

Indian Point Questions

173) Why is Indian Point safe if there is a fault line so close to it?

Public Response: The Ramapo fault system, located near the Indian Point Nuclear Power Plant, is an example of an old fault system that, based on geologic field evidence, has not been active in the last 65.5 million years. The Ramapo fault system extends primarily from southeastern New York to northern New Jersey and is made up of a series of northeast-oriented faults. Even though there is minor earthquake activity in the vicinity of the Ramapo faults, this earthquake activity cannot be directly correlated with any individual fault within the Ramapo fault system.

US nuclear power plants are designed and built to withstand the largest expected earthquake in the site region, based on observed historical seismicity and field evidence for prehistoric earthquakes, and are also designed to incorporate seismic safety margins. A potential earthquake in and around the vicinity of the Ramapo fault system was taken into account during the NRC licensing process for the Indian Point plants, and the plant design incorporated the largest expected earthquake in the site region. In summary, the Ramapo fault system exhibits no definitive evidence for recent fault displacement (i.e., no evidence for fault activity in the last 65.5 million years) and the Indian Point nuclear power plant was designed and built to safely shutdown in the event of an earthquake having the highest magnitude observed in the site region. Therefore, the NRC concluded that the risk of significant damage to the Indian Point reactors due to a potential earthquake is acceptable.

Additional, technical, non-public information: The information above and following is consistent with the literature and the UFSAR for IP related to the Ramapo fault. The Ramapo fault system, which passes through the Indian Point area, is a group of Mesozoic age faults, extending from southeastern New York to northern New Jersey, as well as further southwest. The fault system is composed of a series of southeast-dipping, northeast-striking faults. Various faults of the system contain evidence of repeated slip in various directions since Proterozoic time, including Mesozoic extensional reactivation. However, the USGS staff, who reviewed 31 geologic features in the Appalachian Mountains and Coastal Plain and compiled a National Database on Quaternary Faulting (Crone and Wheeler, 2000), listed the Ramapo fault system as low risk because the fault system lacks evidence for Quaternary slip. They further pointed out that the Ramapo fault system, and 17 other geologic features, "have little or no published geologic evidence of Quaternary tectonic faulting that could indicate the likely occurrence of earthquakes larger than those observed historically" (Wheeler and Crone, 2004). Among these faults, the Ramapo fault system is one of the three that underwent a paleoseismological study. In two trenches excavated across the Ramapo fault, no evidence of Quaternary tectonic faulting was found (Wheeler and Crone, 2000). Because the Ramapo fault system is relatively inactive, and because the plants are designed to safely shutdown in the event of an earthquake of the highest intensity ever recorded in that area, the NRC has concluded that the risk of significant damage to the reactors due to a probable earthquake in the area is extremely small.

The letter that was sent to the NRC from Rep Lowey refers to the Ramapo seismic zone (RSZ) and the Dobbs Ferry fault. The letter incorrectly states that the Dobbs Ferry fault is located within the Ramapo seismic zone. Based on the literature, it is not. It is close, but it is considered to be in the Manhattan Prong more to the east (more like 10-15 miles away) while the Ramapo fault system is considered to be in the Reading Prong (a couple of miles away from IP). Also for clarification, the seismicity is considered to be within the Precambrian/Paleozoic basement at depths greater than the Mesozoic Newark Basin where the RSZ is situated.

Questions posed by utilities

The following questions were received from NextEra Energy. Responses are the most recent as of 6pm on 3-25-11.

- 174) **We are trying to understand why our plants in low-seismic areas (see below) would appear on the list of 27 plants that the NRC intends to review for seismic issues. While the story below notes that these plants have been identified based on "largest increase in seismic risk from a 1980s-era USGS study," the USGS maps show a low probability for seismic activity. I'm not aware of any major changes that would have increased seismic risk... can you help explain?**

Answer: First, it should be clarified that the list of 27 plants is only provided to show that there is sufficient reason to move the project to the next phase of the generic issue program. These are not the only plants that will be reassessed. Due to the significant uncertainty in the data available, all plants in the central and eastern US were expected to receive the generic letter and will be reassessed. Further, in light of the events in Japan, it has been decided that all 104 operating reactors will be reassessed.

The GI-199 study considers both overall risk and also changes in risk. Both the approach to assessing seismic hazard and the data available to seismologists have improved significantly since the 1980. As a result, estimates of seismic hazard, although still low, have increased since that time. This is the result of a steady improvement in the understanding of seismic hazard over time. It is important to note that it is not the seismic activity, or the seismic hazard itself, that has increased; but rather it is the understanding of it that has changed. (Information on how the USGS seismic hazard maps are developed is available at the USGS website). The larger change in the risk (in terms of core damage frequency) associated with some sites in the study directly reflects the change in assessed hazard.

- 175) **My basic understanding - especially in the case of St. Lucie and Duane Arnold - is that highly conservative values were input into your screening process for plants with low-seismic probability, therefore moving plants like those previously mentioned up in the listing. Can you help me to understand this?**

Answer: The screening process that was undertaken used data currently available to the NRC, principally from the IPEEE study conducted in the mid-90s. Licensees of nuclear plants in moderate to high seismicity areas tended to provide more detailed information regarding the seismic resistance of the structures, systems, and components than plants in low seismicity areas. Therefore when considering loads beyond the seismic design, NRC staff tended to have more detailed information to rely on for plants in moderate to high seismicity zones; and had to make conservative assumptions for plants in low seismicity regions.

Pending and Unanswered Questions from Members of Congress and Industry

The below questions are gleaned from the congressional letters coming into the NRC. Because they generally cover different topics, they are being kept together as sets to assist the office assigned with response. Once a formal response is developed and sent, the questions will be moved to the appropriate sections.

176) Received 3/16/11 from Congresswoman Lowey

The key elements of the congresswoman's letter are as follows:

The Ramapo Seismic Zone is a particular threat because the zone passes within two miles of Indian Point. The Ramapo Seismic zone includes the Dobbs Ferry fault in Westchester, which generated a 4.1 magnitude earthquake in 1955. The Columbia University study suggests that this pattern of subtle but active faults increases the risk to the New York City area and that an earthquake with a magnitude of 7.0 on the Richter scale is within reach. Disturbingly, Entergy measures the risk of an earthquake near Indian Point to be between 1.0 and 3.0 on the Richter scale, despite evidence to the contrary.

The NRC should study Indian Point's risk of, and ability to sustain a disaster, including the impact of earthquakes and hurricanes, as well as collateral impacts such as loss of power, inability to cool reactors and emergency evacuation routes. The NRC should evaluate how a similar incident in the New York metropolitan area could be further complicated due to a dramatically higher population and the effectiveness of the proposed evacuation routes.

Public Response: Please see response in the Indian Point section.

Additional, technical, non-public information: None.

177) From 3/16/11 Press Release from Senators Boxer and Feinstein

Plant Design and Operations

1. What changes to the design or operation of the Diablo Canyon and SONGS facilities have improved safety at the plants since they began operating in the mid-1980s?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

2. What emergency notification systems have been installed at California nuclear power plants? Has there ever been a lapse of these systems during previous earthquakes or emergencies?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

3. What safety measures are in place to ensure continued power to California reactors in the event of an extended power failure?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

Type of Reactor

4. What are the differences and similarities between the reactors being used in California (pressurized water reactors) and those in Japan (boiling water reactors), as well as the

facilities used to house the reactors, including the standards to which they were built and their ability to withstand natural and manmade disasters?

Public Response: NRR/DORL developing response
Additional, technical, non-public information: ADD

Earthquakes and Tsunamis

5. We have been told that both Diablo Canyon and San Onofre Nuclear Generating Station are designed to withstand the maximum credible threat at both plants, which we understand to be much less than the 9.0 earthquake that hit Japan. What assumptions have you made about the ability of both plants to withstand an earthquake or tsunami? Given the disaster in Japan, what are our options to provide these plants with a greater margin for safety?

Public Response: Annie and Kamal developing response
Additional, technical, non-public information: ADD

6. Have new faults been discovered near Diablo Canyon or San Onofre Nuclear Generating Station since those plants began operations? If so, how have the plants been modified to account for the increased risk of an earthquake? How will the NRC consider information on ways to address risks posed by faults near these plants that is produced pursuant to state law or recommendations by state agencies during the NRC relicensing process?

Public Response: Annie and Kamal developing response
Additional, technical, non-public information: ADD

7. What are the evacuation plans for both plants in the event of an emergency? We understand that Highway 1 is the main route out of San Luis Obispo, what is the plan for evacuation of the nearby population if an earthquake takes out portions of the highway and a nuclear emergency occurs simultaneously?

Public Response: NRR/DORL developing response
Additional, technical, non-public information: ADD

8. What is the NRC's role in monitoring radiation in the event of a nuclear accident both here and abroad? What is the role of EPA and other federal agencies?

Public Response: NRR/DORL developing response
Additional, technical, non-public information: ADD

9. What monitoring systems currently are in place to track potential impacts on the US, including California, associated with the events in Japan?

Public Response: NRR/DORL developing response
Additional, technical, non-public information: ADD

10. 6. Which federal agency is leading the monitoring effort and which agencies have responsibility for assessing human health impacts? What impacts have occurred to date on the health or environment of the US or are currently projected or modeled in connection with the events in Japan?

Public Response: NRR/DORL developing response
Additional, technical, non-public information: ADD

11. What contingency plans are in place to ensure that the American public is notified in the event that hazardous materials associated with the events in Japan pose an imminent threat to the US?

