED ITS SLOWNESS IN PROVIDING INFORMATION, SAYING INFORMATION GIVEN TO THE KANTEI MUST BE ACCURATE.

THE GOVERNMENT'S INITIAL MISSTEPS UNDENIABLY EXACERBATED THE SITUATION. WHEN KAN HAD A TELEPHONE CONVERSATION WITH SOUTH KOREAN PRESIDENT LEE MYUNG-BAK ON MARCH 13, HE SOUNDED OPTIMISTIC, ASSERTING THAT THE [FUKUSHIMA NUCLEAR PLANT] ACCIDENT IS "ESSENTIALLY DIFFERENT FROM THE CHERNOBYL INCIDENT." BUT A KAN AIDE REGRETS THE GOVERNMENT'S INITIAL OPTIMISM, SAYING, "WE LACKED A SENSE OF CRISIS."

SOME SAY THAT HAD THE GOVERNMENT TAKEN THE INITIATIVE IMMEDIATELY, TEPCO WOULD HAVE BEEN FORCED TO COOL THE DAMAGED REACTORS WITH SEAWATER MUCH SOONER. BY REPEATEDLY EXPANDING THE SCOPE OF EVACUATIONS AROUND THE FACILITY, THE GOVERNMENT IS SEEN AS CONSTANTLY BEHIND THE CURVE RATHER THAN TAKING PRE-EMPTIVE STEPS.

WITH THE HEADQUARTERS, THE GOVERNMENT AND TEPCO HAVE LAUNCHED A MORE COORDINATED EFFORT. BUT FACED WITH THE INCREASINGLY DAUNTING CHALLENGE OF MINIMIZING RADIOACTIVE CONTAMINATION, THEY ARE RACING AGAINST TIME.
(11031606STBS)

(4)WIND-BORNE RADIOACTIVE MATERIAL REACHES TOKYO
NIKKEI (PAGE 2) (ABRIDGED)

MARCH 16, 2011

THE SMALL AMOUNT OF RADIOACTIVE MATERIAL CARRIED BY THE WIND FROM THE FUKUSHIMA NO. 1 NUCLEAR POWER PLANT TO THE KANTO REGION DOES NOT THREATEN HUMAN HEALTH, EXPERTS SAID.

THE MINISTRY OF SCIENCE AND TECHNOLOGY HAS DECIDED TO BEGIN PUBLISHING RADIATION LEVELS TWICE DAILY -- IN THE MORNING AND IN THE AFTERNOON FOR EACH PREFECTURE FROM MARCH 15. THE MINISTRY SAID THAT 0.001318 MILI SIEVERTS OF RADIATION PER HOUR WAS DETECTED IN TOCHIGI PREFECTURE AND 0.000809 MILI SIEVERTS IN TOKYO ON MARCH 15. RADIOACTIVE MATERIAL WAS CARRIED BY THE WIND TO THE KANTO REGION.

"REGARDING THE SPREAD OF RADIOACTIVE MATERIAL, WHAT WE HAVE TO BE MOST AWARE OF IS THE DIRECTION OF THE WIND," SAID AKIRA KONDO, AN OSAKA UNIVERSITY ASSOCIATE PROFESSOR OF AIR POLLUTION AND ENVIRONMENTAL STUDIES.

ACCORDING TO TOKYO CITY UNIVERSITY PROFESSOR TETSUO MATSUMOTO, XENON AND KRYPTON FLOAT IN GAS FORM WHILE IODINE ATTACHES TO PARTICLES AND DUST TRAVELING IN THE AIR.

THE DENSITY OF RADIOACTIVE SUBSTANCES WILL DROP PRECIPITOUSLY AS THEY MOVE FARTHER AWAY FROM THE SOURCE. AT ONE KILOMETER, THE DENSITY WILL BE REDUCED TO AROUND ONE-MILLIONTH.

ON THE MORNING OF MARCH 15, 400 MILI SIEVERTS OF RADIATION WAS DETECTED AROUND THE FUKUSHIMA NO. 1 NUCLEAR POWER PLANT 3RD REACTOR, A LEVEL HIGH ENOUGH TO POSE A HEALTH RISK. EVEN IF PEOPLE ARE EXPOSED TO THAT LEVEL OF RADIATION
FOR AN HOUR, THE IMPACT IS FAR SMALLER THAN GETTING A CHEST X-RAY, WHICH EMITS 0.05 MILI SIEVERTS OF RADIATION. "FOR NOW, THERE ARE NO ADVERSE EFFECTS IN THE TOKYO METROPOLITAN AREA," KONDOSAID.
(11031607STBS)

(5) SECRETARY OF STATE CLINTON EXPRESSES CONCERN ABOUT NUCLEAR ACCIDENTS

ASAHI (PAGE 7) (FULL)

MARCH 16, 2011

FOREIGN MINISTER TAKEAKI MATSUMOTO, WHO IS VISITING PARIS, HELD A MEETING WITH U.S. SECRETARY OF STATE CLINTON FOR ABOUT 40 MINUTES ON THE MORNING OF MARCH 15 (AFTERNOON OF MARCH 15, JAPAN TIME) AT A HOTEL IN PARIS.

ACCORDING TO THE FOREIGN MINISTRY, CLINTON EXPRESSED APPREHENSION ABOUT THE ACCIDENTS AT THE FUKUSHIMA NO. 1 NUCLEAR POWER PLANT.
MATSUOKA EXPLAINED THE JAPANESE GOVERNMENT'S RESPONSE TO THE SITUATION AND PROVIDED A PROGRESS REPORT ON THE COOLING OPERATIONS.
THE U.S. GOVERNMENT HAS DISPATCHED NUCLEAR ENERGY SPECIALISTS, WHO ARE CURRENTLY HOLDING TALKS WITH JAPANESE EXPERTS ON HOW TO DEAL WITH THE SITUATION.

REGARDING THE SUPPORT BEING PROVIDED BY THE U.S., SUCH AS RELIEF EFFORTS BY THE U.S. MILITARY AND THE DISPATCH OF RESCUE TEAMS, MATSUMOTO

REPORTEDLY EXPRESSED GRATITUDE BY SAYING: "ON BEHALF OF THE JAPANESE GOVERNMENT AND THE JAPANESE PEOPLE, I WOULD LIKE TO EXPRESS MY APPRECIATION TO THE U.S. GOVERNMENT AND THE AMERICAN PEOPLE." THE MINISTER ALSO PROMISED THAT THE GOJ WILL "DO ITS UTMOST TO CONFIRM THE WELFARE AND WHEREABOUTS" OF AMERICAN CITIZENS LIVING IN JAPAN. (11031601SUBS)

(6) SDF DEPLOYS 150 SPECIAL TROOPS TO DEAL WITH NUCLEAR SITUATION

TOKYO SHIMBUN (PAGE 3) (ABRIDGED)

MARCH 16, 2011

THE SELF-DEFENSE FORCES HAS NOW DEPLOYED ABOUT 200 TROOPS AROUND TOKYO ELECTRIC POWER CO.'S FUKUSHIMA NO. 1 AND NO. 2 NUCLEAR POWER PLANTS. THESE SDF TROOPS INCLUDE A UNIT THAT HAS SPECIAL EQUIPMENT TO BLOCK RADIOACTIVE MATERIAL. HOWEVER, THEY HAVE BEEN TASKED WITH MISSIONS THAT HAD NOT BEEN EXPECTED FOR THE SDF. SINCE SOME OF THEM HAVE BEEN INJURED OR EXPOSED TO RADIATION, THE SDF TASKFORCE IS BECOMING INCREASINGLY ANXIOUS.

