Subject:	Agenda and documents for the 2000hrs Consortium Call
Start: End:	Thu 4/7/2011 8:00 PM Thu 4/7/2011 9:00 PM
Recurrence:	(none)
Meeting Status:	Accepted
Organizer: Required Attendees:	LIA01 Hoc Al Hochevar; Alice Caponiti; (b)(6) Blamey, Alan (Alan.Blamey@nrc.gov); Blount, Tom (Tom.Blount@nrc.gov); Bruce Boger; Casto, Chuck (Chuck.Casto@nrc.gov); Christensen, Harold (Harold.Christensen@nrc.gov); Craig Gaddis; DORLCAL Resource (DORLCAL.Resource@nrc.gov); Dorman, Dan (Dan.Dorman@nrc.gov); DprNrrCal Resource (DprNrrCal.Resource@nrc.gov); Emche, Danielle (Danielle.Emche@nrc.gov); ET05 Hoc (ET05.Hoc@nrc.gov); ET07 Hoc (ET07.Hoc@nrc.gov); FOIA Response; Giitter, Joseph (Joseph.Giitter@nrc.gov); Glenn Southern; HOO Hoc (HOO.Hoc@nrc.gov); INPO; INPO; INPO; INPO; INPO; INPO; INPO; (b)(6) Jay Tilden (b)(6) (b)(6) Lee A Gard, (INPO); LIA01 Hoc (LIA01.Hoc@nrc.gov); LIA06 Hoc (LIA06.Hoc@nrc.gov); McDermott, Brian (Brian.McDermott@nrc.gov); McGinty, Tim (Tim.McGinty@nrc.gov); McIerr, Chris (Chris.Miller@nrc.gov); MoGinty, Tim (Tim.McGinty@nrc.gov); Moller, Chris (Chris.Miller@nrc.gov); NRC Liaison at USAID; OST02 HOC (OST02.HOC@nrc.gov); PACOM Watch Officer, Pentagon Japan Crisis Team J-4 Desk; Peter Lyons; PMT12; (b)(6) Rick Nielsen; Robert Gambone; Robert Mercer; Ron Cherry, DOE-Japan Embassy; Ross-Lee, MaryJane (MaryJane.Ross-Le@@nrc.gov); SaT01 Hoc (RST01.Hoc@nrc.gov); RST01B Hoc (RST01B.Hoc@nrc.gov); Sal Golub; Sal Golub; Samuel Young; Steve Aoki; Tom Vavoso; (b)(6) Virgilio, Martin (Martin.Virgilio@nrc.gov); Weber, Michael (Michael.Weber@nrc.gov); Wiggins, Jim (Jim.Wiggins@nrc.gov); William Webster; Zimmerman, Roy (Roy.Zimmerman@nrc.gov)

Attached please find the documents for today's Consortium call at 2000hrs. Thanks

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3/20

Agenda for Daily Industry Consortium Teleconference Meeting April 7, 2011 2000 hrs EDT 800-772-3842 (Passcode: (b)(6)

Purpose of the Meeting:	Alignment of US Government and Nuclear Industry support for
	Japan in responding to the Fukushima Nuclear Event.
From a start Orate and a	Deinferen rales and responsibilities: identify problems and enon

 Expected Outcome:
 Reinforce roles and responsibilities; identify problems and open issues surrounding our support

Meeting Chair: US NRC

Roll Call

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- Continued discussion of organizational Issues / Roles and Responsibilities
 - o US Agency Roles and Leads
 - o Industry Support Structure and Roles
- Review Current Action Items Spreadsheet
- New Actions

Consortium Call - 4/6/11 20:00

Attendees:

- NRC Headquarters Operations Officer
- Roy Zimmerman, NRC ET Director
- Joe Gitter, NRC EST Director & Response Advisor
- Mark Lombard, NRC LT Director
- Milt Murray, NRC LT Coordinator
- Alan Blamey, NRC Japan Team
- Gary Waldrup, INPO
- Rick M. Nielsen, INPO
- Alice Caponiti, DOE
- Jay Tilden, DOE/NNSA
- Glenn Southern, NR
- Sam Keith, CDC
- LT International Liaison
- LT Federal Liaison

Organizational Issues/Roles & Responsibilities

- U.S. Agency Roles and Leads –Understanding is that work continues towards identifying another Federal lead other than NRC. In interim, NRC continues to lead.
- U.S. Industry Support Structure and Roles No update. Per Deputies meeting DOE has technical lead for support matrix.

Current Action Items and Material Request List (i.e., Matrix)

• Matrix updated based on input received during call and in follow-up emails. For latest status of action items, please review attached Matrix.

New Action - None identified.

Other

- South Texas instrumentation will not ship due to internal contamination.
- NRC HQ is working with the Embassy Team to merge the daily call spreadsheet with embassy sheet.
- Long term result is to move this function to the embassy.
- Try to finalize the process .
- ** Next meeting planned for 4/7/2011 @ 20:00

Embassy #	Item#	Action Item Description	Coordinating Agency	Current Status and Expected timing	Status
2.B	1	Provide radiation monitors, survey meters, friskers requested by GoJ (Mr. Hosono) (radiacs) and TepCo Keisuke Takenaka - hand and foot monitors- Two locations	NRC Team working with USAID; INPO, Rick Nielsen	San Onofre equipment has been shipped (4.6.11). Send to 11601- 13, NIshi-jyusanbugyo, Hitachinaka-City,Ibaraki, 311-1206, Japan, phone +81-29-264-2681. Bruce to send 20 hand/foot friskers (850 lb per) to Contact is Keisuki Takanaka 竹中 圭介 [takenaka.keisuke@tepc o.co.jp] to ship to the Narita Airport.	Open
4	19	Use of the germanium semiconductor detectors (for measuring the extent to which water and foods are exposed to radiation)	DOE (Sal)		Open
2.A	20 & 22	Use of radiation monitoring devices on the ground (stationary type)	DOE-NNSA and	DOE Ground monitoring activities continue, including joint activities with DoD,	Open

5	21	Use of robotic devices (for monitoring)	DOE/DOD	Talon equipment shipped 4.5.11 and should arrive in country 4.08.11	Open
27	28	Use of extinguishant / coolant (Nitrogen?)	NRC	Still awaiting clarification	Open

23	30	Concept study for retrieving, treating, and storing/disposing of turbine building water.	DOE and DOD, DOE-NE pocs S Golub, Monica Regalbuto; DoD Admiral Gregory	DOE-NE is developing an options paper for contaminated water management for consideration by GoJ. DOE (Golub) will contact DoD (Adm. Gregory to coordinate efforts).	Open
23	31	Temporary holding tanks and tanker trucks as a temporary holding area (for removing contaminated water)	DOE-NE pocs S Golub, Monica Regalbuto	Ifive stainless steel storage tanks and one trailer with a heavily shielded tank have been identifdied for shipment. Transpotation is being coordinated by DOE- NNSA.	Open

33	33	Japan asked for NRC expertise on temporary shielding options, to determine whether the NPP Plant buildings are strong enough to hold up under additional pressure	NRC .		Open
13/14	34	Request for the following: 2100 units – Rad Survey Meters 2500 units – Personal Dosimeters (13 embassy) 5100 units – iodine shielding masks (14 embassy)	INPO (Neilson) DOE DOE, INPO. Rick Nielsen to provide source/cost information for US acquisition.	High priority. Extensive list of materials were provided by INPO to GoJ shortly after tsunami; this list is being refined to clarify lead times.	Open
		10 Tri-nuc combination filters and demin limits requested by TEPCO through AI Hochevar (10/7)	INPO (Neilson) DOE, Neilson to provid source/cost information for US acquitision (4/2)	Tri-nuc has only two in stock	Open
5	21.A	Use of robotic devices (for rubble removal)	DOE; DOD;DOE poc S Golub, DOE-NE, J Tilden, DOE- NNSA		Open

?	2	Information on sources for Gamma Cameras	INPO	No further action; material provided to GoJ.	CLOSED
10	3	Provide Hydraulic (water) Hoses (300-500 meters)	INPO	Request has been canceled by Govt of Japan	CLOSED
104	4	Provide sources and specifications on Anti C's, respirators, materials.	INPO	Due Date: 3/29/11. Supply chain: Materials sourced; to be obtained commercially. Information sent to GoJ through Al Hochevar	CLOSED
106	6	List Tools/methods for moving damaged fuel, plus contacts of those with experience at TMI-2 and Chernobyl.	INPO	Options provided to GoJ through AI Hochevar on 3/30.	CLOSED
107	7	Provide strategies for shielding for individual rooms and for the facility in general. List companies that can fabricate and install such shielding.	INPO	options for shielding provided along with photographs of installations and companies	CLOSED
108	8	Obtain contact information for industry personnel with experience in handling and disposal of open pools/trenches of high dose rate (>100 R/hr) water. Rcvd Mar 29 from Al Hochevar from Mr. Hosono	INPO	Contacts developed and provided to GoJ through Al Hochevar 3/31/11	CLOSED
109	9	Assist Westinghouse working on the UAV request and coordinating with Texas A & M expert	INPO	No further INPO action; Westinghouse addressing fully.	CLOSED

110	10	INPO propose revision 1 to RST Assessment Document. (SAMG Technical Document)	INPO	Proposal provided to NRC. guidance has been sent to INPO contact in Japan and is being updated (Rev 1) and will be discussed at 1100 hrs call today; will include injection rate- plan and best assessment to plant conditions;	CLOSED
111	11	GEH is following up on the Nitrogen purge issue. (same as item 13; suggest deleting item 10)	INPO		CLOSED
28	13	There has been a request from GoJ directly to Pacific Northwest Labs for technical assistance with water decontamination and storage issues (this request is not being coordinated through the NRC. For further information please contact the PNNL Point of Contacts)	DOE/PNNL	PNNL Reps Onishi and Reid have arrived in Japan and are actively engaged with GOJ counterparts	CLOSED
118	15	Requests for military air transport - General Guidance for Logistics Assistance - Not an actual action item.	J4/PACOM	PACOM is involved in the review and approval of all requests for military airlift to Japan. Requests should include weight and dimensions of the cargo	CLOSED

1	16	Conduct of aerial survey (for AMS measurements) (sharing of the data and its analysis)	Golub DOE-NE	AMS flights continue on daily basis in Japan, weather permitting. New model will be developed for Ambassador due 6Apr. Need source term from NRC-PMT and then NARAC will run model. Will need USG clearance before release to GOJ.	CLOSED
8	23	Use of unmanned helicopter (K-MAX)	J4 ??		CLOSED
7	22	Use of the data (image, level of radiation) obtained by UAVs	DOE and NRC (A .Blamey) to identify the issue and what the minimum need will be to meet this request. DOE; DOD	This item is unclear and should be revised to be actionable, or deleted.	CLOSED
12	26	Protective body shielding	??	requested by MISA and MOD	CLOSED

18	27	Use of iodine preparation (iodide of potash) (quantity specification to be discussed later with due consideration of US offer of 1 million bottles)	R. Neilson; USAID??		CLOSED
19	29	Plastic bottles of drinkable water for the infant / baby use	USÁID??	USAID to track	CLOSED
9	24	Fresh water supply pumps from Bechtel. (Note that this is no longer an INPO action. Bechtel's role was to furnish engineering and source the equipment for movement in Australia. US shipped the equipment, MOD to assemble.)	DOD	First train in Japan	Closed
23	32	Investigate whether there is a technology that would absorb contaminated materials from water (for removing contaminated water)	DOE; DOE-NE pocs S Golub, Monica Regalbuto	Is being coordinated thru Item #30. GOJ reps have expressed interest in treatment equipment located at SRS. Regalbuto team is looking at how to facilitate delivery.	Closed per DOE request part of item 30
3	18	Conduct of the simulation by the radiation diffusion model (comparison with the SPEEDI simulation by the Japan side)	DOE & NRC PMT	DOE and Japan are sharing data for model comparison runs.	Closed 4.6.11

Comments	Original Requesting Agency	Target Date	Date Needed	Lead Time	Cost of Items	Costs for Shipping	Weight & Dimensions
Songs shipped requested material. STP shipped 1 of 2 next action is for Tepco to indicate if they can accept radioactive material for second shipment. Bruce is currently checking out their equipment before sending, they will send 2 -4 by air and the balance by sea action is with Bruce (Kimberly Smith) to ship.	GoJ, Mr. Hosono	ASAP	Not specified	N/A	Donated	STP-\$4k; SONGS- \$1.5k; Bruce- \$10kUtilities to pay cost of shipping	
DOE delivered 2 detectors on 4/05/11. 2-4 more detectors will ship the same week.							
Stationary monitoring is the open item. This was a GoJ request and the idea is to possibly install a system such as the EPA Radnet system. DOE Ground monitoring equipment is in country, but awaiting additional guidance from GOJ regarding deployment.							

DOE is handling Ground robotics and	NISA/TEPCO	 <u> </u>			
hardened cameras only. DOE shipped					
on 4/5 and it is expected to be in					
country on Friday, April 8 2011. DOE					
awaiting GOJ request for technical					
experts.					
experts.					
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A. Blamey to Verify with GOJ what is					
exactly needed in this request					

DOE SRS is providing six stainless steel ~16,000 gallon storage tanks and one ~1000 gallon high activity trailer, all of which can support water characterization and process development efforts. Further, a specialized pump from Hanford was also offered. Transportation, likely commercial, for this equipment is being arranged with no arrival date yet established. Request from GoJ based on capabilities identified in initial white paper from item 30.	SA/TEPCO		

NRC has completed a gross analysis and does not have sufficient information to perform a detailed analysis for shielding. From Cabinet Office Crisis Management Team Meeting notes, 3/28/11 A. Blamey to discuss further with Japan							
	Unclear source; high priority assigned by consortium.	Complete list 4/7/11	N/A	N/A	N/A	N/A	N/A
Suppy chain to locate.TEPCO commmittd to purchase and ship. Determine how this will work.							
GOJ retracted their request for automated heavy equipment, but continues to have interest in advice and support for shielding of both robotic (small) and heavy equipment in radiation environments.						·	

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	GoJ, Mr.					
	Hosono					
	GoJ, Mr.					
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GoJ to establish need. Communicated						
to them that they are payers by	GoJ, Mr.					
Hochevar.	Hosono				-	
	GoJ, Mr.					
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	GoJ, Mr.					
	Hosono				2	
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	Dr. Murphy is in					
	Japan assisting					
	Westinghouse.					

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	RST		 		
Tom Michener PNNL – DOE Laboratories in WA				-	
509-375-2162					
Wayne Johnson, Division Director					
PNNL – DOE Laboratories in WA 509-372-4791					
1.Preferredchoice should be					
commercial carrier for timely delivery;					
should limit requests to materiel that is difficult for commercial carriers to					
deliver. 2. GOJ will need to submit a					
formal request for use of military air for					
shipments through Embassy to DOD.		-			

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NRC's PMT provided this info to the					
white house (NITOPS). The feedback					
was that NITOPS won't task NARAC to					
run analysis until approval is received					
from the White House					
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PACOM indicated no longer needed					
and taken off the table.					
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Follow up action with langer landlad					
Follow up action with Japan. Handled					
separately from Ground robotics and					
hardened cameras NISA will hold a					
meeting to discuss and determine					
needs for vauge items on the lists.	 	l		 	
Information provided on body shielding.					
The NRC is currently not procuring any					
body shielding. Alan Blamey will work					
with Japanese embassy officials to re-					
validate the need for this asset					

Industry had tablets available, but HHS had liquid tablets that they were to provide. A. Blamey to verify with GOJ. May be caught up in logistics. Coming from USAID and CDC				
On the Embassy list for tracking				
There is one train that is installed. There is no need for further trains. DOD has the appropriate guidance. Alan Blamey will work with Japanese embassy officials to re-validate the need for this asset R Neilson says that second train is in Australia. A. Blamey to determine from Embassy if still needed and to share with R. Neilson so that Bechtel and can be advised				
Secretary Chu reportedly told this to the Japanese. The Toshiba Team has developed draft plans for water treatment with a focus on fission product removal and minimization of solids waste processing.				
Comparions of radiation diffusion models are ongoing between DOE and GOJ				

Subject:	Agenda for Industry Consortium Daily Call (NOTE TIME CHANGE to 2000 HRS DAILY)
Location:	Ops Center
Start:	Mon 4/18/2011 8:00 PM
End:	Mon 4/18/2011 9:00 PM
Recurrence:	Weekly
Recurrence Pattern:	every Monday and Wednesday from 8:00 PM to 9:00 PM
Meeting Status:	Accepted
Organizer: Required Attendees:	LIA01 Hoc LIA01 Hoc; 'Aoki Steven'; Blamey, Alan; Blount, Tom; Boger, Bruce; Casto, Chuck; Dorman, Dan; ET05 Hoc; ET07 Hoc; FOIA Response.hoc Resource; Giitter, Joseph; 'Golub Sal'; 'Golub Sal'; 'Good Charles'; 'Hochevar Al'; HOO Hoc; 'INPO'; LIA06 Hoc; LIA08 Hoc; LIA11 Hoc; 'Lyons Peter'; McDermott, Brian; McGinty, Tim; Miller, Chris; Monninger, John; Morris, Scott; 'NRC Liaison functional account at USAID'; OST02 HOC; 'Pentagon Japan Crisis Team J-4 Desk'; Hoc, PMT12; Ross-Lee, MaryJane; RST01 Hoc; RST01B Hoc; 'Vavoso Tom'; Virgilio, Martin; Weber, Michael; 'Webster William'; Wiggins, Jim; Zimmerman, Roy
Optional Attendees:	'Hochevar, Albert R. (INPO)'; Tschiltz, Michael; DprNrrCal Resource; Temple, Jeffrey; DORLCAL Resource; Nielsen, Rick M (INPO); Maddox, James E. (INPO); Fadel, Daniel P; keith.moser@exeloncorp.com

When: Occurs every Monday and Wednesday effective 4/18/2011 until 5/8/2011 from 8:00 PM to 9:00 PM (GMT-05:00) Eastern Time (US & Canada). Where: Ops Center

Note: The GMT offset above does not reflect daylight saving time adjustments.

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The Industry Consortium Daily Calls have been rescheduled for 2000 hrs EDT.

The attached Agenda will be updated periodically.

The call in number is: 800-772-3842 (Passcode: (b)(6)

P17/21

Agenda for Daily Industry Consortium Teleconference Meeting March 30, 2011 2000 hrs EDT 800-772-3842 (Passcode: (b)(6)

Purpose of the Meeting:	Alignment of US Government and US Nuclear Industry support for
	Japan in responding to the Fukushima Nuclear Event.

Expected Outcome: Reinforce roles and responsibilities; identify problems and open issues surrounding our support

Meeting Chair: US NRC

- Roll Call
- Continued discussion of organizational Issues / Roles and Responsibilities
 - o US Agency Roles and Leads
 - o US Industry Support Structure and Roles
- INPO report on status of material requests
- INPO team report status of on-going work on requests for technical support
- Review Current Action Items Spreadsheet
- New Actions

From: Sent: To: Subject: Dudek, Michael Friday, March 11, 2011 6:15 PM Villoch, Deborah (OGA) Deputies Meeting??

Any feedback from the Deputies Meeting?

From: Villoch, Deborah (OGA) [Deborah.Villoch@associates.dhs.gov]
Sent: Friday, March 11, 2011 5:28 PM
To: Dudek, Michael
Subject: FW: IP iDUB- Earthquake-Tsunami-Japan- 11March 2011 (1700 hrs)

One more time----here it is---

R/

Deb Villoch

FOR OFFICIAL USE ONLY

Incident Daily Update Brief

Earthquake-Tsunami - Japan

Current Situation

The Government of Japan declared a nuclear emergency regarding the nuclear power plant in Fukushima. The NOAA Tsunami Warning Center reports the Tsunami Warning has been downgraded to a Tsunami Advisory for the entire state of Hawaii. A Tsunami Warning continues for coastal areas of California and Oregon from Point Concepcion, California, to the Oregon-Washington border and coastal areas of Alaska from Amchitka Pass (125 miles west of Adak) to Attu. A Tsunami Advisory continues for coastal areas of California from the California-Mexico Border to Point Concepcion, California, and coastal areas of Washington - British Columbia and Alaska from the Oregon-Washington Border to Amchitka Pass, Alaska. The Tsunami Warnings for Russia, Yap, Marshall Islands, Midway Island, and Johnston Island have been discontinued.

The Hawaii Energy Council reports their two refineries have returned to normal operations. National Communications System industry partners report minimal damage to networks within Japan. The Transportation Security Administration (TSA) reports the Honolulu International Airport and other airports in Hawaii have resumed normal operations. Sections of Highway 1 in California remain closed, as well as beaches and impacted harbors.

Activations

- The DHS National Operations Center remains at Phase 1 Awareness for this event.
- The NOC CAT activated at 0830 (IP personnel reported as of 0730)
- DHS Infrastructure Protection (IP) has upgraded to Phase 3-URGENT and the IP Incident Management Cell is currently surged for this event.
- The Federal Emergency Management Agency (FEMA) Regions IX and X remain at Level I, Full Activation.
- Region IX has been in contact with Saipan, Guam, and Hawaii, and their respective Emergency Operating Centers (EOC) have all been activated.

- FEMA has assigned a liaison to the Hawaii EOC.
- The National Response Coordinating Center is activated at Level I, Full Activation, with all Emergency Support Functions activated.
- All Incident Management Assistance Teams are on alert. The Washington State EOC will open and assign additional personnel in response to the Tsunami Warning.
- Alaska, Oregon, and Washington State Emergency Operation Centers (SEOC) have been activated.
- California has partially activated their EOC and closed beaches and harbors for potential tsunami impact.
- Hawaii County EOC activations: Kauai, Oahu, Maui, and Hawaii.

Background

The US Geological Survey (USGS) reported an 8.9 M earthquake has occurred off the eastern coast of Honshu, Japan. Tsunami watches and warnings were issued for the Pacific region including the west coast of the US. Smaller aftershocks continue throughout the region. Cellular networks in Japan are working intermittently. There are conflicting reports about whether public transportation continues to operate.

Critical Infrastructure Status by Sectors

Nuclear

- Due to the Tsunami Warning for the West Coast of the United States, the U.S. Nuclear Regulatory Commission (NRC) has entered into "Monitoring Mode" for the nuclear power plants (NPPs) located on the West Coast, which are as follows: Diablo Canyon (CA), San Onofre (CA), and Columbia Generating Station (WA).
- There is no specific threat to any power plant, nonetheless, per their plant procedures for tsunami warnings, the Diablo Canyon NPP has entered "Unusual Event Mode."
- Pertaining to the status of Nuclear Facilities in Japan post-earthquake assessment, it has been reported that an
 "atomic power emergency" was declared and evacuated thousands of residents within the surrounding of the
 Fukushima Daiichi nuclear power plant located in northern Japan. The plant has been shutdown and there are no
 release of radiation has been detected. The International Atomic Energy Agency (IAEA) is monitoring.

Energy

- The Hawaii Energy Council reports that both Tesoro & Chevron report that their refineries have returned to normal operation
- California has confirmed contact with all offshore platforms and none were affected.

Transportation Systems

- Rail
 - > Federal Railroad Administration (FRA) outreach accomplished with no requests for regulatory relief received.
- Highway
- > Highway 1 remains closed.
- Aviation
 - The primary Western U.S. airports that have aircraft flying into and out of Japan from Los Angeles (LAX), San Francisco (SFO), Seattle (SEA), Honolulu (HNL) and Anchorage (ANC; refueling) continue normal operations, with carriers reducing flights into Japan.
 - > The airports at Honolulu, HI and A.B. Won Pat International Airport, Agana, Guam are both back to normal operations.
- Pipelines
 - US Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Western Region has contacted most of the off shore oil and gas platform operators in CA
 - PHMSA Alaska office has contacted Tesoro Alaska, Conoco Philips LNG and Chevron in the Cook Inlet; they are actively monitoring

- > TSA reports no known impacts to their communications network in country
- Maritime

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- > The Port of Los Angeles temporarily suspended cargo operations as a result of tsunami warnings along the Pacific U.S. coast
- > Local IOC potentially impacted is Kahului Harbor, Kauai County
- > USCG reports Portland and Columbia Rivers remain closed

Banking and Finance

- > The Federal Reserve Board contacted the Bank of Japan (BOJ); the BOJ reports no impact on its functions
- Banking and Finance reports no impact to operations this time. Treasury is monitoring reports of damage to undersea cables. The Financial Services Sector Coordinating Council convened a call of the Crisis Management Team and there were no significant items reported.

Communications

- Hawaii
 - > There has been no damage to cable landing stations in Hawaii from the 11 March 2011 tsunami.
 - HITRAC assesses the overall risk to cable landings in Hawaii are low. The likelihood of physical damage loss of losing any cables is low, and there are redundancies in place to further mitigate the risks.
 - > The communications infrastructure of Hawaii is built around undersea cables and satellites. Hawaii is principally dependent on its submarine cable landing sites for intra-island and external communications.
- Guam/ American Samoa
 - Reports from Guam state that the island has gone from a tsunami warning (imminent) down to a tsunami watch.
 - > Communications to American Samoa are operational.
 - > There are no reports of issues affecting the undersea cable at this time.
 - > There was congestion on the fiber from Hawaii but it remained in service.
 - Test calls to both Guam (without GETS) and American Samoa (with GETS) from the NCC Watch were successful.
- West Coast, CONUS
 - > Local telephone companies in California reporting no impacts to physical infrastructure.
 - Call volume (traffic) spiked after the earthquake. Volume did not cause blocking and no network management controls were implemented on the local networks.
 - > No Network Outage Reporting System (NORS) reports for earthquake related issues on the local infrastructure Japan
- Japan
 - There are no reports of confirmed breaks on the Asia Pacific Cable Network -2 (APCN-2), Japan-US (JUS), East Asia Crossing (EAC), China to China (C2C) and Southeast Asia/Middle East/Western Europe -3 (SeMeWe-3) undersea cables at this time.
 - At approximately 14:00 EST, there was another earthquake of 6.2 magnitude on the western coast of Honshu, Japan. Epicenter is 28 miles NNE of Nagano, Japan.
 - There is a cable landing facility (Joetsu) for the Russian-Japan undersea cable located 10.5 miles from the Nagano epicenter.
 - There is a cable landing facility (Naoetsu) for the Russian-Japan-Korea cable located 11 miles from the Nagano epicenter.
 - We do not yet have any status data with respect to either of these cables. We are seeking this data.

Postal & Shipping

- Overseas) The primary air shippers (FedEx & UPS) continue to operate into Japan. Service has been disrupted locally. Generally speaking, pickup and delivery service in East Japan are suspended however, shipments to Japan are being accepted, but may delayed.
- (US) Stateside pickup and delivery service has been suspended (UPS) in some areas within California and Hawaii with service slated to resume once conditions permit safe access.

Food & Agriculture

FDA's Office of Crisis Management is mapping where FDA regulated facilities are in Japan and overlaying that with the earthquake impact zone as well as the tsunami. FDA office in Hawaii will be reporting on impacts that occur there due to the tsunami.

Chemical

The Chemical SSA has established contact with the Chemical Sector Coordinating Council (SCC). Instructions for access to HSIN and the help desk have been shared with the SCC who shared that information with their members. The SSA and SCC continue to monitor the situation. Impact on the Sector in the U.S. will depend on damage caused by the waves. The Sector is also monitoring the impact of the tsunami in Japan for impacts on the raw materials supply chain.

IP Actions and Issues

 DHS Infrastructure Protection (IP) has been downgraded to Phase 2-CONCERN on 11 March 1530 ESTand the IP CAT representative will continue to support the 24 hour operations of the NOC CAT.

Contingency Planning and Incident Management Division

- The NICC has sent the IOC for Hawaii to PSAs and Regional Directors in the affected areas.
- The NICC has created a tab for this incident on WebEOC and continues to update.
- The NICC has created a tab on HSIN-CS titled "Japanese Earthquake" for information sharing with private sector partners.
- The NICC has sent FEMA NRCC watch desk officer home to support 24/7 NRCC activation.
- The NICC has placed Tsunami related GIS products previously created into WebEOC.

Protective Security Coordination Division

- IP PSAs are currently either in place or responding to State EOCs and are reporting potential critical impacts as required
- PSA Alaska reports Alaska is currently under a Tsunami Watch as a result of yesterday's 8.9 earthquake in Japan. No notifications of injuries or damage to property have been reported at this time.
- PSA- Hawaii reports that the Captain of the Port has closed all ports in Hawaii and has provided the status of
 preparatory actions in Hawaii.
- PSA-California reports that assessments of cable landings are on-going with no current impacts reported.
- PSAs located in Alaska, Oregon, and Washington State Emergency Operation Centers (SEOCS)

Infrastructure Analysis and Strategy Division

- HITRAC has provided Infrastructure Impact Assessments (IIA) from Hawaii Tsunami 2010 for reference.
- HITRAC is currently responding to RFI regarding potential impacts analysis for San Onofre Nuclear Power Plant and Diablo Canyon
- HITRAC has provided IRQ in reference to cable landings in Hawaii

Infrastructure Information Collection Division

- Geospatial products created for Guam and Hawaii depicting Infrastructure Asset List (IAL), military installations, and undersea cables for Guam.
- IICD has provided the 2010 Access to Imagery Summary Table to the NICC for reference.
- IICD has provided lat/long coordinates for the Hawaii IOC list

Infrastructure Security Compliance Division

- ISCD has accounted for all personnel located in Marianas Island, Guam, Wake Island, American Somoa, Hawaiian Islands, and the entire West Coast of the United States, to include Alaska.
- Accountability is complete for Regions 9 and 10; tracking a total of 30 Tier 1 facilities in the area.
- POD confirming airport and support status in affected areas

- The Telecommunications Sector Specialist participated in the 0900 Telecommunications teleconference
- The ONG and Electric Sector Specialists participated in the 1200 DOE Electric Sector teleconference
- POD representative participated in the development of the 1500 SITREP for Telecommunications`

Partnership and Outreach Division

- POD confirmed airport and support status in affected areas
- The Telecommunications Sector Specialist participated in the 0900 Telecommunications teleconference
- The Electric Sector Specialist participated in the 1200 Electric Sector teleconference
- POD representative participated in the development of the 1500 SITREP for Telecommunications

Sector-Specific Agency Emergency Management Office

- Dams Sector reports no impacts expected at this time.
- Due to the Tsunami Warning for the West Coast of the United States, the U.S. Nuclear Regulatory Commission (NRC) has entered into "Monitoring Mode" for the nuclear power plants (NPPs) located on the West Coast, which are as follows: Diablo Canyon (CA), San Onofre (CA), and Columbia Generating Station (WA).
- There is no specific threat to any power plant, nonetheless, per their plant procedures for tsunami warnings, the Diablo Canyon NPP has entered "Unusual Event Mode." (Please see below definitions)
- Pertaining to the status of Nuclear Facilities in Japan post-earthquake assessment, it has been reported that an
 "atomic power emergency" was declared and evacuated thousands of residents within the surrounding of the
 Fukushima Daiichi nuclear power plant located in northern Japan. The plant has been shutdown and there are no
 release of radiation has been detected. The International Atomic Energy Agency (IAEA) is monitoring.

Operational Rhythm

- 1700- IP iDUB Briefing
- 1700 Senior Leadership Briefing/Call

Leadership Discussion Points

- IP Phase downgrade
- Weekend staffing requirements
- Senior Leadership Group Calls
- Senior Leadership Briefing

Critical Information Requirements

- Personnel accountability
 - > Contact initiated with PSA Hawaii, Alaska,
 - > S1 accountability criteria for Marianas Island, Guam, Hawaii, Wake Island, and American Samoa
 - > IP reports all personnel in the Pacific Islands and US Western States have been accounted for.
- Cable Landing Status
 - > There has been no damage to cable landing stations in Hawaii from the 11 March 2011 tsunami.
 - HITRAC assesses the overall risk to cable landings in Hawaii are low. The likelihood of physical damage loss of losing any cables is low, and there are redundancies in place to further mitigate the risks.
 - > The communications infrastructure of Hawaii is built around undersea cables and satellites. Hawaii is principally dependent on its submarine cable landing sites for intra-island and external communications.
- Status of Critical Infrastructure in affected areas
 - > IOC from Hawaii-Chile Earthquake/Tsunami provided by IASD

FOR OFFICIAL USE ONLY

Respectfully, Deborah Villoch Infrastructure Protection Liaison to FEMA IP Operations Officer U.S. Department of Homeland Security National Protection and Programs Directorate Contingency Planning & Incident Management Division <u>Deborah.villoch@hq.dhs.gov</u> <u>Deborah.villoch@dhs.sgov.gov</u> Office: 202-646-7690 BlackBerry: (b)(6)

6

From:	Dudek, Michael
Sent:	Wednesday, March 16, 2011 3:19 PM
То:	Hoc, PMT12
Subject:	RE: US AID Request for Information to Support a Paper for the White House

Can you please resend this to Joseph Anderson and	(b)(6)
Thanks!	

From: Hoc, PMT12
Sent: Wednesday, March 16, 2011 3:14 PM
To: Kozal, Jason; Dudek, Michael; Anderson, James
Cc: LIA03 Hoc; PMTERDS Hoc; LIA01 Hoc
Subject: FW: US AID Request for Information to Support a Paper for the White House

Jason,

Here is the PMT input to your White House Paper. Vince Holahan is on shift now.

Kathy B.

D2/81

From: Sent: To: Subject: Dudek, Michael Wednesday, March 16, 2011 4:42 PM Coggins, Angela Help?

Angela,

<u>I'm encountering a little bit of a road block concerning the NRC travelers.</u> Can you possibly help me? My cell phone is (b)(6)

Thanks! :-) Michael

From: Coggins, Angela Sent: Wednesday, March 16, 2011 3:25 PM To: Dudek, Michael Subject: Re: Spoke with Josh

Super!! Angela Coggins Policy Director Office of Chairman Gregory B Jaczko US Nuclear Regulatory Commission angela.coggins@nrc.gov/301-415-1828

----- Original Message -----From: Dudek, Michael To: Coggins, Angela Sent: Wed Mar 16 15:20:14 2011 Subject: RE: Spoke with Josh

Yes, I am the one who spurred the request. :-)

We are compiling all of the information here at USAID and their staff is going to start sourcing it so that it can be delivered.

Thanks!

From: Coggins, Angela Sent: Wednesday, March 16, 2011 3:06 PM To: Dudek, Michael Subject: Re: Spoke with Josh

Great! A different question, are you in touch with our RST team here in the ops ctr about additional assets needed and progress in getting them to Japan? I hear lots of discussions here and just want to make sure we're all coordinating. Angela Coggins

Policy Director Office of Chairman Gregory B Jaczko US Nuclear Regulatory Commission angela.coggins@nrc.gov/301-415-1828

----- Original Message -----From: Dudek, Michael To: Coggins, Angela Sent: Wed Mar 16 15:04:04 2011 Subject: RE: Spoke with Josh

Thank you Angela! :-) Josh called and USAID is happy!

Michael I. Dudek

From: Coggins, Angela Sent: Wednesday, March 16, 2011 1:57 PM To: Dudek, Michael Subject: Spoke with Josh

Either Josh or Chairman should be calling now. Angela Coggins Policy Director Office of Chairman Gregory B Jaczko US Nuclear Regulatory Commission angela.coggins@nrc.gov/301-415-1828 From: Sent: To: Subject: Dudek, Michael Friday, March 11, 2011 7:47 PM LIA01 Hoc FW: Japan Earthquake Tsunami Sldes - Update

From: FEMA-NRCC-dhsip [Fema-NRCC-dhsip@dhs.gov] Sent: Friday, March 11, 2011 7:45 PM To: NICC; IP.IMC Cc: NICC Directors Subject: FW: Japan Earthquake Tsunami Sldes - Update

FYSA-

Japan Earthquake Tsunami Slides - Update

R/ Deborah Villoch Infrastructure Protection Liaison/Operations Officer U.S. Department of Homeland Security National Protection and Programs Directorate <u>Deborah.Villoch@hq.dhs.gov</u> <u>Deborah.Villoch@dhs.sgov.gov</u> Office: 202-646-7690 BlackBerry (b)(6)



From: Sent: To: Subject: Dudek, Michael Friday, March 11, 2011 5:46 PM LIA01 Hoc FW: Fukushima Nuclear Power Plant

Importance:

High

From: Villoch, Deborah [Deborah.Villoch1@dhs.gov]
Sent: Friday, March 11, 2011 5:35 PM
To: Dudek, Michael
Subject: FW: Fukushima Nuclear Power Plant

From FEMA Watch---

Respectfully,

Deborah Villoch Infrastructure Protection Liaison to FEMA <u>Deborah.villoch@hq.dhs.gov</u> <u>Deborah.villoch@dhs.sgov.gov</u> Office: 202-646-7690 BlackBerry (b)(6)

From: FEMA-NWC Sent: Friday, March 11, 2011 5:15:53 PM To: Villoch, Deborah (OGA); FEMA-NRCC-opschief; FEMA-NRCC-planchief; Burgess, Steven; Carwile, William; Coble, Rex; Edwards, EricL; FEMA OPERATIONS CENTER; FEMA-NRCC; FEMA-OPB; Fenton, Robert; Flinn, Richard D; Ingram, Deborah; Kadesch, Kim; Laird, Vicki; Matia, Matthew; Washington, Russell; Woodard, Steven; Zimmerman, Elizabeth Cc: CBRNE Subject: Fukushima Nuclear Power Plant Importance: High Auto forwarded by a Rule

- The Japan Nuclear Industrial Safety Agency (NISA) has recommended that people who live within 10 kilometers of the Fukushima Nuclear Power Plant in Okumacho evacuate the area immediately
- Please see below for the full report, as provided by the DHS CAT.

v/r, Christopher Blaz Watch Officer National Watch Center Response Directorate U.S. Department of Homeland Security - FEMA Office: 202-646-2828

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Unsecure Fax: 202-646-4617 fema-nwc@dhs.gov

-----Original Message-----From: Roberts, Richard M Sent: Friday, March 11, 2011 4:24 PM To: Utschig, Andrew S; zTask Force 1 Mailbox; Hinds, Lynda J; Fitzgerald, Paul M; Christopher, William W Cc: Bernier-Toth, Michelle; CA-Taskforce; Fitzgerald, Paul M; Christopher, William W; Dresser, Heather L (EAP/J); Cherry, Ronald C Subject: RE: Latest update on Japan earthquake

We just sent this:

This warden message is being issued to alert U.S. citizens residing or traveling in Fukushima Prefecture in Japan that the Japan Nuclear Industrial Safety Agency (NISA) has recommended that people who live within 10 kilometers of the Fukushima Nuclear Power Plant in Okumacho evacuate the area immediately.

Please disseminate this message to U.S. citizens in your organizations or to other Americans you know that live or may travel to the affected region.

For those who are in Japan and wish to inform of us of your condition, please send an e-mail to <u>lapanEmergencyUSC@state.gov</u> In your e-mail please provide the information requested below; Please also in your e-mail please state that we may your release information to people who may contact us regarding your welfare.

- Full Name
- Date of Birth
- Place of Birth

* As much information as possible regarding your physical location (address, hotel name, etc.) and contact information (home phone, cell phone, email address, etc.) within Japan. Please also send us any other information you feel is important for us to know, such as any pre-existing medical conditions, or whether you or your loved one is either elderly or a child in Japan without his/her parent(s).

The Department of Defense instructs that family members of Department of Defense personnel may contact 1-800-342-9647 for more specific information.

While we understand that there have been disruptions in communications in Japan, including the interruption of internet and mobile telephone service, we encourage you to continue your efforts to be in contact with your loved one(s) using SMS texting and other social media (e.g., FaceBook, My Space, Twitter, etc) that your loved one(s) may use. Please also try to contact your loved one(s) via landline telephone, as that means of communication has not been affected by communication disruptions. If you are able to be in touch with your loved one(s), please do write back to us and let us know.

We have been told that there are limited flights departing from Narita and Haneda airports. If you trying to fly out from Japan, please contact your airline to see if it is scheduled to depart.

Please continue to monitor the Embassy's website, <u>http://japan.usembassy.gov/</u>, for updated information. For telephone inquiries, please call 202-501-4444 or 1-888-407-4747. Please consult the Country Specific Information Sheet for Japan, available on the Bureau of Consular Affairs website at <u>http://travel.state.gov/travel/cis_pa_tw/cis/cis_1148.html</u>.

This email is UNCLASSIFIED

Subject: Location:	USAID / NRC Japan ops travel and funding Telecom
Start: End:	Thu 3/17/2011 11:00 AM Thu 3/17/2011 12:00 PM
Recurrence:	(none)
Meeting Status:	Accepted
Organizer: Required Attendees: Optional Attendees:	Kozal, Jason Kaplan, Michele; Matheson, Mary; Dorfman, Joel; Kozal, Jason; Dudek, Michael; 'RMTPACTSU_ELNRC@ofda.gov'; 'RMTPACTSU_AC@ofda.gov' Peterson, Gordon; Golder, Jennifer; Mitchell, Reggie; Rothschild, Trip; Mamish, Nader; McDevitt, Joan; Williams-Johnson, Patrice; Ramsey, Jack

When: Thursday, March 17, 2011 11:00 AM-12:00 PM. Eastern Standard Time Where: Telecom

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***The purpose of this conference is to inform the NRC of the legal structure that USAID operates in, specifically addressing financial items and how that interacts with the NRC's authority to respond to international incidents. Additionally there will be a discussion of the current situation where some NRC employees in Japan are traveling under the NRC travel authority and some are traveling under USAID travel authority.

Expected outcome: To gain alignment on which federal agency is responsible for financing the operations of NRC responseers during the response in Japan. Call in number is 18007723842 [(b)(6)

This conference call is to address and inform issues surrounding the NRC response to the crisis in Japan. Specifically around travel funding and general response funding while operating with USAID.

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From: Sent: To: Subject: Dudek, Michael Wednesday, March 30, 2011 3:03 PM Kozal, Jason RE: Conference call wed.

If I were you, I would call Jane who is now the status officer to proactively arrange for Brian to be on this call at 1715. Brian has 1,000 of e-mails and I'm not sure that he is reading any of them.

**I would also (if I were you) develop some talking points for Brian so that he is not blind-sided by USAID topics and questions. Send these to Jane at ET07.hoc@nrc.gov.

Dudek

-----Original Message-----From: Kozal, Jason Sent: Wednesday, March 30, 2011 3:01 PM To: Dudek, Michael Subject: Re: Conference call wed.

Ok. I sent him a heads up yesterday to his e-mail. Its at 1715. - am in the hotwash now. If he needs to talk let me know.

Sent from an NRC BlackBerry Jason W Kozal 301-448-6627

----- Original Message -----From: Dudek, Michael To: Kozal, Jason Sent: Wed Mar 30 14:58:44 2011 Subject: RE: Conference call wed.

I gave Brian a print-out of your message below. He was not aware of the call. I also gave him your USAID phone number (202-712-4383) so that he could call you and arrange the meeting.

Dudek

-----Original Message-----From: Kozal, Jason Sent: Wednesday, March 30, 2011 10:53 AM To: Dudek, Michael Subject: Fw: Conference call wed.

Can you make sure that Brian has saw this when he gets in. I haven't got a reply from him.

5/86

Sent from an NRC BlackBerry

Jason W Kozal (b)(6)

----- Original Message -----From: Kozal, Jason To: McDermott, Brian Cc: Trocine, Leigh Sent: Tue Mar 29 20:19:58 2011 Subject: Conference call wed.

Brian,

I just finished talking to Mark Bartalini, the Director of the Office of Disaster Assistance at USAID. The response in Japan falls in his area of responsibility. He was on the IPC that was held this afternoon by the NSS to address issues related to the response in Japan. I'm not sure who was on the call for the NRC, but the issue around the logistics platform we discussed last night came up on the IPC. He said progress was made but there were some additional things needed to be discussed. He would like to hold a conference call tomorrow evening (he indicated some time between 5 and 7) to further the discussion. He specifically named DoD as an additional participant. Can we support a call at that time? I am not sure of what your status is, who is on shift, or who the ET wants on the call. Let me know your thoughts and either Leigh tonight or I can pass on the right info to Mark.

Thanks.

Sent from an NRC BlackBerry Jason W Kozal (b)(6) From: Sent: To: Subject: Attachments:

1.

Milligan, Patricia Tuesday, April 12, 2011 3:25 PM Dudek, Michael PARs for Deputies Meeting Rev 19a (2).docx PARs for Deputies Meeting Rev 19a (2).docx

Please forward to Dan Merzke for distribution as appropriate. OUO at this time.

25/87

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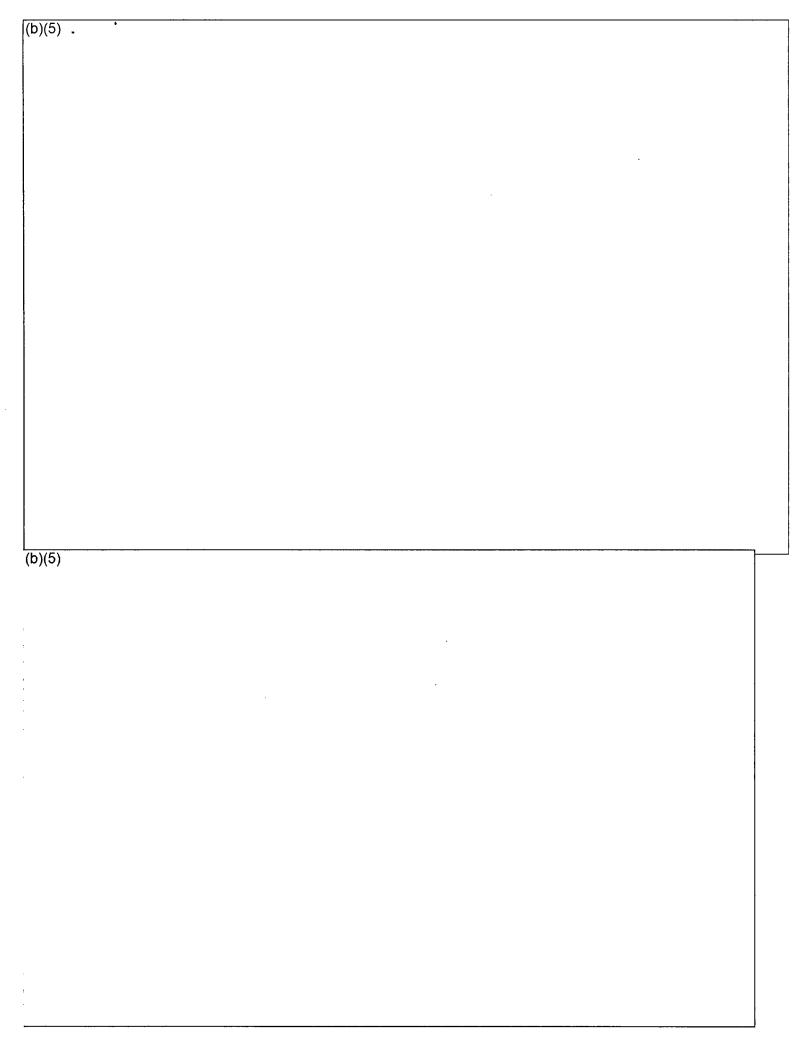
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From: Sent: To: Subject:

Milligan, Patricia Wednesday, April 13, 2011 10:39 AM Dudek, Michael; McDermott, Brian Re: FYI: Release of Global Assessment to the CAs

Just finishing the most recent rev. Will send out and you can forward to dan Sent from my NRC Blackberry <u>Patricia A Millican</u>, CHP RPh (b)(6)

From: Dudek, Michael To: McDermott, Brian; Milligan, Patricia Sent: Wed Apr 13 10:36:55 2011 Subject: FYI: Release of Global Assessment to the CAs

After speaking to Dan, please see Marty's thoughts below. Any thoughts on how I should proceed? ③

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Michael Dudek | Technical Assistant | NSIR/Division of Preparedness & Response | U.S. NRC 11555 Rockville Pike, Rockville, MD 20852 | 🕿 (301) 415-6500 | 🖾 Michael, Dudek @nrc.gov

From: Merzke, Daniel Sent: Wednesday, April 13, 2011 10:32 AM To: Dudek, Michael Subject: Release of Global Assessment to the CAs

Michael, I spoke to Marty about the reluctance of the ET to release the Global Assessment to the CAs. He said there's no reason to withhold it from the CAs, as long as we stress to them that it is a draft document only. I told him that's the emphasis I placed on the re-entry criteria document, and he was fine with that. If you could get me the document soon, I'd appreciate it. Thanks a lot.

Dan

From: Sent: To: Subject: Attachments: Dudek, Michael Friday, April 15, 2011 1:19 PM Merzke, Daniel RE: Status of Papers FW: OUO- Japan

Dan,

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Please see the e-mail above from Roy to Marty on the status of the papers.

Michael Dudek | Technical Assistant | NSIR/Division of Preparedness & Response | U.S. NRC 11555 Rockville Pike, Rockville, MD 20852 | 🕿 (301) 415-6500 | 🖾: <u>Michael.Dudek@nrc.gov</u>

From: Merzke, Daniel Sent: Friday, April 15, 2011 9:02 AM To: Dudek, Michael Subject: Status of Papers

Michael, Marty asked me to check on the status of three "papers." One was the Global Assessment slides, which I saw a draft of and are being reviewed, so I know about that. Where are we with the composite paper (re-entry criteria), and he said there is a paper for the Global Assessment? Do you happen to know where that is? Thanks in advance.

Dan

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Japan Earthquake and Tsunami Daiichi-ET Chronology Descending

2011/03/13 23:25:36	LT	Confirmed hydrogen explosion in the reactor building at Fukushima Unit 3.
2011/03/15 18:50:30	TEPCO via TV	TEPCO is saying they haven't yet started fire extinguishing Unit 4 fire. Fuel rods have been exposed and generating hydrogen in Unit 4. Some of roof is damaged, so helicopters could be used to inject water, or by fire engines. Not decided yet for sure because of difficulties. 30R/hr in area, so difficult for personnel to fight fire in area.
2011/03/16 07:16.55	White House (Brennan and Reed)	Chairman provides NRC recommendations to White House with concurrence by NR. Chairman believes these are conservative recommendations based on the information that we have. NRC believes that Unit 4 SFP fire was caused by loss of water that resulted in a zirc fire.
03/16 17:16:11	Bill, Chairman, Casto	SFP indications coming from TEPCO. They have requested us to help with systems. TEPCO hasn't been able to cross line to fatal doses yet. Chairman: we believe pool #4 is dry, and another potentially structurally damaged? Chuck: yes, and #4 pool walls have collapsed. Can't maintain inventory at all. Jim had seen satellite photos, and looking at photos, he believes floor is actually bottom of pool. So it is dry. No pool left.

9. Japan 50-mile perimeter?

9a. Q. Could you clarify how you developed the "50-mile" evacuation zone for American citizens around the Fukushima plants? Since this is far wider than the 12 mile zone recommended by the IAEA and Japanese authorities, your recommendation caused quite a bit of concern and confusion. What scientific basis did you have for your recommendation?

A. The decision to recommend US citizens evacuate beyond 50 miles was informed by the following: : information from the site was often conflicting and limited; dose rates on site were high- especially those reported between units 3 and 4 supporting the assessment that the fuel in the Unit 4 spent fuel pool was uncovered ; IAEA reported on March 14th that the Unit 4 spent fuel pool was uncovered ; IAEA reported on March 14th that the Unit 4 spent fuel pool was on fire; TPECO reported on March 15 that temperatures were rising in units 4, 5 and 6; TEPCO reported at 22:17 on March 15th that it was pulling all workers from the damaged nuclear plant; IAEA report on 3/16 02:53 that level had dropped in Unit 5 but did not specify if this was the reactor vessel or the spent fuel pool; multiple hydrogen explosions supported the assumption that there was significant fuel damage ongoing; off-site dose calculations performed by NRC staff using the NRC RASCAL code resulted in projected doses that were very high at some distance from the site. NRC staff recognized that the projected doses were conservative however, given the fluid and rapidly changing nature of the events, recommending that US citizens evacuate beyond 50 miles was prudent.

9b. Q. You said at the time that your recommendation was based on the "possibility of scenarios that we haven't seen yet." What did that mean, precisely?

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A. The possibility that the ongoing events may result in a situation where all six reactor units/spent fuel pools could be seriously challenged resulting in significant onsite and offsite doses. 9c. Q. Last week, the NRC clarified that its 50-mile recommendation was based on the determination that releases from the Fukushima plant "could...possibly exceed conservatively set safe radiation-exposure limits" based on "limited data and conservative assumptions." Since your recommendation was far more conservative than that of the Japanese or IAEA experts, you may have had additional information that they did not have...or perhaps, you didn't agree with their recommendation. Which was it? What did you know that they didn't, or what specifically did you disagree with?

A. Unlike in the United States where the NRC has full access to nuclear power plants, resident inspectors on site and is connected via the Emergency Response Data System to vital plant computers, the information from Japan was limited and often conflicting, the situation was very fluid, and there was considerable concern about the ability to regain control of the reactors. The NRC and US government had no ability to impact the outcome of the situation as it was unfolding at the Fukushima site, all that could be done was to ensure the safety of U.S. citizens living in that region of Japan. This is consistent with US government policy as the State Department will order the evacuation of U.S. citizens from regions of countries where their safety may be at risk.

10. Claim that the spent fuel ponds in Japan were empty

During the morning of March 15, 2011, Japanese authorities confirmed that the possibility existed that spent fuel at Unit 4 was not being adequately cooled. It was believed that there was a possibility that spent fuel may restart fission reactions spontaneously. During the evening of March 15, 2011, the NRC received confirmation that Unit 4, containing spent fuel pond, was experiencing a fuel cladding fire. It was explained by TEPCO that the fuel rods have been exposed and hydrogen generation in Unit 4 was taking place. It was understood that a portion of the Unit 4 roof was damaged, possibly as a result of the explosion of secondary containment at Unit 3 which occurred the evening of March 13, 2011.

(b)(5)

From:	Milligan, Patricia
Sent:	Monday, April 18, 2011 1:35 PM
То:	Dudek, Michael
Subject:	Fw: NSIR-11-0162_Response morris edit.docx
Attachments:	NSIR-11-0162_Response morris edit.docx

Importance:

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High

This is it. Sent from my NRC Blackberry Patricia A Milligan, CHP RPh (b)(6)

From: Morris, Scott To: Milligan, Patricia Sent: Fri Apr 15 13:35:05 2011 Subject: NSIR-11-0162_Response morris edit.docx

I made several tweeks ... please review!

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From:Wagner, PaigeSent:Monday, April 18, 2011 2:32 PMTo:Dudek, Michael; Harvey, SueCc:Peterson, GordonSubject:FW: new table for tracking costs and potential reimbursement - response requested by
next Tuesday (FOUO/SBU)Attachments:Preliminary USG Actions-Vetting Document (SBU) 4-15-2011.xlsx

Michael,

As we discussed, please see the attached spreadsheet and let me know if you think we will be able to identify the costs associated with each of these items.

Please call me if you want to discuss this further.

l appreciate your assistance. Paige

Paige Wagner, Senior Budget Analyst U.S. Nuclear Regulatory Commission Office of the Chief Financial Officer DPB, Budget Analysis Branch Phone: (301)415-6220 E-mail: <u>Paige.Wagner@nrc.gov</u>

From: Peterson, Gordon
Sent: Monday, April 18, 2011 8:31 AM
To: Wagner, Paige
Cc: Smolik, George; Allwein, Russell
Subject: FW: new table for tracking costs and potential reimbursement - response requested by next Tuesday (FOUO/SBU)

Hi Paige,

OMB has forwarded this spreadsheet for agencies to capture the costs associated with the Japan events. Please take a look at it and let's discuss. The due date for getting this back to OMB is tomorrow, April 19th.

Gordon S. Peterson, Deputy Director Division of Planning and Budget Office of the Chief Financial Officer Nuclear Regulatory Commission 301-415-7348 gordon.peterson@nrc.gov

From: Dyer, Jim Sent: Monday, April 18, 2011 7:27 AM To: Peterson, Gordon

5/91

Cc: Brown, Milton; Mitchell, Reggie

Subject: FW: new table for tracking costs and potential reimbursement - response requested by next Tuesday (FOUO/SBU)

From: McDonald, Christine [mailto: (b)(6) Sent: Friday, April 15, 2011 5:37 PM

To: Dyer, Jim; Golder, Jennifer; Evans, Michele

Subject: new table for tracking costs and potential reimbursement - response requested by next Tuesday (FOUO/SBU)

FOR OFFICIAL USE ONLY/SENSITIVE BUT UNCLASSIFIED (FOUO/SBU)

Jim/Jennifer/Michele -

We've had a bit of a shift in this exercise to rack up costs and potential reimbursement amounts. We now have new tracking table that focuses on current and planned activities, which is attached. It may not be entirely unfamiliar.

We very much appreciate the work that's been done to date to summarize your cost information. That data has been useful and was provided to OMB and other policy officials. Given recent changes in direction, we now need to translate that information into the attached spreadsheet.

Guidance:

We are asking all affected agencies to add cost and other information to each item in the first tab of the attached spreadsheet. No changes should be made to any rows or columns other than the ones highlighted in green. The most critical columns to complete are highlighted in yellow. If there are items you are tracking that are not captured in the first two tabs of the attached spreadsheet, you can add them to the third tab. Since this is forward looking, you don't have to add any actions already taken that aren't already listed. We will try to use your existing spreadsheet for that information.

Because there is some overlap between NRC's table and this new table I am hoping that it is not going to be terribly difficult to join the two. However, I think there may be some challenges for NRC in filling it out. But regardless, I am sorry to have to ask you to re-rack your cost information. And, I thank you in advance for your help.

We're looking to get the tables back from agencies, completed to the best of their ability, <u>by Tuesday morning 4/19</u>. If this changes (which it might) I will let you know immediately. Also, we understand that data provided will be rough estimates.

I'm happy to talk through this or answer questions. Feel free to give me a call. And, if this is really going to be a problem, certainly let me know.

Thanks again, Christine

PS - Since this contains information relevant to other agencies, we ask that it not be shared too widely. And of course, given the sensitivity, it should not be shared with anyone outside NRC.

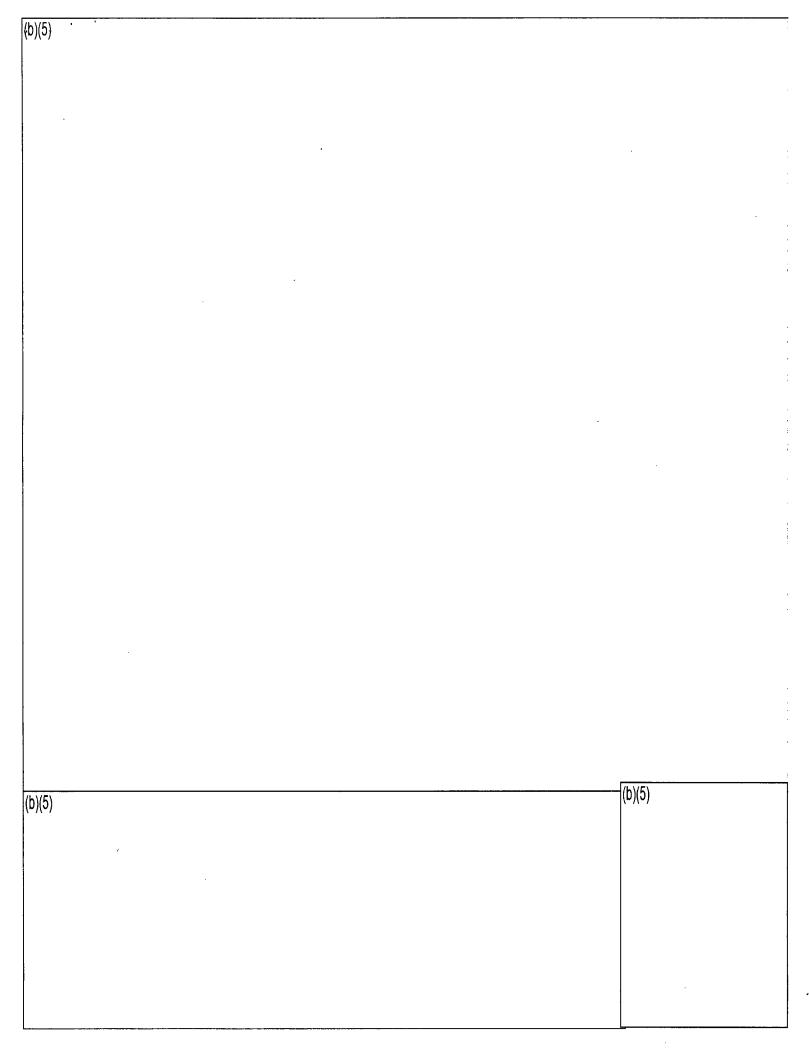
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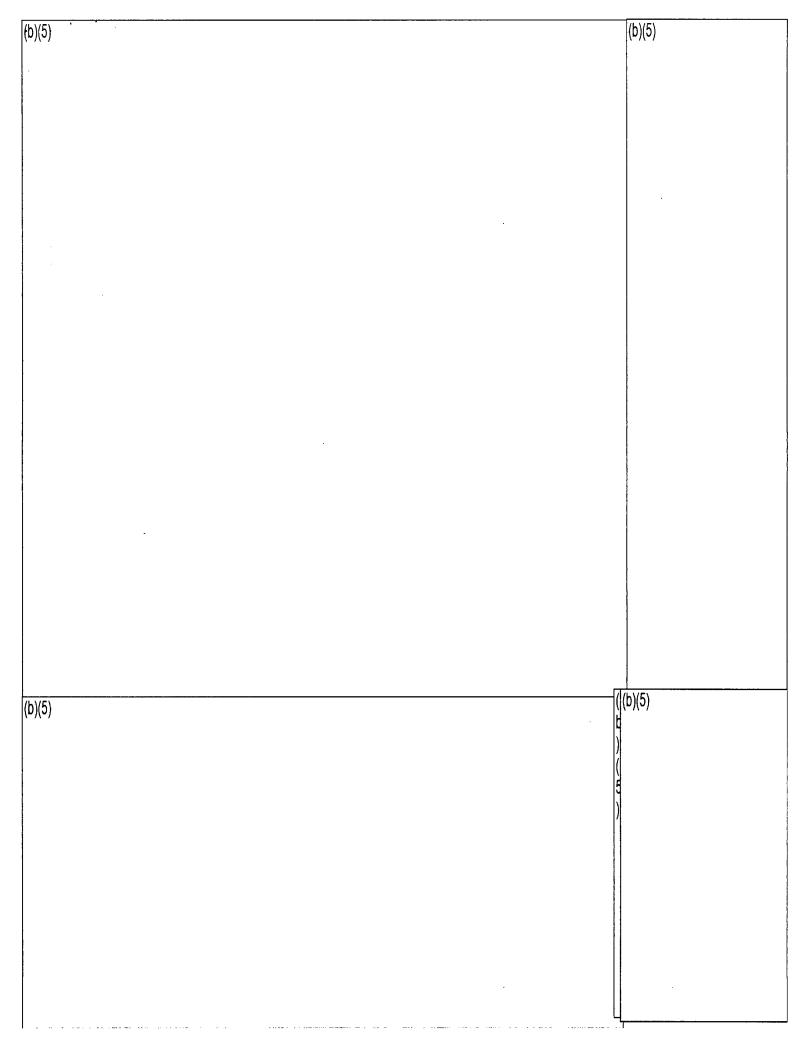
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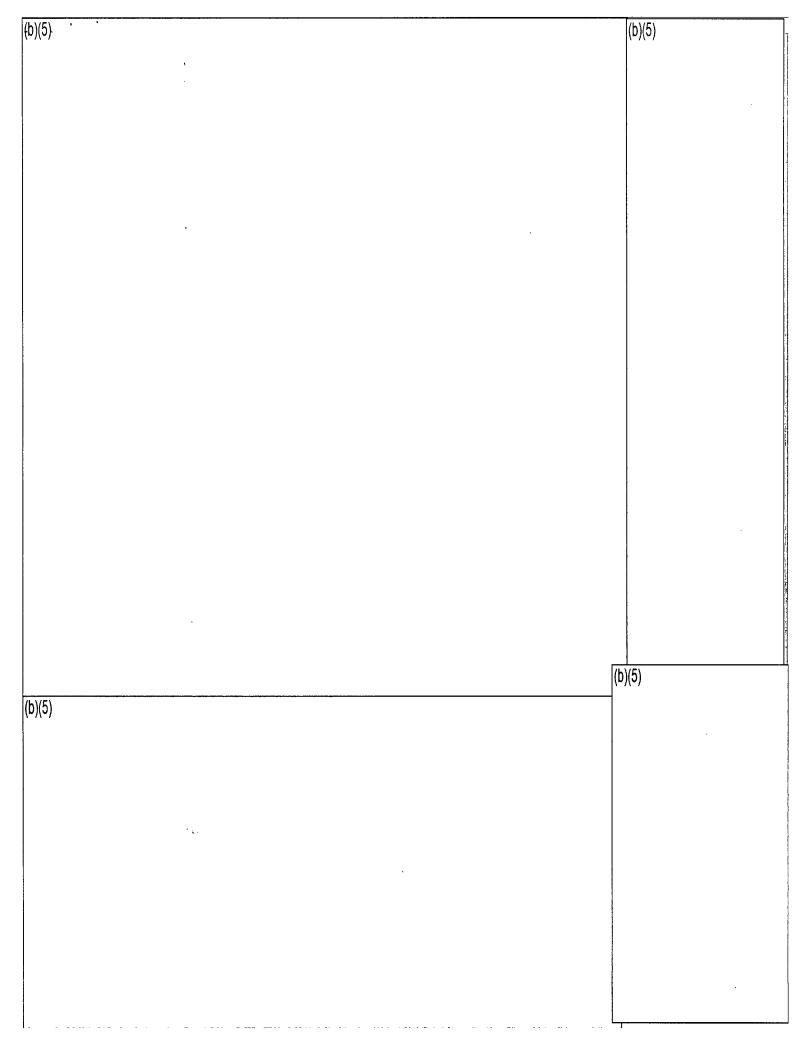
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Christine McDonald Office of Management and Budget, Energy Branch (202) 395-6944

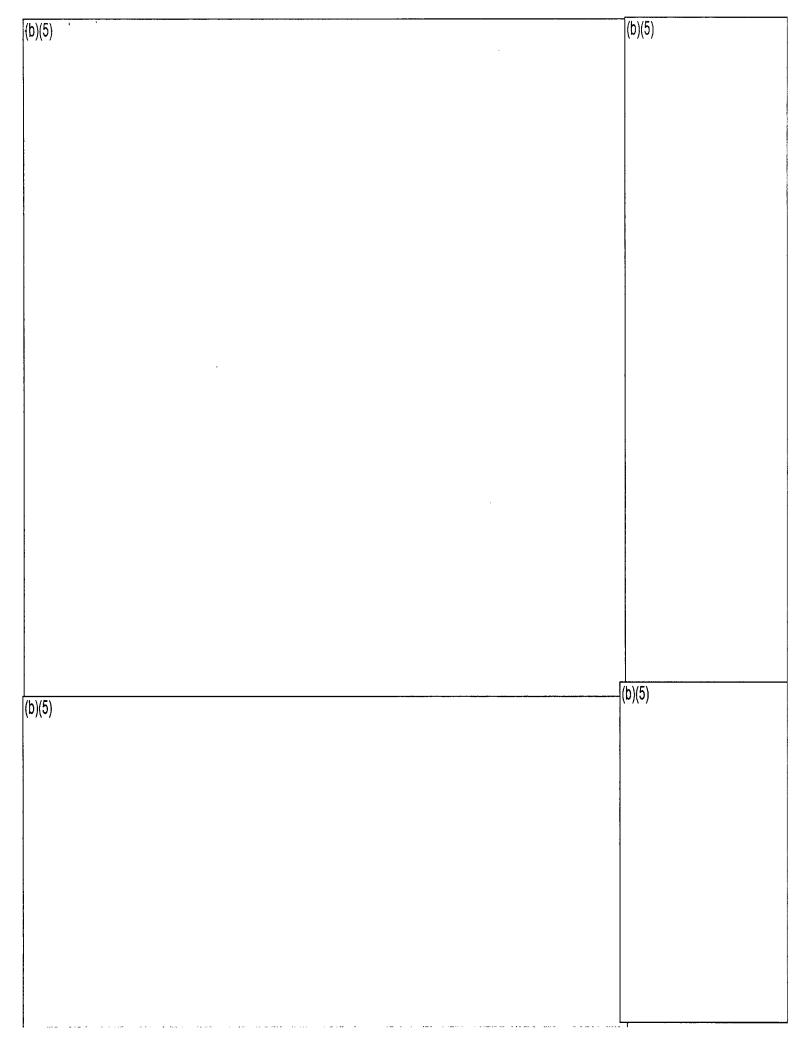


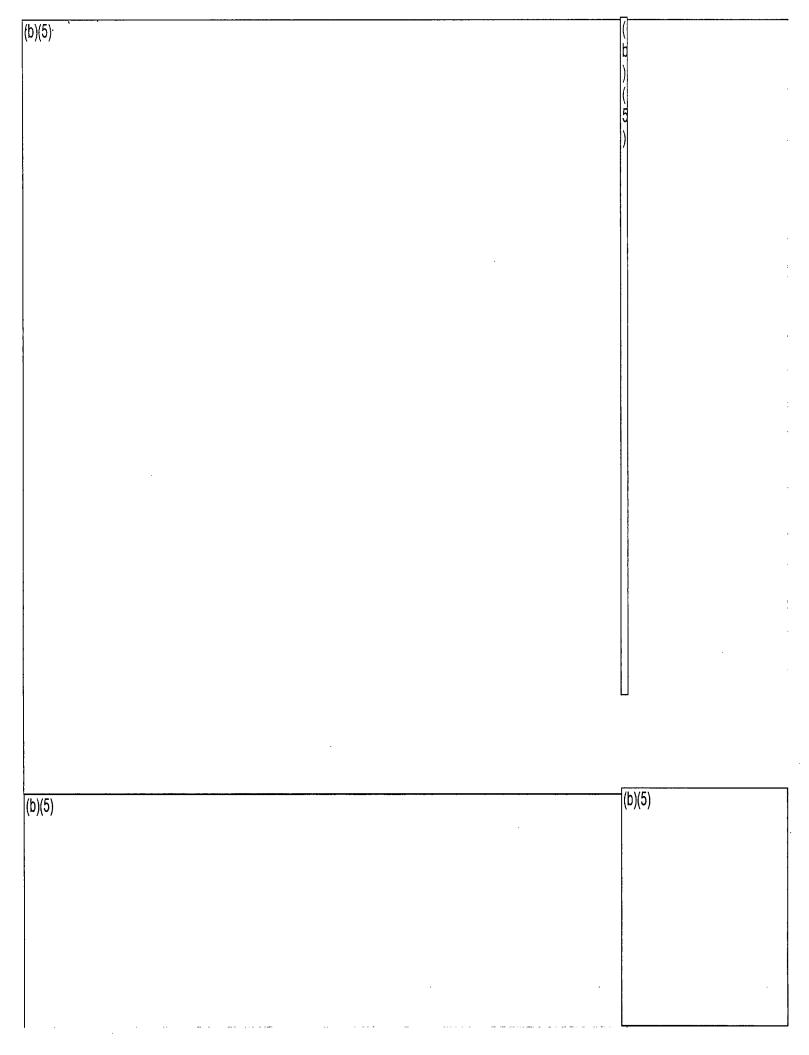
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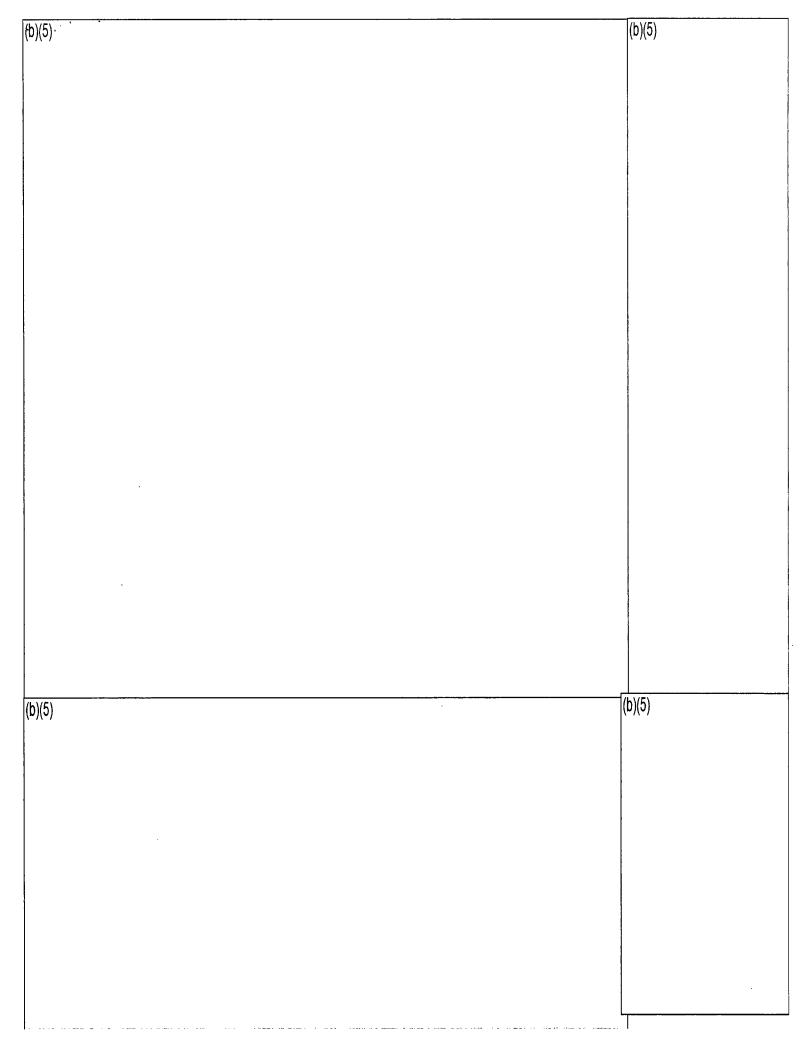




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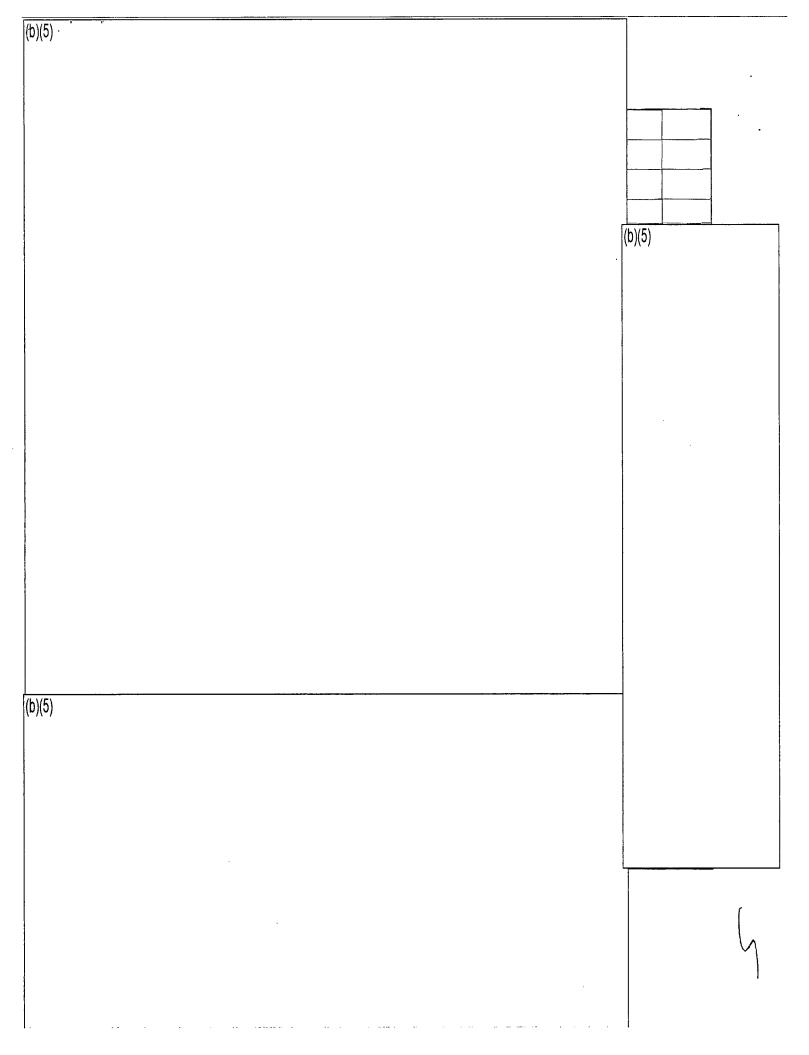






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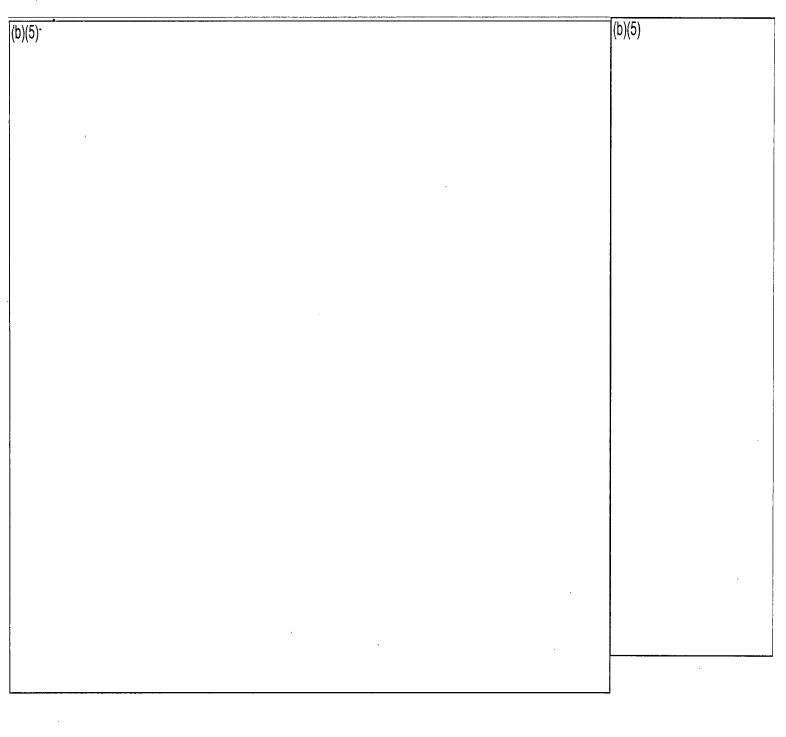
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From:	Deegan, George
Sent:	Tuesday, April 19, 2011 3:08 PM
То:	Dudek, Michael
Cc:	Felsher, Harry; Camper, Larry; Lewis, Robert; Kim, Grace
Subject:	RE: LLRW Disposition/OGC Comments - RESEND - correction
Attachments:	image001.jpg; image002.jpg

Michael- I'm not sure whether or not the following information is usable at this point in time. As you see below, here is a series of emails between FSME and OGC on questions related to radioactive waste management that were raised last week. The original response provided on 4/12/11 apparently did not take into account comments from all segments of OGC. As you see below, the revised OGC response reflects OGC combined views.

From: Felsher, Harry Sent: Monday, April 18, 2011 2:52 PM To: Camper, Larry; Deegan, George; Lewis, Robert Subject: FW: LLRW Disposition/OGC Comments - RESEND - correction

FYI

From: Kim, Grace
Sent: Monday, April 18, 2011 2:07 PM
To: Felsher, Harry; London, Lisa
Cc: Rothschild, Trip; Jones, Bradley; Biggins, James; Campbell, Tison; Owens, Janice; Morris, Scott
Subject: RE: LLRW Disposition/OGC Comments - RESEND - correction

Harry,

(b)(5)

Grace

Harry,

OIP and OGC accept the response with understanding that all radioactive contaminants fall under the broad Part 20 definition of background in this situation.

5/92

Thank you for explaining that Cs-137 though longer-lived would still be considered "background" in this situation and would only have to be sent to an AEA facility for disposal, if the US entity who possessed it elected to do so.

Janice

From: Owens, Janice
Sent: Tuesday, April 12, 2011 11:41 AM
To: Felsher, Harry; Lewis, Robert; Rothschild, Trip; Tobin, Jennifer; Smith, Brooke; Kim, Grace; Moore, Scott
Cc: Camper, Larry; Kennedy, James; Persinko, Andrew; Suber, Gregory; McKenney, Christepher; Lowman, Donald; Cool, Donald; Shaffner, James
Subject: RE: URGENT ACTION - LLRW Disposition

We would like to discuss.

The response to question 2 raises the possibility of Cs-137 which would not be background? Should the response address domestic and import licensing requirements if above background is present?

For import purposes, equipment contaminated with radioactive materials above background levels would be authorized under NRC's general import license. and would not be considered radioactive waste.

From: Felsher, Harry
Sent: Monday, April 18, 2011 11:01 AM
To: London, Lisa
Cc: Rothschild, Trip; Jones, Bradley; Biggins, James; Kim, Grace; Campbell, Tison; Owens, Janice; Morris, Scott
Subject: RE: LLRW Disposition/OGC Comments

Lisa,

This was the first RED TICKET item from the Operations Center (before the process was developed). Based on <u>verbal communications</u>, there was OGC concurrence on what was sent forward last week.

Thanks, Harry

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From: London, Lisa
Sent: Friday, April 15, 2011 4:23 PM
To: Felsher, Harry
Cc: Rothschild, Trip; Jones, Bradley; Biggins, James; Kim, Grace; Campbell, Tison; Owens, Janice; Morris, Scott
Subject: LLRW Disposition/OGC Comments

Harry,

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OGC and OIP: Please review the following ASAP because this is owed to the Ops Center by 12:00 noon today. Please respond back to Harry Felsher

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Lisa G. London Attorney U.S. Nuclear Regulatory Commission e-mail: Lisa.London@nrc.gov phone: (301) 415-3233

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Precycle — Reduce waste, print only when necessary.

From:	Milligan, Patricia
Sent:	Tuesday, April 19, 2011 3:16 PM
То:	Williams, Kevin; Dudek, Michael; Merzke, Daniel
Subject:	Fw: Brief for Marty's Meeting with EPA

This is the meeting on the 21st Sent from my NRC Blackberry Patricia A Milligan, CHP RPh (b)(6)

From: Merzke, Daniel
To: Milligan, Patricia
Cc: McDermott, Brian; Morris, Scott
Sent: Wed Apr 13 11:23:01 2011
Subject: Brief for Marty's Meeting with EPA

Trish, we scheduled the briefing for Marty on the visit to EPA concerning the PLE long-term recovery cleanup standard for tomorrow at 9:00 am. The meeting is 4/21. Marty's calendar is booked through the 20th, except for Monday, and as you are going to be on travel Monday, we had to go with the only slot available. If there's a problem or you can't attend, please let me know ASAP. Thanks.

Dan

5/93

From:Deegan, GeorgeSent:Tuesday, April 19, 2011 4:40 PMTo:Dudek, MichaelSubject:RE: LLRW Disposition/OGC Comments - RESEND - correctionAttachments:image001.jpg; image002.jpg

Michael-I think so, but it preceeded all of the JETT taskings. I think this was the very first one. It came in April 11 before we had our meeting and before your process was set up, but it came in from the White House with a very short fuse, so I suppose it was roughly equivalent (I was out sick on April 11-12 so Harry Felsher was acting for me and I had no personal involvement in it).

From: Dudek, Michael Sent: Tuesday, April 19, 2011 4:36 PM To: Deegan, George Subject: RE: LLRW Disposition/OGC Comments - RESEND - correction

George,

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I'm not sure what I'm to do with this because I haven't had any visibility on this item. Is this a Japan Tasking? If so, do you have a tasking number that I can follow-up on?

Thanks!

Michael Dudek | Technical Assistant | NSIR/Division of Preparedness & Response | U.S. NRC 11555 Rockville Pike, Rockville, MD 20852 | 🕿 (301) 415-6500 | 🖾: <u>Michael Dudek@nrc.gov</u>

From: Deegan, George
Sent: Tuesday, April 19, 2011 3:08 PM
To: Dudek, Michael
Cc: Felsher, Harry; Camper, Larry; Lewis, Robert; Kim, Grace
Subject: RE: LLRW Disposition/OGC Comments - RESEND - correction

Michael- I'm not sure whether or not the following information is usable at this point in time. As you see below, here is a series of emails between FSME and OGC on questions related to radioactive waste management that were raised last week. The original response provided on 4/12/11 apparently did not take into account comments from all segments of OGC. As you see below, the revised OGC response reflects OGC combined views.

From: Felsher, Harry Sent: Monday, April 18, 2011 2:52 PM To: Camper, Larry; Deegan, George; Lewis, Robert Subject: FW: LLRW Disposition/OGC Comments - RESEND - correction

FYI

From: Kim, Grace
Sent: Monday, April 18, 2011 2:07 PM
To: Felsher, Harry; London, Lisa
Cc: Rothschild, Trip; Jones, Bradley; Biggins, James; Campbell, Tison; Owens, Janice; Morris, Scott
Subject: RE: LLRW Disposition/OGC Comments - RESEND - correction

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Grace

Harry,

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Thank you for explaining that Cs-137 though longer-lived would still be considered "background" in this situation and would only have to be sent to an AEA facility for disposal, if the US entity who possessed it elected to do so.

Janice

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Sent: Tuesday, April 12, 2011 11:41 AM
To: Felsher, Harry; Lewis, Robert; Rothschild, Trip; Tobin, Jennifer; Smith, Brooke; Kim, Grace; Moore, Scott
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Lisa,

This was the first RED TICKET item from the Operations Center (before the process was developed). Based on <u>verbal communications</u>, there was OGC concurrence on what was sent forward last week.

Thanks,

Harry

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From: London, Lisa Sent: Friday, April 15, 2011 4:23 PM To: Felsher, Harry Cc: Rothschild, Trip; Jones, Bradley; Biggins, James; Kim, Grace; Campbell, Tison; Owens, Janice; Morris, Scott Subject: LLRW Disposition/OGC Comments

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Harry,

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(b)(5)	I will be out on Monday but should you,

or anyone else that may be handling this from FSME, wish to confer with OGC on revised responses to be provided to the Ops center please contact Trip Rothschild, Grace Kim, Tison Campbell and either Brad Jones or Jim Biggins. I will be back on Tuesday.

OGC and OIP: Please review the following ASAP because this is owed to the Ops Center by 12:00 noon today. Please respond back to Harry Felsher

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Answer:

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Lisa G. London Attorney U.S. Nuclear Regulatory Commission e-mail: Lisa.London@nrc.gov phone: (301) 415-3233



Precycle — Reduce waste, print only when necessary.

From:	Deegan, George	
Sent:	Tuesday, April 19, 2011 4:44 PM	
То:	Dudek, Michael	
Subject:	FW: QUICK TURN-AROUND ACTION for White House:	LLRW Disposition

Here is how this originated. Again, I was out on April 11-12 so Harry worked this on FSME's behalf and coordinated with OGC. I think Frazier's email really intended to assign a due date of noon, Tuesday, April 12 since he didn't send his until after noon on Monday, April 11.

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From: Frazier, Alan Sent: Monday, April 11, 2011 12:39 PM To: Felsher, Harry Cc: Deegan, George; Rivera, Alison; Moore, Scott; Lewis, Robert; Andersen, James; Brock, Kathryn Subject: QUICK TURN-AROUND ACTION for White House: LLRW Disposition **Importance:** High

FSME,

Importance:

DUE by NOON tomorrow, Tuesday, April 11 to the ET in the Ops Center. This items will not be ticketed by OEDO. It is my understanding we are still putting a process in place to ticket Ops Center-related tickets like this but this action cannot wait.

Please contact Kathryn Brock in the Ops Center if you need more information.

High

Alan

From: Hoc, PMT12 Sent: Monday, April 11, 2011 12:28 PM To: Frazier, Alan Cc: OST01 HOC Subject: FW: LLRW Disposition

Hi Alan.

Can you please task FSME to answer this question from the White House? If they have questions they can visit me in the Ops Center or call me through the HOO (301-816-5100 and ask for PMT). The due date to the White House is tomorrow (4/12) COB, so the staff should return it back to the Executive Team in the Operations Center by noon tomorrow. Please have the staff include PMT12.hoc@nrc.gov and OST01.hoc@nrc.gov on the correspondence.

Thanks.

Kathy		55/95
From: Bentz, Julie A. [mailto](b)(6) Sent: Monday, April 11, 2011 12:08 PM		
To:(b)(6)		
(b)(6)	·	

(b)(6)

Subject: LLRW Disposition

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Dan,

	Thanks	for	helping	us	understand	where	the	issues	are	on	this	problem.](b)(5)	
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Can I get an answer from NRC and EPA to these questions by COB tomorrow? EPA Ops Center and NRC Ops Center are on this email to forward this request to the correct players. If EPA or NRC[(b)(5) (b)(5)

Thanks! _____ulie_Bentz___ (b)(6)

> -----Original Message-----From: Schultheisz.Daniel@epamail.epa.gov [mailto:Schultheisz.Daniel@epamail.epa.gov] On Behalf Of EOC_Environmental_Unit@epamail.epa.gov Sent: Monday, April 11, 2011 9:57 AM To: Subject: Fw: Draft read-out 1600 Telecon 04/07/11 Low Level Radioactive Waste Disposition

(b)(5)

I hope this helps. Hopefully this will become more clear as the situation evolves.

Dan Schultheisz U.S. Environmental Protection Agency Office of Radiation and Indoor Air Radiation Protection Division (202) 343-9349

----- Forwarded by Epahq Eoc/DC/USEPA/US on 04/08/2011 02:07 PM -----

From: "Steele, Jeffrey M CIV SEA 08 NR"

To: Date: 04/08/2011 12:53 PM

Subject: RE: Draft read-out 1600 Telecon 04/07/11 Low Level Radioactive Waste Disposition

Dr. Idar,

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Given that much of the call was spent describing the current radiological status on the ground in Japan, I think a short summary of that status would be useful in the telecon summary. Here is a proposed paragraph.

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	Jeff Steele
	Naval Reactors 202-781-6192
	Original Message
	From: Idar, Deanne J CIV OSD POLICY [mailto (b)(6) Sent: Thursday, April 07, 2011 6:55 PM To:
	Subject: Draft read-out 1600 Telecon 04/07/11 Low Level Radioactive Waste Disposition

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ALCON:

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The draft read-out from today's 1600 Telecon on the Low Level Radioactive Waste (LLRW) Disposition is attached (and copied below) for your review. I welcome feedback from the participants on any missing due-outs or key points. Thanks again to all that were able to participate in our discussion. Best, Deanne <<...>> Low Level Radioactive Waste (LLRW) Disposition IA (Sub-set) Telecon: 1600-1700 Thursday, 6 April 2011 Participants: NNSA/DOE: EM HQ Office of Disposal Operations Office, General Counsel, NE 1. 2. EPA NRC 3. 4. NSS DoD: DoD LLRW Disposition Advisory Committee Chair, Naval Reactors, OSD(P)/CWMD 5. Facilitator: Dr. Deanne J. Idar, OSD Policy/Global Strategic Affairs/CWMD/ CBRN Defense Due outs: 1. DOE: Verify if DOE AMS assets have had any radioactive levels above clearance criteria; follow-up w Julie Bentz, NSS 2. NRC: provide DOS POCs information to OSD(P)/CWMD who will distribute to DoD LLRW Disposition Advisory Committee Chair 3. NSS: facilitate connection to DOS contacts for OSD(P)/CWMD Agenda 1. Roll Call 2. Review of 4 questions posed by DoD LLRW Disposition Advisory Committee (b)(5) 3. Wrap op Meeting Summary: The objective of today's telecon was to assist the DoD in developing the appropriate guidance to address any regulatory requirements for the appropriate disposition of LLWR generated by DoD operations in support of Operation Tomodachi OCONUS and CONUS. The 4 questions identified above were reviewed. Key points follow: (b)(5)

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See background NRC regulations information provided by Ms. Janice Owens, NRC, regarding general license for import, and definitions as follows.

§ 110.27 General license for import.