Public Response: NRR/DORL developing response
Additional, technical, non-public information: ADD

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178) From 3/15/11 Press Release from Congresspeople Markey and Capps

Note that these are only the seismic questions. There are other questions that are structural

1. Provide the Richter or moment magnitude scale rating for each operating nuclear reactor in the United States. If no such information exists, on what basis can such an assertion be made regarding the design of any single nuclear power plant?

Public Response: US nuclear power plants are designed for different ground motions determined on a site-specific basis, which are called the Safe Shutdown Earthquake ground motions (SSE). Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location. Ground motion, or shaking, is a function of both earthquake magnitude and distance from the fault to the site. The magnitude alone cannot be used to predict ground motions. Currently operating nuclear power plants developed their SSEs based on a "deterministic" or "scenario earthquake" basis that account for the largest earthquake expected in the area around the plant.

Please see the available table of Design Basis Ground Motions for US Plants in the Additional Information: Useful Tables.

Additional, technical, non-public information: ADD

2. The San Onofre reactor is reportedly designed to withstand a 7.0 earthquake, and the Diablo Canyon reactor is designed to withstand a 7.5 magnitude. According to the Southern California Earthquake Center (SCEC), there is an 82% probability of an earthquake 7.0 magnitude in the next 30 years, and a 37 percent probability that an earthquake of 7.5 magnitude will occur. Shouldn't these reactors be retrofitted to ensure that they can withstand a stronger earthquake than a 7.5? If not, why not?

Public Response: This needs to be edited and enhanced. The question arises from an un-cited reference to the Uniform California Earthquake Rupture Forecast (UCERF). The UCERF was developed by a multidisciplinary group of scientists and engineers called the Working Group on California Earthquake Probabilities (WGCEP). The goal of the UCERF model is to determine earthquake rupture probabilities of various magnitudes for different regions of California. The probability values cited in the Congressional Inquiry are from the UCERF for the entire Southern California region, not specifically for the region near either SONGS or DCNPP. The faults located near DCNPP and SONGS contribute nothing to the cited probability values, in the sense that their contributions are mathematically insignificant. The cited probabilities are totally dominated by the San Andreas, San Jacinto, Imperial and other highly active faults along the plate boundary in Southern California. These faults are all located at great distances from DCNPP and SONGS. As noted in the answer to Question #1, NPPs are not designed for earthquake magnitudes but for anticipated ground shaking. The ground shaking hazard posed by earthquakes located at distances equal to the faults important to the UCERF model is very low, much less than the hazard estimated for the nearby faults used to develop the design ground motions for the subject plants. In summary, the specific probability values cited in the letter do not apply to either DCNPP and SONGS; the actual probabilities at the NPP sites are far less.

Additional, technical, non-public information: The colors in UCERF Figure 2 represent the probabilities of having a nearby earthquake rupture (within 3 or 4 miles) of magnitude 6.7 or larger in the next 30 years. Therefore, reading the colors off of Figure 2, the San Onofre and Diablo Canyon NPPs have a $\leq 10\%$ probability of having a $\geq M6.7$ earthquake rupture within 3 to 4 miles in the next 30 years. Therefore, retrofitting these reactors to withstand earthquakes of M7.5 or stronger based on the UCERF study would put an unnecessary burden on the licensees.

3. Provide specific information regarding the differences in safety-significant structures between a nuclear power plant that is located in a seismically active area and one that is not. Provide, for each

operating nuclear reactor in a seismically active area, a full list and description of the safety-significant design features that are included that are not included in similar models that are not located in seismically active areas.

Public Response: This is a rough draft. We need to get some reviews of this. Assumed NRR will have ultimate responsibility for the response.

There are no differences in safety requirements for nuclear power plants located in seismically active areas and ones that are not. Regardless of site seismicity, Appendix S to 10 CFR Part 50 requires for site-specific SSE ground motions, structures, systems, and components will remain functional and within applicable stress, strain, and deformation limits. The required safety functions of SSCs must be assured during and after the vibratory ground motion through design, testing, or qualification methods. The evaluation must take into account soil-structure interaction effects and the expected duration of the vibratory motions. Appendix S also requires that the horizontal component of the SSE ground motion in the free field at the foundation elevation of structures must be an appropriate response spectrum with peak ground acceleration (PGA) of at least 0.10g. Design basis loads for nuclear power plant structures, important to safety, include combined loads for seismic, wind, tornado, normal operating conditions (pressure and thermal), and accident conditions. Codes and standards, such as the American Institute of Concrete (ACI-349) and the American Institute of Steel Construction (AISC N690), are used in the design of nuclear power plant structures to ensure a conservative, safe design under design basis loads. In addition to the nominal seismic design, all new generation reactors have to demonstrate a seismic margin of 1.67 relative to the site-specific seismic demands.

For the current operating fleet of nuclear power reactors, site-to-site differences in structural design can result from differences in external site hazards such as seismic, wind, tornado, and tsunami. For a low-seismicity region, wind or tornado loads may control the design. Conversely, for a high-seismicity region, seismic loads will likely control. Structures in high-seismicity regions have robust designs with typically higher capacity shear walls, as an example. Systems and components will also be more robust and are designed and tested to higher levels of acceleration.

Additional, technical, non-public information: ADD

4. In your opinion, can any operating nuclear reactors in the United States withstand an earthquake of the magnitude experience in Japan?

Public Response: The March 11, 2011, magnitude 9 earthquake that recently affected Japan is different than earthquakes that could affect US nuclear plants. Each US nuclear plant is designed to a ground-shaking level that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. The Japan earthquake was caused by a "subduction zone" event, which is the type of mechanism that produces the largest possible magnitude earthquakes. In the continental US, the only subduction zone is the Cascadia subduction zone which lies off the coast of northern California, Oregon and Washington, so an earthquake this large could only happen in that region. The only plant in that area is Columbia Generating Station, which is approximately 225 miles (363 km) from the coast and the subduction zone. Outside of the Cascadia subduction zone, earthquakes are not expected to exceed a magnitude of approximate 8, which has 31 times less energy than a magnitude 9.

Additional, technical, non-public information: ADD

179) Questions suggested by ANS for inclusion in a public FAQ document:

1. How badly were the SFP structures damaged by the earthquake?
2. Was the SFP water drained due to the earthquake? If yes, over what period of time?
3. Are the SFPs structurally sound enough to be refilled with water, a slurry, or sand?

4. What are the SFP loadings (# F/As, weight, heat load, radioactivity)?
5. How much has the cladding in the SFPs been oxidized (perhaps as inferred from the hydrogen released)?
6. What is the degree of fuel melting in the SFPs?
7. Is the fuel in the SFPs in a coolable geometry?
8. What effect has the spraying with water cannons and concrete pumping truck had (fuel cooling, fuel degradation, water accumulation)?
9. What are the options to refill the SFPs with water, i.e., plant systems, external systems, water supplies, heat sink?
10. Will refilling the SFPs with water cause the fuel within to "slump" as occurred at TMI?
11. Will refilling the SFPs with water produce massive amounts of hydrogen? If yes, is it likely to explode before it is vented from the building?
12. Will refilling the SFPs with water produce a potential nuclear criticality?
13. What special precautions and being taken , e.g., shielding being installed around cooling system components to accommodate high levels of contamination in and radiation from the water to be circulated from the SFPs (and reactor assemblies), to ensure worker protection prior to activating installed cooling systems?
14. Is filling the SFPs with a slurry or sand being aggressively evaluated?

Additional Information: Useful Tables

Table of Design Basis Ground Motions for US Plants

Design Basis Earthquake Information					
Nuclear Plant By State/Location	Maximum Observed Or Inferred Intensity (MMI Scale)	Relative Distance Of Seismic Source	Design SSE Peak Acceleration, g	OBE Peak Acceleration, g	Soil Condition
New York					
Fitzpatrick	VI	Near	0.15	0.08	Soil
Ginna 1	VIII/IX	>60 miles	0.2	0.08	Rock
Indian Point 2, 3	VII	Near	0.15	0.1	Rock
Nine Mile Point 1	IX-X	>60 miles	0.11	0.06	Rock
Nine Mile Point 2	VI	Near	0.15	0.075	Rock
New Jersey					
Salem 1,2	VII-VIII	Near	0.2	0.1	Deep Soil
Connecticut					
Millstone 1, 2, 3	VII	Near	0.17	0.07	Rock
Vermont					
Vermont Yankee	VI	Near	0.14	0.07	Rock
Ohio					

Davis Besse 1	VII	Near	0.15	0.08	Rock
Perry 1	VII	Near	0.15	0.08	Rock
Georgia					
Hatch 1, 2	VII	Near	0.15	0.08	Deep Soil
Vogtle 1, 2	VII-VIII	Near	0.2	0.12	Deep Soil
Tennessee					
Sequoyah 1, 2	VIII	Near	0.18	0.09	Rock
Watts Bar 1	VIII	Near	0.18	0.09	Rock
California					
San Onofre 2, 3	IX-X	Near	0.67	0.34	Soil
Diablo Canyon 1, 2	X-XI	Near	0.75	0.20	Rock
Florida					
Crystal River 3	V	Near	0.10	0.05	Rock
St. Lucie 1, 2	VI	Near	0.10	0.05	Soil
Turkey Point 3, 4	VII	Near	0.15	0.05	Rock

NOTES:

MMI=Modified Mercalli Intensity, a measure of observed/reported damage and severity of shaking.
Relative distance measure used in FSAR to develop SSE acceleration, "Near" indicates distance less than 10 miles.
SSE=Safe Shutdown Earthquake ground motion, for horizontal acceleration, in units of earth's gravity, *g*.
OBE=Operating Basis Earthquake ground motion, level of horizontal acceleration, which if exceeded requires plant shutdown.