THE SDF HAS A 150-STRONG SPECIAL TASKFORCE THAT BELONGS TO THE CENTRAL NUCLEAR BIOLOGICAL CHEMICAL WEAPON DEFENSE UNIT (CNBC) UNDER THE SDF CENTRAL READINESS COMMAND (CRC). IN ADDITION, THE SDF HAS ORGANIZED A CHEMICAL DEFENSE UNIT CONSISTING OF SEVERAL DOZEN MEMBERS IN EACH OF ITS DIVISIONS AND BRIGADES. THE SDF HAS DECONTAMINATION FACILITIES TO WASH RADIOACTIVE MATERIAL OFF THE HUMAN BODY OR CLOTHING AND GAUGE RADIATION LEVELS.

THE SDF'S POSSIBLE TASKS INCLUDE CONDUCTING EVACUATION GUIDANCE FOR RESIDENTS AND DECONTAMINATING RADIOACTIVE MATERIAL. HOWEVER, THE SDF HAS NEVER HAD TRAINING IN COOLING NUCLEAR REACTORS AS IT HAS BEEN TASKED TO DO THIS TIME.

A HYDROGEN EXPLOSION OCCURRED YESTERDAY AT THE NO.1 NUCLEAR POWER PLANT'S 3RD REACTOR. IN THAT ACCIDENT, FOUR SDF MEMBERS WERE INJURED WHEN THEY WERE INJECTING SEAWATER INTO THE POOL. ONE OF THEM WAS SLIGHTLY EXPOSED TO RADIATION AND WAS HOSPITALIZED.

THE SDF TASKFORCE DID NOT CARRY OUT WATER INJECTION WORK YESTERDAY, AND MOST OF ITS MEMBERS WENT BACK TO THE KORIYAMA GARRISON IN FUKUSHIMA PREFECTURE, WHICH IS LOCATED AWAY FROM THE TROUBLED NUKE PLANT. SOME OF THE TASKFORCE MEMBERS TRANSPORTED LOCAL RESIDENTS FOR EVACUATION OR SUPPORTED WORK AT THE NO. 2 NUCLEAR POWER PLANT. AT THIS POINT, THE SDF'S EFFORTS TO DEAL WITH RADIATION LEAKS FROM THE NUKE PLANT HAVE BEEN LIMITED. (11031603IMSU)

(7) HIGHEST LEVEL OF RADIATION DETECTED IN TOKYO REGION

YOMIURI (PAGE 1) (ABRIDGED)

MARCH 16, 2011

THE SCIENCE MINISTRY ON MARCH 15 ANNOUNCED THAT TOKYO AND SEVEN

NEIGHBORING PREFECTURES RECORDED THE HIGHEST LEVELS OF RADIATION, EXCLUDING TIMES WHEN NUCLEAR TESTS WERE CONDUCTED BY NEIGHBORING COUNTRIES, AS OF THE EVENING OF THE SAME DAY. EACH PREFECTURE MONITORS RADIATION AT THE PREFECTURAL OFFICE OR OTHER PLACE UNLIKELY TO BE AFFECTED BY NUCLEAR POWER GENERATION-RELATED FACILITIES.
TOCHIGI PREFECTURE RECORDED THE HIGHEST LEVEL OF RADIATION 1.318 MICRO SIEVERTS PER HOUR BETWEEN 9:00 A.M. AND 5:00 P.M. ON THE 15TH.
THE FIGURES FOR SAITAMA PREFECTURE AND TOKYO IN THE SAME TIMEFRAME WERE 1.222 MICRO SIEVERTS AND 0.809 MICRO SIEVERTS PER HOUR.
(11031604YKBS)

ROOS

UNCLASSIFIED

NNNN

From: Akstulewicz, Brenda
To: Wittick, Susan
Cc: Harrington, Holly
Subject: RE: Talking Points for 8200 phone staff
Date: Friday, March 18, 2011 10:41:04 AM

Ok, thanks Susan. I will finalize after Holly reviews.

From: Wittick, Susan
Sent: Friday, March 18, 2011 10:39 AM
To: Akstulewicz, Brenda; Harrington, Holly
Cc: Harrington, Holly
Subject: RE: Talking Points for 8200 phone staff

Brenda, a few notes and updates are attached.
Susan

From: Akstulewicz, Brenda
Sent: Friday, March 18, 2011 10:29 AM
To: Harrington, Holly; Wittick, Susan
Subject: Talking Points for 8200 phone staff
Importance: High

Ladies,

Attached for your review.

B

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

RRRR-100

INFORMATION
ON COMMISISON MEETING
MONDAY, MARCH 21, 2011
COMMISSION BRIEFING ROOM
OWFN

The EDO will be briefing the Commission on the events in Japan at a PUBLIC meeting. Calls on this meeting are being directed to 301-415-8200. You may respond to inquiries with the following:

- Monday, March 21, 2011
  - 9am –11am with the possibility of it ending earlier, but it will end promptly at 11am
  - Commission ~~hearing~~ Conference room (to be consistent with public notice)
    - One White Flint North
    - 11555 Rockville Pike
    - Rockville, MD
  - Overflow will be directed to the TWFN auditorium

- This is NOT a question/answer session, it is an invitation to be present when the EDO briefs the Commission
- There is a Closed Commission Meeting directly following Open Meeting, so Chairman and Commissioners will not be available for questions or interviews.

- Public is welcome
  - Must have photo ID to gain entrance

- Media is welcome
  - Must have photo ID to gain entrance
  - ~~NO Cameras~~

- Parking
  - Encourage people to take Metro
  - There is NO on-site parking
  - Parking is available at the Metro garage on Marinelli Rd.

- Cameras
  - There is going to be a camera pool
    - CBS has video
    - No pool for stills (will get more info on this at 11:30 mtg) cameras are allowed

- This meeting will be webcast direct them to:
  - www.nrc.gov
  - Public Involvement and Meetings Tab (far right at top of page)
  - Click on Public Meeting Schedule
  - Locate meeting by
    - Date/time
    - Purpose

- Click on [webcast]

From: Brenner, Eliot
To: Harrington, Holly
Subject: RE: USC REPORT ON NEAR MISSES
Date: Friday, March 18, 2011 10:06:39 AM

I just hit reply because she was on the hill moving quickly. Mea culpa.

-----Original Message-----
From: Harrington, Holly
Sent: Friday, March 18, 2011 10:03 AM
To: Brenner, Eliot
Subject: RE: USC REPORT ON NEAR MISSES

Ok. Sorry. Didn't cc me . . .

-----Original Message-----
From: Brenner, Eliot
Sent: Friday, March 18, 2011 10:02 AM
To: Harrington, Holly; Schmidt, Rebecca; Sheehan, Neil
Cc: Droggitis, Spiros; Powell, Amy
Subject: RE: USC REPORT ON NEAR MISSES

I sent this short note to becky a few minutes ago.

It is important to note that many of these issues were caught by NRC inspectors who are at the plants on a daily basis. This is a cataloguing of NRC actions on things either found by us or brought to us by the operator.

We will, of course, read the report in detail when we have a chance, but the timing is certainly a little suspect to me.

Eliot

-----Original Message-----
From: Harrington, Holly
Sent: Friday, March 18, 2011 10:01 AM
To: Schmidt, Rebecca; Brenner, Eliot; Sheehan, Neil
Cc: Droggitis, Spiros; Powell, Amy
Subject: RE: USC REPORT ON NEAR MISSES

Neil -- can you follow up?