(a) Except as provided in paragraphs (b) and (c) of this section, a general license is issued to any person to import byproduct, source, or special nuclear material if the U.S. consignee is authorized to receive and possess the material under a general or specific NRC or Agreement State license issued by the Commission or a State with which the Commission has entered into an agreement under Section 274b. of the Atomic Energy Act. (b) The general license in paragraph (a) of this section does not authorize the import of more than 100 kilograms per shipment of source and/or special nuclear material in the form of irradiated fuel. (c) Paragraph (a) of this section does not authorize the import under a general license of radioactive waste. (d) A person importing formula quantities of strategic special nuclear material (as defined in § 73.2 of this chapter) under this general license shall provide the notifications required by § 73.27 and § 73.72 of this chapter. (e) A general license is issued to any person to import the major components of a utilization facility as defined in § 110.2 for end- use at a utilization facility licensed by the Commission. (f) Importers of radioactive material listed in Appendix P to this part must provide the notifications required by § 110.50. [51 FR 47208, Dec. 31, 1986, as amended at 56 FR 38336, Aug. 13, 1991; 58 FR 13003, Mar. 9, 1993; 60 FR 37564, July 21, 1995; 61 FR 35602, July 8, 1996; 65 FR 70291, Nov. 22, 2000; 68 FR 31589, May 28, 2003; 70 FR 37991, July 1, 2005; 75 FR 44089, Jul. 28, 2010]

§ 110.2 Definitions.

Radioactive waste, for the purposes of this part, means any material that contains or is contaminated with source, byproduct, or special nuclear material that by its possession would require a specific radioactive material license in accordance with this Chapter and is imported or exported for the purposes of disposal in a land disposal facility as defined in 10 CFR part 61, a disposal area as defined in Appendix A to 10 CFR part 40, or an equivalent facility; or recycling, waste treatment or other waste management process that generates radioactive material for disposal in a land disposal facility as defined in 10 CFR part 61, a disposal area as defined in Appendix A to 10 CFR part 40, or an equivalent facility. Radioactive waste does not include radioactive material that is-

(1) Of U.S. origin and contained in a sealed source, or device containing a sealed source, that is being returned to a manufacturer, distributor or other entity which is authorized to receive and possess the sealed source or the device containing a sealed source;
(2) A contaminant on any non-radioactive material (including service tools and protective clothing) used in a nuclear facility (an NRC- or Agreement State-licensed facility (or equivalent facility) or activity authorized to possess or use radioactive material), if the material is being shipped solely for recovery and beneficial reuse of the non-radioactive material in a nuclear facility and not for waste

management purposes or disposal;

(3) Exempted from regulation by the Nuclear Regulatory Commission or equivalent Agreement State regulations;

(4) Generated or used in a U.S. Government waste research and development testing program under international arrangements;

(5) Being returned by or for the U.S. Government or military to a facility that is authorized to possess the material; or

(6) Imported solely for the purposes of recycling and not for waste management or disposal where there is a market for the recycled material and evidence of a contract or business agreement can be produced upon request by the NRC.

Note: The definition of radioactive waste in this part does not include spent or irradiated fuel.

Deanne J. Idar, Ph.D. Senior Science Advisor OSD(P)-GSA/CWMD/ CBRN Defense Policy Office: Rm 5C746 Pentagon Phone: 703-571-2327 Blackberry: (b)(6) From: Sent: To: Subject: Dudek, Michael Tuesday, April 19, 2011 5:09 PM Deegan, George RE: LLRW Disposition

George,

I will pass the information on to the Ops Center; however, I'm not sure that they are still focused on this tasking. Things are moving so fast in there that they just try to get the best answer that they can, answer the mail, and then move on.

I'll keep you appraised of any follow-up actions that result.

Thanks!

Michael Dudek | Technical Assistant | NSIR/Division of Preparedness & Response | U.S. NRC 11555 Rockville Pike, Rockville, MD 20852 | 🕿 (301) 415-6500 | 🖾: <u>Michael Dudek@nrc.gov</u>

From: Deegan, George Sent: Tuesday, April 19, 2011 4:45 PM To: Dudek, Michael Subject: FW: LLRW Disposition

Here was how Harry closed it on April 12.

From: Felsher, Harry
Sent: Tuesday, April 12, 2011 12:11 PM
To: ET07 Hoc; OST01 HOC
Cc: Brock, Kathryn; Frazier, Alan; Lewis, Robert; Owens, Janice; Rothschild, Trip; Tobin, Jennifer; Smith, Brooke; Kim, Grace; Moore, Scott; Camper, Larry; Kennedy, James; Persinko, Andrew; Suber, Gregory; McKenney, Christepher; Lowman, Donald; Cool, Donald; Shaffner, James; Weber, Michael; Virgilio, Martin; Deegan, George
Subject: RE: LLRW Disposition

FSME, OIP, and OGC agree on the following response to the ET Operations Center:

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From: Bentz, Ju Sent: Monday	lie A. [mailto(b)(6)
To: (b)(6)	April 11, 2011 12:08 PM
Cc: (b)(6)	
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Subject: LLRW	Disposition
Dan,	
	elping us understand where the issues are on this problem. (b)(5)
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	answer from NRC and EPA to these questions by COB tomorrow? EPA Ops Center and
NRC <u>Ops Cente</u> NRC(b)(5)	answer from NRC and EPA to these questions by COB tomorrow? EPA Ops Center and er are on this email to forward this request to the correct players. If EPA or
NRC <u>Ops Cente</u> NRC(b)(5)	
NRC <u>Ops Cente</u> NRC(b)(5)	
NRC <u>OpsCente</u> NRC(b)(5))(5) Thanks!	
NRC Ops Cente MRC(b)(5))(5) Thanks! Julie Bentz	
NRC Ops Cente MRC(b)(5))(5) Thanks! Julie Bentz	
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NRC Ops Cente MRC(b)(5))(5) Thanks! Julie Bentz)(6) Original	er are on this email to forward this request to the correct players. If EPA or
NRC Ops Cente MRC(b)(5))(5) Thanks! Julie Bentz)(6) Original From: Schulth	er are on this email to forward this request to the correct players. If EPA or
NRC Ops Cente MRC(b)(5))(5) Thanks! Julie Bentz)(6) Original From: Schulth Behalf Of EOC	er are on this email to forward this request to the correct players. If EPA or . Message meisz.Daniel@epamail.epa.gov [mailto:Schultheisz.Daniel@epamail.epa.gov] On . Environmental_Unit@epamail.epa.gov
NRC Ops Cente MRC(b)(5) Thanks! Julie Bentz)(6) Original From: Schulth Behalf Of EOC Sent: Monday, To:	<pre>er are on this email to forward this request to the correct plavers. If EPA or </pre>
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I hope this helps. Hopefully this will become more clear as the situation evolves.

Dan Schultheisz U.S. Environmental Protection Agency Office of Radiation and Indoor Air Radiation Protection Division (202) 343-9349

----- Forwarded by Epahq Eoc/DC/USEPA/US on 04/08/2011 02:07 PM -----

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Subject: RE: Draft read-out 1600 Telecon 04/07/11 Low Level Radioactive Waste Disposition

Dr. Idar,

Given that much, of the call was spent describing the current radiological status on the ground in Japan, I think a short summary of that status would be useful in the telecon summary. Here is a proposed paragraph.

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Jeff Steele Naval Reactors 202-781-6192

-----Original Message-----From: Idar, Deanne J CIV OSD POLICY [mailto(b)(6) Sent: Thursday, April 07, 2011 6:55 PM To: Subject: Draft read-out 1600 Telecon 04/07/11 Low Level Radioactive Waste Disposition

UNCLASSIFIED// EOR OFFICIAL USE ONLY ,

ALCON:

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Thanks again to all that were able to participate in our discussion.

Best,

Deanne

<<...>> Low Level Radioactive Waste (LLRW) Disposition IA (Sub-set) Telecon: 1600-1700 Thursday, 6 April 2011 Participants: NNSA/DOE: EM HQ Office of Disposal Operations Office, General Counsel, NE 1. 2. EPA 3. NRC 4. NSS DoD: DoD LLRW Disposition Advisory Committee Chair, Naval Reactors, OSD(P)/CWMD 5. Facilitator: Dr. Deanne J. Idar, OSD Policy/Global Strategic Affairs/CWMD/ CBRN Defense Due outs: 1. DOE: Verify if DOE AMS assets have had any radioactive levels above clearance criteria; follow-up w Julie Bentz, NSS 2. NRC: provide DOS POCs information to OSD(P)/CWMD who will distribute to DoD LLRW Disposition Advisory Committee Chair 3. NSS: facilitate connection to DOS contacts for OSD(P)/CWMD Agenda 1. Roll Call 2. Review of 4 questions posed by DoD LLRW Disposition Advisory Committee (b)(5)

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3. Wrap up

(b)(5)

Meeting Summary:

The objective of today's telecon was to assist the DoD in developing the appropriate guidance to address any regulatory requirements for the appropriate disposition of LLWR generated by DoD operations in support of Operation Tomodachi OCONUS and CONUS. The 4 questions identified above were reviewed. Key points follow:

*Locations of concern with respect to accumulated LLRW

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§ 110.2 Definitions.

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management purposes or disposal;

(3) Exempted from regulation by the Nuclear Regulatory Commission or equivalent Agreement State regulations;

(4) Generated or used in a U.S. Government waste research and development testing program under international arrangements;

(5) Being returned by or for the U.S. Government or military to a facility that is authorized to possess the material; or

(6) Imported solely for the purposes of recycling and not for waste management or disposal where there is a market for the recycled material and evidence of a contract or business agreement can be produced upon request by the NRC.

Note: The definition of radioactive waste in this part does not include spent or irradiated fuel.

Deanne J. Idar, Ph.D. Senior Science Advisor OSD(P)-GSA/CWMD/ CBRN Defense Policy Office: Rm 5C746 Pentagon Phone: 703-571-2327 Blackberry: (b)(6)

8

From: Sent: To: Subject: Dudek, Michael Wednesday, April 20, 2011 8:24 AM Harvey, Sue FW: QUICK ACTION - New Ticket for Japanese Event Task Tracking (JETT) Process

FYI

Michael Dudek | Technical Assistant | NSIR/Division of Preparedness & Response | U.S. NRC 11555 Rockville Pike, Rockville, MD 20852 | 🕿 (301) 415-6500 | 🐼: Michael Dudek@nrc.gov

From: Hiland, Patrick
Sent: Tuesday, April 19, 2011 12:14 PM
To: Dudek, Michael
Cc: Wagner, Paige; OST01 HOC; Brown, Milton; Case, Michael; Ruland, William; Deegan, George; Lewis, Robert; Weaver, Doug
Subject: RE: QUICK ACTION - New Ticket for Japanese Event Task Tracking (JETT) Process

Hey Mike, I had discussion with four other RST managers who informed me that the subject spread sheet originated with our site team and was an attempt at tracking some specific requests for hardware and other specific activities that only account for a small fraction of effort expended by USNRC. Bottom line is that this list doesn't do much good. As you know, the NRC has expended thousands of person-hours in our follow-up to the Japan crises. Again, this list was originally generated to mainly track hardware requested and only captures a minimal amount of the total effort. The following rough estimates are provided by Emb/NRC tracking numbers and represent our estimate for the entire agency:

Emb. No.	NRC No.	ESTIMATE (person weeks)
21A	30,31 & 32	1
28	N/A	1
26	N/A	1
27	N/A	1
29	N/A	2
29b	33	1
33	N/A	1
34	N/A	1 .
35	N/A	1
10	3	1
11	3	1
28	N/A	4

From: Dudek, Michael

Sent: Monday, April 18, 2011 4:05 PM To: Hiland, Patrick; Case, Michael; Ruland, William; Deegan, George; Lewis, Robert; Weaver, Doug Cc: Wagner, Paige; OST01 HOC; Brown, Milton Subject: QUICK ACTION - New Ticket for Japanese Event Task Tracking (JETT) Process

NRR, RES, FSME, NMSS:

FOR OFFICIAL USE ONLY/SENSITIVE BUILLINCLASSIFIED (FOUO/SBU)

OMB has forwarded this spreadsheet for agencies to capture the costs associated with the Japan events. Please take a look at it and estimate the resources expended for NRC specific actions. The due date for getting this back to OMB is tomorrow, April 19th. OCFO has requested this information by 10 am tomorrow morning.

Guidance:

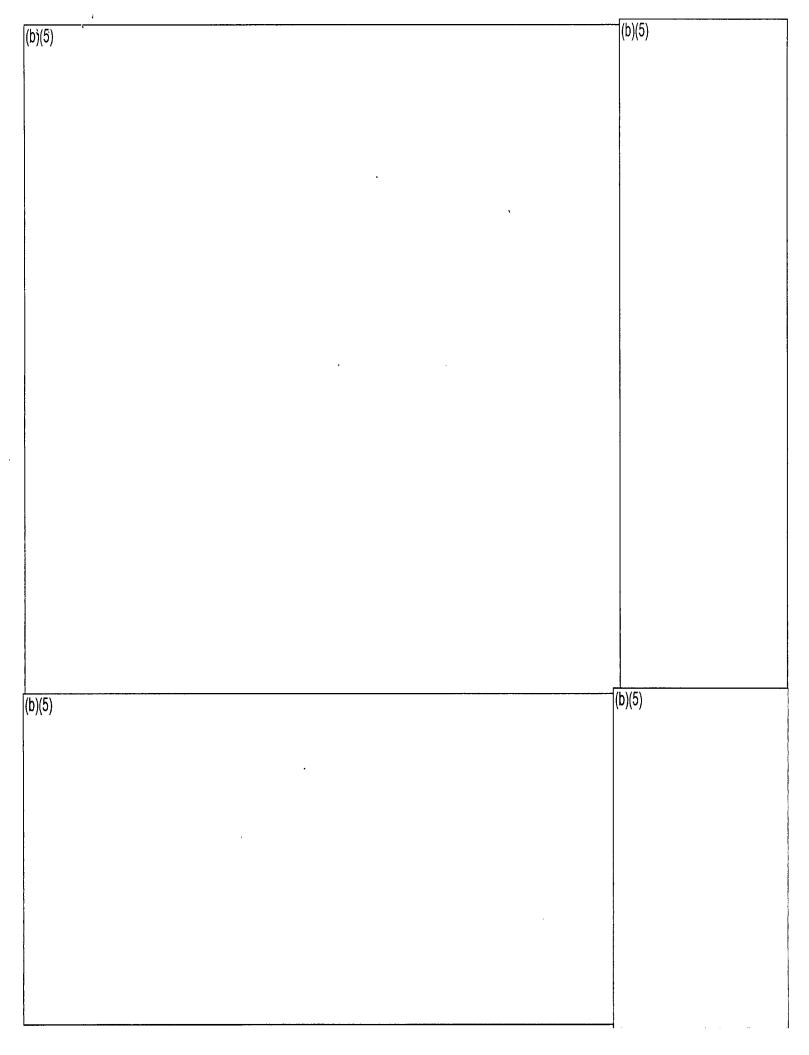
OMB is asking all affected agencies to add cost and other information to each item in the first tab of the attached spreadsheet. No changes should be made to any rows or columns other than the ones highlighted in green. The most critical columns to complete are highlighted in yellow. If there are items you are tracking that are not captured in the first two tabs of the attached spreadsheet, you can add them to the third tab. Since this is forward looking, you don't have to add any actions already taken that aren't already listed. We will try to use your existing spreadsheet for that information.

OMB understands that data provided will be rough estimates. NRC applicable items begin on page 4 and continue to page 8.

Thank you in advance for your help!

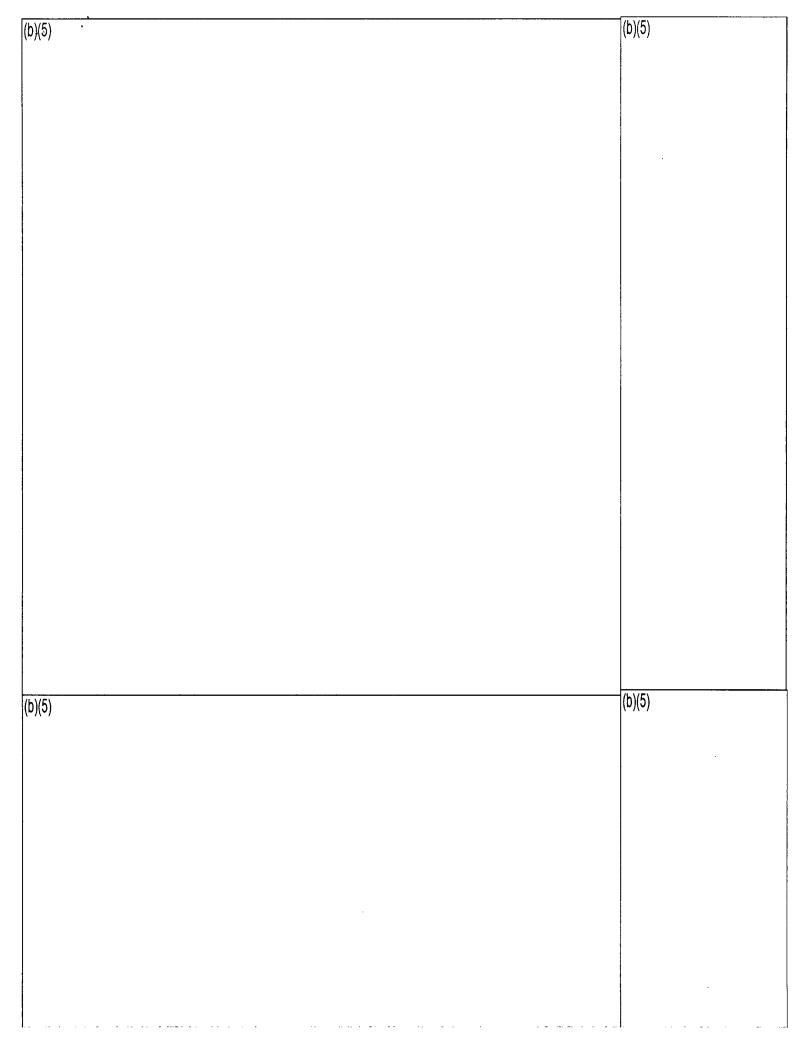
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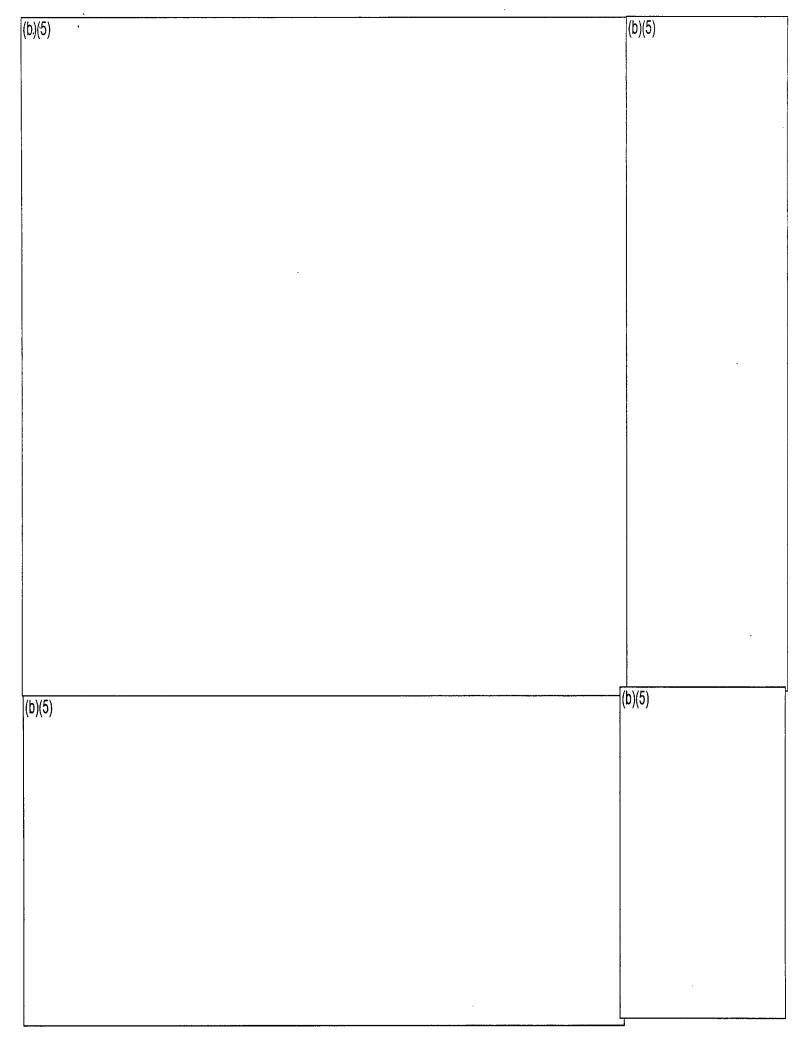
Michael Dudek | Technical Assistant | NSIR/Division of Preparedness & Response | U.S. NRC 11555 Rockville Pike, Rockville, MD 20852 | 🕿 (301) 415-6500 | 🖄: <u>Michael Dudeki@urc.gov</u>

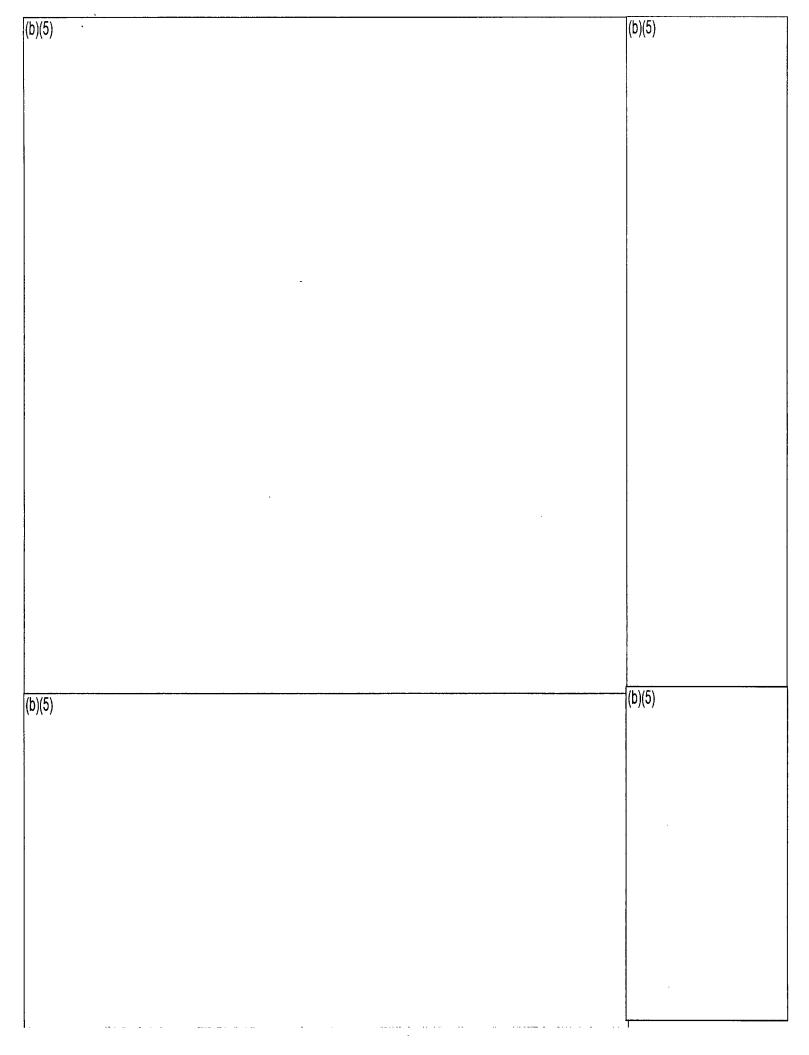


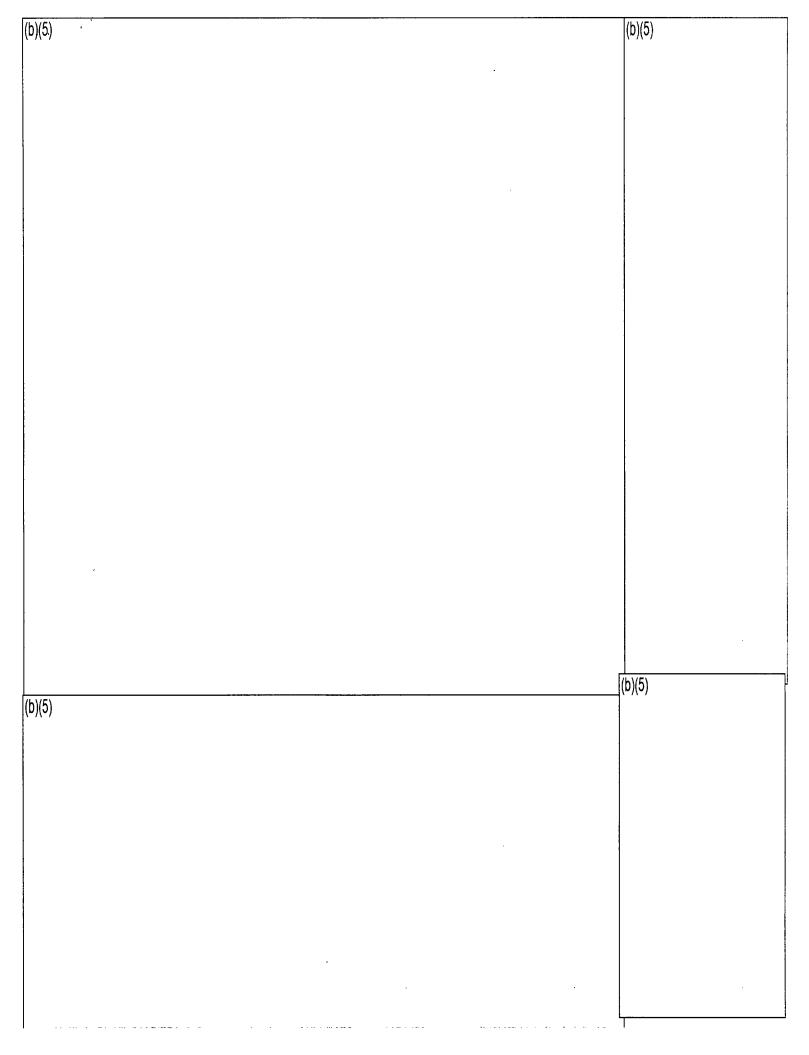
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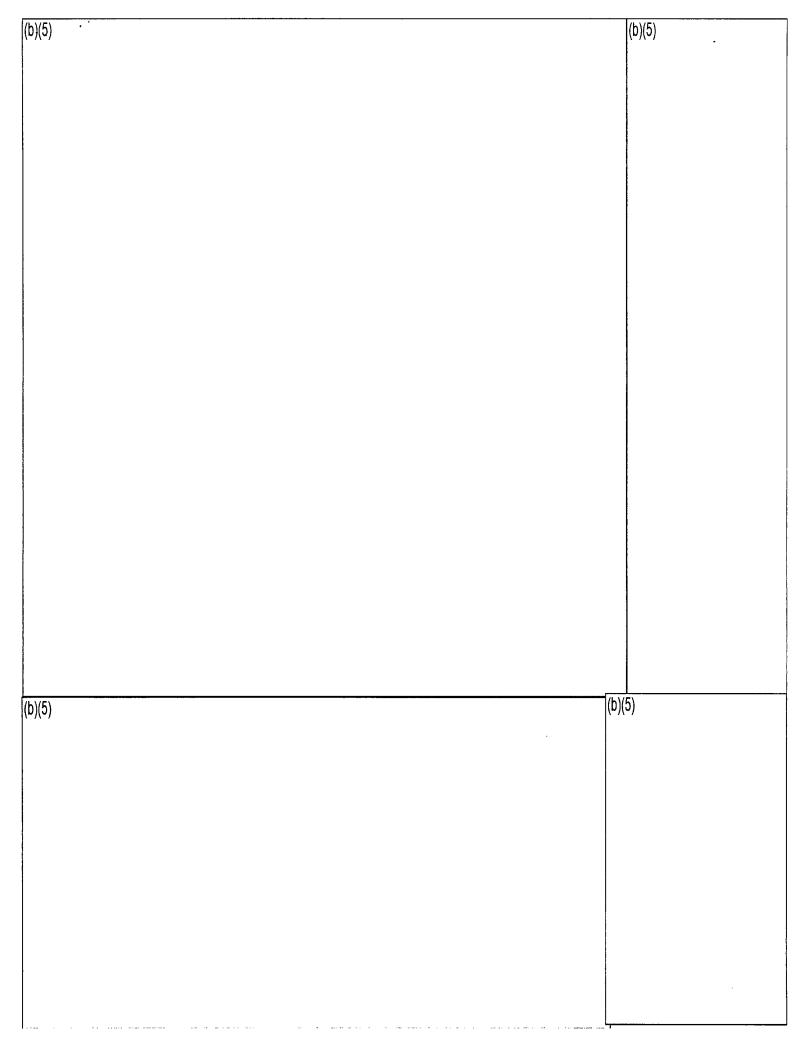








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From: Sent: To: Subject: Dudek, Michael Wednesday, April 20, 2011 9:42 AM Holahan, Patricia RE: Composite paper

Trish,

I will coordinate with Trish Milligan on this item. She will be in the Office today; however, I have not seen her yet.

,

Michael

-----Original Message-----From: Holahan, Patricia Sent: Wednesday, April 20, 2011 8:28 AM To: Milligan, Patricia; Dudek, Michael Cc: Zimmerman, Roy; Virgilio, Martin Subject: Composite paper

Trish, Mike

(b)(5)

Thanks, Trish

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From: Sent: To: Subject: Attachments:

Dudek, Michael Wednesday, April 20, 2011 4:49 PM Merzke, Daniel RE: Composite Paper Composite rev 6.doc

Dan,

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I asked around and you probably have the same version of the document that I do. Rev. 6.

I've sent an e-mail to Trish, but haven't heard back.

Michael I. Dudek

Michael Dudek | Technical Assistant | NSIR/Division of Preparedness & Response | U.S. NRC 11555 Rockville Pike, Rockville, MD 20852 | 🕿 (301) 415-6500 | 🖾 Michael, Dudek@urc.gov

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From: Merzke, Daniel Sent: Wednesday, April 20, 2011 4:03 PM To: Dudek, Michael Subject: Composite Paper

Michael, when you get a chance, could you send me the latest draft of the composite paper. I should have reviewed it a while ago. Thanks.

بدير مدر سرر

Dan

QC

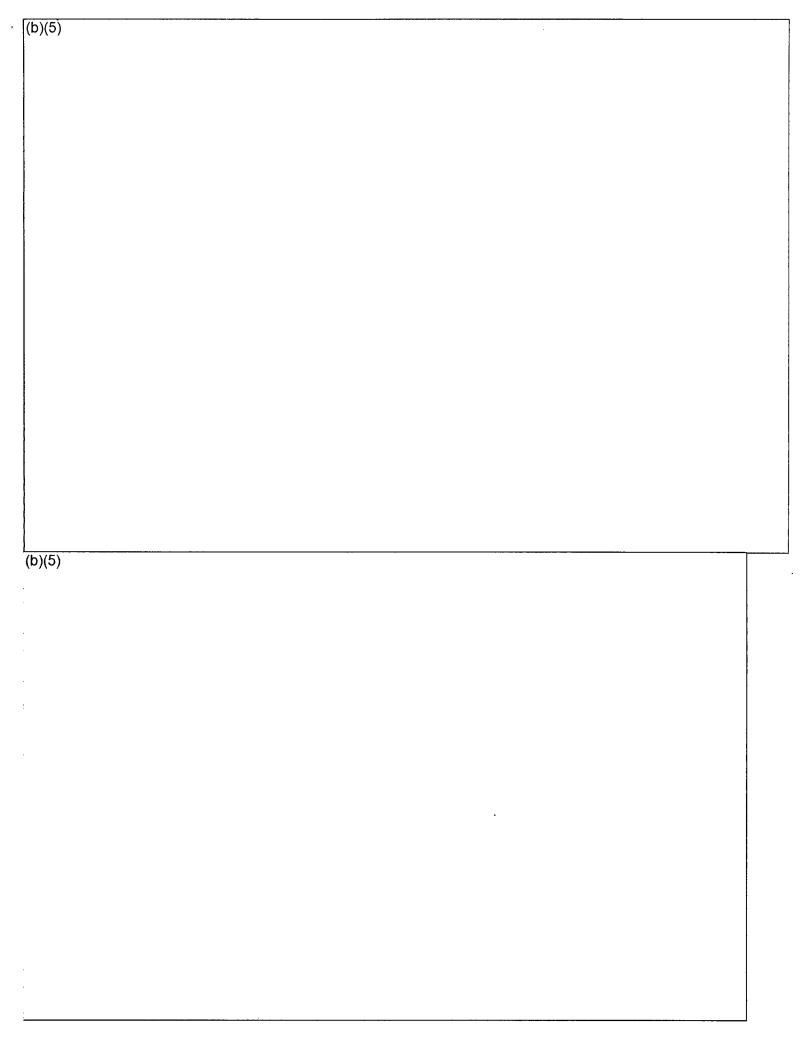
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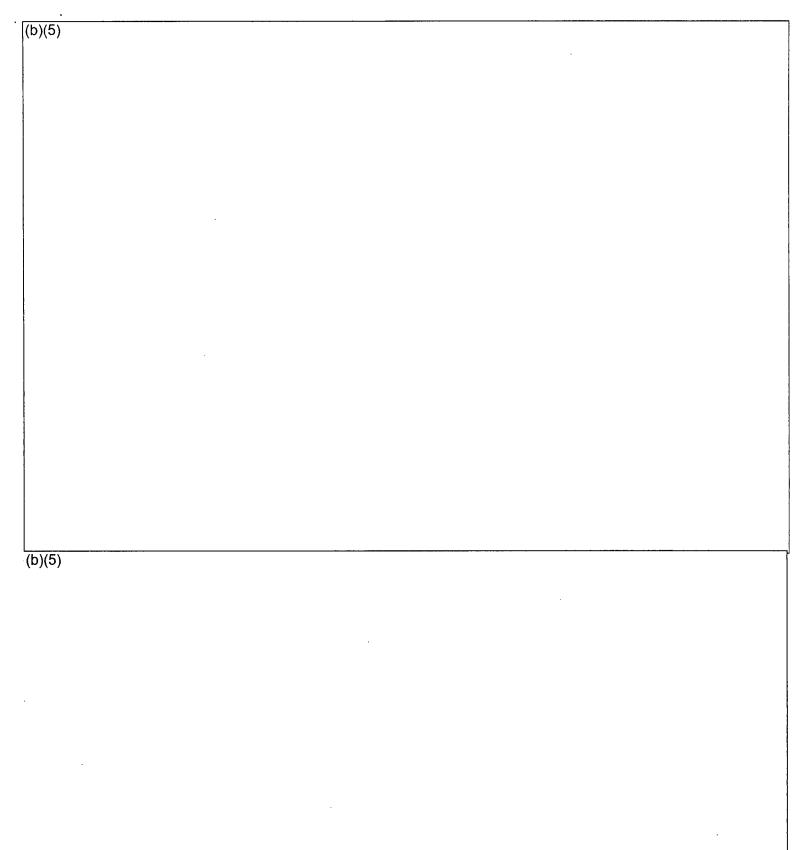
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From: Sent: To: Subject: Jones, Cynthia Wednesday, April 27, 2011 3:49 PM Milligan, Patricia; McDermott, Brian RE: REPLY: revised guidelines

It apparently does now

From: Milligan, Patricia Sent: Wednesday, April 27, 2011 3:47 PM To: McDermott, Brian; Jones, Cynthia Subject: Fw: REPLY: revised guidelines

This version had rad pro for public guidelines. It was sent out on Mon april 25 by myself and pmt Sent from my NRC Blackberry Patricia A Milligan, CHP RPh 202 510 1445

From: Gambone, Kimberly To: Hoc, PMT12 Cc: Milligan, Patricia Sent: Mon Apr 25 10:26:58 2011 Subject: FW: REPLY: revised guidelines

PMT12,... Rev 8 of the composite paper for you.

Trish, I failed to include PMT12 in the original distribution. Would you please include PMT12 on further communications please.

Thanks.

Kimberly

From: Milligan, Patricia Sent: Monday, April 25, 2011 9:25 AM To: Virgilio, Martin; Gambone, Kimberly; Dudek, Michael; MorganButler, Kimyata; Jackson, Deborah; Weaver, Doug; Hiland, Patrick; Skeen, David; Ciocco, Jeff; Kevern, Thomas; Wiggins, Jim; Evans, Michele; Holahan, Patricia; Tracy, Glenn; Uhle, Jennifer; Carpenter, Cynthia; Johnson, Michael; Kokajko, Lawrence; Weber, Michael; RST01 Hoc; LIA08 Hoc; OST01 HOC; Reynolds, Steven; Holonich, Joseph; Casto, Chuck; PMT_japan Resource; Holahan, Vincent; Zimmerman, Roy; Jones, Cynthia; Boger, Bruce; Layton, Michael; Lewis, Robert; McDermott, Brian; Williams, Kevin Cc: Merzke, Daniel; Bush-Goddard, Stephanie; Andersen, James; Bowman, Gregory Subject: RE: REPLY: revised guidelines

I have attached an updated composite |(b)(5)|

(b)(5)

Please review and comment.

thank you. Trish

Patricia Milligan, CHP, RPh Senior Technical Advisor for Preparedness & Response Office of Nuclear Security and Incident Response US NRC MS T B46M Washington, DC 20555 301-415-2223 Blackberry (b)(6)

From: Virgilio, Martin

Sent: Sunday, April 24, 2011 12:24 PM

To: Gambone, Kimberly; Dudek, Michael; MorganButler, Kimyata; Jackson, Deborah; Weaver, Doug; Hiland, Patrick; Skeen, David; Ciocco, Jeff; Kevern, Thomas; Wiggins, Jim; Evans, Michele; Holahan, Patricia; Tracy, Glenn; Uhle, Jennifer; Carpenter, Cynthia; Johnson, Michael; Kokajko, Lawrence; Weber, Michael; Holahan, Patricia; RST01 Hoc; LIA08 Hoc; OST01 HOC; Skeen, David; Hiland, Patrick; Reynolds, Steven; Holonich, Joseph; Casto, Chuck; PMT_japan Resource; Holahan, Vincent; Tracy, Glenn; Zimmerman, Roy; Holahan, Patricia; Jones, Cynthia; Boger, Bruce; Wiggins, Jim; Kokajko, Lawrence; Uhle, Jennifer; Layton, Michael; Carpenter, Cynthia; Johnson, Michael; Lewis, Robert; Milligan, Patricia

Cc: Merzke, Daniel; Bush-Goddard, Stephanie; Andersen, James; Bowman, Gregory **Subject:** REPLY: revised guidelines

All

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Please set of goal at COB Monday for resolving these differences. NSIR lead.

Marty

From: Gambone, Kimberly
Sent: Friday, April 22, 2011 8:02 PM
To: Virgilio, Martin; Dudek, Michael; MorganButler, Kimyata; Jackson, Deborah; Weaver, Doug; Hiland, Patrick; Skeen, David; Ciocco, Jeff; Kevern, Thomas
Cc: Holahan, Vincent; PMT_japan Resource; Tracy, Glenn; Zimmerman, Roy; Boger, Bruce; Wiggins, Jim; Uhle, Jennifer;

Layton, Michael; Holonich, Joseph; Kokajko, Lawrence; Carpenter, Cynthia; Johnson, Michael; Lewis, Robert; Holahan, Patricia; Jones, Cynthia **Subject:** FW: revised guidelines

All, 🗉

Attached is the latest revision of the Composite Paper, i.e., "Recommendations for US citizens on relaxation of the 50 mile evacuation recommendation and re-entry to evacuate areas around Fukushima Daiichi NPP. " NRC Operations Center PMT requests that all line organizations review and provide comment. We strive to release the document to the federal family middle of next week.

Provide comments by COB Tuesday, April 26th to <u>PMT12.hoc@nrc.gov</u>, Cc: Patricia Milligan.

Task Tracker #4969.

Please contact me if you have questions.

Thank you.

V/r,

Kimberly Gambone

PMT/PAAD





Radiological Assessment - of effects from -Fukushima Daiichi Nuclear Power Plant

April 22, 2011



Operations Summary

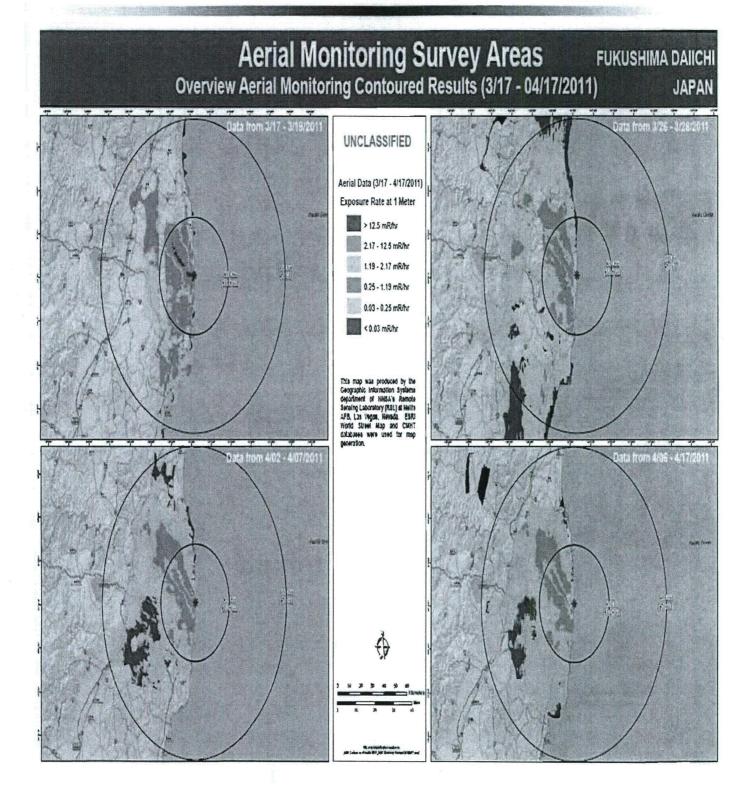


- Aerial Measuring Systems have totaled more than 400 flight hours in support of aerial monitoring operations
- NNSA's Consequence Management Response Teams have collected approximately 160,000 total field measurements taken by DOE, DoD, and Japanese monitoring assets
- 559 total air samples taken at U.S. facilities throughout Japan undergoing lab analysis in the United States





Survey Data Over Time





Assessment



An assessment of measurements gathered through April 20 continues to show:

- Radiation levels continue to decrease
- No measurable deposit of radiological material since March 19
- US bases and facilities all measure dose rates below 32 microrem/hr (32 millionths of a REM) – a level with no known health risks
- Agricultural monitoring and possible intervention will be required for several hundred square kilometers surrounding the site:
 - Soil and water samples are the only definitive method to determine agricultural countermeasures
 - Ground monitoring can give better fidelity to identify areas that require agricultural sampling





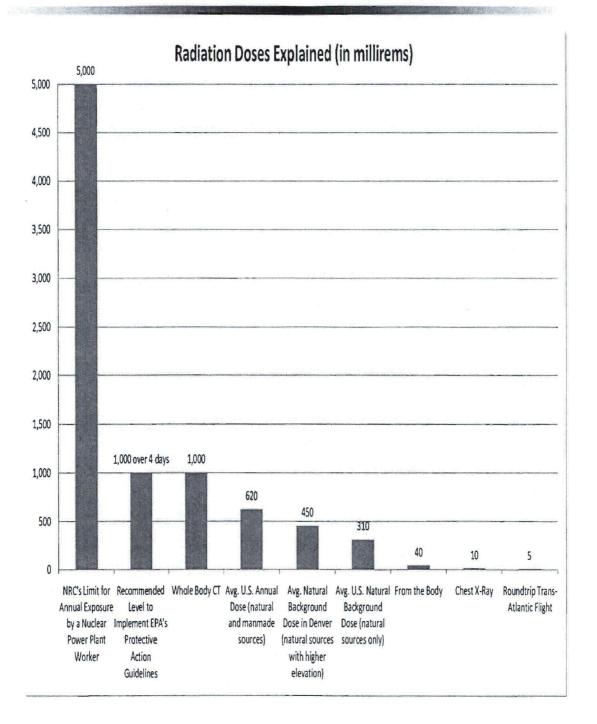


- The Nuclear Regulatory Commission estimates that the average American absorbs 620 mRem a year* (or 0.071 mRem/hour)
- An average transatlantic flight produces an exposure of 2.5 mRem*
- A typical chest x-ray produces 10 mRem per image
- EPA guidelines call for public health actions if exposure exceeds 1000 mRem over 4 days

* Source: NRC: <u>http://nrc.gov/images/about-nrc/radiation/factoid2-lrg.gif</u>







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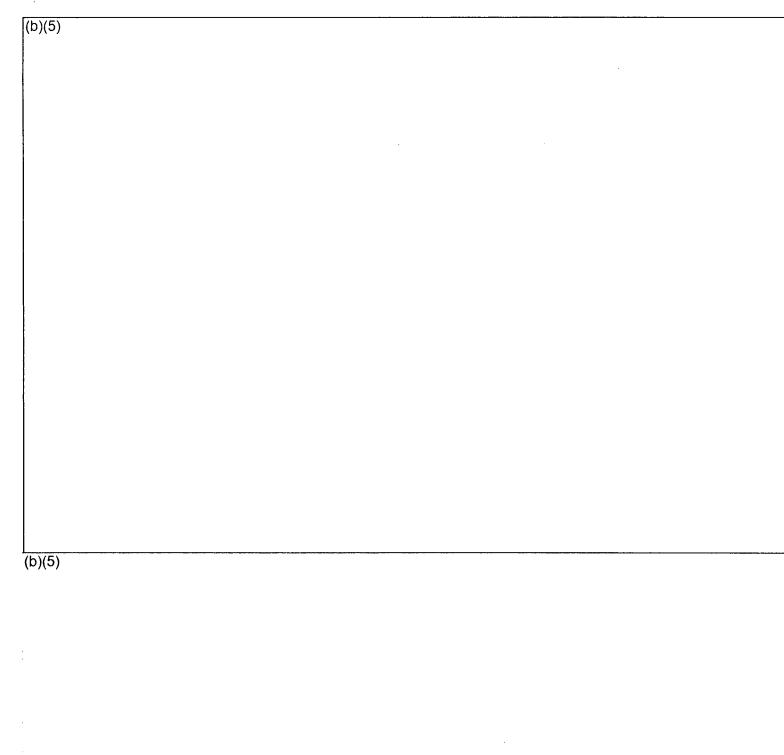
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From: Sent: To: Subject:

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Cecere, Bethany Friday, March 11, 2011 1:22 PM Wright, Lisa (Gibney) RE: Updated 3_11_QUAKE_talk_pts.docx

I'm going to get something to eat. Call me if you need anything in the next 20 minutes, okay? ((b)(6)

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From: Wright, Lisa (Gibney) Sent: Friday, March 11, 2011 10:59 AM To: Cecere, Bethany Subject: Fw: Updated 3_11_QUAKE_talk_pts.docx

Sent from my NRC blackberry Lisa Gibney To reach me please call (b)(6)

From: Marshall, Jane To: Wright, Lisa (Gibney); Wright, Ned Sent: Fri Mar 11 10:47:27 2011 Subject: Fw: Updated 3_11_QUAKE_talk_pts.docx

Sent from my NRC Blackberry

From: Howell, Linda To: HOO Hoc; Marshall, Jane Sent: Fri Mar 11 10:46:23 2011 Subject: FW: Updated 3_11_QUAKE_talk_pts.docx

Revised Talking points from OPA. Please share with the Liaison Team and other managers in the Ops Ctr. From: Uselding, Lara Sent: Friday, March 11, 2011 9:42 AM

To: Howell, Linda Subject: Updated 3_11_QUAKE_talk_pts.docx

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3_11_QUAKE_talk_pts.docx

OPA

TALKING POINTS

MARCH 11, 2011 JAPAN EARTHQUAKE AND WEST COAST TSUNAMI As of 1/16/2013 1:08 PM

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

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

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

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

• The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy. In other words, the licensing bases for existing nuclear power plants are based on historical data from the area's maximum credible earthquake, with an additional margin included. From: Sent: To: Subject: Temple, Jeffrey Thursday, March 31, 2011 1:37 PM Reed, Elizabeth RE: need help to take shift on Sat. 3PM-11PM

Thanks Beth. Jeff

From: Reed, Elizabeth
Sent: Thursday, March 31, 2011 11:23 AM
To: Cecere, Bethany; LIA08 Hoc; Wright, Lisa (Gibney); Lising, Jason; Wright, Ned; Smith, Theodore; Lynch, Jeffery; Salter, Susan; Hale, Jerry; Sloan, Scott; Chazell, Russell; Temple, Jeffrey
Subject: RE: need help to take shift on Sat. 3PM-11PM

I'd love to help out Bethany but I am on day shift that day. I can stay a few hours extra if someone else can cover the last part of the shift.

Beth Reed

From: Cecere, Bethany
Sent: Wednesday, March 30, 2011 5:58 PM
To: LIA08 Hoc; Wright, Lisa (Gibney); Lising, Jason; Wright, Ned; Smith, Theodore; Reed, Elizabeth; Lynch, Jeffery; Salter, Susan; Hale, Jerry; Sloan, Scott; Chazell, Russell; Temple, Jeffrey
Subject: need help to take shift on Sat. 3PM-11PM

I'm sorry to ask, I(b)(6)	
(b)(6)	Can someone please take my shift on Saturday (4/2) from 3 PM-11PM?	

Thank you, Bethany

5/102

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From: Sent: To: Subject: Hasselberg, Rick Monday, April 18, 2011 8:50 AM LIA08 Hoc RE: Japan Team logistics help

Will do!

From: LIA08 Hoc Sent: Sunday, April 17, 2011 9:21 PM To: Hoc, PMT12 Cc: Hasselberg, Rick; Wright, Ned Subject: RE: Japan Team logistics help

Thanks Michelle. Let me get to work first thing Monday morning on these. Rick.can you please send a link to the RTM to Tony Huffert on the Japan Site Team ? Ned Wright...can you chase down this request Monday day shift with OIS (setting up a PMT embassy email account)? Thanks....Jeff Temple

Liaison Team Coordinator US Nuclear Regulatory Commission email: <u>lia08.hoc@nrc.gov</u> Desk Ph: 301-816-5185

From: Hoc, PMT12 Sent: Sunday, April 17, 2011 9:12 PM To: LIA08 Hoc Subject: Japan Team logistics help

Jeff,

Tony asked for

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- 1. PMT training materials, for instance, a slideshow and/or the training module.
- 2. A link to the RTM
- 3. Help with getting PMT embassy email account set up. They have a CSC ticket # which is over a week old, but they haven't got the email account set up yet. Tony was going to send it to me, but he hasn't yet.

Tony had called Lou for help with the training also, and Lou sent the attached email.

Michelle PMT

5/103

From: LIA08 Hoc
Sent: Saturday, April 09, 2011 11:18 AM
To: Temple, Jeffrey; Wright, Lisa (Gibney); Franovich, Rani; Murray, Charles; Jessie, Janelle; Dudek, Michael; Zimmerman, Jacob; Turtil, Richard
Subject: draft LT Coordinator staffing plan going forward

Good morning all

A new organization plan is being developed today that would reduce LT staffing to one person per shift (and total Japan event ops center staffing to 6 people per shift, including the ET Director or an SES position). It is possible this new schedule would start this Monday. We will notify those on the existing Watchbill, for LT Directors, Coordinators, federal liaisons, etc. that we no longer need their help after this weekend (dates still being finalized).

The general concept for transition from a 30 person per shift organization to a 6 person per shift organization is to reduce the workload by closing task trackers, refocusing more attention to the Site Team in Japan, reduce the number of daily reoccurring calls and meetings, and farm out most work to the line organization (OIP, OCA and FSME would handle their international, congressional and state liaison functions via a 24/7 schedule in their offices).

The Lt Coordinator staffing plan attached to this email is DRAFT, and attempts to use everyone sparingly, usually in blocks of 4 shifts at a time. I am also asking Rich Turtil, who runs our State Liaison Desk, Mike Dudek, who was our Lt liaison at USAID, and Jake Zimmerman, a new recruit as a LT Director, to help with some of these LT staffing assignments.

Please let me know as soon as you can if you can support this new schedule as we move forward.

Thanks

Jeff Temple Response Program Manager Liaison Team/Interagency Response Team/Corporate Support Response Team 301-816-5185 (b)(6) (cell)

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Day	Date	0700 - 1500	1500 - 2300	2300 - 0700
Tues	3/15	Milt Murray	Nathan Sanfilippo	Jeff Temple
Wed	3/16	Milt Murray	Nathan Sanfilippo	Jeff Temple
Thurs	3/17	Milt Murray	Rani Franovich	Jeff Temple
Fri	3/18	Milt Murray	Rani Franovich	Janelle Jessie
Sat	3/19	Jeff Temple	Rani Franovich	Janelle Jessie
Sun	3/20	Jeff Temple	Nathan Santilippo	Milt Murray
Mon	3/21	Jeff Temple	Nathan Sanfilippo	Milt Murray
Tues	3/22	Rani Franovich	Nathan Sanfilippo	Milt Murray
Wed	3/23	Rani Franovich	Jeff Temple	Milt Murray
Thurs	3/24	Rani Franovich	Jeff Temple	Milt Murray
Fri	3/25	Rani Franovich (until 12:45)	Janelle Jessie (starting 12:45)	Milt Mutray
Sat	3/26	Janelle Jessie	Rani Franovich	Milt Muray
Sun	3127	Lisa Gibney	Jeff Temple	Milt Murray
Mon	3/28	Jeff Temple	Rani Franovich	Janelle Jessie
Tues	3/29	Milt Murray	Rani Franovich	Janelle Jessie
Wed	3/30	Milt Murray	Jeff Temple	Janelle Jessie
Thurs	3/31	Milt Murray	Jeff Temple	Rani Franovich
Fri	4/1	Jeff Temple	Janelle Jessie	Rani Franovich
Sat	4/2	Jeff Temple	Milt Murray	Joe Rivers
Sun	4/3	Jeff Temple	Mill Murray	Joe Rivers
Mon	4/4	Rani Franovich	Milt Murray	Jeff Temple
Tues	4/5	Rani Franovich	Milt Murray	Leff Temple
Wed	4/6	Rani Franovich	Milt Murray	Janelle Jessie
Thurs	417	Jeff Temple	Clyde Ragland	Janelle Jessie
Fri	EX. B. KERNING STREET, MARKED AND AND ADDRESS AND ADDRES ADDRESS AND ADDRESS AND ADDRES	Jeff Temple	Clyde Ragland	Rani Franovich
Sat	4/9	Jeff Temple	Mit Murray	Rani Franovich
Sun	4/10	Lisa Wright	Milt Murray	Jeff Temple
Mon	4/11	Lisa Wright	Clyde Ragland	leff Temple
Tues	4/12	Lisa Wright	Joe Rivers	Jeff Temple
Wed	4/13	Joe Rivers	Lisa Wright	Jeff Temple
Thurs	4/14	Joe Rivers	Rani Franovich	Janelle Jessie (Ned will cover)
Fri	4/15	Milt Murray	Jeff Temple	Rani Franovich
Sat	4/16	Jake Zimmerman	Jeff Temple	Milt Murray

Sun	4/17	Jake Zimmerman	Jeff Temple	Milt Murray
Mon	4/18	Jake Zimmerman	Jeff Temple	Milt Murray
Tues	4/19	Jake Zimmerman	Jeff Temple	Milt Murray
Wed	4/20	Jeff Temple	Janelle Jessie	Rani Franovich
Thurs	4/21	Milt Murray	Janelle Jessie	Rani Franovich
Fri	4/22	Milt Murray	Janelle Jessie (Ned will cover)	Rani Franovich
Sat	4/23	Milt Murray	Janelle Jessie (Ned will cover)	Rani Franovich
Sun	4/24	Milt Murray	Mike Dudek	Jeff Temple
Mon	4/25	Lisa Wright	Mike Dudek	Jeff Temple
Tues	4/26	Lisa Wright	Mike Dudek	Jeff Temple
Wed	4/27	Lisa Wright	Mike Dudek	Jeff Temple
Thurs	4/28	Lisa Wright	Mike Dudek	Jeff Temple
Fri	4/29	Janelle Jessie	Rich Turtil	Milt Murray
Sat	4/30	Janelle Jessie (Ned will cover)	Jeff Temple	Milt Murray
Sun	5/1	Janelle Jessie (Ned will cover)	Jeff Temple	Milt Murray
Mon	5/2	Rani Franovich	Jeff Temple	Mike Dudek
Tues	5/3	Rani Franovich	Jeff Temple	Mike Dudek
Wed	5/4	Rani Franovich	Jake Zimmerman	Mike Dudek
Thurs	5/5	Jeff Temple	Jake Zimmerman	Mike Dudek
Fri	5/6	Jeff Temple	Jake Zimmerman	Janelle Jessie (JJ's out of town, replacement needed Jeff)
Sat	5/7	Milt Murray	Jeff Temple	Janelle Jessie (JJ's out of town, replacement needed Jeff)
Sun	5/8	Milt Murray	Jeff Temple	Janelle Jessie (JJ's out of town, replacement needed Jeff)

4/1/11

Day	Date	0700 - 1500	1500-2300	2300 - 0700
Tues	3/15	Milt Murray	Nathan Sanfilippo	Jeff Temple
Wed	3/16	Milt Murray	Nathan Sanfilippo	JeffTemple
Thurs	3/17	Milt Murray	Rani Franovich	leff Temple
Fri	3/18	Milt Murray	Rani Franovich	Janelle Jessie
Sat	3/19	Jeff Temple	Rani Francvich	Janelle Jessie
Sun	3/20	Jeff Temple	Nathan Sanfilippo	Wilt MUITRY
Mon	3/21	Jeff Temple	Nathan Sanfilippo	Mill Murray
Tues	3/22	Rani Franovich	Nathan Sanfilippo	Witt Munay
Wed	3/23	Rani Franovich	Jeff Temple	Min Murray
Thurs	3/24	Rani Franovich	Jeff Temple	MIL MUITAN
Fri	3/25	Rani Franovich (until 12:45)	Janelle Jessie (starting 12:45)	Milt Murray
Sat	3/26	Janelle Jessie	Rani Franovich	Mill Murray
Sun	3/27	Lisa Gibney	Jeff Temple	Milt Munay
Mon	3/28	Jeff Temple	Rani Franovich	Janelle Jessie
Tues	3/29	Milt Murray	Rani Franovich	Janelle Jessie
Wed	3/30	Mit Murray	Jeff Temple	Janelle Jessie
Thurs	3/31	Milt Murray	Jeff Temple	Rani Franovich
Fri	4/1	Jeff Temple	Janelle Jessie	Rani Franovich
Sat	4/2	Jeff Temple	Milt Murray	Joe Rivers
Sun	4/3	Jeff Temple	Milt Murray	Joe Rivers
Mon	4/4	Rani Francvich	Mill Murray	Jeff Temple
Tues	4/5	Rani Franovich	Milt Murray	Jeff Temple
Wed	4/6	Rani Franovich	Milt Murray	Janelle Jessie
Thurs	4/7	Jeff Temple	Clyde Ragland	Janelle Jessie
Fri		Jeff Temple	Clyde Ragland	Rani Franovich
Sat	4/9	Jeff Temple	Milt Murray	Rani Franovich
Sun	4/10	Lisa Wright	Milt Murray	Jeff Temple
Mon	4/11	Lisa Wright	Clyde Ragland	Jeff Temple
Tues	4/12	Lisa Wright	Joe Rivers	Jeff Temple
Wed	4/13	Joe Rivers	Lisa Wright	Jeff Temple
Thurs	4/14	Joe Rivers	Rani Franovich	Janelle Jessie
Fri	4/15	Milt Murray	Jeff Temple	Rani Franovich
Sat	4/16	Jake Zimmerman	Jeff Temple	Milt Murray

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Sun	4/17	Jake Zimmerman	Jeff Temple	Milt Murray
Mon	4/18	Jake Zimmerman	Jeff Temple	Milt Murray
Tues	4/19	Jake Zimmerman	Jeff Temple	Milt Murray
Wed	4/20	Jeff Temple	Janelle Jesse	Rani Franovich
Thurs	4/21	Milt Murray	Janelle Jesse	Rani Franovich
Fri	4/22	Milt Murray	Janelle Jesse	Rani Franovich
Sat	4/23	Milt Murray	Janelle Jesse	Rani Franovich
Sun	4/24	Milt Murray	Mike Dudek	Jeff Temple
Mon	4/25	Lisa Wright	Mike Dudek	Jeff Temple
Tues	4/26	Lisa Wright	Mike Dudek	Jeff Temple
Wed	4/27	Lisa Wright	Mike Dudek	Jeff Temple
Thurs	4/28	Lisa Wright	Mike Dudek	Jeff Temple
Fri	4/29	Janelle Jesse	Rich Turtil	Milt Murray
Sat	4/30	Janelle Jesse	Jeff Temple	Milt Murray
Sun	5/1	Janelle Jesse	Jeff Temple	Milt Murray
Mon	5/2	Rani Franovich	Jeff Temple	Mike Dudek
Tues	5/3	Rani Franovich	Jeff Temple	Mike Dudek
Wed	5/4	Rani Franovich	Jake Zimmerman	Mike Dudek
Thurs	5/5	Jeff Temple	Jake Zimmerman	Mike Dudek
Fri	5/6	Jeff Temple	Jake Zimmerman	Janelle Jesse
Sat	5/7	Milt Murray	Jeff Temple	Janelle Jesse
Sun	5/8	Milt Murray	Jeff Temple	Janelle Jesse

4/1/11

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From:	Temple, Jeffrey
Sent:	Monday, April 25, 2011 7:33 PM
То:	Jessie, Janelle; LIA08 Hoc
Cc:	Murray, Charles; Wright, Ned; Franovich, Rani; Dudek, Michael; Wright, Lisa (Gibney); FOIA Response.hoc Resource
Subject:	RE: Follow Up Action: Industry Consortium Matrix as updated from the 4/21/11 200((EDT) Call

Thanks JJ. | appreciate your help with this. Its been a rough transition with the industry consortium Japanese request matrix. Sounds like we need to do a better job communicating any open items to our relief, (b)(5)

(b)(5)		
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Glad you weathered the storm. Jeff

From: Jessie, Janelle
Sent: Friday, April 22, 2011 7:59 AM
To: LIA08 Hoc
Cc: Temple, Jeffrey; Murray, Charles; Wright, Ned; Franovich, Rani; Dudek, Michael; Wright, Lisa (Gibney); FOIA Response.hoc Resource
Subject: Follow Up Action: Industry Consortium Matrix as updated from the 4/21/11 2000 (EDT) Call
Importance: High

Good Morning LT Coordinators!

Just a heads up (when you come on shift) for you to take a look at and follow up on any NRC actions listed in the matrix from the 4/21/11 consortium call. This item was turned over to the LT coordinator on nights last night, but I want to ensure that everyone is aware. (Please check the sent items in outlook at LIA08 for an email to Timothy Cipullo sent at 11:XXpm on 4/21/11 if you cannot locate the hard copy or check the LT toolbox on the desktop—the document is dated 11:XX pm on 4/21/11)

After yesterday's call, I updated the matrix using my notes in an effort to highlight mainly NRC's actions as well as those of other agencies on the call. A copy was also placed in the ET Log book and emailed to Timothy Cipullo of the State Dept at the Embassy—he maintains the list—with a request that he consider incorporating the updates. You will notice that updates made as a result of yesterday's call are in yellow highlight.

While I understand that it is the Embassy's duty to maintain this list now, we need to be certain that any actions for NRC (including those for the site team in Japan) are addressed in a timely manner.

The matrix for yesterday's call was sent to us at 5 or so in the morning on the day of the call. Since I came on for the swing shift at 3pm yesterday, I was not left with enough time to do almost anything about the actions listed for the NRC (including any follow ups with the site team). That was no fun for me and embarrassing to say the least. While no one individual is to blame for this, I think we can all help the effort collectively and set each other up to ensure that the call goes smoothly by taking a look at the matrix to identify NRC's actions, following up on the actions as best we can during our shift and turning over the items to the oncoming coordinator.

Another reason why it is important to track our progress on these items is b/c assumptions are made that the site team is addressing an action and we learned on the call yesterday that the site team believed HQ NRC had the action on some of the items.

I don't want to beleaguer the issue, but I thought it was important enough to follow up on this action.

104

Hopefully this was shared during turnover this morning. I cannot recall if I added into the log as it was midnight before I left. So, I thought it best to send this email to ensure that I communicated this clearly to everyone.

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Have a good weekend.

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JJ

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From: Sent: To: Subject: Temple, Jeffrey Tuesday, April 26, 2011 10:10 AM Chazell, Russell RE: attached Liaison Team shift schedule

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(b)(6)

families, so good overall. How about you?

From: Chazell, Russell Sent: Tuesday, April 26, 2011 7:37 AM To: Temple, Jeffrey Subject: RE: attached Liaison Team shift schedule

You bet. Janelle added me. How was Easter? Good I hope.

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From: Temple, Jeffrey Sent: Monday, April 25, 2011 7:17 PM To: Chazell, Russell Subject: RE: attached Liaison Team shift schedule

Looks like someone already put you on the schedule for those shifts. Thanks for the help. Jeff

From: Chazell, Russell Sent: Wednesday, April 20, 2011 3:38 PM To: Temple, Jeffrey; LIA08 Hoc Subject: RE: attached Liaison Team shift schedule

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Hi Jeff,

If they're still available, I can do the 7-3 shifts on Saturday and Sunday, 5/7 and 5/8.

Thanks, Russ

Russell E. Chazell **Project Manager** NRO/DNRL/NRGA T-6C09 (Office) T-6C32M (Mail Stop) 301-415-5003 (Office) mailto:Russell.Chazell@nrc.gov

..... From: LIA08 Hoc

Sent: Wednesday, April 20, 2011 2:32 PM To: Wright, Lisa (Gibney); Murray, Charles; Rivers, Joseph; Chazell, Russell; Wright, Ned; Ragland, Robert; Jessie, Janelle; Franovich, Rani; Carpenter, Gene; Reed, Elizabeth; Dudek, Michael; Turtil, Richard; Tabatabai, Omid Subject: attached Liaison Team shift schedule

15/105

Please review the attached schedule for LT coverage and let me know if we need to make any changes. I am trying to include a few more liaison team folks and one more safeguards team person to help with this schedule. Also, for your info, we may cut down to two ten hour shifts a day, which would help. I will keep you informed of Operations Center scheduling issues as they arise and get resolved.

Thanks to all for your help, and have a happy and safe Easter. I am out of town for a few days, but can be reached at (b)(6)

Jeff Temple Liaison Team Coordinator US Nuclear Regulatory Commission email: <u>lia08.hoc@nrc.gov</u> Desk Ph: 301-816-5185

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Day	Date	0700 - 1500	1500 - 2300	2300 - 0700
Sun	4/10	Lisa Wright	Milt Murray	Jeff Temple
Mon	4/11	Lisa Wright	Clyde Ragland	Jeff Temple
Tues	4/12	Lisa Wright	Joe Rivers	Jeff Temple
Wed	4/13	Joe Rivers	Lisa Wright	Jeff Temple
hurs	4/14	Clyde Ragland	Rani Franovich	Russ Chazell
Fri	4/15	Milt Murray	Clyde Ragland	Rani Franovich
Sat	4/16	Clyde Ragland	Jeff Temple	Milt Murray
Sun	4/17	Russ Chazell	Jeff Temple	Milt Murray
Mon	4/18	Ned Wright	Jeff Temple	Mit Murray
Tues	4/19	Ned Wright	Jeff Temple	Milt Murray
Wed	4/20	Jeff Temple	Janelle Jesse	Joe Rivers
hurs	4/21	Clyde Ragland (in by 0730)	Janelle Jesse	Joe Rivers
Fri	4/22	Clyde Ragland (in by 0730)	Ned Wright	Rani Franovich
Sat	4/23	Lisa Wright	Ned Wright	Rani Franovich
Sun	4/24	Lisa Wright	Mike Dudek	Omid Tabatabai
Mon	4/25	Lisa Wright	Jim Kellum	Jeff Temple
lues	4/26	Beth Reed	Jim Kellum	Jeff Temple
Wed	4/27	Ned Wright	Jim Kellum	Jeff Temple
hurs	4/28	Ned Wright	Mike Dudek	Jeff Temple
Fri	4/29	Janelle Jessie	Rich Turtil	Milt Murray
Sat	4/30	Lisa Wright	Jeff Temple	Milt Murray
Sun	5/1	Ned Wright	Jeff Temple	Milt Murray
Mon	5/2	Rani Franovich	Jeff Temple	Mike Dudek
Tues	5/3	Rani Franovich	Jeff Temple	Mike Dudek
Wed	5/4	Rani Franovich	Jake Zimmerman	Mike Dudek
hurs	5/5	Jeff Temple	Gene Carpenter	Mike Dudek
Fri	5/6	Jeff Temple	Gene Carpenter	Beth Reed
Sat	5/7		Jeff Temple	Beth Reed

Liaison Team Coordinator Schedule 04/19/2011, 1700 hrs (file is on the LIA08 Desktop, under Team Toolbox)

From:Kish, James < James.Kish@dhs.gov>Sent:Friday, March 11, 2011 11:02 AMTo:Quinn, VanessaCc:Greten, Timothy; Wright, Lisa (Gibney)Subject:Re: NRC Status

Please consider/advise for need to staff a FEMA Liaison the NRC, specifically I want to ensure adequate, timely info if this gets to DIR level.

V, Need to identify who would fill that role and get prep Jim Kish 202 212 2205

From: Quinn, Vanessa
To: Sherwood, Harry; Greten, Timothy; Kish, James; Coons, Albert
Cc: Quinn, Vanessa
Sent: Fri Mar 11 10:56:27 2011
Subject: FW: NRC Status

Lisa Gibney is in the Operations Center at the NRC if we should need her for anything. Her number is (b)(6)

From: prvs=0442b74fa=Joseph.Anderson@nrc.gov [mailto:prvs=0442b74fa=Joseph.Anderson@nrc.gov] On Behalf Of Anderson, Joseph Sent: Friday, March 11, 2011 10:45 AM To: Quinn, Vanessa Cc: Wright, Lisa (Gibney) Subject: NRC Status

I've asked Lisa to contact you directly if anything arises in our Ops Center that you may need to be aware of. Also, please feel free to her directly in the OPS Center if you need to confirm or obtain information quickly. Again, she can be reached a(b)(6)

5/106

From:	Quinn, Vanessa <vanessa.quinn@dhs.gov></vanessa.quinn@dhs.gov>
Sent:	Friday, March 11, 2011 11:33 AM
То:	Wright, Lisa (Gibney); vanessa.quinn@dhs.gov; Michelle.ralston@dhs.gov; Barnes, Joshua
Cc:	Sherwood, Harry
Subject:	RE: Can you get us a DHS sit rep?

Good Morning Joshua:

Are you able to provide us (FEMA REPP and NRC) with a Sit REP. Please let me know.

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

From: prvs=044cd1ad8=Lisa.Wright@nrc.gov [mailto:prvs=044cd1ad8=Lisa.Wright@nrc.gov] On Behalf Of Wright, Lisa (Gibney)

Sent: Friday, March 11, 2011 11:30 AM To: 'vanessa.quinn@dhs.gov'; 'Michelle.ralston@dhs.gov' Subject: Can you get us a DHS sit rep?

If so can you email Ned at <u>ned.wright@nrc.gov</u>. Thank you Sent from my NRC blackberry Lisa Gibney <u>To reach me please call</u> (b)(6)

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From: Sent: To: Subject:

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Ralston, Michelle <Michelle.Ralston@dhs.gov> Friday, March 11, 2011 12:22 PM Wright, Lisa (Gibney) RE: Can you get us a DHS sit rep?

Yes, thank you!

Respectfully,

Michelle Ralston, MS, PMI

Public Affairs, Stakeholder Outreach & Campaign Planning Professional Services & Integration Technological Hazards Division Protection & National Preparedness DHS/FEMA 1800 South Bell Street, Rm. 828

Arlington, VA 22202

(202) 212-2310 desk

(b)(6) Blackberry (703) 305-0837 facsimile

-----Original Message-----From: prvs=044cd1ad8=Lisa.Wright@nrc.gov [mailto:prvs=044cd1ad8=Lisa.Wright@nrc.gov] On Behalf Of Wright, Lisa (Gibney) Sent: Friday, March 11, 2011 12:19 PM To: Ralston, Michelle Subject: RE: Can you get us a DHS sit rep?

Did you get the press release

Lisa Gibney CEM Team Leader- Communications and Outreach Division of Preparedness and Response Office of Nuclear Security and Incident Response Mail Stop: T-3B46 US Nuclear Regulatory Commission (301) 415-8376 Email: Lisa.Gibney@nrc.gov

From: Ralston, Michelle [Michelle.Ralston@dhs.gov] Sent: Friday, March 11, 2011 12:17 PM To: Wright, Lisa (Gibney) Subject: RE: Can you get us a DHS sit rep?

Ah...okay.

Respectfully,

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

-----Original Message-----From: prvs=044cd1ad8=Lisa.Wright@nrc.gov [mailto:prvs=044cd1ad8=Lisa.Wright@nrc.gov] On Behalf Of Wright, Lisa (Gibney) Sent: Friday, March 11, 2011 12:16 PM To: Ralston, Michelle Subject: RE: Can you get us a DHS sit rep?

Not all that surprising....you are one of them

Lisa Gibney CEM Team Leader- Communications and Outreach Division of Preparedness and Response Office of Nuclear Security and Incident Response Mail Stop: T-3B46 US Nuclear Regulatory Commission (301) 415-8376 Email: Lisa.Gibney@nrc.gov

From: Ralston, Michelle [Michelle.Ralston@dhs.gov] Sent: Friday, March 11, 2011 12:15 PM To: Wright, Lisa (Gibney) Subject: RE: Can you get us a DHS sit rep?

Really? I got almost immediate response.

Respectfully,

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

(703) 305-0837 facsimile

-----Original Message-----From: prvs=044cd1ad8=Lisa.Wright@nrc.gov [mailto:prvs=044cd1ad8=Lisa.Wright@nrc.gov] On Behalf Of Wright, Lisa (Gibney) Sent: Friday, March 11, 2011 12:14 PM To: Ralston, Michelle Subject: RE: Can you get us a DHS sit rep?

Thanks. Tried that earlier but none of our accounts are still "active" It will take 10 days to re-set :-)

Lisa Gibney CEM Team Leader- Communications and Outreach Division of Preparedness and Response Office of Nuclear Security and Incident Response Mail Stop: T-3B46 US Nuclear Regulatory Commission (301) 415-8376 Email: Lisa.Gibney@nrc.gov

From: Ralston, Michelle [Michelle.Ralston@dhs.gov] Sent: Friday, March 11, 2011 11:56 AM To: Quinn, Vanessa Cc: Sherwood, Harry; Horwitz, Steve; Wright, Lisa (Gibney) Subject: RE: Can you get us a DHS sit rep?

Vanessa,

Each individual will contact the number below so that they can first see if you have an active account. They can re-set the account. Otherwise, they will send your info to the NOC to be re-set. See below:

Contact By mail or phone:

HSIN Help Desk: 1-866-430-0162

By e-mail:

Outreach Team: hsin.srm@dhs.gov HSIN Help Desk: hsin.helpdesk@dhs.gov

Respectfully,

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

-----Original Message-----From: Quinn, Vanessa Sent: Friday, March 11, 2011 11:45 AM To: Ralston, Michelle Cc: Sherwood, Harry; Horwitz, Steve Subject: FW: Can you get us a DHS sit rep?

Michelle:

Can you check to see who can we go through to ensure our HSIN password is up to date. Lisa Gibney, Harry Sherwood and mines are not up to date, please advise. Thanks

Harry told me to ask you to check on this.

-----Original Message-----From: prvs=044cd1ad8=Lisa.Wright@nrc.gov [mailto:prvs=044cd1ad8=Lisa.Wright@nrc.gov] On Behalf Of Wright, Lisa (Gibney) Sent: Friday, March 11, 2011 11:42 AM To: Quinn, Vanessa Subject: RE: Can you get us a DHS sit rep?

at this point we'd take any/all....our HSIN passwords are expired and we aren't able to get in

Lisa Gibney CEM Team Leader- Communications and Outreach Division of Preparedness and Response Office of Nuclear Security and Incident Response Mail Stop: T-3B46 US Nuclear Regulatory Commission (301) 415-8376 Email: Lisa.Gibney@nrc.gov

From: Quinn, Vanessa [Vanessa.Quinn@dhs.gov] Sent: Friday, March 11, 2011 11:32 AM To: Wright, Lisa (Gibney); vanessa.quinn@dhs.gov; Michelle.ralston@dhs.gov Subject: RE: Can you get us a DHS sit rep?

Do you want a DHS Sit REP or a FEMA Sit REP?

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

From: prvs=044cd1ad8=Lisa.Wright@nrc.gov [mailto:prvs=044cd1ad8=Lisa.Wright@nrc.gov] On Behalf Of Wright, Lisa (Gibney) Sent: Friday, March 11, 2011 11:30 AM To: 'vanessa.quinn@dhs.gov'; 'Michelle.ralston@dhs.gov' Subject: Can you get us a DHS sit rep?

If so can you email Ned at ned.wright@nrc.gov. Thank you Sent from my NRC blackberry Lisa Gibney <u>To reach me please call</u> (b)(6)

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From: Sent: To: Subject: Ralston, Michelle <Michelle.Ralston@dhs.gov> Friday, March 11, 2011 12:48 PM O'Boyle, Seamus; Harrington, Holly; Wright, Lisa (Gibney); Mroz (Sahm), Sara FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

FYI

Respectfully,

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

From: Quinn, Vanessa Sent: Friday, March 11, 2011 12:47 PM To: Ralston, Michelle; Sherwood, Harry; Fiore, Craig; Horwitz, Steve Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

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From: FEMA-NRCC-reslead
Sent: Friday, March 11, 2011 12:47 PM
To: Kish, James
Cc: Quinn, Vanessa; Eberst, William; Sherwood, Harry
Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

From: FEMA-NRCC-planchief Sent: Friday, March 11, 2011 12:23 PM To: FEMA-NRCC-doclead; FEMA-NRCC-reslead; FEMA-NRCC-plandeputy; FEMA-NRCC-curopsplana; FEMA-NRCCcuropspland; FEMA-NRCC-curopsplanb; FEMA-NRCC-assistant; FEMA-NRCC-curopsplanc; FEMA-NRCC-doclead; FEMA-NRCC-docrpts; FEMA-NRCC-sitstatinfoa; FEMA-NRCC-sitstatinfob; FEMA-NRCC-sitstatinfoc; FEMA-NRCC-sitstatinfod; FEMA-NRCC-sitstatinfoe; FEMA-NRCC-sitstatlead; FEMA-NRCC-restracking Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

From: FEMA-R10-RRCC-DOCL

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Sent: Friday, March 11, 2011 12:22:27 PM To: Axton, Charles; Bakke, Phillip; Beck, Gordon; Biasco, Lon; Brand, Kimberley: Brockmeyer, Lori; Burke, Leonard; Burton, Dennis; Cacanindin, Vince; Caesar, Matthew; Carey, Mark; Carson, Tracy; Cisneros, Jessaca: Cox, Kathleen; Daggett, Anna; Dahl, Chris; Deir, Richard; Dewar, James; Donovan, Richard; Durst, Kelly; Edwards, John; Ellingsen, Marianne; Engstfeld, Amanda; Fearnehough, Michael; FEMA-MOC-BOTHELL; FEMA-NRCC-planchief; FEMA-R10-RRCC-AdAsst; FEMA-R10-RRCC-DCO; FEMA-R10-RRCC-DCU; FEMA-R10-RRCC-DOCL; FEMA-R10-RRCC-ESBD; FEMA-R10-RRCC-ESF1; FEMA-R10-RRCC-ESF10: FEMA-R10-RRCC-ESF11: FEMA-R10-RRCC-ESF12: FEMA-R10-RRCC-ESF13; FEMA-R10-RRCC-ESF14; FEMA-R10-RRCC-ESF15; FEMA-R10-RRCC-ESF2; FEMA-R10-RRCC-ESF3; FEMA-R10-RRCC-ESF4; FEMA-R10-RRCC-ESF6; FEMA-R10-RRCC-ESF7; FEMA-R10-RRCC-ESF8; FEMA-R10-RRCC-ESF9; FEMA-R10-RRCC-FASC; FEMA-R10-RRCC-GIU; FEMA-R10-RRCC-IABD: FEMA-R10-RRCC-LSC: FEMA-R10-RRCC-OFA: FEMA-R10-RRCC-OpsMAM; FEMA-R10-RRCC-OSC; FEMA-R10-RRCC-PABD; FEMA-R10-RRCC-PSC; FEMA-R10-RRCC-RESL; FEMA-R10-RRCC-RSTL; FEMA-R10-RRCC-SBA; FEMA-R10-RRCC-SITL; FEMA-R10-RRCC-StRep; FEMA-R10-RRCC-VAL; FEMA-R10-RRCC-Watch; FEMA-R10-SPOC; FEMA-R9IPCHIEF; FEMA-R9IPPLAN; FEMA-R9IPSIT2; FEMA-R9OPSCHIEF; FEMA-R9RRCCDIR; FEMA-R9Watchofficer: Forgit, Robert: Gladish, Jackie: Goudreau, Laura; Grant, Christy; Graves, John; Hall, Thom; Hampton, Dianna; Harrison, Bryant; Hartwell, Aaron; Haubrich, Gail; Herford, Nika; Howard, Mike; Ike, Ryan; Jackson, Lisa M; Jaklitsch, Chris; Keller, Charissa; Keller, Joshua ; Knight, Terry; Krikava, Richard; Little, Robert; Lopez, Lois; Mahlik, Sarah; Manner, Timothy; Marcham, Patrick; Martinsen, Gretchen; Massey, Patrick; Maykovich, Vincent; Medina, John; Morea, Anthony; Oleary, Marybeth; Penfold, Kimberly; R10-RRCC-Planning; Tagavilla, Leroy; Walborn, Anthony; Webb, Joe; White, Paul; Wilder, Thomas; Yandle, Denise; Zaffram, Scott D; Zuber, Ronald Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

Auto forwarded by a Rule

From: FEMA-R10-RRCC-DOCL

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

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

FYI

FYI

From: FEMA-R10-RRCC-SITL Sent: Friday, March 11, 2011 8:07 AM To: FEMA-R10-RRCC-DOCL; R10-RRCC-Planning Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

From: FEMA-MOC-BOTHELL Sent: Friday, March 11, 2011 7:54 AM To: FEMA-R10-RRCC-SITL; !MGMT COOP-CAO; Axton, Charles; Biasco, Lon; Biasco, Tamra; Bonnema, Brad; Casey, Patrick; Caudron, Dominic; Champagne, Lee; Cox, Kathleen; (b)(6) Deir, Richard; Dennis Diemont, Dolph; Edwards, EricL; Fearnehough, Michael; FEMA NWC; FEMA (b)(6) Hunsinger; OPERATIONS CENTER; FEMA-MOC-BOTHELL; Flaten, Duane; focwfemareports@sba.gov; Forgit, Robert; Gladish, Jackie; Goudreau, Laura; Hall, Michael-FCO; Hampton, Dianna; Harrison, Bryant; Hendrickson, Andrew; Hoegemeyer, David; Ike, Rvan; Johnson, AJ; Johnson, Dean; Jones, Dale; Jonientz-Trisler, Chris; Loper, Sharon; Manner, Timothy; Marcham, Patrick; Massey, Patrick; Maykovich, Vincent; McCormick, Michael A; Miller, Laurie; Monroe, Logan; Murphy, Kenneth; NORTHCOM (OGA); O'Halloran, Catlin; Remington, Derek; Robinson, Walt; Rodgers, Tom; Sessner, Debra; Sneed, John; Startt, Patrick; Steven.obrien@us.army.mil; Zuber, Ronald Subject: FW: Unusual Event related to Tsunami Warning 8.9 EQ Japan

FYSA

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

From: FEMA OPERATIONS CENTER

Sent: Friday, March 11, 2011 7:53 AM

To: Sherwood, Harry; Hammond, Mike (Mike.Hammond@fema.gov); Fenton, Robert; Brooks, Marc; Buckingham, Ann; Carwile, William; Coble, Rex; Conklin, Craig; FEMA NRCC; FEMA-R9Watchofficer; Fiore, Craig; Greten, Timothy; Gruber, Corey; Kish, James; Matia, Matthew; nuclearSSA@hq.dhs.gov; Penn, Damon; Quinn, Vanessa; Woodard, Steven; FEMA-MOC-BOTHELL; FEMA-MOC-DENTON; FEMA-MOC-DENVER; FEMA-MOC-FREDERICK; FEMA-MOC-MAYNARD; FEMA-MOC-THOMASVILLE; FEMA-R2-Watch; FEMA-R3-Watch; FEMA-R4-Watch; FEMA-R5-Watch; FEMA-R7-Watch; FEMA-R9-Watch; FEMA-R9-Watch; FEMA-R9-Watch; FEMA-R7-Watch; FEMA-R9-Watch; FEMA-R9-Watch

Subject: Unusual Event related to Tsunami Warning 8.9 EQ Japan

Notification of Nuclear Power Plant Event

Actual or Exercise: Actual Event Event Classification: Unusual Event Plant/Facility: Diablo Canyon Location: Avila Beach, CA Date/Time Declared: 3/11/2011, 1028EST Date/Time Cancelled:

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

NRC Response Mode: Monitoring Release or Potential Release? No

Considerable Public or Congressional Interest? No

Required Action: None

Note: A federal agency representative should be automatically dispatched to the Ops Center if NRC response mode is "Activation" or "Expanded Activation".

Date/Time of Notification: 03/11/2011, 1028EST NRC Caller: Mr. Pete Synder Received By: Kevin Biscoe

Definitions:

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

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

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

From: Sent: To: Subject:

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Wright, Lisa (Gibney) Friday, March 11, 2011 1:00 PM Ralston, Michelle RE: NOC Phase 1 - Awareness 0330-11 Update Report 4 - Earthquake-Tsunami - Japan (0830 EST 11 Mar 11)

wonderful thanks! Lisa Gibney CEM Team Leader- Communications and Outreach Division of Preparedness and Response Office of Nuclear Security and Incident Response Mail Stop: T-3B46 US Nuclear Regulatory Commission (301) 415-8376 Email: Lisa.Gibney@nrc.gov

From: Ralston, Michelle [Michelle.Ralston@dhs.gov]
Sent: Friday, March 11, 2011 12:55 PM
To: Wright, Lisa (Gibney)
Subject: FW: NOC Phase 1 - Awareness 0330-11 Update Report 4 - Earthquake-Tsunami - Japan (0830 EST 11 Mar 11)

How's this?

Respectfully,

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

From: Webb, Bill
Sent: Friday, March 11, 2011 12:17 PM
To: 'Quinn, Vanessa'; Ralston, Michelle
Subject: FW: NOC Phase 1 - Awareness 0330-11 Update Report 4 - Earthquake-Tsunami - Japan (0830 EST 11 Mar 11)

FYI, more to follow as I get it

Bill Webb, MSS, MEP Tech Hazards Branch Chief FEMA Region 10

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R10 RRCC Activated to Level 1. Several NP staff in RRCC currently (No REP at this time assigned)

Sent: Fri Mar 11 08:44:29 2011 Subject: FW: NOC Phase 1 - Awareness 0330-11 Update Report 4 - Earthquake-Tsunami - Japan (0830 EST 11 Mar 11)

FYSA NOC Phase 1 - Awareness 0330-11 Update Report 4 - Earthquake-Tsunami - Japan (0830 EST 11 Mar 11)

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

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From: NOC.SWO.Restricted [mailto:NOC.SWO.Restricted@dhs.gov] Sent: Friday, March 11, 2011 5:43 AM To: undisclosed-recipients Subject: NOC Phase 1 - Awareness 0330-11 Update Report 4 - Earthquake-Tsunami - Japan (0830 EST 11 Mar 11)

NOC Phase 1 - Awareness 0330-11 Update Report 4 - Earthquake-Tsunami - Japan

Current: US Embassy Tokyo reports 39 (no change) fatalities; open source media is reporting up to 60 fatalities. The Hawaii Department of Defense - Office of the Director reports the Kauai, Oahu, Maui, and Hawaii county EOCs have activated. The Hawaii National Guard (HING) Joint Operations Center is activated, including the Joint-Task Force – Homeland Defense Emergency Operations Center (EOC). The US Coast Guard (USCG) and HING has liaison teams at the State EOC. All Hawaijan counties in low-lying coastal areas initiated evacuation orders. Arrival at the Hawaijan Islands is estimated to be 0801-0846 EST. Arrival beginning along the west coast of the US estimated to be 1010 EST in Neah Bay, Washington; 1015 EST in Charleston, Oregon, and 1117 EST in Santa Barbara, California. Evacuations continue in low-lying areas in Hawaii and have begun in low-lying west coast areas of the US. FEMA Regions IX and X remain at Level I, Full Activation, Region IX remains in contact with Saipan, Guam, and Hawaii, and their respective EOCs. FEMA has assigned a liaison to the Hawaii EOC. The FEMA NRCC remains activated at Level I, Full Activation (24/7) with all Emergency Support Functions (ESFs) activated. All Incident Management Assistance Teams remain on alert. The USCG reports all deep draft vessels are accounted for and underway. USCG Sector Guam is experiencing tsunami surge at this time, with no specific wave heights identified. Sector Honolulu will be evacuating to Base Support Unit Sand Island due to potential tsunami landfall.

Future: The Department of Homeland Security continues to reach out to all component agencies to ensure all personnel are safe and accounted for. Smaller aftershocks are possible throughout the region. The Washington State EOC will open and assign additional personnel in response to the Tsunami Warning. The DHS NOC will continue to monitor this event and update as warranted.

Other: ESF 8 (Public Health and Medical Services) report the Kalapapa colony (a disease colony on Molokai, Hawaii) evacuated to higher ground. There are no other medical evacuations at this time. The Department of Transportation reports the Western Region is in contact with most offshore platform operations in California. A private sector marine spill response agency is implementing response procedures for potential environmental concerns.

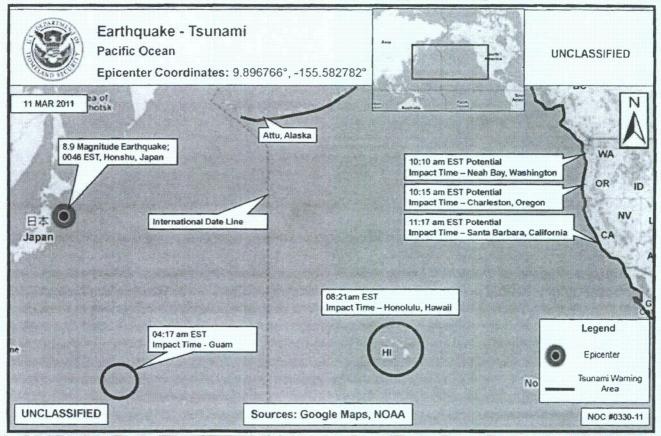
Background: At approximately 0046 EST, Mar 11, the USGS reported an 8.9 magnitude earthquake occurred off the eastern coast of Honshu, Japan at a depth of 6.2 miles. Tsunami Watches and Warnings were issued for the Pacific region including the west coast of the US.

Michael Inzer Senior Watch Officer National Operations Center U.S. Department of Homeland Security Unclassified: 202-282-8101 Secure: (b)(6)

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NOC Phase 1 - Awareness 0330-11 Update Report 4 Earthquake-Tsunami - Japan



Current: US Embassy Tokyo reports 39 (no change) fatalities; open source media is reporting up to 60 fatalities. The Hawaii Department of Defense - Office of the Director reports the Kauai, Oahu, Maui, and Hawaii county EOCs have activated. The Hawaii National Guard (HING) Joint Operations Center is activated, including the Joint-Task Force – Homeland Defense Emergency Operations Center (EOC). The US Coast Guard (USCG) and HING has liaison teams at the State EOC. All Hawaiian counties in low-lying coastal areas initiated evacuation orders. Arrival at the Hawaiian Islands is estimated to be 0801-0846 EST. Arrival beginning along the west coast of the US estimated to be 1010 EST in Neah Bay, Washington; 1015 EST in Charleston, Oregon, and 1117 EST in Santa Barbara, California. Evacuations continue in low-lying areas in Hawaii and have begun in low-lying west coast areas of the US. FEMA Regions IX and X remain at Level I, Full Activation. Region IX remains in contact with Saipan, Guam, and Hawaii, and their respective EOCs. FEMA has assigned a liaison to the Hawaii EOC. The FEMA NRCC remains activated at Level I, Full Activation (24/7) with all Emergency Support Functions (ESFs) activated. All Incident Management Assistance Teams remain on alert. The USCG reports all Hawaiian deep-draft vessels are accounted for and underway. USCG Sector Guam is experiencing tsunami surge at this time, with no specific wave heights identified. Sector Honolulu will be evacuating to Base Support Unit Sand Island due to potential tsunami landfall.