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Table of SSE, OBE and Tsunami Water Levels

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Alabama			
Browns Ferry	0.200	0.100	N/A (Non-Coastal)
Farley	0.100	0.050	N/A (Non-Coastal)
Arkansas			
Arkansas Nuclear	0.200		N/A (Non-Coastal)
Arizona			
Palo Verde	0.200	0.100	N/A (Non-Coastal)
California			
Diablo Canyon	0.400	0.200	The design basis maximum combined wave runup is the greater of that determined for near-shore or distantly-generated tsunamis, and results from near-shore tsunamis. For distantly-generated tsunamis, the combined runup is 30 feet. For near-shore tsunamis, the combined wave runup is 34.6 feet, as determined by hydraulic model testing. The safety-related equipment is installed in watertight compartments to protect it from adverse sea wave events to elevation +48 feet above mean lower low water line (MLLWL).
San Onofre	0.670	0.340	The controlling tsunami occurs during simultaneous high tide and storm surge produces a maximum runup to elevation +15.6 feet mean lower low water line (MLLWL) at the Unit 2 and 3 seawall. When storm waves are superimposed, the predicted maximum runup is to elevation +27 MLLWL. Tsunami protection for the SONGS site is provided by a reinforced concrete seawall constructed to elevation +30.0 MLLWL.
Connecticut			
Millstone	0.170	0.090	18 ft SWL
Florida			
Crystal River	0.050	0.025	N/A (Non-Coastal)
St. Lucie	0.100	0.050	No maximum tsunami level, bounded by PMH surge of +18 MLW wave runup, with plant openings at +19.5 MLW

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Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Turkey Point	0.150	0.050	No maximum tsunami level, bounded by PMH surge of +18.3 MLW water level, site protected to +20 MLW with vital equipment protected to +22 MLW
Georgia			
Hatch	0.150	0.080	N/A (Non-Coastal)
Vogtle	0.200	0.120	N/A (Non-Coastal)
Illinois			
Braidwood	0.200	0.090	N/A (Non-Coastal)
Byron	0.200	0.090	N/A (Non-Coastal)
Clinton	0.250	0.100	N/A (Non-Coastal)
Dresden	0.200	0.100	N/A (Non-Coastal)
LaSalle	0.200	0.100	N/A (Non-Coastal)
Quad Cities	0.240	0.120	N/A (Non-Coastal)
Iowa			
Duane Arnold	0.120	0.060	N/A (Non-Coastal)
Kansas			
Wolf Creek	0.120	0.060	N/A (Non-Coastal)
Louisiana			
River Bend	0.100	0.050	
Waterford	0.100		Floods - 30 feet MSL
Maryland			
Calvert Cliffs	0.150	0.080	14 ft design wave
Massachusetts			
Pilgrim	0.150	0.080	*Storm flooding design basis - 18.3ft
Michigan			
D.C. Cook	0.200	0.100	N/A
Fermi	0.150	0.080	N/A
Palisades	0.200	0.100	N/A
Missouri			
Callaway	0.200		N/A (Non-Coastal)

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Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Mississippi			
Grand Gulf	0.150	0.075	N/A
Minnesota			
Monticello	0.120	0.060	N/A (Non-Coastal)
Prarie Island	0.120	0.060	N/A (Non-Coastal)
Nebraska			
Cooper	0.200	0.100	N/A (Non-Coastal)
Fort Calhoun	0.170	0.080	N/A (Non-Coastal)
New York			
Fitzpatrick	0.150	0.080	N/A (Non-Coastal)
Ginna	0.200	0.080	N/A
Indian Point	0.150	0.100	15 ft msl
Nine Mile Point, Unit 1	0.110	0.060	N/A
Nine Mile Point, Unit 2	0.150	0.075	N/A
New Hampshire			
Seabrook	0.250	0.125	(+) 15.6' MSL Still Water Level (Tsunami Flooding -Such activity is extremely rare on the US Atlantic coast and would result in only minor wave action inside the harbor.)
New Jersey			
Hope Creek	0.200	0.100	35.4 MSL The maximum probable tsunami produces relatively minor water level changes at the site. The maximum runup height reaches an elevation of 18.1 feet MSL with coincident 10 percent exceedance high tide)
Oyster Creek	0.184	0.092	(+) 23.5' MSL Still Water Level (Probable Maximum Tsunami - Tsunami events are not typical of the eastern coast of the United States and have not, therefore, been addressed.)
Salem	0.200	0.100	21.9 MSL (There is no evidence of surface rupture in East Coast earthquakes and no history of significant tsunami activity in the region)
North Carolina			
Brunswick	0.160	0.030	N/A

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Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
McGuire	0.150	0.080	N/A (Non-Coastal)
Shearon Harris	0.150		N/A (Non-Coastal)
Ohio			
Davis-Besse	0.150	0.080	N/A
Perry	0.150	0.080	N/A
Pennsylvania			
Beaver Valley	0.130	0.060	N/A (Non-Coastal)
Limerick	0.150	0.075	N/A (Non-Coastal)
Peach Bottom	0.120	0.050	N/A (Non-Coastal)
Three Mile Island	0.120	0.060	N/A (Non-Coastal)
Susquehanna	0.150	0.080	N/A (Non-Coastal)
South Carolina			
Catawba	0.150	0.080	N/A (Non-Coastal)
Oconee	0.150	0.050	N/A (Non-Coastal)
Robinson	0.200	0.100	N/A (Non-Coastal)
V.C. Summer	0.250	0.150	N/A (Non-Coastal)
Tennessee			
Sequoyah	0.180	0.090	N/A (Non-Coastal)
Watts Bar, Unit 1	0.180	0.090	N/A (Non-Coastal)
Texas			
Comanche Peak	0.120	0.060	N/A
South Texas Project	0.100	0.050	N/A
Vermont			
Vermont Yankee	0.140	0.070	N/A
Virginia			
North Anna	0.180		N/A
Surry	0.150	0.080	N/A
Washington			
Columbia	0.250		N/A (Non-Coastal)

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Wisconsin			
Kewaunee	0.120	0.060	N/A
Point Beach	0.120		N/A
Definition of Safe Shutdown Earthquake	The safe-shutdown earthquake (SSE) for the site is the ground motion response spectra (GMRS), which also satisfies the minimum requirement of paragraph IV(a)(1)(i) of Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants," to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the Code of Federal Regulations (10 CFR Part 50).		
Definition of Operating Basis Earthquake:	To satisfy the requirements of paragraph IV(a)(2)(A) of Appendix S to 10 CFR Part 50, the operating-basis earthquake (OBE) ground motion is defined as follows: <ul style="list-style-type: none"><li>(i) For the certified design portion of the plant, the OBE ground motion is one-third of the CSDRS.<li>(ii) For the safety-related noncertified design portion of the plant, the OBE ground motion is one-third of the design motion response spectra, as stipulated in the design certification conditions specified in design control document (DCD).<li>(iii) The spectrum ordinate criterion to be used in conjunction with Regulatory Guide 1.166, "Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Post-earthquake Actions," issued March 1997, is the lowest of (i) and (ii).		

Table of Plants Near Known Active Faults or in High or Moderate Seismicity Zones

It should be noted that in much of the Central and Eastern US, the seismicity comes from "background" seismicity. Background seismicity is earthquake activity, where the earthquakes cannot be tied to known faults.

Plant (state)	Nearest Active Fault or Seismic Zone	Distance to Fault or Range of Distances to Zones	Type of Faulting Mechanism	Range of Maximum Magnitude (M_w)	OBE (g)	SSE (g)
Diablo Canyon (CA)	Hosgri Fault	5 miles	Predominantly Strike Slip	7.5		
	Shoreline Fault	0.5 miles	Strike Slip	6.25 to 6.75 best estimate by NRC staff in RIL 09-001. Final report on the fault in review by NRC staff		
San Onofre (CA)						
Comanche Peak						

Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level Earthquakes (RLE), and Seismic Core Damage Frequencies