-----Original Message-----
From: Schmidt, Rebecca
Sent: Friday, March 18, 2011 9:23 AM
To: Brenner, Eliot; Harrington, Holly
Cc: Droggitis, Spiros; Powell, Amy
Subject: USC REPORT ON NEAR MISSES

In post pg A13. Any info would be appreciated we are on hill now briefing. It will come up. Is it old? Peach bottom --is hat sleeping guards?

From:	Widomski, Michael
To:	Brenner, Eliot
Cc:	Harrington, Holly; Wittick, Susan
Subject:	DRAFT Commission Meeting Advisory
Date:	Friday, March 18, 2011 9:58:09 AM
Attachments:	NUCLEAR REGULATORY COMMISSION.docx
Importance:	High

Eliot

Attached is the draft advisory for the NRC Commission Meeting for Monday. Please let me know if you have any edits, as well as what type of distribution you want and when you want it sent.

Michael

RRRR-102

NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Telephone: 301/415-8200

Washington, D.C. 20555-0001

E-mail: opa.resource@nrc.gov Site: www.nrc.gov

Blog: http://public-blog.nrc-gateway.gov

March xx, 2011

DRAFT-DRAFT-DRAFT-DRAFT

MEDIA ADVISORY

NUCLEAR REGULATORY COMMISSION (NRC) MEETING

TITLE: Commission Meeting to Receive a Staff Briefing on the NRC Response to Recent Nuclear Events in Japan

PURPOSE: U.S. Nuclear Regulatory Commission Chairman Gregory B. Jaczko will hold a commission meeting for the NRC to receive a brief in an open forum from the Commission's Executive Director of Operations related to the NRC response to the nuclear event in Japan. The commission meeting will consist of a session open to public observation.

Although the meeting will be open to the public, discussions will be limited to Commission members and scheduled presenters of the NRC staff. The open portion of the meeting will be followed by a closed session for NRC members to conduct internal business.

DATE: Monday, March 21, 2011 at 9:00 am.

LOCATION: NRC Headquarters
Commissioners' Conference Room OWFN
11545 Rockville Pike
Rockville, MD 20852

MEDIA: Camera Broadcast Pool: Due to limited space availability, the meeting will be set up for a broadcast network pool camera crew. Broadcast media outlets interested in receiving the feed should contact the network pool.

General Media: Print media and photographers should arrive at the Marinelli Road entrance of the NRC with proper media credentials.

Direction and Parking Note: The NRC offices are located across the street from the White Flint Metro station. Parking is available at the White Flint metro parking garage on Marinelli Road.

# # #

From: OST05 Hoc
To: Maier, Bill; LIA04 Hoc; Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena
Cc: Piccone, Josephine; LIA06 Hoc; Harrington, Holly; Flannery, Cindy; Lukes, Kim; Noonan, Amanda; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtil, Richard; Virgilio, Rosetta; Howell, Linda; Collins, Elmo; Howell, Art
Subject: RE: 10 mile EPZ and 50 mile evacuation zone in Japan
Date: Friday, March 18, 2011 9:55:52 AM

All,

It has been confirmed that this statement may be sent out to our Federal, State, and Local partners.

Kim Lukes
State Liaison – Liaison Team
Incident Response Center

From: Maier, Bill
Sent: Friday, March 18, 2011 9:52 AM
To: LIA04 Hoc; Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena
Cc: Piccone, Josephine; LIA06 Hoc; OST05 Hoc; Harrington, Holly; Flannery, Cindy; Lukes, Kim; Noonan, Amanda; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtil, Richard; Virgilio, Rosetta; Howell, Linda; Collins, Elmo; Howell, Art
Subject: RE: 10 mile EPZ and 50 mile evacuation zone in Japan

I still have my reservations about the adequacy of the statement below to satisfy our partners in off-site radiological emergency preparedness.

I believe if a discussion of some of the conservative assumptions used in the development of the 50 mile protective action recommendation could be included, that would make it a more satisfactory answer.

I recognize that maybe we can't share that information at this time, so I am willing to limit my information sharing to the statement below.

My request is:

DO THE RSLOs HAVE PERMISSION TO FORWARD THIS STATEMENT ON TO OUR FEDERAL, STATE AND LOCAL PARTNERS?

This action is preferable to just using it as a talking point within the NRC, as it will get the information out more quickly.

I will wait for permission to come from the NRC Liaison Team in Headquarters before sending it out.

Bill Maier

From: LIA04 Hoc
Sent: Thursday, March 17, 2011 7:49 PM
To: Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; Maier, Bill; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena
Cc: Piccone, Josephine; LIA06 Hoc; OST05 Hoc; Harrington, Holly; Collins, Elmo; Dean, Bill; Heck, Jared; McCree, Victor; Pederson, Cynthia; Satorius, Mark; Flannery, Cindy; LIA04 Hoc; Lukes, Kim; Noonan, Amanda; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtil, Richard; Virgilio, Rosetta
Subject: 10 mile EPZ and 50 mile evacuation zone in Japan
Importance: High

RSLOs:

Many of your states and others have inquired about the 10 mile EPZ and the 50 mile evacuation recommendation as stated in the NRC's press release of March 16 (No. 11-050), which states "the NRC believes it is appropriate for U.S. residents within 50 miles of the Fukushima reactors to evacuate."

The following has been provided by OPA on March 17 through its approved Talking Points.

- The 10-mile EPZ reflects the area where projected doses from design basis accidents at nuclear power plants would not exceed the EPA's protective action guidelines, and we are confident that it would be adequate even for severe accidents. However, the 10-mile zone was always considered a base for emergency response that could be expanded if the situation warranted. The situation in Japan, with four reactors experiencing exceptional difficulties simultaneously, creates the need to expand the EPZ beyond the normal 10-mile radius. We have said from the beginning of this crisis that the NRC would analyze this situation 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.

Richard Turtil
State Liaison – Liaison Team
Incident Response Center

From:	Brenner, Eliot
To:	Screnci, Diane; Harrington, Holly
Cc:	Sheehan, Neil; Mitlyng, Viktoria
Subject:	RE: MEDIA FW: Questions about SAMA
Date:	Friday, March 18, 2011 9:45:58 AM

I would suggest for the moment tell him that while we are wholly consumed with dealing with the Japan situation and woud be happy to assist him later down the road.

eliot

-----Original Message-----
From: Screnci, Diane
Sent: Friday, March 18, 2011 9:40 AM
To: Harrington, Holly; Brenner, Eliot
Cc: Sheehan, Neil; Mitlyng, Viktoria
Subject: FW: MEDIA FW: Questions about SAMA
Importance: High

THIS NEEDS A PLAN....
This is a huge research project. I don't know the answers to any of these.

Diane Screnci
Sr. Public Affairs Officer
USNRC, RI
610/337-5330

-----Original Message-----
From: Couret, Ivonne
Sent: Thursday, March 17, 2011 7:18 PM
To: Screnci, Diane
Subject: MEDIA FW: Questions about SAMA

Can you respond to this inquiry - Thanks, Ivonne

-----Original Message-----
From: Carl Prine [mailto:cprine@tribweb.com]
Sent: Wednesday, March 16, 2011 2:51 PM
To: OPA Resource
Subject: Questions about SAMA

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

Carl Prine (cprine@tribweb.com) on Wednesday, March 16, 2011 at 14:51:18
---

comments: Hello. My name is Carl Prine and I'm a reporter for the Pittsburgh Tribune-Review.

Some questions:

1. I've become intrigued by staffing levels at NRC's nuclear reactor safety program over time. In 1987, for example, there were 1,640 staffers divided between the regional offices and HQ, skewed toward those in the field (850 to 790 at HQ). Cuts in the 1990s reduced that to 679 in the regions and 651 at HQ.