Future: The Department of Homeland Security 's (DHS) Crisis Action Team has activated and will produce a Senior Leadership Brief at 1100 EST. DHS continues to reach out to all component agencies to ensure all personnel are safe and accounted for. Smaller aftershocks are possible throughout the region. The Washington State EOC will open and assign additional personnel in response to the Tsunami Warning. The DHS NOC will continue to monitor this event and update as warranted.

Other: ESF 8 (Public Health and Medical Services) report the Kalapapa colony (a disease colony on Molokai, Hawaii) evacuated to higher ground. There are no other medical evacuations at this time. The Department of Transportation reports the Western Region is in contact with most offshore platform operations in California. A private sector marine spill response agency is implementing response procedures for potential environmental concerns.

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Time/Date of Report: 0830 EST 11 Mar 11

Report prepared by: DHS - National Operations Center

From:Ralston, Michelle <Michelle.Ralston@dhs.gov>Sent:Friday, March 11, 2011 3:18 PMTo:O'Boyle, Seamus; Harrington, Holly; Wright, Lisa (Gibney); Mroz (Sahm), SaraSubject:FW: Latest FEMA Talking Points

FYI...FEMA EA and Mitigation in CA.

Respectfully,

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

-----Original Message-----From: Fiore, Craig Sent: Friday, March 11, 2011 2:47 PM To: Quinn, Vanessa; Ralston, Michelle; Horwitz, Steve Subject: Latest FEMA Talking Points

Have you all seen these?

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

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

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

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

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

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

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

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

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

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

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

Additional federal coordination efforts include:

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

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

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

The U.S. Nuclear Regulatory Commission (NRC) is closely monitoring conditions near the Diablo Canyon Power Plant, located near San Luis Obispo, CA. The NRC is working closely with its resident inspectors who are on site to ensure safe operating.

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

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

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

Sent from the BlackBerry of Craig J. Fiore

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From:Anderson, JosephSent:Friday, March 11, 2011 4:30 PMTo:'vanessa.quinn@dhs.gov'Cc:Wright, Lisa (Gibney); 'harry.sherwood@dhs.gov'Subject:NRC Ops Center

Vanessa - I am heading home to be and by in case I need to drive in to staff OPS Center this evening or tomorrow morning. Lisa is currently POC in Ops Center and will provide updates as warranted. At this time, dispatching of liaison to our OPS Center would be for FEMA's benefit, since domestic impact affecting offsite REP appears minimal. However, it may be warranted if plant conditions degrade further.

NRC is still trying to get a clearer picture of plant status. At this time, Unit 1 at the Japanese affected site is looking at initiating a controlled venting of Containment to reduce pressure and water level was approximately 130 cm above top of core.

Lisa will provide further details as part of approved updates and can be reached via her Blackberry.

DU/IIS

From:	Anderson, Joseph
Sent:	Friday, March 11, 2011 5:25 PM
To:	Wright, Lisa (Gibney)
Cc:	Miller, Chris; McDermott, Brian
Subject:	Fw: Update on Japanese Earthquake and U.S. Response to Tsunami Threats

Fyi. Outside view.

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From: ANDERSON, Ellen <exa@nei.org>
To: Anderson, Joseph
Sent: Fri Mar 11 17:15:29 2011
Subject: Fw: Update on Japanese Earthquake and U.S. Response to Tsunami Threats

Newest update

From: MALONEY, Jennifer
Sent: Friday, March 11, 2011 02:06 PM
To: ZZ All Lan E-mail Users ZZ (Systems Administrator
Subject: FW: Update on Japanese Earthquake and U.S. Response to Tsunami Threats

Just went out to members.

From: Walter Hill [mailto:whh@nei.org] Sent: Friday, March 11, 2011 5:06 PM To: MALONEY, Jennifer Subject: Update on Japanese Earthquake and U.S. Response to Tsunami Threats

Dear NEI Member:

According to information NEI has received from various sources, three of four mobile power supplies had arrived at the Fukushima Daiichi nuclear power plant and cables were being set up to supply emergency power. The United States is supporting international efforts to provide supplies by air to restore full cooling capability to that Unit 1 at the site.

Pressure inside the containment of Unit 1 at Fukushima Daiichi reportedly has been steadily increasing over the time that emergency core cooling systems have not been active. Tokyo Electric Power Company (TEPCO), the plant operator, reported at 2 a.m. local time that pressure had increased beyond reference levels, but was within engineered limits. The company said it will reduce the pressure within containment "for those units that cannot confirm certain level of water injection" by the safety systems. "We will endeavor to restore the units and continue monitoring the environment of the site periphery."

The Federation of Electric Power Companies in Japan released a statement indicating that "slightly radioactive vapor will be passed through a filtering system and emitted outside via a ventilation stack." TEPCO "is confident that this controlled release will help maintain the integrity of the reactor

containment vessel while having no impact on health or the environment."

In the aftermath of the Japanese earthquake, Pacific Gas & Electric declared an unusual event at its Diablo Canyon Plant this morning to prepare for a potential tsunami. "All plant safety systems and components remain in normal operating condition and both units are currently operating at 100 percent power. The plant is continued to operate safely at 100 percent power," <u>PG&E reported</u>.

Southern California Edison released a statement indicating that the San Onofre plant also continues to operate safely and that a tsunami advisory remains in effect in the region. "The San Onofre Generating Station has not reported any unusual activity," the company reported. "All operations continue normally. The plant's protective measures include a reinforced wall 30 feet above sea level."

Media Engagement

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To date, NEI has responded to scores of media inquiries, including from the following: CBS Nightly News, The Associated Press TV, The Associated Press Radio, PBS News Hour, Australian Broadcasting, BBC Radio, FOX News, NPR's The Diane Rehm Show, E&E News, Wall Street Journal, FOX & Friends, and several regional media outlets.

Please continue to check NEI's <u>dedicated web page</u> on the earthquake for updates and for links for more information.

Walter Hill Senior Director, External Communications

Nuclear Energy Institute 1776 I Street NW, Suite 400 Washington, DC 20006 www.nei.org

P: 202-739-8047 F: 202-533-0148 M: (b)(6) E: whh@nei.org

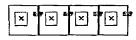
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Sent through mail.messaging.microsoft.com

From:	Wright, Lisa (Gibney)
Sent:	Friday, March 11, 2011 9:33 PM
To:	McDermott, Brian
Subject:	FW: Lead on questions about possible release from Fukushima Daiichi Site
Attachments:	3-11-2011 EPA Foreign Nuclear Incident 1-pager.docx

Importance:

Brian

FYI, this is what we discussed as you were leaving.

High

I also discussed with Lee Veal what we were doing and EPA is getting a copy of our SITREP

Ned

From: Veal.Lee@epamail.epa.gov [mailto:Veal.Lee@epamail.epa.gov]
Sent: Friday, March 11, 2011 9:06 PM
To: Timothy.Greten@dhs.gov
Cc: alexandra.kirin@dhs.gov; McDermott, Brian; Chad.Gorman@dhs.gov; Miller, Chris; Corey.Gruber@dhs.gov; cym3@cdc.gov; Daniel.Blumenthal@nnsa.doe.gov; Donald.Daigler@dhs.gov; Schumann.Jean@epamail.epa.gov; Anderson, Joseph; Wright, Lisa (Gibney); olaughlin@nv.doe.gov; Robert.Farmer@dhs.gov; DeCair.Sara@epamail.epa.gov; Seamus.O'Boyle@dhs.gov; Timothy.Greten@dhs.gov; Edwards.Jonathan@epamail.epa.gov; Poppell.Sam@epamail.epa.gov; Perrin.Alan@epamail.epa.gov; Perry.Dale@epamail.epa.gov
Subject: Re: Lead on questions about possible release from Fukushima Daiichi Site Importance: High

Tim,

Thanks for your note. Yes, you did read the NRF/NRIA correctly. EPA is the coordinating agency in this case IF a radiation release threatens to impact the United States.

Now I should try to answer your questions about the use of FRMAC monitoring assets and/or the IMAAC/NARAC modeling assets. Our colleagues from DOE and NRC provide tremendous support in these areas and they may want to add to this response.

We are very unlikely to see high levels of radioactive aerosols here (impacting the United States) from this event. If history is any guide, including the 1999 Tokaimura criticality incident, it is extremely unlikely that States/locals would need to recommend protective actions for the public. We have a few examples of foreign radiological incidents and the resulting actions in the attached document.

Given how broadly distributed in terms of geography the plume might be (again if there would be one), it is unlikely that we'd ask DOE to fly FRMAC/AMS flights. EPA would likely set up deployable samplers along the western coast to supplement the existing RadNet stations for the purpose of tracking levels. We would, and indeed already are, engaging DOE/NNSA's NARAC modeling team on what they can provide if the worst happens. NARAC (which is the same group of modelers as DHS' IMAAC) is working with the NRC RASCAL team on developing a source term and the NOAA meteorologists on gathering appropriate weather data should we need projections. Again, we don't have an aerosol release impacting the United States, but we are doing our legwork.

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EPA, DOE and NRC are all concerned about what is happening in Japan. I've personally contacted NRC and DOE about sharing information and exchanging situation reports through the weekend. As I understand it, the Japanese are working very closely with the IAEA and in communication with DOE and NRC on their nuclear power plant challenges. EPA will be closely monitoring developments.

As to public communications, EPA will support the Administration's position on how best to accomplish that function. Our Office of External Affairs would have the lead for EPA and they would work closely with our technical experts as well as the White House. They are well versed in how to clear information through the Administration prior to distribution and I have no doubt they would support this response effectively.

Good night and call if you need me,

Lee

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Lee B. Veal Director, Center for Radiological Emergency Management Radiation Protection Division Office of Radiation and Indoor Air Environmental Protection Agency 1310 L Street, NW Washington DC, 20005 Mail Code: 6608J 202-343-9448 cell (b)(6)

----- "Greten, Timothy" <Timothy.Greten@dhs.gov> wrote: -----

Brian/Chris/Dan/Lee

Good evening!

We are starting to get questions from the FEMA regions IX and X (West Coast/Alaska/Hawaii) about the implications of a large radioactive release from the Fukushima Daiichi facility.

Per the Nuclear/Radiological Incident Annex to the NRF, the lead Federal agency appears to be the EPA (pg. NUC-13 of the annex "EPA is also the coordinating agency for....incidents involving foreign, unknown, or

unlicensed radiological sources that have actual, potential, or perceived radiological consequences in the U.S. or its territories, possessions, or territorial waters, and that are not address by DHS/CBP or DHS/USCG).

Should there be a release from Fukushima Daiichi, my understanding is the IMAC (supported by FRMAC) would be monitoring the situation and would be providing information to the EPA, NRC Ops Center, the FEMA NRCC, DHS NOC, etc. EPA is responsible for communicating this information to the public, although that responsibility could be shifted by the White House.

Am I correct?

Thanks

Tim

Timothy A. Greten, PMP Technological Hazards Division Deputy Director/ Federal Radiological Preparedness Coordination Committee Executive Secretariat FEMA National Preparedness Directorate Department of Homeland Security 1800 South Bell St. Arlington, VA, 22202 <u>timothy.greten@dhs.gov</u> office: (202) 646-3907 cell:((b)(6)

3/10/2011, 9:30 am

EPA Response to Foreign Nuclear Incident

Under the National Response Framework, the U.S. Environmental Protection Agency coordinates the national effort to assess and, if necessary, respond to impacts of an international release of radioactive material on the United States and United States citizens.

EPA's nationwide radiation monitoring system, RadNet, monitors the nation's air, drinking water, milk and precipitation for environmental radiation. Historically, the system has been used to track radioactive material associated with atmospheric nuclear weapons testing as well as for monitoring national and international nuclear accidents such as Chernobyl.

EPA maintains additional monitoring capabilities that can be deployed to any location in the United States. In the unlikely event that airborne radiological impacts become a possibility, EPA will deploy these additional monitoring systems.

Based upon current information from the IAEA, the US government, and Japanese officials, EPA does not expect that a radiological release will occur. However, EPA will continue to closely monitor all sources of information including RadNet data.

Historically, foreign radiation releases have not required the U.S. public to take protective actions.

EPA's Historical Response to Foreign Nuclear Incidents

Atmospheric Nuclear Tests, People's Republic of China, 1976

The Event: The People's Republic of China conducted two nuclear weapons tests in southwest China on September 26 and November 17, 1976. Both detonations were conducted above ground, injecting radioactive material into the atmosphere.

EPA's Role: Following the tests, EPA fully activated the Environmental Radiation Air Monitoring System (ERAMS), now RadNet, monitoring radioactivity in air, precipitation, and pasteurized milk until concentrations returned to background in November 1976.

Monitoring Results: EPA's monitoring system identified low but measurable quantities of radioactive material throughout the United States from the September 26 test and no additional material from the November 17 test.

U.S. Protective Actions: Connecticut and Massachusetts state agencies ordered farmers to switch dairy herds to stored feed only, minimizing impact the potential impact on milk supplies.

Chernobyl, April 26, 1986

The Event: On April 26, 1986, an explosion occurred at the Union of Soviet Socialist Republics' (USSR's) Chernobyl nuclear power station in Ukraine. The explosion led to a massive fire that continued for 10 days. Large quantities of radioactive material were released into the atmosphere.

EPA's Role: EPA fully activated the nationwide RadNet system, monitoring radioactivity in air, precipitation, and pasteurized milk.

Monitoring Results: EPA's monitors tracked two waves of radioactive fallout from the Chernobyl incident; in May and June of 1986. Radioactivity levels observed in air, precipitation, and milk throughout the U.S. returned to background levels by July 1986.

U.S. Protective Actions: RadNet data was used to determine that radiation releases from the explosion of a reactor core at the Chernobyl nuclear power plant in 1986 did not reach levels requiring the public to take protective actions.

Tokaimura, September 30, 1999

The Event: On September 30, 1999, at the Japan Nuclear Fuel Conversion Company's facility in Tokaimura, Japan, three workers manually transferred several times the allowable limit of enriched uranium into a precipitation tank, bypassing criticality controls and causing an uncontrolled, self-sustained nuclear reaction. Though the accident released radioactive noble gases and gaseous radioiodine, most of these substances were confined to the building.

EPA's Role: EPA fully activated the nationwide RadNet system, monitoring radioactivity in air and pasteurized milk.

Monitoring Results: No increase in radioactivity above typical background levels was measured in any of the ERAMS samples collected and analyzed in response to the Tokaimura accident.

U.S. Protective Actions: No actions were needed.

From: Sent: To: Subject:

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Ralston, Michelle <Michelle.Ralston@dhs.gov> Saturday, March 12, 2011 9:39 AM Wright, Lisa (Gibney) RE: Press Release from earlier

Okay, thanks.

From: prvs=044cd1ad8=Lisa.Wright@nrc.gov [mailto:prvs=044cd1ad8=Lisa.Wright@nrc.gov] On Behalf Of Wright, Lisa (Gibney) Sent: Friday, March 11, 2011 6:47 PM To: 'Michelle.ralston@dhs.gov' Subject: Re: Press Release from earlier

Probably not. Just wasn't sure you got it. Sent from my NRC blackberry Lisa Gibney <u>To reach me please call</u> (b)(6)

From: Ralston, Michelle <Michelle.Ralston@dhs.gov> To: Wright, Lisa (Gibney); Quinn, Vanessa <Vanessa.Quinn@dhs.gov>; Sherwood, Harry <harry.sherwood@dhs.gov> Sent: Fri Mar 11 17:58:12 2011 Subject: Re: Press Release from earlier

Lisa,

Is this different from what Sara sent? Looks similar.

Thanks!

Respectfully,

Michelle Ralston

(202) 280-9304

From: prvs=044cd1ad8=Lisa.Wright@nrc.gov <prvs=044cd1ad8=Lisa.Wright@nrc.gov> To: Michelle.ralston@dhs.gov <Michelle.Ralston@dhs.gov>; Vanessa Quinn <Vanessa.Quinn@dhs.gov>; Harry.Sherwood@dhs.gov <harry.sherwood@dhs.gov> Sent: Fri Mar 11 17:47:55 2011 Subject: Press Release from earlier

Press Release from earlier this afternoon. My apologies...I'm just now finding it.

Lisa Gibney CEM Team Leader- Communications and Outreach Division of Preparedness and Response Office of Nuclear Security and Incident Response Mail Stop: T-3B46 US Nuclear Regulatory Commission

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(301) 415-8376 Email: <u>Lisa.Gibney@nrc.gov</u>

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No. 11-043

March 11, 2011

NRC CONTINUES TO TRACK EARTHQUAKE AND TSUNAMI ISSUES

Senior officials at U.S. Nuclear Regulatory Commission headquarters in Rockville, Md., are following events related to the Japanese earthquake and subsequent tsunami. In addition, the agency's regional office in Arlington, Texas, will continue to monitor the Diablo Canyon Power Plant's handling of a notice of unusual event (NOUE) at the site, near San Luis Obispo, Calif., for the duration of the event.

"We offer our condolences to all those in Japan affected by these tragedies," said NRC Chairman Gregory Jaczko. "The NRC is ready to provide whatever assistance we can to our Japanese counterparts, should there be a specific request. We're closely coordinating with other federal agencies."

Friday's tsunami warning, issued after an estimated 8.9 magnitude earthquake occurred off the eastern Japanese coast, prompted Pacific Gas and Electric Co. (PG&E), operator of the Diablo Canyon two-reactor plant, to declare a precautionary NOUE at 4:23 a.m. EST Friday. PG&E has reported both reactors have remained online throughout the event. While PG&E has reported only minor tsunami-related effects, the plant is well-protected against tsunami conditions as required by NRC regulations. NRC staff at the plant are keeping track of the plant's response during the event and remain in close contact with plant operators.

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

In addition to the Diablo Canyon plant, the NRC is following events at the San Onofre nuclear power plant, the Humboldt Bay spent fuel storage site and NRC-regulated nuclear materials sites in Hawaii and Alaska to name a few. Personnel at all those sites have informed the NRC conditions remain safe.

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

From:	Ralston, Michelle < Michelle.Ralston@dhs.gov>
Sent:	Monday, March 14, 2011 11:03 AM
То:	King, William; Duncan, James; R5-Watch; Baker, Jean; Opoka, James; Quinn, Vanessa;
	Barnes, Joshua; Barton, Angela; Broockerd, Larry; Collins, Richard; Connell, Renae;
	Coons, Albert; DeFelice, Anthony; DeGilio, Lou; Dowgwillo, Theresa; Du, Jingtong;
	Eberst, William; Fiore, Craig; Flores, Kaori; Fontenot, Rebecca; Galloway, Clark; Gardner,
	Patricia; Gates, Russell; Greten, Timothy; Hallett, Scott; Halsey, Lashawn; Hamilton, Lisa;
	Hammond, Odessa; Horton, Douglas; Howe, Michael; Jeremy, David; Mauldin, Deborah;
	McSwain, Alonzo; Mingledolph, Juvart; Nash Jr, Harry W; Owens, Tamara; Purvis, James;
	Quinn, Vanessa; Ralston, Michelle; Sanders, Tami; Schafer, John; Sheffield, Bonnie;
	Strother, Thomas; Taylor-Redman, Crystal; Tenorio, Pat; Turner, Sheila; Ward, Paul;
	Wierman, Kenneth; Wilt, Michael C; Wylie, Wayne; Yates, Nathaniel
Cc:	Kish, James; Greten, Timothy; Horwitz, Steve; Mroz (Sahm), Sara; Wright, Lisa (Gibney);
	DeFelice, Anthony; Horton, Douglas
Subject:	RE: NEI Talking Points
Attachments:	NEI FAQs.031411_Japanese_Nuclear_Situation.pdf

Thanks, Bill.

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Respectfully,

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

From: King, William Sent: Monday, March 14, 2011 10:31 AM To: Duncan, James; R5-Watch; Baker, Jean; Opoka, James; 'Quinn, Vanessa'; Ralston, Michelle Cc: King, William Subject: FW: NEI Talking Points

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Nuclear Energy Institute Talking Points: Excellent Read

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Frequently Asked Questions: Japanese Nuclear Energy Situation

1. What will be the impact of the Fukushima Daiichi accident on the U.S. nuclear program?

It is premature to draw conclusions from the tragedy in Japan about the U.S. nuclear energy program. Japan is facing what literally can be considered a "worst case" disaster and, so far, even the most seriously damaged of its 54 reactors has not released radiation at levels that would harm the public. That is a testament to their rugged design and construction, and the effectiveness of their employees and the industry's emergency preparedness planning.

Until we understand clearly what has occurred at the Fukushima Daiichi nuclear power plants, and any consequences, it is difficult to speculate about the long-term impact on the U.S. nuclear energy program. The U.S. nuclear industry, the U.S. Nuclear Regulatory Commission, the Institute of Nuclear Power Operations, the World Association of Nuclear Operators and other expert organizations in the United States and around the world will conduct detailed reviews of the accident, identify lessons learned (both in terms of plant operation and design), and we will incorporate those lessons learned into the design and operation of U.S. nuclear power plants. When we fully understand the facts surrounding the event in Japan, we will use those insights to make nuclear energy even safer.

In the long-term, we believe that the U.S. nuclear energy enterprise is built on a strong foundation:

- reactor designs and operating practices that incorporate a defense-in-depth approach and multiple levels of redundant systems
- a strong, independent regulatory infrastructure
- a transparent regulatory process that provides for public participation in licensing decisions, and
- a continuing and systematic process to identify lessons learned from operating experience and to incorporate those lessons.

2. What will be the impact of the Fukushima Daiichi accident on new nuclear plant construction in the United States?

Nuclear energy has been and will continue to be a key element in meeting America's energy needs. The nuclear industry sets the highest standards for safety and, through our focus on continuous learning, we will incorporate lessons learned from the events in Japan into the ongoing process of designing, licensing and building new nuclear power plants.

New nuclear power plant construction in the United States is in the early stages and proceeding in a deliberate fashion. Two companies have started site preparation and other construction activities for new nuclear power plants in Georgia and South Carolina, with the expectation that they will receive their combined construction-operating licenses from the Nuclear Regulatory Commission in late 2011 or early 2012. We expect those new reactor projects to proceed. Both

projects use a light water reactor design with advanced safety features -i.e., the reactors rely on natural forces like gravity (rather than engineered safety features like pumps) to deliver cooling water to the reactor core.

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In addition, a number of companies are moving forward with design, licensing and – at the appropriate time – construction of small modular reactors (SMRs), which also incorporate design features that provide additional safety margin.

Although America's 104 nuclear power plants are safe and meet all requirements necessary to protect public health and safety, these new designs are even safer.

3. Could an accident like the one at Japan's Fukushima Daiichi nuclear plant happen in the United States?

It is difficult to answer this question until we have a better understanding of the precise problems and conditions that faced the operators at Fukushima Daiichi. We do know, however, that Fukushima Daiichi Units 1-3 lost all offsite power and emergency diesel generators. This situation is called "station blackout." U.S. nuclear power plants are designed to cope with a station blackout event that involves a loss of offsite power *and* onsite emergency power. The Nuclear Regulatory Commission's detailed regulations address this scenario. U.S. nuclear plants are required to conduct a "coping" assessment and develop a strategy to demonstrate to the NRC that they could maintain the plant in a safe condition during a station blackout scenario. These assessments, proposed modifications and operating procedures were reviewed and approved by the NRC. Several plants added additional AC power sources to comply with this regulation.

In addition, U.S. nuclear plant designs and operating practices since the terrorist events of September 11, 2001, are designed to mitigate severe accident scenarios such as aircraft impact, which include the complete loss of offsite power and all on-site emergency power sources.

U.S. nuclear plant designs include consideration of seismic events and tsunamis'. It is important not to extrapolate earthquake and tsunami data from one location of the world to another when evaluating these natural hazards. These catastrophic natural events are very region- and locationspecific, based on tectonic and geological fault line locations.

4. What would U.S. nuclear plant operators do if they faced a loss of power from the grid and loss of emergency diesel generators like that faced by the operators at Fukushima Daiichi?

Nuclear power plant operators are trained to ensure that the plant will achieve and maintain safe shutdown during a station blackout scenario (loss of offsite power and loss of onsite emergency AC power). They have operating procedures that guide them on actions to be taken in responding to this scenario. The training includes regular classroom work as well as plant-specific simulator exercises.

5. Do NRC regulations require nuclear plant operators to have back-up power long enough to maintain safe conditions when power from the grid is not available for several days?

Yes, nuclear plants are required to have emergency AC power sources (diesel generators) to provide electrical power to plant safety equipment when there is a loss of power from the electrical grid. These backup generators are tested on a monthly basis to ensure that they successfully start and accept electric loads. Additionally, there are also battery powered DC support systems for some emergency DC power to critical valves, etc.

A nuclear plant can maintain a shutdown condition isolated from the bulk power transmission system for an indefinite period of time.

6. How many U.S. reactors use the Mark I containment design used at Fukushima Daiichi Unit 1?

Six U.S. nuclear reactors (Monticello in Minnesota, Pilgrim in Massachusetts, Dresden 2 and 3 and Quad Cities 1 and 2 in Illinois) are the same base design as the Fukushima Daiichi Unit 1 design (BWR-3 design with Mark I containment). Twenty-three U.S. nuclear plants are boiling water reactors (either BWR-2, BWR-3 or BWR-4) *and* use the Mark I containment: Browns Ferry 1, 2 and 3; Brunswick 1 and 2; Cooper; Dresden 2 and 3; Duane Arnold; Hatch 1 and 2; Fermi; Hope Creek; Fitzpatrick; Monticello; Nine Mile Point 1; Oyster Creek; Peach Bottom 2 and 3; Pilgrim; Quad Cities 1 and 2; Vermont Yankee. Although these are the same basic reactor design, specific elements of the safety systems will vary based on the requirements of the U.S. NRC.

7. What caused the explosion at Fukushima Daiichi Unit 1 on Saturday, March 12?

The explosion appears to have been caused by a build-up of hydrogen in the reactor building. The uranium fuel pellets are enclosed in steel tubes made of zirconium alloy. When exposed to very high temperatures, the zirconium reacts with water to form zirconium oxide and hydrogen. This appears to have happened at Fukushima Daiichi Unit 1 when a portion of the uranium fuel was uncovered. It is assumed that the hydrogen found its way into the reactor building, accumulated there, and ignited. Although significant, the explosion did not appear to compromise the integrity of the primary containment or the reactor vessel.

8. Given that Fukushima Daiichi Unit 1 is a 1970s-vintage plant, do you anticipate increased regulatory requirements and scrutiny on U.S. plants of similar vintage? Do you think the accident will have an impact on license renewal of the older U.S. nuclear power plants?

The U.S. nuclear energy industry and the Nuclear Regulatory Commission will analyze the events at Fukushima Daiichi, identify lessons learned and incorporate those lessons, as appropriate, into the design and operation of U.S. nuclear power plants.

The U.S. industry routinely incorporates lessons learned from operating experience into its reactor designs and operations. For example, as a result of the 1979 accident at Three Mile Island, the industry learned valuable lessons about hydrogen accumulation inside containment. After Three Mile Island, many boiling water reactors implemented a modification referred to as a hardened vent or direct vent. This allows the plant to vent primary containment via high pressure piping. This precludes over-pressurization of containment.

9. There have been questions raised in the past about the BWR Mark I containment like that at Fukushima Daiichi Unit 1? Some critics have pointed to a comment by an NRC official in the early 1980s: "Mark I containment, especially being smaller with lower design pressure, in spite of the suppression pool, if you look at the WASH 1400 safety study, you'll find something like a 90% probability of that containment failing."

The Mark I containment meets all Nuclear Regulatory Commission design and safety requirements necessary to protect public health and safety. The WASH-1400 safety study referenced was performed in 1975. The Nuclear Regulatory Commission has analyzed the Mark I containment design in great detail. The NRC analysis found that the BWR Mark I risk was dominated by two scenarios: station blackout and anticipated transient without scram. The NRC subsequently promulgated regulations for both of these sequences as well as other actions to reduce the probability.

10. What happens when you have a complete loss of electrical power to operate pumps in a BWR-3 reactor with Mark I containment like the one at Fukushima Daiichi Unit 1?

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If plant operators cannot move water through the reactor core, the water in the reactor vessel begins to boil and turn to steam, increasing pressure inside the reactor vessel. In order to keep the reactor vessel pressure below design limits, this steam is then piped into what is called a "suppression pool" of water or "torus" – a large doughnut-shaped ring that sits beneath the reactor vessel.

Eventually, the water in the suppression pool reaches "saturation" – i.e., it cannot absorb any additional heat and it, too begins to boil, increasing pressure in containment. In order to stay within design limits for the primary containment, operators will reduce pressure by venting steam through filters (to scrub out any radioactive particles) to the atmosphere through the vent stack.

If operators cannot pump additional water into the reactor vessel, the water level will begin to drop, uncovering the fuel rods. If the fuel remains uncovered for an extended period of time, fuel damage, possibly including melting of fuel, may occur. If there is fuel damage, and steam is being vented to the suppression poll, then to primary containment, then to secondary containment (in order to relieve pressure build-up on plant systems), small quantities of radioactive materials will escape to the environment.

11. How serious are the releases of radiation from Fukushima Daiichi? Do they represent a threat to human health? Will we see an increase in cancer rates in future years?

The most effective options for protecting the public have already been instituted. In the early stages of this event, authorities ordered evacuation of the people who live around the Fukushima Daiichi site to prevent or mitigate radiation exposure from any releases. Authorities are also distributing potassium iodide tablets to specifically protect against exposure from radioactive iodine that may be present in the releases. Any speculation about possible health effects would be premature until more accurate and complete data becomes available.

12. Did the reactor cores melt at any of the Fukushima Daiichi reactors? Was there any fuel damage?

It appears that Fukushima Daiichi Units 1 and 3 have experienced some fuel damage, since we understand that the upper portion of the fuel rods were uncovered (not covered with water) for some period of time. There is no evidence of a complete core meltdown at either unit, however. The information we have suggests that the basic core configuration so far remains intact, so some water or steam cooling through the core is occurring.

13. Is this accident likely to result in changes to regulatory requirements for U.S. nuclear plants in seismically active areas? Will those regulatory requirements be revisited and made more robust?

The nuclear energy industry believes that existing seismic design criteria are adequate. Every U.S. nuclear power plant has an in-depth seismic analysis and is designed and constructed to withstand the maximum projected earthquake that could occur in its area without any breach of safety systems. Each reactor is built to withstand the maximum site-specific earthquake by utilizing reinforced concrete and other specialized materials. Each reactor would retain the ability

to safely shut down the plant without a release of radiation. Given the seismic history in California, for example, plants in that state are built to withstand an even higher level of seismic activity than plants in many other parts of the country.

Engineers and scientists calculate the potential for earthquake-induced ground motion for a site using a wide range of data and review the impacts of historical earthquakes up to 200 miles away. Those earthquakes within 25 miles are studied in great detail. They use this research to determine the maximum potential earthquake that could affect the site. Each reactor is built to withstand the respective strongest earthquake. Experts identify the potential ground motion for a given site by studying various soil characteristics directly under the plant. For example, a site that features clay over bedrock will respond differently during an earthquake than a hard-rock site. Taking all of these factors into account, experts determine the maximum ground motion the plant must be designed to withstand. As a result, the design requirements for resisting ground motion are greater than indicated by historical records for that site.

It is also important not to extrapolate earthquake and tsunami data from one location of the world to another when evaluating these natural hazards. These catastrophic natural events are very region- and location-specific, based on tectonic and geological fault line locations.

14. Are U.S. emergency planning requirements and practices adequate to deal with a situation like that faced at Fukushima Daiichi?

Yes. Federal law requires that energy companies develop and perform graded exercises of sophisticated emergency response plans to protect the public in the event of an accident at a nuclear power plant. The U.S. Nuclear Regulatory Commission reviews and approves these plans. In addition, the NRC coordinates approval of these plans with the Federal Emergency Management Agency (FEMA), which has the lead federal role in emergency planning beyond the nuclear plant site. An approved emergency plan is required for the plant to maintain its federal operating license. A nuclear plant's emergency response plan must provide protective measures, such as sheltering and evacuation of communities within a 10-mile radius of the facility. In 2001, the NRC issued new requirements and guidance that focus in part on emergency preparedness at plant sites in response to security threats. The industry has implemented these measures, which address such issues as on-site sheltering and evacuation, public communications, and emergency staffing in the specific context of a security breach. Several communities have used the structure of nuclear plant emergency plans to respond to other types of emergencies. For example, during the 2007 wildfires in California, county emergency officials drew on relationships and communications links they had established during their years of planning for nuclear-related events.

In addition, as part of the emergency plan, nuclear plant operators would also staff Emergency Centers within one hour to provide support to the plant staff during the event. This support would be in the form of:

- Technical expertise (engineering, operations, maintenance and radiological controls)
- Offsite communications and interfaces, (state, local and NRC)
- Security and logistics

15. Should U.S. nuclear facilities be required to withstand earthquakes and tsunamis of the kind just experienced in Japan? If not, why not?

U.S. nuclear reactors are designed to withstand an earthquake equal to the most significant historical event or the maximum projected seismic event and associated tsunami without any breach of safety systems.

The lessons learned from this experience must be reviewed carefully to see whether they apply to U.S. nuclear power plants. It is important not to extrapolate earthquake and tsunami data from one location of the world to another when evaluating these natural hazards, however. These catastrophic natural events are very region- and location-specific, based on tectonic and geological fault line locations.

The U.S. Geological Survey (USGS) conducts continuous research of earthquake history and geology, and publishes updated seismic hazard curves for various regions in the continental US. These curves are updated approximately every six years. NRC identified a generic issue (GI-199) that is currently undergoing an evaluation to assess implications of this new information to nuclear plant sites located in the central and eastern United States. The industry is working with the NRC to develop a methodology for addressing this issue.

16. Is this accident as serious as the Three Mile Island accident in 1979? As serious as the Chernobyl accident?

According to the International Atomic Energy Agency's seven-level International Nuclear and Radiological Event Scale (INES), the accident at Fukushima Daiichi is a Level 4 accident.

INES defines Level 4 as an "Accident With Local Consequences," which is lower than the Level 5 rating given to the 1979 Three Mile Island accident in Pennsylvania. The major accident at Chernobyl in 1986 was classified at the highest INES rating of 7.

17. Do you expect an impact on public opinion about nuclear power or public support for nuclear power in the United States as a result of the Fukushima Daiichi accident?

Given the safety record in this country, the robust regulatory infrastructure, the defense in depth that governs operations and designs, and the seismological differences between the U.S. and Japan, we believe that public support for nuclear power should not decline dramatically.

The events at Fukushima Daiichi show that nuclear power's defense-in-depth approach to safety is appropriate and strong. Despite one of the largest earthquakes in world history, with accompanying tsunamis, fires and aftershocks—multiple disasters compounded one on top of the other—the primary containments at reactors near the epicenter have not been breached and the radioactive release has been minimal and controlled. This event will show that even under very severe circumstances, nuclear power plants are designed to withstand natural disasters. Still, the industry takes the incident with utmost seriousness and will strive to continually incorporate any lessons to enhance the safety of nuclear power plants. Opinion surveys show that public confidence in nuclear energy in the United States is strong and we believe it will continue to grow.

18. Do the events indicate that iodine tablets should be made widely available during an emergency?

The thyroid gland preferentially absorbs iodine. In doing so it does not differentiate between radioactive and nonradioactive forms of iodine. The ingestion of nonradioactive potassium iodide (KI), if taken within several hours of likely exposure to radioactive iodine, can protect the thyroid gland by blocking further uptake of radioactive forms of iodine. KI does not protect any other part of the body, nor does it protect against any other radioactive element.

The NRC has supplied KI tablets to states that have requested it for the population within the 10mile emergency planning zone (EPZ) of a nuclear reactor. If necessary, KI is to be used to supplement other measures, such as evacuation, sheltering in place, and control of the food supply, not to take the place of these actions. The Environmental Protection Agency and the Food and Drug Administration have published guidance for state emergency responders on the dosage and effectiveness of KI on different segments of the population. According to the EPA guidance, "KI provides optimal protection when administered immediately prior to or in conjunction with passage of a radioactive cloud."

Populations within the 10-mile emergency planning zone of a nuclear plant are at greatest risk of exposure to radiation and radioactive materials including radioactive iodine. Beyond 10 miles, the major risk of radioiodine exposure is from ingestion of contaminated foodstuffs, particularly milk products. Both the EPA and the FDA have published guidance to protect consumers from contaminated foods within a 50 mile radius.

19. Do the events indicate that evacuation zones around plants should be extended?

The 10-mile emergency planning zone around nuclear power plants as determined in 1978 by a multi-agency federal task force is appropriate and should not change due to the accident at Fukushima Daiichi. In the United States, a nuclear plant's emergency response plan must provide protective measures, such as sheltering and evacuation of communities within a 10-mile radius of the facility. Japan used a similar plan. During the accident there, the Japanese government has issued evacuation orders for a 20-kilometre (12.5-mile) radius around Fukushima Daiichi, and a 3-kilometre radius around Fukushima Daiini.

Updated 3/13/11 3:30pm

From:McDermott, BrianSent:Monday, March 14, 2011 7:42 PMTo:'James.Kish@dhs.gov'; 'bbell@csg.org'Cc:'dhoell@ncem.org'; Wright, Lisa (Gibney); 'Vanessa.Quinn@dhs.gov'Subject:Re: Japan Nuclear Incident/REPP Mtg

Sounds like a good plan for now.

Regards, Brian

Brian McDermott 301-415-7475 (direct) (b)(6) mobile)

From: Kish, James <James.Kish@dhs.gov>
To: bbell@csg.org <bbell@csg.org>; McDermott, Brian; Kish, James <James.Kish@dhs.gov>
Cc: DHoell@ncem.org <DHoell@ncem.org>; Wright, Lisa (Gibney); Quinn, Vanessa <Vanessa.Quinn@dhs.gov>
Sent: Mon Mar 14 17:20:52 2011
Subject: Re: Japan Nuclear Incident/REPP Mtg

From my desk, I would see an update for the state Directors, with them being able to ask Qs after, glad to do that - Brian, your thoughts?

Jim Kish (b)(6)

From: Beverly Bell <bell@csg.org>
To: Brian McDermott <Brian.McDermott@nrc.gov>; Kish, James <James.Kish@dhs.gov>
Cc: Hoell, Doug <dhoell@ncem.org>; Lisa Wright <Lisa.Wright@nrc.gov>; Quinn, Vanessa <Vanessa.Quinn@dhs.gov>
Sent: Mon Mar 14 16:44:40 2011
Subject: Japan Nuclear Incident/REPP Mtg

Brian/Jim,

In light of the nuclear power plant potential disaster taking place in Japan right now, Doug and I feel it is likely that state directors will want to take advantage of the March 25th meeting with both of you to discuss the incident and power plant preparedness/disasters, etc. Even if it's not on the agenda, someone will probably bring it up and want to discuss.

How would you like to handle and prepare for this?

Thanks, Beverly

Beverly Bell Sr. Policy Analyst Preparedness Committee/Response & Recovery Committee Liaison

National Emergency Management Association Office - (859) 244-8112 Fax - (859) 244-8239 bbell@csg.org

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From:	Wright, Lisa (Gibney)
Sent:	Thursday, March 17, 2011 6:52 PM
То:	Anderson, Joseph; Kahler, Carolyn
Subject:	Re: QUERY: NREP Presenters/Attendance

Keynote is NOT open to my knowledge. Roy and Bill only introduced our update slot. 5 minutes max because we share the slot with other agencies.

Carolyn. Can you check with Prosanta Chowdury and see if I am correct.

PS. I didn't mention Randy because his slot is Post Conference at the Open Forum so no bio or slides are needed ahead of time.

Sent from my NRC blackberry Lisa Gibney <u>To reach me please call</u> (b)(6)

From: Anderson, Joseph To: Kahler, Carolyn; Wright, Lisa (Gibney) Sent: Thu Mar 17 17:34:37 2011 Subject: FW: QUERY: NREP Presenters/Attendance

Lisa (Carolyn) -- Obviously, we need to discuss this. Who are keynote speakers or is this an open item?

From: McDermott, Brian Sent: Thursday, March 17, 2011 5:31 PM To: Anderson, Joseph; Thaggard, Mark; Kahler, Robert Cc: Wright, Lisa (Gibney); Williams, Kevin; Kahler, Carolyn Subject: RE: QUERY: NREP Presenters/Attendance

I will not be available that week. Mark has agreed to attend. We should pursue having Jim W attend, as Roy or Bill D were our key speakers in the past. We could even float the idea of having a Commissioner attend.

From: Anderson, Joseph
Sent: Thursday, March 17, 2011 3:36 PM
To: Thaggard, Mark; Kahler, Robert
Cc: McDermott, Brian; Wright, Lisa (Gibney); Williams, Kevin; Kahler, Carolyn
Subject: QUERY: NREP Presenters/Attendance

Mark /Bob: Even with the current events in Japan unfolding, we need to push forward on the following (per Lisa's, who's suppose to be on vacation, e-mail below):

NREP (week of April 18-22): Need to confirm who will be in attendance. Based on events in Japan, I would feel it is even more important than we attend. At a minimum, Bob Kahler should attend as presenter, with Brian or yourself and an Outreach representative based on projected OPS Center staffing. However, we need to promptly identify NRC speaker(s) and forward final slides and bio(s) to NREP by March 31.

Based on feedback from States so far on NRC recommendation for evacuation of American citizens out to 50 miles around Japanese site, discussions WILL be lively and highly energized. As such, approach needs to be discussed in advance with NRC management and FEMA (Jim Kish).

From: Wright, Lisa (Gibney) Sent: Thursday, March 17, 2011 2:33 PM To: Anderson, Joseph Subject: Re: Ops Ctr Support

fyi. NREP needs a decision on who will make the presentation (update) and then get the final slides and their bio by March 31

Commission meeting deadlines seem more problematic. Do you and I need to talk later? I can call you if it would help? Sent from my NRC blackberry Lisa Gibney To reach me please call

(b)(6)

From: Anderson, Joseph
To: Thaggard, Mark
Cc: Wright, Lisa (Gibney); Norris, Michael
Sent: Thu Mar 17 12:56:49 2011
Subject: RE: Ops Ctr Support

Mark -- FYI. At this time, ALL Outreach Branch staff are supporting the OPS Center. In fact only one person from my branch is not assigned to OPS Center (b)(6)

(b)(6) As such, all Outreach efforts has come to a stop -- will be regrouping when Lisa Gibney reeturns this weekend and will reset priorities. Operating Reactor Licensing activities are limited to high priority reviews only at this time.

From: Thaggard, Mark
Sent: Thursday, March 17, 2011 12:45 PM
To: McMurtray, Anthony
Cc: Bower, Anthony; Williamson, Linda; Anderson, Joseph
Subject: Ops Ctr Support

Is it possible to line up some additional people to provide support to the ET? Both Sara Mroz and Jim Anderson have been pulling long hours because (b)(5) It would be nice if we could get them some relief. In addition, they are both in the same branch, which is making it difficult to reassign their work.

Mark Thaggard

Deputy Director Emergency Preparedness Division of Preparedness & Response Office of Nuclear Security and Incident Response Phone: 301-415-1086 BB: [(b)(6) Email: <u>Mark.Thaggard@nrc.gov</u>

From:	Carpenter, Gene
Sent:	Tuesday, March 22, 2011 1:27 PM
То:	Barkley, Richard; Adelstein, Patricia; Anderson, Brian; Bafundo Crimm, Nina; Bailey,
	Kenneth; BowdenBerry, Elva; Burton, William; Daniel, Richard; Fehst, Geraldine; Fuller,
	Michael; Glenn, Nichole; Heck, Jared; Kotra, Janet; Krsek, Robert; Leslie, Bret; Maier, Bill;
	Meeting_Facilitation Resource; Mroz (Sahm), Sara; Rakovan, Lance; Rivera, Alison;
	Rodriguez, Michael; Salter, Susan; Smith, George; Stuyvenberg, Andrew; Wright, Lisa (Gibney)
Subject:	RE: Good Discusssion Today - Thanks for Such a Group Effort!!

FYI:

This is what our Japanese equivalent (NISA) is saying: http://www.nisa.meti.go.jp/english/index.html

Gene

From: Barkley, Richard

Sent: Tuesday, March 22, 2011 13:26

To: Adelstein, Patricia; Anderson, Brian; Bafundo Crimm, Nina; Bailey, Kenneth; Barkley, Richard; BowdenBerry, Elva; Burton, William; Carpenter, Gene; Daniel, Richard; Fehst, Geraldine; Fuller, Michael; Glenn, Nichole; Heck, Jared; Kotra, Janet; Krsek, Robert; Leslie, Bret; Maier, Bill; Meeting_Facilitation Resource; Mroz (Sahm), Sara; Rakovan, Lance; Rivera, Alison; Rodriguez, Michael; Salter, Susan; Smith, George; Stuyvenberg, Andrew; Wright, Lisa (Gibney) **Subject:** Good Discusssion Today - Thanks for Such a Group Effort!!

http://www.nrc.gov/japan/japan-info.html

The above link takes you to the NRC's external website location for the events related to Japan. The agency has gone from having almost nothing on our website on Fukushima to a very healthy list of Frequently Asked Questions. I suspect the materials provided to the Regions in advance of their Annual Assessment Meetings will rely heavily on this material.

Richard S. Barkley, PE Nuclear & Environmental Engineer (610) 337-5065 Work (b)(6) Cell

,s/119

From: Sent: To: Cc: Sheffield, Bonnie <Bonnie.Sheffield@dhs.gov> Monday, April 11, 2011 2:40 PM Wright, Lisa (Gibney) Hamilton, Lisa; Wierman, Kenneth

Good Afternoon,

For the NREP conference, we would like to coordinate the response to the 50 miles evacuation ordered for the event in Japan. I believe that NRC had an official statement about that decision. Could you share it with us? In the event of being asked FEMA and NRC, would speak with one voice. Thank you so much.

Very Respectfully

Bonnie Sheffield

Program Specialist (Emergency Management) Policy and Regulations Unit U.S. Department of Homeland Security/FEMA Technological Hazard Division Radiological Emergency Preparedness Program 1800 S. Bell Street Arlington VA.20598-3025 202 212 2120 office (b)(6) blackberry 703 305 0837 fax

73/120

From: Sent: To: Subject: Reed, Elizabeth Wednesday, April 13, 2011 7:19 AM Wright, Lisa (Gibney) RE: Ops center favor

Not a problem...great minds think alike :-)

-----Original Message-----From: Wright, Lisa (Gibney) Sent: Wednesday, April 13, 2011 7:18 AM To: Reed, Elizabeth Subject: Re: Ops center favor

Fantastic! That's exactly what I had in mind! Thanks a million! Sent from my NRC blackberry Lisa Gibney To reach me please call

(b)(6)

----- Original Message -----From: Reed, Elizabeth To: Wright, Lisa (Gibney) Sent: Wed Apr 13 07:15:54 2011 Subject: RE: Ops center favor

Not a problem, I'll head down there shortly. I know we have been trying to keep a running contact list on WebEOC, but it is rather messy. I think I will start with that list and clean it up a bit and make it more organized.

Beth

-----Original Message-----From: Wright, Lisa (Gibney) Sent: Wednesday, April 13, 2011 7:02 AM To: Reed, Elizabeth Subject: Ops center favor

Hey can I take you up on your offer to help?

Could you swing by the Liaison team room and put together a list of emails of the federal partners that could hang up near the Federal Desk as a portable reference (in case they are working from LIA08 or if we consolidate to one room). We have some folks on shift who haven't been a federal liaison (ok and I am rusty). My sense is that we might be asked to share some documents with "federal partners" around late morning/lunch time and I don't want anyone to scramble. I'm not on shift til later or I'd do it myself.

I was thinking of one combined list of all the emails we have from PACOM to CDC to State to DOE & EPA, etc. Depending on the document the ET or PMT could pick who they want it to go to...kind of like ordering the toppings on a sandwich! Does that sound logical?

If you would have time this morning to help that would be wonderful! I'm not on shift but I'm up at home so just call (b)(6) if this doesn't make sense.

Thanks Lisa Sent from my NRC blackberry Lisa Gibney <u>To reach me pleas</u>e call (b)(6)

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From:
Sent:
To:
Cc:
Subject:

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Payne, Steve <spayne@ncem.org> Thursday, April 14, 2011 9:49 AM Jeffries, William Wright, Lisa (Gibney) RE: REM/SI conversion Chart

Thanks! I am more interested in the radiation units so the counties have a reference in reading information from Japan.

SP NCEM REP Program Manager/Tech Hazards Lead Phone: 919-715-0170 E-Mail: <u>spayne@ncem.org</u>

-----Original Message-----From: Jeffries, William [mailto:william.jeffries@ncdenr.gov] Sent: Thursday, April 14, 2011 9:46 AM To: Payne, Steve Subject: RE: REM/SI conversion Chart

The radiation units look good to me Steve. The conversion from Celsius to Fahrenheit is degrees in Celsius times 9/5 +32. From Fahrenheit to Celsius is degrees in Fahrenheit minus 32 times 5/9.

William Jeffries N.C. Division of Environmental Health Radiation Protection Section

W:919-571-4141 X232 d(b)(6) F:919-571-4148

Please Note My New E-mail Address

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

-----Original Message-----From: Payne, Steve [mailto:spayne@ncem.org] Sent: Thursday, April 14, 2011 9:21 AM To: Jeffries, William; Lisa Gibney (Lisa.Gibney@nrc.gov) Subject: REM/SI conversion Chart

William, Lisa,

Are the conversion numbers on this chart still correct? (Chart date 6/92) If so please advise-would like to give to Senior Staff & REP counties for interpreting information on Fukashima Diachi.

122

Stephen Payne NCEM REP Program Manager/Tech Hazards Lead 4713 Mail Service Center Raleigh, NC 27699-4713 Phone: 919-715-0170 FAX: 919-733-2860 Pager: (b)(6) E-Mail: spayne@ncem.org

"The only thing harder than getting your organization to prepare for a disaster, is explaining afterward why you didn't."

THIS MESSAGE IS SUBJECT TO THE PUBLIC RECORDS LAW AND AS SUCH MAY BE DISCLOSED TO THIRD PARTIES.

-----Original Message-----From: B045Copier@ncem.org [mailto:B045Copier@ncem.org] Sent: Thursday, April 14, 2011 9:17 AM To: Payne, Steve Subject: Scanned from MFP-05386933 04/14/2011 09:05

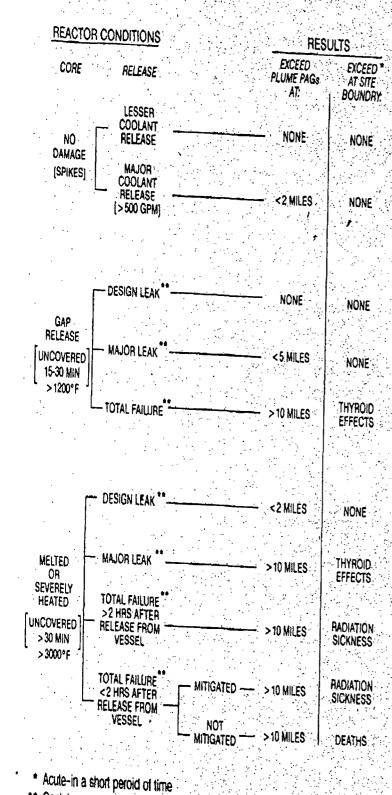
Scanned from MFP-05386933. Date: 04/14/2011 09:05 Pages:1 Resolution:200x200 DPI

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POSSIBLE OFF-SITE CONSEQUENCES WITHIN A FEW HOURS AFTER THE START OF A RELEASE

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Containment



RULES OF THUMB

RELEASES EPA PAG								
10 ⁶ Ci Nobles	1 rem WB Shine	@ 1 Mile						
10 ³ Ci lodine	5-25 rem Thyroid Inhale	@ 1 Mile						
1 Ci lodine	5 rem Milk	@ 1 Mile						

Dose falls off at 1/Distance	
Wind direction is from	• •
Uncovered core heat up rate 1-2°F/sec	
To remove decay heat boil* ≅ 250 gpm @ 1	hour
(*For 3000 MWt plant) ≅ 40 gpm @ 1	month
$\frac{X \tilde{u}}{Q} D \text{ Stability } @ 1 \text{ Mile} = 5 \times 10^{-5} \text{ m}^{-2}$	· · · · ·
1 Ci/m ² \approx 2-5 R/hr – 1 m above ground	
NRC HQ OPERATIONS CENTER (AEOD/IRB)	10/92

RADIATION

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GUIDE TO SI UNITS

DOSE	AMOUNT	TEMPERATURE	PRESSURE (Pascal)
rem sievert 0.1 mrem 1 μ Sv 1 mrem 10 μ Sv 10 mrem 100 μ Sv (0.1 mSv) 100 mrem 1 mSv 500 mrem 5 mSv 1 rem 10 mSv 5 rem 50 mSv 10 rem 100 mSv 25 rem 250 mSv 10 rem 1 Sv ABSORBED ENERGY 100 rem 1 Sv ABSORBED ENERGY 100 rad = 1 Gy (gray) SI UNITS PREFI		Celsius Fahrenheit $3000^{\circ}C$ $5432^{\circ}F$ $2500^{\circ}C$ $4532^{\circ}F$ $2000^{\circ}C$ $3632^{\circ}F$ $1500^{\circ}C$ $2732^{\circ}F$ $1000^{\circ}C$ $1832^{\circ}F$ $800^{\circ}C$ $1472^{\circ}F$ $600^{\circ}C$ $1112^{\circ}F$ $400^{\circ}C$ $752^{\circ}F$ $200^{\circ}C$ $392^{\circ}F$ $100^{\circ}C$ $212^{\circ}F$ $50^{\circ}C$ $122^{\circ}F$ $50^{\circ}C$ $122^{\circ}F$ $0^{\circ}C$ $32^{\circ}F$ $0^{\circ}C$ $32^{\circ}F$ $0^{\circ}C$ $32^{\circ}F$ $0^{\circ}C$ $32^{\circ}F$ $0^{\circ}C$ $32^{\circ}F$	1 PA = 1.45 X 10 ⁻⁴ psi 7000 Pa \approx 1 psi 1M Pa = 145 psi SPEED 1 m/s \approx 2 mph VOLUME 1 m ³ = 10 ³ Å 1 cc (cm ³) = 1 m Å 1 cc \approx 1 gram water 3785 cc/gal 7.48 gal/tt ³ AREA 1 km ² = 10 ⁶ m ² 1 m ² = 11 ft ²
	10^3 n nano 10^{-9}		

tera 10^{12} c centi 10^{-2} p pico 10^{-12} Prepared by U.S. NRC AEOD/IRB giga 10^{9} m milli 10^{-3}

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6/92

From: Sent: To: Subject:

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Wright, Lisa (Gibney) Friday, April 15, 2011 6:45 AM LIA08 Hoc Re: EPA personnel radiation dosimeters sent to Japan

Cool. Thanks! Sent from my NRC blackberry Lisa Gibney <u>To reach me please call</u> (b)(6)

From: LIA08 Hoc To: Wright, Lisa (Gibney) Sent: Thu Apr 14 19:05:49 2011 Subject: FW: EPA personnel radiation dosimeters sent to Japan

Hey Lisa, Just FYI... as of March 22 (see attached email), offers of assistance can be forwarded to INPO at <u>INPOERCAssistance@inpo.org</u>. I have forwarded the note from CDC Liaison to INPO (also attached). No further action is needed.

Just wanted you to have this information for future reference... Thanks, Rani

From: LIA08 Hoc Sent: Wednesday, April 13, 2011 8:00 PM To: Wittick, Brian Subject: FW: EPA personnel radiation dosimeters sent to Japan

FYI-This offer of electronic dosimeters was passed to NRC HQ by the CDC liaison. I'm not sure if that is something for your Asks and Offers matrix or not. Contact information for EPA Region V can be found at the bottom of this note-Thanks Lisa

Lisa Gibney Wright Liaison Team Coordinator US Nuclear Regulatory Commission email: <u>lia08.hoc@nrc.gov</u> Desk Ph: 301-816-5185

From: PMT10 Hoc Sent: Wednesday, April 13, 2011 5:58 PM To: LIA08 Hoc

DJ/123

Cc: Hoc, PMT12; jablonowski.eugene@epa.gov **Subject:** EPA personnel radiation dosimeters sent to Japan

Liaison Team,

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EPA Region 5 just informed me that they have a large number of electronic personnel radiation dosimeters that are ready to be or have already been sent to Japan. If you hear of any need to assist with use of that equipment, please contact Eugene Jablonowski using the contact information below, and copy me.

Thanks, Sam Keith CDC Liaison

EPA point of contact for PRDs: Eugene Jablonowski, Health Physicist U.S. EPA Region 5 Emergency Response 77 W. Jackson Blvd. (SM-5J) Chicago, IL 60604 (312) 886-4591 office (b)(6) cell <---- NEW (312) 692-2466 fax jablonowski.eugene@epa.gov

From:
Sent:
То:
Subject:
Attachments:

McNamara, Nancy Tuesday, April 19, 2011 1:11 PM Wright, Lisa (Gibney) RE: Is Nick Avrakatos There? Dean's Speech Re-Japanese Event.docx

This is what I'm giving Chris along with a lot of Q&As.

andran subsemandaraa ji maana magaqaa ah amaanadhan ay uuro fi kuna ada bir ii saanaan in ii subsem

From: Wright, Lisa (Gibney) Sent: Tuesday, April 19, 2011 1:07 PM To: McNamara, Nancy Subject: Re: Is Nick Avrakatos There?

Haven't seen him. Sent from my NRC blackberry Lisa Gibney <u>To reach me please call</u> (b)(6)

From: McNamara, Nancy To: Wright, Lisa (Gibney) Sent: Tue Apr 19 13:04:16 2011 Subject: Is Nick Avrakatos There?

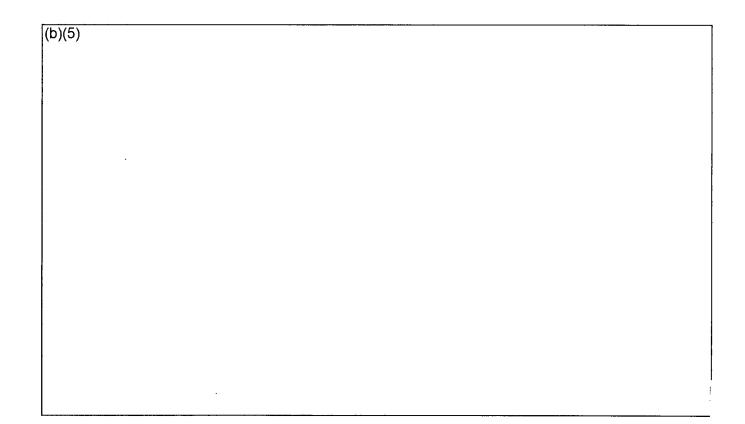
If so, tell him tq(b)(5) problem for us here in RI.

1124

(b)(5)

(b)(5)

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From:	DunnBytner, Stacy <sdunnbytner@dhses.ny.gov></sdunnbytner@dhses.ny.gov>
Sent:	Thursday, April 21, 2011 4:11 PM
То:	DunnBytner, Stacy
Subject:	April 13th Presentation - NEI Japanese Nuclear Accident and U.S. Response
Attachments:	image001.gif

NEI Japanese Nuclear Accident and U.S. Response - Ellen Anderson April 13th Power Pool Meeting

Stacy C. Bytner

Response Section NYS Office of Emergency Management (NYSOEM) Division of Homeland Security and Emergency Services (DHSES) 1220 Washington Avenue, Public Safety Bldg #22, Suite 101 Albany, New York 12226-2251

Email: <u>sdunnbytner@dhses.ny.gov</u> 518-292-2464 - Office (b)(6) ______Business Cell

518-322-4988 - Fax

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DJ/125

From: Sent: To: Subject:

____]

Huyck, Doug Sunday, April 03, 2011 9:55 PM Ralph, Melissa Re: EST Actions Officer

Thank you. Doug

Sent from NRC blackberry

----- Original Message -----From: Ralph, Melissa To: Huyck, Doug Sent: Sun Apr 03 21:15:44 2011 Subject: RE: EST Actions Officer

I think that they found someone this weekend willing to cover that Thursday shift. I'm on the list for Today, Wednesday, and Saturday of this week with Thursday and Friday on my normal duties. Next week, I'm on for Sunday, Monday, and Friday with Tuesday, Wednesday, and Thursday on my normal duties. I don't know if they've made a decision yet about staffing beyond next week but I will let you know. I probably won't be able to support any ops center work that week in order to have enough time in the office on my normal duties while still keeping up with my family commitments.

From: Huyck, Doug Sent: Sunday, April 03, 2011 6:06 PM To: Ralph, Melissa Subject: RE: EST Actions Officer

Thanks for trying

-----Original Message-----From: Ralph, Melissa Sent: Saturday, April 02, 2011 10:08 AM To: Huyck, Doug Subject: RE: EST Actions Officer

Doug,

I'm not sure which Steve Campbell it was that sent the email. It's not just Steve Campbell handling staffing (the first people asking me were Michelle Evans, Tony Bowers, and Amy Salus). This is part of the function of the EST Coordinator on shift. Whoever is staffing that position on a particular shift is working on staffing at any given time. Overall oversight of Ops. Center staffing is Michelle Evans. If you want to reach the EST Coordinator, you can either call or stop into the Ops. Center, or call the HOOs to be transferred to that desk. Hope that helps.

-Melissa

DJ/126

From: Huyck, Doug Sent: Friday, April 01, 2011 3:31 PM To: Ralph, Melissa Subject: RE: EST Actions Officer

I need to talk to Steve Campbell about staffing. There are two of them in the phone book. Please have Steve call me or give me his email address. Thanks

-----Original Message-----From: Ralph, Melissa Sent: Friday, April 01, 2011 12:44 PM To: Schnetzler, Bonnie; Huyck, Doug Subject: RE: EST Actions Officer

The EST actions officer and EST admin assistant on shift usually work on staffing. As I mentioned in the email I sent last night, Michele Evans has also been involved. Last night it was Michele, Amy Salus, and Tony Bowers. Not sure who is on shift today.

From: Schnetzler, Bonnie Sent: Friday, April 01, 2011 12:43 PM To: Huyck, Doug; Ralph, Melissa; Abrahams, Susan Subject: RE: EST Actions Officer

Melissa, Who is the poc for staffing of this position? Thanks, Bonnie

-----Original Message-----From: Huyck, Doug Sent: Friday, April 01, 2011 12:29 PM To: Ralph, Melissa; Schnetzler, Bonnie; Abrahams, Susan Subject: RE: EST Actions Officer

Thanks Melissa.

-----Original Message-----From: Ralph, Melissa Sent: Friday, April 01, 2011 12:24 PM To: Huyck, Doug; Schnetzler, Bonnie Subject: FW: EST Actions Officer

The subject position needs to be filled for the following shift:

Thurs 4/7: 7am – 3 pm

Please "Reply to All" if you can support this shift.

Thank you

Steve Campbell EST Coordinator From: Sent: To: Cc: Subject:

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Jabbour, Andy N <JabbourA@battelle.org> Friday, April 29, 2011 11:32 AM Kozal, Jason; Billings, Sally Crosson, Jonathan; Crosson, Jonathan W RE: Battelle NRC Support Considerations

Sir,

Happy Friday. Nice to see a beautiful day out; yesterday looked like end times in Leesburg, Virginia.

Jon told me you were continuing the conversation with NRC contracting and that we should stand by for word from them as to any possible next steps. I have notified our contracting team and we are standing by to adjust if and however needed.

Jon is at the NLE 12 C&O which, as I listen in, sounds as brilliantly exciting as most of them are...

Given the change in effort and execution plan for NLE 11 (and the fact that our team has loved working with you and the NRC), I'll just keep tossing out there (until you tell me to stop) that, between cyber and the mandatory Eagle Horizon COOP requirement, if you think our team could be of use to you, please let me know. From my end, I am always trying to look forward on people and as we start setting up to shift Jon, if you were interested in maintaining any support and continuity, I could adjust our future staffing planning to keep Anne available. In these times of financial constraint and budget cuts, the people-to-requirements game becomes increasingly challenging. Our team, as I think you are aware, generally focuses on everything from planning, training, exercise, continuity to operational support. Obviously, with the NLEs, that all goes well together and, if you wanted to put anything together, we could allocate the right resources in capabilities and experience to get you the right package at a manageable cost.

Finally, just thought I'd share the blurb below about Battelle's continued engagement (through the Idaho National Laboratory) in Japan as you all are very focused there. One of the things I love about Battelle is while I am not the supersmart science guy, I get to collaborate and support those that are doing amazing things in science, R&D and defense. I thought the below sounded pretty neat.

INL Technical Assistance in Japan - Idaho National Laboratory's (INL) efforts to assist Japan extend beyond charitable contributions from employees: Earlier this month, the lab sent special robotics to assist the Japanese government in the wake of events at the Fukushima nuclear plant. INL finished equipping a radiation-resistant robot and shipped it to Japan on April 5; it arrived by the end of that week. The robot, a commercially available TALON, is equipped with a suite of sensors; detectors and cameras that can help map radiation. While the Japanese will need to determine how to best use the equipment, the robot will have the capabilities to perform a series of operations to help safely characterize and assess the situation through video footage in high-radiation areas.

Four INL robotics experts have been deployed to Japan to support the robot's use at the Fukushima plant. The added value of the system INL sent is the capability to take radiation readings and stamp them geospatially with a GPS location. From the radiation and GPS data, a Google Earth map is generated and the radiation levels are superimposed on the map and color coded according to intensity. As the robot navigates in the environment, a breadcrumb-like trail is generated and displayed on the Operator Control Unit. The system is self contained unit and has the ability to work with a variety of radiation sensors that will give gross radiation level readings up to 10,000R/hr.

Have a great weekend and thank you again for fostering a great environment for our team and your continued trust and confidence in our support.

27/13_{[1}

Very Respectfully,

ANJ | Andy N. Jabbour | 703.969.4790 | Battelle Operations Services Group

From: Jabbour, Andy N Sent: Monday, April 25, 2011 8:41 AM To: 'Kozal, Jason'; 'Billings, Sally' Cc: 'Crosson, Jonathan'; Crosson, Jonathan W Subject: RE: Battelle NRC Support Considerations

Sir,

To follow from Friday, in collaboration with our contracting team, we are able to provide Pam's complete resume, which is attached, and also an informal estimate based on executing the current schedule, transitioning Pam on board and keeping Pam and Anne in direct support 3 days a week through POP (29 SEP 11). The estimate includes an assumed equal level of support each week and a limited number of hours (2 / month) for me. We know Pam will have a few days where she will not be able to support and I do not anticipate charging any time against the contract. As a T&M, any such "savings" would not be invoiced to the NRC. The rough estimate for the extended support is ~\$62,000 in additional resources from the originally allocated amount of \$146,792. Not knowing what your resources look like at this time, should that number be more than you were expecting or are comfortable with, we could adjust the support as needed to decrease the amount (maybe reduce Pam and / or Anne to two days, verse three, or some other adjustment).

....

I have told our team that we would provide the estimate and resume to you, confirm if this reasonable in your assessment, determine any resource issues / requirements from your end as well as any guidance from your contracting office (assuming this is all part of the Wednesday morning talk) and then return to our team to initiate formal modification or refine, as needed.

Please let us know if you have any questions or further guidance at this time. Otherwise, I'll look to Jon coming back from your Wednesday morning meeting with your desired next steps. If at any point I should go to your contracting office with anything, please let me know. Ms. Melgar seemed to suggest that she thought we were maybe leaning forward too much without them when I called her briefly after her email Friday afternoon (3:18 pm).

Thank you for your leadership. We are appreciative of this opportunity to possibly assist in this worthwhile after action project and to continue support to your NLE play.

Respectfully,

ANJ | Andy N. Jabbour | 703.969.4790 | Battelle Operations Services Group

From: Jabbour, Andy N Sent: Friday, April 22, 2011 3:01 PM To: Kozal, Jason; Billings, Sally Cc: Crosson, Jonathan; Crosson, Jonathan W Subject: RE: Battelle NRC Support Considerations

Sir,

(b)(6)

Jon did some good work yesterday to develop an accurate estimate and I followed up some today. I just want to make sure that procedurally we do everything in good order within Battelle's contracting office. I think we will be able to

confirm an estimate for you Monday. As I wait on proper procedures, I am not yet able to provide Pam's resume but understand that is important for you and expect to be able to provide that Monday as well. That being said, as I wait on approval from our contracting office, please find a summary of her experience below my signature.

I think you'll find her a great teammate. There's only one Crosson but we have some other pretty great folks I get to work with. I think Pam and Anne together give you all some great strength to develop a meaningful AAR.

I hope you, Sally and all have a great Easter weekend. May it be a blessed time for you and your families.

Very Respectfully,

ANJ | Andy N. Jabbour | 703.969.4790 | Battelle Operations Services Group

(b)(6)

(b)(6)

From: Kozal, Jason [mailto:Jason.Kozal@nrc.gov]
Sent: Wednesday, April 20, 2011 4:35 PM
To: Jabbour, Andy N; Billings, Sally
Cc: Crosson, Jonathan; Crosson, Jonathan W
Subject: RE: Battelle NRC Support Considerations

Andy,

Thanks for the update. As we would love to have Jon here for the duration, I am not surprised that he would slated for a leadership position based on his performance in support of our program. We appreciate the flexibility that you and your staff have shown in the last 6 weeks in the current dynamic environment here at the NRC and I understand if you would need to make personnel changes. As you stated below, we have some things to work out on our end as far as the contract goes. In the meantime, please provide an estimate based on the your proposal of Ms. Silcox filling Jon's roll. Additionally, if you could supply a resume or a listing of Ms. Silcox's relevant experience that would be helpful when answering questions regarding key personnel changes.

Thanks for your help and enjoy the aquarium!

V/r,

Jason Kozal USNRC/NSIR/DPR/CB 301-415-6231

From: Jabbour, Andy N [mailto:JabbourA@battelle.org]
Sent: Wednesday, April 20, 2011 3:51 PM
To: Kozal, Jason; Billings, Sally
Cc: Crosson, Jonathan; Crosson, Jonathan W
Subject: Battelle NRC Support Considerations

Sir, Ma'am,

I hope everything is going well. Jon has kept me apace regarding possible changes and support and I hope the white paper we provided was useful. We are working with our GSA contracting team now to develop some estimates for you regarding the possibility of retaining Jon and Anne in support of your activities through end of month September. We will get those to you as soon as we can. I regret that we are not able to execute an in-person Quarterly Review. A lot of the issues below would be better addressed in person.

Given the timing of where we are, what you need, the NLE and future requirements, I'd like to start a conversation with you on personnel. First, I want to say thank you very much for creating a positive work environment for Jon and Anne. Jon and Anne really enjoy working with you and with the U.S. NRC and I hope that is a mutual appreciation. I am disappointed I have not had a larger role in your activities but you are very engaged in the business of what you do and with Jon and Anne, have had little need of me.

I have gone into your support for this effort with the thought that it was a rather unique situation for you (the NLE, the earthquake scenario and location with so much nuclear impacted) and have been planning on the assumption that we would not continue in our support past this NLE. I have also used our refined schedule as my planning factor and we have tried to minimize costs to maximize Jon and Anne time on site. In that, we've kept Brandon Brucker from working in direct support of your efforts and I am not charging any time. With the possible increased support for Japan after actions, which I am excited to possibly support, the potential schedule changes cause me some challenges. I am benefiting right now from a contract that I can place Jon and Anne on with pretty flexible work. That will continue to be available for Anne but not for Jon. Jon is slated to assume a leadership position on our DHS IP exercise team, taking over coordination for private sector and NIPP stakeholders (such as the NRC...) for NLE 12. Based off the requirements there, I would like to get Jon going full time (or near full time) on that as soon as possible. I would love to keep Jon in place with you through September but then I am left with a very difficult time trying to assign him afterwards.

I'd like to propose that we have Jon continue to support as scheduled for the NLE and support initial Japan Incident AAR activities but that he continue along the basic schedule we have already put together. That would allow him to transition into his new assignment on schedule.

I would like to keep Anne in place and have her remain on site as discussed between you and Jon, at three days a week through the Period-of-Performance (29 SEP).

I would like to have Pamela Silcox take over AAR support from Jon as he transitions and through the POP. Pam is an excellent and experienced training and exercise professional who has supported numerous activities for us with special focus in our after action development. She is a strong writer, quick thinker and very astute. She is able to support three days a week from June – September with a handful of exceptions due to other requirements and planned time off. I think Pam, working closely with Anne, would provide you a fantastic AAR development team.

If this seems like a reasonable approach, I can work up estimates based on the schedule detailed above.

All that being said, I would be remiss not to at least ask if you have given any thought to NLE 12. I know you have had some internal transition and certainly, with Japan, NLE 11 will not be going as planned. NLE 12 will have focus on critical infrastructure protection and as a cyber scenario, one would have to assume we could interweave NRC concerns in rather well. If you have any interest in exploring any support for NLE 12, I would gladly have that conversation anytime you like.

If it would be useful to get together after you get some guidance back from contracting, we could do that as well, or maybe via phone if you like. Once we have a better idea of where things are, Jon and I will craft together Quarterly Review slides summarizing whatever changes there are, just to keep us all in tune.

Thank you for letting us support this effort and for letting us be a part of your team. I look forward to supporting your real world after action process and hope we contribute to positive preparedness activities for the NRC.

 Please let me know anything you need from me or any questions you have.
 (b)(6)

 (b)(6)
 I look forward to your thoughts and guidance.

 understand you have a meeting Wednesday to discuss hours and the SOW.
 I look forward to wherever this conversation takes us.

Sincerely,

ANJ | Andy N. Jabbour | 703.969.4790 | Battelle Operations Services Group

From: Sent: To: Subject: Way, Ralph Friday, March 18, 2011 10:11 PM Holahan, Patricia RE: Japan

Can I call you? If so what number should I use?

r

From: Holahan, Patricia Sent: Friday, March 18, 2011 10:08 PM To: Way, Ralph Subject: Re: Japan

OK. Vonna just mentioned to me that you may want to come in, if you're available, and (b)(5) (b)(5) She indicated that Becky Karas was mentioning you because they are trying to determine where stuff went. Let me know if you can do it and I'll let Michele know so she can get you access.

----- Original Message -----From: Way, Ralph To: Holahan, Patricia Sent: Fri Mar 18 22:02:50 2011 Subject: RE: Japan

Trish, There are no mediacal reasons that would prevent me from traveling to Japan. Ralph

From: Holahan, Patricia Sent: Friday, March 18, 2011 7:22 PM To: Way, Ralph Subject: Japan

Can you please answer this question:

Meanwhile, I am requesting that the appropriate office management contact their staff on the list and confirm that their current medical condition supports this travel to Japan. When contacting them, it would be fine to indicate that their name is proceeding forward in the process, but it has not been finalized. Please provide the response to me as soon as practicable via email.

Thanks, Trish

22/128

UA03 Hoc From: Sunday, March 20, 2011 11:17 AM Sent: To: Way, Ralph RE: Request for information for contact purposes Subject:

Thanks, Ralph.

Cheers,

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Karen

From: Way, Raiph Sent: Sunday, March 20, 2011 10:50 AM To: LIA03 Hoc Holahan, Patricia Cc: (b)(6) Subject: RE: Request for information for contact purposes

From: LIA03 Hoc Sent: Sunday, March 20, 2011 8:49 AM To: Dorman, Dan; Scott, Michael; Blamey, Alan; Giessner, John; Taylor, Robert; Jackson, Todd; Miller, Marie; Ali, Syed; Sheikh, Abdul; Way, Ralph; Ramsey, Jack Cc: LIA02 Hoc Subject: Request for information for contact purposes

All,

Please respond only to me (not to all as your response will have PII) to provide the information requested below. We need this information for ongoing contact purposes, and to make sure you have the telephonic equipment you need. Also please note that other travelers in your group cannot sign for your dosimeters. You need to stop by the Ops Center, International Liaison desk, to personally sign for that equipment.

NRC TRAVELERS IN JAPAN

Name	Phone Number	Email	Flight Arrival {in Japan Time}	Flight Arrival (in Eastern Daylight Time)	Return date to U.S.	Home telephone #	Emergency contact name	Do you need a blackberry &/or has it been internationally enabled?	Have you picked up your dosimeter
Dan Dorman		Daniel.Dorman@nrc.gov							
Deputy						l			
Director,	1		ł		1				
NMSS									
Mike Scott		Michael.Scott@nrc.gov							
Deputy					1				
Director,]		1 1
Division of									
Systems		1			1		ł		1 1
Analysis, RES			1			}			1.1
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	Alan Blamey, Ril <i>TITLE?</i>		<u>Alan Blamey@nrc. ഉാ</u>					
	Jack Giessner, RIII TITLE?		@nrc.gov					
	Rob Taylor SG Tube Integrity and Chemical Engineering Broach NPP		<u>Robert.Taylor@nrc.gov</u>	-				
	Branch, NRR Todd Jackson Commercial and R&D Branch, DNMS, RI		Timothy.kolb@nrc.gov					
	Marie Miller Chief, Material Security and Industrial Branch, RI		Marie.Miller@nrc.goy					
	Syed Ali Senior Level Advisor, Div of Engineering, RES		Syed Ali@nrc.gov					
	Abdul Sheikh, NRR TITLE?		<u>Abdul.Sheikh@nrc.gov</u>					
(b) (6)	Ralph Way, Senior Level. Advisor, Divi of Seucrity Operations, NSIR	(b)(6) (b) (b) (6) (c)	Ralph.Way@nrc.gov		(b)(6)	b)(6)	Yes (b)(6) (b)(bb)/ It has NOT been internationally enabled	NO
	Jack Ramsey, Senior Level Advisor, OIP		Jack.Ramsey@nrc.gov				1	

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From:Scott, MichaelSent:Monday, March 21, 2011 10:07 AMTo:Kreuter, Jane; Ramsey, Jack; Blamey, Alan; Taylor, Robert; Jackson, Todd; Miller, Marie;
Ali, Syed; Sheikh, Abdul; Way, Ralph; Giessner, JohnSubject:Japan Briefing

I am leaving for Japan tomorrow. Can we have this today?

Sent from my NRC blackberry

Michael Scott

(b)(6)

DJ/130

From:	Shoop, Undine
Sent:	Monday, March 21, 2011 2:57 PM
То:	LIA02 Hoc; Taylor, Robert; Scott, Michael; Blamey, Alan; Giessner, John; Jackson, Todd; Miller, Marie; Ali, Syed; Sheikh, Abdul; Way, Ralph; Ramsey, Jack
Cc:	Dembek, Stephen PE: Padiation briefing
Subject:	RE: Radiation briefing

That would fine, can we extend the time for having the room? I think that is OIP's conference room.

------From: LIA02 Hoc Sent: Monday, March 21, 2011 2:13 PM To: Taylor, Robert; Scott, Michael; Blamey, Alan; Giessner, John; Jackson, Todd; Miller, Marie; Ali, Syed; Sheikh, Abdul; Way, Ralph; Ramsey, Jack Cc: Shoop, Undine; Dembek, Stephen Subject: RE: Radiation briefing

Rob, I was unaware of the other briefing until Ralph Way just informed me. OIP did not inform the liaison team. I think it would be most efficient to piggyback them. Undine is this OK with you?

a and a set of the set From: Taylor, Robert Sent: Monday, March 21, 2011 2:12 PM To: LIA02 Hoc Cc: Shoop, Undine Subject: RE: Radiation briefing

Doesn't this conflict with a 2:30-3:30pm "Japan Briefing" in O4B3 that was set up by Jane Kreuter? Can we just piggyback the radiation briefing onto the end of that meeting?

From: LIA02 Hoc Sent: Monday, March 21, 2011 2:10 PM To: LIA03 Hoc; Scott, Michael; Blamey, Alan; Giessner, John; Taylor, Robert; Jackson, Todd; Miller, Marie; Ali, Syed; Sheikh, Abdul; Way, Ralph; Ramsey, Jack Cc: Dembek, Stephen Subject: Radiation briefing

All,

Undine Shoop has requested that, if possible, all of those travelers departing from HQ on March 24 take part in a single radiation brief tomorrow afternoon at 3 PM. This briefing is required for anyone picking up dosimetry who did not already have it. Please advise as soon as possible whether you will be able to support.

Thank you, Jen

------From: LIA03 Hoc Sent: Monday, March 21, 2011 1:20 PM To: Scott, Michael; Blamey, Alan; Giessner, John; Taylor, Robert; Jackson, Todd; Miller, Marie; Ali, Syed; Sheikh, Abdul; Way, Ralph; Ramsey, Jack Cc: Dembek, Stephen; LIA02 Hoc Subject: FW: Country clearance info

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See below message on country clearance.

Thanks.

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Nancy

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 (<u>http://portal.nrc.gov/OCM/io/travel/default.aspx</u>) 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!

From: Sent: To: Cc: Subject: Sheikh, Abdul Monday, March 21, 2011 10:06 PM Way, Ralph; Ali, Syed Holahan, Patricia; Wiggins, Jim **RE: PRE-DEPLOYMENT MEETING**

Ralph:

I am available tomorrow morning until 11:00 AM. If you or Syed will like to meet or have a teleconference, please let me know. My cell phone is (b)(6)

From: Way, Ralph Sent: Monday, March 21, 2011 2:16 PM To: Ali, Syed; Sheikh, Abdul Cc: Holahan, Patricia; Wiggins, Jim Subject: RE: PRE-DEPLOYMENT MEETING

We are schedule for a briefing from the RST tomorrow 3/22 at 1300 in the RST room.

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From: Ali, Syed Sent: Monday, March 21, 2011 1:55 PM To: Way, Ralph; Sheikh, Abdul Cc: Holahan, Patricia; Wiggins, Jim Subject: RE: PRE-DEPLOYMENT MEETING

Hello Ralph:

Not a bad idea. We can either do it in person and by telephone. With everything going on, and me being located at Church Street, a Telecon might be more feasible.

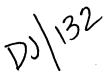
Thanks, Syed Ali

From: Way, Ralph Sent: Monday, March 21, 2011 1:21 PM To: Ali, Syed; Sheikh, Abdul Cc: Holahan, Patricia; Wiggins, Jim Subject: PRE-DEPLOYMENT MEETING

Greeting Gentlemen,

I understand we will be working together in Japan. Would it be possible for us to get together before we leave to discuss what we believe the issue(s) are we will be asked to address?

Thx,



R

Ralph Way, Ph.D. Senior Technical Advisor U.S. Nuclear Regulatory Commission Phone (V) Unclass 301 415 6825 Phone (V) Secure 301 415 6961 FAX (Unclass) 301 415 6661

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Subject: Location:	Japan Briefing O4C3
Start: End:	Tue 3/22/2011 2:30 PM Tue 3/22/2011 3:30 PM
Recurrence:	(none)
Meeting Status:	Accepted
Organizer: Required Attendees:	Kreuter, Jane Ramsey, Jack; Scott, Michael; Blamey, Alan; Taylor, Robert; Jackson, Todd; Miller, Marie; Ali, Syed; Sheikh, Abdul; Way, Ralph; Giessner, John
Importance:	High

When: Tuesday, March 22, 2011 2:30 PM-3:30 PM (GMT-05:00) Eastern Time (US & Canada). Where: O4C3

Note: The GMT offset above does not reflect daylight saving time adjustments.

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Meeting Information:

Leader:	MS JANE KREUTER	
Phone number:	1-301-415-1780	
Contact:	Mr D'ANDRE COLEMAN	
Phone number:	1-301-415-7026	
Call date:	MAR-22-2011 (Tuesday)	
Call time:	02:00 PM EASTERN TIME	
Duration:	2 hr	
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Service level:	Unattended	
Number of lines:	Total=10 Dialout=0 Meet Me=10 Meet Me Toll=0	
Confirmation number:	(b)(6)	
Company:	FTS-NUCLEAR REGULATORY COMMISI	
CRC:		

Passcodes/Pin codes:

Participant passcode (b)(6)					

For security reasons, the passcode will be required to join the call.

Dial in numbers:

nbers Freephone/ Toll Free Number	Country
888-603-8944	USA
888-603-8944	USA

Restrictions may exist when accessing freephone/toll free numbers using a mobile telephone.

In-Conference Features:

All participants must use a touch-tone phone to participate in an Audio Conference. The following features are available for you to use on your phone during an active conference:

Press *0 operator assistance (small fee may apply)

Press *6 mute/unmute individual line

Subject: Location:	Culture Briefing on Japan 04-C3 and Bridge Line
Start: End:	Tue 3/22/2011 2:30 PM Tue 3/22/2011 4:00 PM
Recurrence:	(none)
Meeting Status:	Accepted
Organizer: Required Attendees:	ЦАОЗ Нос Giessner, John; Taylor, Robert; Jackson, Todd; Miller, Marie; Ali, Syed; Sheikh, Abdul; Way, Ralph; Ramsey, Jack; ЦАО2 Нос; Kreuter, Jane; Shoop, Undine

When: Tuesday, March 22, 2011 2:30 PM-4:00 PM (GMT-05:00) Eastern Time (US & Canada). Where: 04-C3 and Bridge Line

Note: The GMT offset above does not reflect daylight saving time adjustments.

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Your conference details are enclosed.

Meeting Information:		
Leader:	MS JANE KREUTER	
Phone number:	1-301-415-1780	
Contact:	Mr D'ANDRE COLEMAN	
Phone number:	1-301-415-7026	
Call date:	MAR-22-2011 (Tuesday)	
Call time:	02:00 PM EASTERN TIME	
Duration:	2 hr	
Service level:	Unattended	
Number of lines:	<u>Total=10 Dialout=0 Meet Me=10 Meet Me Toll=0</u>	
Confirmation number:	(b)(6)	
Company:	FTS-NUCLEAR REGULATORY COMMISI	
CRC:	·	

Passcodes/Pin codes:

Participant passcode (b)(6)				11
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For security reasons, the passcode will be required to join the call.

Dial in numbers:

		Freephone/	
Country	Toll Numbers	Toll Free Number	
USA		888-603-8944	

Restrictions may exist when accessing freephone/toll free numbers using a mobile telephone.

In-Conference Features:

All participants must use a touch-tone phone to participate in an Audio Conference. The following features are

available for you to use on your phone during an active conference:

- Press *0 operator assistance (small fee may apply)
- Press *6 mute/unmute individual line

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From: Sent: To: Cc: Subject:	Floyd, Daphene Wednesday, March 23, 2011 8:03 AM LIA02 Hoc Way, Ralph RE: Correct CountryClearance Information
Thanks. This is don	2.
To: CountryClearance Cc: Way, Ralph	arch 23, 2011 6:16 AM Resource; Floyd, Daphene ntryClearance Information
Please correct Ralph V country clearance.	Nay's clearance level to (b)(6) on his



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From:	Padilla, William
Sent:	Wednesday, March 23, 2011 8:43 AM
То:	Heard, Robert
Cc:	Brusoe, Eric; ET02 Hoc; Reyes, Debra; Giessner, John; Taylor, Robert; Miller, Marie; Way,
	Ralph; Bloom, Steven; Bissett, Ryan
Subject:	RE: Blackberry devices for Japan Support
Attachments:	image003.jpg

Rob – Let's follow the process. Once DST does their provisioning the devices need to be returned to the TSC. The TSC will deliver the devices to you when they are done putting everything together.

Thanks, Bill

William Padilla Jr. Telecommunications Specialist OIS/ICOD/COTB - Telecommunications Team Mailstop: T-5D14 Tel: 301-415-7250 BB:[(b)(6) Fax: 301-415-5077 email: <u>William.Padilla@nrc.gov</u>



From: Heard, Robert
Sent: Tuesday, March 22, 2011 11:20 AM
To: Giessner, John; Taylor, Robert; Miller, Marie; Way, Ralph; Bloom, Steven
Cc: Brusoe, Eric; ET02 Hoc; Reyes, Debra; Padilla, William
Subject: Blackberry devices for Japan Support

For your deployment to Japan you must be provided with a different Blackberry device. In order for us to activate the new device for you we must first deactivate your current device. In order to have this device ready for you when you depart, we will need to deactivate your device on Wednesday March 23rd prior to noon. Immediately we will begin to activate your new device. Your new device will be delivered to the operations center when provisioning is completed, it will be ready for you to pick up from there.

For those of you in the Regions if you are not coming to HQ, your device should be carried by an HQ staff member and will be given to you when you arrive.

If you have any question or concerns please let me know.

Robert Heard Jr. OIS/ICOD/ISPT

23/136

From: Sent: To: Cc: Subject: Attachments:

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Pires, Jose Wednesday, March 23, 2011 4:34 PM Way, Ralph Tegeler, Bret Drawings from fukushima Fukushima drawings.pdf

Ralph, Bret asked me to forward these to you. Thanks,

Jose.



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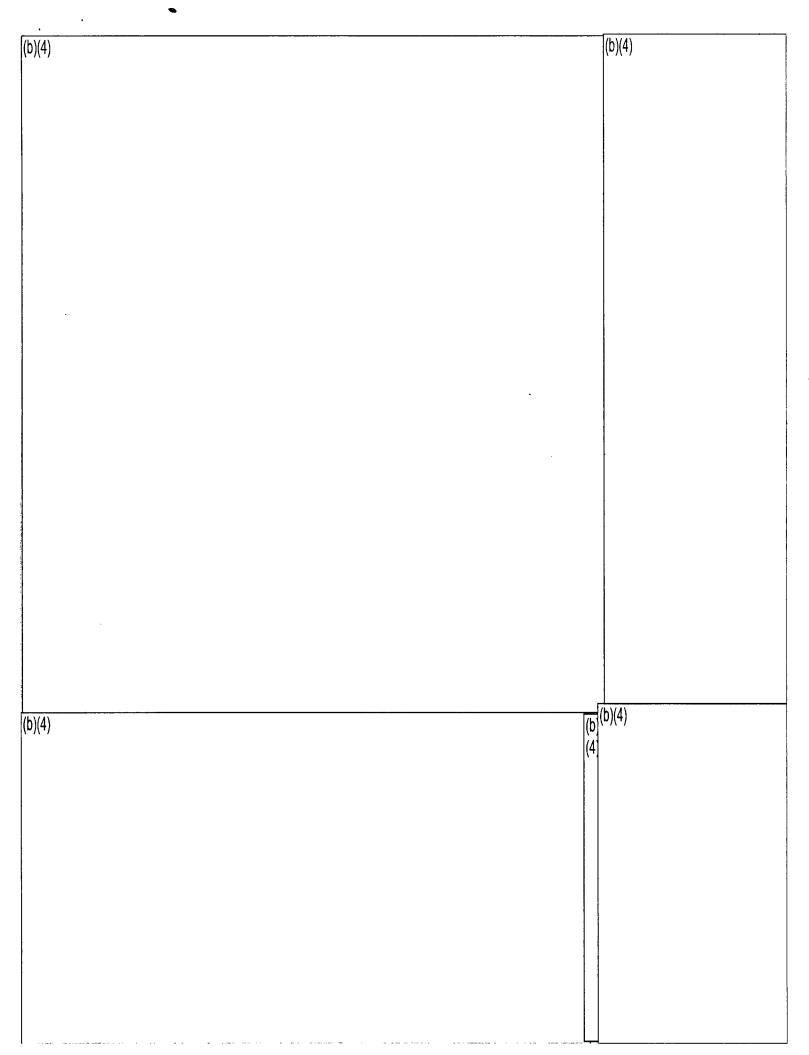
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From:
Sent:
To:
Subject:

ecc@state.gov Thursday, March 24, 2011 8:50 PM Way, Ralph eCC - [INFO ONLY, NO ACTION] - Itinerary #626370/Way REQUEST GRANTED, ARRIVAL: 3/25/2011

Request Summary

Itinerary #:626370

Date Requested:3/23/2011

Request Summary

	Travel Itine	rary		
Destination Country	Destination Cities	Start Date	End Date	Status
JAPAN	Tokyo	3/25/2011	4/8/2011	APPROVED

Travelers	
Name: Ralph Way	Agency: Nuclear Regulatory Commission
Contact Info: 301-415-6825 ralph.way@nrc.gov	Employment Type: Direct Hire
Country of Birth (b)(6)	Passport Type: ^{(b)(6)}
Emergency Contact (D)(6)	Passport #: (b)(6)
(b)(6) Clearance: (b)(6)	Passport Country: (b)(6)
Clearance Verification:	r dosport obundy.
Additional Info: (b)(6)	
Other Group Members:	
None	

Carrier Information Carrier and # Mode Departure Point Departure Date/Time Arrival Point Arrival Date/Time

None

Request Details

	J	IAPAN		
Clearance From JAPAN/TOKYO	Agency/Section/Other ECONOMIC SECTION	Arrival Date 3/25/2011	Departure Date 4/8/2011	Status APPROVED
Other Posts & Post	Sections to be Informed Section	Access to B POC at post	uilding Required?	No
Destination Cities	Tokyo	Access to P	CC Required? No	$\backslash 2$

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VIP Visit? No Purpose of VisitTo support US response effort for cooling Fulkushima Nuclear Units. Fiscal Data: None Other Comments/Remarks: None Hotel Reservations? No Airport Assistance/Transportation? No Accompanying Pouch? No Appointment Request? No Other Needed Assistance? No

		Hotel A	Accomm	odations	
Hotel Name	Street Address	City	Rate	Local Telephone #	Confirmation #
Control Officer Pos Emai Phone Airport Assistanc / Transportation Appointmer Reques Expediter Other Provide Assistance Comments	t: TOKYO l: e n: n: nt t: r: d				
List of recipients:					
[ACTION]-REQUES miyajimacx@ vizcarraik@s katagirinx@s horowitzpd@ bergermc@s [INFO]-COUNTRY kelleyk@sta williamsge@ [INFO]-REQUESTO ralph.way@u	D <u>state.gov</u> <u>state.gov</u> <u>state.gov</u> <u>state.gov</u> <u>state.gov</u> DESK: <u>te.gov</u> <u>state.gov</u> DR CC:				

- danielle.emche@nrc.gov
- drf@nrc.gov

From:	Monninger, John
Sent:	Monday, March 28, 2011 2:45 AM
То:	LIA07 Hoc; Liaison Japan; BurrisRE@INPO.org; inpoercassistance@inpo.org;
	Hochevar@inpo.org; NielsonFM@inpo.org; matthew.gooder@exeloncorp.com
Cc:	Dorman, Dan; Casto, Chuck
Subject:	RE: GOJ requests Hydraulic hoses with couplers & radioactive shielding for vehicles as
	well as additional protective clothing

Regarding the request from Japan for high pressure hose with couplers, they provided the following information:

Use - residual heat removal to replace fire engine hoses that are currently being used Water Pressure Rating - 1 MPa Heat Resistance - 150 C Tube Diameter - 200 a (8 inches) Length - 500 m Total Length - 1500 m (need 3 sections of about 500 m each; they understand that the hose typically comes in units of 50 m with couplers at each end)

Contact at TEPCO: Mr. Hijikata +81 3 6373 4905

This request for hoses with couplers for RHR is different from the discussion below of 24 miles of piping from a freshwater lake. The 24 miles of piping was brought up by USFJ, and was to provide fresh water to the site. The request above from Japan is for hosing on-site.