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Arkansas 1	05000313	0.2	2.8E-04	0.3	4.1E-06	0.3g full-scope EPRI SMA	GI-199
Arkansas 2	05000368	0.2	9.7E-05	0.3	4.1E-06	0.3g focused-scope EPRI SMA	GI-199
Beaver Valley 1	05000334	0.12	3.3E-04	n/a	4.8E-05	seismic PRA	GI-199
Beaver Valley 2	05000412	0.12	2.7E-04	n/a	2.2E-05	seismic PRA	GI-199
Braidwood 1	05000456	0.2	6.7E-05	0.3	7.3E-06	0.3g focused-scope EPRI SMA	GI-199
Braidwood 2	05000457	0.2	6.7E-05	0.3	7.3E-06	0.3g focused-scope EPRI SMA	GI-199
Browns Ferry 1	05000259	0.2	2.5E-04	0.3	3.7E-06	0.3g focused-scope EPRI SMA	GI-199
Browns Ferry 2	05000260	0.2	2.5E-04	0.26	5.4E-06	0.3g focused-scope EPRI SMA	GI-199
Browns Ferry 3	05000296	0.2	2.5E-04	0.26	5.4E-06	0.3g focused-scope EPRI SMA	GI-199
Brunswick 1	05000325	0.16	7.3E-04	0.3	1.5E-05	0.3g focused-scope EPRI SMA	GI-199
Brunswick 2	05000324	0.16	7.3E-04	0.3	1.5E-05	0.3g focused-scope EPRI SMA	GI-199
Byron 1	05000454	0.2	5.2E-05	0.3	5.8E-06	0.3g focused-scope EPRI SMA	GI-199
Byron 2	05000455	0.2	5.2E-05	0.3	5.8E-06	0.3g focused-scope EPRI SMA	GI-199
Callaway	05000483	0.2	3.8E-05	0.3	2.0E-06	0.3g focused-scope EPRI SMA	GI-199
Calvert Cliffs 1	05000317	0.15	1.9E-04	n/a	1.0E-05	seismic PRA	GI-199
Calvert Cliffs 2	05000318	0.15	1.9E-04	n/a	1.2E-05	seismic PRA	GI-199
Catawba 1	05000413	0.15	1.4E-04	n/a	3.7E-05	seismic PRA	GI-199
Catawba 2	05000414	0.15	1.4E-04	n/a	3.7E-05	seismic PRA	GI-199
Clinton	05000461	0.25	5.8E-05	0.3	2.5E-06	0.3g focused-scope EPRI SMA	GI-199
Columbia	05000397	0.25	1.7E-04	n/a	2.1E-05	seismic PRA	IPEEE
Comanche Peak 1	05000445	0.12	1.6E-05	0.12	4.0E-06	reduced-scope EPRI SMA; SSE = 0.12g	GI-199
Comanche Peak 2	05000446	0.12	1.6E-05	0.12	4.0E-06	reduced-scope EPRI SMA; SSE = 0.12g	GI-199
Cooper	05000298	0.2	1.5E-04	0.3	7.0E-06	0.3g focused-scope EPRI SMA	GI-199
Crystal River 3	05000302	0.1	8.9E-05	0.1	2.2E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
D.C. Cook 1	05000315	0.2	2.1E-04	n/a	2.2E-05	seismic PRA	GI-199
D.C. Cook 2	05000316	0.2	2.1E-04	n/a	2.2E-05	seismic PRA	GI-199

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Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level Earthquakes (RLE), and Seismic Core Damage Frequencies

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Davis Besse	05000346	0.15	6.3E-05	0.26	6.7E-06	reduced-scope EPRI SMA	GI-199
Diablo Canyon 1	05000275	0.75	2.0E-04	n/a	4.1E-05	seismic PRA	IPEEE
Diablo Canyon 2	05000323	0.75	2.0E-04	n/a	4.1E-05	seismic PRA	IPEEE
Dresden 2	05000237	0.2	9.7E-05	0.26	1.9E-05	0.3g focused-scope EPRI SMA	GI-199
Dresden 3	05000249	0.2	9.7E-05	0.26	1.9E-05	0.3g focused-scope EPRI SMA	GI-199
Duane Arnold	05000331	0.12	2.3E-04	0.12	3.2E-05	reduced-scope EPRI SMA; SSE = 0.12g	GI-199
Farley 1	05000348	0.1	1.0E-04	0.1	2.8E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Farley 2	05000364	0.1	1.0E-04	0.1	2.8E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Fermi 2	05000341	0.15	1.0E-04	0.3	4.2E-06	0.3g focused-scope EPRI SMA	GI-199
Fitzpatrick	05000333	0.15	3.2E-04	0.22	6.1E-06	0.3g focused-scope NRC SMA	GI-199
Fort Calhoun 1	05000285	0.17	3.7E-04	0.25	5.4E-06	0.3g focused-scope NRC SMA	GI-199
Ginna	05000244	0.2	1.0E-04	0.2	1.3E-05	0.3g focused-scope EPRI SMA	GI-199
Grand Gulf	05000416	0.15	1.0E-04	0.15	1.2E-05	reduced-scope EPRI SMA; SSE = 0.15g	GI-199
Hatch 1	05000400	0.148	3.9E-04	0.29	2.3E-06	0.3g focused-scope EPRI SMA	GI-199
Hatch 2	05000321	0.15	2.7E-04	0.3	2.5E-06	0.3g focused-scope EPRI SMA	GI-199
Hope Creek	05000366	0.2	9.7E-05	0.3	2.5E-06	0.3g focused-scope EPRI SMA	GI-199
Indian Point 2	05000354	0.15	4.9E-04	n/a	2.8E-06	seismic PRA	GI-199
Indian Point 3	05000247	0.15	4.9E-04	n/a	3.3E-05	seismic PRA	GI-199
Kewaunee	05000286	0.12	2.8E-04	n/a	1.0E-04	seismic PRA	GI-199
LaSalle 1	05000305	0.2	1.7E-04	n/a	5.1E-06	seismic PRA	GI-199
LaSalle 2	05000373	0.2	1.7E-04	n/a	2.8E-06	seismic PRA	GI-199
Limerick 1	05000374	0.15	1.8E-04	n/a	2.8E-06	seismic PRA	GI-199
Limerick 2	05000352	0.15	1.8E-04	0.15	5.3E-05	reduced-scope EPRI SMA	GI-199
McGuire 1	05000353	0.15	9.5E-05	0.15	5.3E-05	reduced-scope EPRI SMA	GI-199
McGuire 2	05000369	0.15	9.5E-05	n/a	3.1E-05	seismic PRA	GI-199

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Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level Earthquakes (RLE), and Seismic Core Damage Frequencies

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Millstone 1	05000370	0.254	9.3E-05	n/a	3.1E-05	seismic PRA	GI-199
Millstone 2	05000336	0.17	8.3E-05	0.25	1.1E-05	0.3g focused-scope EPRI SMA	GI-199
Millstone 3	05000423	0.17	8.3E-05	n/a	1.5E-05	seismic PRA	GI-199
Monticello	05000263	0.12	9.3E-05	0.12	1.9E-05	modified focused/expended reduced-scope EPRI SMA	GI-199
Nine Mile Point 1	05000220	0.11	1.5E-04	0.27	4.2E-06	0.3g focused-scope EPRI SMA	GI-199
Nine Mile Point 2	05000410	0.15	4.8E-05	0.23	5.6E-06	SPRA and focused-scope EPRI SMA	GI-199
North Anna 1	05000338	0.12	2.1E-04	0.16	4.4E-05	0.3g focused-scope EPRI SMA	GI-199
North Anna 2	05000339	0.12	2.1E-04	0.16	4.4E-05	0.3g focused-scope EPRI SMA	GI-199
Oconee 1	05000269	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oconee 2	05000270	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oconee 3	05000287	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oyster Creek	05000219	0.17	1.5E-04	n/a	1.4E-05	seismic PRA	GI-199
Palisades	05000255	0.2	1.4E-04	n/a	6.4E-06	seismic PRA	GI-199
Palo Verde 1	05000528	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE
Palo Verde 2	05000529	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE
Palo Verde 3	05000530	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE
Peach Bottom 2	05000277	0.12	2.0E-04	0.2	2.4E-05	modified focused-scope EPRI SMA	GI-199
Peach Bottom 3	05000278	0.12	2.0E-04	0.2	2.4E-05	modified focused-scope EPRI SMA	GI-199
Perry	05000440	0.15	2.2E-04	0.3	2.1E-05	0.3g focused-scope EPRI SMA	GI-199
Pilgrim 1	05000293	0.15	8.1E-04	n/a	6.9E-05	seismic PRA	GI-199
Point Beach 1	05000266	0.12	2.0E-04	n/a	1.1E-05	seismic PRA	GI-199
Point Beach 2	05000301	0.12	2.0E-04	n/a	1.1E-05	seismic PRA	GI-199
Prairie Island 1	05000282	0.12	2.0E-04	0.28	3.0E-06	0.3g focused-scope EPRI SMA	GI-199
Prairie Island 2	05000306	0.12	2.0E-04	0.28	3.0E-06	0.3g focused-scope EPRI SMA	GI-199
Quad Cities 1	05000254	0.24	8.2E-04	0.09	2.7E-05	0.3g focused-scope EPRI SMA	GI-199
Quad Cities 2	05000265	0.24	8.2E-04	0.09	2.7E-05	0.3g focused-scope EPRI SMA	GI-199
River Bend	05000458	0.1	2.4E-04	0.1	2.5E-05	reduced-scope EPRI SMA; SSE =	GI-199