Today, the national staff numbers divide 3:1 HQ to regions. What are the numbers for the Nuclear Reactor Safety division? How many inspectors, for example, do you have at the plants today? And how does that compare to, say, the 1980s?

2. Proponents of the nuclear power industry like to speak of the "gold standard" of safety at the regulators and power companies. But the NRC's own reports seem to dispute this. The NRC IG investigating the oversight of Davis-Besse by NRC and FENOC concluded that financial considerations for the utility overcame safety concerns, to the point that even the back-up systems in the event of reactor vessel head failure were unlikely to have worked. Should we be concerned about the "gold standard" of safety in the industry and NRC when he look at Davis-Besse, Millstone and other problem plants?

3. NRC often analyzes "safety culture survey" returns at plants. When certain facilities have shown more than 10 percent of a staff reluctant to share safety concerns with regulators, NRC steps in to bring the culture up to standards. In 2002, half of NRC's own employees voiced concerns about raising safety or security issues without fear of retaliation. Did NRC continue to do these surveys and what are the results for both plants and NRC employees from 2002 through 2010?

4. Given the complex scenario that developed with coastal Japanese nuclear plants, in re earthquake, tsunami, the loss of power and back-up mitigating technologies, do the Severe Accident Mitigation Alternative (SAMA) plans fully take into account a "double whammy" of two or more simultaneous or linked events that could lead to facility failure and core meltdown?
I mention this because in the most recent ACRS report, the panel asked NRC again to develop better SAMA modeling for potentially catastrophic events. Why has NRC had problems doing this?

5. Does NRC have the ability to overwrite "cost-beneficial" decisions when considering SAMA/ worst case scenario implications?

6. Noting that FENOC failed to properly include all relevant information in the 2005 license reapplication for Beaver Valley Power Station Units 1 and 2, critics asked NRC to either fine the utility $50,000 or move it to the back of the line for renewing its license. But NRC chose not to go down either path. Why not? How satisfied is NRC that BV 1&2 will withstand a serious accident or disaster?

7. In its recent SAMA ER, Besse-Davis owner FENOC on page E-21 wrote that it deleted the reactor vessel rupture event AV because the "event lacks a justifiable frequency." Given LOCA frequencies in NUREG/CR-5750, FENOC concluded that the event should be a "negligible contributor to the total CDF."

But it was at Davis-Besse itself that NRC IG and others realized that the reactor pressure vessel lid had corroded to the point that it nearly led to a loss of coolant accident, one that might not have had the mitigations of the back-up technology, which also likely would've failed.

What has been the role of NRC in ensuring that FENOC and other operators take real world examples into account when developing likely SAMAs and ERs?

organization: Pittsburgh Tribune-Review

address1: 503 Martindale St

address2:

city: Pittsburgh

state: PA

zip: 15212

country: USA

phone: 412-320-7826

From: Widomski, Michael
To: Harrington, Holly
Subject: FW: ON NRC WEBSITE NOW - Commission Briefing on NRC Response to Recent Nuclear Events in Japan
Date: Friday, March 18, 2011 9:43:53 AM
Importance: High

Let me know if you need me to do any more work on the advisory. I've not done anthing on it since sending you the latest draft last night.

Michael

From: prvs=05116173e=Ivonne.Couret@nrc.gov on behalf of Couret, Ivonne
Sent: Fri 3/18/2011 9:40 AM
To: Brenner, Eliot; Hayden, Elizabeth; Janbergs, Holly; Harrington, Holly; Burnell, Scott; McIntyre, David; michael.widomski@dhs.gov; Taylor, Robert; Hannah, Roger; Ledford, Joey; Mitlyng, Viktoria; Uselding, Lara; Chandrathil, Prema; Steger (Tucci), Christine; Shannon, Valerie; Medina, Veronika; Screnci, Diane; Sheehan, Neil; Bonaccorso, Amy; Deavers, Ron
Subject: ON NRC WEBSITE NOW - Commission Briefing on NRC Response to Recent Nuclear Events in Japan

Commission Meeting Schedule

All meetings are held in the Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland, unless otherwise indicated.

Week of March 21, 2011

03/21/11	9:00 A.M.	Briefing on NRC Response to Recent Nuclear Events in Japan (PUBLIC MEETING) (Contact: Office of Public Affairs, 301-415-8200) Webcast

http://www.nrc.gov/public-involve/public-meetings/schedule.html

Ivonne L. Couret
Public Affairs Officer
Office of Public Affairs
Media Desk
opa.resource@nrc.gov
301-415-8200

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http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

RRRR-105

Rosales-Cooper, Cindy

From: Rosales-Cooper, Cindy
Sent: Thursday, March 24, 2011 4:37 PM
To: Smiroldo, Elizabeth; Cullingford, Michael
Cc: Abrams, Charlotte; Young, Francis; Kohut, Peter
Subject: RE: safety standards

NRO will provide our response by next Friday, April 1. Let me know if you think you need it sooner.

Cindy

From: Smiroldo, Elizabeth
Sent: Wednesday, March 23, 2011 4:58 PM
To: Cullingford, Michael; Rosales-Cooper, Cindy
Cc: Abrams, Charlotte; Young, Francis; Kohut, Peter
Subject: FW: safety standards
Importance: High

Hello, Mike and Cindy,

Our Russian counterparts in Rostekhandzor are interested in obtaining information from us regarding our safety standards for NPP designs that are sited or planned to be sited in areas with high seismicity (see below).

Would it be possible to obtain this information (perhaps on a disk that we could send to the via DHL)? I realize that other organizations are probably contacting you for the same items. Please let me know what we can do.

Best regards,
Elizabeth

Elizabeth Smiroldo
International Relations Officer
Office of International Programs
US Nuclear Regulatory Commission
Washington, DC 20555
301-415-3821

From: Измайлов Александр Станиславович [mailto:izmaylov@gosnadzor.ru]
Sent: Wednesday, March 23, 2011 9:06 AM
To: Smiroldo, Elizabeth
Cc: Kohut, Peter
Subject: safety standards

Dear Elizabeth,

Taking into account tragic events in Japan (especially incidents at NPP Fukushima-1) we began to study an international experience in the field of safety requirements for NPP designs, which are sited or is planned to be sited in the areas with high level of seismicity (possible 8-9-points earthquakes).

In this connection I would like to address you with a request. Which specific requirements are used in the USA for the NPP designs located in such areas? And which regulations are set these safety standards?

RRRR/106

With best regards,
Alexander

From: Harrington, Holly
To: Couret, Ivonne
Subject: RE: USAID NRC Liaison - Phone Number
Date: Friday, March 18, 2011 10:42:00 AM

Can veronica stop what she's doing to add this?

From: Couret, Ivonne
Sent: Friday, March 18, 2011 10:40 AM
To: Harrington, Holly
Subject: RE: USAID NRC Liaison - Phone Number

I have it and when I get a chance plug new numbers into it...Ivonne

Ivonne L. Couret
Public Affairs Officer
Office of Public Affairs
Media Desk
opa.resource@nrc.gov
301-415-8200

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

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

From: Harrington, Holly
Sent: Friday, March 18, 2011 10:38 AM
To: Couret, Ivonne
Subject: FW: USAID NRC Liaison - Phone Number

Are we still maintaining a contacts list? Let me know . . .

From: RMTPACTSU_ELNRC [mailto:RMTPACTSU_ELNRC@ofda.gov]
Sent: Thursday, March 17, 2011 6:52 PM
To: LIA11 Hoc; LIA01 Hoc; LIA07 Hoc; LIA02 Hoc; LIA08 Hoc; LIA12 Hoc; Marshall, Jane; Grant, Jeffery; Gott, William; Harrington, Holly; McIntyre, David; Burnell, Scott
Subject: USAID NRC Liaison - Phone Number

Just wanted to let everyone know that we have a phone now down here at USAID. We can be reached at 202-712-4384.