John Monninger

NRC

(b)(6)

From: LIA07 Hoc Sent: Sunday, March 27, 2011 7:41 PM To: Liaison Japan Subject: RE: GOJ requests Hydraulic hoses with couplers & radioactive shielding for vehicles as well as additional protective clothing

FYI

From: Burris, Rick E (INPO) [mailto:BurrisRE@INPO.org] On Behalf Of INPOERCAssistance Sent: Sunday, March 27, 2011 7:21 PM

To: LIA07 Hoc

Cc: McCarthy, James H.; Hochevar, Albert R. (INPO); Nielsen, Rick M (INPO); matthew.gooder@exeloncorp.com **Subject:** RE: GOJ requests Hydraulic hoses with couplers & radioactive shielding for vehicles as well as additional protective clothing

Good Evening Nichole – INPO ERC Assistance did receive this request this afternoon at approximately 1505 and I replied at approximately 1526.

Context of e-mail I received:

"INPO may be of assistance as they have US industry and licensee contacts. Contact info: inpoercassistance@inpo.org, 770-644-8118."

LIA01

I responded as well as talked with Patrick O'Brien of Task Force One. What is needed by INPO are the exact specifications of the water hose "Hydraulic hose and couplings" that are needed by GoJ. My understanding is that GoJ desires to run piping (hose) from a freshwater lake approximately 24 miles from Fukushima Dai-ichi station. So if you can see that during the 2130 call tonight with the embassy in Tokyo this topic is discussed and if you require our assistance (which we will gladly provide), please ensure that very specific specifications are provided to us. Pumping water 24 miles will be quite a feat!

I am on days (0800 – 2000) and for the next several nights Jim McCarthy will be in from 2000 – 0800. So probably the best person to relay the information back to us would be our member of the Embassy team, AI Hochevar.

Best regards,

Rick Burris

Richard E. Burris Institute of Nuclear Power Operations Senior Representative Entergy Nuclear Fleet Senior Representative

(770) 644-8634 (Office) (b)(6) (Mobile)

From: LIA07 Hoc [mailto:LIA07.Hoc@nrc.gov]
Sent: Sunday, March 27, 2011 6:52 PM
To: HOO Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Cc: INPOERCAssistance
Subject: RE: GOJ requests Hydraulic hoses with couplers & radioactive sheilding for vehicles as well as additional rprotective clothing

All,

It is not entirely clear whether this request was forwarded to INPO, per Michael Dudek's message below; to err on the side of caution, INPO is copied on this message, as they are coordinating offers of support regarding requests of this nature.

Thank you, Nichole

Subject: RE: GOJ requests Hydraulic hoses with couplers & radioactive sheilding for vehicles as well as additional rprotective clothing

Brian, Lynda:

INPO may be of assistance as they have US industry and licensee contacts. Contact info: <u>inpoercassistance@inpo.org</u>, 770-644-8118. For the last week or so they have been filtering all technical offers of assistance, prioritizing them, and facilitating as necessary. They should have a list of items (hoses, couplings, protective suits) that are available.

Michael I. Dudek US Nuclear Regulatory Commission

From: Brendel, Brian D [mailto:BrendelBD@state.gov] On Behalf Of zTask Force 1 Mailbox
Sent: Sunday, March 27, 2011 2:56 PM
To: JapanEmbassy, TaskForce; RMTPACTSU_RM; zTask Force 1 Mailbox; RMT_PACTSU
Subject: RE: GOJ requests Hydraulic hoses with couplers & radioactive sheilding for vehicles as well as additional rprotective clothing

Regarding Hydraulic hoses and couplers (couplings?):

Are these hard to find items in the U.S.?

I don't want to steal the thunder from the Australians, but I think these may be something we do not want to let get delayed.

Did the Australians seem very confident they can supply Hydraulic Hoses and quickly and in sufficient quantity?

P.S. Any luck on the radioactive - protection suits?

Brian

From: JapanEmbassy, TaskForce
Sent: Sunday, March 27, 2011 10:42 AM
To: 'RMTPACTSU_RM'; zTask Force 1 Mailbox; RMT_PACTSU
Cc: JapanEmbassy, TaskForce
Subject: RE: GOJ requests Hydraulic hoses with couplers & radioactive sheilding for vehicles as well as additional rprotective clothing

We received the following information from the NRC team in Tokyo:

1. Hydraulic hoses....equipment not located as of yet, the Australians are seeking this equipment. We will update the Japanese Cabinet meeting tomorrow night.

2. Shielding.....points of contact for tungsten shielding were provided at the cabinet meeting tonight.

3. Suits.....we don't believe that such suits exist. We are still in pursuit of these.

on behalf of the Japan Emergency Command Center, +81-3-3224-5533

Lynda Hinds Staff Assistant to Ambassador John V. Roos U.S. Embassy 1-10-5 Akasaka, Minato-ku Tokyo 107-8420 Tel. (03) 3224- 5370

Twitter.com/AmbassadorRoos

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This email is UNCLASSIFIED.

From: RMTPACTSU_RM [mailto:RMTPACTSU_RM@ofda.gov] Sent: Sunday, March 27, 2011 11:39 PM To: zTask Force 1 Mailbox; RMT_PACTSU Cc: JapanEmbassy, TaskForce Subject: RE: GOJ requests Hydraulic hoses with couplers & radioactive sheilding for vehicles as well as additional rprotective clothing

Brian, we did convey this request to the expanded DART and per a concall last night were told the specific request was being discussed at the Tokyo level. We did not receive a further update this morning and we are asking again where things stand...Justin

From: Brendel, Brian D [mailto:BrendelBD@state.gov] On Behalf Of zTask Force 1 Mailbox Sent: Sunday, March 27, 2011 9:37 AM To: RMTPACTSU_RM; zTask Force 1 Mailbox; RMT_PACTSU Cc: JapanEmbassy, TaskForce Subject: RE: GOJ requests Hydraulic hoses with couplers & radioactive sheilding for vehicles as well as additional rprotective clothing

Dear RMT colleagues,

I am hoping to have an update on the following for today's phone call with Ambassador Fujisaki:

1: Hydraulic hoses with couplers (couplings?)

- 2: Radioactive shielding for vehicles
- 3: Protective clothing (suits) against radioactivity.

Was there any word from the expanded DART in Tokyo?

Brian Brendel Cell (b)(6) TaskForce switchboard: 202-647-6611 P.S. The task force still does have real live people staffing it, especially on our night shift 11:00 PM – 7:00 AM

From: RMTPACTSU_RM [mailto:RMTPACTSU_RM@ofda.gov] Sent: Saturday, March 26, 2011 2:55 PM To: zTask Force 1 Mailbox; RMT_PACTSU Subject: RE: GOJ requests Hydraulic hoses with couplers & radioactive sheilding for vehicles as well as additional rprotective clothing

Brian, you have the correct address. We have routed this information to the expanded DART in Tokyo and expect to have some feedback from them our Sunday AM...thanks...Justin

From: Brendel, Brian D [mailto:BrendelBD@state.gov] On Behalf Of zTask Force 1 Mailbox Sent: Saturday, March 26, 2011 2:47 PM To: RMT_PACTSU Subject: FW: GOJ requests Hydraulic hoses with couplers & radioactive sheilding for vehicles as well as additional rprotective clothing Dear RMT (I believe this is your correct email, please confirm):

Ambassador Fujisaki told EAP Acting A/S Joe Donovan that at the most recent meeting with the U.S. Embassy in Tokyo, Senior Advisor Hosono and his team requested hydraulic hoses with couplers and radioactive shielding for vehicles, as well as additional radioactive protective clothing.

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From: Green, Christopher L.
Sent: Saturday, March 26, 2011 12:40 PM
To: Zumwalt, James P; Campbell, Kurt M
Cc: TaskForce-1 - Japan; JapanEmbassy, TaskForce; Loi, James L; Patel, Nirav S; EAP-J-Office-DL; Tong, Kurt W; Donovan, Joseph R
Subject: 03 26 11 Donovan-Fujisaki meeting notes 1100

A/S Campbell, Jim,

Here are the call notes and action items from today's 11:00 a.m. call with Ambassador Fujisaki.

Regards, Christopher

Christopher Green Office of Japan Affairs U.S. Department of State Tel: (202) 647 2914 Fax: (202) 647 4402

PDAS Donovan call notes with Ambassador Fujisaki, March 26, 1100 And Action Items

GOJ Asks: Ambassador Fujisaki told EAP Acting A/S Joe Donovan that at the most recent meeting with the U.S. Embassy in Tokyo, Senior Advisor Hosono and his team requested hydraulic hoses with couplers and radioactive shielding for vehicles, as well as additional radioactive protective clothing.

Water: Donovan said that Costco has determined they have the capacity to provide up to 7 million bottles of water per week to Tokyo in 100 containers, each holding 70,000 bottles. Ambassador Fujisaki asked if Costco could make a public announcement on the delivery of bottled water.

Robots: Ambassador Fujisaki said that the robots and associated equipment was now going to be transported via Japan Airlines (JAL) and not FedEx. It is scheduled to depart Monday and will arrive Tuesday Japan time.

Barges and Hypothetical Bounding Models: Donovan said two U.S. Navy Barges holding fresh water left the port of Yokosuka on March 25 and 26, respectively, to add capacity to Freshwater + boric Acid spraying onto the reactors. He also said that the instruction cable on the plume models should be sent to Embassy Tokyo today. Ambassador Fujisaki asked how many tons of water. Donovan said we would follow up. (We have subsequently informed the Japanese Embassy that each barge holds 350,000 gallons of fresh water.)

Ambassador Fujisaki said that he thought things were going well with his exchanges with senior U.S. officials. He recently met with Dep Sec Poneman, Administrator Jackson, and Secretary Chu among others.

KMAX: Donovan requested that in meetings in Tokyo that the GOJ provide a clear plan for usage of the KMAX, and reiterated our request that the GOJ address indemnity issues by invoking the IAEA Convention on Nuclear Disasters.

The Ambassador explained that the GOJ was not familiar with the capabilities of KMAX and that it would be operated by Americans on the ground who would advise the best use for the equipment. This might be a redundancy, but the GOJ would still appreciate it. Donovan asked Ambassador Fujisaki to follow up with Special Advisor Hosono in Tokyo about invoking the IAEA convention. Ambassador Fujisaki said that the GOJ has been reluctant to invoke the Convention.

The next call with Ambassador Fujisaki is scheduled for Sunday, March 27, at 12:00 p.m.

ACTION ITEMS

Bottled Water: Embassy Tokyo: please determine if COSTCO or DART can make a public announcement. **Lockheed Martin KMAX Helicopter:** Request Embassy Tokyo raise indemnity issue.

SBU This email is UNCLASSIFIED.

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From:
Sent:
To:
Subiect:

Masse, Todd Tuesday, March 29, 2011 6:27 AM Way, Ralph RE: CHECKING IN

Hello Ralph – great to hear from you. Sounds like you are gainfully employed over there! (b)(5)

(b)(5) Get a sense there's anyone fully in charge? Lots of open press here about amazing lack of robotics in country...you know the iRobot machines that can drive into the building to take measurements. Robots for commercial and consumer markets yes – not much in the way of EOD type robots.

Stay safe over there and try to get some occasional sleep!

Best, Todd

Todd Masse

Chief, Intelligence Liaison and Threat Assessment Branch Office of Nuclear Security and Incident Response Nuclear Regulatory Commission (301) 415-7518

From: Way, Ralph Sent: Monday, March 28, 2011 10:32 PM To: Masse, Todd Subject: CHECKING IN

Hi Dude,

Just wanted to drop you a short note. Things here are falling into a routine; Long days and lots of meeting (b)(5) (b)(5) Not a lot of stuff there. The Reactor guys are still trying to understand the Japanese strategy for reaching a steady state at the plants.

The Chairman was here yestrerday, I didn't get to see him I was at a meeting. H ewas in one meeting after the other. Well that's about it for now.

Stay safe.

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From: Sent:	hatada-hiroyuki@meti.go.jp Wednesday, March 30, 2011 11:22 AM
To:	CherryRC@state.gov
. Cc:	
Subject:	(D)(0) amano.ma@tepco.co.jp;(D)(6) a- kumada0303@docomo.ne.jp; bannai-toshihiro@meti.go.jp; Derek.Wadsworth@inl.gov; DuncanAD@state.gov; fujiki-toshimitsu@meti.go.jp; funaki-kentaro@meti.go.jp; hiroshisanomura@docomo.ne.jp; hiroshi.sanomura@mofa.go.jp; hiroshi_yoshinada@komatsu.co.jp; horiguchi-shin@meti.go.jp; HowardEB@state.gov; Jay.Tilden@nnsa.doe.gov; Kathryn.Harris@nnsa.doe.gov(b)(6) [b)(6) [b)(6) [koyama-masaomi@meti.go.jp; kumada@yb3.so-net.ne.jp; mikihay@mod.go.jp; mishima-o2rk@mlit.go.jp; mitsumata-hiroki@meti.go.jp; mitsunori_ozaki@komatsu.co.jp; mizuo@fsinet.or.jp; mori-daisuke@meti.go.jp; nikaidou-y2kg@mlit.go.jp; Nitops@nnsa.doe.gov; okuda-shuji@meti.go.jp; osamu.maekawa@toshiba.co.jp; ozawa-noriaki@meti.go.jp; PWG@nnsa.doe.gov; Way, (b)(6) sakuma-yasuhiro@meti.go.jp; SanoMX@state.gov; satouyosh@mod.go.jp; takashi.hatori@mofa.go.jp; Tracy.Mustin@nnsa.doe.gov; tsuyoshi.hagiwara@toshiba.co.jp; watanabe-k2ar@mlit.go.jp; watanabe-m2x7 @mlit.go.jp; y4023@ce.taisei.co.jp; yagi.n@tepco.co.jp; yano.komei@tepco.co.jp; yasushi.horimizu@jnfl.co.jp; yojiro.hatakeyama@kantei.go.jp; yoshiko.kijima@mofa.go.jp; yoshinada.h.aa@m.titech.ac.jp [Fukushima NPP:Remote Coltrol PT](vol.12) Materials for Mtg #3
Attachments:	RemoCon PT Mtg3.doc; use of rad hardened camera.doc; use of remote control.doc; talon.doc; cameras.doc; heavy equip.doc
Members:	
-	naterial for the Mtg #3 planned at 0900-1100 Thursday 31 of March (JST) 会合の資料を配付します。
Very respectfully,	
Hiroyuki Hatada	
(See attached file: RemoC	on PT Mtg3.doc)
(See attached file: use of i	rad hardened camera.doc)(See attached file: use of remote control.doc)
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Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / 03-3501-1692

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Spurlock" ((b)(6) "Maj. Keith Simmers" (b)(6) >, "Ralph Way"
<ralph.way@nrc.gov>, "Rod Tanaka"</ralph.way@nrc.gov>	
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RE: [Fukushima NPP:Remote Coltrol PT](vol.11)	1
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Dear Hatada-san,

Thank you for making the arrangements for this meeting. The participants from the Embassy will be:

Ron Cherry, DOE Japan Office Aleshia Duncan, DOE Japan Office Ralph Way, NRC Aaron Leong, Mutual Defense Assistance Office Maj. Keith Simmers, US Forces Japan

Please confirm that we will use the same arrangement for making the conference call -- i.e., call the Department of Energy at (202) 586-8100, where the operator will then make the connection to the other U.S. participants on the line.

If you send more information or documents prior to the meeting, please include the other U.S. addressees that I have included on this message.

That will ensure they receive the information as quickly as possible.

Thank you.

Best regards,

Ron

This email is UNCLASSIFIED

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

From: hatada-hiroyuki@meti.go.jp [mailto:hatada-hiroyuki@meti.go.jp (1) DOEは「オーダー済み」のものについては特段のアクションは取らない予 定だが、DOE-owned/DOE-enabled のものなど、コマーシャルベースでは上手く手配 出来るのか心配なものがある。もしどこかで引っかかるなど、DOEとしてアク ションすべき事があれば、教えて欲しい。(→八木さん確認お願いします) (2) カメラについて、希望台数をお願いします(→八木さん確認お願いします。四 台ですか?)

【2】PT#2について 第2回PTを、明日28日11:00(P)から、米国大使館で開催する方向で調 整中です。 米側に対して、出席者を登録する必要があります。 特段御連絡なければ、以下の方を登録しようと思っております。修正あれば御連絡 下さい。

Special Assistant to Prime Minister Mr. Goshi Hosono Diet Member Mr.

Atsushi Kumada

Cabinet Secretariat Yojiro Hatakeyama MOFA Yoshiko Kijima, Hiroshi Sanomura METI Hiroshi Asahi, Hiroki Mitsumata, Kentaro Funaki, Toshimitsu Fujiki, Shuji Okuda, Noriaki Ozawa, Hiroyuki Hatada, NISA Hisanori Nei, MOD Masayuki Iwaike, Kazuya Yonekura MLIT (TBD)

TEPCO Yasushi Horimizu, Komei Yano, Naoto Yagi TAISEI CORP Yoji Tateishi TOSHIBA Tsuyoshi Hagiwara KOMATSU Mitsunori Ozaki, Hiroshi Yoshinada

Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / 03-3501-1692

> 送信元: >	
hatada-hiroyuki/MITI-LAN 	·
> 宛先: >	
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(b)(6)	bannai-toshihiro@meti.go.jp, cherryrc@state.gov,

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>> 日付: >	
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<pre> [Fukushima NPP:Remote Coltrol PT](vol.2) Memorandum on Today's RemoCon PT meeting 1500 at METI 12F romm West-1 ></pre>	
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(addressees)
 外務省 貴島様、佐野様
 経産省 藤木様、奥田様
 経産省資源エネルギー庁 堀口様、舟木様(→三又様)
 経産省保安院 坂内様、小山様、佐久間様(→根井様)
 防衛省 佐藤3佐(→岩池様、米倉様)

東京電力 八木様 (→佐藤様、原田様)

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 東芝
 萩原様

 コマツ
 吉灘様、尾崎様

US Embassy Mr. Cherry, Ms. Duncan

CC: 経産省 小澤様

(カッコ内の方はメールアドレスに入っていませんので適宜共有願います)

Dear attendees to the Remote Control Project Team Meeting #1,

Please find attached a memorandum that will be used in Today's meeting. (Page 1 in Japanese and Page 2 in English) For those who have not seen the previous communication, please see the last email attached below.

Very respectfully,

Hiroyuki Hatada

[添付ファイル "RemoCon PT Mtg1.doc" は hatada-hiroyuki/MITI-LAN が削除しました]

Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / 03-3501-1692

> 送信元: >
hatada-hiroyuki/MITI-LAN >
> 宛先: > >>

[hiroshi_yoshinada@komatsu.co.jp, mitsunori_ozaki@komatsu.co.jp,

osamu.maekawa@toshiba.co.jp, tsuyoshi.hagiwara@toshiba.co.jp, [yagi.n@tepco.co.jp, yoshinada.h.aa@m.titech.ac.jp, takashi.hatori@mofa.go.jp, mikihay@mod.go.jp, satouyosh@mod.go.jp, |bannai-toshihiro@meti.go.jp, koyama-masaomi/MITI-LAN@MITI-LAN, cherryrc@state.gov, duncanad@state.gov, pekodx@state.gov, |howardeb@state.gov, {(b)(6) (b)(6) >-----|----> | Cc: | |----> >------|ozawa-noriaki/MITI-LAN@MITI-LAN, okuda-shuji/MITI-LAN@MITI-LAN, funaki-kentaro/MITI-LAN@MITI-LAN, horiguchi-shin/MITI-LAN@MITI-LAN, - 1 |mori-daisuke/MITI-LAN@MITI-LAN, mikihay@mod.go.jp, mitsumata-hiroki/MITI-LAN@MITI-LAN l >-------|----> |日付: | |----> >------2011/03/26 10:16 1 _____ |----> |件名: | |----> >------[[Fukushima NPP:Remote Coltrol PT] logistics for the meeting #1 1500 26th Mar (TODAY) 【原発・NRC】 リモコンPT第1回ロジ連絡 >------

To the invited participants to the Remote Control PT: (For Japanese, please see below) << to the US participants >>

Please be advised on the logistics for the meeting #1 of the Remote Control Project Team, that was mentioned in yesterday's bilateral meeting:

When: 1500 on Saturday March 26th (TODAY)

Where: Shougi-room located West-1 on the 12th floor of the METI Main Building How to get there:

- Use the gate located on the north edge (facing toward the royal

residence)

- at the entrance of the main building, tell the guard that you are attending "Remote Control Project Team Meeting, hosted by Soumu-ka (ext.2111)".

- use the red elevator to 12th floor and proceed to the door marked West-1

- call me at cell (b)(6) f needed

Please send me a list of US participants with Name, Job title, phone# and email address.

Thank you.

<<日本側参加者の皆様へ>>

お世話になっております。 リモコンPTのロジについて御連絡します。

oリモートコントロール・プロジェクトチーム第1回会合

日時:3月26日(土)15:00~ 場所:経済産業省本館12階西1 省議室 (12階西1) 入館方法: ・土曜日のため、経済産業省の敷地北側の門(農林水産省側、皇居の方角)から入 構下さい。 ・役所のIDをお持ちでない方は、本館入り口にて、守衛所に「官房総務課(内線 2111)の会議(リモコンPT)に出席する」旨、お伝え下さい。

・赤いエレベーターで12階西1の会場までお越し下さい。

出席者登録がまだの方は、お送りしたメールのフォーマットにて回答願います。 (東芝、コマツ、原子力産業課からは既に出席登録を頂いております。)

よろしくお願い申し上げます。

(以上)

Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / 03-3501-1692

機密性2

Radiation Hardened Camera

- 1. Needs and conditions of use
- Purposes:
 - Short term: for checking of the status of fuel rods in the spent fuel pool, surveillance of water pumping to SFP, checking of water levels in the T/B and R/B
- Environments

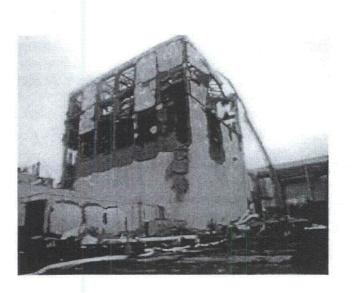
Used in high radiation dose, near and in water conditions; supported by pole hanging from the boom of concrete pump boom truck.

- Quantity required: Five or more(not including one GammaCam)
- When to use Short, mid and long terms.
- 3. Note

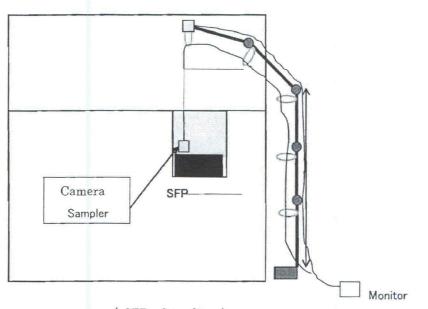
Before delivery to the site, these items will be tested and used for training purpose.

4. Inquiry

Maximum length of the cable attachable to the camera.



(Water Injection from Concrete Pump Boom Truck)



(SFP Sampling)

2

機密性2

Design Information on Shielding for Heavy Machinery & Equipment

1. Needs and conditions of use

Japan would like to request the US side for technological assistance in Japan's effort to modify heavy equipment to be remote controllable under high radiation environment, in particular design information on shielding. The equipment will include (a) "Giraffe" concrete pump boom trucks which is yet to be converted to be remote controlled, and (b) other heavy equipment which is already remote controlled but not yet radiation hardened.

2. When to use

Short, mid and long terms.

3. Note

For "Giraffe" trucks, collaboration is going on between Japan and Putzmeister, the truck manufacturer, to make them remote-controllable. For other heavy equipment, primarily for debris-clearing use, Japan intends to make use of existing models that are remote-controlled.

Japanis in need of the US assistance in making sure that these vehicles are radiation hardened.

4. Inquiry

We have no information as to radiation resistance of oils in hydraulic operated equipments or materials used in non-metallic seals or gaskets. These materials are usually used in moving parts and difficult to shield. The following information is, so, greatly appreciated if you have experience in using these equipments in high radiation environments:

- Information on how components or materials degrade in high radiation environment, like what kind of material got degraded under what level of radiation in what length of time with how much of accumulative doses.



(Concrete Pump Boom Truck (Giraff); Putzmeister)



(Exapmple; Hydraulic Cynder)

第3回リモートコントロール・プロジェクトチーム会合 Remote Control Project Team Meeting #3

(平成23年3月31日(木)9:00~ 経済産業省別館 1042 会議室) (2011 Mar. 28 (Thu.) 9:00- METI Annex 10F Rm#1042)

> アジェンダ Agenda

- 1. 福島における今後の戦略とリモコン技術の必要性の全体像 Overview of the strategy and needs for remote-control technology
- 2. 各論 Discussion on Specific items
- (1) Talon
- (2)耐放射線カメラ

Radiation hardened camera

(3) 遮蔽の設計ノウハウ(キリン、瓦礫除去等建設機械関連)
 Design information on shielding (for Giraffe and debris-clearing equipment)

(参加省庁・企業)

- 経済産業省、原子力安全・保安院、外務省、国土交通省、防衛省 東京電力、東芝、コマツ、大成建設 米国政府
- (Participant organizations)

METI, NISA, MOFA, MLIT, MOD

TEPCO, Toshiba, Komatsu, Taisei

US Government

機密性2

Talon (Qinetiq)

- 1. Needs and concept of utilization
- Intended purpose:
 - > Short term: Measuring radiation dose outdoor
 - > Mid term: Field checking inside of the Reactor Buildings.
- Environment

High radiation dose, Rubbles, overflow water, stairs, indoor obstacles such doors, interference of radio wave by walls

- Quantity in need: One
- 2. When to use: Short term and Mid term.
- 3. Note

Our tentative plan is to conduct performance test of the robots and training of operators at a location before bringing the robots to the Fukushima site for actual use. Japan would appreciate if the US could send experts to provide training.

4. Inquiry

We hear that the Talon we are going to receive from DOE has special function of automated-dose mapping. Please let us know the details of this function, since we would like to start making concepts in details for utilizing the robot. March 30, 2011

Use of radiation hardened cameras in accident sites

Yasushi Horimizu Remote control Project, Tokyo Electric Power Company

TEPCO is investigating the viability of deploying radiation hardened cameras in the Fukushima Daiichi Nuclear Power Plant.

<Short term: within weeks>

1. surveillance of pumping water to spent fuel pools

Pumping to spent fuel pools is underway using concrete pumping vehicle. As remote operation of pumping is being considered, it is desirable to have a camera attached at the top of the arm of the vehicle. Currently a commercially available CCD camera is being used, and this is retrieved after finishing recording.

The CCD camera being used is currently in order. However, if a camera is to be kept there for a long duration, it should be radiation hardened one given the expected accumulation of radiation exposure, especially when information on radiation level is lacking. In this case the camera will be hung from the arm of the pumping vehicle. The distance between the camera and the monitor will be 150-200 m.

2. Check of water levels in the turbine and reactor buildings

Currently the water level in the T/B is visually checked by a front-line worker. But the dose at the water is 1000 mSv/h and the exposure of workers to radiation is problematic. On the other hand, it is anticipated that the dose in the R/B is higher than the T/B; the visual check of water levels in the R/B is even difficult. To be able to check the water level without being suffered from workers' exposure, an option is to have cameras installed in the buildings. In this case cables with at least 100-200 m in length will be required to monitor from a long distance where radiation is sufficiently low. The camera should be water-proof to work properly even if the water level rises to the level of the camera.

3. Check the fuel rod condition in the SFP

Regarding how to check the status of the fuel rods, the US side recommended use of commercially available CCD cameras with water-proof capability because water itself will function as shielding. However, our thinking is that in the water which was contaminated due to damage of fuel rods, radiation exposure is severe and we need to use radiation-hardened cameras for this purpose. In this case the camera will be hung by wire from the arm of the pumping vehicle, and the distance between the camera and the monitor will be 150-200 m.

<Mid-term: from weeks to months>

1. Surveillance of high dose area

Although outside the buildings radiation is not as high as the submerged area in the T/B, we need radiation hardened cameras for the purpose of long term surveillance if take into account the accumulation of exposure.

2. Surveillance of temporal radioactive waste facility

Future management of high radioactive water, currently accumulated in the T/B, in a temporal radioactive waste facility is being investigated. Works such as filter replacement, etc. can be difficult by hands due to high dose in the relevant area. In this case maintenance of the facility should be done remotely, and radiation hardened cameras will be required for remote operation.

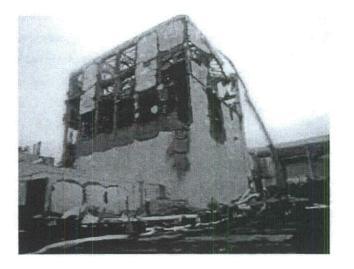
2. Check of R/B

In a short term, the check of water level in the R/B is urgent. Later the condition of facilities and the structure of the R/B will be necessary. High dose is anticipated and routes for access are unclear due to hydrogen explosion. Use of robots with radiation hardened camera will be necessary.

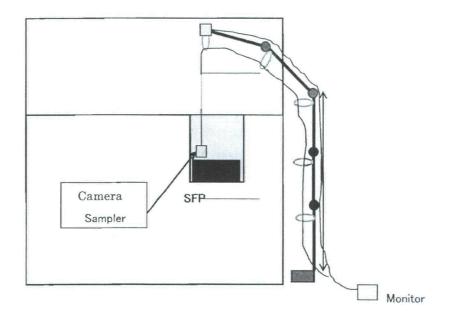
<Long-term: from months to years>

1. Check of reactor condition

At TMI, check of melted fuels in the reactor is remotely done after the close of the accident. Ultra-sonic cameras were more practical than radiation hardened cameras since the water transparency was very low. However, in our case where damage of the reactor vessel is possible, radiation hardened cameras are necessary to confirm the reactor condition.



(Water Injection from Concrete Pump Boom Truck)



(SFP Sampling)

March 30, 2011

Subject:

TEPCO's idea of ulitizing robots and remote control machines at Fukushima-I Plant

Yasushi Horimizu

Remote-control Project, Tokyo Electric Power Company

TEPCO is now considering the following ideas of utilizing robots and remote-control machines for the nuclear accident at Fukushima-I.

1. Short Term - less than several weeks

1.1. Outdoor dose mapping

As of now, outdoor radiation measurements are performed manually, however, we want to utilize measurement robots. Significant hurdle for the measurement is lots of obstacles of rubbles containing high radiation dose. We are currently trying to start using a monitoring robot. We realize the need for verifying the adaptability of those robots before introducing to the site, because readings of dose meter on the robot were not the same with our dose meter. We intend to utilize a high performance robot such as Talon of QinetiQ if it is offered by US government.

1.2. Cheking Reactor Building Operation Floor and Field measurement of Spent Fuel pool

We think monitoring of Operation Floor and Spent Fuel Pool is now insufficient, and want to monitor them by utilizing remote control machines, including those provided from the US side . The items to monitor should be, water level, water temperature, checking structural health of spent fuels, pools, pool gates, and shield plugs, radiation dose, overflow on Operation Floor. The significant barriers can be, high radiation dose, disrupted upper roofs (Unit 1, 3 and 4), and difficulty on accessing floors from the inside of the buildings (all Units). In this situation, we have been considering ideas of putting cameras provided from the US side and monitoring equipments underwater in the Spent Fuel Pools to check the structural health of spent fuels.

1.3. Pouring water to Spent Fuel Pools

We have been pouring water to Spent Fuel Pools using concrete pump boom truck (Giraffe) that is installed next to Reactor Building. We have asked the truck supplier and plant vendors to modify the concrete pump boom truck to make them controlled remotely in order to keep continuing to pour water when radiation dose increase for any reasons. We would like to ask US side to support us to provide us with plenty of information and expertise of the US about radiation protection shielding design for truck cabin sheet, electronic devices and rubber seals.

2. Medium Term - Several weeks to Several months

2.1. Removing rubbles outdoors

Since some of the rubbles outdoors have high radiation dose, we plan to remove those rubbles in order to improve work environment. We plan to use remote control heavy machines because of high radiation dose environment; preparing it by establishing Joint Venture with three major general contractors. We would like to hear from the US about design information of radiation shielding for such heavy machines and equipments.

2.2. Checking operation status of temporarily installed machineries (for cooling reactor, or cleanup of contaminated water)

We plan to monitor operation status by unmanned systems for the long term when installing various temporal equipments at both inside/outside of buildings. We would like to ask the US for support to us on supplying knowledge and technologies in US, since we will have difficulty in transferring data and images as well as , taking picture images.

2.3. Performing field check inside of Reactor Buildings

It is unable to access to inside of Reactor buildings because of high radiation dose. However, we have to perform field check inside of Reactor Buildings when pouring water to reactor or Spent Fuel Pit goes stable. The items to check should be at least, measuring radiation dose, taking images, measuring temperature, measuring concentration of hydrogen and oxygen, checking machineries, checking overflows, manipulation of valves, perform material sampling. At this first stage, we consider to utilize robots, including the one Tepco owns, and Talon and M2 that will be provided from the US side. The barriers are possible system failure from high radiation dose, or failures on remote controls.

3. Long Term - Several months to several years

At another project team, we have started to consider how to cover Reactor Buildings to prevent from further radiation emission in the mid-term future. We think it will be necessary to have remote control machines for dedicated purposes, therefore, we would like to ask you to support us providing various technical knowledge in this filed.

From:	Cherry, Ronald C <cherryrc@state.gov></cherryrc@state.gov>
Sent:	Thursday, March 31, 2011 9:25 AM
То:	Simmers, Keith A MAJ USA; Duncan, Aleshia D; Spurlock, Kenneth CAPT USN MDAO; Leong, Aaron H K Lt Col USAF MDAO; Way, Ralph; Brooks, Andrae E LTC USA
Subject:	RE: Remote Control Project Team Meeting #3 unofficial Notes_31MAR11
Keith,	
Thanks very much. Thes	e are very helpful.
Best,	
Ron	
This email is UNCLASSIFI	ED
ralph.way@nrc.gov; Bro	MAJ USA (b)(6) 1, 2011 5:16 PM Incan, Aleshia D; Spurlock, Kenneth CAPT USN MDAO; Leong, Aaron H K Lt Col USAF MDAO;
Team,	
I've attached my notes f	rom today's meeting.

Thanks,

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<u>...</u>

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Keith

<<Remote Control Project Team Meeting #3 unofficial Notes_31MAR11.doc>>

DJ/142

Remote Control Project Team Meeting #3, 31 0900-1200 MAR 11

- Meeting representation included 19 GOJ and 8 USG; GOJ representation included METI, NISA, MOFA MLIT, MOD, TEPCO, Toshiba, Komastsu, and Taisei; USG representation included DOE, NRC, MDAO, USFJ; others associated with DOE were phoned in and represented INL, DOE HQ, NNSA, and a few others I did not capture
- Meeting began with an expression of gratitude and warm cooperation; cooling and restoration are making progress, and now working to shielding the radiation is now becoming important; progress is key to our response and we would like cooperation and assistance to respond to this situation
- TEPCO overview and review of needs, briefed by the nuclear department rep; he was on site for 10 days following the hydrogen explosion at reactor 1; he provided the following points;
 - 1)cooling reactor pressure vessel of 1-3; cooling started with seawater an now using fresh water; due to decay heat, the reactors have not been able to get attain a cold shutdown; need to restore the RHR system as well as other functions, however not able to do this due to the high radiation level and contaminated water do not allow access; number one priority is cooling, challenged by leaking, need to keep the balance of cooling and contaminated water leaking out; the short term challenge is to investigate the leakage in the containment vessel; here we will use the Talon and M2 for onsite investigation;
 - 2)challenge cooling and checking the integrity of the spent fuel pools in 1-4; units 1 is making preparations to pump water today or tomorrow; being able to use existing system for cooling in the spent fuel pool, however only injecting water but the cooling function has not yet been restored; need to know the water level in the spent fuel pool; will plan to use the existing cooling system as the primary and external trucks as a secondary (as Giraffe) length of the boom is approx 50m; going forward need to modify the truck for remote control need assistance for hardening electronics and shielding; camera on giraffe needs to be shielded, as it is going in the spent fuel pool and under water to survey area need assistance in this area
 - 3)challenge is radiation survey/mapping or dose mapping; we understand the explosion spread contamination and the need to understand the area; currently using a manned vehicle to monitor the area, would like to use robots for this such as the ones to be provided by the USG; as a method to reduce exposure, starting today we began to spray a synthetic resin on the reactors from an unmanned vehicle, 150m away expect this process to take two weeks, reducing exposure; high radiation water in the basement and trench between turbine building and sea what to do with this is a challenge; moving water into empty tanks from unit 1; final disposal is a concern, however it's not a robot issue; need to reduce exposure and the way forward is to use robots request shielding design and hardening in this regard
- Telecon stated assisting is a high priority and saddened by the catastrophe; suggest discuss points and how to assist, provide reachback, expertise and training for the equipment that is coming soon to Japan

- GOJ was grateful to hear DOE was preparing the equipment for shipment; interested to hear about the Talon and M2, reviewing the Talon paper
- Derek, INL, provided a brief overview of the Talon; to be used for radiation detection outside, providing gross dose rate/ radiation level; GOJ interested in spatial radiation dose; what experience/success have you had with Talon: GOJ really using something similar to the Talon, the i-robot; what is your experience/what are you missing: GOJ having 3 major difficulties
 - o 1) actual operations of the item is difficult; short training period was not sufficient
 - 2)dosimeter readings are different from those inside the plant looking into the differences – maybe different coefficients between the two items
 - 3)live camera on site, however not able to record the images; we recommend adequate training and practice the application prior to operating the equipment in the working area
- How far are you operating the i-robot: GOJ approx 800m, which is the max range of the item
- I-robot and Talon operation will be similar; training plan training prior to moving to area is a good way forward; also had challenges, as robot can shield the monitor check the placement of the meter; if monitor was mounted on chassis/body, it gave different readings we put on the arm to mitigate shielding our suggestion as what we learned; GOJ thank you and useful advice; another consideration more radiation than the meter can read will also provide a false reading these are common things we've seen before
- Talon DOE is sending will be one that has been configured for radiation gross radiation levels similar to what is on i-robot; sending 2xradiation detectors (1-low, 1-high), mounted at end of arm with 4 degrees of freedom; provide GPS ability to locate/collect and put on Google map GPS is part of the specialized payload by DOE ability to track/map radiation outside building GPS will not work inside; inside building recommend RASR, suing laser positioning technology; equipment will not be available for approx 6wks w/RASR package; current Talon can map inside only radiation readings no location
- Training requirements: operation at the same level as the pacbot (i-robot); training may be
 easier for the robot used inside the building, because it has an easier interface; video recording
 capability can be put on the robot or via cable connected before the monitor
- Video recorders are part of the camera package coming and could be used for this
- Training issue: begin training with Talon personnel here in Tokyo DOE can provide contact information on request; GOJ yes, please; contact information will be sent to Mr. Ron Cherry via email from Jay Tilden
- Interest in checking fuel rods in spent fuel pool: GOJ yes, that is correct; DOE not sure if you will see anything, will be murky, however there is a camera will be sent; three components: camera, controller, and monitor; approx 20m length from camera to controller; controller to monitor – coax cable up to 150m; DOE to provide mounting, camera cabling, location/configuration information; coax cabling from controller to monitor provided by TEPCO; DOE provide 3xwaterproof cameras and 2xcameras (remote vehicle, inside building)
- Are cameras battery powered: DOE no power provided through cable, standard 110v and 60Hz; power needs t o be supplied to controller; can cable be expanded: DOE yes, but is a special

waterproof cabling connected to the camera; can camera measure temperature: DOE no it cannot

- It may be easy to connect a thermal couple to the camera; that is something that GOJ would need to provide, as it's not in the current shipping package; DOE can provide guidance if needed on thermal coupler; GOJ any advice on CCD camera: DOE not about a particular brand, highly recommend CCD camera for better picture; clearer and easier to use
- GOJ is very grateful for the camera support and the gamma camera DOE is supporting; need to know who to be addressed, who signs for it – general shipping information; DOE intent is to make one shipment of all equipment – shipped to TEPCO and particulars to be passed via Embassy; length of the time to ship: DOE Monday or Tuesday, closer to Tuesday, 5APR
- Support to include recovery, additional radiation sensors as well as the other equipment
- Shielding and heavy equipment: DOE use Brokk and have had no problems, hydraulic driven; primarily used in hot cells in 10 Sievert environments; ability to outfit Heavy equipment with hydraulics, have not had problems going in and out of the areas
- DOE would it be helpful if TEPCO provides additional information that needs to be shielded: additional information to be made remote controller: if not, we can set up a way to provide information; DOE it's hard to provide information until we know about the dose rate, what the equipment will be used for, and training requirements
- Focus on inquiry #4 gather thoughts, however do not believe that the oils/hydraulics are affected, since they are used, and have been proven in radiation and have not seen detriment to seals
- One point to clarify –GOJ want to use wireless remote control for debris clearing and need to know/clarify the environment: DOE yes it could be a problem with the different frequencies; GOJ uses 429MHz and 100mWatt output outdoors and 458MHz can equipment be compatible: DOE do not believe there is a problem DOE providing equipment at 900MHz; 900MHz 950MHz for Talon, unsure about the M2; have the ability to change out radios as necessary; DOE will make a note for the frequencies not to interfere
- Any special seals used: DOE no special seals used, other than what manufacturer provides
- DOE has used similar equipment to the Volvo in 2 Sievert environment for three hours per day and had no problems with seals; general area was 200mREM to 5REM at the hot spot
- DOE to develop a list of contacts and 'notes of the meeting'; ensure that Ron and Alicia are cc'd on all correspondence and agree it's the right way to go; thinking about other assistance to send, if needed – already have Talon and AMS in country – can send more as needed/requested technical assistance with equipment; need to be aware of changing skill sets through this process
- Issue to continue and progress, GOJ is grateful for consideration and assistance, as well as providing valuable advice
- Recommendation to set up a meeting schedule; DOE will send recommendation of this along with the meeting notes
- Ron Cherry was provided a copy of video from the spraying arm of the Giraffe; will share with appropriate parties

From: Sent: To: Cc: Subject:

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Patel, Bhavin Thursday, March 31, 2011 4:08 PM Patel, Bhavin; Way, Ralph L3_JAPAN RE: Ticket # 509146 - User - RALPH WAY

Mr. Ralph,

Below info I received towards your device data service coverage. If you are good to go, please let us know so we can close your case.

AT&T's International Care team has confirmed that his BlackBerry has had an unlimited international data coverage plan continuously and therefore should be able to connect to data service while roaming internationally in Japan, especially since Mr. Way is currently showing voice and text messaging usage on Japanese carrier NTT.

They advise that if the BlackBerry is not connecting to the data service, however, the BlackBerry may only need the battery to be taken out and reinserted in order to have the BlackBerry roam for a data connection automatically. If the BlackBerry is unable to pick up a data connection after a battery restart, the user should check the Data Services setting under Manage Connections > Mobile Network Options, and ensure that both the Data Services and the Data Services While Roaming settings are set to On, and then save changes accordingly and restart the BlackBerry again.

AT&T advises that if necessary, Mr. Way can receive further troubleshooting assistance from their International Care team by calling +1-916-843-4685 at his convenience.

Regards,

Bhavin Patel Systems Engineer / SQL DBA L-3 Communications, STRATIS\NRC Cell:(b)(6) PIN(b)(6) Email: Bhavin.Patel@nrc.gov

From: Patel, Bhavin Sent: Thursday, March 31, 2011 12:03 PM To: Way, Ralph Cc: L3_JAPAN Subject: Ticket # 509146 - User - RALPH WAY Importance: High

Mr. Ralph,

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How are we doing with your device? I am seeing pending messages on your device, which means your device is either powered off, or not of network, or antenna is turned off.

Please contact us so we can assist further.

Thanks.

Regards,

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Bhavin Patel Systems Engineer / SQL DBA L-3 Communications, STRATIS\NRC Cell: (b)(6) PIN: _______ Email: Bhavin.Patel@nrc.gov

From: Kim, Jay Sent: Thursday, March 31, 2011 11:35 AM To: Patel, Bhavin; Stebler, Walter; Wetherell, Matthew Cc: Bissett, Ryan Subject: Japan Incidents assigned to NOC

Bhavin/ Walter, Please review below BB incidents/request.

(b)(6) Ralph Way still seems to be having issues. Is this a telecomm issue? I know there has been a talk about BES default policy being applied to this user so keep me posted.

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509146	RALPH	3/29/2011 11:21:05 PM	OPEN	NOC	BLACKBERRY ACCOUNT	User called in asking assistance on getting access to his BB. He already tried to enter his password 8 times but still was not able to log in. Keep in mind that going over 10 tries will wipe the device completely. I've suggested to reset his device password to "Pass#1" and told him to wait about 30min t0 1 hr before loggin back again. I ended up not resetting his password after talking with Bhavin, we did several tests just to make sure his BB can communicate to the BB server, but it was not successful . We tried to call Mr. Way back to update him on the
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case but the call went stra voicemail. We were not a leave him a message beca voicemail was not setup.			
leave him a mess			

Regards,

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Jay Kim

L-3 STRATIS - Powered by Excellence U.S. Nuclear Regulatory Commission 301 415 6578 Desk (b)(6) BlackBerry Mobile jay.kim@nrc.gov From: Sent: To: Cc: Subject: Way, Ralph Thursday, March 31, 2011 10:23 PM Ali, Syed Way, Ralph RE: Structural Issues List

Syed,

My majoir activities are;

(b)(5)

Work with Structural team and Rx team performing analyses for post blast damage to Rx and SFPs and analysis of potential explosions for Rx and SPF

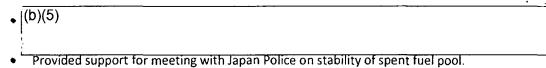
Support embassy personnel in meetiings with Sr Japanese Officials

From: Ali, Syed Sent: Thursday, March 31, 2011 8:18 PM To: Sheikh, Abdul; Way, Ralph Subject: Structural Issues List

My input attached.

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Structural/Explosives Team Issues



- Provide support in the Radiation Task Group meetings for structural related issues. (2 pm meetings at NISA).
- Provide support in the Fuel Transfer Task Group meetings for structural related issues. (4 pm meetings at NISA).

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From:	Johnson, Natalya <njohnson@ofda.gov></njohnson@ofda.gov>
Sent:	Friday, April 01, 2011 5:22 AM
То:	Stahl, Eric
Cc:	Way, Ralph; Sheikh, Abdul; Ali, Syed; Emche, Danielle; LIA02 Hoc
Subject:	RE: NRC Travelers Update
Attachments:	image001.png

Hi Eric,

Let me get in touch with the travel agency and see how soon we can change the tickets.

Natalya

Admin Coordinator Pacific Tsunami and Japan Earthquake DART USAID/DCHA/OFDA Office: (81) (3) 3224 5016 BB: ((b)(6)

From: Stahl, Eric [mailto:Eric.Stahl@nrc.gov]
Sent: Friday, April 01, 2011 6:15 PM
To: Johnson, Natalya
Cc: Way, Ralph; Sheikh, Abdul; Ali, Syed; Emche, Danielle; LIA02 Hoc
Subject: NRC Travelers Update

Hi Natalya -

We have a few changes for NRC travelers. Syed Ali, Abdul Sheikh, and Ralph Way will now all be departing Japan on **MONDAY, 4 APRIL**. Do you need any additional information from us to make these changes? Thanks in advance for all of your help!

Eric Stahl U.S. Nuclear Regulatory Commission Office of International Programs Tel: +1 301-415-0246 Mob: +(b)(6)

D3/145

From: Sent: To: Subject: Attachments:

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LIA03 Hoc Friday, April 01, 2011 1:43 PM OST02 HOC; Liaison Japan Team#3-JAPAN TRAVELER INFORMATION.doc Team#3-JAPAN TRAVELER INFORMATION.doc

Please find the 3rd Team of travelers attached. Please let me know if there are any updates.

Thanks! -Jenny

D>/140

Last updated: 3/31/2011

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Third NRC TRAVELERS IN JAPAN

Name	Phone Number (internal BB or cell)	Email/Other	Flight Arrival (Japan Time)	Return date to U.S.	Emergency contact
Rudy Bernhard, Region II Expertise in severe accident management, B5b and accident recovery, Leaves 4/2	^{BB:} (b)(6)	Rudolph.bernhard@nrc.g ov	Sun, Apr 3 4:00 PM	Sat, April 16 2:55 p.m.	(b)(6)
Michel (Mike) Call, NMSS Nuclear Engineer Fluent in Japanese and (b)(6) (b)(6)	вв.(b)(6)	Michel.call@nrc.gov	Sun, Apr 3 3:10 PM	Sat, April 16 3:37 p.m.	(b)(6)
Elmo Collins, RIV Executive level – Assistant Team Leader. Will replace Dan Dorman, Leaves 3/29	BB((b)(6)	Elmo.collins@nrc.gov	March 30 1:05 PM		
Mike Hay, RIV Extensive experience in emergency planning and event response experience. Masters in HP, Leaves 4/22	BB: (b)(6)	Michael.hay@nrc.gov	Sun, Apr 3 4:00 PM	Sat, April 16 9:20 a.m.	(b)(6)
Mike Salay, RES Severe accident expertise, OECD - leaves 4/2 or 3	BB(b)(6)	Michael.Salay@nrc.gov	Sun, Apr 3 10:00 PM		

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EVERYBODY IS STAYING AT HOTEL IN TOKYO

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LIA02 Hoc From: Sent: Friday, April 01, 2011 9:54 PM Way, Ralph To: RE: CORRECTION: TIME CHANGE FOR RALPH WAY CALL RE BB ISSUES Subject:

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Great, thanks, simple, right?

From: Way, Ralph Sent: Friday, April 01, 2011 9:36 PM To: LIA02 Hoc Subject: RE: CORRECTION: TIME CHANGE FOR RALPH WAY CALL RE BB ISSUES

After 53 minutes on the phone. We're done and it's working.

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From: LIA02 Hoc Sent: Friday, April 01, 2011 8:16 PM To: Way, Ralph Subject: RE: CORRECTION: TIME CHANGE FOR RALPH WAY CALL RE BB ISSUES

OK, thanks. Please keep me posted.

From: Way, Ralph Sent: Friday, April 01, 2011 7:24 PM To: LIA02 Hoc Subject: RE: CORRECTION: TIME CHANGE FOR RALPH WAY CALL RE BB ISSUES

No not yet. I have to call back at 0900 JST. To reset the pasword. I am waiting for the device to wipe itself clean. It takes about 45 minutes.

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From: LIA02 Hoc Sent: Friday, April 01, 2011 7:16 PM To: Way, Ralph Subject: RE: CORRECTION: TIME CHANGE FOR RALPH WAY CALL RE BB ISSUES

Ralph,

Can you let me know if the BB problem is now resolved? Pls let me know either way.

Thanks,

Gerri Fehst

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From: Way, Ralph
Sent: Friday, April 01, 2011 4:38 PM
To: LIA02 Hoc; JapanEmbassy, TaskForce; Stahl, Eric; Emche, Danielle; Salay, Michael; Call, Michel; Bernhard, Rudolph; Collins, Elmo
Subject: RE: CORRECTION: TIME CHANGE FOR RALPH WAY CALL RE BB ISSUES

got it.

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From: LIA02 Hoc
Sent: Friday, April 01, 2011 4:29 PM
To: JapanEmbassy, TaskForce; Way, Ralph; Stahl, Eric; Emche, Danielle; Salay, Michael; Call, Michel; Bernhard, Rudolph; Collins, Elmo
Subject: CORRECTION: TIME CHANGE FOR RALPH WAY CALL RE BB ISSUES

Al! –

Please note correct time for the BB call for Ralph Way is at 8 a.m. Japan time NOT 6 a.m. as noted in e-mail below. Correct time for call is 8 a.m. Japan Time.

Thanks,

Gerri Fehst

From: 11A02 Hoc

From: LIA02 Hoc Sent: Friday, April 01, 2011 4:09 PM To: 'JapanEmbassy, TaskForce'; Way, Ralph; Stahl, Eric; Emche, Danielle; Salay, Michael; Call, Michel; Bernhard, Rudolph; Collins, Elmo Subject: FW: Ralph Way

Team,

Ralph Way is having BB troubles and the OIS troubleshooters prepared to help him would like him available for a 6 a.m. (Japan time) call. Whoever is up and sees this message, please have Ralph available for the call. Ralph should call in to the number listed below in the April 1, 3:32 pm e-mail.

Thanks,

Gerri Fehst

From: ET02 Hoc
Sent: Friday, April 01, 2011 3:49 PM
To: LIA02 Hoc
Cc: Padilla, William; Francis, Sharoon; Kim, Jay; Bissett, Ryan; Brusoe, Eric; Turner, Joseph; Heard, Robert; Patel, Bhavin
Subject: RE: Ralph Way
Importance: High

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From: Patel, Bhavin
Sent: Friday, April 01, 2011 3:32 PM
To: ET02 Hoc; Heard, Robert
Cc: Padilla, William; Francis, Sharoon; Kim, Jay; Bissett, Ryan; Brusoe, Eric; Turner, Joseph; LIA02 Hoc
Subject: RE: Ralph Way

Here you go.

Phone - 877-491-0700 Participant: (b)(6)

Regards,

Bhavin Patel Systems Engineer / SQL DBA L-3 Communications, STRATIS\NRC Cell: (b)(6) PIN: _________ Email: Bhavin.Patel@nrc.gov

From: ET02 Hoc Sent: Friday, April 01, 2011 3:31 PM To: Heard, Robert Cc: Padilla, William; Francis, Sharoon; Patel, Bhavin; Kim, Jay; Bissett, Ryan; Brusoe, Eric; Turner, Joseph; LIA02 Hoc Subject: RE: Ralph Way Importance: High

After I discussed this situation with the OIP staff here in the Ops Center, let's plan on having this conference call at 7pm our time and 6am Japan time. If you could send me the phone bridge number we will forward that information on to the Japan team. Thanks...karen

From: Heard, Robert
Sent: Friday, April 01, 2011 11:52 AM
To: ET02 Hoc
Cc: Padilla, William; Francis, Sharoon; Patel, Bhavin; Kim, Jay; Bissett, Ryan; Brusoe, Eric; Turner, Joseph
Subject: RE: Ralph Way

Per our discussion, we have a plan to get Mr. Way's device operational. It will take some coordination and we will need your help in making the coordination happen.

Below is a list of steps we need to take.

- 1. Have Mr. Way or anybody else type in the incorrect password until the device shows that it is wiping. After a device has a password input incorrectly 10 times the device will automatically wipe itself.
- 2. The process will take approximately 45 minutes.
- After the wipe is completed it will ask the user to enter a new password. Any password can be entered as long as there is at least one capital letter, one lower case, one number and one special character. It must be at least 8 characters. Here is an example RWnrc!00 (these are zeros at the end of the password.)
- 4. Contact us in order for us to walk Mr. Way through checking the device. Again this does not have to be Mr. Way.
- 5. After we have the device set up to communicate with the AT&T service provider, we will provide an activation password for the device to communicate with the BES server. This will allow the device to be reprovisioned.

Please let us know as soon as possible that this can happen. We intend to have staff available for a phone conference at 7pm, which is 6am their time. If you agree to this approach and can have someone with Mr. Way's device at that time, we will set up a phone bridge to walk through this process. As soon as I hear from you, I will send you the phone bridge number.

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If you have any questions please let me know.

Thanks

Rob

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From: ET02 Hoc Sent: Friday, April 01, 2011 11:00 AM To: Heard, Robert Subject: RE: Ralph Way

Yes, I'm available.

From: Heard, Robert Sent: Friday, April 01, 2011 10:59 AM To: ET02 Hoc Subject: Ralph Way

Are you available for me to come down and discuss the issue with his device?

Robert Heard Jr. OIS/ICOD/ISPT (301)415-6393 Robert Heard@nrc.gov From: Sent: To: Subject: Way, Ralph Friday, April 01, 2011 11:40 PM 'MoralesRA@state.gov' Re: 23:57 April 1, 2011 Friday (Kyodo: Quake intensity surpassed projections):

We're on our way up

From: Morales, Russell A <MoralesRA@state.gov>
To: Way, Ralph
Sent: Fri Apr 01 23:10:55 2011
Subject: 23:57 April 1, 2011 Friday (Kyodo: Quake intensity surpassed projections):

Ralph-

Can you pass this also to Sayed (and correct the spelling of his name if it is wrong ⁽²⁾) This came from the press reports that go around. You guys may have already seen this.

23:57 April 1, 2011 Friday (Kyodo: Quake intensity surpassed projections): Kyodo reports Three of the six reactors at the Fukushima Daiichi nuclear power plant experienced a jolt stronger than a worst case projection when hit by Japan's largest-ever earthquake March 11, provisional data by the operator Tokyo Electric Power Co. showed Friday. According to the data, the lowest underground levels of the Nos. 2, 3 and 5 reactor buildings faced a seismic movement of 550, 507 and 548 gals in the east-west direction, respectively, and each figure exceeded previous worst-case projection expectations.

Russell Morales Second Secretary Regional Affairs Section (O) 03-3224-5459 (C) (b)(6)

PERSONAL This email is UNCLASSIFIED.

From: Sent: To: Cc: Subject:

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Johnson, Natalya (DCHA/OFDA) <njohnson@USAID.GOV> Saturday, April 02, 2011 4:29 AM Ali, Syed; Stahl, Eric Sheikh, Abdul; Way, Ralph; Emche, Danielle Re: Ticket reservations

Syed,

Your old ticket will be changed to a new one. I am working with our (new) travel agent and hoping to get tickets soon.

Natalya

----- Original Message -----From: Ali, Syed <Syed.Ali@nrc.gov> To: Stahl, Eric <Eric.Stahl@nrc.gov>; Johnson, Natalya (DCHA/OFDA) Cc: Sheikh, Abdul <Abdul.Sheikh@nrc.gov>; Way, Ralph <Ralph.Way@nrc.gov>; Emche, Danielle <Danielle.Emche@nrc.gov> Sent: Sat Apr 02 03:39:18 2011 Subject: RE: Ticket reservations

Hi Natalya:

I checked my United Air Mileage Plus account and it's still showing the original return date of April 7. I'm wondering whether we are getting a new ticket or the original ticket is being updated. In case we are getting new tickets, I'm assuming somebody will cancel the old return flight. Just wondering.

Thanks, Syed

From: Stahl, Eric Sent: Saturday, April 02, 2011 2:47 AM To: 'njohnson@USAID.GOV' Cc: Ali, Syed; Sheikh, Abdul; Way, Ralph; Emche, Danielle Subject: FW: Ticket reservations

Thanks Natalya! Please forward the ticket information directly to the travelers if possible.

Eric

From: Johnson, Natalya (DCHA/OFDA) [mailto:njohnson@USAID.GOV] Sent: Saturday, April 02, 2011 2:11 AM To: Stahl, Eric Cc: Emche, Danielle Subject: Re: Ticket reservations

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Eric,

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Our travel agent did change the reservations. Let me see if I have the actual tickets and forward them to you.

Natalya

From: Stahl, Eric <Eric.Stahl@nrc.gov> To: Johnson, Natalya (DCHA/OFDA) Cc: Emche, Danielle <Danielle.Emche@nrc.gov> Sent: Sat Apr 02 00:52:50 2011 Subject: RE: Ticket reservations Hi Natalya –

Do you have any new information concerning Ralph Way, Syed Ali or Abdul Sheikh's travel arrangements? Since their new proposed date is Monday, 4 April, they were hoping to hear about their arrangements today.

Thanks again! Eric

From: Johnson, Natalya (DCHA/OFDA) [mailto:njohnson@USAID.GOV] Sent: Friday, April 01, 2011 8:54 AM To: usat@duluthtravel.com; njohnson; OFDAGOV: McKenna, Surin (DCHA/OFDA); OFDAGOV: RMTPACTSU_AC Cc: Stahl, Eric; OFDAGOV: travel Subject: Re: Ticket reservations

Dear Paulette,

I sent you another email with "correction" in the subject line. This is the latest and most accurate version. Let me know if you don't have it and I re-send it.

Thank you Natalya

From: USAID Travel <usat@duluthtravel.com> To: njohnson; OFDAGOV: McKenna, Surin (DCHA/OFDA); OFDAGOV: RMTPACTSU_AC Cc: eric.stahl@nrc.gov <eric.stahl@nrc.gov>; OFDAGOV: travel Sent: Fri Apr 01 08:37:27 2011 Subject: RE: Ticket reservations Good Morning Natalya and Surin,

I show two list sent for travelers departing Japan. Each sent from a different email address.

Please combine the list to one so that I can be sure to have all request answered.

Thanks, Paulette

From: Johnson, Natalya [mailto:njohnson@ofda.gov]

Sent: Thursday, March 31, 2011 10:31 PM To: USAIDTravel; USAID Travel Cc: eric.stahl@nrc.gov; travel Subject: Ticket reservations Importance: High

Greetings,

I am with USAID/OFDA Disaster Response Team in Tokyo, Japan, and need to make few flight reservations for some of our departing team members.

LIST ONE

- 1. Alan Blamey leave from Narita, Japan back to US on April 6, 2011
- 2. Michael Scott leave from Narita, Japan back to US on April 6, 2011
- 3. Todd Jackson leave from Narita, Japan back to US on April 6, 2011
- 4. Syed Ali leave from Narita, Japan back to US on April 6, 2011
- 5. Natalya Johnson leave from Narita, Japan back to US on April 7, 2011
- 6. John Monninger leave from Narita, Japan back to US on April 7, 2011
- 7. Abdul Sheikh leave from Narita, Japan back to US on April 7, 2011
- 8. Robert Taylor leave from Narita, Japan back to US on April 7, 2011
- 9. Marie Miller leave from Narita, Japan back to US on April 7, 2011
- 10. Ralph Way leave from Narita, Japan back to US on April 7, 2011
- 11. Jack Geissner leave from Narita, Japan back to US on April 7, 2011
- 12. Eric Stahl leave from Narita, Japan back to US on April 11, 2011
- 13. Danielle Emche leave from Narita, Japan back to US on April 12, 2011

Please send ticket confirmations to each recipient, rmtpactsu_ac@ofda.gov<mailto:rmtpactsu_ac@ofda.gov>, ofdatravel@ofda.gov>, njohnson@ofda.gov<mailto:njohnson@ofda.gov>

Thank you for your soonest response to this request.

Regards, ~Natalya

LIST 2

NRC Officer		
Daniel Dorman		
Tokyo, Japan		
ETD 4/3		
NRC Officer		
Alan Blamey		
Tokyo, Japan		
ETD 4/6		
NRC Officer		
Michael Scott		
Tokyo, Japan		
ETD 4/6		
NRC Officer		
Todd Jackson		•
Tokyo, Japan		
ETD 4/6		
NRC Officer		
Abdul Sheikh		
Tokyo, Japan		
ETD 4/7		
NRC Officer		

Robert Taylor

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Tokyo, Japan

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ETD 4/7

NRC Officer

Marie Miller

Tokyo, Japan

ETD 4/7

NRC Officer

Syed Ali

Tokyo, Japan

ETD 4/6

NRC Officer

Ralph Way

Tokyo, Japan

ETD 4/7

NRC Officer

Jack Geissner

Tokyo, Japan

ETD 4/7

NRC Officer

Danielle Emche

Tokyo, Japan

ETD 4/12

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NRC Officer

Eric Stahl

Tokyo, Japan

ETD 4/11

Admin Coordinator Pacific Tsunami and Japan Earthquake DART USAID/DCHA/OFDA Office: (81) (3) 3224 5016 BB: (b)(6) _____

From:	Young, Joseph M <youngjm@state.gov></youngjm@state.gov>			
Sent:	Saturday, April 02, 2011 11:17 PM			
To:	(b)(6) Cherry, Ronald C; Duncan, Aleshia D			
Cc:	Blamey, Alan; Way, Ralph; Howard, E. Bruce; (b)(6) Cooper, Justin D;			
· · ·	j3cat2nd@jso.mod.go.jp; j3temp6@jso.mod.go.jp			
Subject:	Re: Inquiries from TEPCO (U)			
Agree completely, Ker Joe	a. Should be no other channel than Hosono.			
To: Young, Joseph M; Cc: alan.blamey@nrc.g Edward Col USAF MDA	eth CAPT USN MDAO ((b)(6) Cherry, Ronald C; Duncan, Aleshia D gov <alan.blamey@nrc.gov>; ralph.way@nrc.gov <ralph.way@nrc.gov>; Howard, E. Bruce; Brown, AO ((b)(6)); Cooper, Justin D; j3cat2nd@jso.mod.go.jp o.jp>; j3temp6@jso.mod.go.jp <j3temp6@jso.mod.go.jp> :51 2011</j3temp6@jso.mod.go.jp></ralph.way@nrc.gov></alan.blamey@nrc.gov>			
Classification: Unclassi	fied			
-	o be vetted. If TEPCO wants to pay for this, that could change things-but I think we should hold off ommitments directly w/TEPCO and redirect them to get Hosono's sign off before making a			
If we are going to turn Ken	on KMax there needs to be moore buy off-on both sides.			
Ken Spurlock Captain, USN Director, Navy Surface Mutual Defense Assist SIPR: <u>spurlockkr@state</u> DSN 315-224-5409 Cell/BB (b)(6)	ance Office			
Original Message	// [mailto:YoungJM@state.gov]			
rioni, ioung, ioseph n	a financo, rounganimeatate.gov]			

Sent: Sunday, April 03, 2011 10:17 AM

To: Cherry, Ronald C <CherryRC@state.gov>; yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>; Duncan, Aleshia D <DuncanAD@state.gov>; funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; hatada-hiroyuki@meti.go.jp>

Cc: kaneko.h@tepco.co.jp <kaneko.h@tepco.co.jp>; mizuo@fsinet.or.jp <mizuo@fsinet.or.jp>;

npd_tanaka_t@tepsco.co.jp <npd_tanaka_t@tepsco.co.jp>; oikawa.kageharu@tepco.co.jp

<oikawa.kageharu@tepco.co.jp>; arahata.taichiro@tepco.co.jp <arahata.taichiro@tepco.co.jp>; Spurlock, Kenneth CAPT USN MDAO; alan.blamey@nrc.gov <alan.blamey@nrc.gov>; ralph.way@nrc.gov <ralph.way@nrc.gov>; Howard, E. Bruce <HowardEB@state.gov>

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Subject: Re: Inquiries from TEPCO

Not sure folks in DC want to revisit the KMAX issue, which seems to be what TEPCO is hinting here. Joe

----- Original Message -----From: Cherry, Ronald C To: 'yagi.n@tepco.co.jp' <yagi.n@tepco.co.jp>; Duncan, Aleshia D; funaki-kentaro@meti.go.jp <funakikentaro@meti.go.jp>; hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp> Cc: ?? ?? <kaneko.h@tepco.co.jp>; ?? ? <mizuo@fsinet.or.jp>; ?? ? <npd_tanaka_t@tepsco.co.jp>; ?? ?? <oikawa.kageharu@tepco.co.jp>; ?? ? <arahata.taichiro@tepco.co.jp>; [(b)(6) [(b)(6)]; Young, Joseph M; 'alan.blamey@nrc.gov' <alan.blamey@nrc.gov>; 'ralph.way@nrc.gov' <ralph.way@nrc.gov>; Howard, E. Bruce Sent: Sat Apr 02 20:52:13 2011 Subject: RE: Inquiries from TEPCO

Dear Yagi-san,

We will be providing the manifest for the equipment to be shipped very soon. This will probably have all the information on the cameras, but I will check to confirm this.

I am referring your question regarding the unmanned helicopter to my colleagues in the Embassy who are working with MOD, which has the lead responsibility for UAVs.

Please let me know if you have any question.

Thank you.

Best regards,

Ron

-----Original Message-----From: 八木 直人 [mailto:yagi.n@tepco.co.jp] Sent: Sunday, April 03, 2011 1:47 AM To: Cherry, Ronald C; Duncan, Aleshia D; funaki-kentaro@meti.go.jp; hatada-hiroyuki@meti.go.jp Cc: 金子 博秀; 堀水靖; 田中 勤; 及川 景晴; 荒畑 太一朗 Subject: Inquiries from TEPCO

Dear Mr. Cherry, Ms. Duncan CC:Mr.Funaki, Mr.Hatada

We would like to make two inquiries as follows:

1.Radiation Hardend Camera and GammaCamCould you tell us specific product names of 5 radiation hardend cameras and1 GammaCam which you are just shipping?You provided us some those camera information, but we don't know which we will get.

2. Availability of Large Unmanned Chopper We would like to ask you the availability of large unmanned chopper.

Purpose: To spray special resin liquid from the chopper over the buildings and rubble to suppress the radioactive dust spreading.

Payload: Hundreds kg

Operation: Autonomous flying by GPS. We can't fly it manually by ourselves due to lacking enough training time. When to use: From the end of April

We have small UAVs (Payload: up to 20 kg) in Japan, but it requires a large number of flights for this plan. We are currently considering this plan but not decided to implement. So we just want to know possibility of realizing this plan and can't promise to receive your offer now if you have an ideal chopper. In such case, could you please forgive us.

If you have any information and comment on this idea, we really appreciate it. Thanks.

Best regards, Naoto Yagi TEPCO

From: Sent:	RST01 Hoc Tuesday, April 05, 2011 1:24 AM
То:	(b)(6)
Subject:	FW: Option B Recommendation Document

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tion B Recommendation Document W: Op

From: RST08 Hoc Sent: Tuesday, April 05, 2011 1:12 AM To: RST01 Hoc Subject: Option B Recommendation Document

The attached Option B recommendations reflects conversations on the 11 to 7 shift with Naval Reactors and INPO.

Eva Brown, BWR Systems and Ops Analyst Reactor Safety Team **Nuclear Regulatory Commission** (301)816-5100

13/15/

From: Sent:	Freeland, Mickey CIVILIAN <(b)(6) Tuesday, April 05, 2011 6:28 AM
То:	Way, Ralph
	Re: DEPLOYING
Subject:	Re: DEPLOTING
Hey, Welcome home. I should get to t beforen but if not will definitely o Nice to have you back safely, Mickey	he office around 7:15. We have Ops Update from 7:30 through 8:30. Will try and call call immediately after.
Original Message From: Way, Ralph <ralph.way@ To: Freeland, Mickey CIVILIAN Sent: Tue Apr 05 06:17:35 2011 Subject: RE: DEPLOYING</ralph.way@ 	nrc.gov>
Say dude,	
I'm back. In the office for a short	while this am.
r	
Original Message	
From: Freeland, Mickey CIVILIAN	(h)(6)
Sent: Thursday, March 31, 2011 (
To: Way, Ralph	
Subject: Re: DEPLOYING	
Subject. Ne. DEI LOTING	
Sounds good. Any good news on	the situation? (b)(6) - not exactly reliable.
Original Message	
From: Way, Ralph <ralph.way@< td=""><td>nrc.gov></td></ralph.way@<>	nrc.gov>
To: Freeland, Mickey CIVILIAN	
Sent: Wed Mar 30 17:40:13 2011	
Subject: RE: DEPLOYING	
We exchnged contact info.	
r	
From: Freeland, Mickey CIVILIAN	ı (b)(6)
Sent: Wednesday, March 30, 201	1 8:04 AM
To: Way, Ralph	$\backslash 6V$
Subject: Re: DEPLOYING	$\sum_{i=1}^{n}$
Ralph,	18:04 AM

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Sounds good, although I was informed last night that we will be phasing out of the embassy. We'll still have capability at MOD, USFJ and Yokota (this is permanent party for us). Get contact info in case you need anything or shout to me. I am in WRAMC today out tomorrow and convalescing over the weekend. I will be off line in a couple of hours for the next 2 days.

Take care and let me know if the situation changes. CNN reports are actually pretty bleak. Mickey

----- Original Message -----From: Way, Ralph <Ralph.Way@nrc.gov> To: Freeland, Mickey CIVILIAN Sent: Wed Mar 30 06:49:04 2011 Subject: RE: DEPLOYING

Had a good meeting with Brooks and his replacement tonight.

r

From: Freeland, Mickey CIVILIAN (b)(6) Sent: Sunday, March 27, 2011 1:00 PM To: Way, Ralph Subject: Re: DEPLOYING

We have a couple of folks that are supposed to move up to J village about 20 km from the reactors. Any idea of what readings they are getting off site and how dangerous it is? Also what is the condition of the reactors especially number 3. If needed my sipr address is: (b)(6)Stay safe,

j,

, Mickey

----- Original Message -----From: Way, Ralph <Ralph.Way@nrc.gov> To: Freeland, Mickey CIVILIAN Sent: Sun Mar 27 01:19:13 2011 Subject: RE: DEPLOYING

Hi Dude, Met Maj Simmers. Good guy. Things are going hard and heavy. Not much to report. We'll have to talk when I get back.

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From: Freeland, Mickey CIVILIAN ((b)(6) Sent: Wednesday, March 23, 2011 7:08 AM To: Way, Ralph Subject: Re: DEPLOYING

Thanks, appreciate it. BTW, who pushed the 50 mile evac limit?

----- Original Message -----From: Way, Ralph <Ralph.Way@nrc.gov> To: Freeland, Mickey CIVILIAN Sent: Wed Mar 23 06:47:50 2011 Subject: RE: DEPLOYING

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Thx. We leave tomorrow at 1322 and we are staying at the ANA hotel. The plan currently is that we will be working out of the embassy. I just had to have my clearance corrected on the country clearance from (b)(6) "I look for them when I get there. I will try and reach out when I get there.

r

Ralph Way, Ph.D. Senior Technical Advisor U.S. Nuclear Regulatory Commission Phone (V) Unclass 301 415 6825 Phone (V) Secure 301 415 6961 FAX (Unclass) 301 415 6661

-----Original Message-----From: Freeland, Mickey CIVILIAN (b)(6) Sent: Tuesday, March 22, 2011 6:10 PM To: Way, Ralph Subject: RE: DEPLOYING

At this point I will assume initial assignment to the embassy. Would be nice if we could share data and capabilities. And you have the clearances to hear what we have and do. We have a LTC Brooks and a Maj Simmers working at the embassy. I will try and get you better coordinates, but I am guessing they will not be hard to find.

Travel safely, Mickey Freeland (b)(6)

-----Original Message-----From: Way, Ralph [mailto:Ralph.Way@nrc.gov] Sent: Monday, March 21, 2011 1:15 PM To: Freeland, Mickey CIVILIAN Subject: RE: DEPLOYING

10-4. I'll let you know where ai am and my status as soon as I can.

r

-----Original Message-----From: Freeland, Mickey CIVILIAN [(b)(6) Sent: Monday, March 21, 2011 1:11 PM To: Way, Ralph; Klein, Dale E Subject: RE: DEPLOYING

Stay safe. We have about 23 folks over there. Let me know where you will be located and I'll try and get you hooked up with our folks. I also have a friend there that might be of assistance, although I have not heard from him for a few days.

R/ Mickey Freeland

(b)(6)

-----Original Message-----From: Way, Ralph [mailto:Ralph.Way@nrc.gov] Sent: Monday, March 21, 2011 12:49 PM To: Klein, Dale E; Freeland, Mickey CIVILIAN Subject: DEPLOYING

Gents,

Just wanted to give you a heads up. I will be deploying to Japan this Thursday. As of right now, it should be fro about two weeks.

4

Regards,

r

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From:	RST01 Hoc
Sent:	Tuesday, April 05, 2011 11:08 PM
То:	(b)(6)
Cc:	
Subject:	FW: 04-05 2200 One Pagers RPV Injection Cntmt Fill.docx

FYI

From: RST07 Hoc Sent: Tuesday, April 05, 2011 11:04 PM To: RST01 Hoc Subject: 04-05 2200 One Pagers RPV Injection Cntmt Fill.docx

RST01,

Please distribute this for review.

All,

The RST has reviewed and incorporated all previous comments as appropriate.

Please review and supply any additional comments by 0200 April 6, 2011.

CHN RST BWR Analyst

72/153

From: Sent:	RST01 Hoc Tuesday, April 05, 2011 11:08 PM
То:	(b)(6)
Cc:	

Subject:

FW: 04-05 2200 One Pagers RPV Injection Cntmt Fill.docx

FYI

From: RST07 Hoc Sent: Tuesday, April 05, 2011 11:04 PM To: RST01 Hoc Subject: 04-05 2200 One Pagers RPV Injection Cntmt Fill.docx

RST01,

Please distribute this for review.

All,

The RST has reviewed and incorporated all previous comments as appropriate.

Please review and supply any additional comments by 0200 April 6, 2011.

CHN RST BWR Analyst

72/1514

فيقيون والجرية فتعيينات المتحصية فتراجد مراجد

From:	RST01 Hoc	
Sent:	Wednesday, April 06, 2011 3:12 AM	
То:	(b)(6)	
Subject:	FW: UPDATED LIST OF CURRENT RST/CONSORTIUM ACTIONS	

From: Hoc, RST16 Sent: Monday, April 04, 2011 11:20 PM To: RST01 Hoc Cc: Hoc, RST16; RST06 Hoc Subject: RE: UPDATED LIST OF CURRENT RST/CONSORTIUM ACTIONS

To Consortium Members, NRC Japan Detachment, and RST members, please see the latest update to the document "Updated List of Current RST/Consortium Actions" as of 2300EDT 4/4/2011.

Please review this status document (pasted below and attached).

Please think of other issues and items that should be discussed at the 0300EDT teleconference call between RST, Japan Detachment and the members of the Consortium, and provide your inputs to the meeting agenda back to the RST at <u>RST01.Hoc@nrc.gov</u> as soon as you can.

Thank you.

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UPDATED LIST OF CURRENT RST/CONSORTIUM ACTIONS - 2300 EDT on 4/4/11

- 1. Provide evaluation of TEPCO differing views on merits of flooding vs. status quo, including hydrogen assumptions.
 - a. Status:
 - 1. INPO is the Lead: draft document due to consortium/RST by 4/4/11(20:00 am-EDT) (Still awaiting as of 2230 4/4/2011)
 - 2. Discussion of hydrogen/steam assumptions in original analysis and draft response to occur during status telecom 4/4/11 This document was issued to Japan Detachment during Day Shift 4/4/2011.
- 2. Respond to site team question on possible additional measures to maximize the success of their current feed-and-bleed strategy.
 - a. Status:
 - 1. Draft document sent to consortium/site team on 4/4/11 (0240 EDT)
 - 2. Comments from consortium due to RST by 4/4/11 (2000 EDT)

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- 3. Comments received from GEH, and from INPO 2245 EDT 4/4/2011
- 4. Level of concurrence discussed with ET and concurrence will stay with the RST.
- SFP for unit 4 white paper. Received Rob Taylor feedback/input on rough draft at 0717 EDT on 4/4/11.
 a. Status:
 - 1. BWR Analyst incorporating R. Taylor input into SFP assessment --Still working as of 2230 4/4/2011
 - 2. NRC line organization working task response received 1900EDT 4/4/2011
- 4. Input on Japan request regarding what a stable reactor condition (no further energetic events or major rad releases) looks like.
 - a. Status:
 - 1. RST has developed draft document and shared with consortium-expected 4/4/11 (11:00am EDT)
 - Replies received from NR and DOE evening of 4/4/2011, still awaiting INPO- & INPO reviewed GEH reply
 - 3. Expected discussion item as working copy for telecom 4/5/11 (3:00 am EDT)
- 5. Words from consortium (GE) to close loop on why guidance for flooding impact on containment pressure is not practical or value-added.

a. Status:

- 1. RST to follow up with consortium during next telecom 4/4/11 (11:00am EDT) RST sent e-mail to GEH @ 1910 EDT on 4/4/11 requesting 1 paragraph explaining guidance.
- 6. Evaluate the consequences of inadvertently adding the organic fixing agent to the spent fuel pools. Due Tuesday Japan time.
 - a. Status:
 - 1. INPO responded to question 3/31/11 (attached document)

Sent request to Richard Lee for RES analysis on new information including possible impact on SFPs @ 1941 EDT on

From:	Cherry, Ronald C <cherryrc@state.gov></cherryrc@state.gov>		
Sent:	Wednesday, April 06, 2011 9:08 AM		
To:	hatada-hiroyuki@meti.go.jp		
Cc:	(b)(6) Duncan, Aleshia D; funaki-kentaro@meti.go.jp; horiguchi-		
	shin@meti.go.jp; Howard, E. Bruce; Jay.Tilden@nnsa.doe.gov((b)(6)		
	(b)(6)okuda-shuji@meti.go.jp; Way, Ralph;		
	(b)(6)		
Subject	PE: EW: Equipment listing for shipment today		

Subject:

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RE: FW: Equipment listing for snipment today

Dear Hatada-san,

Thanks for your reply and for your questions.

DOE is covering the cost of the equipment in the list and the cost of shipping. The figures shown in the equipment list were simply to document the value of the items being shipped.

As for meeting the equipment, that would not be related to the transfer of title since that will have been handled separately. Perhaps the best approach would be to go to AIST in Tsukuba once the equipment has been received and been unpacked, but please let me know what you think.

Thank you for considering the offer of the video and other information, as well as our proposal to send a support team. DOE has indicated that it will cover the costs associated with the team's travel to Japan.

We're looking forward to receiving MOFA's comments.

Thank you for all your assistance.

Best regards,

Ron

This email is UNCLASSIFIED-----Original Message-----From: hatada-hiroyuki@meti.go.jp [mailto:hatada-hiroyuki@meti.go.jp] Sent: Wednesday, April 06, 2011 8:25 PM To: Cherry, Ronald C Cc(b)(6) Duncan, Aleshia D; funaki-kentaro@meti.go.jp; horiguchi-shin@meti.go.jp; Howard, E. Bruce; Jay.Tilden@nnsa.doe.gov(b)(6) okuda-shuji@meti.go.jp; ralph.way@nrc.gov; (b)(6)

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Subject: Re: FW: Equipment listing for shipment today

Dear Cherry-san,

Thank you for your assistance and kind offers.

We are very glad that the equipment has been shipped. I know this is the result of your effort on it. Regarding your message, couple of questions and comments:

156

(1) I saw the attached list and found there were acquisition costs listed together.

1.- **j**

Can we understand that these are going to be provided to us at no cost as written in the proposed MOU? If I am not correct, please let me know.

(2) I would like to clarify the meaning of "to meet the equipment upon its arrival in Japan". You might remember that we provided the address of the AIST research institute in Ibaraki prefecture as their destination.

Do you mean that we are going to "meet" the equipment at Ibaraki, or Narita airport, or somewhere else? Understanding the purpose for which we "meet" the equipment would help us in considering where/how we should meet it.

Is this to do the transfer of title, or something else?

(3) Thanks for offering the video of operational detail and the support people. I will discuss with TEPCO and others and get back to you.

(4) My apologies for delay in responding with MOFA's proposed change in MOU. We have told them the situation and they are aware that they can't spend much time on it. We will get it to you as soon as we receive it.

As always, we appreciate your kind and prompt assistance.

Very respectfully,

Hiroyuki

Hiroyuki Hatada	Deputy Director, Aerospace and Defense Industry
Division, Ministry of	of Economy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp
畑田 浩之 経済	産業省 製造産業局 航空機武器宇宙産業課 課長補佐 /
03-3501-1692	

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"Aaron Leong" (b)(6) "D	uncan, Aleshia D" <duncanad@state.gc< th=""><th>ov>, "Howard, E. Bruce"</th></duncanad@state.gc<>	ov>, "Howard, E. Bruce"
<howardeb@state.gov>, "Kenneth </howardeb@state.gov>		
	1aj. Keith Simmers'' (b)(6)	, "Ralph Way"
<ralph.way@nrc.gov>, "Rod Tanaka"</ralph.way@nrc.gov>		
(b)(6) <funaki-kentaro< td=""><td>@meti.go.jp>, <horiguchi-shin@meti.go< td=""><td>o.jp>, <okuda-shuji@meti.go.jp>,</okuda-shuji@meti.go.jp></td></horiguchi-shin@meti.go<></td></funaki-kentaro<>	@meti.go.jp>, <horiguchi-shin@meti.go< td=""><td>o.jp>, <okuda-shuji@meti.go.jp>,</okuda-shuji@meti.go.jp></td></horiguchi-shin@meti.go<>	o.jp>, <okuda-shuji@meti.go.jp>,</okuda-shuji@meti.go.jp>
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FW: Equipment listing for shipment today		
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Dear Hatada-san,

This is to inform you that the Talon robot with radiation mapping capability and the radiation hardened camera systems have now been shipped.

It's estimated they will arrive in Japan on Friday, April 8. Attached please find the list of the equipment that is in the shipment.

I would like to discuss with you arrangements to meet the equipment upon its arrival in Japan.

Prior to shipping, Idaho National Laboratory made a video of operational details of all the equipment. We can provide the video and electronic copies of the manuals for most of the systems. Please let us know to whom the video and the other electronic files should be delivered.

In addition, DOE is considering sending up to four people to Japan in support of the equipment delivery. Specifically, we propose to send two teams of two persons each to support the setup, training, and operational support of the Talon system and the cameras (total of 4 people). Our laboratory recommends that two people are needed for each of the groups of equipment to technically trouble shoot and support their operation. If you agree, then I would be happy to work with you on the details of when the team should come and where they would work with their Japanese counterparts.

I look forward to hearing from you.

Best regards,

Ron Ronald C. Cherry Energy Attach? Director, DOE Japan Office

From:	hatada-hiroyuki@me	ti.go.jp		
Sent:	Friday, April 08, 2011 3:40 AM			
To:	CherryRC@state.gov	CherryRC@state.gov		
Cc:	(b)(6)	DuncanAD@state.gov; fur	naki-kentaro@meti.go.jp; horiguchi-	
		wardEB@state.gov; Jay.Tilder	<u>n@nnsa.doe.gov;</u>	
	(b)(6)		; okuda-shuji@meti.go.jp; Way,	
	Ralph; (b)(6)	ichii-naoto@meti		
Subject:	format to ensure exp	format to ensure expedited custom process		

Subject:

Dear Cherry-san,

Attached is our provisional translation of the format that we can use to make sure that the shipment goes through the custom process quickly.

Please provide the information necessary to fill in the form, so that we can submit it to a responsible office to expedite the process.

Thank you for your cooperation,

Hiroyuki

Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / 03-3501-1692

(See attached file: Declaration form for import.docx)

23/15/

From: Sent: To: Cc: Subject: Stahl, Eric Friday, April 08, 2011 3:41 AM Liaison Japan Harrington, Holly; LIA02 Hoc; OIP Distribution Dan Dorman's Blog Post on Embassy-Tokyo Site

Please find Dan Dorman's guest blog post on Deputy Chief of Mission Zimwault's blog here: <u>http://zblog.japan.usembassy.gov/e/zblog-e20110408a.html</u>.

Here is the text of the post:

Everyone Working Together Around the Clock

As you probably know, since the Tohoku earthquake and subsequent tsunami on March 11, the Nuclear Regulatory Commission has had a team of experts in Japan to provide technical assistance as requested by the Government of Japan. You probably also know that Japan has a long and proud tradition in the peaceful use of nuclear power. Having just returned from two weeks in Tokyo, working with the many capable engineers, scientists and national leaders to stabilize the Fukushima Dai'ichi plant, I can tell you that Japan is exerting its maximum effort to bring the crisis to a close while minimizing any further radiological impact to people and the environment.

The Tokyo Electric Power Company (TEPCO) and the Japanese government are laboring around the clock to ensure stable and sustainable cooling to the Fukushima reactors and spent fuel pools, while removing the highly contaminated water from the turbine buildings, removing debris to facilitate further remediation, and reducing dose rates to increase access throughout the site and enable the workers there to be more effective and efficient.

Meanwhile the government is consulting with an array of experts on longer range plans to ensure that radioactive material remains confined to the plant site while they develop long-term strategies to remove the damaged fuel and ultimately decommission the site.

Over the last few weeks, the NRC's team of experts has been working with counterparts in TEPCO and the Japanese government to obtain the best available information on plant conditions. We have been sharing this information with a diverse collection of government and industry experts in the United States to obtain the best consensus recommendations, which we then review and refine with our Japanese colleagues.

In addition, we have worked with the U.S. Agency for International Development and a wide range of great Americans from throughout the Federal family and the U.S. nuclear industry, who have contributed a diverse array of equipment and services to help stabilize the plant, protect the workers and the public, and monitor the environmental impacts of the accident. It has been a tremendous privilege to work with all of our Japanese and American colleagues in this important endeavor.

I would be remiss in discussing the Fukushima situation without acknowledging the heroic efforts of the workers at the site. Many of them have already suffered grievous loss of family and property from the earthquake and tsunami. They labor on in difficult conditions to bring stability and closure, and to set the foundation for building a new and positive future for the region and the nation.

The world has rallied to their aid, contributing protective clothing and equipment. Our team in Japan continues to work with the Japanese government to ensure they have the resources to support and protect these workers. These are the true heroes of Fukushima Dailichi, and they deserve our utmost respect, our fervent prayers and our continued support.

Dan Dorman

DJ/158

Eric Stahl

U.S. Nuclear Regulatory Commission Japan Team International Liaison Tel: 81-33-22-45-066 Mob: ((b)(6)

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From: Sent: To:

Cc:

hatada-hiroyuki@meti.go.jp Friday, April 08, 2011 12:11 PM CherryRC@state.gov DuncanAD@state.gov; funaki-kentaro@meti.go.jp; horiguchi-(b)(6) shin@meti.go.jp; HowardEB@state.gov; Jay.Tilden@nnsa.doe.gov; (b)(6) okuda-shuji@meti.go.jp; Way, (b)(6) ichii-naoto@meti.go.jp

Subject:

Re: FW: Equipment listing for shipment today

Dear Cherry-san,

For the video and electronic copies of the manuals, TEPCO says that they want them to be sent to the following address. Regarding the support team of 4 people, we really appreciate the offer but TEPCO needs to arrange the date so that research institutes supporting TEPCO can also attend.