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Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level Earthquakes (RLE), and Seismic Core Damage Frequencies							
Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
						0.1g	
Robinson (HR)	05000261	0.2	1.1E-03	0.28	1.5E-05	0.3g full-scope EPRI SMA	GI-199
Saint Lucie	05000335	0.1	1.4E-04	0.1	4.6E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Salem 1	05000389	0.2	2.6E-04	0.1	4.6E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Salem 2	05000272	0.2	2.6E-04	n/a	9.3E-06	seismic PRA	GI-199
San Onofre 2	05000361	0.67	1.2E-04	n/a	1.7E-05	seismic PRA	IPEEE
San Onofre 3	05000362	0.67	1.2E-04	n/a	1.7E-05	seismic PRA	IPEEE
Seabrook	05000311	0.25	1.3E-04	n/a	9.3E-06	seismic PRA	GI-199
Sequoyah 1	05000443	0.18	7.1E-04	n/a	2.2E-05	seismic PRA	GI-199
Sequoyah 2	05000327	0.18	7.1E-04	0.27	5.1E-05	0.3g full-scope EPRI SMA	GI-199
Shearon Harris 1	05000328	0.15	4.6E-05	0.27	5.1E-05	0.3g full-scope EPRI SMA	GI-199
South Texas 1	05000498	0.1	3.0E-05	n/a	6.2E-06	seismic PRA	GI-199
South Texas 2	05000499	0.1	3.0E-05	n/a	6.2E-06	seismic PRA	GI-199
Summer	05000395	0.15	3.9E-04	0.22	3.8E-05	0.3g focused-scope EPRI SMA	GI-199
Surry 1	05000280	0.15	2.2E-04	n/a	5.7E-06	seismic PRA	GI-199
Surry 2	05000281	0.15	2.2E-04	n/a	5.7E-06	seismic PRA	GI-199
Susquehanna 1	05000387	0.1	1.9E-04	0.21	1.3E-05	0.3g focused-scope EPRI SMA	GI-199
Susquehanna 2	05000388	0.1	1.9E-04	0.21	1.3E-05	0.3g focused-scope EPRI SMA	GI-199
Three Mile Island 1	05000289	0.12	1.0E-04	n/a	4.0E-05	seismic PRA	GI-199
Turkey Point 3	05000250	0.15	3.8E-05	0.15	1.0E-05	site-specific approach; SSE=0.15g	GI-199
Turkey Point 4	05000251	0.15	3.8E-05	0.15	1.0E-05	site-specific approach; SSE=0.15g	GI-199
Vermont Yankee	05000271	0.14	1.2E-04	0.25	8.1E-06	0.3g focused-scope EPRI SMA	GI-199
Vogtle 1	05000424	0.2	1.5E-04	0.3	1.8E-05	0.3g focused-scope EPRI SMA	GI-199
Vogtle 2	05000425	0.2	1.5E-04	0.3	1.8E-05	0.3g focused-scope EPRI SMA	GI-199
Waterford 3	05000382	0.1	1.1E-04	0.1	2.0E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Watts Bar	05000390	0.18	2.9E-04	0.3	3.6E-05	0.3g focused-	GI-199

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Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level Earthquakes (RLE), and Seismic Core Damage Frequencies

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
						scope EPRI SMA	
Wolf Creek	05000482	0.12	3.7E-05	0.2	1.8E-05	reduced-scope EPRI SMA	GI-199
		25th percentile	9.6E-05		6.0E-06		
		min	1.6E-05		2.0E-06		
		median	1.7E-04		1.5E-05		
		mean	3.1E-04		2.1E-05		
		max	3.9E-03		1.0E-04		
		75th percentile	2.6E-04		3.2E-05		

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Table: Design Basis Ground Motions and New Review Level Ground Motions Used for Review of Japanese Plants

Plant sites	Contributing earthquakes	New DBGM S ₂	Original DBGM S ₂
Tomari	Earthquakes undefined specifically	550 Gal	370 Gal
Onagawa	Soutei Miyagiken-oki (M8.2)	580	375
Higashidoori	Earthquakes undefined specifically	450	375
Fukushima	Earthquake near the site (M7.1)	600*	370
Tokai	Earthquakes undefined specifically	600	380
Hamaoka	Assumed Tokai (M8.0), etc.	800	600
Shika	Sasanami-oki Fault (M7.6)	600	490
Tsuruga	Urazoko-Uchiikemi Fault (M6.9), etc. → Mera-Kareizaki - Kaburagi(M7.8), Shelf edge+B+Nosaka (M7.7)	800	532
Mihama	C, Fo-A Fault (M6.9)→ Shelf edge+B+Nosaka(M7.7)	750	405
Ohi	C, Fo-A Fault (M6.9)→Fo-A+Fo-B (M7.4)	700	405
Takahama	Fo-A Fault (M6.9) →Fo-A+Fo-B(M7.4)	550	370
Shimane	Shinji Fault (M7.1)	600	455
Ikata	Central Tectonic Structure (M7.6)	570	473
Genkai	Takekoba F. (M6.9) → Enhanced uncertainty consideration	540	370
Sendai	Gotandagawa F.(M6.9), F-A(M6.9)	540	372
Kashiwazaki-Kariwa	F-B Fault (M7.0), Nagaoka-plain-west Fault (M8.1)	2300 (R1 side) 1209 (R5 side)	450
Monjyu (Proto Type FBR)	Shiraki-Niu F.(M6.9) , C F.(M6.9)→Shelf edge+B+Nosaka(M7.7), Small Damping	760	408
Shimokita Reprocessing F.	Deto-Seiho F.(M6.8), Yokohama F.(M6.8)	450	320

*A recent news story contains information that conflicts with the estimate of 370gal. We believe that we have determined that these numbers are for the rock levels and that the estimates in the news story are at the foundation level of each power block. A figure is being developed to explain this.

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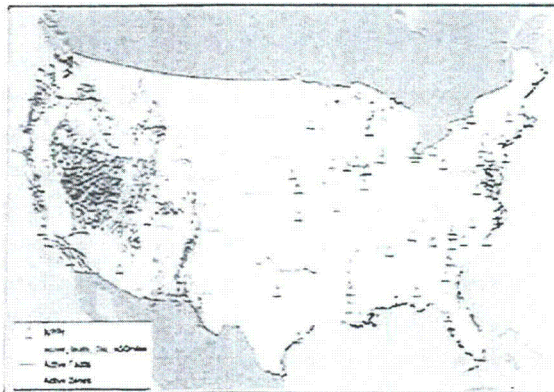
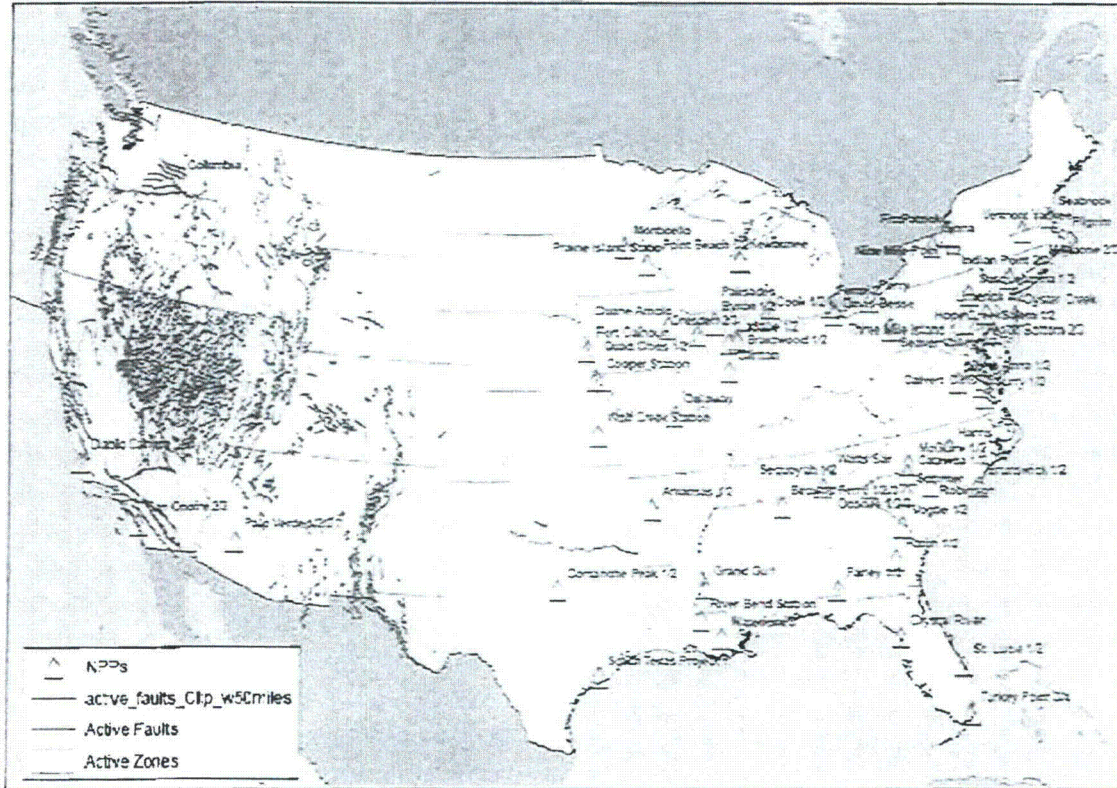
Table: Status of Review of Japanese NPPs to New Earthquake Levels Based on 2006 Guidance

Utility	Site (Unit)	Type	Dec.2010
Hokkaido	Tomari	PWR	△
Tohoku	Onagawa (Unit1)	BWR	◎
	Higashi-dori	BWR	△
Tokyo	Kashiwazaki-Kariwa	BWR	Unit 1,5,6,7 ◎
	Fukushima-No1	BWR	Unit 3 ◇, 5 ◎
	Fukushima-No2	BWR	Unit 4,5 ◎
Chubu	Hamaoka	BWR	△
Hokuriku	Shika (Unit 2)	BWR	◎
Kansai	Mihama(Unit 1)	PWR	◎
	Ohi(Unit 3,4)	PWR	◎
	Takahama (Unit 3,4)	PWR	◎
Chugoku	Shimane (Unit 1, 2)	BWR	◎
Shikoku	Ikata (Unit 3)	PWR	◎
Kyushu	Genkai (Unit 3)	PWR	◎
	Sendai (Unit 1)	PWR	◎
Japan Atomic Power	Tokai-Daini	BWR	○
	Tsuruga	BWR/PWR	△
JAEA	Monju	Proto Type FBR	◎
Japan Nuc. Fuel	Rokkasyo	Reprocessing	◎
◎: NSC review finished, ○: NISA review finished and in NSC review, △: Under review by NISA			

Additional Information: Useful Plots

Plot of Mapped Active Quaternary Faults and Nuclear Plants in the US

It is important to note that this plot somewhat misleading as faults in the central and eastern US are not well characterized. For example, the faults responsible for very large historic events, such as the 1811 and 1812 New Madrid Earthquakes, and the 1886 Charleston Earthquakes have not been conclusively located.