If you need anything, please don't hesitate to ask.

Michael I. Dudek

RRRR-107

From: Harrington, Holly
To: Brenner, Eliot
Subject: RE: Transcript - NRC - Jaczko
Date: Friday, March 18, 2011 10:38:00 AM

Finally found this. Will get this up ASAP

From: Brenner, Eliot
Sent: Thursday, March 17, 2011 6:31 PM
To: Harrington, Holly
Subject: FW: Transcript - NRC - Jaczko

Please post tomorrow, and do a short blog post from me...perhaps pegged off the POTUS comment.

Thanks.

eliot

From: Brenner, Eliot
Sent: Thursday, March 17, 2011 5:38 PM
To: Batkin, Joshua; Schmidt, Rebecca; Powell, Amy; Loyd, Susan
Subject: FW: Transcript - NRC - Jaczko

Transcript from yesterday on the house side.

From: Jordan White [mailto:Jordan.White@fednews.com]
Sent: Thursday, March 17, 2011 3:03 PM
To: Shannon, Valerie; Brenner, Eliot
Subject: Transcript - NRC - Jaczko

Hi Valerie,

Please find attached the transcript of the Jaczko panel. If you have any difficulties with the attachment or any further questions, do not hesitate to contact us. We look forward to hearing from you.

With no objections, this will also appear on our newswire.

Thanks!

Jordan D. White,
Director, Transcription Services,
Federal News Service
202-216-2707
1000 Vermont Ave., NW, Ste. 500
Washington, D.C., 20005
http://www.fednews.com

RRRR-108

From: Couret, Ivonne
To: Harrington, Holly
Subject: RE: Received follow up call from TV1
Date: Friday, March 18, 2011 12:10:17 PM

Took care of it...

Ivonne L. Couret
Public Affairs Officer
Office of Public Affairs
Media Desk
opa.resource@nrc.gov
301-415-8200

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http://www.nrc.gov/reading-rm/photo-gallery/

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

From: Harrington, Holly
Sent: Friday, March 18, 2011 12:07 PM
To: Couret, Ivonne
Subject: FW: Received follow up call from TV1

From: Bubar, Patrice
Sent: Friday, March 18, 2011 11:31 AM
To: Harrington, Holly; Hayden, Elizabeth; Brenner, Eliot
Subject: Received follow up call from TV1

Hello folks.

I may have transferred this information to you but our office received a call from Roland Martin – TV1 – asking for an interview. Their offices are somewhere in DC.

The person who called is Jackie Clark 202-742-4492.

They called again this morning so we referred them back to you.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

RRRR-109

From: McIntyre, David
To: Harrington, Holly
Subject: RE: FEMA EPZ Fact Sheet
Date: Friday, March 18, 2011 10:56:38 AM

NSIR apparently vetted it, according to the FEMA liaison, and is ok to distribute or post.

From: Harrington, Holly
Sent: Friday, March 18, 2011 10:23 AM
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet

If NsIR people like it, should we post? Or use as talking points?

From: McIntyre, David
Sent: Friday, March 18, 2011 10:22 AM
To: Harrington, Holly; Widomski, Michael; Brenner, Eliot; Burnell, Scott; Sheehan, Neil; Screnci, Diane; Couret, Ivonne; Hayden, Elizabeth
Subject: FW: FEMA EPZ Fact Sheet

Those nice Public Affairs folks over at FEMA (I've heard good things about them!) have prepared the attached fact sheet on EPZs.

From: OST05 Hoc
Sent: Friday, March 18, 2011 10:20 AM
To: McIntyre, David; Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; Maier, Bill; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena; Collins, Elmo; Dean, Bill; Heck, Jared; McCree, Victor; Pederson, Cynthia; Satorius, Mark; Easson, Stuart; Flannery, Cindy; LIA04 Hoc; Lukes, Kim; Maupin, Cardelia; Noonan, Amanda; OST05 Hoc; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtil, Richard; Virgilio, Rosetta
Subject: FEMA EPZ Fact Sheet

FYI –

Attached is a FEMA-generated fact sheet on EPZs that can be used for immediate use.

Kim Lukes
State Liaison – Liaison Team
Incident Response Center

RRRR-110

From: Harrington, Holly
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet
Date: Friday, March 18, 2011 12:11:00 PM

Aarrggh. He's running around with his head cut off. I'll try to track him down. Last I saw was his response to you with changes? Can you send me the final version you'd like to run?

How are things in the op center?
Things are still nuts here

From: McIntyre, David
Sent: Friday, March 18, 2011 12:10 PM
To: Harrington, Holly
Subject: RE: FEMA EPZ Fact Sheet

It was your suggestion, you raised it first ....

And yes, I sent it back to him.

From: Harrington, Holly
Sent: Friday, March 18, 2011 12:08 PM
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet

See the question mark!!!!???

Hey are you done with the blog post for Eliot?

From: McIntyre, David
Sent: Friday, March 18, 2011 12:00 PM
To: Harrington, Holly
Subject: RE: FEMA EPZ Fact Sheet

Was too!

From: Harrington, Holly
Sent: Friday, March 18, 2011 10:23 AM
To: McIntyre, David
Subject: RE: FEMA EPZ Fact Sheet

If NsIR people like it, should we post? Or use as talking points?

From: McIntyre, David
Sent: Friday, March 18, 2011 10:22 AM
To: Harrington, Holly; Widomski, Michael; Brenner, Eliot; Burnell, Scott; Sheehan, Neil; Screnci, Diane; Couret, Ivonne; Hayden, Elizabeth
Subject: FW: FEMA EPZ Fact Sheet

Those nice Public Affairs folks over at FEMA (I've heard good things about them!) have

prepared the attached fact sheet on EPZs.

From: OST05 Hoc
Sent: Friday, March 18, 2011 10:20 AM
To: McIntyre, David; Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; Maier, Bill; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena; Collins, Elmo; Dean, Bill; Heck, Jared; McCree, Victor; Pederson, Cynthia; Satorius, Mark; Easson, Stuart; Flannery, Cindy; LIA04 Hoc; Lukes, Kim; Maupin, Cardelia; Noonan, Amanda; OST05 Hoc; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtil, Richard; Virgilio, Rosetta
Subject: FEMA EPZ Fact Sheet

FYI –

Attached is a FEMA-generated fact sheet on EPZs that can be used for immediate use.

Kim Lukes
State Liaison – Liaison Team
Incident Response Center

From: Virgilio, Rosetta
To: Deegan, George; Wittick, Susan; Harrington, Holly
Cc: Piccone, Josephine; Jackson, Deborah; Turtil, Richard
Subject: RE: Q&A for MONDAY"S COMM BRIEF
Date: Friday, March 18, 2011 12:13:19 PM

I agree – I don't believe we should include this discussion in a public forum

And one clarification, which may have been overlooked in an earlier communication: Holly has been sitting in on DHS calls with States (participants seemed primarily from Depts of Public Health) and invited me to two of those calls (Joe Anderson, NSIR sat in on one, that I am aware of). Also, Rich Turtil sat in, as observer, on last nights White House call with Western Govs and Territories.