Hopefully I can get back to you tomorrow with TEPCO's request on this. Thank you,

Shin YOSHINO

Machinery Systems Technology Group,

Technology Development Research Institute, Tokyo Electric Power Company Egasaki-cho 4-1, Tsurumi-ku, Yokohamacity, Kanagawa 230-8510, Japan

Email yoshino.shin@tepco.co.jp

TEL 045-394-6361 FAX 045-585-8647

Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / 03-3501-1692

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"Cherry, Ronald C" <cherryrc@state.gov></cherryrc@state.gov>]
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Spurlock" (b)(6)	, "Maj. Keith Simmers" (b)(6)	"Ralph Way"
<ralph.way@nrc.gov>, "Rod Tanaka"</ralph.way@nrc.gov>		
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I look forward to hearing from you.

Best regards,

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Ron Ronald C. Cherry Energy Attach? Director, DOE Japan Office J.S. Embassy Tokyo Fel. (0)3-3224-5444 Fax (0)3-3224-5769 Cell (b)(6) Email CherryRC@state.gov

This email is UNCLASSIFIED.

(See attached file: SF 122 Listing DT 040411.pdf)

From:	Roberts, Thomas E CIV SEA 08 NR (b)(6)	
Sent:	Saturday, April 09, 2011 7:36 AM	
То:	RST01 Hoc; Ali, Syed; Blamey, Alan; Call, Michel; Casto, Chuck; Collins, Elmo; Emche,	
	Danielle; Giessner, John; Jackson, Todd; Monninger, John;	
	RMTPACTSU_ELNRC@ofda.gov; Bernhard, Rudolph; Salay, Michael; Scott, Michael;	
	Sheikh, Abdul; Stahl, Eric; Taylor, Robert; Way, Ralph; RST09 Hoc; Kepple, Alan C CIV	
	NAVSEA, 08; BMPC_ECC.Contractor@unnpp.gov; Bingman, Bruce M CIV SEA 08 NR;	
	RST08 Hoc; alice.caponiti@nuclear.energy.gov; Herman, David R CIV NAVSEA, 08; Dei,	
	Donald E CIV SEA 08 NR; dmodeen@epri.com; EventResponse@epri.com;	
	GE HitachiNuclearResponseTeam@ge.com; Szeto, Gordon CTV SEA 08 NR; Holahan,	
	Vincent, inpoerc@inpo.org; inpoerctech@inpo.org	
Cc:	FOIA Response hoc Resource	
Subject:	Re: Purpose: Request for Re-review of the attached document	

Based on a quick read on a blackberry, the version you sent out for re-review does not include resolution of NR comments that were incorporated previously as documented in an email issued by rst01 Thursday 10:22pm, nor does it resolve the open comment on criticality forwarded to rst01 by email Friday 12:46pm. Therefore, NR does not agree with this version. Suggest using the Friday 1200 version, delete the "current status" section from it, and add explanation of what actions are required to meet the "maintain subcriticality" goal.

Thanks, Tom Roberts

From: RST01 Hoc <RST01.Hoc@nrc.gov>

To: Ali, Syed <Syed.Ali@nrc.gov>; Blamey, Alan <Alan.Blamey@nrc.gov>; Call, Michel <Michel.Call@nrc.gov>; Casto, Chuck <Chuck.Casto@nrc.gov>; Collins, Elmo <Elmo.Collins@nrc.gov>; Emche, Danielle <Danielle.Emche@nrc.gov>; Giessner, John <John.Giessner@nrc.gov>; Jackson, Todd <Todd.Jackson@nrc.gov>; Monninger, John <John.Monninger@nrc.gov>; NRC Team at USAID <RMTPACTSU_ELNRC@ofda.gov>; Bernhard, Rudolph <Rudolph.Bernhard@nrc.gov>; Salay, Michael <Michael.Salay@nrc.gov>; Scott, Michael <Michael.Scott@nrc.gov>; Sheikh, Abdul <Abdul.Sheikh@nrc.gov>; Stahl, Eric <Eric.Stahl@nrc.gov>; Taylor, Robert <Robert.Taylor@nrc.gov>; Way, Ralph <Ralph.Way@nrc.gov>; RST09 Hoc <RST09.Hoc@nrc.gov>; Kepple, Alan C CIV NAVSEA, 08; Bettis Contacts <BMPC_ECC.Contractor@unnpp.gov>; Bingman, Bruce M CIV SEA 08 NR; RST08 Hoc <RST08.Hoc@nrc.gov>; Caponiti DOE <alice.caponiti@nuclear.energy.gov>; Herman, David R CIV NAVSEA, 08; Dei, Donald E CIV SEA 08 NR; EPRI Dave Modeen <dmodeen@epri.com>; EPRI Event Response Center <EventResponse@epri.com>; GE Hitachi NucResponseTeam <GE.HitachiNuclearResponseTeam@ge.com>; Szeto, Gordon CIV SEA 08 NR; Holahan, Vincent <Vincent.Holahan@nrc.gov>; INPO ERC <inpoerc@inpo.org>; INPOERCTECH <inpoerctech@inpo.org>;

 Joel Pero (Bettis) < joel.pero.contractor@unnpp.gov>; Johne

 Kelly < johne.kelly@nuclear.energy.gov>; Steinhurst, Laurel A CIV SEA 08 NR; Lela Doyle (KAPL)

 <lela.doyle.contractor@unnpp.gov>; Richard Stark <Richard.Stark@nuclear.energy.gov>; Rob Versluis

 <ROB.VERSLUIS@nuclear.energy.gov>; Hoc, RST16 <RST16.Hoc@nrc.gov>; RST01B Hoc <RST01B.Hoc@nrc.gov>;

RST03 Hoc <RST03.Hoc@nrc.gov>; RST07 Hoc <RST07.Hoc@nrc.gov>; Russell Morales <MoralesRA@state.gov>; Sal Golub <sal.golub@nuclear.energy.gov>; Bell, Stephen T CIV SEA 08 NR; Roberts, Thomas E CIV SEA 08 NR; Vavoso, Thomas G CIV NAVSEA, 08

Cc: FOIA Response.hoc Resource <FOIAResponse.hoc.Resource@nrc.gov> Sent: Sat Apr 09 06:23:48 2011

Subject: FW: Purpose: Request for Re-review of the attached document

DJ/160

From: RST06 Hoc Sent: Saturday, April 09, 2011 6:03 AM To: RST01 Hoc Subject: Purpose: Request for Re-review of the attached document

Frank, please forward this e-mail to the Industry e-mail group and the site team (including Chuck and Elmo).

Purpose: Request for Re-review of the attached document (previously reviewed earlier this week).

Request that all involved entities confirm that any comments that they have made on this document have been satisfactorily incorporated so that it can be shared by the site team with NISA.

This is a high priority request because of the priority that NISA has placed on it in their discussions with the US.

Background:

NISA has made several requests for NRC thoughts on conditions for "stability." The RST had worked with its peers on a stability document over the last week. As of 4/9/11, it has been decided to merge the "stability" paper with a paper on PAG to create a broader scope "Composite" paper for use in getting US Govt alignment on reentry recommendations.

This new composite paper will involve some very challenging coordination with other agencies because of the policy issues associated with post-accident dose standards.

The site team has requested that the stand-alone "stability" document be made available for sharing with NISA; however, one partner indicated that the most recent version of the stand alone "stability" paper is unacceptable to them, in part because of the "current status" section.

The RST has gone back to an earlier version of the "compatibility" document that does not include the "current status" section, and is forwarding it to the site team for their review. We will also forward to our peers for review, with an understanding that the new "simplified stability" document is not associated with the policy setting "composite" document.

Thanks,

Fred Brown On-shift RST Director

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From: Sent:	RST01 Hoc Saturday, April 09, 2011 2:17 PM
То:	(b)(6)
Subject:	Global Assessment Document (aka - RST Assessment)

Team:

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Attached is a draft of Revision 2 of the RST assessment. We have tried to combine reactor status, spent fuel pool status, and known plant parameters. This is being issued as a predecisional document for your review and comments.

RST Coordinator

D1/10/

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From:	Cherry, Ronald C <cherryrc@state.gov></cherryrc@state.gov>	
Sent:	Saturday, April 09, 2011 8:57 PM	
To:	yagi.n@tepco.co.jp; hatada-hiroyuki@meti.go.jp; Jay.Tilden@nnsa.doe.gov	
Cc:	荒畑 太一朗; 及川 景晴; Jeffrey.Miller@pnl.gov; Awan, Riaz X (Sofia - DOE);	
	hiro.hirukawa@aist.go.jp; n.koyachi@aist.go.jp; shin.kato@aist.go.jp;	
	mizuo@fsinet.or.jp; npd_tanaka_t@tepsco.co.jp; (b)(6) Way, Ralph;	
	okuda-shuji@meti.go.jp; (b)(6) ichii-	
	naoto@meti.go.jp; Howard, E. Bruce; horiguchi-shin@meti.go.jp; funaki-	
	kentaro@meti.go.jp; Duncan, Aleshia D;((b)(6)	
Subject:	RE: 4 people support team for Talon and cameras	

Dear Yagi-san,

Thanks for your email. I understand the technical point of contact at Idaho National Laboratory will be Mr. Derek Wadsworth. Mr. Tilden at DOE Headquarters will be in touch soon with more specific information. In the meantime, can you tell me who the principal point of contact at TEPCO will be? Will that be yourself, or someone else?

Thank you, again.

Best regards,

Ron Ronald C. Cherry Energy Attaché Director, DOE Japan Office U.S. Embassy Tokyo Tel. (0)3-3224-5444 Fax (0)3-3224-5769 Cell (0)(b)(6) email CherryRC@state.gov

This email is UNCLASSIFIED

----Original Message-----From: 八木 直人 [mailto:yagi.n@tepco.co.jp] Sent: Sunday, April 10, 2011 5:10 AM To: hatada-hiroyuki@meti.go.jp; Cherry, Ronald C Cc: 荒畑 太一朗; 及川 景晴; Jeffrey.Miller@pnl.gov; Awan, Riaz X (Sofia - DOE); hiro.hirukawa@aist.go.jp; n.koyachi@aist.go.jp; shin.kato@aist.go.jp; mizuo@fsinet.or.jp; npd_tanaka_t@tepsco.co.jp; (b)(6) ralph.way@nrc.gov; okuda-shuji@meti.go.jp; (b)(6) Jay.Tilden@nnsa.doe.gov; ichii-naoto@meti.go.jp; Howard, E. Bruce; horiguchi-shin@meti.go.jp; funakikentaro@meti.go.jp; Duncan, Aleshia D; (b)(6) Subject: Re: 4 people support team for Talon and cameras

Dear Mr. Cherry

Thanks for proposing US support team visit to Japan.

,3/1162

Suggested schedule on April 14-15 from us is the earliest days we will be able to be trained. We are frexible on the shchedule.

We also would like to know how many days you think adequate to be trained.

We are currently cosidering using DOE offered Talon to make outside radiation map at first. Then we might use it inside buildings for any kind of monitoring activities. Specific activities date is not yet decided.

Before that our team need to grasp the performance of Talon and cameras and what those equipments can adapt at the site for recovery activities.

I would like to closely contact with you regarding your kind support.

Thank you.

Best regards, Naoto Yagi TEPCO

----- Original Message -----From: "Cherry, Ronald C" <CherryRC@state.gov>

To: <hatada-hiroyuki@meti.go.jp>

Cc: <(b)(6) "Duncan, Aleshia D" <DuncanAD@state.gov>; <funaki-kentaro@meti.go.jp>; <horiguchishin@meti.go.jp>; "Howard, E. Bruce"

<u><HowardEB@state.gov>; <ichii-naoto@meti.go.jp>; <Jay.Tilden@nnsa.doe.gov>; (b)(6)</u>

[(b)(6) | <okuda-shuji@meti.go.jp>; <ralph.way@nrc.gov>; √(b)(6)

<yagi.n@tepco.co.jp>; <npd_tanaka_t@tepsco.co.jp>; <mizuo@fsinet.or.jp>; <shin.kato@aist.go.jp>;

<n.koyachi@aist.go.jp>; <hiro.hirukawa@aist.go.jp>; "Awan, Riaz X (Sofia - DOE)" <AwanRX@state.gov>; <Jeffrey.Miller@pnl.gov>

Sent: Saturday, April 09, 2011 11:40 PM

Subject: Re: 4 people support team for Talon and cameras

> Dear Hatada-san,

>

> Mr. Tilden at DOE Headquarters can provide advice on whom TEPCO should

> contact to coordinate the details of the visit by the team. I believe

> the team can come to Japan in time to work on April 14-15, but I also

> believe it would be good for the U.S. team and TEPCO to agree in

> advance on what activities will be done and how much time may be need

> to do that. Our point of contact can work that out with TEPCO.

>

> The equipment should have arrived at AIST by now. Please let me know

> when AIST confirms its arrival, or if it has not, then we should take

> the necessary steps to track itn so it will be ready when the US team arrives.

>

> Thank you.

>

> Best regards,

- >
- > Ron
- >
- > This has been sent from my Blackberry

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> Original Message	ada himuuki@mati za iat
> From: hatada-hiroyuki@meti.go.jp <hata > Tay Charge Departed C</hata 	ada-niroyuki@meti.go.jp>
> To: Cherry, Ronald C	
> Cc:[(b)(6) > funaki-kentaro@meti.go.jp <funaki-kenta< td=""><td>Duncan, Aleshia D;</td></funaki-kenta<>	Duncan, Aleshia D;
> horiguchi-shin@meti.go.jp < horiguchi < horiguchi-shin@meti.go.jp < horiguchi-shi	
> Bruce; ichii-naoto@meti.go.jp <ichii-naot< p=""></ichii-naot<>	
> Jay.Tilden@nnsa.doe.gov <jay.tilden@n< td=""><td></td></jay.tilden@n<>	
> <u>(b)(6)</u> >(b)(6)	l
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<pre>> <ralph.way@nrc.gov>;(b)(6)</ralph.way@nrc.gov></pre>	(b)(6)
> yagi.n@tepco.co.jp <yagi.n@tepco.co.jp< td=""><td></td></yagi.n@tepco.co.jp<>	
<pre>> <npd_tanaka_t@tepsco.co.jp>; mizuo@f</npd_tanaka_t@tepsco.co.jp></pre>	
<pre>> shin.kato@aist.go.jp <shin.kato@aist.go.< pre=""></shin.kato@aist.go.<></pre>	
> <n.koyachi@aist.go.jp>; hiro.hirukawa@a</n.koyachi@aist.go.jp>	
> <hiro.hirukawa@aist.go.jp></hiro.hirukawa@aist.go.jp>	0.0080.00
> Sent: Sat Apr 09 08:41:27 2011	
> Subject: 4 people support team for Talon	n and cameras
>	
>	
> Dear Cherry-san,	
>	
> Regarding the support team consisting of	of 4 people to assist us with
> Talon and cameras that was mentioned i	
> told me it would be great if the team cou	, .
> shown below:	
>	
> When : 14th and 15th April	
> Where : The National Institute of Adv	vanced Industrial Science
> and Technology (AIST)	
> Address: Teragu Kashiwa-yama 1497-	'-1, Tsukuba-city, Ibaraki,
> JAPAN	
>	
> If this is acceptable to your side, TEPCO is	s ready to coordinate the
> detail on this. Please let us know who to	> talk to.
>	
> By the way, if I remember correctly, I hea	ard from you that the team
> would be helpful in starting up the equip	
> If this is the case, it sounds to me that we	5
> equipment" in the morning of 14th, rathe	
> the shipment arrival to find ourselves wa	•
> start up the equipment. I appreciate you	
> Of course, my assumption is that it will a	· · · · · ·
> it seems that it is taking more time than e	expected.
>	
> Very respectfully,	
>	
> Hiroyuki	

- > >

> > Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry > Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 > / hatada-hiroyuki@meti.go.jp >畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / > 03-3501-1692 > > > > >送信元: hatada-hiroyuki/MITI-LAN > 宛先: "Cherry, Ronald C" < CherryRC@state.gov> > Cc: "Aaron Leong" (b)(6) "Duncan, Aleshia D" > <DuncanAD@state.gov>, funaki-kentaro@meti.go.jp, > horiguchi-shin@meti.go.jp, "Howard, E. Bruce" <HowardEB@state.gov>, > Jay.Tilden@nnsa.doe.gov, "Maj. Keith Simmers" > (b)(6) "Kenneth Spurlock" >[(b)(6) , okuda-shuji@meti.go.jp, "Ralph Way" > <raiph.way@nrc.gov>, "Rod Tanaka" (b)(6) > ichii-naoto/MITI-LAN@MITI-LAN >日付: 2011/04/09 01:10 >件名: Re: FW: Equipment listing for shipment today > > > > > Dear Cherry-san, > > > For the video and electronic copies of the manuals, TEPCO says that > they want them to be sent to the following address. > Regarding the support team of 4 people, we really appreciate the offer > but TEPCO needs to arrange the date so that research institutes > supporting TEPCO can also attend. > Hopefully I can get back to you tomorrow with TEPCO's request on this. > Thank you, > > Shin YOSHINO > Machinery Systems Technology Group, > Technology Development Research Institute, Tokyo Electric Power > Company Egasaki-cho 4-1, Tsurumi-ku, Yokohama-city, Kanagawa 230-8510, > Japan > > Email yoshino.shin@tepco.co.jp > > TEL 045-394-6361 > FAX 045-585-8647 > > > Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry

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> Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692
>/ hatada-hiroyuki@meti.go.jp
> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 /
> 03-3501-1692
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>送信元: "Cherry, Ronald C" <cherryrc@state.gov></cherryrc@state.gov>
> 宛先: <hatada-hiroyuki@meti.go.jp></hatada-hiroyuki@meti.go.jp>
> Cc: "Aaron Leong" ((b)(6) "Duncan, Aleshia D"
> <duncanad@state.gov>, "Howard, E. Bruce" <howardeb@state.gov>,</howardeb@state.gov></duncanad@state.gov>
> "Kenneth Spurlock" {(b)(6) "Maj. Keith Simmers"
>(b)(6) "Ralph Way" <ralph.way@nrc.gov>, "Rod Tanaka"</ralph.way@nrc.gov>
>(b)(6) <funaki-kentaro@meti.go.jp>,</funaki-kentaro@meti.go.jp>
> <horiguchi-shin@meti.go.jp>, <okuda-shuji@meti.go.jp>,</okuda-shuji@meti.go.jp></horiguchi-shin@meti.go.jp>
> <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov>
> 日付: 2011/04/06 18:37
>件名: FW: Equipment listing for shipment today
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> Dear Hatada-san,
>
> This is to inform you that the Talon robot with radiation mapping
> capability and the radiation hardened camera systems have now been
> shipped. It's estimated they will arrive in Japan on Friday, April 8.
> Attached please find the list of the equipment that is in the shipment.
> Attached please find the list of the equipment that is in the sinplicent.
> I would like to discuss with you arrangements to meet the equipment
> upon its arrival in Japan.
>
> Prior to shipping, Idaho National Laboratory made a video of
> operational details of all the equipment. We can provide the video
> and electronic copies of the manuals for most of the systems. Please
> let us know to whom the video and the other electronic files should be delivered.
>
> In addition, DOE is considering sending up to four people to Japan in
> support of the equipment delivery. Specifically, we propose to send
> two teams of two persons each to support the setup, training, and
> operational support of the Talon system and the cameras (total of 4
> people). Our laboratory recommends that two people are needed for
> each of the groups of equipment to technically trouble shoot and
> support their operation. If you agree, then I would be happy to work
> with you on the details of when the team should come and where they
> would work with their Japanese counterparts.
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> I look forward to hearing from you. > > Best regards, > > Ron > Ronald C. Cherry > Energy Attaché > Director, DOE Japan Office > U.S. Embassy Tokyo > Tel. (0)3-3224-5444 > Fax (0)3-3224-5769 > Cell (0)(b)(6) > email CherryRC@state.gov <mailto:CherryRC@state.gov> > > > > > This email is UNCLASSIFIED. > > [添付ファイル "SF 122 Listing DT 040411.pdf" は hatada-hiroyuki/MITI-LAN > が削除しました]

> >

, ,

From: Sent: To:

Subject:

Cherry, Ronald C <CherryRC@state.gov> Sunday, April 10, 2011 12:20 AM Aaron Leong; Duncan, Aleshia D; Howard, E. Bruce; Kenneth Spurlock; Maj. Keith Simmers; Way, Ralph; Rod Tanaka Awan, Riaz X (Sofia - DOE); Jeffrey.Miller@pnl.gov FW: Signed Transfer of Title document

FYI.

Cc:

This email is UNCLASSIFIED

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

From: hatada-hiroyuki@meti.go.jp [mailto:hatada-hiroyuki@meti.go.jp] Sent: Saturday, April 09, 2011 12:24 PM

To: Tilden, Jay

Cc: hatada-hiroyuki@meti.go.jp; Cherry, Ronald C; Duncan, Aleshia D; hideaki.konagaya@mofa.go.jp; hikohito.oishi@mofa.go.jp; hiroshi.sanomura@mofa.go.jp; masakatsu.murotani@mofa.go.jp; funakikentaro@meti.go.jp; ichii-naoto@meti.go.jp; PWG; sakuma-yasuhiro; endo-yutaka Subject: Re: Signed Transfer of Title document

Dear Cherry-san, Tilden-san,

Thank you for your quick response. Attached please find the document with NISA DG signature. I appreciate your support on this.

Very respectfully,

Hiroyuki Hatada METI

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

> I am pleased to forward the executed transfer of title document for

the GoJ to execute. We have incorporated all changes and this document can cover all equipment transfers from the Department of Energy and the National Nuclear Security Administration to the Government of Japan, METI/NISA.

> Also attached is the final list of equipment in the first shipment, due to arrive today JST. Warmest Regards - Jay

> > Jay A. Tilden > Japan Logistics Coordinator & > Dir. > NA-47, NNSA > 202-586-3165 > > > -----Original Message-----

3/163

> From: Tilden, Jay > Sent: Friday, April 08, 2011 1:32 PM > To: 'hatada-hiroyuki@meti.go.jp'; Cherry, Ron > Cc: Duncan, Aleshia (State Dept); hideaki.konagaya@mofa.go.jp; hikohito.oishi@mofa.go.jp; hiroshi.sanomura@mofa.go.jp; masakatsu. murotani@mofa.go.jp; funaki-kentaro@meti.go.jp; ichii-naoto@meti.go.jp > Subject: RE: transfer of title document (Robot donation) > > Hatada-san, > > Thank you so much for the meeting last night and proposed changes with your MOFA colleagues. We are making the changes now, will have it signed, we will then PDF this to you, you can print it and sign it, and PDF it back to us. While the quality will not be great, it will be quick. Thank you - Jay > > Jay A. Tilden > Japan Logistics Coordinator & > Dir. > NA-47, NNSA > 202-586-3165 > > > ----- Original Message-----> From: hatada-hiroyuki@meti.go.jp [mailto:hatada-hiroyuki@meti.go.jp] > Sent: Friday, April 08, 2011 12:59 PM > To: Cherry, Ron > Cc: Duncan, Aleshia (State Dept); hideaki.konagaya@mofa.go.jp; hikohito.oishi@mofa.go.jp; hiroshi.sanomura@mofa.go.jp; Tilden, Jay; masakatsu.murotani@mofa.go.jp; funakikentaro@meti.go.jp; ichii-naoto@ meti.go.jp > Subject: Re: transfer of title document (Robot donation) > > Dear Cherry-san, > > In addition to the proposed change from MOFA, the last sentence was pointed out as something to correct in the phone conference. > Attached is the version that I incorporated the two corrections into. > If everyone is OK with this, let's go with this. > My question is, do we do exchange of signing by electronic means? > > Regards, > > Hiroyuki > (See attached file: transfer of title - recipient is NISA - MOFA rev last sec rev.docx) > > > Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry > Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp > 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / > 03-3501-1692 >

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> 送信元:
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> "Cherry, Ronald C" <cherryrc@state.gov></cherryrc@state.gov>
> >
> >
> 宛先:
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> >
> <hikohito.oishi@mofa.go.jp></hikohito.oishi@mofa.go.jp>
> [<inconto.org methoda.go.jb=""></inconto.org>
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> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, <</masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp>
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> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, <</masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp>
> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, </hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp>
 > <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, <</masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp> hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan,</hideaki.konagaya@mofa.go.jp> Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov> > >
 <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, <</masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp> hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan,</hideaki.konagaya@mofa.go.jp> Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov> > >
 > <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, <</masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp> hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan,</hideaki.konagaya@mofa.go.jp> Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov> > >
 > <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, <</masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp> hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan,</hideaki.konagaya@mofa.go.jp> Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov> Aleshia D" <
 > <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, </hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp> > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov>
 > <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, <</masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp> hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan,</hideaki.konagaya@mofa.go.jp> > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov> > >
> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov> > ></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp>
 > <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, <</masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp> hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan,</hideaki.konagaya@mofa.go.jp> > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov> > >
> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov> > ></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp>
> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov> ></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp>
> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov> > ></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp>
<pre>> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp></pre>
<pre>> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp></pre>
<pre>> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp></pre>
<pre>> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp></pre>
<pre>> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp></pre>
<pre>> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp></pre>
> <hatada-hiroyuki@meti.go.jp>, <masakatsu.murotani@mofa.go.jp>, < hiroshi.sanomura@mofa.go.jp>, <hideaki.konagaya@mofa.go.jp>, "Duncan, > Aleshia D" <duncanad@state.gov>, <jay.tilden@nnsa.doe.gov> > ></jay.tilden@nnsa.doe.gov></duncanad@state.gov></hideaki.konagaya@mofa.go.jp></masakatsu.murotani@mofa.go.jp></hatada-hiroyuki@meti.go.jp>

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>
> Dear Oishi-san,
>
> Thank you for your email, and also for the efforts you and your
colleagues have made to finalize the transfer of title document.
>
> We will be in touch with you once our legal staff have had the chance
to review your proposed addition to the letter.
>
> Best regards,
>
> Ron Cherry
> This has been sent from my Blackberry
> ----- Original Message -----
> From: OISHI HIKOHITO <hikohito.oishi@mofa.go.jp>
> To: Cherry, Ronald C
> Cc: hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp>; MUROTANI
MASAKATSU <masakatsu.murotani@mofa.go.jp>; SANOMURA HIROSHI <hiroshi.
sanomura@mofa.go.jp>; KONAGAYA HIDEAKI <hideaki.konagaya@mofa.go.jp>
> Sent: Fri Apr 08 07:15:10 2011
> Subject: transfer of title document (Robot donation)
>
> Hi, Mr Cherry,
>
> As per our discussions over the last few days about the donation
document, we would like to propose insertion of the following paragraph before the last paragraph (This agreement will
be effective .... ):
>
> "Each Party shall implement the terms of this agreement in compliance
with applicable laws and regulations of its country."
> We do hope that this insertion will be acceptable to your side, and
that the texts of the document will be ready for signature between NISA and NNSA at the earliest opportunity.
>
> Best regards,
>
> Hikohito OISHI
> International Nuclear Cooperation Division MOFA
> Tel: 03-5501-8000 (ext. 2920)
> Division Direct No. 03-5501-8227
> Cell: (b)(6)
>
>
```

4.2

From:	RST01 Hoc
Sent:	Sunday, April 10, 2011 5:05 AM
To:	(b)(6)
Cc:	
Subject:	Criterion to Establish Stable Conditions - NRC DRAFT 4_10_0300.docx

Please find attach the latest draft "Criterion to Establish Stable Conditions." The document is being developed in response to multiple requests from NISA.

It is an improvement over the version distributed yesterday. The current version incorporates the feedback received from DOE/NE and NR during the April 9 telecon (swing shift) as well as the comments from the NRC Japan site team.

RST is working to develop a final document for transmittal to NISA soon. We would appreciate review and comments ASAP.

RST

D3/164

From:	hatada-hiroyuki@meti.go.jp
Sent:	Sunday, April 10, 2011 11:14 PM
То:	Jay Tilden@nnsa.doe.gov
Cc:	(b)(6) AwanRX@state.gov; CherryRC@state.gov;
	DuncanAD@state.gov; funaki-kentaro@meti.go.jp; hiro.hirukawa@aist.go.jp; horiguchi-
	shin@meti.go.jp; HowardEB@state.gov; ichii-naoto@meti.go.jp; jeffrey.miller@pnl.gov;
	(b)(6) mizuo@fsinet.or.jp;
	npd_tanaka_t@tepsco.co.jp; n.koyachi@aist.go.jp; oikawa.kageharu@tepco.co.jp;
	okuda-shuji@meti.go.jp; Way, Ralph;[(b)(6) shin.kato@aist.go.jp;
	yagi.n@tepco.co.jp
Subject:	Re: tracking the shipment
If they are correct, 5 piece The 4 piece shipment's tra If this is incorrect, please le	lled me and they THINK they have identified it from my 8-digit number.
Thank you,	
Hiroyuki	·
Hirovuki Hatada Deputy	Director, Aerospace and Defense Industry
	omy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp
	製造産業局 航空機武器宇宙産業課 課長補佐 /
03-3501-1692	

> 送信元: >	
> "Tilden, Jay" <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov>	
> 宛先: >	•
> "'hatada-hiroyuki@meti.go.jp''' <hatada-hiroyuki@meti.go.jp>, "Cherry, Ron" <cherryrc@state.gov> </cherryrc@state.gov></hatada-hiroyuki@meti.go.jp>	-1
>>	$\neg \Diamond \land$

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Cc:	
> >>	I
(b)(6) , Av	vanRX <awanrx@state.gov>, "Duncan, Aleshia (State Dept)"</awanrx@state.gov>
<duncanad@state.gov>,]</duncanad@state.gov>	
"'funaki-kentaro@meti.go.jp'" <funaki-kentaro@meti.< td=""><td>.go.jp>, "'hiro.hirukawa@aist.go.jp'" <hiro.hirukawa@aist.go.jp>,</hiro.hirukawa@aist.go.jp></td></funaki-kentaro@meti.<>	.go.jp>, "'hiro.hirukawa@aist.go.jp'" <hiro.hirukawa@aist.go.jp>,</hiro.hirukawa@aist.go.jp>
 "'horiguchi-shin@meti.go.jp'" <horiguchi-shin@meti.g naoto@meti.go.jp'" </horiguchi-shin@meti.g 	go.jp>, "'HowardEB@state.gov'" <howardeb@state.gov>, "'ichii-</howardeb@state.gov>
<pre> <ichii-naoto@meti.go.jp>, "Miller, Jeffrey A" <jeffrey.r< pre=""></jeffrey.r<></ichii-naoto@meti.go.jp></pre>	niller@pnl.gov>, (b)(6)
(b)(6)	
"'npd tanaka t@tepsco.co.jp"	
	,''' <n.koyachi@aist.go.jp>, "'oikawa.kageharu@tepco.co.jp'''</n.koyachi@aist.go.jp>
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	.go.jp'" <okuda-shuji@meti.go.jp>, "'ralph.way@nrc.gov'"</okuda-shuji@meti.go.jp>
<ralph.way@nrc.gov>, (b)(6)</ralph.way@nrc.gov>]"'shin.kato@aist.go.jp'" <shin.kato@aist.go.jp>,</shin.kato@aist.go.jp>
"'yagi.n@tepco.co.jp'''] aumura co Graner Berlik, annung co Graner Berlik, a
<pre> <yagi.n@tepco.co.jp></yagi.n@tepco.co.jp></pre>	I
>	
> 日付:	
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>	
2011/04/11 12:07	1
>>	
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>	
Re: tracking the shipment	
>	
We will look into this and get back with you tomorrow -	lav
we will look into this and get back with you tomorrow	, ay
Original Message	
From: hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@m< td=""><td>eti.go.jp></td></hatada-hiroyuki@m<>	eti.go.jp>
To: Cherry, Ron Cc: (b)(6) arat	nata.taichiro@tepco.co.jp <arahata.taichiro@tepco.co.jp>;</arahata.taichiro@tepco.co.jp>
AwanRX; Duncan, Aleshia (State Dept); funaki-kentaro@	
hiro.hirukawa@aist.go.jp <hiro.hirukawa@aist.go.jp>; h</hiro.hirukawa@aist.go.jp>	•
	oto@meti.go.jp <ichii-naoto@meti.go.jp>; Tilden, Jay; Miller,</ichii-naoto@meti.go.jp>
(b)(6)	
	uo@fsinet.or.jp>; npd_tanaka_t@tepsco.co.jp
<pre><npd_tanaka_t@tepsco.co.jp>; n.koyachi@aist.go.jp <n. <pre="">coikawa kagabagu@tanga co.ip>; okuda chuii@mati go</n.></npd_tanaka_t@tepsco.co.jp></pre>	
<oikawa.kageharu@tepco.co.jp>; okuda-shuji@meti.go.</oikawa.kageharu@tepco.co.jp>	אלאריאראלארארארארארארארארארארארארארארארא

shin.kato@aist.go.jp <shin.kato@aist.go.jp>;

<ralph.way@nrc.gov>; (b)(6) yagi.n@tepco.co.jp <yagi.n@tepco.co.jp> Sent: Sun Apr 10 22:56:23 2011 Subject: tracking the shipment

Dear Cherry-san,

ţ

As I talked to you over the phone, below is the current problem that I am facing regarding the shipment that is behind the expected arrival date.

-Expected arrival date is April 9, but I have just confirmed that it has not arrived yet at Tsukuba, as of around 11am April 11.

-I am not sure if it has arrived at Narita.

-I tried to track it, and the only response from Fedex automatic system is below that only says that it has not been delivered.

-I called Fedex customer support, but they needed "12-digit" tracking code, not the 8 digit one that I received from your team.

-I tried to persuade, but they insisted that they can't track unless they have 12 digit number.

Thus, I need your help providing me with 12-digit number, or track it from your side to see what's happening and what can be done.

Thanks for your assistance.

Very respectfully,

Hiroyuki

Hiroyuki Hatada	Deputy Director, Aerospace and Defense Industry
Division, Ministry	of Economy, Trade and Industry / +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp
畑田 浩之 経済	産業省 製造産業局 航空機武器宇宙産業課 課長補佐 /
03-3501-1692	

転送者: hatada-hiroyuki/MITI-LAN 転送日: 2011/04/11 11:46
>
送信元:
>
>
"FedEx Freight" <ecommerce@freight.fedex.com></ecommerce@freight.fedex.com>
>
>
宛先:
>
>

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hatada-hiroyuki@meti.go.jp	
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> 日付:	
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2011/04/11 11:20	
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件名: >	
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Shipment Status	
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FedEx Freight FodEx Freight Tracker Statur	
FedEx Freight Tracker Status As of Sunday, April 10, 2011 9:18:58 PM Central Daylight Time	
HELP Document Do you have any shipments we could pick up today?	
Call 1-800-874-4723 or your nearest Customer Center.	
Current Status of Shipment for FB#: 54501824	
Origin Service Center:	
Destination Service Center:	
Pickup Date: 04/05/2011 ETA Date: 04/09/2011	
Act. Delivery: NOT DELIVERED	
Weight: 1613	
Pieces: 5	
Over, Short & Damaged Exceptions: None	

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Copyright 2001-2002 FedEx

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From:	吉野 伸 <yoshino.shin@tepco.co.jp></yoshino.shin@tepco.co.jp>
Sent:	Monday, April 11, 2011 7:20 AM
То:	Tilden, Jay; 'derek.wadsworth@inl.gov'
Cc:	'arahata.taichiro@tepco.co.jp'; Cherry, Ron; 'yagi.n@tepco.co.jp'; 'hatada-
	hiroyuki@meti.go.jp'; Miller, Jeffrey A; AwanRX; 'hiro.hirukawa@aist.go.jp';
	'n.koyachi@aist.go.jp'; 'shin.kato@aist.go.jp'; 'mizuo@fsinet.or.jp';
	'npd_tanaka_t@tepsco.co.jp'; (b)(6) Way, Ralph; 'okuda-
	shuji@meti.go.jp'; (b)(6)
	naoto@meti.go.jp'; 'HowardEB@state.gov'; 'horigu <u>chi-shin@meti.go.jp'; 'funa</u> ki-
	kentaro@meti.go.jp'; Duncan, Aleshia (State Dept); (b)(6)
	'oikawa.kageharu@tepco.co.jp'; McFarlane, Harold; NITOPS; PWG; Larzelere, Alex; Kelly,
	John E (NE); Golub, Sal
Subject:	Re: 4 people support team for Talon and cameras

Dear Mr Tilden and Mr Wadsworth

I am Shin Yoshino in TEPCO, preparing for the reception of your team on Thursday(4/14) and Friday(4/15). My understanding is that your team

will provide us for the lecture and training of the Talon with a radiation camera. If you need some equipments, a projector, etc, please let me know in advance. The place where you will teach us has been determined to be AIST(Sansouken) in Tsukuba, about one hour-train from Tokyo. Details will be sent to you later.

I am looking forwards to seeing you.

Best wishes,

On Sun, 10 Apr 2011 11:12:57 -0400 "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov> wrote:

> Dear Yagi-san and Yoshino-san,

>

> Good evening, I am Jay Tilden and serve as the logistics coordinator for the US Dept of Energy. Dr. Derek Wadsworth, of the Idaho National Laboratory is your technical point of contact for the 4 person team we will deploy to you next week.

>

> His email is provided above and his direct phone number 208.526.8514.

> Derek and I are available to assist in any way we can. Regards - Jay

> Tilden

>

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

> From: 荒畑 太一朗 <arahata.taichiro@tepco.co.jp>

> To: Cherry, Ron; yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>;

> hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp>; Tilden, Jay

> Cc: 及川 景晴 <oikawa.kageharu@tepco.co.jp>; Miller, Jeffrey A; AwanRX;

> hiro.hirukawa@aist.go.jp <hiro.hirukawa@aist.go.jp>;

> n.koyachi@aist.go.jp <n.koyachi@aist.go.jp>; shin.kato@aist.go.jp

> <shin.kato@aist.go.jp>; mizuo@fsinet.or.jp <mizuo@fsinet.or.jp>;

> npd_tanaka_t@tepsco.co.jp <npd_tanaka_t@tepsco.co.jp>;

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ralph.way@nrc.gov

> <ralph.way@nrc.gov>; okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>;

≯<u>(b)(6)</u> ≯(b)(6)

> ichii-naoto@meti.go.jp <ichii-naoto@meti.go.jp>; Howard, E. Bruce

> <HowardEB@state.gov>; horiguchi-shin@meti.go.jp

> <horiguchi-shin@meti.go.jp>; funaki-kentaro@meti.go.jp

> <funaki-kentaro@meti.go.jp>; Duncan, Aleshia (State Dept);

×(b)(6)

> Sent: Sun Apr 10 08:48:24 2011

> Subject: Re: 4 people support team for Talon and cameras

>

> Dear Mr. Cherry

>

> Thanks for proposing US support team visit to Japan.

>

> The principal point of contact at TEPCO will be

> Mr.Yoshino(yoshino.shin@tepco.co.jp) at Mechanical System Group of

> laboratory.

> I think you know from Mr.Yagi's mail ,specific activities date of

> Talon with mapping function has not yet decided.

> First, on April 14-15, Mr. Yoshino will evaluate the performance and

> how to use The Talon and cameras, then we will judge the introduction

> of the Talon to Fukushima Daiichi NPS and decide the schedule with the

> persons concerned.

> Therefore We will not ask your operation support just after April 15.

> Thank you.

>

- > Best regards,
- > Naoto Yagi

> TEPCO

>

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

> From: "Cherry, Ronald C" <CherryRC@state.gov>

> To: <yagi.n@tepco.co.jp>; <hatada-hiroyuki@meti.go.jp>;

> <Jay.Tilden@nnsa.doe.gov>

> Cc: "荒畑 太一朗" <arahata.taichiro@tepco.co.jp>; "及川 景晴"

> <oikawa.kageharu@tepco.co.jp>; <Jeffrey.Miller@pnl.gov>; "Awan, Riaz X

> (Sofia - DOE)" <AwanRX@state.gov>; <hiro.hirukawa@aist.go.jp>;

> <n.koyachi@aist.go.jp>; <shin.kato@aist.go.jp>; <mizuo@fsinet.or.jp>;

> <npd_tanaka_t@tepsco.co.jp>; (b)(6)

> <ralph.way@nrc.gov>; <okuda-shuji@meti.go.jp>;

> (b)(6)

<ichii-naoto@meti.go.jp>; "Howard, E. Bruce"

> <HowardEB@state.gov>; <horiguchi-shin@meti.go.jp>;

> <funaki-kentaro@meti.go.jp>; "Duncan, Aleshia D" <DuncanAD@state.gov>;

> (b)(6)

> Sent: Sunday, April 10, 2011 9:56 AM

> Subject: RE: 4 people support team for Talon and cameras

>

>

>> Dear Yagi-san,

>>

```
>> Thanks for your email. I understand the technical point of contact
>> at Idaho National Laboratory will be Mr. Derek Wadsworth. Mr.
>> Tilden at DOE Headquarters will be in touch soon with more specific
>> information. In the meantime, can you tell me who the principal
>> point of contact at TEPCO will be? Will that be yourself, or someone else?
>>
>> Thank you, again.
>>
>> Best regards,
>>
> > Ron
> > Ronald C. Cherry
>> Energy Attach??
>> Director, DOE Japan Office
>> U.S. Embassy Tokyo
>> Tel. (0)3-3224-5444
>> Fax (0)3-3224-5769
>> Cell (0](b)(6)
>> email CherryRC@state.gov
>>
>> This email is UNCLASSIFIED
>>
>>-----Original Message-----
>> From: 八木 直人 [mailto:yagi.n@tepco.co.jp]
>> Sent: Sunday, April 10, 2011 5:10 AM
>> To: hatada-hiroyuki@meti.go.jp; Cherry, Ronald C
->> Cc: 荒畑 太一朗; 及川 景晴; Jeffrey.Miller@pnl.gov; Awan, Riaz X (Sofia -
>> DOE); hiro.hirukawa@aist.go.jp; n.koyachi@aist.go.jp;
>> shin.kato@aist.go.jp; mizuo@fsinet.or.jp; npd_tanaka_t@tepsco.co.jp;
                            alph.way@nrc.gov; okuda-shuji@meti.go.jp;
>>(b)(6)
> >(b)(6)
>> Jay.Tilden@nnsa.doe.gov; ichii-naoto@meti.go.jp; Howard, E. Bruce;
>> horiguchi-shin@meti.go.jp; funaki-kentaro@meti.go.jp; Duncan,
> Aleshia D; (b)(6)
>> Subject: Re: 4 people support team for Talon and cameras
>>
>> Dear Mr. Cherry
>>
>> Thanks for proposing US support team visit to Japan.
>>
>> Suggested schedule on April 14-15 from us is the earliest days we
>> will be able to be trained. We are frexible on the shchedule.
>>
>> We also would like to know how many days you think adequate to be trained.
>> We are currently cosidering using DOE offered Talon to make outside
>> radiation map at first. Then we might use it inside buildings for
>> any kind of monitoring activities. Specific activities date is not yet decided.
>> Before that our team need to grasp the performance of Talon and
>> cameras and what those equipments can adapt at the site for recovery activities.
>>
>> I would like to closely contact with you regarding your kind support.
>>
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>> Thank you.

>>

> > Best regards,

> > Naoto Yagi

> > TEPCO

>>

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

>> From: "Cherry, Ronald C" <CherryRC@state.gov>

> > To: hatada-hiroyuki@meti.go.jp

> > Cc: (b)(6) "Duncan, Aleshia D"

>> <DuncanAD@state.gov>; <funaki-kentaro@meti.go.jp>; <horiguchi-shin@meti.go.jp>; "Howard, E.

>> Bruce"

>> <HowardEB@state.gov>; <ichii-naoto@meti.go.jp>;

>><Jay.Tilden@nnsa.doe.gov>; (b)(6)

>> (b)(6)

>><npd tanaka t@tepsco.co.jp>; <mizuo@fsinet.or.jp>;

>> <shin.kato@aist.go.jp>; <n.koyachi@aist.go.jp>; <hiro.hirukawa@aist.go.jp>; "Awan, Riaz X (Sofia - DOE)"

> > <AwanRX@state.gov>; <Jeffrey.Miller@pnl.gov>

> > Sent: Saturday, April 09, 2011 11:40 PM

> > Subject: Re: 4 people support team for Talon and cameras

>>

>>

> >> Dear Hatada-san,

> >>

>>> Mr. Tilden at DOE Headquarters can provide advice on whom TEPCO

> >> should contact to coordinate the details of the visit by the team.

>>> I believe the team can come to Japan in time to work on April

> >> 14-15, but I also believe it would be good for the U.S. team and

> >> TEPCO to agree in advance on what activities will be done and how

>>> much time may be need to do that. Our point of contact can work that out with TEPCO.

>>>

> >> The equipment should have arrived at AIST by now. Please let me

> >> know when AIST confirms its arrival, or if it has not, then we

>>> should take the necessary steps to track itn so it will be ready

> >> when the US team arrives.

> >>

> >> Thank you.

> >>

> >> Best regards,

> >>

> >> Ron

> >>

> >>

> >> This has been sent from my Blackberry

> >>

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

>>> From: hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp>

> >> To: Cherry, Ronald C

>>> Cc¹(b)(6) (b)(6) ; Duncan, Aleshia D;

>>> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>;

>>> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>; Howard, E.

>>> Bruce; ichii-naoto@meti.go.jp <ichii-naoto@meti.go.jp>;

> >> Jay.Tilden@nnsa.doe.gov <Jay.Tilden@nnsa.doe.gov>;

>>><u>(b)(6)</u>

>>>(b)(6)

>>> okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>; ralph.way@nrc.gov

> >> <ralph.way@nrc.gov>{(b)(6)

>>> ((b)(6) yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>;

>>> npd_tanaka_t@tepsco.co.jp <npd_tanaka_t@tepsco.co.jp>;

>>> mizuo@fsinet.or.jp <mizuo@fsinet.or.jp>; shin.kato@aist.go.jp

>>> <shin.kato@aist.go.jp>; n.koyachi@aist.go.jp

>>> <n.koyachi@aist.go.jp>; hiro.hirukawa@aist.go.jp

>>> <hiro.hirukawa@aist.go.jp>

> >> Sent: Sat Apr 09 08:41:27 2011

>>> Subject: 4 people support team for Talon and cameras

> >>

>>>

>>> Dear Cherry-san,

>>>

> >> Regarding the support team consisting of 4 people to assist us with

>>> Talon and cameras that was mentioned in your previous email, TEPCO

>>> told me it would be great if the team could help them on

>>> dates/place shown below:

>>>

>>> When : 14th and 15th April

>>> Where : The National Institute of Advanced Industrial

>>> Science and Technology (AIST)

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>>> Address: Teragu Kashiwa-yama 1497-1, Tsukuba-city, Ibaraki,
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> >> JAPAN

>>>

> >> If this is acceptable to your side, TEPCO is ready to coordinate

>>> the detail on this. Please let us know who to talk to.

> >>

>>> By the way, if I remember correctly, I heard from you that the team >>> would be helpful in starting up the equipment, like assembling.

>>> If this is the case, it sounds to me that we could do the "meeting

>>> the equipment" in the morning of 14th, rather than doing it right

> >> after the shipment arrival to find ourselves waiting to become able

>>> to even start up the equipment. I appreciate your thought on this.

> >> Of course, my assumption is that it will arrive on or by 13th,

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>>> though it seems that it is taking more time than expected.
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> >>

>>> Very respectfully,

> >>

>>> Hiroyuki

> >>

>>>

>>>

>>> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry

>>> Division, Ministry of Economy, Trade and Industry /

>>> +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp

>>> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 /

> >> 03-3501-1692

> >> >>> > >> > >> > >> >>> 送信元: hatada-hiroyuki/MITI-LAN >>> 宛先: "Cherry, Ronald C" < CherryRC@state.gov> >>> Cc: "Aaron Leong" ((b)(6) 'Duncan, Aleshia D" >>> <DuncanAD@state.gov>, funaki-kentaro@meti.go.jp, >>> horiguchi-shin@meti.go.jp, "Howard, E. Bruce" <HowardEB@state.gov>, >>> Jay.Tilden@nnsa.doe.gov, "Maj. Keith Simmers" >>> (b)(6) "Kenneth Spurlock" >>>|(b)(6) , okuda-shuji@meti.go.jp, "Ralph Way" >>> <ralph.way@nrc.gov>, "Rod Tanaka" (b)(6) >>> ichii-naoto/MITI-LAN@MITI-LAN >>>日付:2011/04/0901:10 >>> 件名: Re: FW: Equipment listing for shipment today > >> >>> >>> > >> >>> >>> Dear Cherry-san, > >> >>> > >> For the video and electronic copies of the manuals, TEPCO says that >>> they want them to be sent to the following address. >>> Regarding the support team of 4 people, we really appreciate the >>> offer but TEPCO needs to arrange the date so that research >>> institutes supporting TEPCO can also attend. >>> Hopefully I can get back to you tomorrow with TEPCO's request on this. >>> Thank you, >>> >>> Shin YOSHINO >>> Machinery Systems Technology Group, Technology Development Research >>> Institute, Tokyo Electric Power Company Egasaki-cho 4-1, >>> Tsurumi-ku, Yokohama-city, Kanagawa 230-8510, Japan >>> >>> Email yoshino.shin@tepco.co.jp > >> >>> TEL 045-394-6361 >>> FAX 045-585-8647 > >> > >> >>> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >>> Division, Ministry of Economy, Trade and Industry / >>> +81-3-3501-1692 / hatada-hiroyuki@meti.go.jp >>> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>> 03-3501-1692 > >> > >> > >>

>>> >>> > >> >>>送信元: "Cherry, Ronald C" <CherryRC@state.gov> >>> 宛先: <hatada-hiroyuki@meti.go.jp> "Duncan, Aleshia D" > >> Cc: "Aaron Leong" (b)(6) >>> <DuncanAD@state.gov>, "Howard, E. Bruce" <HowardEB@state.gov>, > >> "Kenneth Spurlock" ((b)(6) "Maj. Keith Simmers" >>> (b)(6)"Ralph Way" <ralph.way@nrc.gov>, "Rod Tanaka" >>> (b)(6) <funaki-kentaro@meti.go.jp>, >>> <horiguchi-shin@meti.go.jp>, <okuda-shuji@meti.go.jp>, >>> <Jay.Tilden@nnsa.doe.gov> >>> 日付: 2011/04/06 18:37 >>> 件名; FW; Equipment listing for shipment today >>> >>> >>> > >> >>> >>> > >> Dear Hatada-san, >>> >>> This is to inform you that the Talon robot with radiation mapping >>> capability and the radiation hardened camera systems have now been > >> shipped. It's estimated they will arrive in Japan on Friday, April 8. >>> Attached please find the list of the equipment that is in the shipment. > >> >>> I would like to discuss with you arrangements to meet the equipment >>> upon its arrival in Japan. > >> >>> Prior to shipping, Idaho National Laboratory made a video of >>> operational details of all the equipment. We can provide the video >>> and electronic copies of the manuals for most of the systems. >>> Please let us know to whom the video and the other electronic files >>> should be delivered. > >> >>> In addition, DOE is considering sending up to four people to Japan >>> in support of the equipment delivery. Specifically, we propose to >>> send two teams of two persons each to support the setup, training, >>> and operational support of the Talon system and the cameras (total >>> of 4 people). Our laboratory recommends that two people are needed >>> for each of the groups of equipment to technically trouble shoot >>> and support their operation. If you agree, then I would be happy >>> to work with you on the details of when the team should come and >>> where they would work with their Japanese counterparts. >>> >>> I look forward to hearing from you. > >> >>> Best regards, > >>

- > >> Ron
- > >> Ronald C. Cherry

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>>> Energy Attach??
>>> Director, DOE Japan Office
>>> U.S. Embassy Tokyo
>>> Tel. (0)3-3224-5444
>>> Fax (0)3-3224-5769
>>> Cell (0(b)(6)
>>> email CherryRC@state.gov <mailto:CherryRC@state.gov>
>>>
> >>
>>>
>>>
>>> This email is UNCLASSIFIED.
> >>
>>> [添付ファイル "SF 122 Listing DT 040411.pdf" は hatada-hiroyuki/MITI-LAN
> >> が削除しました]
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From:	Derek C Wadsworth	<derek.wadsworth@inl.gov></derek.wadsworth@inl.gov>	>	
Sent:	Monday, April 11, 20	11 4:58 PM		
То:	八木 直人; Jay.Tilden(@nnsa.doe.gov		
Cc:	(b)(6)arzelere, Alex; arahata.taichiro@tepco.co.jp; AwanRX; Cherry,			
	Ron; Duncan, Aleshia	(State Dept); funaki-kentaro	@meti.g	o.jp; McFarlane, Harold;
	hatada-hiroyuki@me	ti.go.jp; hiro.hirukawa@aist.g	jo.jp; hoi	iguchi-shin@meti.go.jp;
	HowardEB@state.gov	/; ichii-naoto@meti.go.jp; Tilc	den, Jay;	Miller, Jeffrey A; Kelly, John E
	(NE); (b)(6)	(b)(6)		mizuo@fsinet.or.jp; NITOPS;
	npd_tanaka_t@tepsco	o.co.jp; n.koyachi@aist.go.jp;	oikawa.	kageharu@tepco.co.jp;
	okuda-shuji@meti.go	o.jp; PWG; Way, Ralph; (b)(6))	Golub, Sal;
	shin.kato@aist.go.jp;	吉野 伸		
Subject:	Radio Specifications			
Attachments:	Inquiries for Radio.xls	; Inquiries for Radio.xls		

Dear Yagi-san,

The following Excel spreadsheet has all of the radio information for the systems that were sent. Please contact me if you have any more questions.

Regards,

Derek Wadsworth

Derek Wadsworth Robotic & Human Systems Idaho National Laboratory Office: (208) 526-8514 Mobile: (b)(6) derek.wadsworth@inl.gov

八木 直人 <yagi.n@tepco.co.jp>

04/11/11 09:24 AM

To 吉野 伸 <yoshino.shin@tepco.co.jp>, "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov>, <derek.wadsworth@inl.gov>

cc <arahata.taichiro@tepco< th=""><th>.co.jp>, "Cherry, Ron" <</th><th>CherryRC@state.gov</th><th>i>, <hatada-< p=""></hatada-<></th></arahata.taichiro@tepco<>	.co.jp>, "Cherry, Ron" <	CherryRC@state.gov	i>, <hatada-< p=""></hatada-<>
hiroyuki@meti.go.jp>, "N	liller, Jeffrey A" <jeffrey.< td=""><td>.miller@pnl.gov>, "Aw</td><td>anRX"</td></jeffrey.<>	.miller@pnl.gov>, "Aw	anRX"
<awanrx@state.gov>, ·</awanrx@state.gov>	<hiro.hirukawa@aist.go.< td=""><td>.jp>, <n.koyachi@aist< td=""><td>.go.jp>,</td></n.koyachi@aist<></td></hiro.hirukawa@aist.go.<>	.jp>, <n.koyachi@aist< td=""><td>.go.jp>,</td></n.koyachi@aist<>	.go.jp>,
<shin kato@aist.go.jp="">.</shin>	<mizuo@fsinet.or.jp>, <</mizuo@fsinet.or.jp>	npd_tanaka_t@tepsc	o.co.jp>,
l/b)(6)	<pre><raiph.wav@nrc.gov< pre=""></raiph.wav@nrc.gov<></pre>	<u>< <okuda< u="">-shuji@mel</okuda<></u>	i.go.jp>,
(b)(6)	1(b)(6)	, <ichii-naol< td=""><td>o@meti.go.jp>,</td></ichii-naol<>	o@meti.go.jp>,
<howardeb@state.gov></howardeb@state.gov>			ro@meti.go.jp>,
"Duncan, Aleshia \(State	Dept\)" <duncanad@s< td=""><td>tate.gov>, (b)(6)</td><td></td></duncanad@s<>	tate.gov>, (b)(6)	

<oikawa kageharu@tepco.co.jp>, "McFarlane, Harold" <harold.mcfarlane@inl.gov>, "NITOPS" <NITOPS@nnsa.doe.gov>, "PWG" <PWG@nnsa.doe.gov>, "Larzelere, Alex" <alex.larzelere@nuclear.energy.gov>, "Kelly, John E \(NE\)" <JohnE.Kelly@nuclear.energy.gov>, "Golub, Sal" <sal.golub@nuclear.energy.gov>

Subject Re: 4 people support team for Talon and cameras

Dear Mr Tilden and Mr Wadsworth

Good afternoon, I am Naoto Yagi working for TEPCO. We would like to know information about radio used by Talon. We have to get radio waves use permission from Ministry of Internal Affairs and Communications before starting up Talon in Japan. It is because its radio waves are US specific and not usually accepted in Japan.

And we also have to manage and control the frequency band resourses at the Fukushima site in order to avoid interferences between each radio-controled equipment.

Attached file is the format for radio information inquiries. We'd really appreciate if you fill in it and send back to us.

Thanks.

Best regards. Naoto Yagi **TEPCO** ----- Original Message -----From: "吉野 伸" <yoshino.shin@tepco.co.jp> To: "Tilden, Jay" <Jay. Tilden@nnsa.doe.gov>: <derek.wadsworth@inl.gov> Cc: <arahata.taichiro@tepco.co.jp>; "Cherry, Ron" <CherryRC@state.gov>; <yagi.n@tepco.co.jp>; <hatada-hiroyuki@meti.go.jp>; "Miller, Jeffrey A" <jeffrey.miller@pnl.gov>: "AwanRX" <AwanRX@state.gov>; <hiro.hirukawa@aist.go.jp>; <n.koyachi@aist.go.jp>; <shin.kato@aist.go.jp>; <mizuo@fsinet.or.jp>; <npd_tanaka_t@tepsco.co.jp>; (b)(6) <ralph.way@nrc.gov>; <okuda-shuji@meti.go.jp>; (b)(6) (b)(6) <ichii-naoto@meti.go.jp>; <HowardEB@state.gov>; <horiguchi-shin@meti.go.jp>; <funaki-kentaro@meti.go.jp>: "Duncan, Aleshia (State Dept) " <DuncanAD@state.gov>: (b)(6) <oikawa.kageharu@tepco.co.jp>; "McFarlane, Harold" <harold.mcfarlane@inl.gov>: "NITOPS" <NITOPS@nnsa.doe.gov>; "PWG" <PWG@NNSA. Doe. Gov>; "Larzelere, Alex" <alex. larzelere@nuclear.energy.gov>; ″Kelly, John E (NE)″ <JohnE.Kelly@Nuclear.Energy.Gov>; ″Golub, Sal″ <sal.golub@nuclear.energy.gov> Sent: Monday, April 11, 2011 8:20 PM Subject: Re: 4 people support team for Talon and cameras

> Dear Mr Tilden and Mr Wadsworth

>

> I am Shin Yoshino in TEPCO, preparing for the reception of your team > on Thursday(4/14) and Friday(4/15). My understanding is that your team > will provide us for the lecture and training of the Talon with a radiation > camera. If you need some equipments, a projector, etc, please let me know > in advance. The place where you will teach us has been determined to be > AIST(Sansouken) in Tsukuba, about one hour-train from Tokyo. Details will > be sent to you later. > I am looking forwards to seeing you. > > Best wishes. > > On Sun, 10 Apr 2011 11:12:57 -0400 > "Tilden, Jay" <Jay. Tilden@nnsa.doe.gov> wrote: > >> Dear Yagi-san and Yoshino-san, >>>> Good evening. I am Jay Tilden and serve as the logistics coordinator for >> the US Dept of Energy. Dr. Derek Wadsworth, of the Idaho National >> Laboratory is your technical point of contact for the 4 person team we >> will deploy to you next week. >>>> His email is provided above and his direct phone number 208.526.8514. >> Derek and I are available to assist in any way we can. Regards - Jay >> Tilden \gg >> ----- Original Message --->> From: 荒畑 太一朗 <arahata.taichiro@tepco.co.jp> >> To: Cherry, Ron; yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>; >> hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp>; Tilden, Jay >> Cc: 及川 景晴 <oikawa.kageharu@tepco.co.jp>: Miller, Jeffrey A: AwanRX: >> hiro.hirukawa@aist.go.jp <hiro.hirukawa@aist.go.jp>; n.koyachi@aist.go.jp >> <n.koyachi@aist.go.jp>: shin.kato@aist.go.jp <shin.kato@aist.go.jp>: >> mizuo@fsinet.or.jp <mizuo@fsinet.or.jp>; npd_tanaka_t@tepsco.co.jp >> <npd_tanaka_t@tepsco. co. jp>; (b)(6) ralph.way@nrc.gov <ralph.way@nrc.gov>; >> (b)(6) >> okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>; >>(b)(6) >](b)(6) ichii-naoto@meti.go.jp >> <ichii-naoto@meti.go.jp>; Howard, E. Bruce <HowardEB@state.gov>; >> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>: >> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; Duncan, Aleshia >> (State Dept); (b)(6) >> Sent: Sun Apr 10 08:48:24 2011 >> Subject: Re: 4 people support team for Talon and cameras \gg >> Dear Mr. Cherry >>>> Thanks for proposing US support team visit to Japan. >>>> The principal point of contact at TEPCO will be >> Mr.Yoshino(yoshino.shin@tepco.co.jp) at Mechanical System Group of \gg laboratory. >> I think you know from Mr. Yagi's mail , specific activities date of

>> Talon with mapping function has not yet decided. >> First on April 14-15 , Mr. Yoshino will evaluate the performance and how >> to >> use The Talon and cameras, >> then we will judge the introduction of the Talon to Fukushima Daiichi NPS >> and decide the schedule with the persons concerned. >> Therefore We will not ask your operation support just after April 15. >> Thank you. >>>> Best regards, >> Naoto Yagi >> TEPCO >>>> ----- Original Message ----->> From: "Cherry. Ronald C" <CherryRC@state.gov> >> To: <yagi.n@tepco.co.jp>: <hatada-hiroyuki@meti.go.jp>: >> <Jay. Tilden@nnsa. doe. gov> >> Cc: "荒畑 太一朗" <arahata.taichiro@tepco.co.jp>: "及川 景晴" >> <oikawa.kageharu@tepco.co.jp>: <Jeffrey.Miller@pnl.gov>: "Awan, Riaz X >> (Sofia - DOE) " <AwanRX@state.gov>; <hiro.hirukawa@aist.go.jp>; >> <n.koyachi@aist.go.jp>; <shin<u>kato@aist.go.jp>; <mizuo@fs</u>inet.or.jp>; >> <npd_tanaka_t@tepsco.co.jp>; (b)(6) >> <ralph.way@nrc.gov>; >> <okuda-shuji@meti.go.jp>: (b)(6) >>|(b)(6) <ichii-naoto@meti.go.jp>: "Howard, E. Bruce" >> <HowardEB@state.gov>; <horiguchi-shin@meti.go.jp>; >> <funaki-kentaro@meti.go.jp>: "Duncan, Aleshia D" <DuncanAD@state.gov>; >> |(b)(6) >> Sent: Sunday, April 10, 2011 9:56 AM >> Subject: RE: 4 people support team for Talon and cameras >>>>>> > Dear Yagi-san, >>>> >> > Thanks for your email. I understand the technical point of contact at >> > Idaho National Laboratory will be Mr. Derek Wadsworth. Mr. Tilden at >> > DOE >> > Headquarters will be in touch soon with more specific information. In >> > the >> > meantime, can you tell me who the principal point of contact at TEPCO >> > will >>> be? Will that be yourself, or someone else? >>>>> > Thank you, again. >>>>> > Best regards, >>>>> > Ron >> > Ronald C. Cherry >> > Energy Attach?? >> > Director, DOE Japan Office >> > U.S. Embassy Tokyo >> > Tel. (0) 3-3224-5444 >> > Fax (0) 3-3224-5769

>> > Cell (0)(b)(6)>> > email CherryRC@state.gov >>>>> > This email is UNCLASSIFIED $\rangle\rangle\rangle$ >> > -----Original Message-->>> From: 八木 直人 [mailto:yagi.n@tepco.co.jp] >> > Sent: Sunday, April 10, 2011 5:10 AM >> > To: hatada-hiroyuki@meti.go.jp; Cherry, Ronald C >> > Cc: 荒畑 太一朗; 及川 景晴; Jeffrey. Miller@pnl.gov; Awan, Riaz X >>> (Sofia - DOE); hiro.hirukawa@aist.go.jp; n.koyachi@aist.go.jp; >> > shin.kato@aist.go.jp; mizuo@fsinet.or.jp; npd_tanaka_t@tepsco.co.jp; <u>lralph.wav@nrc.gov: okuda-</u>şhuji@meti.go.jp; >> >(b)(6) >> >|(b)(6) >> > Jay. Tilden@nnsa.doe.gov: ichii-naoto@meti.go.jp; Howard, E. Bruce; >> > horiguchi-shin@meti.go.jp; funaki-kentaro@meti.go.jp; Duncan, Aleshia >> > D: >> > Aaron. Leong@usfj. mil >> > Subject: Re: 4 people support team for Talon and cameras >>>>>> > Dear Mr. Cherry >>>>>> > Thanks for proposing US support team visit to Japan. >>>>> > Suggested schedule on April 14-15 from us is the earliest days we will >> > be >> > able to be trained. We are frexible on the shchedule. $\rangle\rangle$ >> > We also would like to know how many days you think adequate to be >> > trained. >> > We are currently cosidering using DOE offered Talon to make outside >> > radiation map at first. Then we might use it inside buildings for any >> > kind >> > of monitoring activities. Specific activities date is not yet decided. >> > Before that our team need to grasp the performance of Talon and cameras $\rangle\rangle$ and what those equipments can adapt at the site for recovery >> > activities. >>>>>> > I would like to closely contact with you regarding your kind support. >>>>> > Thank you. $\rangle\rangle$ >> > Best regards, >> > Naoto Yagi >> > TEPCO $\rangle\rangle$ >> > ----- Original Message ----->> > From: "Cherry, Ronald C" <CherryRC@state.gov> >> > To: <hatada-hiroyuki@meti.go.jp> "Duncan, Aleshia D" <DuncanAD@state.gov>; >> > Cc: (b)(6)>> > <funaki-kentaro@meti.go.jp>; <horiguchi-shin@meti.go.jp>; "Howard, E. >> > Bruce" >> > <HowardEB@state.gov>; <ichii-naoto@meti.go.jp>; >> > <Jay. Tilden@nnsa. doe. gov>;

>> >(b)(6) >> > <okuda-shuji@meti.go.jp>: <ralph.way@nrc.gov>: >>>|(b)(6)|>> > <yagi.n@tepco.co.jp>: <npd_tanaka_t@tepsco.co.jp>: >> > <mizuo@fsinet.or.jp>: >> > <shin.kato@aist.go.jp>; <n.koyachi@aist.go.jp>; >> > <hiro.hirukawa@aist.go.jp>; "Awan, Riaz X (Sofia - DOE)" >> > <AwanRX@state.gov>: <Jeffrey.Miller@pnl.gov> >> > Sent: Saturday, April 09, 2011 11:40 PM >> > Subject: Re: 4 people support team for Talon and cameras >>>>>>>> >> Dear Hatada-san, $\gg \gg$ >>>> Mr. Tilden at DOE Headquarters can provide advice on whom TEPCO should >> >> contact to coordinate the details of the visit by the team. I believe >> >> the team can come to Japan in time to work on April 14-15, but I also >> >> believe it would be good for the U.S. team and TEPCO to agree in >> >> advance on what activities will be done and how much time may be need >> >> to do that. Our point of contact can work that out with TEPCO. $\gg \gg$ >> >> The equipment should have arrived at AIST by now. Please let me know >> >> when AIST confirms its arrival, or if it has not, then we should take >> >> the necessary steps to track itn so it will be ready when the US team \gg arrives. $\gg \gg$ >> >> Thank you. $\gg \gg$ >> >> Best regards. $\gg \gg$ >> >> Ron $\gg \gg$ $\gg \gg$ >> >> This has been sent from my Blackberry $\gg \gg$ >> >> ----- Original Message ----->> >> From: hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp> >> >> To: Cherry, Ronald C \rightarrow \rightarrow Cc: (b)(6) Duncan, Aleshia D; >> >> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; >> >> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>; Howard, E. >> >> Jay. Tilden@nnsa. doe. gov <Jay. Tilden@nnsa. doe. gov>; >> >> (b)(6) >>>>(b)(6)>> >> okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>: ralph.way@nrc.gov >> >> <ralph.way@nrc.gov>: (b)(6) >> >> yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>: npd_tanaka_t@tepsco.co.jp >> >> <npd_tanaka_t@tepsco.co.jp>; mizuo@fsinet.or.jp <mizuo@fsinet.or.jp>; >> >> shin.kato@aist.go.jp <shin.kato@aist.go.jp>; n.koyachi@aist.go.jp >> >> <n. koyachi@aist.go.jp>; hiro.hirukawa@aist.go.jp >> >> <hiro.hirukawa@aist.go.jp> >> >> Sent: Sat Apr 09 08:41:27 2011 >> >> Subject: 4 people support team for Talon and cameras

>> >> Dear Cherry-san. $\gg \gg$ >> >> Regarding the support team consisting of 4 people to assist us with >> >> Talon and cameras that was mentioned in your previous email, TEPCO \rightarrow told me it would be great if the team could help them on dates/place >> >> shown below: $\gg \gg$ $\gg \gg$ When : 14th and 15th April Where : The National Institute of Advanced Industrial Science \gg >> >> and Technology (AIST) $\gg \gg$ Address: Teragu Kashiwa-yama 1497-1, Tsukuba-city, Ibaraki, >> >> JAPAN $\rangle\rangle\rangle\rangle$ >> >> If this is acceptable to your side, TEPCO is ready to coordinate the >> >> detail on this. Please let us know who to talk to. $\rangle\rangle\rangle\rangle\rangle$ \gg By the way, if I remember correctly. I heard from you that the team >>>> would be helpful in starting up the equipment, like assembling. >> >> If this is the case, it sounds to me that we could do the "meeting the >> >> equipment" in the morning of 14th, rather than doing it right after >> >> the shipment arrival to find ourselves waiting to become able to even \rightarrow start up the equipment. I appreciate your thought on this. >> >> Of course, my assumption is that it will arrive on or by 13th, though >>>>> it seems that it is taking more time than expected. $\gg \gg$ >> >> Very respectfully. $\gg \gg$ >> >> Hiroyuki $\gg \gg$ $\gg \gg$ $\rangle\rangle\rangle\rangle$ >> >> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >> >> Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 >> >> / hatada-hiroyuki@meti.go.jp >> >> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >> >> 03-3501-1692 $\gg \gg$ $\gg \gg$ $\gg \gg$ $\gg \gg$ $\rangle\rangle\rangle\rangle$ >> >> 送信元: hatada-hiroyuki/MITI-LAN >> >> 宛先: "Cherry, Ronald C" <CherryRC@state.gov> >> >> Cc: "Aaron Leong" (b)(6)"Duncan, Aleshia D" >> >> <DuncanAD@state.gov>, funaki-kentaro@meti.go.jp, >> >> horiguchi-shin@meti.go.jp, "Howard, E. Bruce" <HowardEB@state.gov>, >> >> Jay. Tilden@nnsa.doe.gov, "Maj. Keith Simmers" >> >>(b)(6) "Kenneth Spurlock" >> >> (b)(6) , okuda<u>-shuji@meti.go.jp, "Ralph</u> Way" >> >> <ralph.way@nrc.gov>, "Rod Tanaka" (b)(6) >> >> ichii-naoto/MITI-LAN@MITI-LAN >> >> 日付: 2011/04/09 01:10

>> >> 件名: Re: FW: Equipment listing for shipment today $\gg \gg$ \gg $\gg \gg$ $\gg \gg$ $\gg \gg$ >> >> Dear Cherry-san, $\gg \gg$ $\gg \gg$ >> >> For the video and electronic copies of the manuals, TEPCO says that \gg \gg they want them to be sent to the following address. >> >> Regarding the support team of 4 people, we really appreciate the offer >> >>> but TEPCO needs to arrange the date so that research institutes >> >> supporting TEPCO can also attend. >> >> Hopefully I can get back to you tomorrow with TEPCO's request on this. >> >> Thank you. $\gg \gg$ >> >> Shin YOSHINO >> >> Machinery Systems Technology Group. >> >> Technology Development Research Institute, Tokyo Electric Power >> >> Company Egasaki-cho 4-1, Tsurumi-ku, Yokohama-city, Kanagawa 230-8510, >> >> Japan $\rangle\rangle\rangle\rangle\rangle$ >> >> Email yoshino.shin@tepco.co.jp $\gg \gg$ >> >> TEL 045-394-6361 >> >> FAX 045-585-8647 $\gg \gg$ $\gg \gg$ >> >> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >> >> Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 >> >> / hatada-hiroyuki@meti.go.jp >> >> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >> >> 03-3501-1692 $\gg \gg$ $\gg \gg$ $\gg \gg$ $\gg \gg$ $\gg \gg$ $\gg \gg$ >> >> 送信元: "Cherry, Ronald C" <CherryRC@state.gov> >> >> 宛先: <hatada-hiroyuki@meti.go.jp> "Duncan, Aleshia D" \rightarrow \rightarrow Cc: "Aaron Leong" ((b)(6) >> >> <DuncanAD@state.gov>, "Howard, E. <HowardEB@state.gov>. Bruce >> >> "Kenneth Spurlock" (b)(6) ▷, "Maj. Keith Simmers" >> >> /(b)(6) "Ralph Way" <ralph.way@nrc.gov>, "Rod >> >> Tanaka" >> >> <rodney.tanaka@usfj.mil>, <funaki-kentaro@meti.go, jp>, >> >> <horiguchi-shin@meti.go.jp>, <okuda-shuji@meti.go.jp>, >> >> <Jay. Tilden@nnsa. doe. gov> >>>> 日付: 2011/04/06 18:37 >> >> 件名: FW: Equipment listing for shipment today $\gg \gg$ \gg

 $\gg \gg$ $\gg \gg$ $\gg \gg$ $\rangle\rangle\rangle\rangle\rangle$ >> >> Dear Hatada-san, $\gg \gg$ >> >> This is to inform you that the Talon robot with radiation mapping >> >> capability and the radiation hardened camera systems have now been >> >> shipped. It's estimated they will arrive in Japan on Friday, April >>> 8. >>>>> Attached please find the list of the equipment that is in the >> >> shipment. >>>>>>>>> I would like to discuss with you arrangements to meet the equipment >> >> upon its arrival in Japan. $\rangle\rangle\rangle\rangle\rangle$ >> >> Prior to shipping. Idaho National Laboratory made a video of >>>> operational details of all the equipment. We can provide the video >> >> and electronic copies of the manuals for most of the systems. Please >>>> let us know to whom the video and the other electronic files should be >> >> delivered. $\rangle\rangle\rangle\rangle\rangle$ >> >> In addition. DOE is considering sending up to four people to Japan in >> >> support of the equipment delivery. Specifically, we propose to send \rightarrow two teams of two persons each to support the setup, training, and >> >> operational support of the Talon system and the cameras (total of 4 \rightarrow >> people). Our laboratory recommends that two people are needed for \gg each of the groups of equipment to technically trouble shoot and >> >> support their operation. If you agree, then I would be happy to work >> >> with you on the details of when the team should come and where they \gg >> would work with their Japanese counterparts. $\gg \gg$ >> >> I look forward to hearing from you. $\gg \gg$ >>>> Best regards. $\rangle\rangle\rangle\rangle\rangle$ >> >> Ron >> >> Ronald C. Cherry >> >> Energy Attach?? >> >> Director, DOE Japan Office >> >> U.S. Embassy Tokyo >> >> Tel. (0) 3-3224-5444 >> >> Fax (0) 3-3224-5769 >> >> Cell (0)|(b)(6)>> >> email CherryRC@state.gov <mailto:CherryRC@state.gov> $\gg \gg$ $\gg \gg$ >>>>>>>>>> >> This email is UNCLASSIFIED. \gg <u>>> >> [添付ファイル "SF 122 Listing DT 040411.pdf" は</u> >> >> hatada-hiroyuki/MITI-LAN >>>>> が削除しました]

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	Radio informati	on	
	example		Talon
		Video	Unknown
standard	IEEE802.11g	Data	Freewave FGR
		Telemetry	reewave HTP-900F
		Video	2 W
power	1Watt	Data	500 mW
		Telemetry	870 mW Max
		Video	1700-1900 MHz
frequency band	2.4GHz	Data	2.4 GHz
		Telemetry	900 MHz
		Video	Unknown
frequency bandwidth	2.409-2.480GHz	Data	2.400-2.4835 GHz
		Telemetry	902-928 MHz
		Video	1 Ch
number of channels	3CH	Data	112 CH
		Telemetry	41 CH
		Video	Unknown
bandwidth of the channels	22MHz/CH	Data	230 Khz
		Telemetry	611.2 kHz
		Video	Unknown
modulation system	OFDM, QPAS	Data	GFSK
		Telemetry	GFSK
existance or non-existance of		Video	No
	yes or no	Data	Yes
frequency hopping		Telemetry	Yes
existance or non-existance of		Video	No
	yes or no	Data	Yes
carrier sense		Telemetry	Yes

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Note: 10 Settings Available in this range, set at factory. Exact one in use unknown.

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	Radio info	ormation	
	example		Talon
standard	IEEE802.11g	Video	
Stanuaru	ILLLOUZ.TIg	Data	
nowor	1Watt	Video	
power	IWall	Data	
frequency band	2.4GHz	Video	
irequency band	2.4002	Data	
frequency	2.409-2.480GHz	Video	
bandwidth		Data	
number of channels	зсн	Video	
number of channels		Data	
bandwidth of the	22MHz/CH	Video	
channels		Data	
modulation evotors	OFDM, QPAS	Video	
modulation system		Data	
existance or non-		Video	
existance of	yes or no	Data	
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existance of carrier	yes or no	Data	

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Please fill in the blanks

From:	Stout, Donald <donald.stout@nnsa.doe.gov></donald.stout@nnsa.doe.gov>
Sent:	Monday, April 11, 2011 5:23 PM
Го:	Way, Ralph
Subiect:	FW: Harmonization Memo

Ralph, package o' stuff ref the Henry-Fremont-Podonsky séance on Friday. Don

-----Original Message-----From: Rieben, Benjamin E CTR OSD ATL [mailtd (b)(6) Sent: Friday, April 08, 2011 9:56 AM To: Hudson, Wayne E CIV OSD ATL; Stout, Donald; Leifheit, Kevin Cc: Whitehead, Thomas N LCDR OSD ATL; Wilcox, John T Col OSD ATL; West, Trina R CPO OSD ATL; Gillis, Roderick E Mr OSD ATL; Rieben, Benjamin E CTR OSD ATL; Martin, Anthony G CTR OSD ATL Subject: RE: Harmonization Memo

All,

Subject:

Please the attached Talking Points for review. I have also attached the current memo/associated papers which incorporate all NNSA comments.

Please let me know if you need anything else.

V/R. Eli Rieben

----Original Message-----From: Stout, Donald [mailto:Donald.Stout@nusa.doe.gov] Sent: Friday, April 08, 2011 8:23 AM To: Hudson, Wayne E CIV OSD ATL; Rieben, Benjamin E CTR OSD ATL Cc: Whitehead, Thomas N LCDR OSD ATL; Leifheit, Kevin Subject: RE: Harmonization Memo

Use 202-287-6614 @ 1015.

Thanks.

-----Original Message-----From: Hudson, Wayne E CIV OSD ATL (b)(6) Sent: Friday, April 08, 2011 7:45 AM To: Stout, Donald; Rieben, Benjamin E CTR OSD ATL Cc: Whitehead, Thomas N LCDR OSD ATL; Leifheit, Kevin Subject: RE: Harmonization Memo

Don

Do you have a number you want use to call in on

Wayne

-----Original Message-----From: Stout, Donald [mailto:Donald.Stout@nnsa.doe.gov] Sent: Thursday, April 07, 2011 4:52 PM To: Rieben, Benjamin E CTR OSD ATL; Hudson, Wayne E CIV OSD ATL Cc: Whitehead, Thomas N LCDR OSD ATL; Leifheit, Kevin Subject: Harmonization Memo

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Gents, touching base regarding the draft memo status and to synch on prepping the seniors for tomorrow's session. Appreciate any SITREP available and suggested time for a quick telecon in the AM.

Thanks. Don

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Don Stout NNSA/NA-72 OFC: 202-586-9933 BB: (b)(6)

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From:	Derek C Wadsworth <derek.wadsworth@inl.gov></derek.wadsworth@inl.gov>					
Sent:	Monday, April 11, 2011 8:19 PM					
To:	八木 直人					
Cc:	(b)(6) Larzelere, Alex; arahata.taichiro@tepco.co.jp; AwanRX; Cherry,					
	Ron; Duncan, Aleshia (State Dept); funaki-kentaro@meti.go.jp; McFarlane, Harold; hatada-hiroyuki@meti.go.jp; hiro.hirukawa@aist.go.jp; horiguchi-shin@meti.go.jp; HowardEB@state.gov; ichii-naoto@meti.go.jp; Jay.Tilden@nnsa.doe.gov; Miller, Jeffrey					
	A; Kelly, John E (NE); (b)(6)					
	mizuo@fsinet.or.jp; NITOPS; npd_tanaka_t@tepsco.co.jp; n.koyachi@aist.go.jp;					
	oikawa.kageharu@tepco.co.jp; okuda-shuji@meti.go.jp; PWG; Way, Ralph;					
	(b)(6) Golub, Sal; shin.kato@aist.go.jp; 吉野 伸					
Subject:	Re: Radio Specifications					

Dear Yagi-san,

You are very welcome. Please let me know if I can further assist you.