Nuclear Plants in the US Compared to the USGS National Seismic Hazard Maps

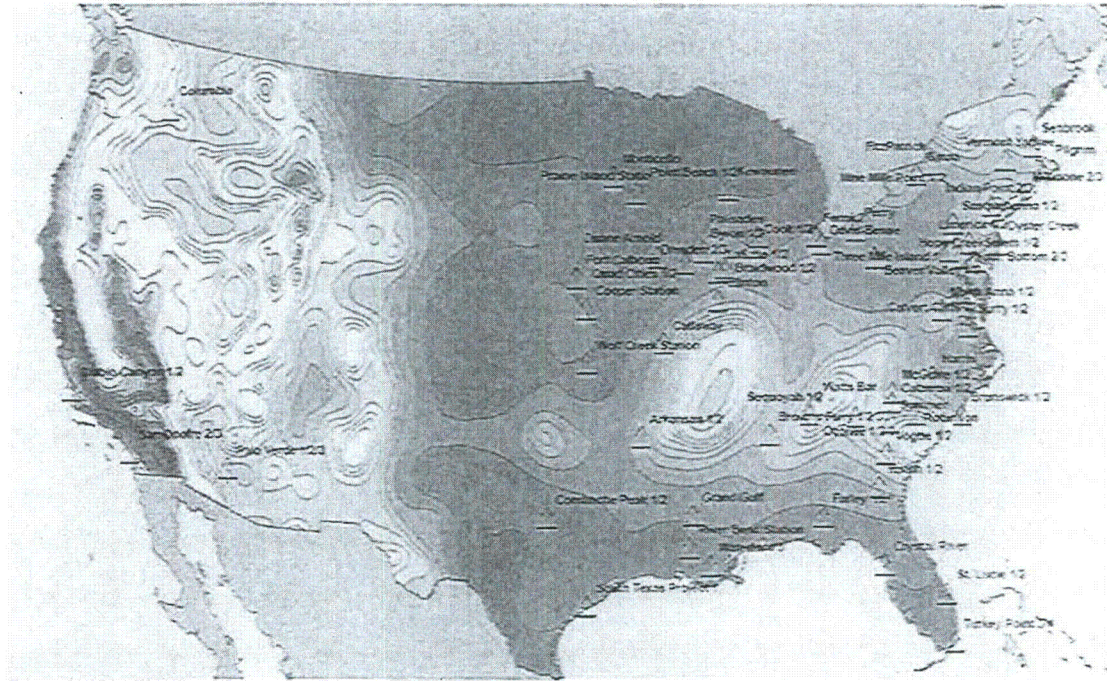
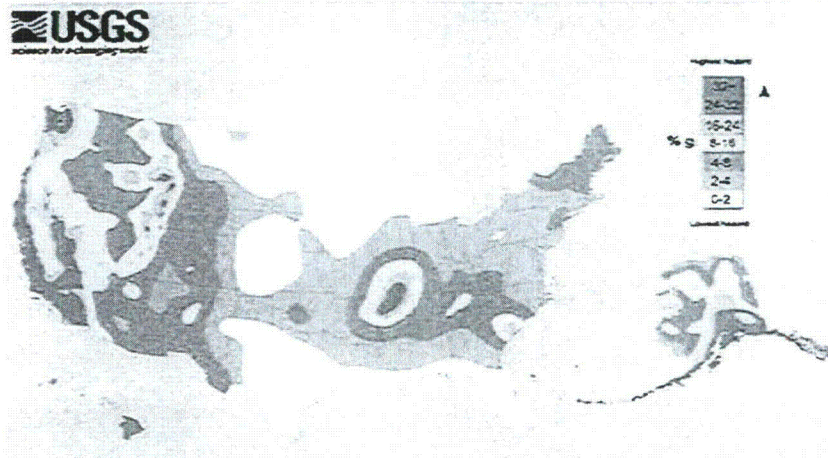


Figure 1: US Nuclear Plants overlain on the USGS National Seismic Hazard Map (PGA of 10% in 50 years from the USGS 2002 maps)

As you can see the seismic source regions in the central and eastern east are not well defined. So to state a specific number of plants that are in the moderate seismicity zones is challenging and open to interpretation. This is just one interpretation, which is provided by the USGS.

USGS US National Seismic Hazard Maps

Many version of this map are available at the USGS website at <http://earthquake.usgs.gov/hazards/>

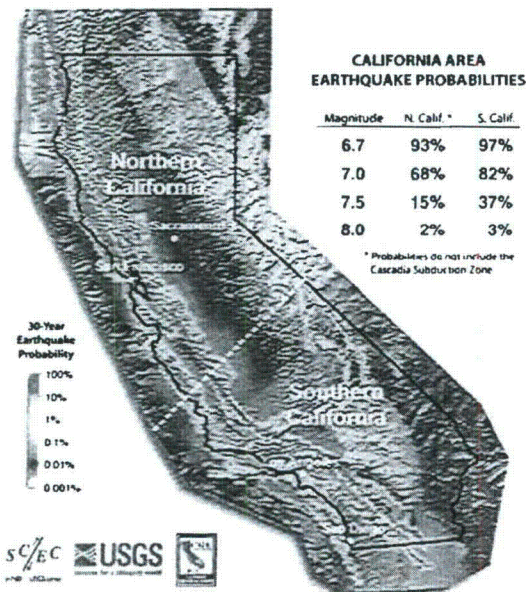


Plot of Nuclear Plants in the US Compared to Recent Earthquakes

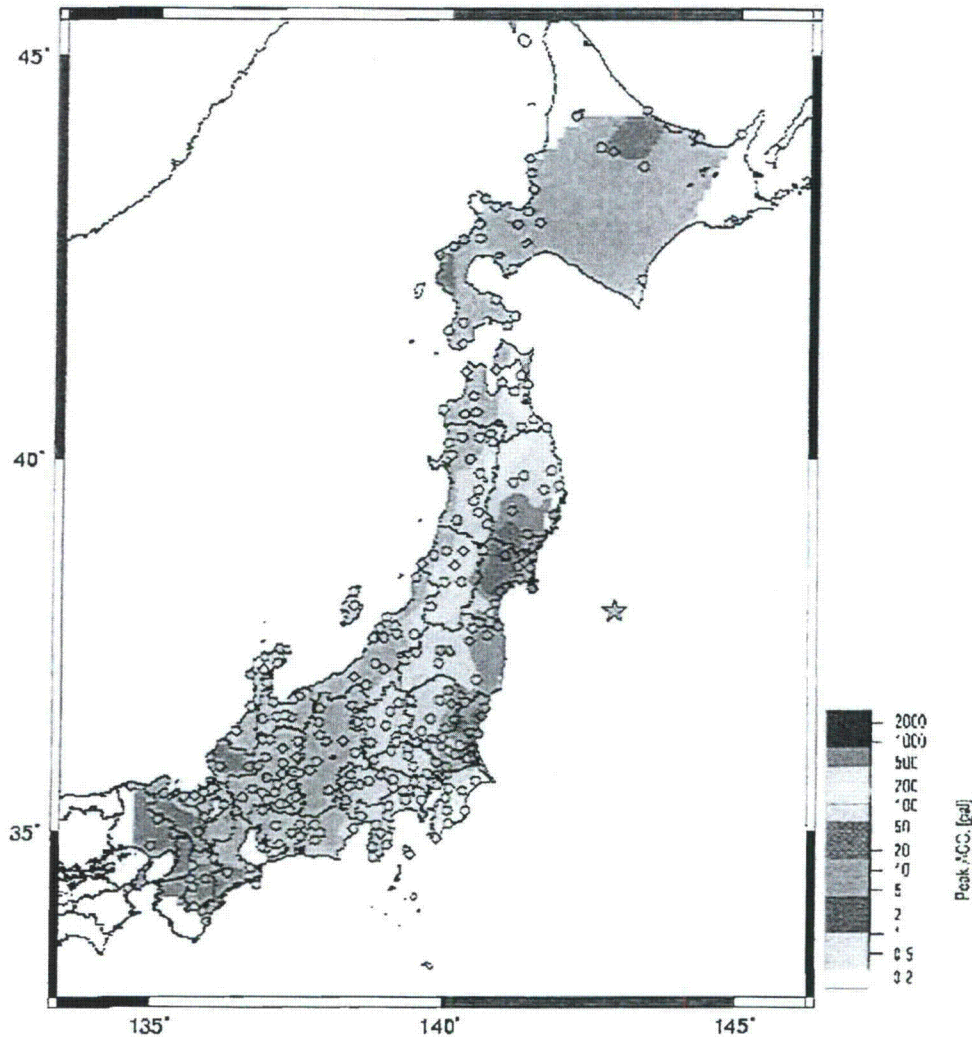


UCERF Map of California Earthquake Probabilities for Northern versus Southern California

This is included in this document as Markey (inaccurately) used the below statistics to say that the probability of a magnitude 7 at SONGS was 82%. The dashed line of this California map is the boundary between northern and southern California used in the UCERF study. As shown in the table, the 30-year probability of an earthquake of magnitude 7.5 or larger is higher in the southern half of the state (37%) than in the northern half (15%).