From: Deegan, George
Sent: Friday, March 18, 2011 11:29 AM
To: Wittick, Susan; Harrington, Holly
Cc: Virgilio, Rosetta; Piccone, Josephine; Jackson, Deborah
Subject: RE: Q&A for MONDAY'S COMM BRIEF

Holly-

I've been outside this process, so I have no direct knowledge, but I suspect you are right and that the communication challenges are multi-layered. However, it appears that the opposite may also be true (that other agencies are feeling the need to fill a void and communicate in areas where NRC should be weighing in. I base this on what Rosetta Virgilio sent me last night. In her email she indicated that "*States also noted that other Feds (DHS, FEMA, CDC) were holding calls with States without NRC participation. States felt the calls would have benefited from NRC participation*". She got this from an email from Julia Schmitt (Nebraska) to Charlie Miller. Based on this, and based on your observations below, which seems 180 degrees different, I'd suggest we not include either of these additional pieces, but I will defer to you all as the liaison and communication experts for the final word. That's what we were intending with oru last key message "a desire for one voice in the Federal message on these topics"

From: Wittick, Susan
Sent: Friday, March 18, 2011 11:17 AM
To: Deegan, George
Cc: Harrington, Holly
Subject: FW: Q&A for MONDAY'S COMM BRIEF

George,
Please see comments below.
Susan

From: Harrington, Holly
Sent: Friday, March 18, 2011 11:08 AM
To: Wittick, Susan
Subject: RE: Q&A for MONDAY'S COMM BRIEF

This is fine, as far as it goes. It does not talk about the challenge of other agencies not being

RRRR-112

forthcoming with information and forcing states to look for us for information that is not in our mission or area of responsibility, such as plume mapping, ocean currents and health questions. This appears to be changing, however, with DOE, HHS and EPA working together to provide such information.

From: Wittick, Susan
Sent: Friday, March 18, 2011 10:26 AM
To: Harrington, Holly
Subject: FW: Q&A for MONDAY'S COMM BRIEF

Holly, can you review and approve for OPA?
Thanks,
Susan

From: Deegan, George
Sent: Friday, March 18, 2011 9:28 AM
To: Wittick, Susan
Cc: Piccone, Josephine; Jackson, Deborah; Rivera, Alison; Virgilio, Rosetta; Turtil, Richard; Noonan, Amanda; Miller, Charles; Moore, Scott; Camper, Larry
Subject: Q&A for MONDAY'S COMM BRIEF

Susan-

Our staff has provided me the attached information that we thought could be provided as a question/answer in support of Monday's Commission briefing. Since it relates to communications with the States, I wanted to make sure OPA was comfortable with it before I provide it to Allen Howe and his team. I added an item in the third paragraph --- emergency planning zones---but otherwise this is the same as what I sent you at 8:42 a.m.. If you'd like to make changes, please send them to me and I'll coordinate within FSME. Thanks.

David Decker

From: LIA07 Hoc
Sent: Sunday, March 13, 2011 10:45 PM
To: LIA07 Hoc; Al Coons; Andersen, James; Anderson, Joseph; Barker, Allan; Batkin, Joshua; Bill King; Bill King 2; Brenner, Eliot; Bubar, Patrice; Castleman, Patrick; Charles Donnell; Coggins, Angela; Collins, Elmo; Conrad Burnside; D Feighert; D Hammons; Dean, Bill; Decker, David; DIA; DIA2; Dorman, Dan; DOT; Droggitis, Spiros; DTRA; Dudek; EOP; EPA; EPA2; Franovich, Mike; Hahn, Matthew; Haney, Catherine; Harrington, Holly; Harry Sherwood; HHS; Hipschman, Thomas; HOO Hoc; Howell, Linda; J H-L; Jaczko, Gregory; Jim Kish; Johanna Berkey; Johnson, Michael; Kahler, Robert; L Hammond; Leeds, Eric; Logaras, Harral; Loyd, Susan; Maier, Bill; Marshall, Michael; McCree, Victor; McDermott, Brian; McNamara, Nancy; Michelle Ralston; Miller, Charles; Miller, Chris; Monninger, John; Nan Calhoun; Navy; Nieh, Ho; NOC; Orders, William; Pace, Patti; Pearson, Laura; Peter Lyons; R McCabe; R Thomson; S Horwitz; Satorius, Mark; Schmidt, Rebecca; Seamus O'Boyle; Sharkey, Jeffry; Sheron, Brian; Snodderly, Michael; Sosa, Belkys; Steve Colman; Thomas Zerr; Tifft, Doug; Timothy Greten; Trapp, James; Trojanowski, Robert; Vanessa Quinn; W Webb; Warren, Roberta; Wiggins, Jim; Williams, Kevin; Wittick, Brian; Woodruff, Gena; Schmidt, Rebecca; Powell, Amy; Loyd, Susan; Coggins, Angela; Batkin, Joshua; taskforce-1 @state.gov
Cc: LIA09 Hoc
Subject: RE: 2230 EDT (March 13, 2011) USNRC Earthquake/Tsunami SitRep
Attachments: USNRC Earthquake-Tsunami Update.031311.2230EDT.docx

Attached, please find a 2230 EDT situation report from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami on March 13, 2011. This Update includes information on the status of Fukushima Daiichi, Unit 3.
~~Please note that this information is "Official Use Only" and is only being shared within the federal family.~~
Please call the Headquarters Operations Officer at 301-816-5100 with questions.
-Jim

Jim Anderson
Office of Nuclear Security and Incident Response
US Nuclear Regulatory Commission
james.anderson@nrc.gov
LIA07.HOC@nrc.gov (Operations Center)

RRR-113

From: McIntyre, David
To: Brenner, Eliot; Harrington, Holly
Cc: Burnell, Scott
Subject: RE: MSNBC blog post -- ok to go
Date: Friday, March 18, 2011 1:56:37 PM

Which "nuclear regulators" are you referring to?

From: Brenner, Eliot
Sent: Friday, March 18, 2011 1:56 PM
To: Harrington, Holly
Cc: McIntyre, David; Burnell, Scott
Subject: MSNBC blog post -- ok to go

Check the last sentence in the next to last paragraph with Scott. Otherwise ready to go

Many news reports during this chaotic week have questioned the safety of U.S. nuclear power plants in the wake of the terrible events in Japan. These reports raise questions about the design of reactor containments and spent fuel pools, and of course whether our plants would be able to withstand an earthquake and tsunami like the ones that devastated Japan.

Nuclear power is a complicated, technical subject, and we naturally try to simplify it to make it understandable to the general public. Sometimes, however, simplification leads to misunderstanding, and misunderstanding causes fear.

One example was a so-called "investigative report" on MSNBC.com that ranked nuclear power plants according to their "vulnerability" to major earthquakes. The reporter concluded that the Indian Point plant, 24 miles north of New York City, was "the most vulnerable" in the nation. Instant headlines. You may have heard a local news report that your neighborhood nuclear plant ranked "on the NRC's Top Ten List" of the plants most likely to tumble in a temblor.

Let's be clear: The NRC does not rank nuclear power plants according to their vulnerability to earthquakes. This "ranking" was developed by the MSNBC.com reporter using partial information and we believe an even more partial understanding of how we evaluate plants for seismic risk. Each plant is evaluated individually according to the geology of its site, not by a "one-size-fits-all" model – therefore such rankings or comparisons are highly misleading.

We are also frequently asked whether Plant A can withstand a quake of magnitude X. The reporters always want a yes-or-no answer, but again, it's not that simple. Nuclear plants are designed to withstand a certain level of "ground shaking," to use a technical term. But the way the ground shakes in an earthquake is a factor of the magnitude and the distance from the epicenter, among other things. So we can't give a simple answer to such a simple question.