Regards,

Derek Wadsworth

Derek Wadsworth

Robotic & Human Systems Idaho National Laboratory Office: (208) 526-8514 Mobile: (b)(6) derek.wadsworth@inl.gov

八木 直入 <yagi.n@tepco.co.jp>

04/11/11 06:08 PM

To <Jay.Tilden@nnsa.doe.gov>, "Derek C Wadsworth" <Derek.Wadsworth@inl.gov>

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Subject Re: Radio Specifications

169

Dear Mr. Wadsworth Thanks for your prompt reply. The data you sent is very helpful for us. Best regards, Naoto Yagi **TEPCO** ---- Original Message -----From: "Derek C Wadsworth" <Derek. Wadsworth@inl.gov> To: "八木 直人" <yagi. n@tepco. co. jp>: <Jay. Tilden@nnsa. doe, gov> Cc: (b)(6) "Larzelere, Alex" <alex.larzelere@nuclear.energy.gov>; <arahata.taichiro@tepco.co.jp>; "AwanRX" <AwanRX@state.gov>: "Cherry, Ron" <CherryRC@state.gov>: "Duncan, Aleshia (State Dept) "McFarlane, Harold" <harold.mcfarlane@inl.gov>; <hatada-hiroyuki@meti.go.jp>; <hiro.hirukawa@aist.go.jp>; <horiguchi-shin@meti.go.jp>; <HowardEB@state.gov>; <ichii-naoto@meti.go.jp>; "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov>; "Miller, Jeffrey A" <jeffrey.miller@pnl.gov>: "Kelly, John E (NE)" <JohnE. Kelly@nuclear.energy.gov>; (b)(6) (b)(6) <mizuo@fsinet.or.jp>: "NITOPS" ITOPS@nnsa.doe.gov>; <npd_tanaka_t@tepsco.co.jp>; <n.koyachi@aist.go.jp>; <oikawa.kageharu@tepco.co.jp>: <okuda-shuji@meti.go.jp>; "PWG" <PWG@nnsa. doe. gov>; <ralph. way@nrc. gov>; (b)(6) "Golub, Sal" <sal.golub@nuclear.energy.gov>; <shin.kato@aist.go.jp>; "吉野 伸" <yoshino.shin@tepco.co.jp> Sent: Tuesday, April 12, 2011 5:58 AM Subject: Radio Specifications > Dear Yagi-san. > > The following Excel spreadsheet has all of the radio information for the > systems that were sent. Please contact me if you have any more questions. > > > > > > > Regards. > > Derek Wadsworth > > > > > Derek Wadsworth > Robotic & Human Systems > Idaho National Laboratory > Office: (208) 526-8514 > Mobile: (b)(6) > derek.wadsworth@inl.gov

> > > > > 八木 直人 <yagi.n@tepco.co.jp> > 04/11/11 09:24 AM > > To > 吉野 伸 <yoshino. shin@tepco. co. jp>, "Tilden, Jay" > <Jay. Tilden@nnsa. doe. gov>, <derek.wadsworth@inl.gov> > cc > <arahata.taichiro@tepco.co.jp>. "Cherry, Ron" <CherryRC@state.gov>. > <hatada-hiroyuki@meti.go.jp>, "Miller, Jeffrey A" > <jeffrey.miller@pnl.gov>, "AwanRX" <AwanRX@state.gov>, > <hiro.hirukawa@aist.go.jp>, <n.koyachi@aist.go.jp>, > <shin.kato@aist.go.jp>, <mizuo@fsinet.or.jp>, <npd_tanaka_t@tepsco.co.jp>, > (b)(6) <ralph.way@nrc.gov>, <okuda-shuji@meti.go.jp>, >(b)(6) (b)(6) > <ichii-naoto@meti.go.jp>, <HowardEB@state.gov>, > <horiguchi-shin@meti.go.jp>, <funaki-kentaro@meti.go.jp>, "Duncan, Aleshia > ¥(State Dept¥) ~ <DuncanAD@state.gov>, (b)(6) > <oikawa.kageharu@tepco.co.jp>. "McFarlane, Harold" > <harold.mcfarlane@inl.gov>, "NITOPS" <NITOPS@nnsa.doe.gov>, "PWG" > <PWG@nnsa.doe.gov>, "Larzelere, Alex" <alex.larzelere@nuclear.energy.gov>, > "Kelly, John E ¥(NE¥)" <JohnE.Kelly@nuclear.energy.gov>. "Golub. Sal" > <sal.golub@nuclear.energy.gov> > Subject > Re: 4 people support team for Talon and cameras > > > > > > > Dear Mr Tilden and Mr Wadsworth > > > Good afternoon, I am Naoto Yagi working for TEPCO. We would like to know > information about radio used by Talon. We have to get radio waves use > permission from Ministry of Internal Affairs and Communications before > starting up Talon in Japan. It is because its radio waves are US specific > and not usually accepted in Japan. > > And we also have to manage and control the frequency band resourses at the > > Fukushima site in order to avoid interferences between each > radio-controled > equipment. > > Attached file is the format for radio information inquiries. We'd really > appreciate if you fill in it and send back to us. > > Thanks. >

> Best regards, > Naoto Yagi > TEPCO > > ----- Original Message -----> From: "吉野 伸" <yoshino.shin@tepco.co.jp> > To: "Tilden, Jay" <Jay. Tilden@nnsa. doe. gov>; <derek. wadsworth@inl. gov> > Cc: <arahata.taichiro@tepco.co.jp>: "Cherry, Ron" <CherryRC@state.gov>; > <yagi.n@tepco.co.jp>: <hatada-hiroyuki@meti.go.jp>: "Miller, Jeffrey A" > <jeffrey.miller@pnl.gov>: "AwanRX" <AwanRX@state.gov>: > <hiro.hirukawa@aist.go.jp>; <n.koyachi@aist.go.jp>; > <shin.kato@aist.go.jp>: > <mizuo@fsinet.or.jp>; <npd_tanaka_t@tepsco.co.jp>; > (b)(6) > Kralph, way@nrc, gov>; <okuda-shuji@meti.go.jp>; ><u>|(b)(6)</u> >|(b)(6) <ichii-naoto@meti.go.jp>: <HowardEB@state.gov>: > <horiguchi-shin@meti.go.jp>; <funaki-kentaro@meti.go.jp>; "Duncan, Aleshia > > (State Dept) " <DuncanAD@state.gov>: (b)(6) > <oikawa.kageharu@tepco.co.jp>; "McFarlane, Harold > <harold.mcfarlane@inl.gov>; "NITOPS" <NITOPS@nnsa.doe.gov>; "PWG" > <PWG@NNSA Doe. Gov>; "Larzelere, Alex" <alex. larzelere@nuclear.energy.gov>; > > "Kelly, John E (NE)" <JohnE. Kelly@Nuclear. Energy. Gov>: "Golub, Sal" > <sal. golub@nuclear. energy. gov> > Sent: Monday, April 11, 2011 8:20 PM > Subject: Re: 4 people support team for Talon and cameras > > >> Dear Mr Tilden and Mr Wadsworth >>>> I am Shin Yoshino in TEPCO, preparing for the reception of your team >> on Thursday(4/14) and Friday(4/15). My understanding is that your team >> will provide us for the lecture and training of the Talon with a > radiation >> camera. If you need some equipments, a projector, etc, please let me > know >> in advance. The place where you will teach us has been determined to be >> AIST (Sansouken) in Tsukuba, about one hour-train from Tokyo. Details > will >> be sent to you later. >>>> I am looking forwards to seeing you. >>>> Best wishes, >>>> On Sun, 10 Apr 2011 11:12:57 -0400 >> "Tilden, Jay" <Jay. Tilden@nnsa. doe. gov> wrote: >>>>> Dear Yagi-san and Yoshino-san, >>>>>> Good evening, 1 am Jay Tilden and serve as the logistics coordinator > for

>>> the US Dept of Energy. Dr. Derek Wadsworth, of the Idaho National >>> Laboratory is your technical point of contact for the 4 person team we >>> will deploy to you next week. >>>>>> His email is provided above and his direct phone number 208.526.8514. >>> Derek and I are available to assist in any way we can. Regards - Jay >>> Tilden >>>>>> ----- Original Message ----->>> From: 荒畑 太一朗 <arahata.taichiro@tepco.co.jp> >>> To: Cherry, Ron; yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>; >>> hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp>; Tilden, Jay >>> Cc: 及川 景晴 <oikawa.kageharu@tepco.co.jp>; Miller, Jeffrey A: > AwanRX; >>> hiro.hirukawa@aist.go.jp <hiro.hirukawa@aist.go.jp>; > n. koyachi@aist.go.jp >>> <n. koyachi@aist.go.jp>: shin.kato@aist.go.jp <shin.kato@aist.go.jp>; >>> mizuo@fsinet.or.jp <mizuo@fsinet.or.jp>: npd_tanaka_t@tepsco.co.jp >>> <npd_tanaka_t@tepsco.co.jp>: (b)(6) ralph.way@nrc.gov <ralph.way@nrc.gov>: >>> (b)(6) >>> okuda-shuji@meti.go.jp <o<u>kuda-shuji@meti.go.jp</u>>; >>> (b)(6) |(b)(6) >>> (b)(6) ichii-naoto@meti.go.jp > >>> <ichii-naoto@meti.go.jp>; Howard, E. Bruce <HowardEB@state.gov>; >>> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>; >>> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; Duncan, Aleshia >>> (State Dept): (b)(6) >>> Sent: Sun Apr 10 08:48:24 2011 >>> Subject: Re: 4 people support team for Talon and cameras >>>>>> Dear Mr. Cherry >>> >>> Thanks for proposing US support team visit to Japan. >>>>>> The principal point of contact at TEPCO will be >>> Mr.Yoshino(yoshino.shin@tepco.co.jp) at Mechanical System Group of >>> laboratory. >>> I think you know from Mr.Yagi's mail ,specific activities date of >>> Talon with mapping function has not yet decided. >>> First, on April 14-15 . Mr. Yoshino will evaluate the performance and how > >>> to >>> use The Talon and cameras, >>> then we will judge the introduction of the Talon to Fukushima Daiichi > NPS >>> and decide the schedule with the persons concerned. >>> Therefore We will not ask your operation support just after April 15. >>> Thank you. >>>>>> Best regards, >>> Naoto Yagi >>> TEPCO >>>

>>> ----- Original Message ----->>> From: "Cherry, Ronald C" <CherryRC@state.gov> >>> To: <yagi.n@tepco.co.jp>: <hatada-hiroyuki@meti.go.jp>: >>> <Jay. Tilden@nnsa. doe. gov> >>> Cc: "荒畑 太一朗" <arahata.taichiro@tepco.co.jp>: "及川 景晴" >>> <oikawa.kageharu@tepco.co.jp>; <Jeffrey.Miller@pnl.gov>; "Awan, Riaz X >>> (Sofia - DOE)" <AwanRX@state.gov>; <hiro.hirukawa@aist.go.jp>; >>> <n.koyachi@aist.go.jp>; <shin.kato@aist.go.jp>; <mizuo@fsinet.or.jp>; >>> <npd_tanaka_t@tepsco. co. jp>: (b)(6) >>> <ralph.way@nrc.gov>; >>> <okuda-shuji@meti.go.jp>: (b)(6) >>> (b)(6) <i <i chii-naoto@meti.go.jp>; "Howard, E. Bruce" >>> <HowardEB@state.gov>; <horiguchi-shin@meti.go.jp>: >>> <funaki-kentaro@meti.go.jp>: "Duncan. Aleshia D" <DuncanAD@state.gov>: >>>(b)(6) >>> Sent: Sunday, April 10, 2011 9:56 AM >>> Subject: RE: 4 people support team for Talon and cameras >>>>>>>>> > Dear Yagi-san, $\rangle\rangle\rangle\rangle$ >>> > Thanks for your email. I understand the technical point of contact > at >>> > Idaho National Laboratory will be Mr. Derek Wadsworth. Mr. Tilden at > >>> > DOE >>> > Headquarters will be in touch soon with more specific information. In > >>> > the >>> > meantime, can you tell me who the principal point of contact at TEPCO 5 >>> > will >>> > be? Will that be yourself, or someone else? >>>>>>>> > Thank you, again. $\rangle\rangle\rangle\rangle$ >>> > Best regards. >>> > >>> > Ron >>> > Ronald C. Cherry >>> > Energy Attach?? >>> > Director, DOE Japan Office >>> > U.S. Embassy Tokyo >>> > Tel. (0) 3-3224-5444 >>> > Fax (0) 3-3224-5769 >>> > Cell (0)(b)(6)>>> > email CherryRC@state.gov $\rangle\rangle\rangle\rangle$ >>> > This email is UNCLASSIFIED >>> > -----Original Message----->>> > From: 八木 直人 [mailto:yagi.n@tepco.co.jp] >>> > Sent: Sunday, April 10, 2011 5:10 AM >>> > To: hatada-hiroyuki@meti.go.jp; Cherry, Ronald C

>>> > Cc: 荒畑 太一朗: 及川 景晴; Jeffrey.Miller@pnl.gov: Awan, Riaz X >>> > (Sofia - DOE): hiro.hirukawa@aist.go.jp; n.koyachi@aist.go.jp; >>> > shin.kato@aist.go.jp; mizuo@fsinet.or.jp; npd_tanaka_t@tepsco.co.jp; >>> >|(b)(6) ralph.way@nrc.gov: okuda-shuji@meti.go.jp; >>> >(b)(6) >>> > Jay. Tilden@nnsa.doe.gov; ichii-naoto@meti.go.jp; Howard, E. Bruce; >>> > horiguchi-shin@meti.go.jp; funaki-kentaro@meti.go.jp; Duncan, Aleshia > >>> > D; >>> >/(b)(6) >>> > Subject: Re: 4 people support team for Talon and cameras >>> > >>> > Dear Mr. Cherry >>> > >>> > Thanks for proposing US support team visit to Japan. >>> > Suggested schedule on April 14-15 from us is the earliest days we > will >>> > be >>> > able to be trained. We are frexible on the shchedule. >>> > >>> > We also would like to know how many days you think adequate to be $\rangle\rangle\rangle$ trained. >>> > We are currently cosidering using DOE offered Talon to make outside >>> > radiation map at first. Then we might use it inside buildings for any Σ >>> > kind >>> > of monitoring activities. Specific activities date is not yet > decided. >>> > Before that our team need to grasp the performance of Talon and > cameras >>> > and what those equipments can adapt at the site for recovery >>> > activities. >>> > I would like to closely contact with you regarding your kind support. >>> > >>> > Thank you. >>> > >>> > Best regards. >>> > Naoto Yagi >>> > TEPCO $\rangle\rangle\rangle\rangle$ >>> > ----- Original Message ----->>> > From: "Cherry, Ronald C" <CherryRC@state.gov> >>> > To: <hatada-hiroyuki@meti.go.jp> $>>> > C_{c}: |(b)(6)|$ "Duncan, Aleshia D" <DuncanAD@state.gov>; >>> > <funaki-kentaro@meti.go.jp>; <horiguchi-shin@meti.go.jp>; "Howard, E. >>> > Bruce" >>> > <HowardEB@state.gov>: <ichii-naoto@meti.go.jp>: >>> > <Jay. Tilden@nnsa. doe. gov>: >>> >(b)(6)]|(b)(6) >>> > <okuda-shuji@meti.go.jp>; <ralph.way@nrc.gov>; >>> > (b)(6) >>> > <yagi.n@tepco.co.jp>; <npd_tanaka_t@tepsco.co.jp>;

>>> > <mizuo@fsinet.or.jp>: >>> > <shin.kato@aist.go.jp>; <n.koyachi@aist.go.jp>; >>> > <hiro.hirukawa@aist.go.jp>; "Awan, Riaz X (Sofia - DOE)" >>> > <AwanRX@state.gov>; <Jeffrey.Miller@pnl.gov> >>> > Sent: Saturday, April 09, 2011 11:40 PM >>> > Subject: Re: 4 people support team for Talon and cameras >>> > >>> > >>> >> Dear Hatada-san, $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> Mr. Tilden at DOE Headquarters can provide advice on whom TEPCO > should >>> >> contact to coordinate the details of the visit by the team. I > believe >>> >> the team can come to Japan in time to work on April 14-15, but I > also >>> >> believe it would be good for the U.S. team and TEPCO to agree in >>> >> advance on what activities will be done and how much time may be > need >>> >> to do that. Our point of contact can work that out with TEPCO. \gg >>> >> The equipment should have arrived at AIST by now. Please let me > know >>> >> when AIST confirms its arrival, or if it has not, then we should > take > team >>> >>> arrives. \gg >>> >> Thank you. >>> >> >>> >> Best regards. $\rangle\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> Ron \gg >>> >> >>> >> This has been sent from my Blackberry $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> ---- Original Message ----->>> >> From: hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp> >>> >> To: Cherry, Ronald C >>> >> Cc: (b)(6) Duncan, Aleshia D: >>> >> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>: >>> >> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>: Howard, E. >>> >>> Bruce: ichii-naoto@meti.go.jp <ichii-naoto@meti.go.jp>; >>> >> Jay. Tilden@nnsa. doe. gov <Jay. Tilden@nnsa. doe. gov>: >>> >>/(b)(6) >>> >> (b)(6) >>> >> okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>: ralph.way@nrc.gov >>> >> <ralph.way@nrc.gov>; (b)(6) > (b)(6) >>> yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>: npd_tanaka_t@tepsco.co.jp >>> >> <npd_tanaka_t@tepsco.co.jp>: mizuo@fsinet.or.jp

> <mizuo@fsinet.or.jp>;

>>> >> shin.kato@aist.go.jp <shin.kato@aist.go.jp>; n.koyachi@aist.go.jp >>> >> <n. koyachi@aist.go.jp>: hiro.hirukawa@aist.go.jp >>> >> <hiro.hirukawa@aist.go.jp> >>> >> Sent: Sat Apr 09 08:41:27 2011 >>> >> Subject: 4 people support team for Talon and cameras $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> >>> >> Dear Cherry-san. $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> Regarding the support team consisting of 4 people to assist us with >>> >> Talon and cameras that was mentioned in your previous email, TEPCO >>> >> told me it would be great if the team could help them on dates/place >>> >> shown below: $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >>> When : 14th and 15th April Where : The National Institute of Advanced Industrial Science \gg \gg and Technology (AIST) $\rangle\rangle\rangle\rangle\rangle\rangle$ Address: Teragu Kashiwa-yama 1497-1, Tsukuba-city. Ibaraki, >>> >> JAPAN $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> If this is acceptable to your side, TEPCO is ready to coordinate the >>> >> detail on this. Please let us know who to talk to. $\rangle\rangle\rangle\rangle\rangle$ >>> >> By the way, if I remember correctly, I heard from you that the team >>> >> would be helpful in starting up the equipment, like assembling. > the >>> >> equipment" in the morning of 14th, rather than doing it right after >>> >> the shipment arrival to find ourselves waiting to become able to > even \rightarrow start up the equipment. 1 appreciate your thought on this. >>> >> Of course, my assumption is that it will arrive on or by 13th. > though \rightarrow it seems that it is taking more time than expected. $\rangle\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> Very respectfully, $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> Hiroyuki $\rangle\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> >>> >> Deputy Director, Aerospace and Defense Industry >>> >> Hiroyuki Hatada >>> >> Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 >>> >> / hatada-hiroyuki@meti.go.jp >>> >>> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>> >> 03-3501-1692 $\rangle\rangle\rangle\rangle\rangle\rangle$ \gg $\rangle\rangle\rangle\rangle\rangle\rangle$ $\rangle\rangle\rangle\rangle\rangle\rangle$ $\rangle\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> 送信元: hatada-hiroyuki/MIT1-LAN >>> >> 宛先: "Cherry, Ronald C" <CherryRC@state.gov> >>> Cc: "Aaron Leong" (b)(6) "Duncan, Aleshia D"

<pre>>>>> horiguchi-shi@meti.go.jo. "Howard E. Bruce" (HowardEB@state.gov). >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	>>> >> <duncanad@state.gov>, funaki-kentaro@meti.go.jp.</duncanad@state.gov>
<pre>>>>> / (b)(6)</pre>	
<pre>>>>> [(D)(6)</pre>	>>> >> Jay.Tilden@nnsa.doe.gov, ~Maj. Keith Simmers~
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<pre>>>>> ichii-macto/MITI-LANWUTI-LANU >>>> 目付: 2011/04/09 01:10 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
<pre>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	>>> >> <ralph.way@nrc.gov>, "Rod Tanaka" ((b)(6)</ralph.way@nrc.gov>
<pre>>>>> 件名: Re: FW: Equipment listing for shipment today >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
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<pre>>>>> For the video and electronic copies of the manuals, TEPCO says that >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
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<pre>>>>> Regarding the support team of 4 people, we really appreciate the >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	· · ·
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<pre>>>> Shin YOSHINO >>> Machinery Systems Technology Group, >>> Technology Development Research Institute, Tokyo Electric Power >>> >> Company Egasaki-cho 4-1, Tsurumi-ku, Yokohama-city, Kanagawa > 230-8510, >>> >> Japan >>> >>> >>> Email yoshino.shin@tepco.co.jp >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
<pre>>>> >>> Machinery Systems Technology Group, >>> >>> Company Egasaki-cho 4-1, Tsurumi-ku, Yokohama-city, Kanagawa > 230-8510, >>> >>> >>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
<pre>>>> >>> Technology Development Research Institute, Tokyo Electric Power >>> >>> Company Egasaki-cho 4-1, Tsurumi-ku, Yokohama-city, Kanagawa > 230-8510, >>> >>> >>>> Email yoshino.shin@tepco.co.jp >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
<pre>>>> >>> Company Egasaki-cho 4-1, Tsurumi-ku, Yokohama-city, Kanagawa > 230-8510, >>> >>> Japan >>> >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
<pre>> 230-8510, >>> >>> Email yoshino.shin@tepco.co.jp >>> >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
<pre>>>> >>> Japan >>> >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
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<pre>>>> Email yoshino.shin@tepco.co.jp >>> >> >>> TEL 045-394-6361 >>>> FAX 045-585-8647 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	·
<pre>>>> >> TEL 045-394-6361 >>> >> FAX 045-585-8647 >>> >> >> >> >> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >>> >> >> >> >> Division, Ministry of Economy. Trade and Industry / +81-3-3501-1692 >>> >> / hatada-hiroyuki@meti.go.jp >>> >> / m田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>> >> >> >> >> >> >> >> >> >> >>>>>>>></pre>	
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<pre>>>> >> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >>> >> Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 >>> >> / hatada-hiroyuki@meti.go.jp >>> >> / m田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>> >> >>> >>>>>>>>>>>>>>>>>>>>>>>>></pre>	
<pre>>>> >>> Division, Ministry of Economy. Trade and Industry / +81-3-3501-1692 >>> >> / hatada-hiroyuki@meti.go.jp >>> >> / m田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>> >> 03-3501-1692 >>> >>> >>> >>>>>>>>>>>>>>>>>>>>>>>>></pre>	
<pre>>>> / hatada-hiroyuki@meti.go.jp >>> / m田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>> >> 03-3501-1692 >>> >> >>> >> >>> >>>>>>>>>>>>>>>>>>></pre>	
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>>> >> >>> >> >>> >> >>> 送信元: "Cherry, Ronald C" <cherryrc@state.gov> >>> >> 远先: <hatada-hiroyuki@meti.go.jp></hatada-hiroyuki@meti.go.jp></cherryrc@state.gov>	>>> >>>
>>> >> >>> >> >>> >> >>> 送信元: "Cherry, Ronald C" <cherryrc@state.gov> >>> >> 远先: <hatada-hiroyuki@meti.go.jp></hatada-hiroyuki@meti.go.jp></cherryrc@state.gov>	
>>> >> >>> >> >>> >> 送信元: "Cherry, Ronald C" <cherryrc@state.gov> >>> >> 宛先: <hatada-hiroyuki@meti.go.jp></hatada-hiroyuki@meti.go.jp></cherryrc@state.gov>	
>>> >> 送信元: "Cherry, Ronald C" <cherryrc@state.gov> >>> >> 宛先: <hatada-hiroyuki@meti.go.jp></hatada-hiroyuki@meti.go.jp></cherryrc@state.gov>	
>>> >> 送信元: "Cherry, Ronald C" <cherryrc@state.gov> >>> >> 宛先: <hatada-hiroyuki@meti.go.jp></hatada-hiroyuki@meti.go.jp></cherryrc@state.gov>	
>>> 宛先: <hatada-hiroyuki@meti.go.jp></hatada-hiroyuki@meti.go.jp>	

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>>> <> <DuncanAD@state.gov>. "Howard, E. Bruce" <HowardEB@state.gov>. >>> >> "Kenneth Spurlock" ((b)(6) "Maj. Keith Simmers" $\rightarrow \rightarrow (b)(6)$ ["]Ralph Way" <ralph.way@nrc.gov>, "Rod >>> >> Tanaka" >>> >> (b)(6) <funaki-kentaro@meti.go.jp>, >>> >> <horiguchi-shin@meti.go.jp>, <okuda-shuji@meti.go.jp>, >>> >> <Jay. Tilden@nnsa. doe. gov> >>> >> 日付: 2011/04/06 18:37 >>> >> 件名: FW: Equipment listing for shipment today >>> >> $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> $\rangle\rangle\rangle\rangle\rangle\rangle$ \gg >>> >> >>> >> Dear Hatada-san. $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> This is to inform you that the Talon robot with radiation mapping >>> >> capability and the radiation hardened camera systems have now been >>> >> shipped. It's estimated they will arrive in Japan on Friday. April > >>> >> 8. >>> >> Attached please find the list of the equipment that is in the >>> >> shipment. >>> >> >>> >> I would like to discuss with you arrangements to meet the equipment >>> >> upon its arrival in Japan. $\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> Prior to shipping, Idaho National Laboratory made a video of >>> >> operational details of all the equipment. We can provide the video \rightarrow and electronic copies of the manuals for most of the systems. Please >>> >> let us know to whom the video and the other electronic files should > be >>> >> delivered. \rightarrow >>> >> In addition, DOE is considering sending up to four people to Japan > in >>> >> support of the equipment delivery. Specifically, we propose to send >>> >> two teams of two persons each to support the setup, training, and >>> >> operational support of the Talon system and the cameras (total of 4 >>> >> people). Our laboratory recommends that two people are needed for >>> >> each of the groups of equipment to technically trouble shoot and \rightarrow support their operation. If you agree, then I would be happy to > work >>> >> with you on the details of when the team should come and where they >>> >> would work with their Japanese counterparts. \rightarrow >>>> I look forward to hearing from you. $\rangle\rangle\rangle\rangle\rangle$ >>> >> Best regards. $\rangle\rangle\rangle\rangle\rangle\rangle\rangle$ >>> >> Ron >>> >> Ronald C. Cherry >>> >> Energy Attach?? 11

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From:	八木 直人 <yagi.n@tepco.co.jp></yagi.n@tepco.co.jp>
Sent:	Monday, April 11, 2011 10:06 PM
To:	Derek C Wadsworth
Cc:	(b)(6)arzelere, Alex; arahata.taichiro@tepco.co.jp; AwanRX; Cherry,
	Ron; Duncan, Aleshia (State Dept); funaki-kentaro@meti.go.jp; McFarlane, Harold;
	hatada-hiroyuki@meti.go.jp; hiro.hirukawa@aist.go.jp; horiguchi-shin@meti.go.jp;
	HowardEB@state.gov; ichii-naoto@meti.go.jp; Jay.Tilden@nnsa.doe.gov; Miller, Jeffrey
	A; Kelly, John E (NE);[(b)(6)
	mizuo@fsinet.or.jp; NITOPS; npd_tanaka_t@tepsco.co.jp; n.koyachi@aist.go.jp;
	oikawa.kageharu@tepco.co.jp; okuda-shuji@meti.go.jp; PWG; Way, Ralph;
	(b)(6)Golub, Sal; shin.kato@aist.go.jp; 吉野 伸
Subject:	Re: Radio Specifications

Dear Dr. Wadsworth

Thanks for your kind help.

I noticed the frequency band for Video transmission is so wide. Our transmission division told me it must be difficult to get the permission for such a wide frequency band.

I assume you can't know exact settings set at factory because it has been already shipped. Do you have any idea to know that in advance? Could visiting US support team find it soon after checking Talon in Japan? If US team identify exact frequency band on 14th April, we will be able to activate video transmission function on 15th April after getting permission.

I really appreciate if your have advise on it. Thanks.

Best regards, Naoto Yagi TEPCO

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

From: "Derek C Wadsworth" <Derek.Wadsworth@inl.gov>

To: "八木 直人" <yagi.n@tepco.co.jp>

Cc: (b)(6) "Larzelere, Alex"

<alex.larzelere@nuclear.energy.gov>; <arahata.taichiro@tepco.co.jp>; "AwanRX" <AwanRX@state.gov>; "Cherry, Ron" <CherryRC@state.gov>; "Duncan, Aleshia (State Dept)" <DuncanAD@state.gov>; <funaki-kentaro@meti.go.jp>; "McFarlane, Harold" <harold.mcfarlane@inl.gov>; <hatada-hiroyuki@meti.go.jp>; <hiro.hirukawa@aist.go.jp>; <horiguchi-shin@meti.go.jp>; <HowardEB@state.gov>; <ichii-naoto@meti.go.jp>; <lay.Tilden@nnsa.doe.gov>; "Miller, Jeffrey A" <jeffrey.miller@pnl.gov>; "Kelly, John E (NE)" <JohnE.Kelly@nuclear.energy.gov>; (b)(6)

(b)(6) ; <mizuo@fsinet.or.jp>; "NITOPS" <NITOPS@nnsa.doe.gov>; <npd_tanaka_t@tepsco.co.jp>; <n.koyachi@aist.go.jp>; <oikawa.kageharu@tepco.co.jp>; <okuda-shuji@meti.go.jp>; "PWG" <PWG@nnsa.doe.gov>; <ralph.way@nrc.gov>; (b)(6) "Golub, Sal"

<sal.golub@nuclear.energy.gov>; <shin.kato@aist.go.jp>; "吉野伸" <yoshino.shin@tepco.co.jp>

Sent: Tuesday, April 12, 2011 9:18 AM

Subject: Re: Radio Specifications

> Dear Yagi-san, > You are very welcome. Please let me know if I can further assist you. > > Regards, > > Derek Wadsworth > > Derek Wadsworth > Robotic & Human Systems > Idaho National Laboratory > Office: (208) 526-8514 > Mobile: (b)(6) > derek.wadsworth@inl.gov > > > 八木 直人 <yagi.n@tepco.co.jp> >04/11/11 06:08 PM > > To > <Jay.Tilden@nnsa.doe.gov>, "Derek C Wadsworth" > <Derek.Wadsworth@inl.gov> cc (b)(6) "Larzelere, Alex" > <alex.larzelere@nuclear.energy.gov>, <arahata.taichiro@tepco.co.jp>, > "AwanRX" < AwanRX@state.gov>, "Cherry, Ron" < CherryRC@state.gov>, > "Duncan, Aleshia \(State Dept\)" < DuncanAD@state.gov>, > <funaki-kentaro@meti.go.jp>, "McFarlane, Harold" > <harold.mcfarlane@inl.gov>, <hatada-hiroyuki@meti.go.jp>, > <hiro.hirukawa@aist.go.jp>, <horiguchi-shin@meti.go.jp>, > <HowardEB@state.gov>, <ichii-naoto@meti.go.jp>, "Tilden, Jay" > <Jay.Tilden@nnsa.doe.gov>, "Miller, Jeffrey A" <jeffrey.miller@pnl.gov>, "Kelly, John E \(NE\)" > < JohnE.Kelly@nuclear.energy.gov>, <(b)(6) <mizuo@fsinet.or.jp>, "NITOPS" >(b)(6) > <NITOPS@nnsa.doe.gov>, <npd tanaka t@tepsco.co.jp>, > <n.koyachi@aist.go.jp>, <oikawa.kageharu@tepco.co.jp>, > <okuda-shuji@meti.go.jp>, "PWG" <PWG@nnsa.doe.gov>, > <ralph.way@nrc.gov>, ((b)(6)_ _, "Golub, Sal" ><sal.golub@nuclear.energy.gov>, <shin.kato@aist.go.jp>, 吉野 伸 > <yoshino.shin@tepco.co.jp> Subject > Re: Radio Specifications > > Dear Mr. Wadsworth >

> Thanks for your prompt reply. The data you sent is very helpful for us.

> > Best regards,

> Naoto Yagi

> TEPCO

>

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

> From: "Derek C Wadsworth" < Derek.Wadsworth@inl.gov>

> To: "八木 直人" <yagi.n@tepco.co.jp>; <Jay.Tilden@nnsa.doe.gov>

> Cc: <(b)(6) "Larzelere, Alex"

> <alex.larzelere@nuclear.energy.gov>; <arahata.taichiro@tepco.co.jp>;

> "AwanRX" < AwanRX@state.gov>; "Cherry, Ron" < CherryRC@state.gov>;

> "Duncan, Aleshia (State Dept)" < DuncanAD@state.gov>;

> <funaki-kentaro@meti.go.jp>; "McFarlane, Harold"

> <harold.mcfarlane@inl.gov>; <hatada-hiroyuki@meti.go.jp>;

> <hiro.hirukawa@aist.go.jp>; <horiguchi-shin@meti.go.jp>;

> <HowardEB@state.gov>; <ichii-naoto@meti.go.jp>; "Tilden, Jay"

> <Jay.Tilden@nnsa.doe.gov>; "Miller, Jeffrey A"

> <jeffrey.miller@pnl.gov>; "Kelly, John E (NE)"

> <JohnE.Kelly@nuclear.energy.gov>; <(b)(6)

> (b)(6) <mizuo@fsinet.or.jp>; "NITOPS"

> <NITOPS@nnsa.doe.gov>; <npd_tanaka_t@tepsco.co.jp>;

> <n.koyachi@aist.go.jp>; <oikawa.kageharu@tepco.co.jp>;

> <okuda-shuji@meti.go.jp>; "PWG"

> < PWG@nnsa.doe.gov>; <ralph.way@nrc.gov>; (b)(6)

> "Golub,

>

> Sal" <sal.golub@nuclear.energy.gov>; <shin.kato@aist.go.jp>; "吉野 伸"

> <yoshino.shin@tepco.co.jp>

> Sent: Tuesday, April 12, 2011 5:58 AM

> Subject: Radio Specifications

>

>

>> Dear Yagi-san,

>>

>> The following Excel spreadsheet has all of the radio information for >> the systems that were sent. Please contact me if you have any more > questions.

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>> Regards,

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>> Derek Wadsworth

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»_____

>>

>> Derek Wadsworth

>> Robotic & Human Systems >> Idaho National Laboratory >> Office: (208) 526-8514 >> Mobile: (b)(6) >> derek.wadsworth@inl.gov >> >> >> >> >> 八木 直人 <yagi.n@tepco.co.jp> >> 04/11/11 09:24 AM >> >> To >> 吉野 伸 <yoshino.shin@tepco.co.jp>, "Tilden, Jay" >> <Jay.Tilden@nnsa.doe.gov>, <derek.wadsworth@inl.gov> cc >> <arahata.taichiro@tepco.co.jp>, "Cherry, Ron" <CherryRC@state.gov>, >> <hatada-hiroyuki@meti.go.jp>, "Miller, Jeffrey A" >> <jeffrey.miller@pnl.gov>, "AwanRX" <AwanRX@state.gov>, >> <hiro.hirukawa@aist.go.jp>, <n.koyachi@aist.go.jp>, >> <shin.kato@aist.go.jp>, <mizuo@fsinet.or.jp>, > < npd tanaka t@tepsco.co.jp>,]<ralph.way@nrc.gov>, >> (b)(6) >> <okuda-shuji@meti.go.jp>, (b)(6) >> √(b)(6) <ichii-naoto@meti.go.jp>, >> <HowardEB@state.gov>, <horiguchi-shin@meti.go.jp>, >> <funaki-kentaro@meti.go.jp>, "Duncan, > Aleshia >> \(State Dept\)" <DuncanAD@state.gov>, (b)(6) >> <oikawa.kageharu@tepco.co.jp>, "McFarlane, Harold" >> <harold.mcfarlane@inl.gov>, "NITOPS" <NITOPS@nnsa.doe.gov>, "PWG" >> <PWG@nnsa.doe.gov>, "Larzelere, Alex" > <alex.larzelere@nuclear.energy.gov>, >> "Kelly, John E \(NE\)" <JohnE.Kelly@nuclear.energy.gov>, "Golub, Sal" >> <sal.golub@nuclear.energy.gov> >> Subject >> Re: 4 people support team for Talon and cameras >> >> >> >> >> >> >> Dear Mr Tilden and Mr Wadsworth >> >> >> Good afternoon, I am Naoto Yagi working for TEPCO. We would like to >> know information about radio used by Talon. We have to get radio >> waves use permission from Ministry of Internal Affairs and >> Communications before starting up Talon in Japan. It is because its >> radio waves are US > specific >> and not usually accepted in Japan.

>> >> And we also have to manage and control the frequency band resourses >> at > the >> >> Fukushima site in order to avoid interferences between each >> radio-controled equipment. >> >> Attached file is the format for radio information inquiries. We'd >> really appreciate if you fill in it and send back to us. >> >> Thanks. >> >> Best regards, >> Naoto Yagi >> TEPCO >> >> ----- Original Message ----->> From: "吉野 伸" < yoshino.shin@tepco.co.jp> >> To: "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov>; >> <derek.wadsworth@inl.gov> >> Cc: <arahata.taichiro@tepco.co.jp>; "Cherry, Ron" >> <CherryRC@state.gov>; <yagi.n@tepco.co.jp>; <hatada-hiroyuki@meti.go.jp>; "Miller, Jeffrey A" >> <jeffrey.miller@pnl.gov>; "AwanRX" <AwanRX@state.gov>; >> <hiro.hirukawa@aist.go.jp>; <n.koyachi@aist.go.jp>; >> <shin.kato@aist.go.jp>; <mizuo@fsinet.or.jp>; >> <npd tanaka t@tepsco.co.jp>; (b)(6) >> <ralph.way@nrc.gov>; <okuda-shuji@meti.go.jp>; >> (b)(6) (b)(6) >> <ichii-naoto@meti.go.jp>; > <HowardEB@state.gov>; >> <horiguchi-shin@meti.go.jp>; <funaki-kentaro@meti.go.jp>; "Duncan, > Aleshia >> >> (State Dept)" <DuncanAD@state.gov>; (b)(6) >> <oikawa.kageharu@tepco.co.jp>; "McFarlane, Harold" >> <harold.mcfarlane@inl.gov>; "NITOPS" <NITOPS@nnsa.doe.gov>; "PWG" >> <PWG@NNSA.Doe.Gov>; "Larzelere, Alex" > <alex.larzelere@nuclear.energy.gov>; >> >> "Kelly, John E (NE)" <JohnE.Kelly@Nuclear.Energy.Gov>; "Golub, Sal" >> <sal.golub@nuclear.energy.gov> >> Sent: Monday, April 11, 2011 8:20 PM >> Subject: Re: 4 people support team for Talon and cameras >> >> >>> Dear Mr Tilden and Mr Wadsworth >>> >>> I am Shin Yoshino in TEPCO, preparing for the reception of your team >>> on Thursday(4/14) and Friday(4/15). My understanding is that your >>> team will provide us for the lecture and training of the Talon with >>> a

>> radiation >>> camera. If you need some equipments, a projector, etc, please let me >> know >>> in advance. The place where you will teach us has been determined to >>> be >>> AIST(Sansouken) in Tsukuba, about one hour-train from Tokyo. Details >> will >>> be sent to you later. >>> >>> I am looking forwards to seeing you. >>> >>> Best wishes, >>> >>> On Sun, 10 Apr 2011 11:12:57 -0400 >>> "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov> wrote: >>> >>>> Dear Yagi-san and Yoshino-san, >>>> >>>> Good evening, I am Jay Tilden and serve as the logistics >>>> coordinator >> for >>>> the US Dept of Energy. Dr. Derek Wadsworth, of the Idaho National >>>> Laboratory is your technical point of contact for the 4 person team >>>> we will deploy to you next week. >>>> >>>> His email is provided above and his direct phone number 208.526.8514. >>>> Derek and I are available to assist in any way we can. Regards ->>>> Jay Tilden >>>> >>>> ----- Original Message ----->>>> From: 荒畑 太一朗 <arahata.taichiro@tepco.co.jp> >>>> To: Cherry, Ron; yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>; >>>> hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp>; Tilden, >>>> Jav >>>> Cc: 及川 景晴 <oikawa.kageharu@tepco.co.jp>; Miller, Jeffrey A; >> AwanRX; >>>> hiro.hirukawa@aist.go.jp <hiro.hirukawa@aist.go.jp>; >> n.koyachi@aist.go.jp >>>> <n.koyachi@aist.go.jp>; shin.kato@aist.go.jp >>>> <shin.kato@aist.go.jp>; mizuo@fsinet.or.jp <mizuo@fsinet.or.jp>; >>>> npd_tanaka_t@tepsco.co.jp <npd_tanaka_t@tepsco.co.jp>; >>>> (b)(6) ralph.way@nrc.gov >>>> <ralph.way@nrc.gov>; okuda-shuji@meti.go.jp >>>> <okuda-shuji@meti.go.jp>;(b)(6) >>>> (b)(6) >>>> (b)(6) > ichii-naoto@meti.go.jp >> >>>> <ichii-naoto@meti.go.jp>; Howard, E. Bruce <HowardEB@state.gov>; >>>> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>; >>>> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; Duncan, >>>> Aleshia (State Dept); (b)(6)

>>>> Sent: Sun Apr 10 08:48:24 2011 >>>> Subject: Re: 4 people support team for Talon and cameras >>>> >>>> Dear Mr. Cherry >>>> >>>> Thanks for proposing US support team visit to Japan. >>>> >>>> The principal point of contact at TEPCO will be >>>> Mr.Yoshino(yoshino.shin@tepco.co.jp) at Mechanical System Group of >>>> laboratory. >>>> I think you know from Mr.Yagi's mail ,specific activities date of >>>> Talon with mapping function has not yet decided. >>>> First, on April 14-15, Mr. Yoshino will evaluate the performance and >>>> how >> >>>> to >>>> use The Talon and cameras, >>>> then we will judge the introduction of the Talon to Fukushima >>>> Daiichi >> NPS >>>> and decide the schedule with the persons concerned. >>>> Therefore We will not ask your operation support just after April 15. >>>> Thank you. >>>> >>>> Best regards, >>>> Naoto Yagi >>>> TEPCO >>>> >>>> ----- Original Message ----->>>> From: "Cherry, Ronald C" <CherryRC@state.gov> >>>> To: <yagi.n@tepco.co.jp>; <hatada-hiroyuki@meti.go.jp>; >>>> <Jay.Tilden@nnsa.doe.gov> >>>> Cc: "荒畑 太一朗" <arahata.taichiro@tepco.co.jp>; "及川 景晴" >>>> <oikawa.kageharu@tepco.co.jp>; <Jeffrey.Miller@pnl.gov>; "Awan, >>>> Riaz X (Sofia - DOE)" <AwanRX@state.gov>; >>>> <hiro.hirukawa@aist.go.jp>; <n.koyachi@aist.go.jp>; >>>> <shin.kato@aist.go.jp>; <mizuo@fsinet.or.jp>; >>>> <npd_tanaka_t@tepsco.co.jp>; (b)(6) >>>> <ralph.way@nrc.gov>; <okuda-shuji@meti.go.jp>; <ichii-naoto@meti.go.jp>; "Howard, E. Bruce" >>>>(b)(6) >>>> < HowardEB@state.gov>; < horiguchi-shin@meti.go.jp>; >>>> <funaki-kentaro@meti.go.jp>; "Duncan, Aleshia D" >>>> <DuncanAD@state.gov>; (b)(6) >>>> Sent: Sunday, April 10, 2011 9:56 AM >>>> Subject: RE: 4 people support team for Talon and cameras >>>> >>>> >>>> > Dear Yagi-san, >>>>>> >>>> > Thanks for your email. I understand the technical point of >>>> > contact >> at

>>>> > Idaho National Laboratory will be Mr. Derek Wadsworth. Mr. >>>> > Tilden > at >> >>>> > DOE >>>> > Headquarters will be in touch soon with more specific information. > In >> >>>> > the >>>> > meantime, can you tell me who the principal point of contact at > TEPCO >> >>>> > will >>>> > be? Will that be yourself, or someone else? >>>> > >>>> > Thank you, again. >>>>>> >>>> > Best regards, >>>>>> >>>> > Ron >>>> > Ronald C. Cherry >>>> > Energy Attach?? >>>> > Director, DOE Japan Office >>>> > U.S. Embassy Tokyo >>>> > Tel. (0)3-3224-5444 >>>> > Fax (0)3-3224-5769 >>>> > Cell (b)(6) >>>> > email CherryRC@state.gov >>>> > >>>> > This email is UNCLASSIFIED >>>>>> >>>> > -----Original Message----->>>> > From: 八木 直人 [mailto:yagi.n@tepco.co.jp] >>>> > Sent: Sunday, April 10, 2011 5:10 AM >>>> > To: hatada-hiroyuki@meti.go.jp; Cherry, Ronald C >>>> > Cc: 荒畑 太一朗; 及川 景晴; Jeffrey.Miller@pnl.gov; Awan, Riaz X (Sofia ->>>> > DOE); hiro.hirukawa@aist.go.jp; n.koyachi@aist.go.jp; >>>> > shin.kato@aist.go.jp; mizuo@fsinet.or.jp; >>>> > npd_tanaka_t@tepsco.co.jp; (b)(6) >>>> > ralph.way@nrc.gov; okuda-shuji@meti.go.jp; >>>> >(b)(6) >>>> > Jay.Tilden@nnsa.doe.gov; ichii-naoto@meti.go.jp; Howard, E. >>>> > Bruce; horiguchi-shin@meti.go.jp; funaki-kentaro@meti.go.jp; >>>> > Duncan, > Aleshia >> >>>> > D; >>>> </(b)(6) >>>> > Subject: Re: 4 people support team for Talon and cameras >>>> > Dear Mr. Cherry

>>>>>>

>>>> > Thanks for proposing US support team visit to Japan. >>>>>> >>>> > Suggested schedule on April 14-15 from us is the earliest days we >> will >>>> > be >>>> > able to be trained. We are frexible on the shchedule. >>>>>> >>>> > We also would like to know how many days you think adequate to be >>>> > trained. >>>> > We are currently cosidering using DOE offered Talon to make >>>> > outside radiation map at first. Then we might use it inside >>>> > buildings for > any >> >>>> > kind >>>> > of monitoring activities. Specific activities date is not yet >> decided. >>>> > Before that our team need to grasp the performance of Talon and >> cameras >>>> > and what those equipments can adapt at the site for recovery >>>> > activities. >>>>>> >>>> > I would like to closely contact with you regarding your kind > support. >>>>>> >>>> > Thank you. >>>>> >>>> > Best regards, >>>> > Naoto Yagi >>>> > TEPCO >>>>>> >>>> > ----- Original Message ----->>>> > From: "Cherry, Ronald C" < CherryRC@state.gov> >>>> > To: <hatada-hiroyuki@meti.go.jp> >>>> > Cc: (b)(6) "Duncan, Aleshia D" > < DuncanAD@state.gov>; >>>> > <funaki-kentaro@meti.go.jp>; <horiguchi-shin@meti.go.jp>; >>>> > "Howard, > E. >>>> > Bruce" >>>> > <HowardEB@state.gov>; <ichii-naoto@meti.go.jp>; >>>> > <Jay.Tilden@nnsa.doe.gov>; (b)(6) >>>>> > (b)(6)]; <okuda-shuji@meti.go.jp>; >>>> > <ralph.way@nrc.gov>; (b)(6) >>>> > <yagi.n@tepco.co.jp>; <npd_tanaka_t@tepsco.co.jp>; >>>> > <mizuo@fsinet.or.jp>; <shin.kato@aist.go.jp>; >>>> > <n.koyachi@aist.go.jp>; <hiro.hirukawa@aist.go.jp>; "Awan, Riaz X >>>> > (Sofia - DOE)" >>>> > <AwanRX@state.gov>; <Jeffrey.Miller@pnl.gov> >>>> > Sent: Saturday, April 09, 2011 11:40 PM >>>> > Subject: Re: 4 people support team for Talon and cameras

>>>>>> >>>> >> Dear Hatada-san, >>>> >>> >>>> >> Mr. Tilden at DOE Headquarters can provide advice on whom TEPCO >> should >>>> >> contact to coordinate the details of the visit by the team. I >> believe >>>> >> the team can come to Japan in time to work on April 14-15, but I >> also >>>> believe it would be good for the U.S. team and TEPCO to agree in >>>> >> advance on what activities will be done and how much time may be >> need >>>> >> to do that. Our point of contact can work that out with TEPCO. >>>> >>> >>>> The equipment should have arrived at AIST by now. Please let me >> know >>>> when AIST confirms its arrival, or if it has not, then we should >> take >>>> >> the necessary steps to track itn so it will be ready when the US >> team >>>> >> arrives. >>>> >>> >>>> >> Thank you. >>>> >>> >>>> >>> Best regards, >>>> >>> >>>> >> Ron >>>> >> >>>> >>> >>>> >> This has been sent from my Blackberry >>>> >>> >>>> >> ----- Original Message ----->>>> >> From: hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp> >>>> >> To: Cherry, Ronald C >>>> >> Cc(b)(6) Duncan, Aleshia >>>> >> D; funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; >>>> >> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>; Howard, E. >>>> >> Bruce; ichii-naoto@meti.go.jp <ichii-naoto@meti.go.jp>; >>>> >> Jay.Tilden@nnsa.doe.gov <Jay.Tilden@nnsa.doe.gov>; >>>> >>(b)(6) >>>> >>/(b)(6) >>>> >> okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>; >>>> >> ralph.way@nrc.gov <ralph.way@nrc.gov>;(b)(6) >> √(b)(6) >>>> yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>; >>>> >> npd_tanaka_t@tepsco.co.jp <npd_tanaka_t@tepsco.co.jp>; >>>> >> mizuo@fsinet.or.jp >> <mizuo@fsinet.or.jp>; >>>> >> shin.kato@aist.go.jp <shin.kato@aist.go.jp>; >>>> >> n.koyachi@aist.go.jp <n.koyachi@aist.go.jp>; >>>> >> hiro.hirukawa@aist.go.jp <hiro.hirukawa@aist.go.jp> >>>> >> Sent: Sat Apr 09 08:41:27 2011

>>>> Subject: 4 people support team for Talon and cameras >>>> >>> >>>> >>> >>>> >> Dear Cherry-san, >>>> >>> >>>> >> Regarding the support team consisting of 4 people to assist us >>>> >> with Talon and cameras that was mentioned in your previous >>>> >> email, TEPCO told me it would be great if the team could help >>>> >> them on > dates/place >>>> >> shown below: >>>> >>> >>>> >>> When : 14th and 15th April Where : The National Institute of Advanced Industrial >>>> >>> > Science >>>> >> and Technology (AIST) Address: Teragu Kashiwa-yama 1497-1, Tsukuba-city, >>>> >>> >>>> >> Ibaraki, JAPAN >>>> >>> >>>> >> If this is acceptable to your side, TEPCO is ready to coordinate > the >>>> >>> detail on this. Please let us know who to talk to. >>>> >>> >>>> By the way, if I remember correctly, I heard from you that the >>>> >> team would be helpful in starting up the equipment, like assembling. >>>> >> If this is the case, it sounds to me that we could do the >>>> >> "meeting >> the >>>> >> equipment" in the morning of 14th, rather than doing it right >>>> >> after the shipment arrival to find ourselves waiting to become >>>> >> able to >> even >>>> >> start up the equipment. I appreciate your thought on this. >>>> >> Of course, my assumption is that it will arrive on or by 13th, >> though >>>> >> it seems that it is taking more time than expected. >>>> >>> >>>> >> Very respectfully, >>>> >>> >>>> >> Hiroyuki >>>> >>> >>>> >>> >>>> >>> >>>> >> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >>>> >> Division, Ministry of Economy, Trade and Industry / > +81-3-3501-1692 >>>> >> / hatada-hiroyuki@meti.go.jp >>>> >>> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>>> >> 03-3501-1692 >>>> >>> >>>> >>> >>>> >>>

>>>> >>> >>>> >>> >>>> >>> 送信元: hatada-hiroyuki/MITI-LAN >>>> >> 宛先: "Cherry, Ronald C" <CherryRC@state.gov> >>>> >>> Cc: "Aaron Leong" (b)(6) "Duncan, Aleshia D" >>>> >> <DuncanAD@state.gov>, funaki-kentaro@meti.go.jp, >>>> >> horiguchi-shin@meti.go.jp, "Howard, E. Bruce" >>>> >> <HowardEB@state.gov>, Jay.Tilden@nnsa.doe.gov, "Maj. Keith Simmers" >>>> >> (b)(6) "Kenneth Spurlock" , okuda-shuji@meti.go.jp, "Ralph Way" >>>> >> (b)(6) >>>> >> <ralph.way@nrc.gov>, "Rod Tanaka" (b)(6) >>>> >> ichii-naoto/MITI-LAN@MITI-LAN >>>> >>> 日付: 2011/04/09 01:10 >>>> >> 件名: Re: FW: Equipment listing for shipment today >>>> >>> >>>> >>> >>>> >>> >>>> >>> >>>> >>> >>>> >>> Dear Cherry-san, >>>> >>> >>>> >>> >>>> >> For the video and electronic copies of the manuals, TEPCO says >>>> >> that they want them to be sent to the following address. >>>> >> Regarding the support team of 4 people, we really appreciate the >> offer >>>> but TEPCO needs to arrange the date so that research institutes >>>> >> supporting TEPCO can also attend. >>>> >> Hopefully I can get back to you tomorrow with TEPCO's request on >> this. >>>> >> Thank you, >>>> >>> >>>> >> Shin YOSHINO >>>> >> Machinery Systems Technology Group, Technology Development >>>> >> Research Institute, Tokyo Electric Power Company Egasaki-cho >>>> >> 4-1, Tsurumi-ku, Yokohama-city, Kanagawa >> 230-8510, >>>> >> Japan >>>> >>> >>>> >> Email yoshino.shin@tepco.co.jp >>>> >>> >>>> >> TEL 045-394-6361 >>>> >> FAX 045-585-8647 >>>> >>> >>>> >>> >>>> >> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >>>> >> Division, Ministry of Economy, Trade and Industry / > +81-3-3501-1692 >>>> >> / hatada-hiroyuki@meti.go.jp >>>> >>> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>>> >> 03-3501-1692 >>>> >>>

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>>>> >>
>>>> >> 送信元: "Cherry, Ronald C" <cherryrc@state.gov></cherryrc@state.gov>
>>>> >> 宛先: <hatada-hiroyuki@meti.go.jp></hatada-hiroyuki@meti.go.jp>
>>>> Cc: "Aaron Leong" (b)(6) "Duncan, Aleshia D"
>>>> <> <duncanad@state.gov>, "Howard, E. Bruce" <howardeb@state.gov>,</howardeb@state.gov></duncanad@state.gov>
>>>> >> "Kenneth Spurlock" ((b)(6) , "Maj. Keith
> Simmers"
>>>> >>> (b)(6) "Ralph Way" <ralph.way@nrc.gov>, "Rod</ralph.way@nrc.gov>
>>>> >> <u>Tanaka"</u>
>>>> >>> ((b)(6) <funaki-kentaro@meti.go.jp>,</funaki-kentaro@meti.go.jp>
>>>> >> <horiguchi-shin@meti.go.jp>, <okuda-shuji@meti.go.jp>,</okuda-shuji@meti.go.jp></horiguchi-shin@meti.go.jp>
>>>> >> <jay.tilden@nnsa.doe.gov></jay.tilden@nnsa.doe.gov>
>>>> >> 日付: 2011/04/06 18:37
>>>> >> 件名: FW: Equipment listing for shipment today
>>>>>>>
>>>> >>> <u></u>
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>>>> >>>
>>>> >> Dear Hatada-san,
>>>> >>>
>>>> >>> This is to inform you that the Talon robot with radiation
>>>> >>> mapping capability and the radiation hardened camera systems
>>>> >> have now been shipped. It's estimated they will arrive in Japan
>>>> >> on Friday,
> April
>>
>>>> >> 8.
>>>> >> Attached please find the list of the equipment that is in the
>>>> shipment.
>>>> >>
>>>> >> I would like to discuss with you arrangements to meet the
>>>> >> equipment upon its arrival in Japan.
>>>> >>>
>>>> >> Prior to shipping, Idaho National Laboratory made a video of
>>>> >> operational details of all the equipment. We can provide the
>>>> video and electronic copies of the manuals for most of the systems.
> Please
>>>> >>> let us know to whom the video and the other electronic files
>>>> >> should
>> be
>>>> >> delivered.
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
>>>> >> In addition, DOE is considering sending up to four people to
>>>> >> Japan
>> in
>>>> >> support of the equipment delivery. Specifically, we propose to

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> send
>>>> >> two teams of two persons each to support the setup, training,
>>>> >> and operational support of the Talon system and the cameras
>>>>>> (total of 4 people). Our laboratory recommends that two people
>>>> >> are needed for each of the groups of equipment to technically
>>>> >> trouble shoot and support their operation. If you agree, then I
>>>> >> would be happy to
>> work
>>>> with you on the details of when the team should come and where
>>>> >> they would work with their Japanese counterparts.
>>>> >>>
>>>> >> I look forward to hearing from you.
>>>> >>>
>>>> >>> Best regards,
>>>> >>>
>>>> >> Ron
>>>> >> Ronald C. Cherry
>>>> >> Energy Attach??
>>>> >> Director, DOE Japan Office
>>>> >> U.S. Embassy Tokyo
>>>> >> Tel. (0)3-3224-5444
>>>> >> Fax (0)3-3224-5769
>>>> >> Cell (0(b)(6)
>>>> >> email CherryRC@state.gov <mailto:CherryRC@state.gov>
>>>> >>>
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>>>> >>>
>>>> >>>
>>>> >>> This email is UNCLASSIFIED.
>>>> >>>
>>>> >> [添付ファイル "SF 122 Listing DT 040411.pdf" は
>>>> >> hatada-hiroyuki/MITI-LAN
>>>> >> が削除しました]
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From:	吉野 伸 <t0698977@tepco.co.jp></t0698977@tepco.co.jp>	
Sent:	Monday, April 11, 2011 10:26 PM	
То:	Derek C Wadsworth; Jay.Tilden@nnsa.doe.gov	
Cc:	鎌原 健志; 阪上 知己; 八木 直人; shin.kato@aist.go.jp; Golub, Sal;	
	(b)(6)	
	oikawa.kageharu@tepco.co.jp; n.koyachi@aist.go.jp; npd_tanaka_t@tepsco.co.jp;	
	NITOPS; mizuo@fsinet.or.jp; (b)(6) Ke	elly,
	John E (NE); Miller, Jeffrey A; Tilden, Jay; ichii-naoto@meti.go.jp; HowardEB@state.go	ov;
	horiguchi-shin@meti.go.jp; hiro.hirukawa@aist.go.jp; hatada-hiroyuki@meti.go.jp;	
	McFarlane, Harold; funaki-kentaro@meti.go.jp; Duncan, Aleshia (State Dept); Cherry,	
	Ron; AwanRX; arahata.taichiro@tepco.co.jp; Larzelere, Alex; (b)(6)	
Subject:	lecture and training in Tsukuba	

Dear Mr Wadsworth and Mr Tilden

I am Shin Yoshino in TEPCo. I will give you more information about the lecture and training in Tsukuba.

date: 2011/4/14(Thu.) - 15(Fri.)

time: 10:00 - 16:00

venue: AIST North Site

one hour-train from Tokyo and 30 minute-taxi from Tsukuba St.

I do not know where you are staying. If you start in Tokyo Station, please take a JR Yamanote Line train for Ueno to Akihabara (5 minutes), and change trains in Akihabara to Tsukuba Express (TX) for Tsukuba terminal (50 minutes). Please be careful that

Akihabara Station on Tsukuba Express is underground. So you may need about

10 minutes

to change trains. You can meet us at the exit of Tsukuba Station (terminal) at 9:30. And then we will take you to AIST by taxi. The time table of TX is below.

Akihabara - Tsukuba 8:24 9:11 8:34 9:28

Because there is no eating place in AIST, do not foget to bring lunch and drink with yourself. We can assist you at Tsukuba Station.

We need to submit the participants list to AIST. We would appreciate if you send the name list of DOE's participants.

Best,

----- Original Message -----From: "Derek C Wadsworth" <Derek.Wadsworth@inl.gov> Sent: Tuesday, April 12, 2011 5:58 AM Subject: Radio Specifications

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       > Dear Yagi-san,
        >
        > The following Excel spreadsheet has all of the radio information for the
        > systems that were sent. Please contact me if you have any more questions.
        >
        >
        >
        >
        >
        >
        > Regards,
        >
        > Derek Wadsworth
        >
        >
        >
        > Derek Wadsworth
        > Robotic & Human Systems
        > Idaho National Laboratory
        > Office: (208) 526-8514
        > Mobile: (b)(6)
        > derek.wadsworth@inl.gov
        >
        >
        >
        >
        > 八木 直人 <yagi.n@tepco.co.jp>
        > 04/11/11 09:24 AM
        >
        > To
        > 吉野 伸 < yoshino.shin@tepco.co.jp>, "Tilden, Jay"
        > <Jay.Tilden@nnsa.doe.gov>, <derek.wadsworth@inl.gov>
        > cc
        > <arahata.taichiro@tepco.co.jp>, "Cherry, Ron" <CherryRC@state.gov>,
        > <hatada-hiroyuki@meti.go.jp>, "Miller, Jeffrey A"
        > <jeffrey.miller@pnl.gov>, "AwanRX" <AwanRX@state.gov>,
        > <hiro.hirukawa@aist.go.jp>, <n.koyachi@aist.go.jp>,
        > <shin.kato@aist.go.jp>, <mizuo@fsinet.or.jp>, <npd_tanaka_t@tepsco.co.jp>,
                                   ]<ralph.way@nrc.gov>, <okuda-shuji@meti.go.jp>,
        > {(b)(6)
        > {(b)(6)
        > <ichii-naoto@meti.go.jp>, <HowardEB@state.gov>,
        > <horiguchi-shin@meti.go.jp>, <funaki-kentaro@meti.go.jp>, "Duncan, Aleshia
        > \(State Dept\)" < DuncanAD@state.gov>, (b)(6)
        > < oikawa.kageharu@tepco.co.jp>, "McFarlane, Harold"
        > <harold.mcfarlane@inl.gov>, "NITOPS" <NITOPS@nnsa.doe.gov>, "PWG"
        > < PWG@nnsa.doe.gov>, "Larzelere, Alex" < alex.larzelere@nuclear.energy.gov>,
        > "Kelly, John E \(NE\)" < JohnE.Kelly@nuclear.energy.gov>, "Golub, Sal"
        > <sal.golub@nuclear.energy.gov>
        > Subject
        > Re: 4 people support team for Talon and cameras
        >
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> > > > > > Dear Mr Tilden and Mr Wadsworth > > > Good afternoon, I am Naoto Yagi working for TEPCO. We would like to know > information about radio used by Talon. We have to get radio waves use > permission from Ministry of Internal Affairs and Communications before > starting up Talon in Japan. It is because its radio waves are US specific > and not usually accepted in Japan. > > And we also have to manage and control the frequency band resourses at the > > Fukushima site in order to avoid interferences between each > radio-controled > equipment. > > Attached file is the format for radio information inquiries. We'd really > appreciate if you fill in it and send back to us. > > Thanks. > > Best regards, > Naoto Yagi > TEPCO > > ----- Original Message ----->From: "吉野 伸" <yoshino.shin@tepco.co.jp> > To: "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov>; <derek.wadsworth@inl.gov> > Cc: <arahata.taichiro@tepco.co.jp>; "Cherry, Ron" <CherryRC@state.gov>; ><yagi.n@tepco.co.jp>; <hatada-hiroyuki@meti.go.jp>; "Miller, Jeffrey A" > <jeffrey.miller@pnl.gov>; "AwanRX" <AwanRX@state.gov>; > <hiro.hirukawa@aist.go.jp>; <n.koyachi@aist.go.jp>; > <shin.kato@aist.go.jp>; > <mizuo@fsinet.or.jp>; <npd_tanaka_t@tepsco.co.jp>; >(b)(6) > <ralph.way@nrc.gov>; <okuda-shuji@meti.go.jp>; > (b)(6) >(b)(6) <ichii-naoto@meti.go.jp>; <HowardEB@state.gov>; > <horiguchi-shin@meti.go.jp>; <funaki-kentaro@meti.go.jp>; "Duncan, Aleshia > > (State Dept)" < DuncanAD@state.gov>; {(b)(6) > <oikawa.kageharu@tepco.co.jp>; "McFarlane, Harold" > <harold.mcfarlane@inl.gov>; "NITOPS" <NITOPS@nnsa.doe.gov>; "PWG" > <PWG@NNSA.Doe.Gov>; "Larzelere, Alex" <alex.larzelere@nuclear.energy.gov>; > > "Kelly, John E (NE)" <JohnE.Kelly@Nuclear.Energy.Gov>; "Golub, Sal" > <sal.golub@nuclear.energy.gov> > Sent: Monday, April 11, 2011 8:20 PM

> Subject: Re: 4 people support team for Talon and cameras > > >> Dear Mr Tilden and Mr Wadsworth >> >> I am Shin Yoshino in TEPCO, preparing for the reception of your team >> on Thursday(4/14) and Friday(4/15). My understanding is that your team >> will provide us for the lecture and training of the Talon with a > radiation >> camera. If you need some equipments, a projector, etc, please let me > know >> in advance. The place where you will teach us has been determined to be >> AIST(Sansouken) in Tsukuba, about one hour-train from Tokyo. Details > will >> be sent to you later. >> >> I am looking forwards to seeing you. >> >> Best wishes, >> >> On Sun, 10 Apr 2011 11:12:57 -0400 >> "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov> wrote: >> >>> Dear Yagi-san and Yoshino-san, >>> >>> Good evening, I am Jay Tilden and serve as the logistics coordinator > for >>> the US Dept of Energy. Dr. Derek Wadsworth, of the Idaho National >>> Laboratory is your technical point of contact for the 4 person team we >>> will deploy to you next week. >>> >>> His email is provided above and his direct phone number 208.526.8514. >>> Derek and I are available to assist in any way we can. Regards - Jay >>> Tilden >>> >>> ----- Original Message ----->>> From: 荒畑 太一朗 <arahata.taichiro@tepco.co.jp> >>> To: Cherry, Ron; yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>; >>> hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp>; Tilden, Jay >>> Cc: 及川 景晴 <oikawa.kageharu@tepco.co.jp>; Miller, Jeffrey A; > AwanRX; >>> hiro.hirukawa@aist.go.jp <hiro.hirukawa@aist.go.jp>; > n.koyachi@aist.go.jp >>> <n.koyachi@aist.go.jp>; shin.kato@aist.go.jp <shin.kato@aist.go.jp>; >>> mizuo@fsinet.or.jp <mizuo@fsinet.or.jp>; npd tanaka t@tepsco.co.jp >>> <npd tanaka_t@tepsco.co.jp>;(b)(6) ralph.way@nrc.gov <ralph.way@nrc.gov>; >>> (b)(6) >>> okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>; >>>(b)(6) >>>(b)(6) (b)(6) ichii-naoto@meti.go.jp >

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>>> <ichii-naoto@meti.go.jp>; Howard, E. Bruce <HowardEB@state.gov>;

>>> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>; >>> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; Duncan, Aleshia >>> (State Dept) (b)(6) >>> Sent: Sun Apr 10 08:48:24 2011 >>> Subject: Re: 4 people support team for Talon and cameras >>> >>> Dear Mr. Cherry >>> >>> Thanks for proposing US support team visit to Japan. >>> >>> The principal point of contact at TEPCO will be >>> Mr.Yoshino(yoshino.shin@tepco.co.jp) at Mechanical System Group of >>> laboratory. >>> I think you know from Mr.Yagi's mail ,specific activities date of >>> Talon with mapping function has not yet decided. >>> First, on April 14-15, Mr.Yoshino will evaluate the performance and how > >>> to >>> use The Talon and cameras, >>> then we will judge the introduction of the Talon to Fukushima Daiichi > NPS >>> and decide the schedule with the persons concerned. >>> Therefore We will not ask your operation support just after April 15. >>> Thank you. >>> >>> Best regards, >>> Naoto Yagi >>> TEPCO >>> >>> ----- Original Message ----->>> From: "Cherry, Ronald C" <CherryRC@state.gov> >>> To: <yagi.n@tepco.co.jp>; <hatada-hiroyuki@meti.go.jp>; >>> <Jay.Tilden@nnsa.doe.gov> >>> Cc: "荒畑 太一朗" <arahata.taichiro@tepco.co.jp>; "及川 景晴" >>> <oikawa.kageharu@tepco.co.jp>; <Jeffrey.Miller@pnl.gov>; "Awan, Riaz X >>> (Sofia - DOE)" <AwanRX@state.gov>; <hiro.hirukawa@aist.go.jp>; >>> <n.koyachi@aist.go.jp>; <shin.kato@aist.go.jp>; <mizuo@fsinet.or.jp>; >>> <npd tanaka t@tepsco.co.jp>;[(b)(6) >>> <ralph.way@nrc.gov>; >>> <okuda-shuji@meti.go.jp>; (b)(6) >>> (b)(6) ; <ichii-naoto@meti.go.jp>; "Howard, E. Bruce" >>> <HowardEB@state.gov>; <horiguchi-shin@meti.go.jp>; >>> <funaki-kentaro@meti.go.jp>; "Duncan, Aleshia D" <DuncanAD@state.gov>; >>>|(b)(6) >>> Sent: Sunday, April 10, 2011 9:56 AM >>> Subject: RE: 4 people support team for Talon and cameras >>> >>> >>> > Dear Yagi-san, >>>>> >>> > Thanks for your email. I understand the technical point of contact > at

>>>> Idaho National Laboratory will be Mr. Derek Wadsworth. Mr. Tilden at > >>> > DOE >>>> Headquarters will be in touch soon with more specific information. In > >>> > the >>> > meantime, can you tell me who the principal point of contact at TEPCO > >>> > will >>> > be? Will that be yourself, or someone else? >>>>> >>> > Thank you, again. >>>> >>> > Best regards, >>>>. >>> > Ron >>> > Ronald C. Cherry >>> > Energy Attach?? >>> > Director, DOE Japan Office >>> > U.S. Embassy Tokyo >>> > Tel. (0)3-3224-5444 >>> > Fax (0)3-3224-5769 >>> > Cell (b)(6) >>> > email CherryRC@state.gov >>> > This email is UNCLASSIFIED >>>>> >>> > -----Original Message----->>> > From: 八木 直人 [mailto:yagi.n@tepco.co.jp] >>> > Sent: Sunday, April 10, 2011 5:10 AM >>> > To: hatada-hiroyuki@meti.go.jp; Cherry, Ronald C >>> > Cc: 荒畑 太一朗; 及川 景晴; Jeffrey.Miller@pnl.gov; Awan, Riaz X >>> > (Sofia - DOE); hiro.hirukawa@aist.go.jp; n.koyachi@aist.go.jp; >>> > shin.kato@aist.go.jp; mizuo@fsinet.or.jp; npd_tanaka_t@tepsco.co.jp; >>> \(b)(6) alph.way@nrc.gov; okuda-shuji@meti.go.jp; >>> >(b)(6) >>> > Jay.Tilden@nnsa.doe.gov; ichii-naoto@meti.go.jp; Howard, E. Bruce; >>> > horiguchi-shin@meti.go.jp; funaki-kentaro@meti.go.jp; Duncan, Aleshia > >>> > D; (b)(6) >>> > >>> > Subject: Re: 4 people support team for Talon and cameras >>>>> >>> > Dear Mr. Cherry >>>>> >>> > Thanks for proposing US support team visit to Japan. >>>> >>> > Suggested schedule on April 14-15 from us is the earliest days we > will >>> > be >>> > able to be trained. We are frexible on the shchedule. >>>>

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>>> > We also would like to know how many days you think adequate to be >>> > trained. >>> > We are currently cosidering using DOE offered Talon to make outside >>> > radiation map at first. Then we might use it inside buildings for any > >>> > kind >>> > of monitoring activities. Specific activities date is not yet > decided. >>> > Before that our team need to grasp the performance of Talon and > cameras >>> > and what those equipments can adapt at the site for recovery >>> > activities. >>>>> >>> > I would like to closely contact with you regarding your kind support. >>>>> >>> > Thank you. >>>>> >>> > Best regards, >>> > Naoto Yagi >>> > TEPCO >>>>> >>> > ----- Original Message ----->>> > From: "Cherry, Ronald C" < CherryRC@state.gov> >>> > To: <hatada-hiroyuki@meti.go.jp> >>> > Cc: (b)(6) "Duncan, Aleshia D" <DuncanAD@state.gov>; >>> > <funaki-kentaro@meti.go.jp>; <horiguchi-shin@meti.go.jp>; "Howard, E. >>> > Bruce" >>> > <HowardEB@state.gov>; <ichii-naoto@meti.go.jp>; >>> > <lay.Tilden@nnsa.doe.gov>; >>>>(b)(6) >>> > <okuda-shuji@meti.go.jp>; <ralph.way@nrc.gov>; >>> > (b)(6) >>> > <yagi.n@tepco.co.jp>; <npd_tanaka_t@tepsco.co.jp>; >>> > <mizuo@fsinet.or.jp>; >>> > <shin.kato@aist.go.jp>; <n.koyachi@aist.go.jp>; >>> > <hiro.hirukawa@aist.go.jp>; "Awan, Riaz X (Sofia - DOE)" >>> > <AwanRX@state.gov>; <Jeffrey.Miller@pnl.gov> >>> > Sent: Saturday, April 09, 2011 11:40 PM >>> > Subject: Re: 4 people support team for Talon and cameras >>>> >>>>> >>> >> Dear Hatada-san, >>> >> >>> >> Mr. Tilden at DOE Headquarters can provide advice on whom TEPCO > should >>> >> contact to coordinate the details of the visit by the team. I > believe >>> >> the team can come to Japan in time to work on April 14-15, but I > also >>> >> believe it would be good for the U.S. team and TEPCO to agree in >>> >> advance on what activities will be done and how much time may be > need

>>> >> to do that. Our point of contact can work that out with TEPCO. >>> >>> >>> >> The equipment should have arrived at AIST by now. Please let me > know >>> >> when AIST confirms its arrival, or if it has not, then we should > take >>>> the necessary steps to track itn so it will be ready when the US > team >>> >> arrives. >>> >>> >>> >> Thank you. >>> >> >>> >> Best regards, >>> >>> >>> >> Ron >>> >>> >>> >> >>> >> This has been sent from my Blackberry >>> >> >>> >> ----- Original Message ----->>> >> From: hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp> >>> >> To: Cherry, Ronald C >>> >> Cc: (b)(6) Duncan, Aleshia D; >>> >> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; >>> >> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>; Howard, E. >>> >> Bruce; ichii-naoto@meti.go.jp <ichii-naoto@meti.go.jp>; >>> >> Jay.Tilden@nnsa.doe.gov <Jay.Tilden@nnsa.doe.gov>; >>> >>(b)(6) >>> >>(b)(6) >>> >> okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>; ralph.way@nrc.gov >>> >> <ralph.way@nrc.gov>;(b)(6) > (b)(6) >>> >> yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>; npd_tanaka_t@tepsco.co.jp >>> >> <npd_tanaka_t@tepsco.co.jp>; mizuo@fsinet.or.jp > <mizuo@fsinet.or.jp>; >>> >> shin.kato@aist.go.jp <shin.kato@aist.go.jp>; n.koyachi@aist.go.jp >>> >> <n.koyachi@aist.go.jp>; hiro.hirukawa@aist.go.jp >>> >> <hiro.hirukawa@aist.go.jp> >>> >> Sent: Sat Apr 09 08:41:27 2011 >>> >> Subject: 4 people support team for Talon and cameras >>> >>> >>> >> >>> >> Dear Cherry-san, >>>>>>> >>> >> Regarding the support team consisting of 4 people to assist us with >>> >> Talon and cameras that was mentioned in your previous email, TEPCO >>> >> told me it would be great if the team could help them on dates/place >>> >> shown below: >>> >>> When: 14th and 15th April >>> >> Where : The National Institute of Advanced Industrial Science >>> >>>

>>> >> and Technology (AIST)

Address: Teragu Kashiwa-yama 1497-1, Tsukuba-city, Ibaraki, >>> >> >>> >> JAPAN >>> >> >>> >> If this is acceptable to your side, TEPCO is ready to coordinate the >>> >> detail on this. Please let us know who to talk to. >>>>>>> >>> >> By the way, if I remember correctly, I heard from you that the team >>> >> would be helpful in starting up the equipment, like assembling. >>> >> If this is the case, it sounds to me that we could do the "meeting > the >>> >> equipment" in the morning of 14th, rather than doing it right after >>> >> the shipment arrival to find ourselves waiting to become able to > even >>> >> start up the equipment. I appreciate your thought on this. >>> >> Of course, my assumption is that it will arrive on or by 13th, > though >>> >> it seems that it is taking more time than expected. >>> >>> >>> >> Very respectfully, >>> >> >>> >> Hiroyuki >>> >> >>> >> >>> >>> >>> >> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >>> >> Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 >>> >> / hatada-hiroyuki@meti.go.jp >>> >> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>> >> 03-3501-1692 >>> >>> >>> >>> >>> >> >>> >> >>> >>> >>> >> 送信元: hatada-hiroyuki/MITI-LAN >>> >> 宛先: "Cherry, Ronald C" <CherryRC@state.gov> 🗋 "Duncan, Aleshia D" >>> >> Cc: "Aaron Leong" ((b)(6) >>> >> <DuncanAD@state.gov>, funaki-kentaro@meti.go.jp, >>> >> horiguchi-shin@meti.go.jp, "Howard, E. Bruce" <HowardEB@state.gov>, >>> >> Jay.Tilden@nnsa.doe.gov, "Maj. Keith Simmers" >>> >>(b)(6)]"Kenneth Spurlock" >>> >>|(b)(6) , okuda-shuji@meti.go.jp, "Ralph Way" >>> >> <ralph.way@nrc.gov>, "Rod Tanaka" (b)(6) >>> >> ichii-naoto/MITI-LAN@MITI-LAN >>> >> 日付: 2011/04/09 01:10 >>> >> 件名: Re: FW: Equipment listing for shipment today >>> >> >>> >>> >>> >>> >>> >>> >>> >>> >>> >> Dear Cherry-san,

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>>> >> >>> >> >>> >> For the video and electronic copies of the manuals, TEPCO says that >>> >> they want them to be sent to the following address. >>> >> Regarding the support team of 4 people, we really appreciate the > offer >>> but TEPCO needs to arrange the date so that research institutes >>> >> supporting TEPCO can also attend. >>> >> Hopefully I can get back to you tomorrow with TEPCO's request on > this. >>> >> Thank you, >>> >>> >>> >> Shin YOSHINO >>> >> Machinery Systems Technology Group, >>> >> Technology Development Research Institute, Tokyo Electric Power >>> >> Company Egasaki-cho 4-1, Tsurumi-ku, Yokohama-city, Kanagawa > 230-8510, >>> >> Japan ->>> >>> >>> >> Email yoshino.shin@tepco.co.jp >>> >> >>> >> TEL 045-394-6361 >>> >> FAX 045-585-8647 >>> >>> >>> >> >>> >> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >>> >> Division, Ministry of Economy, Trade and Industry / +81-3-3501-1692 >>> >> / hatada-hiroyuki@meti.go.jp >>> >> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>> >> 03-3501-1692 >>> >>> >>> >>> >>> >> >>> >>> >>> >>> >>> >>> >>> >> 送信元: "Cherry, Ronald C" < CherryRC@state.gov> >>> >> 宛先: <hatada-hiroyuki@meti.go.jp> "Duncan, Aleshia D >>> >> Cc: "Aaron Leong" (b)(6) >>> >> <DuncanAD@state.gov>, "Howard, E. Bruce" <HowardEB@state.gov>, >>> >> (b)(6) "Maj. Keith Simmers" _{>>> >>}|(b)(6) "Ralph Way" <ralph.way@nrc.gov>, "Rod >>> >> Tanaka' <funaki-kentaro@meti.go.jp>, >>> >>(b)(6) >>> >> <horiguchi-shin@meti.go.jp>, <okuda-shuji@meti.go.jp>, >>> >> <Jay.Tilden@nnsa.doe.gov> >>> >> 日付: 2011/04/06 18:37 >>> >> 件名: FW: Equipment listing for shipment today >>> >> >>> >>> >>> >>>

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>>> >> Dear Hatada-san,

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>>>>> This is to inform you that the Talon robot with radiation mapping
>>> capability and the radiation hardened camera systems have now been
>>> shipped. It's estimated they will arrive in Japan on Friday, April

>>> >> 8.

>>> >> Attached please find the list of the equipment that is in the >>> >> shipment.

>>> >>

>>> >> I would like to discuss with you arrangements to meet the equipment >>> >> upon its arrival in Japan.

>>> >>

>>> >> Prior to shipping, Idaho National Laboratory made a video of >>> >> operational details of all the equipment. We can provide the video >>> >> and electronic copies of the manuals for most of the systems. Please >>> >> let us know to whom the video and the other electronic files should > be

>>> >> delivered.

>>> >>

>>> >> In addition, DOE is considering sending up to four people to Japan > in

>>> support of the equipment delivery. Specifically, we propose to send
>>> two teams of two persons each to support the setup, training, and
>>> operational support of the Talon system and the cameras (total of 4
>>> people). Our laboratory recommends that two people are needed for
>>> each of the groups of equipment to technically trouble shoot and
>>> support their operation. If you agree, then I would be happy to
> work

>>> with you on the details of when the team should come and where they >>> >> would work with their Japanese counterparts.

>>> >>>

>>> >> I look forward to hearing from you.

>>> >>> >>> >> Best regards, >>> >> >>> >> Ron >>> >> Ronald C. Cherry >>> >> Energy Attach?? >>> >> Director, DOE Japan Office >>> >> U.S. Embassy Tokyo >>> >> Tel. (0)3-3224-5444 >>> >> Fax (0)3-3224-5769 >>> >> Cell (b)(6) >>> >> email CherryRC@state.gov <mailto:CherryRC@state.gov> >>> >> >>> >> >>> >>> >>> >> >>> >> This email is UNCLASSIFIED.

>>> >>	
>>> >> [添付ファイル "SF 122 Listing DT 040411.pdf"	は
>>> >> hatada-hiroyuki/MITI-LAN	
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From: 八木 直人 <yagi.n@tepco.co.jp> Sent: Wednesday, April 13, 2011 9:37 AM robert.kinoshita@inl.gov To: Derek C Wadsworth; (b)(6) Cc: Larzelere, Alex; arahata.taichiro@tepco.co.jp; AwanRX; Duncan, Aleshia (State Dept); funakikentaro@meti.go.jp; McFarlane, Harold; hatada-hiroyuki@meti.go.jp; hiro.hirukawa@aist.go.jp; horiguchi-shin@meti.go.jp; HowardEB@state.gov; ichiinaoto@meti.go.jp; Jay.Tilden@nnsa.doe.gov; Miller, Jeffrey A; Kelly, John E (NE); (b)(6) mizuo@fsinet.or.jp; NITOPS; npd_tanaka_t@tepsco.co.jp; n.koyachi@aist.go.jp; oikawa.kageharu@tepco.co.jp; okuda-shuji@meti.go.jp; PWG; Way, Ralph; (b)(6) Golub, Sal; shin.kato@aist.go.jp; 吉野 伸; Cherry, Ron Re: Radio Specifications Subject:

Dear Mr. Kinoshita

Thanks for your kind assistance.

We would like to know following two information regarding radio frequency used by Talon.

1.Radio frequency for Video

Exact Frequency bandwidth : (ex.2.409-2.480GHz) (Your Note in Excel spreadsheet: 10 Settings Available in this range, set at factory. Exact one in use unknown.)

2.Radio frequency for Telemetry Exact Frequency bandwidth : (you told us it's 902-928MHz in Excel spreadsheet)

If Talon use only following limited frequency bandwidths, we don't need to negotiate other radio wave users. Otherwise we have to do so and it might take some time. 903-905MHz 910.6-915MHz 925-928MHz

We can't boot up Talon tommorrow without radio wave permission by Goverment of Japan.

When you email to me, please cc Mr. Oikawa (oikawa.kageharu@tepco.co.jp) working for TEPCO. Thanks.

Best regards Naoto Yagi TEPCO

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

From: "八木 直人" <yagi.n@tepco.co.jp>

To: "Derek C Wadsworth" <Derek.Wadsworth@inl.gov>

l'Larzelere, Alex" Cc: (b)(6)

<alex.larzelere@nuclear.energy.gov>; <arahata.taichiro@tepco.co.jp>;

"AwanRX" <AwanRX@state.gov>; "Cherry, Ron" <CherryRC@state.gov>; "Duncan,

Aleshia (State Dept)" <DuncanAD@state.gov>; <funaki-kentaro@meti.go.jp>;

"McFarlane, Harold" <harold.mcfarlane@inl.gov>;

<hatada-hiroyuki@meti.go.jp>; <hiro.hirukawa@aist.go.jp>;

<horiguchi-shin@meti.go.jp>; <HowardEB@state.gov>; <ichii-naoto@meti.go.jp>;

<Jay.Tilden@nnsa.doe.gov>; "Miller, Jeffrey A" <jeffrey.miller@pnl.gov>;

"Kelly, John E (NE)" < JohnE.Kelly@nuclear.energy.gov>;

(b)(6) <mizuo@fsinet.or.jp>; 'NITOPS" <NITOPS@nnsa.doe.gov>; <npd_tanaka_t@tepsco.co.jp>; <n.koyachi@aist.go.jp>; <oikawa.kageharu@tepco.co.jp>;

<okuda-shuji@meti.go.jp>; "PWG" <PWG@nnsa.doe.gov>; <ralph.way@nrc.gov>; "Golub, Sal" <sal.golub@nuclear.energy.gov>;

(b)(6)

<shin.kato@aist.go.jp>; "吉野伸" <yoshino.shin@tepco.co.jp>

Sent: Tuesday, April 12, 2011 11:05 AM

Subject: Re: Radio Specifications

> Dear Dr. Wadsworth

>

> Thanks for your kind help.

>

> I noticed the frequency band for Video transmission is so wide. Our

> transmission division told me it must be difficult to get the permission

> for such a wide frequency band.

>

> Lassume you can't know exact settings set at factory because it has been > already shipped. Do you have any idea to know that in advance? Could > visiting US support team find it soon after checking Talon in Japan? If > US team identify exact frequency band on 14th April, we will be able to > activate video transmission function on 15th April after getting > permission.

> I really appreciate if your have advise on it.

> Thanks.

>

- > Best regards,
- > Naoto Yagi

> TEPCO

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

> From: "Derek C Wadsworth" < Derek.Wadsworth@inl.gov>

> To: "八木 直人" <yagi.n@tepco.co.jp>

(b)(6) "Larzelere, Alex"

> <alex.larzelere@nuclear.energy.gov>; <arahata.taichiro@tepco.co.jp>;

> "AwanRX" <AwanRX@state.gov>; "Cherry, Ron" <CherryRC@state.gov>; "Duncan,

> Aleshia (State Dept)" < DuncanAD@state.gov>; < funaki-kentaro@meti.go.jp>;

> "McFarlane, Harold" <harold.mcfarlane@inl.gov>;

> <hatada-hiroyuki@meti.go.jp>; <hiro.hirukawa@aist.go.jp>;

> <horiguchi-shin@meti.go.jp>; <HowardEB@state.gov>; > <ichii-naoto@meti.go.jp>; <Jay.Tilden@nnsa.doe.gov>; "Miller, Jeffrey A" > <jeffrey.miller@pnl.gov>; "Kelly, John E (NE)" > <JohnE.Kelly@nuclear.energy.gov>; (b)(6) <mizuo@fsinet.or.jp>; "NITOPS" >(b)(6) > <NITOPS@nnsa.doe.gov>; <npd_tanaka_t@tepsco.co.jp>; > <n.koyachi@aist.go.jp>; <oikawa.kageharu@tepco.co.jp>; > <okuda-shuji@meti.go.jp>; "PWG" <PWG@nnsa.doe.gov>; <ralph.way@nrc.gov>; "Golub, Sal" <sal.golub@nuclear.energy.gov>; (b)(6) > <shin.kato@aist.go.jp>; "吉野 伸" <yoshino.shin@tepco.co.jp> > Sent: Tuesday, April 12, 2011 9:18 AM > Subject: Re: Radio Specifications > > >> Dear Yagi-san, >> >> You are very welcome. Please let me know if I can further assist you. >> >> Regards, >> >> Derek Wadsworth >> >> >> >> Derek Wadsworth >> Robotic & Human Systems >> Idaho National Laboratory >> Office: (208) 526-8514 >> Mobile: (b)(6) >> derek.wadsworth@inl.gov >> >> >> >> >> 八木 直人 <yagi.n@tepco.co.jp> >>04/11/11 06:08 PM >> >> To >> <Jay.Tilden@nnsa.doe.gov>, "Derek C Wadsworth" <Derek.Wadsworth@inl.gov> >> cc >> (b)(6) "Larzelere, Alex" >> <alex.larzelere@nuclear.energy.gov>, <arahata.taichiro@tepco.co.jp>, >> "AwanRX" < AwanRX@state.gov>, "Cherry, Ron" < CherryRC@state.gov>, "Duncan, >> Aleshia \(State Dept\)" <DuncanAD@state.gov>, >> <funaki-kentaro@meti.go.jp>, >> "McFarlane, Harold" <harold.mcfarlane@inl.gov>, >> <hatada-hiroyuki@meti.go.jp>, <hiro.hirukawa@aist.go.jp>, >> <horiguchi-shin@meti.go.jp>, <HowardEB@state.gov>, >> <ichii-naoto@meti.go.jp>, "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov>, >> "Miller, Jeffrey A" <jeffrey.miller@pnl.gov>, "Kelly, John E \(NE\)" >> <JohnE.Kelly@nuclear.energy.gov>, {(b)(6) <mizuo@fsinet.or.jp>, "NITOPS" >>(b)(6)

>> <NITOPS@nnsa.doe.gov>, <npd tanaka t@tepsco.co.jp>, >> <n.koyachi@aist.go.jp>, <oikawa.kageharu@tepco.co.jp>, >> <okuda-shuji@meti.go.jp>, "PWG" <PWG@nnsa.doe.gov>, <ralph.way@nrc.gov>, >>|(b)(6) "Golub, Sal" <sal.golub@nuclear.energy.gov>, >> <shin.kato@aist.go.jp>, 吉野 伸 <yoshino.shin@tepco.co.jp> >> Subject >> Re: Radio Specifications >> >> >> >> >> >> >> Dear Mr. Wadsworth >> >> Thanks for your prompt reply. The data you sent is very helpful for us. >> >> Best regards, >> Naoto Yagi >> TEPCO >> >> ----- Original Message ----->> From: "Derek C Wadsworth" <Derek.Wadsworth@inl.gov> >> To: "八木 直人" <yagi.n@tepco.co.jp>; <Jay.Tilden@nnsa.doe.gov> "Larzelere, Alex" >> Cc: (b)(6) >> <alex.larzelere@nuclear.energy.gov>; <arahata.taichiro@tepco.co.jp>; >> "AwanRX" <AwanRX@state.gov>; "Cherry, Ron" <CherryRC@state.gov>; "Duncan, >> Aleshia (State Dept)" <DuncanAD@state.gov>; <funaki-kentaro@meti.go.jp>; >> "McFarlane, Harold" <harold.mcfarlane@inl.gov>; >> <hatada-hiroyuki@meti.go.jp>; <hiro.hirukawa@aist.go.jp>; >> <horiguchi-shin@meti.go.jp>; <HowardEB@state.gov>; >> <ichii-naoto@meti.go.jp>; >> "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov>; "Miller, Jeffrey A" >> <jeffrey.miller@pnl.gov>; "Kelly, John E (NE)" >> <lohnE.Kelly@nuclear.energy.gov>; (b)(6) <mizuo@fsinet.or.jp>; "NITOPS" >> (b)(6) >> <NITOPS@nnsa.doe.gov>; <npd_tanaka_t@tepsco.co.jp>; >> <n.koyachi@aist.go.jp>; >> <oikawa.kageharu@tepco.co.jp>; <okuda-shuji@meti.go.jp>; "PWG" >> <PWG@nnsa.doe.gov>; <ralph.way@nrc.gov>; {(b)(6) >> "Golub, >> >> Sal" <sal.golub@nuclear.energy.gov>; <shin.kato@aist.go.jp>; "吉野 伸" >> <yoshino.shin@tepco.co.jp> >> Sent: Tuesday, April 12, 2011 5:58 AM >> Subject: Radio Specifications >> >> >>> Dear Yagi-san, >>> >>> The following Excel spreadsheet has all of the radio information for the

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>>> systems that were sent. Please contact me if you have any more

>> questions. >>> >>> >>> >>> >>> >>> >>> Regards, >>> >>> Derek Wadsworth >>> >>> >>> >>> >>> Derek Wadsworth >>> Robotic & Human Systems >>> Idaho National Laboratory >>> Office: (208) 526-8514 >>> Mobile: (b)(6) >>> derek.wadsworth@inl.gov >>> >>> >>> >>> >>> 八木 直人 <yagi.n@tepco.co.jp> >>> 04/11/11 09:24 AM >>> >>> To >>> 吉野 伸 <yoshino.shin@tepco.co.jp>, "Tilden, Jay" >>> <Jay.Tilden@nnsa.doe.gov>, <derek.wadsworth@inl.gov> >>> cc >>> <arahata.taichiro@tepco.co.jp>, "Cherry, Ron" <CherryRC@state.gov>, >>> <hatada-hiroyuki@meti.go.jp>, "Miller, Jeffrey A" >>> <jeffrey.miller@pnl.gov>, "AwanRX" <AwanRX@state.gov>, >>> <hiro.hirukawa@aist.go.jp>, <n.koyachi@aist.go.jp>, >>> <shin.kato@aist.go.jp>, <mizuo@fsinet.or.jp>, >> <npd tanaka_t@tepsco.co.jp>, >><u>>[/h)(6)</u> >>{(b)(6) >>> <ichii-naoto@meti.go.jp>, <HowardEB@state.gov>, >>> <horiguchi-shin@meti.go.jp>, <funaki-kentaro@meti.go.jp>, "Duncan, >> Aleshia >>> \{State Dept\}" <DuncanAD@state.gov>, (b)(6) >>> <oikawa.kageharu@tepco.co.jp>, "McFarlane, Harold" >>> <harold.mcfarlane@inl.gov>, "NITOPS" <NITOPS@nnsa.doe.gov>, "PWG" >>> <PWG@nnsa.doe.gov>, "Larzelere, Alex" >> <alex.larzelere@nuclear.energy.gov>, >>> "Kelly, John E \(NE\)" <JohnE.Kelly@nuclear.energy.gov>, "Golub, Sal" >>> <sal.golub@nuclear.energy.gov> >>> Subject >>> Re: 4 people support team for Talon and cameras

>>>

>>> >>> >>> >>> >>> >>> Dear Mr Tilden and Mr Wadsworth >>> >>> >>> Good afternoon, I am Naoto Yagi working for TEPCO. We would like to know >>> information about radio used by Talon. We have to get radio waves use >>> permission from Ministry of Internal Affairs and Communications before >>> starting up Talon in Japan. It is because its radio waves are US >> specific >>> and not usually accepted in Japan. >>> >>> And we also have to manage and control the frequency band resourses at >> the >>> >>> Fukushima site in order to avoid interferences between each >>> radio-controled >>> equipment. >>> >>> Attached file is the format for radio information inquiries. We'd really >>> appreciate if you fill in it and send back to us. >>> >>> Thanks. >>> >>> Best regards, >>> Naoto Yagi >>> TEPCO >>> >>> ----- Original Message ----->>> From: "吉野 伸" <yoshino.shin@tepco.co.jp> >>> To: "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov>; <derek.wadsworth@inl.gov> >>> Cc: <arahata.taichiro@tepco.co.jp>; "Cherry, Ron" <CherryRC@state.gov>; >>> <yagi.n@tepco.co.jp>; <hatada-hiroyuki@meti.go.jp>; "Miller, Jeffrey A" >>> <jeffrey.miller@pnl.gov>; "AwanRX" <AwanRX@state.gov>; >>> <hiro.hirukawa@aist.go.jp>; <n.koyachi@aist.go.jp>; >>> <shin.kato@aist.go.jp>; >>> <mizuo@fsinet.or.jp>; <npd_tanaka_t@tepsco.co.jp>; >>>(b)(6) >>> <ralph.way@nrc.gov>; <okuda-shuji@meti.go.jp>; >>>(b)(6) >>>(b)(6) kichii-naoto@meti.go.jp>; >> <HowardEB@state.gov>; >>> <horiguchi-shin@meti.go.jp>; <funaki-kentaro@meti.go.jp>; "Duncan, >> Aleshia >>> >>> (State Dept)" <DuncanAD@state.gov>; |(b)(6) >>> <oikawa.kageharu@tepco.co.jp>; "McFarlane, Harold" >>> <harold.mcfarlane@inl.gov>; "NITOPS" <NITOPS@nnsa.doe.gov>; "PWG" >>> <PWG@NNSA.Doe.Gov>; "Larzelere, Alex"

>> <alex.larzelere@nuclear.energy.gov>; >>> >>> "Kelly, John E (NE)" <JohnE.Kelly@Nuclear.Energy.Gov>; "Golub, Sal" >>> <sal.golub@nuclear.energy.gov> >>> Sent: Monday, April 11, 2011 8:20 PM >>> Subject: Re: 4 people support team for Talon and cameras >>> >>> >>>> Dear Mr Tilden and Mr Wadsworth >>>> >>>> I am Shin Yoshino in TEPCO, preparing for the reception of your team >>>> on Thursday(4/14) and Friday(4/15). My understanding is that your team >>>> will provide us for the lecture and training of the Talon with a >>> radiation >>>> camera. If you need some equipments, a projector, etc, please let me >>> know >>>> in advance. The place where you will teach us has been determined to be >>>> AIST(Sansouken) in Tsukuba, about one hour-train from Tokyo. Details >>> will >>>> be sent to you later. >>>> >>>> I am looking forwards to seeing you. >>>> >>>> Best wishes, >>>> >>>> On Sun, 10 Apr 2011 11:12:57 -0400 >>>> "Tilden, Jay" <Jay.Tilden@nnsa.doe.gov> wrote: >>>> >>>> Dear Yagi-san and Yoshino-san, >>>>> >>>> Good evening, I am Jay Tilden and serve as the logistics coordinator >>> for >>>>> the US Dept of Energy. Dr. Derek Wadsworth, of the Idaho National >>>> Laboratory is your technical point of contact for the 4 person team we >>>> will deploy to you next week. >>>>> >>>>> His email is provided above and his direct phone number 208.526.8514. >>>> Derek and I are available to assist in any way we can. Regards - Jay >>>> Tilden >>>>> >>>> ----- Original Message ----->>>>> From: 荒畑 太一朗 <arahata.taichiro@tepco.co.jp> >>>> To: Cherry, Ron; yagi.n@tepco.co.jp <yagi.n@tepco.co.jp>; >>>>> hatada-hiroyuki@meti.go.jp <hatada-hiroyuki@meti.go.jp>; Tilden, Jay >>>>> Cc: 及川 景晴 <oikawa.kageharu@tepco.co.jp>; Miller, Jeffrey A; >>> AwanRX; >>>>> hiro.hirukawa@aist.go.jp <hiro.hirukawa@aist.go.jp>; >>> n.koyachi@aist.go.jp >>>>> <n.koyachi@aist.go.jp>; shin.kato@aist.go.jp <shin.kato@aist.go.jp>; >>>> mizuo@fsinet.or.jp <mizuo@fsinet.or.jp>; npd_tanaka_t@tepsco.co.jp >>>> <npd_tanaka_t@tepsco.co.jp>; (b)(6) >>>> [(b)(6) ralph.way@nrc.gov <ralph.way@nrc.gov>;

>>>> okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>; >>>>/(b)(6) >>>>> >> ichii-naoto@meti.go.jp >>> >>>>> <ichii-naoto@meti.go.jp>; Howard, E. Bruce <HowardEB@state.gov>; >>>> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>; >>>> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; Duncan, Aleshia >>>>> (State Dept)(b)(6) >>>> Sent: Sun Apr 10 08:48:24 2011 >>>> Subject: Re: 4 people support team for Talon and cameras >>>>> >>>> Dear Mr. Cherry >>>>> >>>> Thanks for proposing US support team visit to Japan. >>>>> >>>> The principal point of contact at TEPCO will be >>>> Mr.Yoshino(yoshino.shin@tepco.co.jp) at Mechanical System Group of >>>> laboratory. >>>> I think you know from Mr.Yagi's mail, specific activities date of >>>> Talon with mapping function has not yet decided. >>>> First, on April 14-15 , Mr. Yoshino will evaluate the performance and how >>> >>>> to >>>> use The Talon and cameras, >>>>> then we will judge the introduction of the Talon to Fukushima Daiichi >>> NPS >>>> and decide the schedule with the persons concerned. >>>>> Therefore We will not ask your operation support just after April 15. >>>> Thank you. >>>>> >>>> Best regards, >>>> Naoto Yagi >>>> TEPCO >>>>> >>>> ----- Original Message ----->>>> From: "Cherry, Ronald C" <CherryRC@state.gov> >>>>> To: <yagi.n@tepco.co.jp>; <hatada-hiroyuki@meti.go.jp>; >>>> <Jay.Tilden@nnsa.doe.gov> >>>>> Cc: "荒畑 太一朗" <arahata.taichiro@tepco.co.jp>; "及川 景晴" >>>> <oikawa.kageharu@tepco.co.jp>; <Jeffrey.Miller@pnl.gov>; "Awan, Riaz X >>>>> (Sofia - DOE)" <AwanRX@state.gov>; <hiro.hirukawa@aist.go.jp>; >>>> <n.koyachi@aist.go.jp>; <shin.kato@aist.go.jp>; <mizuo@fsinet.or.jp>; >>>> <npd_tanaka_t@tepsco.co.jp>; (b)(6) >>>> <ralph.way@nrc.gov>; >>>> <<u>okuda-shuji@meti.go.jp>;</u>[(b)(6) <ichii-naoto@meti.go.jp>; "Howard, E. Bruce" >>>>> (b)(6) >>>> <HowardEB@state.gov>; <horiguchi-shin@meti.go.jp>; >>>>> <funaki-kentaro@meti.go.jp>; "Duncan, Aleshia D" <DuncanAD@state.gov>; >>>>/(b)(6) >>>> Sent: Sunday, April 10, 2011 9:56 AM >>>> Subject: RE: 4 people support team for Talon and cameras

>>>>> >>>>> >>>>> Dear Yagi-san, >>>> > Thanks for your email. I understand the technical point of contact >>> at >>>>>> Idaho National Laboratory will be Mr. Derek Wadsworth. Mr. Tilden >> at >>> >>>>> DOE >>>>> Headquarters will be in touch soon with more specific information. >> In >>> >>>>> > the >>>>> meantime, can you tell me who the principal point of contact at >> TEPCO >>> >>>>> > will >>>>> > be? Will that be yourself, or someone else? >>>>> > Thank you, again. >>>>> > Best regards, >>>>>>> >>>> > Ron >>>> > Ronald C. Cherry >>>>> > Energy Attach?? >>>> > Director, DOE Japan Office >>>> > U.S. Embassy Tokyo >>>>> Tel. (0)3-3224-5444 >>>> > Fax (0)3-3224-5769 >>>>> > Cell (0(b)(6) >>>>> email CherryRC@state.gov >>>>> This email is UNCLASSIFIED >>>> > -----Original Message----->>>>> From: 八木 直人 [mailto:yagi.n@tepco.co.jp] >>>> > Sent: Sunday, April 10, 2011 5:10 AM >>>>> To: hatada-hiroyuki@meti.go.jp; Cherry, Ronald C ->>>>> Cc: 荒畑 太一朗; 及川 景晴; Jeffrey.Miller@pnl.gov; Awan, Riaz X >>>>> (Sofia - DOE); hiro.hirukawa@aist.go.jp; n.koyachi@aist.go.jp; >>>>> shin.kato@aist.go.jp; mizuo@fsinet.or.jp; npd_tanaka_t@tepsco.co.jp; >>>>> x(b)(6) alph.wav@nrc.gov; okuda-shuji@meti.go.jp; >>>> /(b)(6) >>>>> > Jay.Tilden@nnsa.doe.gov; ichii-naoto@meti.go.jp; Howard, E. Bruce; >>>>> horiguchi-shin@meti.go.jp; funaki-kentaro@meti.go.jp; Duncan, >> Aleshia >>> >>>>> D:

>>>>> Subject: Re: 4 people support team for Talon and cameras

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>>>>> Dear Mr. Cherry
>>>>> > Thanks for proposing US support team visit to Japan.
>>>>>>>>
>>>>> > Suggested schedule on April 14-15 from us is the earliest days we
>>> will
>>>>> be
>>>>> able to be trained. We are frexible on the shchedule.
>>>>> We also would like to know how many days you think adequate to be
>>>>> trained.
>>>>> We are currently cosidering using DOE offered Talon to make outside
>>>>> radiation map at first. Then we might use it inside buildings for
>> any
>>>
>>>>> > kind
>>>>> > of monitoring activities. Specific activities date is not yet
>>> decided.
>>>>> > Before that our team need to grasp the performance of Talon and
>>> cameras
>>>> > and what those equipments can adapt at the site for recovery
>>>>> activities.
>>>> > I would like to closely contact with you regarding your kind
>> support.
>>>>>>>
>>>>> > Thank you.
>>>> > Best regards,
>>>> > Naoto Yagi
>>>> > TEPCO
>>>>>>>
>>>> > ----- Original Message -----
>>>>> > From: "Cherry, Ronald C" < CherryRC@state.gov>
>>>> > To: <hatada-hiroyuki@meti.go.jp>
                                   "Duncan, Aleshia D"
>>>> > Cc: (b)(6)
>> <DuncanAD@state.gov>;
>>>>> > <funaki-kentaro@meti.go.jp>; <horiguchi-shin@meti.go.jp>; "Howard,
>> E.
>>>>> Bruce"
>>>>> > <HowardEB@state.gov>; <ichii-naoto@meti.go.jp>;
>>>>> > <lay.Tilden@nnsa.doe.gov>
>>>>>> > (b)(6)
                                   (b)(6)
>>>>> < <okuda-shuji@meti.go.jp>; <ralph.way@nrc.gov>;
>>>>>> (b)(6)
>>>>> > <yagi.n@tepco.co.jp>; <npd_tanaka_t@tepsco.co.jp>;
>>>>> > <mizuo@fsinet.or.jp>;
>>>>> > <shin.kato@aist.go.jp>; <n.koyachi@aist.go.jp>;
>>>>> > <hiro.hirukawa@aist.go.jp>; "Awan, Riaz X (Sofia - DOE)"
>>>>> > <AwanRX@state.gov>; <Jeffrey.Miller@pnl.gov>
>>>> > Sent: Saturday, April 09, 2011 11:40 PM
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>>>> > Subject: Re: 4 people support team for Talon and cameras >>>>>>>> >>>>>>>> >>>>> >> Dear Hatada-san, >>> should >>> believe >>> also >>>>> believe it would be good for the U.S. team and TEPCO to agree in >>>> >> advance on what activities will be done and how much time may be >>> need >>> know >>>>> >>> when AIST confirms its arrival, or if it has not, then we should >>> take >>> team >>>> >> arrives. >>>>>>>> >>>>> Thank you. >>>>>>> Best regards, >>>>> Ron >>>>>>>>> >>>>>>>>> >>>> >> ---- Original Message ----->>>>> >> To: Cherry, Ronald C >>>>>>> Cc (b)(6) ; Duncan, Aleshia D; >>>>>>> funaki-kentaro@meti.go.jp <funaki-kentaro@meti.go.jp>; >>>>>> horiguchi-shin@meti.go.jp <horiguchi-shin@meti.go.jp>; Howard, E. >>>> >> Bruce; ichii-naoto@meti.go.jp <ichii-naoto@meti.go.jp>; >>>>> >> Jay.Tilden@nnsa.doe.gov <Jay.Tilden@nnsa.doe.gov>; >>>> >> okuda-shuji@meti.go.jp <okuda-shuji@meti.go.jp>; ralph.way@nrc.gov >>> (b)(6) >>> <mizuo@fsinet.or.jp>; >>>>> >>> shin.kato@aist.go.jp <shin.kato@aist.go.jp>; n.koyachi@aist.go.jp

>>>>>>> <hiro.hirukawa@aist.go.jp>

>>>> >> Sent: Sat Apr 09 08:41:27 2011 >>>>> Dear Cherry-san, >>>>>>>>> >>>>> Talon and cameras that was mentioned in your previous email, TEPCO >> dates/place >>>> >> shown below: >>>>>>>>>> When: 14th and 15th April Where : The National Institute of Advanced Industrial >>>>>>>>> >> Science >>>> >> and Technology (AIST) Address: Teragu Kashiwa-yama 1497-1, Tsukuba-city, Ibaraki, >>>> >> JAPAN >>>>>>>> >>>>>>> If this is acceptable to your side, TEPCO is ready to coordinate >> the >>>>>>>>> >>>>>> By the way, if I remember correctly, I heard from you that the team >>>>> >>> would be helpful in starting up the equipment, like assembling. >>>>>>> If this is the case, it sounds to me that we could do the "meeting >>> the >>>>> >>> the shipment arrival to find ourselves waiting to become able to >>> even >>>> >> Of course, my assumption is that it will arrive on or by 13th, >>> though >>>>>>>>> it seems that it is taking more time than expected. >>>>>>>>> >>>>>>> Very respectfully, >>>> >> Hiroyuki >>>>> >>> >>>>> >> >>>>>>>>> >>>>> >>> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >> +81-3-3501-1692 >>>>> / hatada-hiroyuki@meti.go.jp >>>>> >> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>>> >>>> 03-3501-1692 >>>>>>>>> >>>>>>>>>

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>>>>> >>> 宛先: "Cherry, Ronald C" <CherryRC@state.gov> >>>> >>> Cc: "Aaron Leong" ((b)(6) "Duncan, Aleshia D" >>>>> >> <DuncanAD@state.gov>, funaki-kentaro@meti.go.jp, >>>>> >> horiguchi-shin@meti.go.jp, "Howard, E. Bruce" <HowardEB@state.gov>, >>>>> >>> Jay.Tilden@nnsa.doe.gov, "Maj. Keith Simmers" Kenneth Spurlock" . okuda-shuji@meti.go.jp, "Ralph Way" >>>>> >> >>>>> <ralph.way@nrc.gov>, "Rod Tanaka" (b)(6) >>>>> >> 件名: Re: FW: Equipment listing for shipment today >>>>>>>>> >>>>>>>> Dear Cherry-san, >>>>> For the video and electronic copies of the manuals, TEPCO says that >>>>>> they want them to be sent to the following address. >>>>>> Regarding the support team of 4 people, we really appreciate the >>> offer >>>>> but TEPCO needs to arrange the date so that research institutes >>>> >> supporting TEPCO can also attend. >>> this. >>>>> Thank you, >>>>>>>>> >>>> >> Shin YOSHINO >>>> >> Machinery Systems Technology Group, >>>>> >>> Technology Development Research Institute, Tokyo Electric Power >>>>> >>> Company Egasaki-cho 4-1, Tsurumi-ku, Yokohama-city, Kanagawa >>> 230-8510. >>>>> >> Japan >>>>> >>> >>>> >> Email yoshino.shin@tepco.co.jp >>>>>>>>> >>>> >> TEL 045-394-6361 >>>> >> FAX 045-585-8647 >>>>>> Hiroyuki Hatada Deputy Director, Aerospace and Defense Industry >>>>> >> Division, Ministry of Economy, Trade and Industry / >>+81-3-3501-1692 >>>>> / hatada-hiroyuki@meti.go.jp >>>>> >> 畑田 浩之 経済産業省 製造産業局 航空機武器宇宙産業課 課長補佐 / >>>> >>> 03-3501-1692

>>>>>>>>> >>>>> >>> 送信元: "Cherry, Ronald C" <CherryRC@state.gov> >>>> >>> Cc: "Aaron Leong" (b)(6) "Duncan, Aleshia D" >>>>> <> ChuncanAD@state.gov>, "Howard, E. Bruce" <HowardEB@state.gov>, >>>> >> "Kenneth Spurlock" ((b)(6) , "Maj. Keith >> Simmers" "Ralph Way" <ralph.way@nrc.gov>, "Rod >>>>>>>> (b)(6) >>>>> Tanaka" (b)(6) funaki-kentaro@meti.go.jp>, >>>>>>>> >>>> >> <horiguchi-shin@meti.go.jp>, <okuda-shuji@meti.go.jp>, >>>>>>> </ar> >>>>>>>> 日付: 2011/04/06 18:37 >>>>>>>>> >>>>> >>> Dear Hatada-san, >>>>> >>> This is to inform you that the Talon robot with radiation mapping >>>>> >> shipped. It's estimated they will arrive in Japan on Friday, >> April >>> >>>>>>>>. >>>>>>> shipment. >>>>>>>>> >>>>>>> I would like to discuss with you arrangements to meet the equipment >>>> >>> upon its arrival in Japan. >>>>> >> Prior to shipping, Idaho National Laboratory made a video of >>>> >> operational details of all the equipment. We can provide the video >>>>> and electronic copies of the manuals for most of the systems. >> Please >>> be >>>> >> delivered. >>>>>>>>> >>>>>>>> In addition, DOE is considering sending up to four people to Japan >>> in >> send >>>>>>>>>>> two teams of two persons each to support the setup, training, and >>>>> operational support of the Talon system and the cameras (total of 4 >>>>>> people). Our laboratory recommends that two people are needed for >>>>> >>> each of the groups of equipment to technically trouble shoot and

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>>>> >> support their operation. If you agree, then I would be happy to
>>> work
>>>>> with you on the details of when the team should come and where they
>>>> >> would work with their Japanese counterparts.
>>>> >> I look forward to hearing from you.
>>>>> >>>
>>>> >> Best regards,
>>>>> >>>
>>>>> Ron
>>>> >> Ronald C. Cherry
>>>>>>> Energy Attach??
>>>>> >> Director, DOE Japan Office
>>>> >> U.S. Embassy Tokyo
>>>>> >> Tel. (0)3-3224-5444
>>>> >> Fax (0)3-3224-5769
>>>>>>>>>
>>>>>>>>>
>>>>>> This email is UNCLASSIFIED.
>>>>> >>>
>>>> >> hatada-hiroyuki/MITI-LAN
>>>>> >> が削除しました]
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From: Sent:	RST01 Hoc Sunday, April 17, 2011 9:48 AM	
To:	(b)(6)	
Cc:		
Subject:	TEPCO "Roadmap towards Restoration"	

Good Morning,

Please find attached TEPCO's "Roadmap Toward Restoration" documents. The Executive Team director has asked that you review these documents because we'll be discussing them at our 11:00 am. We would like your views on this document within a reasonable timeframe.