Plot of ground motion acceleration (PGA) from Japanese earthquake

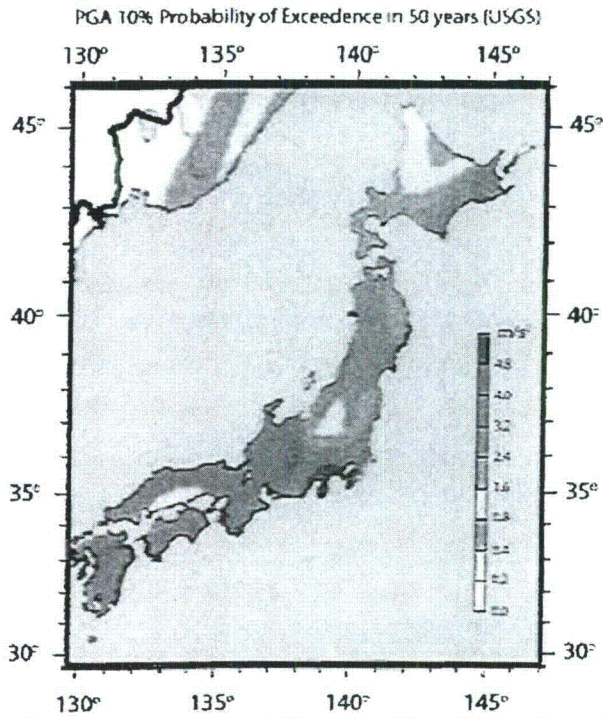


2011/03/11-14:46 38.0N 142.9E 24km M9.0

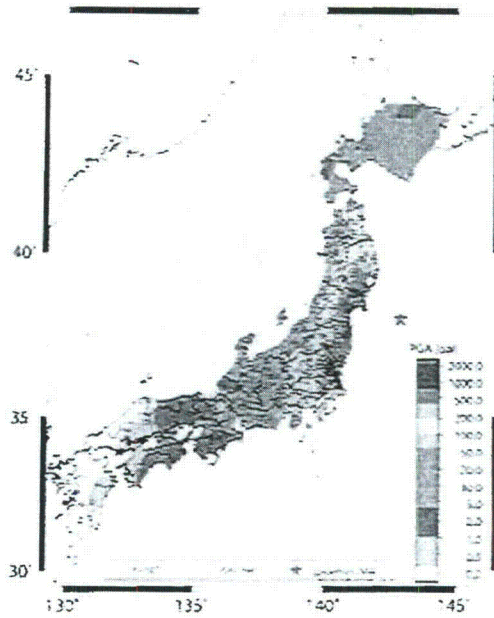
Peak Acceleration Map from K-NET NEID

Table of Nuclear Plant Design and Review Ground Motions for the Plants that Automatically Tripped (JNES)

Plant sites	Contributing earthquakes used for determination of hazard	New DBGM S_x	Original DBGM S_x
Onagawa	Soutei Miyagiken-oki (M8.2)	580 gal (0.59g)	375 gal (0.38g)
Fukushima (both)	Earthquake near the site (M7.1)	600 gal (0.62g)	370 gal (0.37g)
Tokai	Earthquakes specifically undefined	600 gal (0.62g)	380 gal (0.39g)



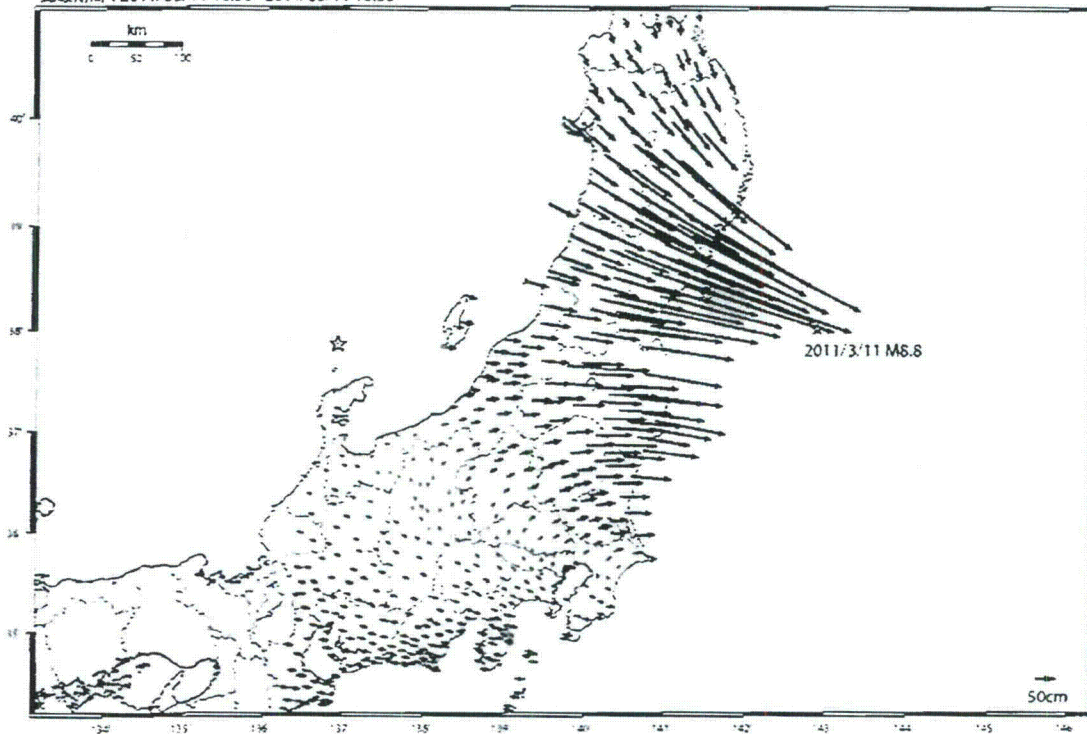
PGA, M_w 9.0 Tohoku Earthquake (NE)



PGA corresponding to a 10% probability of exceedance in 50 years (left) and the PGA experienced during the Tohoku Earthquake (right)

変動ベクトル図 (水平)

基準期間 : 2011/03/01 21:00 - 2011/03/08 21:00
比較期間 : 2011/03/11 16:30 - 2011/03/11 16:30



(基準期 03/01 21:00 - 03/08 21:00)