Each plant is built to the circumstances that exist at its location – including earthquakes, floods and

tsunamis. For example, at nuclear plants along the Atlantic and Gulf Coasts, the greatest water threat is hurricane storm surge, not a tsunami. Moreover, there is only one fault, near the northwest U.S. coast, that is similar to the fault in Japan, and there are no nuclear plants nearby. The closest coastal plant to that fault is well-protected against tsunami.

Over the last few years, the NRC has reassessed nuclear plants in the central and eastern United States for their vulnerability to earthquakes, using new seismic data developed by geologists. This study has shown that quakes may slightly exceed those the plants were designed to withstand, but not by much and not to the point there is any immediate concern on the part of nuclear regulators.

This is a complex issue that does not always lend itself to simple yes and no answers. Bottom line: the NRC does not rank plants on seismic risk. Plants in this country continue to operate safely and securely.

From:	McIntyre, David
To:	Harrington, Holly
Subject:	FW: MSNBC blog post-2.docx
Date:	Friday, March 18, 2011 12:40:25 PM
Attachments:	MSNBC blog post-2.docx

From: McIntyre, David
Sent: Friday, March 18, 2011 11:40 AM
To: Brenner, Eliot
Subject: MSNBC blog post-2.docx

For your review and then please send to Holly.

RRRR-N5

Many news reports during this chaotic week have questioned the safety of U.S. nuclear power plants in the wake of the terrible events in Japan. These reports raise issues such as design flaws in reactor containments and spent fuel pools, and of course whether our plants would be able to withstand an earthquake and tsunami like the ones that devastated Japan.

Nuclear power is a complicated, technical subject, and we naturally try to simplify it to make it understandable to the general public. Sometimes, however, simplification leads to misunderstanding, and misunderstanding causes fear.

One example was a so-called "investigative report" on MSNBC.com that ranked nuclear power plants according to their "vulnerability" to major earthquakes. The reporter concluded that the Indian Point plant, 24 miles north of New York City, was "the most vulnerable" in the nation. Instant headlines. You may have heard a local news report that your neighborhood nuclear plant ranked "on the NRC's Top Ten List" of the plants most likely to tumble in a temblor.

Let's be clear: The NRC does not rank nuclear power plants according to their vulnerability to earthquakes. This "ranking" was developed by the MSNBC.com reporter using partial information and we believe an even more partial understanding of how we evaluate plants for seismic risk. Each plant is evaluated individually according to the geology of its site, not by a "one-size-fits-all" model – therefore such rankings or comparisons are highly misleading.

We are also frequently asked whether Plant A can withstand a quake of magnitude X. The reporters always want a yes-or-no answer, but again, it's not that simple. Nuclear plants are designed to withstand a certain level of "ground shaking," to use a technical term. But the way the ground shakes in an earthquake is a factor of the magnitude and the distance from the epicenter. So we can't give a simple answer to such a simple question.

Each plant is built to the circumstances that exist at its location – including earthquakes, floods and tsunamis. For example, at nuclear plants along the Atlantic and Gulf Coasts, the greatest water threat is hurricane storm surge, not a tsunami. Moreover, there is only one fault, near the northwest U.S. coast, that is similar to thee fault in Japan, and there are no nuclear plants nearby. The closest coastal plant to that fault is well-protected against tsunami.

Over the last few years, the NRC has reassessed nuclear plants in the central and eastern United States for their vulnerability to earthquakes, using new seismic data developed by geologists. This study has shown that quakes may slightly exceed those the plants were designed to withstand, but not by much.

This is a complex issue that does not always lend itself to simple yes and no answers. Bottom line: the NRC does not rank plants on seismic risk.

From: Brenner, Eliot
To: Harrington, Holly
Subject: RE: another post, perhaps put this up first, followed by the seismic one?
Date: Friday, March 18, 2011 1:46:43 PM

Good.

From: Harrington, Holly
Sent: Friday, March 18, 2011 1:03 PM
To: Brenner, Eliot
Subject: another post, perhaps put this up first, followed by the seismic one?

Catching up on the NRC Blog

First, let me thank everyone who has been visiting this blog and leaving comments. We appreciate your interest. I apologize for the lack of a post on Thursday and the delay in getting comments posted.

Speaking of comments, we are not posting comments that are suggestions for how the Japanese authorities should be responding to their emergency. The NRC is not responsible for responding to that accident and it's not appropriate for us to serve as a forum for suggestions – both helpful and impractical.

You may have noticed that we are not replying to many of your comments. This is simply a factor of workload and staffing. We are doing the best we can to continue to communicate the NRC actions related to the Japanese emergency – and NRC actions related to the nuclear power plants in the U.S. To that end, Chairman Jaczko testified before Congress on Wednesday. A transcript is available here: http://www.nrc.gov/about-nrc/organization/commission/comm-gregory-jaczko/0317nrc-transcript-jaczko.pdf . A video is also posted here: http://www.energycommerce.house.gov/hearings/hearingdetail.aspx?NewsID=8329 .

Eliot Brenner
Public Affairs Director

RRRR-116

From:	Library Resource
To:	james.milichich@jfcom.mil
Cc:	Mendiola, Mary; McGowan, Anna; Harrington, Holly
Subject:	NRC information sources
Date:	Friday, March 18, 2011 1:29:46 PM
Attachments:	Information Resources for Japan.docx

Hello Jim,
Thank you for calling the NRC Technical Library.

Here is the list of web-based information resources that we have put together to help us respond to questions regarding the events in Japan. Though not exhaustive, I think there is a lot of useful information to be found. I am happy to share this list with a fellow Federal librarian.

Let us know if you have any questions.

Regards,
Beth

Beth Deahl
NRC Technical Library
library.resource@nrc.gov
301.415.6239

RRRR-117

List of Useful Sites regarding the current situation in Japan, used by the Public Document Room staff in response to questions from the public

NRC Web pages:

Biological Effects of Radiation Fact Sheet
http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/bio-effects-radiation.html

NRC Blog
http://public-blog.nrc-gateway.gov/

NRC Fact Sheets
http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/

NRC Information Digest
http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/

NRC Press Releases
http://www.nrc.gov/reading-rm/doc-collections/news/2011/

Other U.S. Government Sites:

Centers for Disease Control and Prevention - Emergency Preparedness and Response - Radiation
http://emergency.cdc.gov/radiation/

Environmental Protection Agency - Health Effects: Radiation Protection
http://www.epa.gov/radiation/understand/health_effects.html

FEMA (Federal Emergency Management Agency)
http://www.fema.gov

National Library of Medicine –

Disaster Information Management Research Center
http://disasterinfo.nlm.nih.gov/dimrc/japan2011.html

MedlinePlus
http://www.nlm.nih.gov/medlineplus/

Radiation Emergencies
http://www.nlm.nih.gov/medlineplus/radiationemergencies.html

Radiation Exposure
http://www.nlm.nih.gov/medlineplus/radiationexposure.html

National Weather Service – Air Quality
http://www.nws.noaa.gov/aq/

National Weather Service – Search on Radioactivity
http://search.usa.gov/search?v%3Aproject=firstgov&query=radioactivity&affiliate=nws.noaa.gov

USA.gov – "Disaster in Japan" is one of their rotating features on the main page.
http://www.usa.gov/index.shtml

USAID (United States Agency for International Development)
http://www.usaid.gov

U.S. Department of State
http://www.state.gov

White House
http://www.whitehouse.gov

Other Organizations:

International Atomic Energy Agency
http://www.iaea.org/press

Nuclear Energy Institute
http://www.nei.org

World Meteorological Organization
http://www.wmo.int/pages/mediacentre/news/index_en.html

Mary Mendiola
03/16/2011

From:	Deegan, George
To:	Howe, Allen; Williams, Kevin; Gratton, Christopher
Cc:	Harrington, Holly; Wittick, Susan; Piccone, Josephine; Jackson, Deborah; Rivera, Alison; Virgilio, Rosetta; Turtil, Richard; Miller, Charles; Moore, Scott; Camper, Larry; Andersen, James; Brock, Kathryn; Frazier, Alan
Subject:	Q&A ON COMMUNICATIONS FOR MONDAY"S COMMISSION BRIEFING
Date:	Friday, March 18, 2011 1:36:09 PM
Attachments:	japanq&a.docx

Allen, Kevin, Chris:

Here is the Q&A regarding communications that FSME has drafted. We have coordinated the attached with OPA. Please include in the Q&A book for Monday's briefing. This also ties in with the talking points I provided you earlier this morning.