Thank you,

Liaison Team Coordinator US Nuclear Regulatory Commission email: <u>lia08.hoc@nrc.gov</u> Desk Ph: 301-816-5185

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From:	Evans, Michele
Sent:	Tuesday, March 29, 2011 9:38 AM
То:	Holahan, Patricia; McDermott, Brian; Layton, Michael; Morris, Scott; Erlanger, Craig; Caldwell, Robert; Wiggins, Jim; Rheaume, Cynthia; Abraham, Susan
Subject:	FW: FYI: California Coastal Commission Report
Attachments:	Tohoku_Earthquake_Report.pdf; image001.png

In case you are planning any west coast trips...

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From: Nelson, Robert

Sent: Tuesday, March 29, 2011 8:36 AM

To: Leeds, Eric; Boger, Bruce; Grobe, Jack; Landau, Mindy; Roberts, Darrell; Kennedy, Kriss; Lara, Julio; Croteau, Rick; Steger (Tucci), Christine; LIA06 Hoc; Bahadur, Sher; Blount, Tom; Brown, Frederick; Cheok, Michael; Evans, Michele; Ferrell, Kimberly; Galloway, Melanie; Giitter, Joseph; Givvines, Mary; Hiland, Patrick; Holian, Brian; Howe, Allen; Lee, Samson; Lubinski, John; McGinty, Tim; Quay, Theodore; Ruland, William; Skeen, David; Thomas, Brian; Westreich, Barry; Guzman, Richard; Lyon, Fred; Markley, Michael; Meighan, Sean; Nguyen, Quynh; Oesterle, Eric; Polickoski, James; Tam, Peter; Thomas, Eric

Cc: West, Steven; Shear, Gary; Burnell, Scott; Broaddus, Doug; Campbell, Stephen; Carlson, Robert; Chernoff, Harold; Kulesa, Gloria; Pascarelli, Robert; Salgado, Nancy; Simms, Sophonia; Wall, Scott **Subject:** FYI: California Coastal Commission Report

The California Coastal Commission has released, "THE TOHOKU EARTHQUAKE OF MARCH 11, 2011: A PRELIMINARY REPORT ON IMPLICATIONS FOR COASTAL CALIFORNIA." It is a public document and is attached.

The report provides: a description of the Tōhoku Earthquake and tsunami effects; an evaluation of whether the seismic characteristics of the Tōhoku Earthquake are applicable to the California coast; and a brief description of the earthquake and tsunami risks at California's three coastal nuclear facilities. The Executive Summary is repeated below.

• The vast majority of faults in California, including the San Andreas fault, could not produce a magnitude 9 earthquake.

Most of California is not susceptible to an event of the scale of the Tōhoku Earthquake. Nevertheless, it is important not to become complacent; large earthquakes are inevitable throughout coastal California, and could be devastating in their own right. There is a large population and much infrastructure at risk in central and southern coastal California.

- The Cascadia Subduction Zone could produce a magnitude 9 earthquake similar to the Tohoku Earthquake. The northern part of the coastal California, as well as all of coastal Oregon, Washington, and part of coastal British Columbia—the Cascadia Subduction Zone—is susceptible to an earthquake and tsunami event similar to that of the Tohoku Earthquake. Emergency response scenarios and land use planning must take this into account.
- A nuclear emergency such as is occurring in Japan is extremely unlikely at the state's two operating nuclear power plants.

The combination of strong ground motion and massive tsunami that occurred in Japan cannot be generated by faults near the San Onofre Nuclear Generating Station and the Diablo Canyon Power Plant. Nevertheless, the geologic conditions near those plants are very likely different than previously believed and ongoing study is warranted. This has been understood for at least the past three years, and some of these studies, and the environmental planning process for other such studies, are underway.

If you already received this from Annie Kammerer, I apologize for the duplicate.

R.A. Nelson

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Robert A. Nelson NRR External Communications Coordinator, Japan Event Deputy Director Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation



Protecting People and the Explorement

E-mail: <u>robert.nelson@nrc.gov</u> | 🛱 Office: (301) 415-1453 | J Cell: (b)(6)

STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY

EDMUND G. BROWN, JR., COVERNOR

CALIFORNIA COASTAL COMMISSION 45 FREMONT STREET, SUITE 2000 SAN FRANCISCO, CA 94105-2219 VOICE (415) 904-5200 FAX (415) 904-5400 TDD (415) 597-5885



March 24, 2011

THE TŌHOKU EARTHQUAKE OF MARCH 11, 2011: A PRELIMINARY REPORT ON IMPLICATIONS FOR COASTAL CALIFORNIA

To: Commissioners and interested parties From: Mark Johnsson, Staff Geologist

This report is intended to help the Commission place the recent events in Japan in context and to provide perspective for their possible implications to coastal California, based on preliminary information known at this early date. The discussion below includes the following:

- A description of the Tōhoku Earthquake and tsunami effects
- An evaluation of whether the seismic characteristics of the Tōhoku Earthquake are applicable to the California coast
- A brief description of the earthquake and tsunami risks at California's three coastal nuclear facilities

References and links to web resources can be found at the end of this report. Some words or phrases are further explained in an appendix. These words or phrases are marked in *bold italics* where they first occur.

EXECUTIVE SUMMARY

• The vast majority of faults in California, including the San Andreas fault, could not produce a magnitude 9 earthquake.

Most of California is not susceptible to an event of the scale of the Tōhoku Earthquake. Nevertheless, it is important not to become complacent; large earthquakes are inevitable throughout coastal California, and could be devastating in their own right. There is a large population and much infrastructure at risk in central and southern coastal California.

• The Cascadia Subduction Zone could produce a magnitude 9 earthquake similar to the Tōhoku Earthquake.

The northern part of the coastal California, as well as all of coastal Oregon, Washington, and part of coastal British Columbia—the Cascadia Subduction Zone—is susceptible to an

earthquake and tsunami event similar to that of the Tōhoku Earthquake. Emergency response scenarios and land use planning must take this into account.

• A nuclear emergency such as is occurring in Japan is extremely unlikely at the state's two operating nuclear power plants.

The combination of strong ground motion and massive tsunami that occurred in Japan cannot be generated by faults near the San Onofre Nuclear Generating Station and the Diablo Canyon Power Plant. Nevertheless, the geologic conditions near those plants are very likely different than previously believed and ongoing study is warranted. This has been understood for at least the past three years, and some of these studies, and the environmental planning process for other such studies, are underway.

The Tohoku Earthquake and Tsunami

The magnitude 9.0 Tōhoku Earthquake of March 11, 2011, the fourth most powerful earthquake measured by modern instruments (since about the year 1900), occurred at the interface between the *Pacific* and *North America plates*. Two days prior to the earthquake, a magnitude 7.2 earthquake occurred near what would be the *epicenter* of the Tōhoku Earthquake. It was followed by three aftershocks in the magnitude 6 range later that day. In retrospect, these earthquakes can be viewed as foreshocks to the magnitude 9.0 event that followed. The *hypocenter* of the Tōhoku Earthquake was located 81 miles off the east coast of the Oshika Peninsula, part of the Tōhoku region of the island of Honshu, near the city of Sendai, at a depth of 20 miles below the seafloor.

Over the next several days, hundreds of aftershocks, the largest of magnitude 6.8, outlined the area of the plate boundary that ruptured. Aftershocks extend to depths of about 340 miles, although most are above a depth of 125 miles. As of March 23, some 726 aftershocks have been recorded, 26 of them magnitude 6.0 or greater, and they are expected to continue, at a decreasing frequency, for the next several years.

The Tōhoku Earthquake is what is termed a "*megathrust earthquake*:" a major *subduction zone* earthquake whereby the Pacific plate suddenly lurched beneath the North America plate. The affected portion of the North America plate is a westward and southward extension of the plate from the Alaska region that underlies eastern Siberia and the northern Sea of Japan Some geologists divide this geologically complex region into a number of microplates (for a representation of the geometry of these plates, see <u>http://pubs.usgs.gov/gip/dynamic/slabs.html</u>).

The area of the plate boundary that *ruptured* during this earthquake was about 190 miles long and 90 miles wide, which is larger than the areas of San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego counties combined. At the location of the earthquake, *oceanic crust* of the Pacific plate is being thrust under oceanic crust of the North America plate at an angle of about 15 degrees, creating the Japan Trench, a bathymetric trough on the seafloor. The average rate of this movement is approximately 83 mm/yr, one of the higher rates of *plate* *convergence* in the world. Much of this movement occurs episodically in earthquakes such as the Tohoku Earthquake.

The Tōhoku Earthquake was accompanied by violent and long-lasting ground shaking. The highest measured *ground acceleration* was a devastating 2.75 g¹, measured over 80 miles from the epicenter, although most stations relatively near the epicenter reported ground accelerations more on the order of 1.0 g. Ground shaking intensity reached a *Modified Mercalli Intensity* of IX (Violent), and resulted in widespread damage. Damaging secondary effects included liquefaction, lateral spread, and landslides.

The most damaging secondary effect of the earthquake was the resulting tsunami. Megathrust earthquakes of this magnitude occurring beneath the sea at relatively shallow depths always produce large tsunamis and the Tōhoku Earthquake was no exception. About 15 minutes after the earthquake, a tsunami with an amplitude of about 30 feet hit the shoreline. The first wave swept up to six miles inland in flat regions, leveling buildings, and sweeping debris, buildings, ships, vehicles, and airplanes far inland.

The tsunami caused the loss of power, and disabled backup generators, at the Fukushima 1 nuclear power plant. The subsequent loss of coolant in several reactors and spent fuel storage pools resulted in explosions, fires, and partial core meltdowns in at least three nuclear reactors, and the release of radiation to the environment.

The full extent of the damage resulting from the Tōhoku earthquake and tsunami is still unknown and will likely be unknown for some time. Given the thousands of lives that have been lost, the billions of dollars worth of property and infrastructure destroyed, and the ongoing nuclear emergency, it is natural to ask how vulnerable California is to a similar event.

Does the Tohoku quake increase the likelihood of a similar event in California?

Despite some alarmist articles that have appeared in the press, there is no reason to believe that this earthquake has in-and-of-itself raised the likelihood of an earthquake in California. Although there have been three very damaging earthquakes around the Pacific Rim in just the last year, they are not related in a geologic sense.

The magnitude 8.8 southern Chilean earthquake of 27 February 2010 was a major subduction zone earthquake similar in many ways to the Tōhoku Earthquake, but it occurred on a separate plate boundary (the Nazca/South America plate boundary) with no connection to the Pacific or North America plates.

¹ Ground shaking during earthquakes is measured by how fast the earth moves, both horizontally and vertically. It is expressed as a comparison to the force of gravity – that is, the acceleration (which is the rate of change in speed) of the ground relative to the acceleration caused by gravity (or g-force). For instance, ground shaking of 1.0g is equal to the acceleration caused by gravity, shaking of 0.5g is equal to half the acceleration of gravity, etc. For any location and earthquake, this value varies based on a number of factors, including the area of the fault plane that slipped, depth of the earthquake, distance from the epicenter, and the underlying site geology.

The magnitude 7.1 Canterbury Earthquake of September 4, 2010 near Christchurch, New Zealand, together with its destructive February 22, 2011 magnitude 6.3 aftershock, was not a major plate boundary earthquake, but rather a significant earthquake on shallow crustal faults. The fact that its major aftershock (dubbed the Christchurch Earthquake) was so damaging is more a product of its location and shallow depth than of its significance as a geologic phenomenon.

The relatively recent magnitude 9.1 and 8.6 earthquakes of 2004 and 2005 off the island of Sumatra were far removed from the Pacific plate, and most seismologists do not feel that stress transfer to the Pacific plate occurred as a result of these events.

Although geologists are increasingly realizing that large earthquakes may load stress on adjacent faults, there is no connection between the faults associated with any of these earthquakes and any faults in California. The United States Geological Survey (USGS) writes on their website for the event:

The USGS does not believe that the earthquakes in Japan have significantly raised the probability of future major earthquakes. While the probability of future large earthquakes far from northern Honshu has not increased, neither has it decreased and large earthquakes will continue to occur just as we have observed in the past.

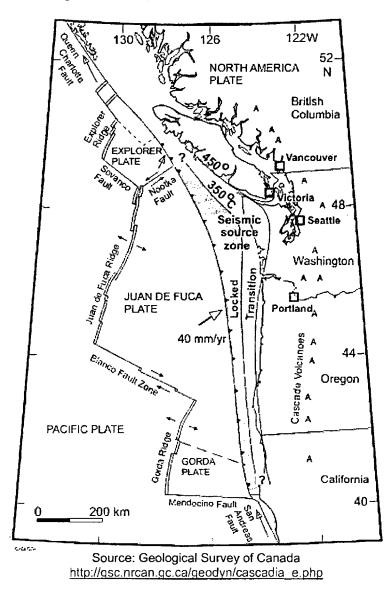
Could an earthquake of this magnitude occur in California?

Most faults in California are incapable of an earthquake of the magnitude of the Tōhoku Earthquake. A magnitude 9 earthquake requires rupturing a fault surface thousands of square miles in area. The shallow faults making up most of the state's California's fault systems, including the San Andreas fault, simply do not have sufficient area to generate such an earthquake.

An important exception is the region north of Cape Mendocino, from about 25 miles south of Eureka to north of Vancouver, British Columbia, an area known as the Cascadia Subduction Zone. This region could generate an earthquake comparable to the Tōhoku Earthquake. There are important similarities, and some differences, between the Cascadia Subduction Zone and the part of the subduction zone off the Tōhoku region of Japan that ruptured during the Tōhoku Earthquake.

The Cascadia Subduction Zone

The Cascadia Subduction Zone lies off the Pacific Northwest, and is the zone where the Gorda, Juan de Fuca, and Explorer plates are being thrust beneath the overriding North America plate. Unlike the situation at the Japan Trench, where oceanic crust is thrust beneath other oceanic crust, here oceanic crust is thrust beneath continental crust. The Gorda, Juan de Fuca, and Explorer plates are separated from the Pacific plate by the Juan de Fuca and Gorda Ridges to the west and by the Mendocino Transform Fault to the south. Two prominent sets of fracture zones, healed *transform faults*, are zones of weakness and separate the Explorer plate to the north from the Juan de Fuca plate to the south, and the Juan de Fuca plate from the Gorda plate further south. All three subplates are moving together, converging on the North America plate at a rate of about 40 mm/yr and diving beneath it at an angle of about 8 degrees, an angle that increases with depth. The upper portion of the subduction zone is locked (not moving), while the lower section is moving, thus creating great stress in the upper part of the subduction zone. Release of this stress will occur during the next megathrust earthquake.



The Cascadia Subduction Zone, about 800 miles long, is thus divided into three segments. The longest segment, about 450 miles long, is the Juan de Fuca plate segment that lies off central and northern Oregon and Washington. The Juan de Fuca plate segment is flanked by the Explorer plate segment, off British Columbia, and the Gorda plate segment, off northern California and southern Oregon, each about 175 miles long. It is unknown if the segments typically rupture together, separately, or in pairs during megathrust earthquakes. This introduces some uncertainty into the estimation of the magnitude of megathrust earthquakes in the Cascadia Subduction Zone.

Implications of Tohoku Earthquake

Nevertheless, most seismologists agree that a megathrust earthquake involving any of these plates would be in the magnitude 9 range, similar to the Töhoku Earthquake.

Thirteen past megathrust earthquakes associated with the Cascadia Subduction Zone have been identified through submarine sediment deposits triggered by the earthquakes, tsunami deposits preserved on land, and deposits indicative of sudden land subsidence associated with the earthquakes. Of these past earthquakes, the last seven are reasonably well-dated:

Estimated Date	Recurrence Interval (yr)
26 January 1700, ~9:00 PM	780
780-1190 AD	210
690-730 AD	330
350-420 AD	910
660-440 BC	400
980-890 BC	250
1440-1340 BC	unknown

Reference: Atwater et al., 2005

The time of the most recent event is known with such precision because, even though there are no written records from North America, Japanese writings describe an "orphan tsunami" (one not accompanied by an earthquake) arriving in Japan at a time that would correspond to an earthquake on the Cascadia Subduction Zone at about 9:00 PM (local time) on January 26, 1700. This time and date are consistent with the geologic data, and with Yurok legends indicating that the earthquake and tsunami occurred early on a winter night in about that year.

The probability of another megathrust earthquake on the Cascadia Subduction Zone in any given upcoming time interval can be estimated from these recurrence interval data. The mean recurrence interval is 500-600 years. According to a study by Mazzotti and Adams (2004), this yields a probability of between 0 and 12 percent that the next megathrust earthquake will occur in the next 50 years.

However, close examination of the recurrence interval data show that they may be bimodal in distribution: three earthquakes in relatively quick succession, followed by a long pause; then three earthquakes, followed by a long pause, ending in the 1700 event. A sample size of seven events is too small to confirm that this is a real trend, but there are geologic reasons that such a bimodal recurrence interval distribution might make sense. Assuming a bimodal recurrence interval, with the two "modes" being recurrence intervals of 310 and 820 years, the probability of a megathrust earthquake occurring in the next 50 years rises to between 6 and 45 percent.

Finally, it has been recently discovered that, in addition to megathrust earthquakes, a significant amount of the convergence between the Juan de Fuca and North America plates is taken up by what has been termed "slow-slip" events. These are events, lasting one to three weeks and recurring every 13-15 months, when movement between the plates occurs at great depths without causing significant earthquakes. Mazzotti and Adams (2004) calculate that the chance of a

megathrust earthquake occurring during one of these slow-slip events is 30 to 100 times greater than between events.

To summarize, an earthquake and tsunami looking very much like the Tōhoku Earthquake is very likely in northern California. It is, however, very difficult to predict the probability of such an event in any given time interval. The interagency Cascadia Region Earthquake Workgroup (CREW) continues to study and prepare for the next megathrust earthquake. In 2005 they published a very useful and informative planning scenario, which can be found at http://www.crew.org/papers/CREWCascadiaFinal.pdf.

Implications for California Nuclear Power Plants and Spent Fuel Storage Facilities

There are two operating nuclear power plants in the California coastal zone and one nuclear plant undergoing decommissioning. The Diablo Canyon Power Plant (DCPP) in San Luis Obispo County and the San Onofre Nuclear Generating Station (SONGS) in northern San Diego County are operating power plants that hold current licenses from the Nuclear Regulatory Commission (NRC). The nuclear unit of the Humboldt Bay Power Plant (HBPP) near Eureka is being decommissioned, although highly radioactive spent fuel and other materials remain on site. A magnitude 9 earthquake near DCPP or SONGS is extremely unlikely. However, the Humboldt Bay plant is in close proximity to the Cascadia Subduction Zone and could be subject to a magnitude 9 earthquake.

All three facilities, including their spent fuel storage facilities, have been subject to numerous seismic investigations. During the permitting process for the Independent Spent Fuel Storage Installation (ISFSI) at each facility, Southern California Edison (SCE) and Pacific Gas and Electric (PG&E) undertook new geologic investigations; particularly extensive for Diablo Canyon and Humboldt Bay. These studies, along with studies undertaken for the original licensing of these plants, ongoing USGS and academic studies, and experience gained from geologically similar regions, were reviewed by the U.S. Nuclear Regulatory Commission (NRC), which ultimately released Final Safety Analysis Reports (FSARs) recommending approval of each facility.

During Coastal Commission review and permitting of each ISFSI, Commission staff reviewed all of this material, conducted independent research of published literature, interviewed knowledgeable parties, and conducted site visits at and around each facility, prior to recommending that the Commission approve each facility. The Commission's adopted findings for each approval can be found at:

DCPP: <u>http://www.coastal.ca.gov/energy/W5a-1-2005.pdf</u> SONGS: <u>http://www.coastal.ca.gov/energy/e-00-14rf.pdf</u> HBPP: <u>http://www.coastal.ca.gov/energy/Th6a-9-2005.pdf</u>

The expected earthquake and tsunami risk at each facility is described briefly below.

Diablo Canyon Nuclear Power Plant

Earthquake Concerns: Although a magnitude 9 earthquake is extremely unlikely near the DCPP, a magnitude 7.2 earthquake on the Hosgri Fault, lying only 3 miles offshore, is currently considered possible.

The Hosgri Fault was discovered during the construction of the plant. In 1975 the NRC, in conjunction with the USGS, concluded that that the Hosgri Fault is capable of a magnitude 7.5 earthquake, and that ground shaking at DCPP could be as high as 0.75 g. PG&E retrofitted the plant in 1978 to withstand that level of ground shaking. In 1978 the NRC required the implementation of a Long Term Seismic Program, through which the seismic safety at the plant would be continuously reevaluated. In 1991, NRC approved a report from PG&E that, using improved earthquake models, showed that the maximum credible earthquake on the Hosgri fault was of magnitude 7.2, but that ground shaking at DCPP would be as high as 0.83 g. PG&E demonstrated to the satisfactions of the NRC that the plant had been retrofitted in 1978 with adequate safety margins to withstand that level of ground shaking.

The most recent study submitted to the NRC by PG&E examined ground shaking that would result from an earthquake on the newly discovered "Shoreline Fault" located less than 0.5 miles from the reactor building. Preliminary results of those studies indicate that the potential ground shaking from this fault will be less that those used in the initial plant design. The report of these studies, available at <u>http://diablocanyonpge.com/home/resources/shoreline-fault-zone-report-with-plates.html</u> is currently under review by the NRC, as well as by state geologists from a number of agencies, including the Coastal Commission.

As discussed below, AB 1632 required that the State prepare a report making recommendations to facilitate assessing, among other things, the seismic safety of DCPP and SONGS. One of the recommendations in that report is for further detailed investigation not only of the Shoreline Fault, but of the total seismic environment of the plant. These studies are currently underway. The proposed high-energy studies meant to identify seismic characteristics deep below the plant and surrounding area will be subject to CEQA review and will require review and permitting by the Coastal Commission.

Tsunami Concerns: DCPP is located at an elevation of 85 feet above mean sea level (MSL), atop a high coastal bluff. It is effectively above the range of any conceivable earthquake-induced tsunami, and is mapped as lying outside of the tsunami inundation zone on the Tsunami Inundation Maps recently released by the California Emergency Management Agency, California Geological Survey, and the University of Southern California.

San Onofre Nuclear Generating Station

Unit 1 of the San Onofre Nuclear Generating Station was commissioned in 1968, and was designed to resist ground shaking of 0.67g corresponding to a magnitude 7.0 earthquake on the nearby Newport-Inglewood-Rose Canyon Fault system. Units 2 and 3 were commissioned in

1983 and 1984 to the same design standard. Unit 1 was decommissioned in 1992, but radioactive portions of the reactor still remain at the plant.

Earthquake Concerns: Although a magnitude 9 earthquake is extremely unlikely near SONGS, a few studies indicate that an earthquake larger than the design-basis earthquake may be possible near the reactor site. The Commission considered these studies in its findings for the ISFSI approval in June 2001 and concluded that:

...there appears to be credible evidence that, in addition to the strike-slip faulting recognized at the time of the SONGS licensing review, thrust faults exist in the area offshore of the SONGS site which might interact with the Newport-Inglewood-Rose Canyon fault system in a complex way during an earthquake. If these faults are active or potentially active, the increase in potential fault rupture area has, at a minimum, the potential to increase the magnitude of an earthquake on the integrated fault system. Geologists' understanding of this area is rapidly evolving, and there are few constraints on the parameters needed to assess the increase in earthquake risk (such as slip rate on each of the potentially active faults, segmentation of the faults, and potential for cascading failure between fault segments). One of the few published estimates is that of Shaw and his students (Rivero et al., 2000), who hypothesize that the combined system may be capable of an earthquake ranging from M_W 7.1 to 7.6, depending on which sets of faults are involved in the earthquake...

Shaw's tectonic model for the area is, however, quite controversial (Jones, USGS, pers. comm., 2001). Commission staff consulted with seismologists and geologists at the U.S. Geological Survey, California Division of Mines and Geology, California Seismic Safety Commission, within academia, and at private consulting firms. Although there was near unanimous recognition that there is an increased earthquake risk given our emerging understanding of the complexities of the region relative to a simple strike-slip model used in the SONGS seismic hazard assessments, no one could assess the potential ground shaking that might be expected at the SONGS site.

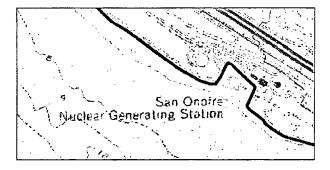
The Commission thus finds that there is credible reason to believe that the design basis earthquake approved by the NRC at the time of the licensing of SONGS 2 and 3—a magnitude 7.0 earthquake on the Newport-Inglewood-Rose Canyon fault system 8 km from the site, resulting in ground shaking with a high frequency component peaking at 0.67 g—may underestimate the seismic risk at the site. This does not mean that the facility is unsafe—although the design basis earthquake may have been undersized, the plant was engineered with very large margins of safety, and would very likely be able to attain a safe shutdown even given the larger ground accelerations that might occur during a much larger earthquake.

Tsunami Concerns: Tsunami run up and inundation were considered by the SCE and NRC for permitting of the SONGS facility. However, more recent examinations indicate that a larger earthquake or a large submarine landslide could generate a tsunami larger than that considered by SCE or the NRC. The potential tsunami risk was included in the Commission's findings for the ISFSI permit which concluded:

These studies suggest that large local-source tsunamis could be generated by mechanisms other than those considered during licensing for SONGS 2 and 3, the basis for the 1995 SCE report. However, there have been no local runup studies based on this mechanism that are widely agreed upon, and certainly none for the SONGS site itself. As Dr. [Mark] Legg indicates, tsunami runup maps are currently being prepared for San Diego County by individuals at the University of Southern California in conjunction with the Office of Emergency Services, but they are not currently available.

Commission staff accordingly concludes that although the proposed project may be threatened by tsunami, the major effect from an earthquake-generated tsunami would be site inundation. Possible inundation has been factored into the [ISFSI] project design, and it would not adversely [a]ffect the stability of the site. There is also a potential for a submarine landslide to generate a tsunami that could threaten this site; however, current mapping and modeling do not provide any information of how the site would be [a]ffected by such an event.

The maps mentioned have since been produced, and they do, in fact, place the SONGS facility in the tsunami inundation zone:



The SONGS site was excavated into the coastal bluff and the nuclear reactors are located at an elevation of less than 20 feet MSL. The tsunami inundation line calculated for this area is at an elevation of approximately 20 feet MSL, and the plant is protected by a 30-foot seawall. Thus, it appears to be protected from the modeled set of tsunamis underlying the state map. How the inundation line on the state map might change if it included the magnitude 7.6 thrust earthquake postulated by Shaw and others is not, however, known. Further study of the tsunami risk at the SONGS facility appears warranted.

Humboldt Bay Power Plant

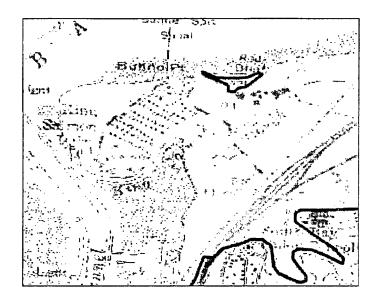
The Humboldt Bay Power Plant is susceptible to a megathrust earthquake on the Cascadia Subduztion Zone. The nuclear unit at HBPP has been shut down since 1976, largely for seismic hazard reasons, and currently is undergoing decommissioning. PG&E expects to complete decommissioning by about 2015. Highly radioactive spent fuel remains on site. Until recently, this fuel was stored in the same type of pool that apparently has been compromised in Japan. In 2005 the Coastal Commission approved a small Independent Spent Fuel Storage Installation (ISFSI) to contain this material. Unlike the ISFSI's at SONGS and DCPP, the casks containing the spent fuel and highly radioactive components of the decommissioned reactor are located below ground, in part to make them less vulnerable to tsunamis.

Earthquake Concerns: Regarding ground shaking, the Commission's findings for the Independent Spent Fuel Storage Installation concluded that the facility was designed to withstand the expected level of ground motion:

PG&E designed the ISFSI in part using a probabilistic assessment of the "maximum credible earthquake" likely to occur at the site during a 2000-year return period. This design earthquake is

of magnitude 9.1, roughly equivalent to the recent Sumatra earthquake of December 2004, and has a peak acceleration of almost 2.9 g, which is equivalent to the force near the upper limit of any earthquake anywhere in the world. The Commission's staff geologist has objected to the use of a 2000-year return period and instead recommends the use of a 10,000-year return period; however, the Commission concurs with his determination that the overall assessment provided by PG&E results in a conservative design basis for the ISFSI. The Commission therefore recommends that designing the ISFSI to withstand this rate of ground shaking is consistent with Coastal Act section 30253(1) with respect to the ground motion hazard.

Tsunami Concerns: The site clearly is at high risk for a tsunami generated during a Cascadia Subduction Zone event. This general region is by far the most studied area on the west coast of Noarth America with respect to tsunami hazards, with many of those studies being funded by PG&E and summarized in the NRC's FSAR for the site. The State's Tsunami Inundation Map shows that the entire site, except for a small area at the top of Buhne Hill, lies in the predicted inundation zone. That small hilltop is the approximate location of the ISFSI.



The Coastal Commission found in September 2005 that the ISFSI is susceptible to tsunami hazards, including higher runup levels than predicted during the NRC licensing process, and the danger of bluff erosion due to energy from both incoming and retreating waves. As summarized in the Commission staff report:

PG&E assessed how the ISFSI site likely would be affected by tsunamis and tsunami runups. It determined that the maximum tsunami runup resulting from a Cascadian Subduction Zone earthquake during Mean Higher High Water would be from about 23 to 38 feet. Because the ISFSI site is at about 44 feet, and because it is below grade, PG&E concludes that the ISFSI would not be inundated and would not be damaged by debris carried by the tsunami.

However, for several reasons, the Commission cannot conclude that the site will be safe from tsunami hazards either during the relatively short-term or in perpetuity. First, similarities between the expected Cascadian Subduction Zone earthquakes and the December 2004 Sumatran earthquake raise doubts as to the validity of the expected tsunami runup height at the ISFSI site.

The Sumatran quake resulted in tsunami runups of as much as 130 feet, which is about three times higher than the runup predicted at the ISFSI site, but the mechanisms for the earthquakes and the generation of tsunamis in each area are similar. Additionally, the predicted 38-foot runup at the ISFSI site is based only on the height above Mean Higher High Water and does not include the customary additional height provided if the tsunami occurred during a 100-year storm surge. This would put the runup at an even higher level, possibly at or above the 44-foot elevation of the ISFSI structure. Further, the ISFSI site is on a peninsula made up of poorly consolidated soils, and it would be subject during a tsunami to wave energy from both incoming and retreating waves, which could result in substantial erosion and damage to the ISFSI site.

Finally, because the ISFSI is expected to remain in perpetuity, Commission staff requested PG&E evaluate the longer-term potential for tsunami effects. PG&E applied the rate of tectonic uplift at Buhne Point (estimated at about 1.3 feet per 100 years) to several scenarios for anticipated rates of sea level rise. The analyses found that during the next several thousand years, overtopping of the site would be likely, though over the next 10,000 years, the anticipated sea level will likely fall due to increased glaciation and that ISFSI site would become less exposed to risks associated with sea level rise or tsunamis.

Therefore, based on the above, the Commission finds that the siting of the ISFSI is inconsistent with the requirement of Section 30253(1) to minimize risks associated with tsunamis and tsunami runup.

Although the Commission found the project was inconsistent with Coastal Act section 30253 for this and other reasons, as well as other Chapter 3 policies of the Coastal Act, it approved the ISFSI, in large part due to the lack of safer alternative storage sites for the material and the hazards of transporting the material offsite. The Commission's findings state:

Denying the ISFSI on the basis of these inconsistencies would result in the continued presence of the existing storage facility, which would likely result in significant adverse impacts to marine biology, water quality, and environmentally sensitive habitat areas caused by the same geologic hazards that make the blufftop a safer location than the existing storage pool. In such a situation, when a proposed project is inconsistent with a Chapter 3 policy, and denial or modification of the project would be inconsistent with another policy, Section 30007.5 of the Coastal Act provides for resolution of such a policy conflict.

Simply put, although the site is unsafe, keeping the spent fuel in subterranean casks in a hazardous location is less unsafe than keeping the material in the spent fuel pool within the nearby and lower elevation reactor building, where it had been kept for the previous several decades. After Commission approval of the facility, all spent fuel at the site has been moved into the ISFSI. The Commission will soon review an application for an expansion of this facility to accommodate low and mid-level radioactive waste being generated during the HBPP decommissioning process.

Ongoing and Planned Seismic Studies

Both state and federal legislators have in recent days called for renewed study of the seismic safety of nuclear power plants in California and the United States, respectively; however, such studies are in fact already underway in California. AB 1632 (Blakeslee, Statutes of 2006, Chapter 722), directed the California Energy Commission to assess the vulnerability of the state's operating nuclear power plants to a major disruption due to a major seismic event or plant aging,

the potential impacts of such a disruption, potential impacts from the accumulation of nuclear waste at the state's existing nuclear plants, and other key policy and planning issues regarding the future role of California's existing nuclear plants. In 2008, the Energy Commission released the required report "An Assessment of California's Nuclear Power Plants" which can be found at: http://www.energy.ca.gov/2008publications/CEC-100-2008-009/CEC-100-2008-009-CMF.PDF

The California Public Utilities Commission has since required PG&E and SCE to undertake the studies recommended in the report, which include, among other things, 3D seismic imaging of the faults around both sites, in order to answer some of the questions about fault geometry and expected ground motions during different earthquake scenarios. The Coastal Commission's staff geologist sits on an Independent Peer Review Panel which reviewed the production of the AB 1632 report and will review the study plan, results, and interpretation of these studies as they proceed. PG&E has begun some of these studies, and has begun the environmental review process for others. SCE, who is not proceeding with relicensing on as aggressive a time schedule as PG&E, has not yet produced plans for the required studies.

Effects of the Tohoku Earthquake Tsunami in California

The Tōhoku Earthquake produced a tsunami felt throughout the Pacific Ocean. California was moderately impacted, and several harbors around the state suffered damage, collectively totaling tens of millions of dollars. Fortunately, given the state's tsunami preparedness, and the many hours warning time afforded by this distant-source tsunami, early evacuation and preparation were effective and losses were kept to a minimum, although there was one death associated with the tsunami. The Coastal Commission's coastal engineer will prepare an evaluation of preparations, events, responses, and results of this major test of the state's tsunami preparedness and response program in the near future.

Implications for Predictions of Future Sea Level Rise

The way the land responds to a megathrust earthquake such as is expected in the Cascadia Subduction Zone has important implications for planning for future sea level rise. When a subduction zone is locked (not moving through small earthquakes) at the surface, but is moving at depth, as is the case in the Cascadia Subduction Zone, there is a region close to the coast where the land is rising. Further inland is a region of gradual land subsidence. When the locked upper portion of the subduction zone builds up sufficient stress, it suddenly slips (causing a megathrust earthquake), and the region of uplift near the coast suddenly subsides, while the region further inland rises. The Incorporated Research Institutions for Seismology (IRIS) has produced an excellent animation illustrating this process, which can be found at http://www.youtube.com/watch?v=RVaDXsqLUtI

In northern coastal California, the land has been rising faster than global average sea level since the 1700 megathrust event, and the long-term average sea level rise *relative to the land* is actually negative (-0.65 mm/yr at Crescent City, for example); *relative* sea level in this region is falling. As global average sea level rise continues to accelerate, the rate of *relative* sea level *fall* in northern California will decrease, but the uplift of the land will reduce the effects of global sea level rise relative to elsewhere on the coast.

One consequence of the next Cascadia Subduction Zone earthquake is that this effect will be suddenly undone. Past Cascadia Subduction Zone earthquakes have typically resulted in a sudden land subsidence of about six feet. This figure is consistent with what has been observed following other megathrust earthquakes around the world. This sudden subsidence needs to be taken into account when planning for future sea level rise. The National Academy of Science has, at the request of the western states' governors, convened a panel to provide recommendations for predicting sea level trends in California, Oregon, and Washington over the next century. The panel is well aware of this phenomenon, and it will be interesting to see how they incorporate it into their recommendations.

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Coastal Commission SONGS ISFSI staff report: <u>http://www.coastal.ca.gov/energy/e-00-14rf.pdf</u> Coastal Commission DCPP ISFSI staff report: <u>http://www.coastal.ca.gov/energy/W5a-1-2005.pdf</u> Coastal Commission HBPP ISFSI staff report: <u>http://www.coastal.ca.gov/energy/Th6a-9-2005.pdf</u>

AB1632 Report: http://www.energy.ca.gov/ab1632/index.html

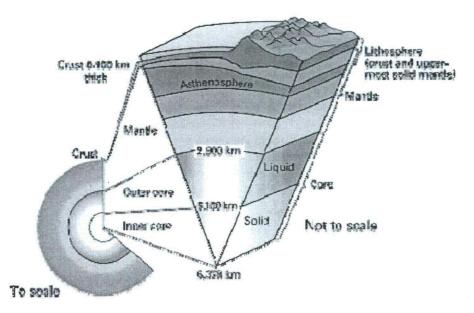
CREW Scenario: http://www.crew.org/papers/CREWCascadiaFinal.pdf

APPENDIX: EXPLANATION OF TERMS AND PROCESESS

Plate tectonics

This section is adapted from a USGS publication entitled *This Dynamic Earth*; see http://pubs.usgs.gov/gip/dynamic/inside.html

The interior of the Earth can be divided into three sections— the crust, mantle, and core. This layered structure can be compared to that of a boiled egg. The crust, the outermost layer, is rigid and very thin compared with the other two. Beneath the oceans, the crust is made up mostly of dense rocks such as gabbro and basalt and is only about 5 km thick. The thickness of the crust beneath continents is mostly made up of less dense granite and averages 30 km in thickness. The Earth's crust is brittle and can break.



Below the crust is the mantle, a dense, hot layer of semi-solid rock approximately 2,900 km thick. The mantle is hotter and denser because temperature and pressure inside the Earth increase with depth. At the center of the Earth lies the core, which is nearly twice as dense as the mantle because its composition is metallic (iron-nickel alloy) rather than stony. The Earth's core is made up of two parts: a 2,200 km-thick liquid outer core and a 1,250 km-thick solid inner core.

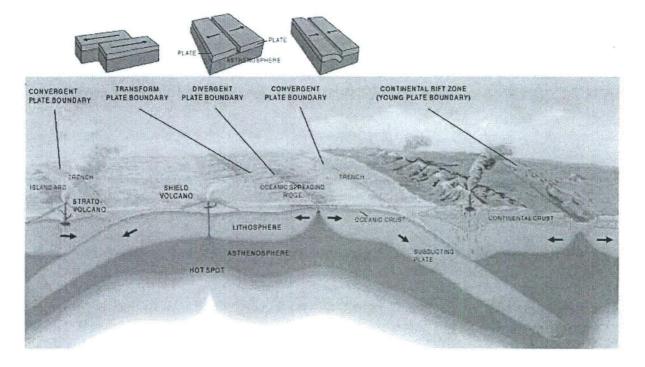
The upper part of the mantle is cooler and more rigid than the deep mantle; in many ways, it behaves like the overlying crust. Together they form a rigid layer of rock called the lithosphere. Averaging 80 km in thickness, the lithosphere has been broken up into the moving plates that contain the world's continents and oceans. Below the lithosphere is a relatively narrow, mobile zone in the mantle called the asthenosphere. The rigid lithosphere is thought to "float" or move about on the slowly flowing asthenosphere. The

Implications of Tōhoku Earthquake

March 24, 2011

movement of the lithospheric plates atop the plastic asthenosphere is the root of plate tectonics. The plates interact at the Earth's surface in a number of ways, with three main types of boundaries between them:

- Divergent boundaries -- where new crust is generated as the plates pull away from each other.
- Convergent boundaries -- where crust is destroyed as one plate dives under another.
- Transform boundaries -- where crust is neither produced nor destroyed as the plates slide horizontally past each other



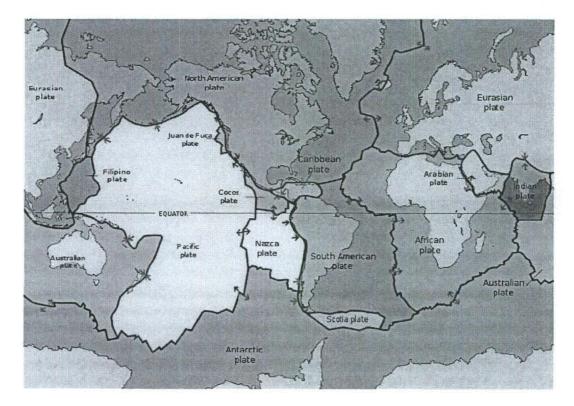
The earth's two largest plates interacted during the Tōhoku Earthquake of 11 March 2011:

North America plate

The North American plate comprises most of North America, Greenland, Cuba, Bahamas, and parts of Siberia, Japan and Iceland. It extends eastward to the Mid-Atlantic Ridge and westward to the Chersky Range in eastern Siberia. The plate includes both continental and oceanic crust. The interior of the main continental landmass includes an extensive granitic core called a craton. Along most of the edges of this craton are fragments of crustal material called terranes, accreted to the craton by tectonic actions over the long span of geologic time. It is believed that much of North America west of the Rockies is composed of such terranes.

Pacific plate

The Pacific lies beneath the Pacific Ocean and is made up almost entirely of oceanic crust. The north-eastern side is a divergent boundary with the Explorer, Juan de Fuca and Gorda plates.. In the middle of the eastern side is a transform boundary with the North American Plate along the San Andreas Fault, and a boundary with the Cocos Plate. The south-eastern side is a divergent boundary with the Nazca Plate forming the East Pacific Rise. The southern side is a divergent boundary with the Antarctic Plate forming the Pacific-Antarctic Ridge. On its western side, the plate is bounded by the Okhotsk Plate at the Kuril-Kamchatka Trench and the Japan Trench, forming a convergent boundary in which it is subducted under the Philippine Sea Plate creating the Mariana Trench. In the south-west, the Pacific Plate has a complex but generally convergent boundary with the Indo-Australian Plate, subducting under it north of New Zealand forming the Tonga Trench and the Kermadec Trench. The Alpine Fault marks a transform boundary between the two plates, and further south the Indo-Australian Plate subducts under the Pacific Plate forming the Puysegur Trench. The northern side is a convergent boundary subducting under the North American Plate forming the Aleutian Trench and the corresponding Aleutian Islands



page 18

Types of faults

This section is adapted from the USGS *Glossary of Earthquake* terms; see http://earthquake.usgs.gov/learn/glossary/

Faults can be divided into two broad categories, depending on the sense of movement on the dipping fault plant

Dip-slip faults are inclined fractures where the blocks have mostly shifted mostly vertically. If the rock mass above an inclined fault moves down, the fault is termed normal, whereas if the rock above the fault moves up, the fault is termed reverse. A thrust fault is a reverse fault with a dip of 45 degrees or less. Oblique-slip faults have significant components of different slip styles. A megathrust earthquake refers to a large earthquake on a subduction zone with a thrust type of mechanism.



Normal Fault Flash Animation



Thrust Fault Flash Animation

• Strike-slip faults are vertical (or nearly vertical) fractures where the blocks have mostly moved horizontally. If the block opposite an observer looking across the fault moves to the right, the slip style is termed right lateral; if the block moves to the left, the motion is termed left lateral.



• A transform fault is a special variety of strike-slip fault that accommodates relative horizontal slip between oceanic crustal plates. They often extend from divergent plate boundaries at ocean ridges. Where no longer active, they are referred to as **healed transform faults**.

Measuring and locating earthquakes

Some of this section is adapted from the USGS *Glossary of Earthquake* terms; see http://earthquake.usgs.gov/learn/glossary/

Earthquake locations

Earthquakes cause slip of an area of the fault plane at depth. The size of this **rupture area** is proportional to the **magnitude** of the earthquake; the larger the

rupture area the larger the earthquake magnitude. The earthquake's **hypocenter** is its position in three dimensions beneath the earth. The earthquake's **epicenter** is the two dimensional projection of the hypocenter on the surface of the Earth.

Earthquake magnitude

The magnitude of an earthquake is a number that characterizes the relative size of an earthquake. Magnitude is based on measurement of the maximum motion recorded by a seismograph. Several scales have been defined, but the most commonly used scale for large earthquakes is the moment magnitude (Mw) scale. Like the other scales, the moment magnitude scale is logarithmic. That is, each numeric increase in the scale (from say to a Mw 8.0 to Mw 9.0) represents a ten-fold increase in ground shaking. The energy released increases by a factor of about 33 times.

Ground shaking intensity

Buildings are not designed to withstand an earthquake of a particular magnitude, but a particular level of ground shaking. Whereas earthquake magnitude is an intrinsic property of the earthquake, the level of ground shaking, or intensity, that is felt at any particular location is a function of a number of factors. These include the distance of the location from the earthquakes epicenter, the depth of the earthquake, and characteristics of the location (such as whether it is underlain by dense bedrock, soft sediments, or artificial fill). The intensity felt usually is measured on the **Modified Mercalli Intensity** scale, and is given as a number (written as a Roman numeral) describing the severity of an earthquake in terms of its effects on the earth's surface and on humans and their structures. Several other scales exist. There are many intensities for an earthquake, depending on where you are, unlike the magnitude, which is one number for each earthquake.

Ground accelaration

A more quantitative way to describe ground shaking intensity is to measure it by a strong motion accelerometer, a special type of seismograph. Ground motion is expressed as a comparison to the force of gravity – that is, the acceleration (the rate of change in speed) of the ground relative to the acceleration caused by gravity. For instance, ground shaking of 1.0 g is equal to the acceleration caused by gravity, shaking of 0.5 g is equal to half the acceleration of gravity, etc. This is also known as **peak ground acceleration**; the maximum amount of ground acceleration regardless of the characteristics of the seismic waves involved.

Spectral accelaration

In reality, ground shaking is caused by seismic waves emanating from the earthquake's hypocenter, and modified during the travel to any particular site. These waves have a variety of wavelengths, periods, and velocities. Buildings and other structures interact with these various waves in different ways. For example, waves with a frequency of 3 to 8.5 hertz (cycles per second) are of particular interest to nuclear power plants since

the critical components of the plants resonate at those frequencies. The level of ground acceleration at any particular seismic frequency is known as its spectral acceleration. A curve describing the acceleration at all frequencies is used to describe the total ground shaking environment at a site.

From:	Baskett, Ron <baskett1@llnl.gov></baskett1@llnl.gov>
Sent:	Friday, March 11, 2011 3:12 PM
To:	 Chacko, Betsie; Al Mongeon; Andrea Donnellan; Andy Grose; Blumenthal, Daniel; David Bowman; Davis, Bruce; Ed Tupin; Ed Tupin; Erik Glassman; Sugiyama, Gayle; Gorman, Chad; J Nasstrom; Jennifer Olsen; Jessica Wieder; John Kulifay; Kathryn Snead; Brandon, Lou; Brandon, Lou; Manuel Aponte; Mark Witzel; Mongeon, Albert; Peter Ambrose; Remick, Alan; Robert Shankman; Rochester, Monica; Ronald Neff; Crawford, Sean; Al Mongeon; Andrea Donnellan; Andy Grose; Blumenthal, Daniel; David Bowman; Ed Tupin; Ed Tupin; Erik Glassman; Sugiyama, Gayle; J Nasstrom; Jennifer Olsen; Jessica Wieder; John Kulifay; Kathryn Snead; Brandon, Lou; Brandon, Lou; Manuel Aponte; Mark Witzel; Robert Shankman; Ronald Neff; Crawford, Sean; Al Mongeon; Andrea Donnellan; Andy Grose; David Bowman; Ed Tupin; Erik Glassman; Sugiyama, Gayle; J Nasstrom; Jennifer Olsen; Jessica Wieder; John Kulifay; Kathryn Snead; Brandon, Lou; Brandon, Lou; Manuel Aponte; Mark Witzel; Robert Shankman; Ronald Neff; Al Mongeon; Andrea Donnellan; Andy Grose; David Bowman; Ed Tupin; Ed Tupin; Ed Tupin; Ed Tupin; Erik Glassman; Sugiyama, Gayle; J Nasstrom; Jennifer Olsen; Jessica Wieder; John Kulifay; Kathryn Snead; Brandon, Lou; Brandon, Lou; Manuel Aponte; Mark Witzel; Robert Shankman; Ronald Neff; Al Mongeon; Andrea Donnellan; Andy Grose; David Bowman; Ed Tupin; Ed Tupin; Erik Glassman; Sugiyama, Gayle; J Nasstrom; Jennifer Olsen; Jessica Wieder; John Kulifay; Kathryn Snead; Brandon, Lou; Brandon, Lou; Manuel Aponte; Mark Witzel; Robert Shankman; Ronald Neff; Blumenthal, Daniel; Blumenthal, Danie!; Kathryn Snead/DC/USEPA/US; Kathryn Snead/DC/USEPA/US; ValentineDavis, Victor; Rochester, Monica
Subject:	NARAC surface wind analysis for Japan
Attachments:	NARAC_JapanWindAnalysis-1500UTC-11Mar.ppt
Attachments:	MARAC_JapartwindAnalysis-10001C-110df.ppt

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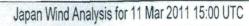
Please find attached a NARAC analysis of today's near-surface wind fields for northern and central Japan today.

Ron Baskett NARAC/IMAAC Program Lawrence Livermore National Laboratory Livermore, CA Office: 925-423-6731 baskett1@llnl.gov

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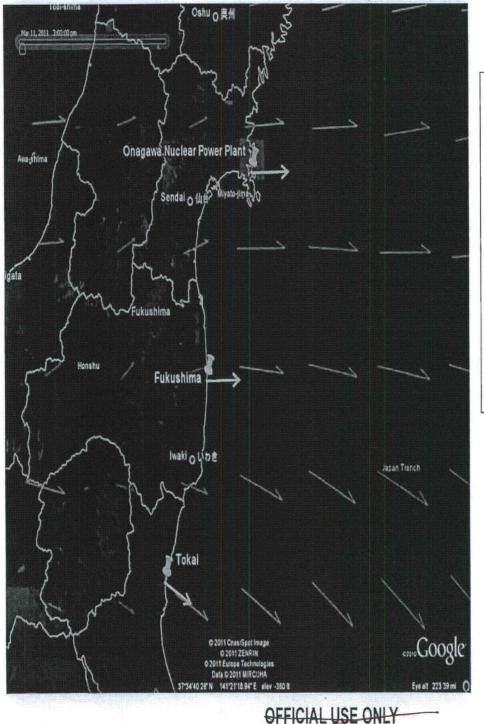
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Central Japan Wind Analysis and Location of Shutdown Nuclear Power



Notes:

No release of radioactivity
 has been reported

• Near-surface wind analysis used NOAA GFS weather forecast model and DOE/NARAC ADAPT meteorological data assimilation model

• Winds are generally steady from the West, Northwest

For more information: DOE Operations Center 202-586-8100

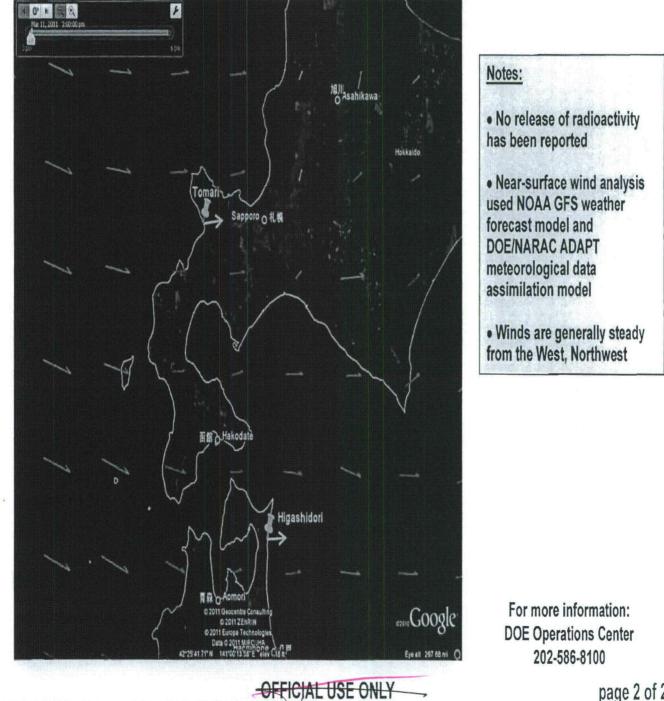
page 1 of 2

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Japan Wind Analysis for 11 Mar 2011 15:00 UTC

Northern Japan Wind Analysis and Location of **Shutdown Nuclear Power Plants**



page 2 of 2

From: Sent: To: Subject: Brandon, Lou Saturday, March 12, 2011 8:00 AM Jim Hardeman RE: Fukushima

Jim

We've been using Oyster Creek as a surrogate plant to model various scenarios, 10% cladding, 10% core melt, worst case (don't think representative). Fukushima Unit one would be about 20% power. Appreciate your efforts. Been up all night and going home.

Lou

From: Jim Hardeman [mailto:Jim.Hardeman@dnr.state.ga.us] Sent: Friday, March 11, 2011 6:26 PM To: Brandon, Lou Subject: Fukushima

Lou --

Are y'all getting any "data" from the Japanese? I'm hearing all these media folks breathlessly reporting that radiation levels are 1,000 times normal, not bothering to indicate that this in INSIDE the plant. I did a quick and dirty RASCAL, and assuming a generic Mark 1 BWR, wetwell radiation level of 1,000 R/hr, release through suppression pool, no sprays, no SBGT you're still looking at minimal doses offsite.

Would be good though if we had some data.

Looks like we'll have something to talk about in Orlando.

Jim

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From: Sent: To: Subject: Boatright, Aleem <Aleem.Boatright@Hq.Doe.Gov> Monday, March 14, 2011 10:05 AM Brandon, Lou PMT Assistance - Follow-up

Lou:

Nice speaking to you this morning.

Just to follow up on what we discussed, I wanted to let you know that if you decided it would be useful to have me down there helping out with the PMT, just give either Glenn Podonsky or Bill Eckroade a call; they have the authority to send me over to help out in an official capacity if at all desired, and would be happy to contribute. They are the Chief and Deputy Chief, respectively, of the Health, Safety, and Security (HSS) Office of DOE, the office in which I work. Glenn can be reached at 301-903-3777 and Bill can be reached at 202-287-5403.

Thanks, and I look forward to working with you again if needed, Aleem

Aleem E. Boatright Nuclear Engineer Office of ES&H Evaluations - HS-64 Office of Independent Oversight Office of Health, Safety, and Security U.S. Department of Energy E-mail: <u>aleem.boatright@hq.doe.gov</u> <u>Office Phone: 301-903-0004</u> Cell Phone: (b)(6)

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From:Mazaika, MichaelSent:Monday, March 14, 2011 12:40 PMTo:PMT01 HocCc:Harvey, Brad; Quinlan, Kevin; Galletta, Thomas; Schaaf, Robert; Brandon, LouSubject:RE: PMT Met EmailImportance:High

Brad:

Attached are a few links that may be useful to you:

Meteo Mobile

http://www.aviador.es/fields.php?countryid=104

This will get you access to METARS for airports throughout Japan. Click on the "Map of Japan's Airports" link about two-thirds down the screen. There are a lot of airports overall so you'll have to zoom in on the area (northern portion of the main island on the east coast). The closest airport is Sendai; a little farther north is Kasuminome – both have a similar orientation to the coastline. I'd estimate they are about 50 km to the north along the coast. Clicking on the italicized station name will pull up a separate page that has the coded version of the METAR observations (**times are in Zulu and may not be current**). There is a link called "decode" next to the ICAO airport ID for translating the transmission.

There appears to be a good deal of topography on the island so flow inland may be quite complicated.

Windfinder

http://www.windfinder.com/forecasts/wind_eastern_asia_akt.htm

This will get you to a map that has forecast winds for the next 7 days or so at three-hour intervals. Forecast dates and times can be accessed from a drop down list on the left side of the page. I'm not so sure about the data sources but this link provides wind data for sailors and wind surfers on a global scale so I suspect there is some reliability to the data bases. Clicking on the station names below the map will get you to a graphic and tabular display that covers the current forecast period (similar to what we get from weather.gov.

More to follow

Please let me know if you have any questions.

Thanks,

Mike

From: PMT01 Hoc

Sent: Monday, March 14, 2011 12:11 PM To: Quinlan, Kevin; Galletta, Thomas; Mazaika, Michael Cc: Harvey, Brad Subject: PMT Met Email

23/1778

From:
Sent:
To:
Subject:

Brandon, Lou Monday, March 14, 2011 1:39 PM Cool, Donald RE: Access to WebEOC

Don, choices should be PMT Director, and then choosing the default Japanese scenario, should get you in. Feel free to come to the Operation center to observe and get assistance on WebEOC. Lots of interesting activity. PMT Directors are beginning to be staffed. There is a roster if you want to volunteer for a shift. I'm off now and back for the 11PM shift.

.

Lou

From: Cool, Donald Sent: Monday, March 14, 2011 1:05 PM To: Brandon, Lou Subject: RE: Access to WebEOC

Lou

I am beginning to feel like an electronic dunce. Obviously I am still missing something. I have not been into the system before. II click new user, it asks for a position name, which presumably would be PMT Director, and then a position access code, which I don't have. Perhaps if you give me the correct position name and an access code that will get me started.

How is the staffing going for the PMT? I am presuming that you are able to cycle through the regular reactor PMT teams in the monitoring mode, but with round the clock I wondered if you were going to be reaching deeper.

Don

From: Brandon, Lou Sent: Monday, March 14, 2011 11:36 To: Cool, Donald Subject: RE: Access to WebEOC	5 AM	n (m. 1997), se an
Don, if this is your 1 st time in, (b)(6	6)	·
(b)(6)	Let me know if this doesn't work	
From: Cool, Donald Sent: Monday, March 14, 2011 9:04 To: Brandon, Lou Subject: RE: Access to WebEOC	AM	
Thanks Lou. But WebEOC is not	letting me in. (b)(6)	or some other format?
		7,1,79

From: Brandon, Lou Sent: Monday, March 14, 2011 8:59 AM To: Cool, Donald Subject: RE: Access to WebEOC

Don, see the WebEOC link below. There is a Japanese event set up.

Below please find a link to the IR Procedures. Those of interest should all be under the PMT section, halfway down the right column. Since you have Citrix, I'm also forwarding other information that you might find useful.

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Lou

From: Cool, Donald Sent: Sunday, March 13, 2011 10:18 AM To: Brandon, Lou Subject: Access to WebEOC

Lou

With the events going on in Japan, I thought I might try to access the WebEOC to see what was going on. I am in CITRIX, Sunday morning. I guess I don't know where to go to access the Op Center things. Not a problem today, but something that would be good to know.

Cheers

Donald A. Cool

From:Mazaika, MichaelSent:Monday, March 14, 2011 6:53 PMTo:PMT01 HocCc:Harvey, Brad; Quinlan, Kevin; Galletta, Thomas; Schaaf, Robert; Brandon, LouSubject:Nearby Climate Observing Stations from Japan Meteorological AgencyAttachments:Japan Met Agency - Nearby Observing Stations.xlsx

Folks:

Attached is an electronic copy the table I brought to Tom and Kevin late this afternoon listing meteorological observing stations along the east coast of the main island under the Japan Meteorological Agency (JMA). The table is self explanatory. There are several stations fairly close to the site but are not currently reporting data – probably either because they were inundated and/or lost power. Two of the JMA stations – Sendai to the north and Onahama to the south resumed reporting on March 14. We have not been able to obtain data from these stations prior to that date for chronological purposes. The Sendai station appears to be located at an airport; Onahama does not.

Please let me know if you have any questions.

Thanks,

Mike

Physical Scientist (Meteorologist) U.S. Nuclear Regulatory Commission NRO/DSER/RSAC 11545 Rockville Pike, Mail Stop T-7F27 Rockville, MD 20852-2738 (301) 415-6282 michael.mazaika@nrc.gov

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	T	·	Japan Me	teorological /	Agency - Meteo	prologica	Stations Al	ong Coa	stline of	Fukushima	a Reactor			1	
Area	Prefecture	Station	Туре	Lat (N)	Lon (E)	Elev	Dist to	WS	WD	Temp	Hum	Precip	Pres	Sunshine	Snow
						(m)	Site (km)			ļ				Duration	Depth
Tohoku	Fukushima	Soma	Auto	37o 47.0'	140o 55.5'	9	41.34	X	X	X		X		X	
		Haramachi	Auto	370 38.3'	140o 59.1'	10	24.47					X			
		Namie	Auto	37o 29.5'	140o 57.9'	47	9.77	X	X	X		X	van Mo ^{nter}	X	
		Tomioka	Auto	37o 20.8'	141o 1.0'	50	8.45					X			
<u></u>		Hirono	Auto	37º 14.0'	141o 0.0'	43	21.15	X	X	X		X		X	
		Onahama	Wx Stri	36o 56.8'	140o 54.2'	3	54.09	X	X	X	X	X	X	X	•·····
Tohoku	Miyagi	Watari	Auto	38o 1.5'	140o 51.5'	4	68.87	X	X	X		X		X	
		Natori	Auto	38o 8.3'	140o 55.0'	2	80.42	X	X	X		X			
		Sendai	Observ	38º 15.7'	140o 53.8'	39	94.26	X	X	X	X	X	X	X	X
		Shiogama	Auto	380 20.3'	141o 0.8'	105	102.05	X	X	X		X		X	
	Reactor			37o 25.3'	1410 1.9'								·		

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	xa, Michael ay, March 14, 2011 7:36 PM
To: PMT02	Hoc
Cc: Harvey	, Brad; Quinlan, Kevin; Galletta, Thomas; Schaaf, Robert; Brandon, Lou
Subject: Other	Possible Met Observing Stations

Kevin:

As we discussed, I took a look at another climate data resource in my files to see if there were any military or other airfield summaries on the east coast of the main island. None appear to be closer than the spreadsheet that I sent earlier, but a few are just beyond those limits that may still have stayed operational. However, you'll see though when you look at these locations on a map that coastal orientation may be somewhat of a potential issue.

They are:

- Kasuminome Airbase Lat = 38 deg 13 min; Lon = 140 deg 55 min, Elev = 18 ft (Google for Kasuminome, Sendai, Japan)
- Matsushima Airbase Lat = 38 deg 24 min; Lon = 141 deg 23 min, Elev = 9 ft (Located NE of Sendai)
- Ishinomaki Lat = 38 deg 26 min; Lon = 141 deg 18 min, Elev = 148 ft (USNT, Located NE of Sendai), Station ID 475920 (RJ19)

Let us know if you find anything useful for march 11-13.

Thanks,

Mike

Physical Scientist (Meteorologist) U.S. Nuclear Regulatory Commission NRO/DSER/RSAC 11545 Rockville Pike, Mail Stop T-7F27 Rockville, MD 20852-2738 (301) 415-6282 michael.mazaika@nrc.gov

From: Sent: To: Subject: Athey Consulting <atheyconsulting@frontiernet.net> Tuesday, March 15, 2011 6:52 PM Andrews, Tom; Brandon, Lou RE: RASCAL 4.1 Problem

Tom –

We actually just saw the same problem while working the Japanese incident. You are correct that it is problem with the string used to identify where the met data is located. We have already developed a fix and will be trying it out over the next few days. I will keep you posted and will try to get a patch out in some form as soon as things settle down a bit. In the mean time, the workaround seem to be: enter all your met data at one time and do not expect to edit. We have done some work with copying the met files back and forth between folders but that is confusing and a pain.

George

Athey Consulting (304) 725-8834 <u>atheyconsulting@frontiernet.net</u>

From: Andrews, Tom [mailto:Tom.Andrews@nrc.gov] Sent: Tuesday, March 15, 2011 5:16 PM To: Brandon, Lou; Athey Consulting Subject: RASCAL 4.1 Problem

Situation:

I am entering info for an "Other Radioactive Material Release" I get to the point to where I enter site specific met data and save the data I can then view the data, but I cannot edit the data.

When I try to edit the existing file, I get an error message that states something similar to the following:

File passed to program C:\Program Files\RASCAL4\site\Site\Met Actual\Site 2011-03-15-1432.obs does not exist

Program assumes new observations are being created

Seems to be a file name construction bug in identifying the name of the file that gets passed to the program... The file is actually found in

C:\Program Files\RASCAL4\Site\Other\Met Actual

Tom Andrews Senior Emergency Response Coordinator USNRC - Region IV 612 East Lamar, Suite 400 Arlington, TX 76011

Office:	817.860.8233
Facsimile:	817.860.8228
Cellular:	(b)(6)

NRC responders deserve nothing less than the best possible planning, procedures, equipment and training I can provide them.

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Finally, the recipient should check this message and any attachments for the presence of viruses. The Nuclear Regulatory Commission accepts no liability for any damage caused by any virus transmitted by this email.

From: Sent: To: Subject: Athey Consulting <atheyconsulting@frontiernet.net> Tuesday, March 15, 2011 6:59 PM Brandon, Lou Wednesday support for Japanese emergency

Lou –

I have developed and tested a new version of the STDose program that seems to address the issues with the met data. If plan to bring it with me to NRC tomorrow. If for some reason I should not come to NRC on Wednesday please e-mail and/or leave voice mail on my cell before 5 a.m. I am hoping to get an early start and be at NRC by 7 a.m.

I have identified a problem with the TADPuff model crashing when doing long calculation durations. With a release rate of "total failure" it seems to occur when calculating beyond 32 hours. With lower release rates it seems to crash later, e.g. maybe not until 36 hours. I have not yet notified Van as he is enroute to Richland today and indicated he would not be able to do any programming the remainder of the week. I will notify him of the problem later this week.

George

Athey Consulting (304) 725-8834 <u>atheyconsulting@frontiernet.net</u>



From:	PMT01 Hoc
Sent:	Wednesday, March 16, 2011 1:15 PM
To:	LIA02 Hoc
Cc:	Galletta, Thomas; Quinlan, Kevin; Brown, David; Harvey, Brad; Brandon, Lou; Schaaf,
	Robert
Subject:	Confirmation of Meteorological Monitoring Near Fukishima Site
Attachments:	Japan Meteorological Agency.txt

Folks:

The Director General of the Japanese Meteorological Agency (JMA), Dr. Mitsuhiku Hatori, indicated in a letter (attached) regarding the disaster that the "JMA, as the national meteorological service, also provides special meteorological information for the damaged areas, which is indispensable for the safe and appropriate operation of rescue, recovery and other emergency responses".

Please confirm whether the JMA has dispatched team(s) to the site area with portable meteorological monitoring equipment. If so, please identify where the measurement stations are located, when data collection began, what information is being collected, how often, and how to get access to it.

Thank you.

PMT Meteorology

Japan Meteorological Agency JapaneseAbout Us Access Links Site Map HomeWeather/EarthquakesNews ReleasesServicesFor Tourists/ResidentsFor NMHSs Home > News Releases > Message from Dr. Hatori, Director-General of the Japan Meteorological Agency on "The 2011 off the Pacific coast of Tohoku Earthquake" Message from Dr. Hatori, Director-General of the Japan Meteorological Agency on "The 2011 off the Pacific coast of Tohoku Earthquake" 15 March 2011 First, I would like to extend my deepest condolences for the sufferers of the devastating earthquake and following catastrophic tsunami. I think that the operational abilities of the Japan Meteorological Agency (JMA) are now being tried under this emergency situation. All the JMA staff are highly motivated and work together to keep providing necessary information and services to protect people in Japan. On behalf of all the staff members of JMA, I would like to convey my sincere appreciation for many warm messages from the Secretary General of WMO, Permanent Representatives with WMO, and directors and staff of National Meteorological and Hydrological Services and other related organizations abroad upon the massive earthquake and tsunami which hit the northeast part of Japan on March 11, 2011. I am leading the emergency responses at JMA, and at the same time, participating in the Major Disaster Management Headquarters (Minister level conferences based on the Disaster Countermeasures Basic Act), and I do not have time to respond individually to those messages for the time being, but all

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the JMA staff and I are very much encouraged and grateful.

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Supported by those warm words, JMA keeps its best efforts to monitor meteorological and geophysical phenomena, continue issuing forecasts and warnings as usual. Although we have some troubles with AWS, seismometers and tide gauges in Tohoku and surrounding areas due to the earthquake and tsunami, so far we have no major problems in issuing warnings/advisories/information on earthquakes, tsunamis and severe weather. JMA, as the national meteorological service, also provides special meteorological information for the damaged areas, which is indispensable for the safe and appropriate operation of rescue, recovery and other emergency responses. We also continue the normal operation of our international roles such as Regional Telecommunication Hub (RTH), Regional Specialized Meteorological Centres (RSMCs), and in provision of meteorological satellite data. Mitsuhiko Hatori Permanent Representative of Japan with WMO Director-General of the Japan Meteorological Agency

- Back to the top page of News releases

Japan Meteorological Agency, 1-3-4 Otemachi, Chiyoda-ku, Tokyo 100-8122, Japan All Rights Reserved, Copyright (C) 2002-2009 <Legal Notice> From:Geusic, Kate [USA] <Geusic_Kate@bah.com>Sent:Wednesday, March 16, 2011 1:45 PMTo:Brandon, LouSubject:HIFLD WG Infrastructure Geospatial Viewer and Capabilities Collection ToolAttachments:HIFLD WG Infrastructure Geospatial Viewers and Capabilities Form.xlsx; Other HIFLDWG Infrastructure Geospatial Viewers and Capabilities Form.xlsx; HIFLD WG Mission
Engineering Infrastructure Geospatial Assesment Access Instructions.pdf

Lou Brandon,

I am contacting you on behalf of the Homeland Infrastructure Foundation-Level Data (HIFLD) Working Group. The purpose of this email is to serve as an introduction to a collection tool that will be used to gather further data and information on the infrastructure geospatial viewers used across the HIFLD Community. As our mission partner at the Nuclear Regulatory Commission, we could use your assistance in gathering information on Infrastructure Geospatial Viewers and Capabilities accessed or used by the Nuclear Regulatory Commission. Over the past 6 months, the HIFLD Working Group employed the HIFLD Mission Engineering team to collect the baseline data for the <u>HIFLD WG Official Members' Mission Engineering</u> (ME) Infrastructure Geospatial Viewers and Capabilities Assessment. The initial geospatial viewers that were analyzed included:

- ▶ DHS: iCAV, DHS Earth
- DOD: TRITON, HD-MAP, KDAS, SMADS, SAGE
- NGA: NGA Earth, NGA Palanterra
- ▶ USGS: The National Map
- > NOAA: ERMA

Please follow the instructions to provide your input on the Infrastructure Geospatial Viewers you have access to and use.

Accessing the forms:

- 1. Please follow this link <u>HIFLD WG Official Members' Mission Engineering® (ME) Infrastructure</u> <u>Geospatial Viewers and Capabilities Assessment</u> to access the HIFLD WG Infrastructure Geospatial Viewers/Capabilities Form and the Other HIFLD WG Infrastructure Geospatial Viewers/Capabilities Form
- 2. If the forms do not automatically appear after clicking the link above please sign in via the login box located on the left side of the page:
 - a. User name: email address to which this email was sent
 - b. If you have forgotten your password select the "Forgot Password" link to have a new one email to you
- 3. If you are unable to access the forms via the above link please use the Access Instructions PDF (attached) or fill out the attached forms and email them to <u>Geusic kate@bah.com</u>

We look forward to your feedback. If you have any issues utilizing the collection tool or the site, please contact Kate Geusic for assistance. If you would prefer to walk through the tool via phone, I can be contacted at (757)-459-4318.

Thank you,

Kate Geusic

Booz | Allen | Hamilton (757)-459-4318 (office) (b)(6) (cell) geusic_kate@bah.com

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- 1. The link should bring you to the following page. If it does not please see Page 2.
- Both the HIFLD WG Infrastructure Geospatial Viewers/Capabilities Form and the Other HIFLD WG Infrastructure Geospatial Viewers/Capabilities Form can be accessed from this page. The links are highlighted with a red box below.

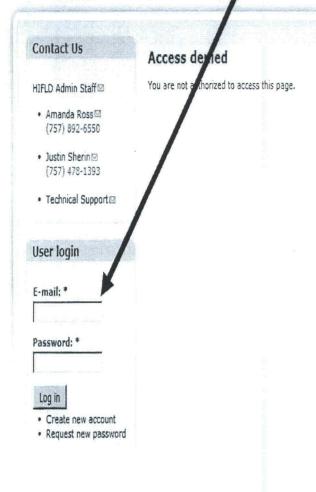
HIFLD Homeland Infrastructure Foundation-Level Data Working Group Interagency Coordination Teams HIFLD to the Regions Geospatial Infrastructure Viewers/Capabilities Assessment Roster HIFLD HSIP Contact Us Hame Home geusic_kate HIFLD WG Official Members' Mission Engineering® (ME) Infrastructure Geospatial Viewers and My Account **Capabilities Assessment Collection Effort** * Events HIFLD Meetings o Member View Edit Track Participation at Other Meetings o My Events Overview INFRASTRUCTURE INFOR Interagency **Coordination Teams** The purpose of this collection effort is to gather information on the Infrastructure Geospatial Data Requirements Viewers/Capabilities that are leveraged in order to provide mission support for Homeland • Technology · Process and Defense, Homeland Security, Emergency Preparedness & Response, Recovery and/or Civil Standards Support. . HSIP HIFLD WG Infrastructure Geospatial Viewers/Capabilities that are used or o My HSTP Request HSIP Gold 2011 accessible: · Data Request · HSIP Freedom 2010 Click here: HIFLD WG Infrastructure Geospatial Viewers/Capabilities Form . HSIP - NAVTEQ State Release The purpose of this form is to capture additional baseline information on the selected set of • HSIP Feedback Infrastructure Geospatial Viewers/Capabilities in the HIFLD WG Official Members' Mission In The News Engineering@ (ME) Infrastructure Geospatial Viewers and Capabilities Assessment. The selected o Awards Infrastructure Geospatial Viewers/Capabilities include: o Articles • Forums Department of Homeland Security (DHS): ICAV NextGen, DHS Earth Search · National Geospatial Agency (NGA): NGA Earth, Palanterra Log Out · Department of Defense (DoD): TRITON, HD-MAP, KDAS, SMADS, SAGE Administer United States Geological Survey (USGS): The National Map National Oceanic and Atmospheric Administration (NOAA): ERMA **Admin Reports** The information collected will supplement the HIFLD WG Official Members' Mission Engineering® (ME) Infrastructure Geospatial Viewers and Capabilities Assessment data collection efforts that have already been completed and provide further detail for each Infrastructure Geospatial **HSIP Reports** Viewers/Capabilities. When using the form, please fill in all fields that are required (denoted by · 2011 Request Tracking asterisks). This form will take you approximately 5 to 10 minutes to fill out. · 2010 Request Tracking · Metrics Other HIFLD WG Infrastructure Geospatial Viewers/Capabilities that are used Feedback Reports or accessible: Website Reports · Site Metrics Click here: Other HIFLD WG Infrastructure Geospatial Viewers/Capabilities Form **NAVTEQ** Reports The purpose of this form is to capture original baseline information on Infrastructure Geospatial Viewers/Capabilities that are NOT in the HIFLD WG · Create New Request Official Members' Mission Engineering (ME) Infrastructure Geospatial Viewers and Capabilities Assessment. The geospatial community utilizes many · Request Tracking types of Infrastructure Geospatial Viewers and/or Capabilities. This initial data collection effort will provide a more robust catalog of Infrastructure Geospatial Viewers and/or Capabilities that are used by the community to perform a job function and create products. When using the form, please Viewer/Capabilities fill in all fields that are required (denoted by asterisks) at the minimum. This form will take you approximately 5 to 10 minutes to fill out. Collection · Add Viewer/Capability **POC Information** · Viewer Tracking Kate Geusic 757-459-4318 Geusic Kate@bah.com @ or hilldwg@bah.com @ ATTACHMENT SIZE HIFLD_CM_DRAFTv10_posterwithlogos-01.jpg 558.27 KB

3. If the link ahs take you to the following page please log in here with your email address and password (if you do not know your password use the "Request new password" link below the login).

HIFLD

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Homeland Infrastructure Foundation-Level Data Working Group



Disclaimer: The information contained herein is marked U//FOUO for the exclusive use of Government and Contractor personnel with need-to-know HIFLD information. Such information is specifically prohibited from posting on unrestricted web sites or other unrestricted applications.

4. Once you have logged in continue with the instructions on page one of this document.

Your Information		
Name:		
Phone:		
Email:		
Department/Agency:	Department of Energy	▼
Office:		
Supported Mission Areas:	(Choose All That Apply)	
	Infrastructure Protection	
	Homeland Security	
	Homeland Defense	
	Emergency Preparedness, Response and Recovery	
Viewers you have access to:	(Choose All That Apply)	
	HD-Map	
	KDAS	
	SMADS SMADS	
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ArcGIS Server
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Type of Web Service:
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Your Information Name: Phone: Email: Department/Agency: Office:	
Other Viewers/Capabilities Viewer Name: Type of Access:	you use (can be external to your department/agency - Example IDX3 Viewer Web Service
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Uniques Capabilities of the Viewer/Web Service/Other: Supported Mission Areas:	<pre>(Choose All That Apply) Infrastructure Protection Homeland Security Homeland Defense Civil Support Emergency Preparedness, Response and Recovery Other</pre>
Viewer Owner POC Name: Email: Phone: Department/Agenct Office:	

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From:	Pavek, John - Washington, DC <john.pavek@wdc.usda.gov></john.pavek@wdc.usda.gov>
Sent:	Wednesday, March 16, 2011 2:55 PM
То:	Pavek, John - Washington, DC; Evans, Lynn (CDC/ONDIEH/NCEH); Anderson, Jeri L.
	(CDC/NIOSH/DSHEFS); Ansari, Armin (CDC/ONDIEH/NCEH); Brandon, Lou; Brooks,
	Michael (ATSDR/DHAC/SRAB); Brozowski, George (EPA); Buzzell, Jennifer
	(CDC/ONDIEH/NCEH); Charp, Paul (ATSDR/DHAC/SRAB); Cherniack, James J.
	(FDA/ORA/NE-FO); Gordon S Cleveland (APHIS); Connell, Carol (ATSDR/DHAC/SRAB);
	Cunningham, William C. (FDA/CFSAN); DeCair, Sara (EPA); Dixon, John E.
	(CDC/ONDIEH/NCEH); Evans, Rachel T. (FDA/ORA/CE-FO); Funk, Renee
	(CDC/NIOSH/OD); Goodman, Roger (EPA); Graham, Ron (FSIS); Hansen, Patricia A.
	(FDA/CFSAN); Hargrave, Scotty L. (FDA/ORA/SW-FO); Hornsby-Myers, Jennifer
	(CDC/NIOSH/OD); Howard King, Vinetta M. (FDA/OC/OCTC); Jablonowski, Gene (EPA);
	Jensen, John (USDA); Jones, Terri L. (FDA/ORA/P-FO); Keith, Sam (ATSDR/DTEM/ATB);
	Liles, Darrell (EPA); Lotz, William G. (Greg) (CDC/NIOSH/DART); Lough, Scott (AMS);
	Maher, Carmen T. (FDA/OC/OCS); Mena, RaJah (DOE/FRMAC); Miller, Charles W.
	(CDC/ONDIEH/NCEH); Morrison, Ellen F. (FDA/OC/OCTC); Nemhauser, Jeffrey B.
	(CDC/ONDIEH/NCEH); Noska, Mike (FDA); O'Laughlin, Colleen (DOE/FRMAC);
	Pemberton, Wendy (DOE/FRMAC); Peter A Petch (APHIS); Russo, Mark R.
	(FDA/OC/OCTC); Sincek, Jeffrey A. (FDA/ORA/CE-FO); Smallwood, Karen R.
	(FDA/ORA/SE-FO); Tupin, Ed (EPA); Veal, Lee (EPA); Whitcomb, Robert C.
	(CDC/ONDIEH/NCEH); Wiley, Albert (ORAU)
Subject:	RE: Press release Subject: Japan Nuke Response

Subject: Japan Nuke Response

State Dept has just issued the following statement advising on a 50 mile evac from the reactor site U.S. Embassy Tokyo, Japan

March 16, 2011

Statement by U.S. Ambassador John V. Roos

The United States Nuclear Regulatory Commission (NRC), the Department of Energy and other technical experts in the U.S. Government have reviewed the scientific and technical information they have collected from assets in country, as well as what the Government of Japan has disseminated, in response to the deteriorating situation at the Fukushima Nuclear Power Plant. Consistent with the NRC guidelines that apply to such a situation in the United States, we are recommending, as a precaution, that American citizens who live within 50 miles (80 kilometers) of the Fukushima Nuclear Power Plant evacuate the area or to take shelter indoors if safe evacuation is not practical.