Thanks.

RRRR-118

Q. How are we reaching out to the States and what are the associated challenges?

A. We are reaching out to the State primarily through the Regional State Liaison Officers and Regional State Agreements Officers. NRC had a teleconference with the Organization of Agreement States, the Conference of Radiation Control Program Directors, and all of the Agreement States last week to provide some status information.

The largest challenge with the States relates to the timeliness of the NRC's responses to their questions. Because we need to place an emphasis on clear, consistent, and accurate communications during an ongoing and quickly-changing crisis, and because of the international nature of this event, NRC has been cautious in the delivery of information. This has, in some cases, been frustrating to the States.

We have been able to provide some immediate information (e.g., we did say "at this time" it does not appear that harmful levels of radiation will reach any part of the United States including Alaska and Hawaii). However, the States want more details, with particular interest in issues such as potassium iodide, plume projections, radiation monitoring, dose modeling, and emergency planning zones.

The NRC's State Liaison team has received a request from the National Governors' Association Center for Best Practices, Environmental, Energy, and Transportation, to participate in a panel on March 21 or 22 to provide senior state officials (governor energy advisors) with an update on the event and to answer questions related to the event.

NRC has also been asked to provide a 10-15 minute presentation to the governors' senior energy advisors on April 4.

From:	Droggitis, Spiros
To:	Schmidt, Rebecca; Powell, Amy; Brenner, Eliot; Harrington, Holly; Burnell, Scott; McIntyre, David
Subject:	NRC Warning On Japan Nuclear Accident Raise Doubts On EPA Guidelines
Date:	Friday, March 18, 2011 10:32:22 AM
Attachments:	3-18-11 article--NRC warnings raise doubts about EPA guidelines.pdf

Interesting article from Inside EPA which we may be hearing more about. An EPA guy who I see on the bus in the morning sent it to me.

RRRR-93

From: RST06 Hoc
Sent: Sunday, April 10, 2011 4:26 AM
To: RST10 Hoc
Subject: Criterion to Establish Stable Conditions - NRC DRAFT 4_10_0300.docx
Attachments: Criterion to Establish Stable Conditions - NRC DRAFT 4_10_0300.docx

New comments on the first and last pages.

RRR/119

Simplified Plant Condition Stability Determination
For Discussion with Nuclear and Industrial Safety Agency (NISA)

Purpose: The purpose of this paper is to address the conditions (in containment, in reactors and spent fuel pools) that should be evaluated in determining when the Fukushima Daiichi units can be considered "stable"

Stakeholder: Site team; for use as talking points in discussions with NISA in support of alignment.

Approval: Reactor Safety Team (RST) Director

~~This paper is intended to help guide further assessments that will be performed of individual reactor units and spent fuel pools as part of developing future policy on protective measures.~~ Establishing actual stability criteria for the Fukushima Daiichi site is under the purview of the Japanese government. ~~Moreover, as it may not be possible to achieve all of these conditions in the foreseeable future for each reactor unit and spent fuel pool, case-basis assessment of the need to meet each of these conditions will be needed as part of establishing the actual criteria.~~ The purpose of this document is to facilitate discussion between the NRC site team and the Japanese Regulatory (NISA) on the types of issues that the Nuclear Regulatory Commission staff would consider in a similar situation when evaluating the stability of a site for purposes of post-accident protective measure recommendations.

In developing this paper, existing United States guidelines on determination of emergency conditions were reviewed. The boiling water reactor (BWR) generic severe accident management guidelines (SAMGs) indicate that the determination as to whether an emergency exists should include consideration of the nature of the event, equipment status, the effectiveness of the actions performed, the feasibility of returning to normal operations, and the possibility that conditions will degrade further. The determination is not dependent upon the status of entry conditions.

The following conditions may limit the potential for a major release or event. (Phase 1 – stable). While these conditions do not directly correspond to Emergency Action Level (EAL) classifications in the United States or International Nuclear Event Scale (INES) classifications through the International Atomic Energy Agency (IAEA), achieving these conditions could support downgrading of these classifications.

Goals:

Establish a reliable means to:

- Remove decay heat
- Preclude detonation in primary containment atmosphere
- Maintain reactors and spent fuel pools subcritical with fuel adequately cooled and shielded
- Minimize radioactive releases

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- Ensure adequate structural integrity for all units (e.g. containment and spent fuel pools)

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Factors – Phase 1 Stable

Principle: Plant conditions provide reasonable confidence that unanticipated conditions will not result in changes to the Protective Action Recommendations (PAR) (e.g., sheltering or evacuation) for a reasonable period of time.

Approach:

Establish:

1. Reactor Pressure Vessel (RPV) water level, reliably maintained, above top of the active fuel (TAF) or containment water levels covering the reactor pressure vessel (RPV) lower head.
2. Non-combustible in the primary containment atmosphere including consideration of a functional sample system.
3. Functional and reliable power source equipment for each of the systems being used.
4. Functional and reliable pumping equipment in-service to ensure adequate cooling
5. Functional and clean water source of sufficient capacity to ensure adequate core cooling and subcriticality. Boron used as necessary to control criticality with consideration of pH and boron solubility limitations.
6. Reliable means to determine key parameters associated with actual or potential large releases (e.g., Area Radiation, gaseous and liquid release detectors, RPV/DW level, RPV/DW pressure, etc.)
7. The means for containment of significant external leakage (e.g. primary containment leakage) for portions of the plant (SFPs or Reactor units) with credible potential for energetic releases of significant quantities of radioactive material.
8. The ability to routinely and safely fill and measure SFP level and temperature.
9. Reasonable expectation of adequate SFP structural integrity
10. When considering activities in close proximity to the site, measures to minimize further spread of contamination (e.g., covers or resin spray over significant sources of loose contamination at the plant)

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Factors – Phase 2 Stable

Principle: Bring all the Fukushima Daiichi Units to cold shutdown (i.e. subcritical, RPV water temperature less than 100 degrees Celsius), establish long term containment and establish long term reliable spent fuel cooling.

Approach

Establish:

1. All equipment and systems deployed for long term plant stability can withstand external events such as a seismic event and a tsunami.
2. Long term core cooling (pumps and heat exchangers in-service) with robust pumping system installation to ensure reliable service.
3. The ability to maintain water level in RPV and drywell to top of active fuel, redundant power sources, and pumping equipment for RPV injection
4. A monitored filtered vent path from the drywell
5. Reliable instrumentation and means to monitor reactor cooling and site radiation levels.
6. A secondary containment to contain contamination and provide for a monitored filtered vent path
7. Removal of salt from cores and SFPs (minimizes long term corrosion and impedance to cooling)
8. Long term SFP management; water level, sub-criticality, temperature/cooling, and fuel coverage to reduce/ maintain radiation dose to within a reasonable range
9. Temporary roof/cover for SFP when external spray cooling is not needed
10. Known and monitored liquid release pathways

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