We want to underscore that there are numerous factors in the aftermath of the earthquake and Tsunami, including weather, wind direction and speed, and the nature of the reactor problem that affect the risk of radioactive contamination within this 50 mile (80 km) radius or the possibility of lower-level radioactive materials reaching greater distances.

The U.S. Embassy will continue to update American citizens as the situation develops. U.S. citizens in need of emergency assistance should send an e-mail to <u>JapanEmergencyUSC@state.gov</u> with detailed information about their location and contact information, and monitor the U.S. Department of State website at travel.state.gov.

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The United States is continuing to do everything in its power to help Japan and American citizens who were there at the time of these tragic events. To support our citizens there, the Embassy is working around the clock, we have our consular services available 24 hours a day to determine the whereabouts and well-being of all U.S. citizens in Japan and we have offered our Japanese friends assistance, including disaster response experts, search and rescue teams, technical advisers with nuclear expertise and logistical support from the United States military.

Here are updated topline points for folks

IF ASKED about any questions about harmful radiation headed towards the US: NRC Chairman Jaczko continues to say the following: "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."

Topline Points

• The United States is continuing to do everything in its power to help Japan and American citizens who were there at the time of these tragic events.

• USAID is coordinating the overall U.S. government efforts in support of the Japanese government's response and are currently directing individuals to <u>www.usaid.gov</u> for information about response donations.

• The President is being kept up to date and is constantly being briefed by his national security staff. The National Security staff in the White House is also coordinating a large interagency response with experts meeting around the clock to monitor the latest information coming out of Japan.

• We have offered our Japanese friends includes disaster response experts, search and rescue teams, technical advisers with nuclear expertise and logistical support from the United States military.

• In response to the deteriorating situation at the Fukushima Nuclear Power Plant, the United States Nuclear Regulatory Commission (NRC), the Department of Energy and other technical experts in the U.S. Government have reviewed the scientific and technical information they have collected from assets in country, as well as what the Government of Japan has disseminated. Consistent with the NRC guidelines that would apply to such a situation in the United States, we are recommending, as a precaution, that American citizens who live within 50 miles (80 kilometers) of the Fukushima Nuclear Power Plant evacuate the area or to take shelter indoors if safe evacuation is not practical.

• We want to underscore that there are numerous factors in the aftermath of the earthquake and Tsunami, including weather, wind direction and speed, and the nature of the reactor problem that affect the risk of radioactive contamination within this 50 mile radius or the possibility of lower-level radioactive materials reaching greater distances.

• To support our citizens there, the Embassy is working around the clock, we have our consular services available 24 hours a day to determine the whereabouts and well-being of all U.S. citizens in Japan. U.S. citizens in need of emergency assistance should send an e-mail to <u>JapanEmergencyUSC@state.gov</u> with detailed information about their location and contact information, and monitor the U.S. Department of State website at travel.state.gov.

As I said earlier, we have offered our Japanese friends disaster response experts, search and rescue teams, technical advisers with nuclear expertise and logistical support from the United States military.

• Secretary Chu announced that DOE offered and Japan accepted an Aerial Measuring System capability,

including detectors and analytical equipment used to provide assessments of contamination on the ground. In total, the DOE team includes 34 people.

• USAID set up a Response Management Team in DC and sent a Disaster Assistance Response Team to Tokyo, which includes people with nuclear expertise from the Departments of Energy and Health and Human Services as well the Nuclear Regulatory Commission (NRC). The NRC members are experts in boiling water nuclear reactors and are available to assist their Japanese counterparts.

• Two Urban Search and Rescue Teams (LA County and Fairfax County teams) which total 144 members plus 12 search and rescue canines and up to 45 metric tons of rescue equipment have begun searching for survivors.

• The Department of Defense has the USS Reagan on station off the coast of Japan and is currently using an air facility in Misawa as a forward operating base.

• The American Red Cross (ARC) International Services team is supporting the Japanese Red Cross Society (JRCS) to assess the impact, determine response efforts, and assist the people of Japan.

• USAID is hosting a daily conference call with Congressional staff, including participation from DoD, DoS, NRC, DoE, and HHS. The U.S. officials will continue to provide a brief overview of each agency's efforts in the response to Japan and respond to questions from the Congressional staff regarding humanitarian assistance, military assistance, and the nuclear plant situation.

• Currently nearly 5300 US military members are supporting the disaster relief efforts. There are 8 ships, including the aircraft carrier USS Ronald Reagan, transport aircraft and more than 100 military helos are being repositioned to northern Japan to support the efforts.

• The US military has flown reconnaissance flights and provided the Japanese government with images of the areas affected by the earthquake and tsunami. Search and rescue flights and missions along the coast continue, relief operations including delivery of food, water and other relief supplies also continue.

• Yokota Air Base is serving as a humanitarian relief operations staging area and Misawa Air Base is serving as both a logistical hub for humanitarian relief and rescue workers as well as an operating base for U.S., Japanese and other international helos and aircraft.

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, 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. In addition, EPA plans to work with its federal partners to deploy additional monitoring capabilities to parts of the western U.S. and U.S. territories.

• As always, 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.

• The FDA and USDA continues to ensure all our imported food remains safe as they do everyday

• If there were to be a nuclear accident here, we are prepared to respond and FEMA and the Department of Homeland Security exercise these preparedness plans with the rest of the government and state and local officials as well. Release of radioactive materials can be accidental or intentional and we have a detailed plan to respond regardless of the cause. The Nuclear/Radiological Incident Annex to the National Response Framework outlines which department or agency would have the lead for the Federal response depending on the source and type of release. For example, the Nuclear Regulatory Commission (NRC) would coordinate a response to a release involving nuclear weapons in DOE custody. The Department of Homeland Security would coordinate a response to a deliberate attack using improvised nuclear devices or radiological dispersal devices.

• Given the range of potential causes, from an earthquake to a terrorist attack, the plan provides the flexibility and agility we need to respond aggressively and effectively. In addition, state and local officials and nuclear facilities have detailed emergency plans that include specific protective actions, evacuation routes, and methods to alert the public of actions to take in the event of an emergency. There is a robust and active nuclear power plant accident exercise program that includes Federal, State, and local involvement to test plans and keep them current, and just last year we conducted such an exercise. Federal protective action guides are used at all nuclear power plants and are widely accepted and used in planning and exercises, and we will continue our efforts to plan and prepare for the safety and security of the American people.

John B. Pavek / Director, Emergency Preparedness Rural Development U.S. Department of Agriculture 1400 Independence Ave., S.W. | Washington, D.C. 20250 Phone: 202.720.2078 | Fax: 202.690.3333 www.rurdev.usda.gov

"Committed to the future of rural communities" "Estamos dedicados al futuro de las comunidades rurales"

From: Pavek, John - Washington, DC

Sent: Wednesday, March 16, 2011 2:07 PM

To: 'Evans, Lynn (CDC/ONDIEH/NCEH)'; Anderson, Jeri L. (CDC/NIOSH/DSHEFS); Ansari, Armin (CDC/ONDIEH/NCEH); Brandon, Lou (NRC); Brooks, Michael (ATSDR/DHAC/SRAB); Brozowski, George (EPA); Buzzell, Jennifer (CDC/ONDIEH/NCEH); Charp, Paul (ATSDR/DHAC/SRAB); Cherniack, James J. (FDA/ORA/NE-FO); Gordon S Cleveland (APHIS); Connell, Carol (ATSDR/DHAC/SRAB); Cunningham, William C. (FDA/CFSAN); DeCair, Sara (EPA); Dixon, John E. (CDC/ONDIEH/NCEH); Evans, Rachel T. (FDA/ORA/CE-FO); Funk, Renee (CDC/NIOSH/OD); Goodman, Roger (EPA); Graham, Ron (FSIS); Hansen, Patricia A. (FDA/CFSAN); Hargrave, Scotty L. (FDA/ORA/SW-FO); Hornsby-Myers, Jennifer (CDC/NIOSH/OD); Howard King, Vinetta M. (FDA/OC/OCTC); Jablonowski, Gene (EPA); Jensen, John (USDA); Jones, Terri L. (FDA/ORA/P-FO); Keith, Sam (ATSDR/DTEM/ATB); Liles, Darrell (EPA); Lotz, William G. (Greg) (CDC/NIOSH/DART); Lough, Scott (AMS); Maher, Carmen T. (FDA/OC/OCS); Mena, RaJah (DOE/FRMAC); Miller, Charles W. (CDC/ONDIEH/NCEH); Morrison, Ellen F. (FDA/OC/OCTC); Nemhauser, Jeffrey B. (CDC/ONDIEH/NCEH); Noska, Mike (FDA); O'Laughlin, Colleen (DOE/FRMAC); Pemberton, Wendy (DOE/FRMAC); Peter A Petch (APHIS); Russo, Mark R. (FDA/OC/OCTC); Sincek, Jeffrey A. (FDA/ORA/CE-FO); Smallwood, Karen R. (FDA/ORA/SE-FO); Tupin, Ed (EPA); Veal, Lee (EPA); Whitcomb, Robert C. (CDC/ONDIEH/NCEH); Wiley, Albert (ORAU)

FYI Got this from our HI office

John B. Pavek / Director, Emergency Preparedness Rural Development U.S. Department of Agriculture 1400 Independence Ave., S.W. | Washington, D.C. 20250 Phone: 202.720.2078 | Fax: 202.690.3333 www.rurdev.usda.gov

"Committed to the future of rural communities" "Estamos dedicados al futuro de las comunidades rurales"

From: Evans, Lynn (CDC/ONDIEH/NCEH) [mailto:gfn6@cdc.gov] Sent: Monday, March 14, 2011 12:52 PM

To: Anderson, Jeri L. (CDC/NIOSH/DSHEFS); Ansari, Armin (CDC/ONDIEH/NCEH); Brandon, Lou (NRC); Brooks, Michael (ATSDR/DHAC/SRAB); Brozowski, George (EPA); Buzzell, Jennifer (CDC/ONDIEH/NCEH); Charp, Paul (ATSDR/DHAC/SRAB); Cherniack, James J. (FDA/ORA/NE-FO); Gordon S Cleveland (APHIS); Connell, Carol (ATSDR/DHAC/SRAB); Cunningham, William C. (FDA/CFSAN); DeCair, Sara (EPA); Dixon, John E. (CDC/ONDIEH/NCEH); Evans, Lynn (CDC/ONDIEH/NCEH); Evans, Rachel T. (FDA/ORA/CE-FO); Funk, Renee (CDC/NIOSH/OD); Goodman, Roger (EPA); Graham, Ron (FSIS); Hansen, Patricia A. (FDA/CFSAN); Hargrave, Scotty L. (FDA/ORA/SW-FO); Hornsby-Myers, Jennifer (CDC/NIOSH/OD); Howard King, Vinetta M. (FDA/OC/OCTC); Jablonowski, Gene (EPA); Jensen, John (USDA); Jones, Terri L. (FDA/ORA/P-FO); Keith, Sam (ATSDR/DTEM/ATB); Liles, Darrell (EPA); Lotz, William G. (Greg) (CDC/NIOSH/DART); Lough, Scott (AMS); Maher, Carmen T. (FDA/OC/OCS); Mena, RaJah (DOE/FRMAC); Miller, Charles W. (CDC/ONDIEH/NCEH); Morrison, Ellen F. (FDA/OC/OCTC); Nemhauser, Jeffrey B. (CDC/ONDIEH/NCEH); Noska, Mike (FDA); O'Laughlin, Colleen (DOE/FRMAC); Pavek, John - Washington, DC; Pemberton, Wendy (DOE/FRMAC); Peter A Petch (APHIS); Russo, Mark R. (FDA/OC/OCTC); Sincek, Jeffrey A. (FDA/ORA/CE-FO); Smallwood, Karen R. (FDA/ORA/SE-FO); Tupin, Ed (EPA); Veal, Lee (EPA); Whitcomb, Robert C. (CDC/ONDIEH/NCEH); Wiley, Albert (ORAU) **Subject:** Advisory Team Distribution List

FYI...Attached is the current Advisory Team distribution list.

D. Lynn Evans, MS CAPT, USPHS Centers for Disease Control and Prevention NCEH/EHHE/Radiation Studies Branch Mail Stop F58 4770 Buford Highway NE Atlanta, GA 30341-3717 Phone: (770) 488-3656 Fax: (770) 488-1539 Email: gfn6@cdc.gov

FEMA R IX QUICKREP Oakland Watch 03/16/2011 08:15 PDT

Press Releases Regarding Radiation Exposure

Description: FEMA Region IX remains in touch with responsible lead agencies regarding the aftermath of the M9.0 Japanese Earthquake on 03/11/2011. While FEMA Region IX is not the lead agency for this incident, we remain dedicated to facilitating timely information flow.

Summary: Further information can be obtained directly from the publishing agencies' websites.

EPA Statement on Air Monitoring Effort

3/15/2011 WASHINGTON -

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. In addition, EPA plans to work with its federal partners to deploy additional monitoring capabilities to parts of the western U.S. and U.S. territories.

As always, 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.

Source: http://www.epa.gov/radiation/statement.html

DOH ADVISES PUBLIC TO AVOID INGESTING POTASSIUM IODIDE; NO INCREASED RISK OF RADIATION EXPOSURE

Hawaii Department of Health:

For Immediate Release: March 15, 2011

HONOLULU – The damage to nuclear reactors in Japan has led to concerns about radiation exposure in Hawaii and other parts of the world. The DOH continues to closely monitor the situation, and at this time there is no indication of increased risk to our state. Based on all available information, state and federal experts do not anticipate a risk of exposure to Hawaii. Therefore, the Hawaii State Department of Health (DOH) advises the public against ingesting potassium iodine or KI as a precaution against possible radiation exposure. Ingesting KI is not an effective precautionary measure.

"There is no increased risk of harmful levels of radiation exposure in Hawaii based on the situation to date at the nuclear power complex in Japan," said Interim Health

Director Loretta Fuddy. "Those who ingest potassium iodine out of concern for possible exposure from this situation are doing something which is not only ineffective, but may also cause unwanted side effects. If a need should arise for residents to start taking potassium iodide to guard against effects of radiation exposure, the Hawaii State Department of Health along with other local, state and federal agencies will inform the public. We do not anticipate this need."

The DO along with other local, state and federal agencies is actively monitoring the situation. The department uses a number of redundant monitoring systems capable of detecting any significant elevation in radiation levels. The public is encouraged to check reliable sources for up-to-date information.

Potassium iodide, or KI, is a stable form of iodine. During a nuclear emergency, persons may be exposed to a radioactive form of iodine, which can be harmful to the thyroid gland. In such an event, public officials may recommend use of KI to offer some protection. KI is not recommended for use as a precautionary medication, unless there is a specific emergency that warrants use as recommended by public health officials.

Although usually benign, KI can be harmful to people with allergies to iodine or shellfish, those with certain skin disorders, or those with thyroid problems. Observed but infrequent side effects of ingesting KI include nausea, intestinal upset, rashes, inflammation of the salivary glands, and possibly severe allergic reactions. KI cannot protect the body from radioactive elements other than radioactive iodine – if radioactive iodine is not present, taking KI is not protective.

All residents are recommended to prepare a basic emergency kit to prepare for any kind of disaster. While potassium iodide is not a recommended component of such a kit, there are at least 10 essential items, as recommended by the DOH Plan to Be Ready guide which should be included. The guide is available at http://hawaii.gov/health/BT/Kit.html.

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- 1. Water
- 2. Non-perishable Food
- 3. Cash and Important Documents
- 4. Clothes
- 5. Flashlight
- 6. First Aid Kit
- 7. Prescription Medication
- 8. Radio
- 9. Hygiene Items
- 10. Tools (such as a can opener)

These essential items will help ensure that people can meet their own basic needs when other resources may not be available during an emergency. It is also vital that families put together a communications plan, such as a pre-planned place to meet and a

designated out-of-state contact, in case family members are separated or at work or school when a disaster strikes.

For more information on emergency preparedness, go to

http://hawaii.gov/health/BT/Radiation.html

For more information on potassium iodide (KI), visit the Centers for Disease Control and Prevention's website at <u>http://emergency.cdc.gov/radiation/ki.asp</u>

Guam Safe from Nuclear Fallout

FOR IMMEDIATE RELEASE

March 15, 2011

Guam Homeland Security/Office of Civil Defense assures residents and potential visitors that Guam is safe from the meltdown that occurred in Japan.

Chip Guard from the National Weather Service said Guam is an environmentally-safe destination for visitors.

Guam Visitors Bureau Deputy Manager Joann Camacho wants to assure those with flight plans to Guam that the events surrounding the nuclear power plant in Japan do not affect Guam.

Guard issued the following statement, citing the United States Nuclear Regulatory Commission:

"For those of you that have expressed doubt or uncertainty about whether or not Guam is currently an environmentally safe destination for tourists, we offer the following information.

"In regards to any detrimental effects of radiation from the current nuclear power plant situation in Japan, the United States Nuclear Regulatory Commission (NRC) has release information stating: "Hawaii, Alaska, the U.S. territories (including Guam) and the U.S. West Coast are not expected to experience any harmful levels or radioactivity.

"The U.S. National Oceanic and Atmospheric Administration's National Weather Forecast Office in Guam has indicated that current weather patterns would not bring air from the Japan region to Guam or other Islands of Micronesia for at least a week and likely for a much longer period.

"Thus, we want to assure our potential guests that Guam is an environmentally safe destination for all of our potential visitors."

Calif. Dept. of Public Health (CDPH) FAQ on radiation risk

March 15, 2011 17:00 PDT

We just listened in on a CalEMA call and the Nuclear Regulatory Commission (NRC) is saying it is extremely unlikely for radiation to reach the U.S., because of distance and based on reactor design. No recommendation to take potassium iodine at this time and there's risk of allergic reaction. The Dept. of Energy (DOE) dispersion models indicate even taking "worst case", thousands times smaller in CA. EPA fixed radiation monitors in all 50 states (RadNet) not showing anything more than "background", and EPA is deploying mobile monitors to Alaska, Guam and Hawaii for early-warning.

Information, situation report, and donation links for businesses:

- US Chamber BCLC <u>http://bclc.uschamber.com/Programs/disaster/japan-earthquake-</u> and-tsunami Help Desk for businesses **1-888-MY-BIZ-HELP** (888-692-4943)

- Calif. Dept. of Public Health (CDPH) www.cdph.ca.gov,

www.bepreparedcalifornia.ca.gov

Google Person Finder link <u>http://japan.person-finder.appspot.com/?lang=en</u>
 Relief organizations via Interaction <u>http://www.interaction.org/crisis-list/interaction-</u>members-support-japan-earthquake-response

- U.S. Military Pacific Command (PACOM) www.pacom.mil

- UN OCHA (Office for Coordination of Humanitarian Affairs) from www.cidi.org

- The Aidmatrix Network is working with 2nd Harvest Japan

<u>http://2ndharvestjapan.blob.core.windows.net/index.html</u> and NetHope Japan http://www.nethope.org/japan/

-PLEASE NOTE THAT THESE REPORTS MAY CONTAIN INFORMATION THAT IS PRIVILEGED -OR-CONFIDENTIAL, AND MAY CONTAIN INFORMATION THAT IS NOT VERIFIED.--

California Dept. of Public Health (CDPH) FAQ 3/15/11

The California Department of Public Health (CDPH) has established a public information response line within the Joint Emergency Operations Center at (916) 341-3947 to answer questions about the impact to public health in California. The information line is staffed from 8 AM to 5 PM daily. CDPH is preparing materials related to this incident that will be posted on www.cdph.ca.gov, www.bepreparedcalifornia.ca.gov

According to the Nuclear Regulatory Commission (NRC), Japan's nuclear emergency presents no danger to California. CDPH is monitoring the situation closely in conjunction with our state and federal partners, including NRC, U.S. Environmental Protection Agency, the U.S. Department of Energy, FEMA Region IX, and the California Emergency Management Agency (CalEMA).

California has a plan of response for radiological emergencies if one were to arise. Plans include the Nuclear Radiological Emergency Program and the National Response Framework.

Q&A

Q. What's the risk for California from the current nuclear power emergency in Japan? A. At present, the Nuclear Regulatory Commission (NRC) says Japan's nuclear emergency presents no danger to California.

Q. What are you doing to assess the risk? A. CDPH is monitoring the situation closely in conjunction with our State and federal partners.

Q. What resources does California have to tell if radiation is present in the environment? A. CDPH has a radiological branch and routinely tests air, water and the food supply.

Q. Does California have a plan in place to respond to a radiological emergency?

A. CDPH has a plan for response to radiological emergencies, called the Nuclear Emergency Response Plan.

Q. Does California stockpile supplies for such an emergency?

A. California does stockpile emergency supplies, including potassium iodide (KI) tablets, in the area around the southern nuclear power plant.

Potassium iodide tablets are useful in blocking some types of radiation in the thyroid. Potassium iodide tablets are not recommended at this time, and can present a danger to people with allergies to iodine, shellfish or who have thyroid problems. Potassium iodide tablets should not be taken until/unless directed by authorities.

Q. Should I be taking Potassium lodide (KI) to protect myself?

A. No. Potassium Iodide (KI) tablets are not recommended at this time, and can present a danger to people with allergies to iodine, shellfish or who have thyroid problems. Dosages can vary and should only be taken as advised by a medical professional.

US Chamber BCLC (Business & Civic Leadership Center) 3/15/11

People, Damages, Impacts

USGS has revised the magnitude of Friday's earthquake to a 9.0 based on better data they now have. Total number of people killed by this disaster remains unclear. Hundreds of dead washed ashore on Japan's hard-hit northeast coast since Friday's earthquake and tsunami. Others found alive and dug out of the debris Monday by firefighters, who used pickaxes and chain saws. The official death toll stands at 2,800, but Miyagi has estimated that 10,000 people died in their prefecture. Some 430,000 people are living in emergency shelters or with relatives. Another 24,000 people are stranded. Save the Children warns that up to 100,000 children have been displaced due to the earthquake/tsunami. Tens of thousands are still unaccounted for, while many remote towns and villages remain cut off and have had no assistance since the earthquake hit. A government official in Iwate prefecture, one of the three hardest hit, said it had received so far only 10% of the food and other supplies they had requested from the central government. Millions in Japan's devastated northeast spent a 4th night without food, water, or heating in near-freezing temperatures. Tens of thousands of rescue workers are struggling to reach them. Funeral homes and crematoriums are overwhelmed as their capabilities only to deal with small numbers at a time (eg. 20 per day). Officials have run out of body bags and coffins. Most Japanese choose to cremate their dead, but due to so many bodies, the government waived a rule requiring permission from local government before cremation/burial. This is to speed up funerals

About 550,000 people had been evacuated after the earthquake/tsunami.

According to a news survey and raising concerns for a dramatic increase in the number of dead, local officials have lost contact with about 30,000 people. In the NE of Japan seaside community of Minami-Sanriku (Miyagi Prefecture) over half of the population are missing, and the town of itself appears to have been almost completely destroyed by the earthquake and tsunami. It had about 18,000 residents before the magnitude 9.0 quake.

Nuclear Reactors

Japan's State of Emergency continues in relation to its nuclear power plant. An explosion occurred at Unit 2 of the Fukushima Dai-ichi nuclear plant about 6:10 am local time due to

overheating. There was no immediate word of any damage to the reactor itself. Units 1 and 3 are somewhat stabilized, so Unit 2 is requiring all the attention. The valve to vent steam and reduce pressure inside the reactor closed at 11pm Monday, but the increased pressure made it impossible to pump water in. So, the water level dropped quickly, possibly fully exposing the fuel rods. They were able open the valve to reduce pressure and allowed seawater into the reactor at around 1am Tuesday. By 3am, the water level remained low and the fuel rods remained exposed.

If a complete reactor meltdown were to occur - where the uranium core melts through the outer containment shell - a wave of radiation would be released, resulting in major and widespread health problems.

France's ASN nuclear safety authority said the nuclear accident in Japan could be classed as level 5 or 6 on the international scale of 1 to 7, on a par with the 1979 U.S. Three Mile Island meltdown. Japan's nuclear safety agency had given the accident at Fukushima Daiichi nuclear power plant a 4 on the scale.

Economic

Due to the earthquake/tsunami that has cut off parts supplies, Toyota Motor Corp. and Nissan Motor Co. suspended all domestic production from Monday. Honda Motor Co. has stop most of its domestic production. Production in other industries will also be inhibited as many factories (in the Tohoku region of N. Japan) were hit hard

The crisis with Japan's quake-damaged nuclear power stations effected Monday stock prices of two Louisiana companies - one which planned to build new reactors and another that uses the plants to generate power for utility customers and wholesale electricity markets.

Parts of Japan's economy are "frozen" due to the earthquake, but analysts forecast that it will bounce back later this year although the loss of production will impact the economy during this quarter and the next. In a report by

Goldman Sachs, the electronics industry is expected to be badly hit due to "extreme damage" across the electronics industry supply chain.

Response Management

Japan has distributed 230,000 units of stable iodine to evacuation centers in the area around Fukushima Daiichi and Fukushima Daini nuclear power plants. The distribution is a precautionary measure in the event that it is determined to be necessary, so iodine has not yet been administered to residents. (Ingestion of stable iodine helps prevent the accumulation of radioactive iodine in the thyroid.)

CARE Japan will assist the ongoing emergency response in Japan after the massive earthquake and tsunami. New numbers of casualties and destruction are coming in by the hour, such as people who have lost houses are in need of assistance. Typically, CARE only responds in developing countries, however, this was the worst earthquake on record in Japan followed by a ten-meter high tsunami causing massive destruction.

Emergency workers have rescued 15,000 people so far and about 550,000 had been evacuated by Monday to about 2,600 shelters in six prefectures. Adding urgency to relief efforts, snow or rain is expected on Wednesday in some regions.

International Response

Following an official request, Japan is set to receive a search and humanitarian assessment team to Japan's disaster-hit areas. The team will comprise 25 Swiss experts and nine sniffer dogs. The team will be split into two, each with their own specific mission. 15 international specialist teams have been deployed to support Government response.

Earthquake Context & Global Impacts

The Japan Meteorological Agency upgraded the magnitude of Friday's earthquake to 9.0 (from 8.8), making it the world's 4th strongest in more than a century. The energy released by the quake was 45 times that of the 1923 Great Kanto Earthquake that killed some 140,000 people in the Tokyo area, and about 1,450 times that of the 2005 Great Hanshin Earthquake that damaged much of Kobe in 1995 and killed 6,400 people.

Japan's coastline may have shifted by as much as 13 feet to the east following Friday's 9.0 earthquake. The quake probably shifted Earth on its axis by about 6.5 inches and caused the planet to rotate slightly faster, shortening the length of the day by about 1.8 millionths of a second. Other sources say the recent quake caused the entire island of Honshu to shift 8 feet to the east.

Send Word Now Offering Free Temporary Notification in Japan

Send Word Now is offering free incident and communications support to businesses, organizations, and agencies based in Japan, or with operations in Japan, that may be experiencing difficulty in communicating and coordinating with their employees, constituents, and customers. If your organization would like a free temporary software license to use the Send Word Now mass notification system in your crisis response efforts, please contact us at info@sendwordnow.com, or call Kymberli Fieux at (760) 330-7116.

If you have any questions, please don't hesitate to call me at (415) 200-7967 or pohtaki@CAresiliency.org .

Sincerely,

Peter Ohtaki California Resiliency Alliance

From:	Jablonowski.Eugene@epamail.epa.gov
Sent:	Wednesday, March 16, 2011 3:47 PM
Το:	Pavek, John - Washington, DC; Wiley, Albert (ORAU); Ansari, Armin
	(CDC/ONDIEH/NCEH); Whitcomb, Robert C. (CDC/ONDIEH/NCEH); Maher, Carmen T.
	(FDA/OC/OCS); Connell, Carol (ATSDR/DHAC/SRAB); Miller, Charles W.
	(CDC/ONDIEH/NCEH); Liles.Darrell@epamail.epa.gov; Tupin.Edward@epamail.epa.gov; Morrison, Ellen F. (FDA/OC/OCTC); Hornsby-Myers, Jennifer (CDC/NIOSH/OD);
	Brozowski.George@epamail.epa.gov; Evans, Lynn (CDC/ONDIEH/NCEH); Gordon S
	Cleveland (APHIS); Dixon, John E. (CDC/ONDIEH/NCEH); Cherniack, James J.
	(FDA/ORA/NE-FO); Sincek, Jeffrey A. (FDA/ORA/CE-FO); Nemhauser, Jeffrey B.
	(CDC/ONDIEH/NCEH); Jensen, John (USDA); Pavek, John - Washington, DC; Anderson,
	Jeri L. (CDC/NIOSH/DSHEFS); Smallwood, Karen R. (FDA/ORA/SE-FO); Keith, Sam
	(ATSDR/DTEM/ATB); Veal.Lee@epamail.epa.gov; Brandon, Lou; Russo, Mark R.
	(FDA/OC/OCTC); Brooks, Michael (ATSDR/DHAC/SRAB); Mena, RaJah (DOE/FRMAC);
	Noska, Mike (FDA); O'Laughlin, Colleen (DOE/FRMAC); Buzzell, Jennifer
	(CDC/ONDIEH/NCEH); Charp, Paul (ATSDR/DHAC/SRAB); Hansen, Patricia A.
	(FDA/CFSAN); Pemberton, Wendy (DOE/FRMAC); Peter A Petch (APHIS); Evans, Rachel
	T. (FDA/ORA/CE-FO); Funk, Renee (CDC/NIOSH/OD);
	Goodman.Roger@epamail.epa.gov; Graham, Ron (FSIS); DeCair.Sara@epamail.epa.gov;
	Hargrave, Scotty L. (FDA/ORA/SW-FO); Lough, Scott (AMS); Jones, Terri L. (FDA/ORA/P-
	FO); Howard King, Vinetta M. (FDA/OC/OCTC); Lotz, William G. (Greg)
	(CDC/NIOSH/DART); Cunningham, William C. (FDA/CFSAN)
Cc:	Wieder.Jessica@epamail.epa.gov
Subject:	FYI: Japan event statements from the States of Alaska, Washington, Oregon, California and Hawaii

Japan event statements from the States of Alaska, Washington, Oregon, California and Hawaii

Alaska

http://www.hss.state.ak.us/press/2011/Reactor_pr_031511.pdf

http://www.hss.state.ak.us/prepared/radiological.htm

"The State of Alaska, along with our Federal counterparts, is continually monitoring the situation in Japan regarding their nuclear reactors. According to officials, at this time there is no immediate or anticipated threat of nuclear radiation reaching Alaska. We will continue to monitor the situation and notify the public through regular media channels and this website should the situation change."

Washington

http://www.doh.wa.gov/Topics/japan-fag.htm

"We don't expect significant levels of radioactivity in our state, and there's no health risk. Japan is thousands of miles from our state, and if radioactivity from the reactors there is released to the upper atmosphere it would be thinned-out by the winds before it could reach us. We could see a very small increase in radiation levels — well below levels that would be a health concern. We're working with federal, state, and local agencies in a coordinated effort to monitor radiation levels in the air and rain water."

Oregon

http://public.health.oregon.gov/Preparedness/CurrentHazards/Pages/index.aspx http://public.health.oregon.gov/Preparedness/CurrentHazards/Documents/Factsheets/factsheet-japan-event.pdf http://public.health.oregon.gov/Preparedness/CurrentHazards/Documents/Factsheets/ga-japan-event.pdf "No Health Risk to Oregon from Japanese Radiation Events"

California http://www.cdph.ca.gov/Pages/CDPHCalEMAstatementMarch152011.aspx

http://www.calema.ca.gov/WebPage/oeswebsite.nsf/Content/1E69ED3C8DE165DB882576D70062B6FE?OpenDocument http://calemanews.wordpress.com/2011/03/16/statement-from-california's-department-of-public-health-and-emergencymanagement-agency-on-risk-of-radiation-exposure/

"We urge Californians to not take potassium iodide as a precautionary measure. It is not necessary given the current circumstances in Japan, it can present a danger to people with allergies to iodine, shellfish or who have thyroid problems, and taken inappropriately it can have serious side effects including abnormal heart rhythms, nausea, vomiting, electrolyte abnormalities and bleeding."

Hawaii

http://hawaii.gov/health/about/pr/pressdate.html

"The DOH Indoor and Radiological Health Branch (IRHB) is closely monitoring information on the radiation release, and with the current size of the release and the distance from Hawaii, no public health risk to the state is expected."

"The DOH in partnership with the U.S. Environmental Protection Agency has a system in place for ambient monitoring for radioactive dust. The system (RADNET) looks at real-time data as well as particulate sampling (from monitors located on the islands of Oahu and Hawaii) which are analyzed by the DOH and at a laboratory in Alabama. At this time, the department has no indication of any readings above normal background levels and does not expect any "spikes" due to the limited amount of material released and the current environmental conditions."

Eugene Jablonowski, Health Physicist U.S. EPA Region 5 Emergency Response 77 W. Jackson Blvd. (SM-5J) Chicago, IL 60604 (312) 886-4591 office (b)(6) cell <---- NEW (312) 692-2466 fax jablonowski.eugene@epa.gov

From:	PMT01 Hoc
Sent:	Wednesday, March 16, 2011 4:14 PM
То:	Galletta, Thomas; Mazaika, Michael; Quinlan, Kevin; Harvey, Brad; Brandon, Lou; Schaaf, Robert
Cc:	PMT01 Hoc
Subject:	FW: Meteorological data of Fukushima

Gentlemen,

Below is the request that we sent last night through the International Liaison asking for any meteorological data that the JMA may have available near the site region. We had a brief phone conversation with the JMA Office of International Affairs, but due to the language difficulty, it was determined that email was the best approach. They initially supplied us with a link the general wind forecast for the coastal region (Hamadori) of the Fukushima Prefecture. That data is useful as a verification tool, but we were hoping to have either actual measurements near there or site regional forecast information.

As of now, we have not received a response from the JMA.

Than<mark>ks,</mark> Kevin

From: LIA02 Hoc Sent: Tuesday, March 15, 2011 7:42 PM To: 'iao-jma@met.kishou.go.jp' Cc: Emche, Danielle Subject: Meteorlogical data of Fukushima

Dear Mr. Aki Shimpo,

Thank you for taking my call this morning. I hope you can help me with some additional basic information. My questions are:

- 1. Can you please tell me the geographic location of the monitoring station in Hamadori Fukushima Prefecture?
- 2. Also, you mentioned that you update the information twice a day at 6 AM and 6 PM, do you know of any hourly wind forecasts for Fukushima Prefecture?
- Last, if you are able to provide any emergency response meteorological data specific to the coastal region near Fukushima Prefecture that could help us in our assistance to Japan, we would be very glad to receive such information. Please advise us about what is possible.

Perhaps some of the information I am asking for may not be available on your website and I could receive better information from you by email. Thank you so much for your assistance and please let me know if there is any way that we can work together.

Best regards, Danielle

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From:Mazaika, MichaelSent:Wednesday, March 16, 2011 4:42 PMTo:PMT01 Hoc; Quinlan, Kevin; Brown, DavidCc:Galletta, Thomas; Harvey, Brad; Brandon, Lou; Schaaf, RobertSubject:Request to Install 10-M Met Tower OnsiteImportance:High

Kevin/Dave:

As Kevin and I briefly discussed this afternoon, Tom and I had provided an extended forecast earlier today that covered a potential onshore wind shift late Saturday into Sunday. My understanding of that request (thru Bruce Watson?) was that U.S. assets (material and personnel) were being transported to the plant site and that precautions may need to be implemented to avoid potential contamination.

Here's an out-of-the-box thought since we have been struggling from the beginning for actual local meteorological data which does not appear to be available along the coast except for Sendai (about 60 miles to the north) and Onahama (about 35 miles to the south). If you have time tonight, could begin to pursue finding out who is responsible for that deployment, when it will occur, and...

Whether it is possible to have a portable 10-meter meteorological tower included as part of that deployment and arrangements made for its siting, installation, calibration, data recording and/or transmittal. Some type of power source would also be required (generator with battery back-up).

If we get positive feedback we can begin to assist on the details of getting the system operational.

Please let me know if you have any questions.

Thanks,

Mike

Physical Scientist (Meteorologist) U.S. Nuclear Regulatory Commission NRO/DSER/RSAC 11545 Rockville Pike, Mail Stop T-7F27 Rockville, MD 20852-2738 (301) 415-6282 <u>michael.mazaika@nrc.gov</u>

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From:Mazaika, MichaelSent:Wednesday, March 16, 2011 6:04 PMTo:PMT01 Hoc; Quinlan, KevinCc:Galletta, Thomas; Brown, David; Harvey, Brad; Brandon, Lou; Schaaf, RobertSubject:Request to Tokyo Electric for Info Re Meteorological Monitoring at Fukushima Dai-ichi
Nuclear Power PlantImportance:High

Kevin:

As we discussed, could you please pass this on to the International Liaison team for resolution? The e-mail should probably come from PMT-Meteorology rather than me.

Thanks,

Mike

Folks:

Could you please place a request to Tokyo Electric regarding meteorological monitoring activities and data availability for the Fukushima Dai-ichi Nuclear Power Plant? In particular, we would like to know the following:

- Confirm the current operational status of meteorological monitoring system(s) at and near the plant site;
- Number of stations (towers) and location(s) of each relative to the plant site;
- Height of tower(s) and base elevation of each;
- Parameters measured at each tower;
- · Units of measure for each parameter;
- Atmospheric stability classification method;
- Data files for last three (3) years of measurements up to the time of malfunction (if not currently operating) and, if provided, an explanation of:
 - > Data format,
 - Time and date stamping,
 - > Missing data indicators,
 - Data quality indicators (if any)

Information measured nearby along the coastline of the Fukushima and Miyagi Prefectures, since the start of the earthquake and tsunami disaster, appears only to be available for Japan Meteorological Agency stations located at Sendai (about 95 kilometers to the north) and Onahama (about 55 kilometers to the south). Historical onsite data would be used to help understand daily and seasonal variations in local, site-

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specific meteorological conditions and to check the reasonability of model-predicted meteorological conditions that are currently being used run atmospheric dispersion and dose assessment models.

Thanks for your assistance.

From:	Pavek, John - Washington, DC <john.pavek@wdc.usda.gov></john.pavek@wdc.usda.gov>
Sent:	Thursday, March 17, 2011 8:49 AM
То:	Evans, Lynn (CDC/ONDIEH/NCEH); Allen, George T. (FDA/ORA/NE-FO); Anderson, Jeri L,
	(CDC/NIOSH/DSHEFS); Ansari, Armin (CDC/ONDIEH/NCEH); Brandon, Lou; Brooks,
	Michael (ATSDR/DHAC/SRAB); Brozowski, George (EPA); Buzzell, Jennifer
	(CDC/ONDIEH/NCEH); Charp, Paul (ATSDR/DHAC/SRAB); Cherniack, James J.
	(FDA/ORA/NE-FO); Gordon S Cleveland (APHIS); Connell, Carol (ATSDR/DHAC/SRAB);
	Cunningham, William C. (FDA/CFSAN); DeCair, Sara (EPA); Dixon, John E.
	(CDC/ONDIEH/NCEH); Evans, Rachel T. (FDA/ORA/CE-FO); Funk, Renee
	(CDC/NIOSH/OD); Goodman, Roger (EPA); Graham, Ron (FSIS); Hansen, Patricia A.
	(FDA/CFSAN); Hargrave, Scotty L. (FDA/ORA/SW-FO); Hornsby-Myers, Jennifer
	(CDC/NIOSH/OD); Howard King, Vinetta M. (FDA/OC/OCTC); Jablonowski, Gene (EPA);
	Jensen, John (USDA); Jones, Terri L. (FDA/ORA/P-FO); Keith, Sam (ATSDR/DTEM/ATB);
	Liles, Darrell (EPA); Lotz, William G. (Greg) (CDC/NIOSH/DART); Lough, Scott (AMS);
	Maher, Carmen T. (FDA/OC/OCS); Mena, RaJah (DOE/FRMAC); Miller, Charles W.
	(CDC/ONDIEH/NCEH); Morrison, Ellen F. (FDA/OC/OCTC); Nemhauser, Jeffrey B.
	(CDC/ONDIEH/NCEH); Noska, Mike (FDA); O'Laughlin, Colleen (DOE/FRMAC);
	Pemberton, Wendy (DOE/FRMAC); Peter A Petch (APHIS); Russo, Mark R.
	(FDA/OC/OCTC); Sincek, Jeffrey A. (FDA/ORA/CE-FO); Smallwood, Karen R.
	(FDA/ORA/SE-FO); Tupin, Ed (EPA); Veal, Lee (EPA); Whitcomb, Robert C.
	(CDC/ONDIEH/NCEH); Wiley, Albert (ORAU)
Subject:	RE: Articles of Interest

Nuclear Reactors, Materials and Waste Sector

11. March 16, Boston Globe – (Vermont) Vermont Yankee license on hold. The Nuclear Regulatory Commission (NRC) March 15 put a temporary hold on a 20-year license extension for the Vermont Yankee nuclear power plant. NRC had instructed its staff to issue the renewal March 10, the day before the massive earthquake and tsunami in Japan. An NRC spokesman attributed the delay to the fact manpower is short while the agency focuses resources on helping Japan deal with the unfolding nuclear crisis. Opponents of the nearly 40-year-old plant, who note it is the same design as the most compromised reactor in Japan, said the delay should be far longer — until the agency can assure the public the plant is safe. Vermont Yankee, in Vernon near the Massachusetts border, has suffered a series of problems in recent years that have frayed the public trust, including the collapse of a cooling tower and leaks of tritium into groundwater from underground pipes that company officials initially said were not there. A Vermont Yankee spokesman said March 15 it was his understanding the delay was merely a temporary one and the license would be issued soon. Source:

http://www.boston.com/news/world/asia/articles/2011/03/16/vermont_yankee_license_extension_on_hold/

12. March 16, Bloomberg – (International) Pools storing spent fuel may present biggest risk at Fukushima. According to officials, pools containing spent fuel rods at the Fukushima Dai-ichi nuclear plant in Japan have been heating up at three of the plant's six reactors, Bloomberg reported March 16. Water in the spent fuel pool at the number 4 reactor may be boiling, Japan's Nuclear and Industrial Safety Agency said March 15. Temperatures in the spent fuel pools of the shuttered number 5 and number 6 reactors rose to as high as 145 degrees Fahrenheit at 2 p.m. March 15, up from 140 degrees at 7 a.m., a Tokyo electric official said. Left unchecked, that risks fire and possibly a nuclear reaction that spews radiation into the atmosphere, said an engineer who used to lead the Nuclear Emergency Response at Los Alamos National Laboratory in New Mexico. Japanese authorities were concerned about the condition of the pools of units 3 and 4, the International Atomic Energy Agency (IAEA) said March 15. Military helicopters may be used to drop water on unit 3 and workers were planning to spray water into unit 4, according to

the IAEA. Tokyo Electric said March 15 the containment chamber at the unit 2 reactor may have been breached because pressure dropped suddenly. Clouds of steam were seen rising from the reactor building after a fire at the number 4 reactor. The 50 workers remaining at the plant were pulled out March 15 after radiation temporarily rose to unsafe levels. They later returned. Tokyo Electric is building a cable to supply power to the plant's cooling systems, a spokesman said. The systems were knocked out by the March 11 earthquake and tsunami, and the company has been pumping seawater into the reactors to keep them from melting down. The highest measurement of radiation so far taken at the plant was 400 millisieverts, 20 times the annual limit for nuclear industry employees and uranium miners, according to the World Nuclear Association. Source: <u>http://www.blooinberg.com/news/2011-03-16/poolsstoring-spent-fuel-may-present-biggest-risk-at-fukushima.html</u>

John B. Pavek / Director, Emergency Preparedness Rural Development U.S. Department of Agriculture 1400 Independence Ave., S.W. | Washington, D.C. 20250 Phone: 202.720.2078 | Fax: 202.690.3333 www.rurdev.usda.gov

"Committed to the future of rural communities" "Estamos dedicados al futuro de las comunidades rurales"

From: Evans, Lynn (CDC/ONDIEH/NCEH) [mailto:gfn6@cdc.gov] Sent: Wednesday, March 16, 2011 3:37 PM

To: Allen, George T. (FDA/ORA/NE-FO); Anderson, Jeri L. (CDC/NIOSH/DSHEFS); Ansari, Armin (CDC/ONDIEH/NCEH); Brandon, Lou (NRC); Brooks, Michael (ATSDR/DHAC/SRAB); Brozowski, George (EPA); Buzzell, Jennifer (CDC/ONDIEH/NCEH); Charp, Paul (ATSDR/DHAC/SRAB); Cherniack, James J. (FDA/ORA/NE-FO); Gordon S Cleveland (APHIS); Connell, Carol (ATSDR/DHAC/SRAB); Cunningham, William C. (FDA/CFSAN); DeCair, Sara (EPA); Dixon, John E. (CDC/ONDIEH/NCEH); Evans, Lynn (CDC/ONDIEH/NCEH); Evans, Rachel T. (FDA/ORA/CE-FO); Funk, Renee (CDC/NIOSH/OD); Goodman, Roger (EPA); Graham, Ron (FSIS); Hansen, Patricia A. (FDA/CFSAN); Hargrave, Scotty L. (FDA/ORA/SW-FO); Hornsby-Myers, Jennifer (CDC/NIOSH/OD); Howard King, Vinetta M. (FDA/OC/OCTC); Jablonowski, Gene (EPA); Jensen, John (USDA); Jones, Terri L. (FDA/ORA/P-FO); Keith, Sam (ATSDR/DTEM/ATB); Liles, Darrell (EPA); Lotz, William G. (Greg) (CDC/NIOSH/DART); Lough, Scott (AMS); Maher, Carmen T. (FDA/OC/OCS); Mena, RaJah (DOE/FRMAC); Miller, Charles W. (CDC/ONDIEH/NCEH); Morrison, Ellen F. (FDA/OC/OCTC); Nemhauser, Jeffrey B. (CDC/ONDIEH/NCEH); Noska, Mike (FDA); O'Laughlin, Colleen (DOE/FRMAC); Pavek, John - Washington, DC; Pemberton, Wendy (DOE/FRMAC); Peter A Petch (APHIS); Russo, Mark R. (FDA/OC/OCTC); Sincek, Jeffrey A. (FDA/ORA/CE-FO); Smallwood, Karen R. (FDA/ORA/SE-FO); Tupin, Ed (EPA); Veal, Lee (EPA); Whitcomb, Robert C. (CDC/ONDIEH/NCEH); Wiley, Albert (ORAU)

Subject: New Time for Advisory Team Call on March 17, 2011 Importance: High

NEW TIME FOR ADVISORY TEAM CALL

The Advisory Team conference call will be at 1:00 PM (EDT) on March 17, 2011.

Please use the following call-in numbers:

Phone number: 866-561-4509 Pass code: (b)(6)

Note: <u>The Advisory Team has NOT been activated</u>. These conference calls are meant to help maintain situational awareness for the Subcommittee members.

Thanks!

D. Lynn Evans, MS CAPT, USPHS Centers for Disease Control and Prevention NCEH/EHHE/Radiation Studies Branch Mail Stop F58 4770 Buford Highway NE Atlanta, GA 30341-3717 Phone: (770) 488-3656 Fax: (770) 488-1539 Email: gfn6@cdc.gov

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From: Sent: To: Cc:	gordon.s.cleveland@aphis.usda.gov Thursday, March 17, 2011 9:12 AM cmiller1@cdc.gov gfn6@cdc.gov; tupin.edward@epa.gov; Michael.noska@fda.hhs.gov; DeCair.Sara@epamail.epa.gov; william.cunningham@fda.hhs.gov; scotty.hargrave@fda.hhs.gov; asa4@CDC.GOV; pac4@cdc.gov; Jablonowski.Eugene@epamail.epa.gov; mdb7@CDC.GOV; ccc8@cdc.gov; rachel.evans@fda.hhs.gov; john.jensen@da.usda.gov; John.Pavek@wdc.usda.gov; Scott_Lough-AMSE2K.%gw@aphis.usda.gov; Peter.A.Petch@aphis.usda.gov; ron.graham@fsis.usda.gov; daniel.blumenthal@nnsa.doe.gov; Brandon, Lou; albert.wiley@orise.orau.gov
Subject:	NY Times Comprehensive Nuclear Test Ban Treaty Organization plum projection

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http://www.nytimes.com/interactive/2011/03/16/science/plume-graphic.html?ref=science

Gordon S. Cleveland Radiological Program Analyst USDA/APHIS VS NCAHEM 4700 River Rd. Unit 41 Riverdale, MD 20737 PH(301) 734-8091 FX(301) 734-7817 CL[(b)(6)

»//qz

From: Sent: To: Cc:	gordon.s.cleveland@aphis.usda.gov Thursday, March 17, 2011 9:34 AM cmiller1@cdc.gov gfn6@cdc.gov; tupin.edward@epa.gov; Michael.noska@fda.hhs.gov; DeCair.Sara@epamail.epa.gov; william.cunningham@fda.hhs.gov; scotty.hargrave@fda.hhs.gov; asa4@CDC.GOV; pac4@cdc.gov; Jablonowski.Eugene@epamail.epa.gov; mdb7@CDC.GOV; ccc8@cdc.gov; rachel.evans@fda.hhs.gov; john.jensen@da.usda.gov; John.Pavek@wdc.usda.gov; Scott_Lough-AMSE2K.%gw@aphis.usda.gov; Peter.A.Petch@aphis.usda.gov; ron.graham@fsis.usda.gov; daniel.blumenthal@nnsa.doe.gov; Brandon, Lou; albert.wiley@orise.orau.gov
Subject:	FAS Reports.
Attachments:	March16Japan.docx; March15Japan.docx

This is from Foreign Agriculture Service. Take note of the resumption of agricultural operations part. Hmmmm

Gordon S. Cleveland Radiological Program Analyst USDA/APHIS VS NCAHEM 4700 River Rd. Unit 41 Riverdale, MD 20737 PH(301) 734-8091 FX(301) 734-7817 CL(b)(6)

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Daily Japan Updates

March 15, 2011

Overview

It is too early for post to be able to quantify the extent of damage to the agricultural sector, but we believe that the biggest damage will not be to crop agriculture, but to livestock production in the area. The reasons for this are the destruction of the road and rail systems, and port facilities in the region that had feed mills and silos. Because feed mills in those affected ports have been damaged or destroyed, and because feed cannot be moved into the affected hinterland from undamaged areas, we expect that livestock producers in those areas will suffer. It is too early to say to what degree, but we don't think it will have a major impact on overall demand or supply of meat and livestock products. Fisheries will be affected as there were many fishing ports and facilities on the tsunami stricken coast. It is difficult to hazard a guess at this point as to what damage has been done to fishing grounds, the fishing fleet or facilities, but it has to be significant.

The earthquake and Tsunami hit Japan's north east pacific coastal region on March 11, 2011. The catastrophe devastated cities, towns, and villages of the prefectures located along the coast line. The most affected prefectures are lwate, Miyagi, Fukushima, and Ibaragi.



Grains and Oilseeds

Rice – In a remarkable display of professionalism, MAFF announced the 11th and the final MA rice tender late on March 14. The will bring the total to: 677,708 mt.

Dert	Domogo	Compound Food		
Port	Damage	Compound Feed		
		Production		
		(in million metric tons)		
Kushiro, Hokkaido	None	1.12		
Tomakomai, Hokkaido	None	1.52		
Hachinohe, Aomori	Severely damaged	1.82		
Kamaishi, Iwate	Severely damaged	0.24		
Ishinomaki, Miyagi	Severely damaged	1.14		
Sendai, Miyagi	Severely damaged	0.46		
Kashima, Ibaraki	Unloading facility partially damaged	3.97		
	but compound feed production facility			
	in tact			
Nagoya, Aichi	None	1.34		
Toyohashi, Aichi	None	0.72		
Mizushima, Okayama	None	1.43		
Yashiro, Kumamoto	None	0.71		
Kagoshima, Kagoshima	None	1.39		
Shibushi, Kagoshima	None	2.64		
Other ports and inland	None	6.30		
production facilities				
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Major Feed Grain Ports in Japan and the Quake/Tsunami Impact

Total Compound Feed Production

24.80 million MT

The four severely damaged ports in the Tohoku area will not be operational for an extended period of time. The compound feed production capacity of these ports totals about 3.66 million MT, or 15% of Japan's total production of compound feed.

The port of Kashima is partially damaged, and it is expected to take about three months before it can receive vessels for unloading. However, the feed mills at the port are operational.

The plan is to increase production at unaffected mills and transport to affected areas (by boat from Hokkaido and Kyushu, and by truck from Western Honshu).

The challenge is to secure: 1) availability of boats; 2) inland routes; and 3) fuel.

Seafood

Japan Fisheries Association created an emergency headquarters on March 14 to support fishing industries in disaster area. There are many fishing cities and villages in Iwate, Miyagi, Fukushima and Ibaraki prefectures such as; Hachinohe, Kuji, Ootsuchi, Miyako, Yamada, Oofunato, Rikuzentakada, Kesen-numa, Minami Sanriku, Onagawa, Ishinomaki, Shiogama, Sendai, Natori, Iwaki, Takahagi, Hitachinaka, Ooarai, Hazaki, Choshi and so on. Unlike grain and soybeans, which require large storage and processing facilities, fishing industries tend to be comprised of small scale operators. Kesen-Numa is the largest tuna deep sea fishing fleet base and suffered catastrophic damage.

Tsukiji fish market handled only one quarter of the usual volume on March 12 because of delayed shipments. Fresh fish supply throughout the country will decrease from March 15 and there is no forecast to recover in the short term. Supply of frozen fish is also affected because the quakes, and subsequent power outages, have impacted cold storage facilities throughout the country. Rolling blackouts will cause spoilage in frozen fish stocks.

Wood Products

A significant amount of wood products, particularly plywood and lumber, are produced in Ishinomaki, in Miyagi prefecture and in Miyako and Ofunato, in Iwate prefecture. It is too early to estimate damage to these facilities and the impact on the wood industry because there are still many employees missing. Those factories still intact after the earthquake have been facing blackouts and a shutdown of major distribution channels and, thus, are unable to produce or ship finished products. A sudden shortage of plywood and lumber product can be expected.

Mills reporting damage:

Mills in Ishinomaki, Miyagi; Seihoku Ishinomaki Mill, Seihoku Plywood, Tokyo Board Ishinomaki Mill

Mills in Miyako, Iwate; Hokuyo Plywood, Hokusei, Iwate Prefecture Plywood Corp., Miyako Board

Mills in Ofunato, Iwate; Kita Nihon Plywood, Ofunato Plywood (These two plywood mills were completely wiped out).

Chugoku Mokuzai Kashima mill is the largest Douglas fir sawmill in Japan and can cut 350 thousand cubic meters in year. This volume alone is equal to all the lumber exported from the USA to Japan in 2011. There is no major damage to the sawmill machinery. Mill floors have bumps and cracks and their private berth is in need of repair. It will take at least two weeks to investigate the damage and make repairs. This will affect Douglas fir log imports from the USA.

Meat and Livestock

According to The Meat Statistics in Japan, there are approximately 24,000 farms that are engaged in poultry, dairy, beef cattle and swine farming operations in the four impacted prefectures. The number accounts to 21% of the nation's total number of livestock farms. The number of livestock/poultry raised in all four prefectures (% share to the total) are; Broiler 19.5 million (18%), Layer 28.4 million (16%), Pig 1.57 million (16%), Beef Cattle 355,300 (12%), and Dairy 121,600 (8%). Produce from the regions (beef, pork, chicken, egg, and fresh milk) are destined mainly for the markets in the Tokyo metropolitan area and also for prefectural capitals.

First, at this point in time, the amount of information/data available assessing the impact of this major catastrophe is extremely limited. Time is needed to develop better assessments of the impact on the livestock sector. We do know that most livestock farms are located inland in these four prefectures, rather than the coastal area hit by Tsunamis. Post notes some initial issues and challenges that farmers in these earthquake hit prefectures presently facing are outlined below:

• The strong earthquake caused severe structural damages on the livestock farm facilities and equipment.

• The lack of feed supplies is a major issue – At least half a dozen feed mills/factories were located in the earthquake hit coastal area. It is assumed that those mills/factories became incapacitated by these catastrophes. Those who were dependent on the above will have to look for alternative supply sources. The Japan Agricultural Cooperatives (JA) has its own network and other major private feed manufacturers also have their distribution networks. Alternative supplies are being arranged reportedly by using buffer stocks and diverting the products from other factories located in the country. Time will be an issue as to how fast that they can arrange the above.

• Even though alternative supplies have been arranged, farms still face delivery issues. If the farms are located in a remote area where roads and bridges are subject to clean up/reconstruction, they will likely face the delivery issues making it harder to get needed supplies on time.

• Damages to basic infrastructure, particularly in the Tohoku region (Northern Part of Honshu region), is said to be quite devastating. Thus, a certain percentage of farms (we do not know the total) are facing problems with electricity, water, and road disruptions, although they may have some diesel generators and water tanks to keep them for a few days. Keeping animal sheds warm will be an issue as the weather in the northern part is still reported to be cold.

• In the four prefectures, there are about 20 slaughtering plants/licensed meat handlers (out of a total of 198 in the nation). Not all, but some are reportedly note operating due to a lack of electricity/water and so on. How quickly these operations can be restored is uncertain and will likely affect some shipments of meat in certain areas.

• With all of the above, supplies of beef/pork/chicken/eggs/ fresh milk (for school lunch and so on) to be delivered not only to city capitals in each prefecture, but also to the Tokyo metropolitan area, will be significantly disrupted/hampered until the above issues are resolved.

• Many cattle and hogs to be slaughtered and auctioned at the Central Tokyo Meat Market will likely remain constrained for the foreseeable future.

• Lastly, radioactive materials released from the Fukushima nuclear plant could become a consumption issue as a certain population of animals could have been exposed in case farms are located closer to the plant.

Toxicity

Post will be reporting on the possible effects of toxic substances and related issues on food production and safety due to Tohoku Earthquake. Several topics that will be explored in greater detail include:

1. Salinity – by tsunami and liquefaction

1.1. The tsunami affected a wide area of Northern Japan, including the agricultural production area. In some areas sea water will remain for a long period of time. In areas where the water recedes, the soil might not be suitable for crop production due to the salinity.

- 1.2. Salinity problem would be also created by liquefaction of ground.
- 2. Radiation particles short term and long term
- 3. Substances from oil refinery spill and burning
- 4. Residue released by collapsing building
- 5. Contamination of water for food production factory, agricultural production, etc.
- 6. Contamination of food ingredients for processed products

7. Contamination in agricultural production systems, distribution and food processing plants due to lack of water

8. Contamination of final products by foreign materials due to the damage of package

Horticultural Products

The prefectures affected by the earthquake (Ibaraki, Iwate, Fukushima, and Miyagi) are not major producers of horticultural products. With a few exceptions, most of their horticultural production is consumed locally. Located in the northern part of mainland Japan, the affected area is not one of the major horticultural producers.

Fruits- The four prefectures combined production of fresh fruits constitutes only 7.6 percent (roughly 231,430 MT) of Japan's total fruit production. Nonetheless, the Fukushima prefecture produces about 21 percent of the nation's peaches. The Ibaraki prefecture contributes 23 percent to Japan's total melon production, 22 percent of chestnut production, and 10 percent of total Japanese pears. The lwate prefecture supplies 7.2 percent of the nation's apples.

Vegetables- Vegetable production in the affected region constitutes 6.9 percent of the nation's total vegetable production (about 976,075 MT). Out of the four prefectures, Ibaraki is the strongest vegetable producer, satisfying not only local consumption but also supplying the nearby Tokyo Metro area. Ibaraki's chief vegetables production includes about 45 percent of Japan's lotus roots, 41 percent of Spring Chinese Cabbage, 34 percent of spring lettuce, and 33 percent of green peppers. At much smaller scale, the Fukushima prefecture produces green peppers and Chinese cabbage. Vegetable production in the remaining prefecture remains small.

Horticultural planting in this northern region does not usually occur until the weather gets warm, around April or May, so while recent events may delay planting, no major long-term changes are expected in this sector. With regards to the tsunami affected area, aside from some green houses and small local production, horticultural production is not significant. Hence, it is not expected to negatively impact Japan's overall horticultural production.

Retail and Distribution

Affected Region - Ibaraki, Miyage, Fukushima, and Iwate prefectures: Usual distribution routes are closed for an indefinite period of time, except for emergency vehicles. Agricultural products that are distributed through these emergency routes are drinking water and cup

noodles. One other important item, which is non-agricultural, is batteries. The usual routes are interstate highways. Major delivery service companies stopped their service to Hokkaido, Tohoku (6 prefectures including Miyage, Fukushima, Aomori, Akita, Iwate and Yamagata) and Ibaragi Prefecture as of Monday, March 14.

It is important to note that Japan depends almost exclusively on trucking for the transport of food and agricultural goods. Trains systems are generally used for passenger traffic.

- 1. North from Tokyo
 - a. Tohoku Highway
 - b. Tohoku lwaki Highway
 - c. Shuto Highway Sango Line to Joban Highway
- 2. East from Niigata
 - a. Banetsu Highway
- 3. East from Yamagata
 - a. Tohoku Chuo Highway

4. Another important route is the transportation of product from Hokkaido, which would use sea vessels, Seikan Renrakusen (truck ferry), but these options are unavailable as they are now reserved for relief efforts. Another channel is the Seikan Tunnel, which travels under the sea between Hokkaido and Aomori, but again, this route is only available for emergency supplies.

5. Any other major roads in the three effected prefectures, Fukushima, Miyagi and lwate are closed.

What is being said in the industry is "No Roads, No Gasoline, and No Delivery". Even the National Postal Service and all courier services (e.g. Fedex) are prohibited from using these routes.

Sources say that even on the third day after the earthquake that supplies are slow to arrive and quantities are scarce. Most disturbingly, hospitals are not receiving enough food to feed their patient populations.

Emergency air transportation seems to be the only means of distributing to emergency supplies at this time.

Major supermarkets such as AEON and Ito-Yokado cannot deliver to their stores in the emergency area at this time. They are sending noodles, water, for relief supplies and trying to keep up with stocks of water, cup noodles and batteries at their stores in the affected area, but are having difficulty.

Kokubu, a major food wholesaler, says that it's hard to tell at this moment when infrastructure will recover. At present, the guesstimate is at least one week from today (March 15) to restart distribution of foods. The wholesaler's 25 storage facilities in the effective region, Tohoku Region, are not operative due to power black-outs.

Japanese food manufacturers reacted quickly and made donations to the devastated areas. For instance, Coca Cola Japan supplies 7.2 million bottles of soft drinks, Ito-en gives 600,000 bottles of soft drinks, Otsuka Holdings does 197,000 bottles of mineral water/160,000 bottles of sports drinks/142,000 cases plus of energy bars/3,000 units of packed curry and others raise money and donations, too.

<u>Tokyo</u> (Please note that disruptions in distribution and supply in the Tokyo (Kanto), and Nagoya (Chukyo) areas are expected to be short lived).

From first hand observation, most nonperishable food items were purchased by the end of the day of March 13 (Sunday). Bottled water, cup noodles, and bread were scarce by Saturday March 12. Non-agricultural products such as batteries, flashlights, rechargeable cell phone batteries, candles, portable gas hibachis were sold out by Saturday as well. These products may or may not be replenished by Tuesday March 15.

Queen's Isetan, which is a high-end supermarket, is barely replenishing their store shelves, according to one manager.

Some of the issues affecting retail in Tokyo include:

-	Scheduled blackouts and request of power saving done by the To	kyo
Power	ompany due to possible power shortage	

- Lack of employees: public transportation is spotty due to physical railway checks and scheduled blackouts

- Reduced or cutoff water, power and gas at food suppliers including food and package factories, slaughter houses and stock yards/warehouses.

Restriction of gasoline and some limits of traffic on damaged bridge. In
 Chiba, there have been reports of road liquefaction.

Minor hoarding food done by consumers.

<u>In the case of vegetables (from Dole-Japan)</u> - Most store shelves are empty and they won't be replenished quickly due to highly controlled port entries. All attention is on emergency supplies and anything else is limited. Dole reported that air shipments destined for Narita Airport from the U.S. were turned back. At other ports container yards closed due to damaged equipment caused by the earthquake.

The next concern is that there isn't enough gasoline for trucks. However, we understand that the government will be releasing some stockpiled oil for refining.

<u>Osaka</u>

Operations of supermarkets in the Osaka area seemed normal as of Sunday March 13.

<u>Niigata</u>

Operations of supermarkets in the Niigata area were normal as of Sunday March 13.

Japan Daily Updates March 16, 2011

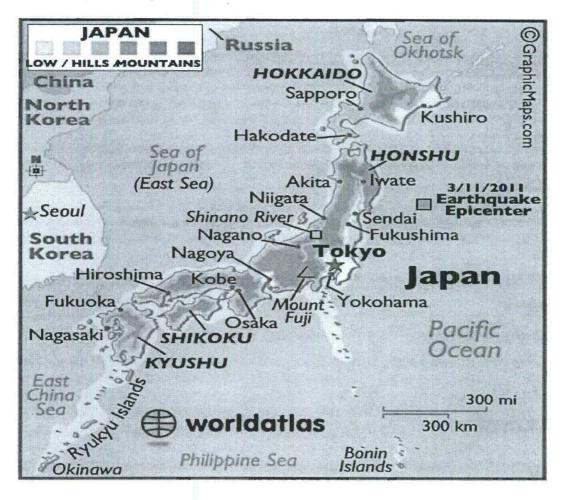
Today's Overview

The predominant theme in the agricultural community revolves around fuel shortages and power outages. Long lines are forming in front of every gas station with available fuel. Rolling blackouts have been instituted country-wide. Power and fuel are limiting the capacity to produce and deliver much need food and beverage supplies.

Retailers around the country are reporting shortages of prepared meals, batteries, rice, candles, portable gas stoves, and other essential products. Food prices, especially for staple foods, are spiking at the retail level as available supplies continue dwindle due to infrastructure and fuel constraints. Confounding this issue is the fact that consumers are displaying some hoarding behavior in both affected, and unaffected, areas of the country

Background

A massive 9.0 magnitude earthquake and subsequent Tsunami hit Japan's north east pacific coastal region on March 11, 2011. The catastrophe devastated cities, towns, and villages of the prefectures located along the coast line. The most affected prefectures are Iwate, Miyagi, Fukushima, and Ibaragi.



Emergency Food and Beverage Distribution Plan

Ministry of Agriculture, Forestry and Fisheries is responding to requests for emergency food and beverages to be delivered to the affected areas. The amount requested through local, prefectural, and federal government so far is:

Food: 2.73 million portions Water: 1.78 million bottles Infant formula: 7 metric tons

Emergency food and beverages delivered, or being delivered, include:

Prefecture	Item	Quantity	Content
Aomori	Food	5,000 portions	rice porridge
·Iwate	Food	256,000 portions	cup-noodles, bread, pre- cooked/packaged rice, canned food
	Water	50,000 bottles	· · · · · · · · · · · · · · · · · · ·
Miyagi	Food	822,000 portions	bread, onigiri, cup-noodles, pre- cooked/packaged rice
	Water	550,000 bottles	
	*Infant	7 metric tons	
	formula		
Yamagata	Food	2,000 portions	rice porridge
Fukushima	Food	150,000 portions	bread, onigiri, cup-noodles
	Water	101,000 bottles	
TOTAL	Food	1,235,000 portions	
	Water	701,000 bottles	
	*Infant	7 metric tons	
	formula		

Emergency food and beverages currently in the process of being prepared for shipment include:

Prefecture	Item	Quantity	Content
Iwate	Food	272,000 portions	bread, cup-noodles, pre-
			cooked/packaged rice, canned food
	Water	50,000 bottles	
Miyagi	Food	291,000 portions	bread, onigiri, cup-noodles,
			cooked/packaged rice
	Water	80,000 bottles	
Fukushima	Food	633,000 portions	bread, onigiri, cup-noodles,
			cooked/packaged rice
	Water	633,000 bottles	
Ibaraki	Food	89,000 portions	
	Water	91,000 bottles	
Other	*Food	210,000 portions	
TOTAL	Food	1,495,000 portions	
	Water	1,074,000 bottles	

Beyond government support, twenty-two private companies have offered 2.32 million portions of food, 300,000 bottles of water along with 8 kitchen-equipped vans. There are also

numerous companies independently volunteering food aid outside of the government's official count.

From what we know so far, the current quantity of food donated by the private sector stands at:

Onigiri and bento: 1.59 million portions/day, supplied by 64 companies Water: 5.58 million kiters/day, supplied by 17 companies Bread: 360,000 portions, supplied by 6 companies Instant noodles: 1.88 million portions, supplied by 5 companies Infant formula : 168 metric tons, supplied by 3 companies Rice crackers: 20,000 packs, supplied by 14 companies Canned/retort-packaged food: 790,000 units, supplied by 8 companies Milled rice: 1,670-1,790 metric tons (11-12 million portions), supplied by 11 companies

Grains and Oilseeds

Today NHK news reported that Kamaishi port may be reopening very soon to emergency and aid shipments only.

Port	Damage	Compound Feed	
		Production	
		(in million metric tons)	
Kushiro, Hokkaido	None	1.12	
Tomakomai, Hokkaido	None	1.52	
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	but compound feed production facility		
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Toyohashi, Aichi	None	0.72	
Mizushima, Okayama	None	1.43	
Yashiro, Kumamoto	None	0.71	
Kagoshima, Kagoshima	None	1.39	
Shibushi, Kagoshima	None	2.64	
Other ports and inland	None	6.30	
production facilities			

Major Feed Grain Ports in Japan and the Quake/Tsunami Impact

Total Compound Feed Production

24.80 million MT

The four severely damaged ports in the Tohoku area will not be operational for an extended period of time. The compound feed production capacity of these ports totals about 3.66 million MT, or 15% of Japan's total production of compound feed.

The port of Kashima is partially damaged, and it is expected to take about three months before it can receive vessels for unloading. However, the feed mills at the port are operational.

The plan is to increase production at unaffected mills and transport to affected areas (by boat from Hokkaido and Kyushu, and by truck from Western Honshu).

The challenge is to secure: 1) availability of boats; 2) inland routes; and 3) fuel.

<u>Seafood</u>

No updates from 3/15

Wood Products

No updates from 3/15

Meat and Livestock

The primary impact on livestock production on the Tohoku area is access to feed grains and the need for electricity to obtain fresh ground water supplies, particularly for pigs and for processing of hog waste.

Tohoku region cattle likely will remain on the farm longer than anticipated due to transportation issues and the inability of processing plants to resume full operating schedules without guaranteed power supplies. Less than half of the 17 wholesale cattle markets in the region have resumed regular operation, but only those producers in the immediate region should experience significant issues.

Toxicity

FAS/Tokyo continues to assess the toxicity and contamination issues that may result from this catastrophe. Possible effects of toxic substances and related issues, such as food production and safety due to Tohoku Earthquake, include:

- 1. Salinity by tsunami and liquefaction.
 - 1.1.Tsunami affected wide area of Northern Japan, including agricultural production area. In some area, sea water will remain for a long time. In area where water recedes, the soil might not be suitable for crop production due to the salinity.
 - 1.2. Salinity problem would be also created by liquefaction of ground.
- 2. Radiation particles short term and long term
 - 2.1.Short term effects of released radiation particles

Wednesday, March 16, 2011; MHLW and MAFF had an informal meeting regarding the handling of agricultural products from areas possibly affected by nuclear reactors in Fukushima Prefecture. In short, the safety management of nuclear disasters, including the handling of current crops in the ground, are handled by the Emergency Command Center of Nuclear Safety Commission, in the Cabinet Office. Fukushima Prefecture's Department of Agriculture, Forestry and Fisheries sent MAFF and MHLW an assessment of the situation. The assessment states that the authorities consider the agricultural products in the area of evacuation (20 km and 10km radius of No. 1 and No. 2 Reactor, respectively at the time) will not be harvested nor distributed since all residents, including growers, have been evacuated. For this reason, the authorities

believe that agricultural products affected by radiation will not be distributed domestically or internationally. MHLW/MAFF understanding is that the Command Center is allocating most of resource their resources to containing the situation and has not completed a risk assessment and of agricultural products (pls note that this is unofficial comment from MHLW).

Wednesday, March 16, 2011; Food Safety Commission released a note regarding the nuclear disaster in Fukushima (<u>http://www.fsc.go.jp/sonota/emerg/emerg_genshiro_20110316.pdf</u>). The note is basically the list of related GOJ websites such as Cabinet Office, Nuclear and Industrial Safety Agency, etc.

2.2.Long term effects of released radiation particles

Fresh produce, different effects on leaf, fruit and root vegetables as well as tree crops and grains

Daily products

Meat products

Tree/wood products

- 3. Substances released from oil refinery spill and burning
- 4. Residue released by collapsing building
- 5. Deficiencies in food sanitation due to programmed and unscheduled blackouts- Blackouts will make it difficult to control crop temperatures, and may cause an increase in microorganisms in food.
- 6. Food contamination by microorganisms may include; ingredient, final products, processing facilities, distribution facilities due to lack of sufficient water, chemicals, or other resource for proper management.

Horticultural Products

Other than increased retail prices, no updates from 3/15

Retail and Distribution

In Japan convenience stores are critical to the distribution of food and beverages in Japan. In fact, many people use convenience stores as their primary shopping outlet. When the Kobe quake hit in 1995, it was convenience stores that were handing out free food and drinks before the government set up relief centers.

Lawson, with the most outlets (9,800), but second by value, has a total of 10 food preparation facilities in the Kanto region (Ibaraki, is in Kanto, all other affected prefectures are in Tohoku). One factory in Chiba prefecture suffered significant damage, which has made it very difficult to distribute daily meals to Tokyo and Chiba prefectures.

On the other hand, Seven-Eleven Japan, the biggest convenience store (13,000 outlets), has been making daily improvements to their supply chain since the earthquake. 7-11 Japan was able to adapt its distribution system and program the Kanto logistics network to serve the Tohoku region, and then use other plants west of Tokyo to serve Tokyo. As of March 14, both Lawson and 7-11 Japan resumed business in more than a half of their shop operating in the Tohoku region. Lawson resumed operations in 450 outlets, out of a total of 810, in the Tohoku region. 7-11 also resumed sales at a 450 outlets out of a total of 920 in the region.

Food demand surges - Yamazaki Bakery is now running factories at 100%, and continues to receive more orders. Major food wholesalers, Kokubu, Ryoshoku and Nippon Access, have received double the orders from retailers. Wholesalers are maintaining ordinary operations at their warehouses in the Tokyo region.

According to the Asahi Shinbum on March 15, sales results of the major retailers jumped dramatically in last two days. Purchases of bottled water vaulted to 10 times, Natto 3 times bigger, Tofu is 1.7 times greater, and milk increased by 1.5 times. Sales of chicken rose 9 times more than the sales of same period of last year, canned food 3 times bigger, rice 1.6 times more.

Major retailers are supplying significant amounts of relief materials and food. AEON sent 33,000 bottles of water, 40,000 meals of Onigiri (rice ball) and 3,000 portions of cooked rice from Osaka to Aomori by air freight on March 12. AEON shut down all of 130 outlets in the Tohoku region right after the earthquake, but then sent 70 employees to Sendai to resume shop operation. For consumers in Tokyo, most of AEON's supermarkets in the Tokyo region are open with plenty of food products. Even though supermarkets are well stocked, there is some hoarding of food and beverages, often emptying shelves within 2 to 3 hours. The retailer is now asking consumers to limit purchases per person. Other major retailers in the Tokyo region are in the same situation.

<u>Media</u>

Major newspapers reported today that there is enough food supply in Japan, and that consumers needn't rush to buy, or hoard, food stocks. MAFF Minister Kano released a statement today stating that there is more than enough rice supply in Japan.

Today's media reports reported the following:

- Rice, toilet paper and other daily necessities are growing scarce at stores, not only in the quake-hit Tohoku region, but also in the Tokyo metropolitan area. But manufacturers across a wide array of industries say they have sufficient capacity to meet the demand.
- The temporary shortage at retailers is likely caused by such factors as turmoil in logistics networks and anxious consumers stocking up on various goods.
- Retailers and manufacturers are working to fill store shelves depleted in quake-hit regions and the Tokyo area by using distribution networks and production bases in unscathed in Western parts of the nation.

• On March 15, Farm Minister Kano called out to the public to stay calm as there is sufficient amount of food supply. On March 16 the Minister released a statement that Japan has more than enough rice supply to meet the demand.

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• Regarding the explosion at the Fukushima No. 1 Nuclear Power Plant, Nihon Nogyo Shimbun (aka Japan Agricultural News) reports that Farm Minister Kano suggested at a meeting of the Disaster Headquarters held on March 15 that impacts on farm products by the explosion should be surveyed in order to find out the realities of the situation.

From:	Cunningham, William C <william.cunningham@fda.hhs.gov></william.cunningham@fda.hhs.gov>
Sent:	Thursday, March 17, 2011 1:47 PM
То:	 Evans, Donna L (CDC); Allen Jr, George T; Anderson, Jeri L. (CDC); Ansari, Armin J. (CDC); Brandon, Lou; Brooks, Michael D. (ATSDR); Brozowski, George (EPA); Buzzell, Jennifer J. (CDC); Charp, Paul (ATSDR); Cherniack, James; Cleveland, Gordon (USDA); Connell, Carol (ATSDR); DeCair, Sara (EPA); Dixon, John E. (CDC); Evans, Donna L. (CDC); Evans, Rachel T; Funk, Renee H. (CDC); Goodman, Roger (EPA); Graham, Ron (USDA); Hansen, Patricia A; Hargrave, Scotty L; Hornsby-Myers, Jennifer L. (CDC); Howard King, Vinetta; Jablonowski, Gene (EPA); Jensen, John (USDA); Jones, Terri; Keith, Sam (ATSDR); Liles, Darrell (EPA); Lotz, William G. (CDC); Lough, Scott (USDA); Maher, Carmen; Mena, RaJah (DOE/FRMAC); Miller, Charles W. (CDC); Morrison, Ellen F; Nemhauser, Jeffrey B. (CDC); Noska, Michael A; O'Laughlin, Colleen (DOE/FRMAC); Pavek, John (USDA); Pemberton, Wendy (DOE/FRMAC); Petch, Peter (USDA); Russo, Mark; Sincek, Jeffrey; Smallwood, Karen R; Tupin, Ed (EPA); Veal, Lee (EPA); Whitcomb, Robert (CDC); Wiley, Albert (ORAU)
Subject:	FDA "Talking Points"
Attachments:	FDA Talking Points_HHS-WH cleared.doc

Lynn, et al.,

As mentioned in our call, please see the attached.

We have permission to use it internally with our "counterparts", as defined to include Federal and State partners.

Bill

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From: Sent: To: Subject: Brandon, Lou Friday, March 18, 2011 8:51 AM Dixon, John E. (CDC/ONDIEH/NCEH) RE: Need your assistance

John,

RASCAL projection for a batch about a 100 days old below:

(b)(5)

From: Dixon, John E. (CDC/ONDIEH/NCEH) [mailto:gyf7@cdc.gov] Sent: Thursday, March 17, 2011 10:19 AM To: Brandon, Lou Subject: Need your assistance

Lou,

Do you have a short list of the radionuclides present in 100 day old spent nuclear fuel? If so, could you e-mail that to me? I am in the CDC's EOC.

Regards, John

404-553-7777

2)/195

From: Sent: To: Cc: Subject: PMT02 Hoc Friday, March 18, 2011 5:25 PM PMT02 Hoc; narac@llnl.gov; nitops@nnsa.doe.gov cmht@nnsa.doe.gov; Brandon, Lou Clarification of release fraction in NRC RASCAL estimations

--- THIS IS A MONITORING OPERATION FOR THE FUKUSHIMA REACTOR IN JAPAN ---

This is a MONITORING OPERATION FOR THE JAPAN EARTHQUAKE TSUNAMI AFTERMATH.

This e-mail is to clarify the Unit 2 source term that provided in the e-mail entitled, "NRC RASCAL estimates" at 3:57 am on 3/18/2011. The Unit 2 source term was a 33% core melt RASCAL run. This means that 25% core activity is actually released. It is assumed that 8% of the activity plates out on the walls of containment.

NRC Protective Measures Team 301-816-5419

Please reply to this email to acknowledge receipt.

This information should not be released at this time.

NO PARTICIPATION OR RESPONSE BY CMHT IS EXPECTED

--- THIS IS A MONITORING OPERATION FOR THE FUKUSHIMA REACTOR IN JAPAN

DJ/196

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From:	Keith, Sam (ATSDR/DTEM/ATB) <ldk4@cdc.gov></ldk4@cdc.gov>
Sent:	Friday, March 18, 2011 6:18 PM
To:	Evans, Lynn (CDC/ONDIEH/NCEH); Allen, George T. (FDA/ORA/NE-FO); Anderson, Jeri L. (CDC/NIOSH/DSHEFS); Ansari, Armin (CDC/ONDIEH/NCEH); Brandon, Lou; Brooks, Michael (ATSDR/DHAC/SRAB); 'brozowski.george@epa.gov'; Buzzell, Jennifer
	(CDC/ONDIEH/NCEH); Charp, Paul (ATSDR/DHAC/SRAB); Cherniack, James J.
	(FDA/ORA/NE-FO); 'gordon.s.cleveland@aphis.usda.gov'; Connell, Carol
	(ATSDR/DHAC/SRAB); 'william.cunningham@fda.hhs.gov'; 'decair.sara@epa.gov'; Dixon,
	John E. (CDC/ONDIEH/NCEH); Evans, Rachel T. (FDA/ORA/CE-FO); Funk, Renee
	(CDC/NIOSH/OD); 'GOODMAN.ROGER@EPA.GOV'; 'ron.graham@fsis.usda.gov';
	'patricia.hansen@fda.hhs.gov'; Hargrave, Scotty L. (FDA/ORA/SW-FO); Hornsby-Myers,
	Jennifer (CDC/NIOSH/OD); Howard King, Vinetta M. (FDA/OC/OCTC);
	'jablonowski.eugene@epa.gov'; 'john.jensen@dm.usda.gov'; Jones, Terri L.
	(FDA/ORA/P-FO); 'liles.darrell@epa.gov'; Lotz, William G. (Greg) (CDC/NIOSH/DART);
	'Scott.Lough@ams.usda.gov'; Maher, Carmen T. (FDA/OC/OCS); 'menarm@nv.doe.gov'
Subject:	Re: Advisory Team Data Needs

. . . .

Lynn,

Met data:

For the duration of each release: estimated release height, gas temperature, wind direction, wind speed, and air temps (ground level and heights to 500m) near reactor. This is used to calculate Pasquel category, width of plume, plume height, etc.

Estimated isotope mixture in core at time of shutdown and time of shutdown for each reactor.

Any surface deposition analytical results. They have a number of unaffected reactors and possibly used that staff and equipment to collect and analyze actual radioactive material conc and isotopic mix. Useful in simplifying dose estimates.

Specific makes and models of rad survey meters and probes used for worker and public monitoring.

Locations of shelters, agricultural entities, schools, day care centers

US air monitoring equipment in airplanes. Useful for locating leading edges and height of plume to estimate arrival times on US soil and acceptable airline routes.

Japanese hospital monitoring equipment that can be used for thyroid screening in country.

Other information can be requested to meet specific needs and time frames as we learn more.

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Sam Keith

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From: Evans, Lynn (CDC/ONDIEH/NCEH)
Sent: Friday, March 18, 2011 03:02 PM
To: Allen, George T. (FDA/ORA/NE-FO); Anderson, Jeri L. (CDC/NIOSH/DSHEFS); Ansari, Armin (CDC/ONDIEH/NCEH);
Brandon, Lou (NRC) <|kb1@nrc.gov>; Brooks, Michael (ATSDR/DHAC/SRAB); Brozowski, George (EPA)
<brozowski.george@epa.gov>; Buzzell, Jennifer (CDC/ONDIEH/NCEH); Charp, Paul (ATSDR/DHAC/SRAB); Cherniack, James J. (FDA/ORA/NE-FO); Cleveland, Gordon (USDA) <gordon.s.cleveland@aphis.usda.gov>; Connell, Carol

(ATSDR/DHAC/SRAB); Cunningham, William C. (FDA/CFSAN) <william.cunningham@fda.hhs.gov>; DeCair, Sara (EPA) <decair.sara@epa.gov>: Dixon, John E. (CDC/ONDIEH/NCEH); Evans, Lynn (CDC/ONDIEH/NCEH); Evans, Rachel T. (FDA/ORA/CE-FO); Funk, Renee (CDC/NIOSH/OD); Goodman, Roger (EPA) <goodman.roger@epa.gov>; Graham, Ron (USDA) <ron.graham@fsis.usda.gov>; Hansen, Patricia A. (FDA/CFSAN) <patricia.hansen@fda.hhs.gov>; Hargrave, Scotty L. (FDA/ORA/SW-FO); Hornsby-Myers, Jennifer (CDC/NIOSH/OD); Howard King, Vinetta M. (FDA/OC/OCTC); Jablonowski, Gene (EPA) <jablonowski.eugene@epa.gov>; Jensen, John (USDA) <john.jensen@dm.usda.gov>; Jones, Terri L. (FDA/ORA/P-FO); Keith, Sam (ATSDR/DTEM/ATB); Liles, Darrell (EPA) < liles.darrell@epa.gov>; Lotz, William G. (Greg) (CDC/NIOSH/DART); Lough, Scott (USDA) <Scott.Lough@ams.usda.gov>; Maher, Carmen T. (FDA/OC/OCS); Mena, RaJah (DOE/FRMAC) <menarm@nv.doe.gov>; Miller, Charles W. (CDC/ONDIEH/NCEH); Morrison, Ellen F. (FDA/OC/OCTC); Nemhauser, Jeffrey B. (CDC/ONDIEH/NCEH); 'Noska, Mike (FDA)' <michael.noska@fda.hhs.gov>; O'Laughlin, Colleen (DOE/FRMAC) <olaughlin@nv.doe.gov>; 'Pavek, John (USDA)' <john.pavek@wdc.usda.gov>; Pemberton, Wendy (DOE/FRMAC) <pemberwj@nv.doe.gov>; Petch, Peter (USDA) <peter.a.petch@aphis.usda.gov>; Russo, Mark R. (FDA/OC/OCTC); Sincek, Jeffrey A. (FDA/ORA/CE-FO); Smallwood, Karen R. (FDA/ORA/SE-FO): Tupin. Ed (EPA) <tupin.edward@epa.gov>; Veal, Lee (EPA) <veal.lee@epa.gov>; Whitcomb, Robert C. (CDC/ONDIEH/NCEH); Wiley, Albert (ORAU) <albert.wiley@orise.orau.gov> Subject: Advisory Team Data Needs

The National Security Staff (NSS) has asked the Advisory Team to provide a list of issues and challenges the Advisory Team is experiencing during the response to the Japan earthquake. Specifically, what information, data, etc., does the Advisory Team need but is not getting at this time? This could include actual or predicted plume maps, levels detected, radionuclide mix, etc.

We received this request after our conference call today and it requires a quick response. Please send me your list by 6:00 PM (EDT) today, March 18, 2011. I will compile the lists and forward as directed.

Thanks!

Lynn

Note: Ed Tupin was selected to be the Chairperson for the activated Advisory Team. This email is being sent by me for Ed Tupin.

D. Lynn Evans, MS

CAPT, USPHS

Centers for Disease Control and Prevention

NCEH/EHHE/Radiation Studies Branch

Mail Stop F58

4770 Buford Highway NE

Atlanta, GA 30341-3717

Phone: (770) 488-3656

Fax: (770) 488-1539

Email: gfn6@cdc.gov

(CDC/NIOSH/DSHEFS); Ansari, Armin; Brandon, Lou; Brooks, Michael;	Tupin.Edward@epamail.epa.gov Saturday, March 19, 2011 11:23 AM Evans, Lynn; Allen, George T. (FDA/ORA/NE-FO); Anderson, Jeri L.				
Brozowski.George@epamail.epa.gov; Buzzell, Jenniter (CDC/ONDIEH/NCEH); Cha	Brozowski.George@epamail.epa.gov; Buzzell, Jennifer (CDC/ONDIEH/NCEH); Charp,				
Paul; Cherniak, Jim; Cleveland, Gordon; Connell, Carol; Cunningham, William C.					
(FDA/CFSAN); DeCair.Sara@epamail.epa.gov; Dixon, John E. (CDC/ONDIEH/NCEF	(FDA/CFSAN); DeCair.Sara@epamail.epa.gov; Dixon, John E. (CDC/ONDIEH/NCEH);				
Evans, Rachel T. (FDA/ORA/CE-FO); Funk, Renee (CDC/NIOSH/OD);	Evans, Rachel T. (FDA/ORA/CE-FO); Funk, Renee (CDC/NIOSH/OD); Goodman.Roger@epamail.epa.gov; Graham, Ron; Hansen, Patricia A; Hargrave, Scotty				
Goodman.Roger@epamail.epa.gov; Graham, Ron; Hansen, Patricia A; Hargrave, S					
L; Hornsby-Myers, Jennifer (CDC/NIOSH/OD); Howard King, Vinetta M.					
(FDA/OC/OCTC); Jablonowski.Eugene@epamail.epa.gov; Jensen, John (USDA); Jo Terri L. (FDA/ORA/P-FO); Keith, Sam (ATSDR/DTEM/ATB);	nes,				
Liles.Darrell@epamail.epa.gov; Lotz, William G. (Greg) (CDC/NIOSH/DART); Lougl	Liles.Darrell@epamail.epa.gov; Lotz, William G. (Greg) (CDC/NIOSH/DART); Lough,				
Scott (USDA); Maher, Carmen T. (FDA/OC/OCS); Mena, RaJah (DOE/FRMAC);					
Helen.Sterling@dhs.gov					
Subject: Clearance issue					

All

I know we planned a small	group to work this issue.	(b)(5)		
(b)(5)			 	

Those who are available please join a conf call at 1130 on the advisory team line.

866-561-4509 PiN (b)(6) Ed Edward A. Tupin, MS, CHP

Health Physicist Radiation Protection Division Office of Radiation and Indoor Air USEPA Office: 202-343-9383 Cell (b)(6)

Location: 1310 L St., NW 5th floor Washington, DC

Sent by EPA Wireless E-Mail Services

22/198

From: Sent: To: Cc: Subject: PMT01 Hoc Sunday, March 20, 2011 12:34 AM albert.mongeon@noaa.gov Brandon, Lou; PMT01 Hoc Weather observations for Fukushima site

Al,

Lou Brandon, NRC, suggested I contact you with a question. The NRC protective measures team (PMT) is using forecast weather model (WRF) data provided by NARAC for dose projections using RASCAL. We still have a 33-hr gap in our data from March 13 0000 Z to March 14 0900 Z for the Fukushima Dilachi site. The data needed are hourly measurements of wind direction, wind speed, stability class, and precipitation.

I will be filling this gap with observed data from Fukushima, Soma or other nearby meteorological station. Do you already have this data recorded, and could you send it to me?

Dave Brown Protective Measures Team U.S. NRC

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From: Sent: To: Cc: Subject: Brandon, Lou Sunday, March 20, 2011 8:29 AM Liles.Darrell@epamail.epa.gov DeCair.Sara@epamail.epa.gov RE: RASCAL Question

Darrell,

About 32 of 550 bundles are MOX in unit 3. No MOX in SFP. RASCAL does not model MOX. Consensus is that dose projections would change little under most scenarios.

Lou

-----Original Message-----From: Liles.Darrell@epamail.epa.gov [mailto:Liles.Darrell@epamail.epa.gov] Sent: Thursday, March 17, 2011 3:28 PM To: Brandon, Lou Cc: DeCair.Sara@epamail.epa.gov Subject: RASCAL Question

Lou,

I'm guess that RASCAL doesn't yet perform calculations for mixed oxide fuel. CmWeb has the RASCAL source terms for Unit 1 and 2 but not 3 which is MOX.

Darrell