※震源地 静岡県 950252

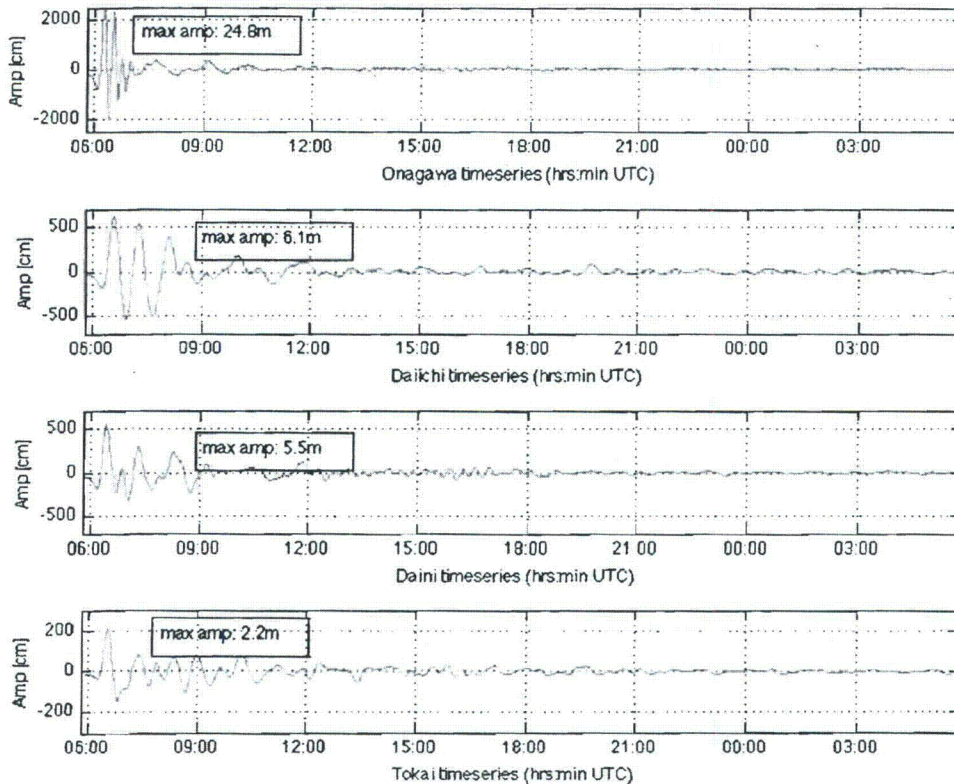
国土地理院

Coseismic slip during the M9.0 earthquake

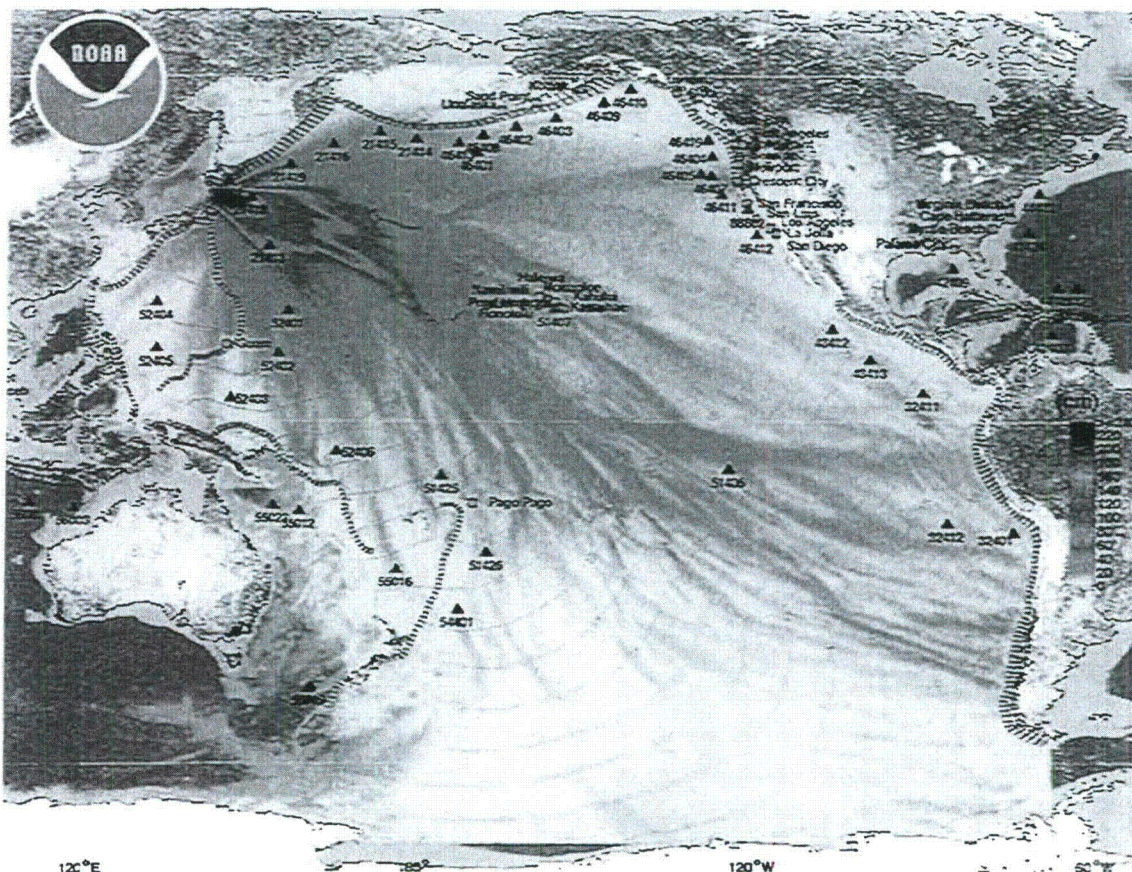
Plot of Tsunami Wave Heights at 5 Meter Bathymetry Offshore at the Japanese Plants (NOAA)

These are results from high-resolution models run by PMEL NOAA staff, who do modeling for the tsunami warning system. While the available bathymetry and topography data used in the model are not of the highest quality at that location, NOAA has confidence in the results, which show good comparisons between model flooding estimates and inundation observations inferred from satellite images. DART measurements are used in the modeling. The images show model time series very close to a shoreline, at about 5m depth. The runup heights (maximum elevation of flooded area) may be different from these amplitudes at shoreline (can be higher or lower, depending on the topographic profile). According to TEPCO, the wave height onshore at the Fukushima plant was 14 meters high.

Offshore wave amplitudes, scaled to the coastline



Plot of Tsunami Wave Heights in the Pacific (NOAA)



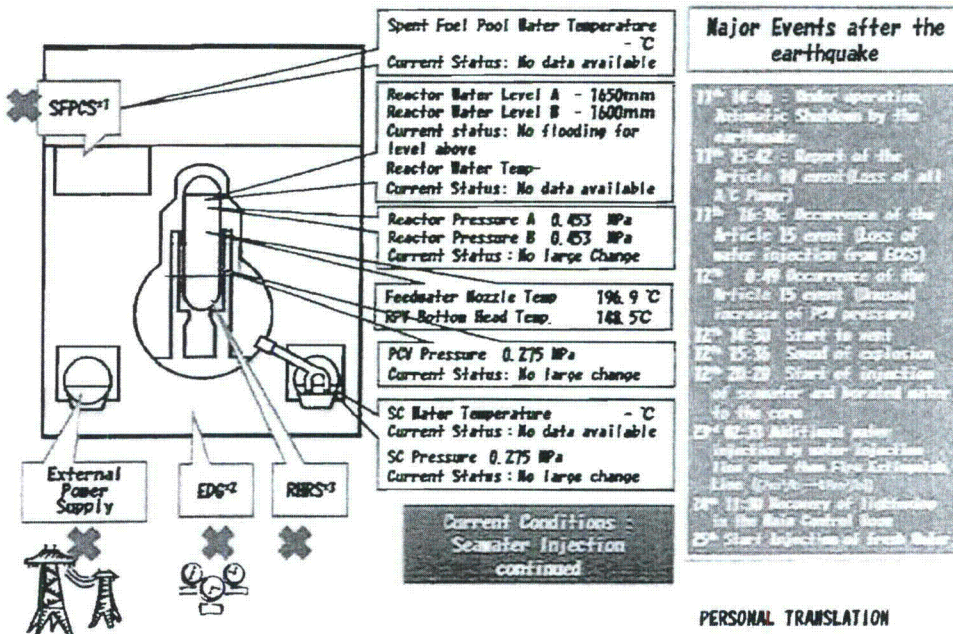
This shows the effect on the US coastline.



I found the numbers at the Onagawa plant unimaginable, so I found a side view picture. It's hard to tell the elevation of the plant.

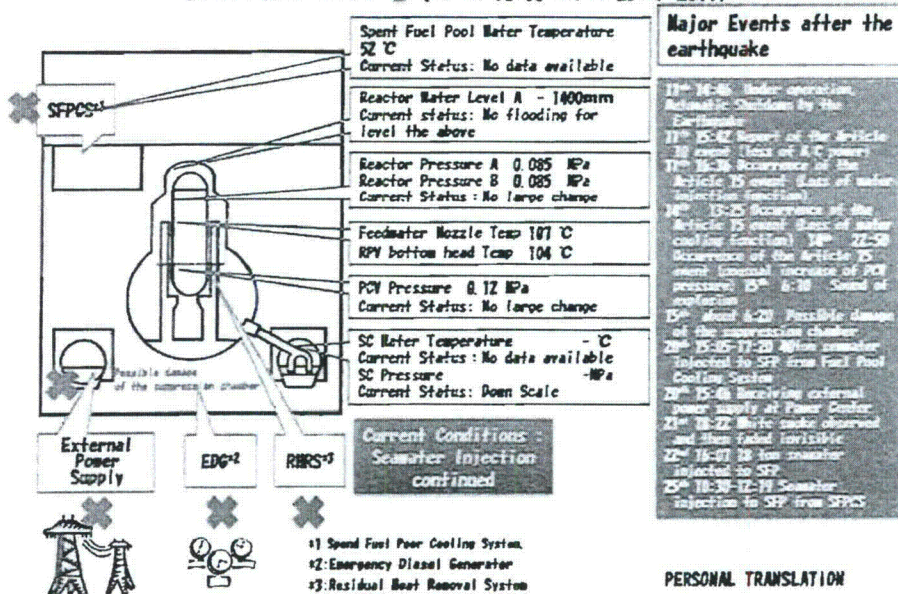
Plant Status (6pm, Japan time, on 3-25-11)

Current Status of Fukushima Dai-ichi Nuclear Power Stations Unit 1 (As of 18:00 March 25th, 2011)



PERSONAL TRANSLATION

Current Status of Fukushima Dai-ichi Nuclear Power Stations Unit 2 (As of 18:00 March 25th, 2011)



PERSONAL TRANSLATION

Current Status of Fukushima Dai-ichi Nuclear Power Stations Unit 3 (As of 18:00 March 25th, 2011)

Spent Fuel Pool Water Temperature - °C	Current Status: No data available
Reactor Water Level A - 1900mm Reactor Water Level B - 2300mm	Current status: No flooding for level above
Reactor Pressure A 0.137 MPa Reactor Pressure B 0.002 MPa	Current Status: No large change
Feedwater Nozzle Temp. -32.4°C (under calibration)	
RPV Bottom Head	110.0°C
PCV Pressure 0.1875 MPa	Current Status: No large change
SC Water Temperature - °C	Current Status: No data available
SC Pressure 0.1895 MPa	Current Status: No large change

Current Status:
Water spray to SFP and Seawater Injection of the core continued

PERSONAL TRANSLATION

- Major Events after the earthquake**
- 12th 12:46 Automatic shutdown by the earthquake
 - 12th 12:42 Alarm on the Article 33 event (Loss of A.C. Power)
 - 12th 12:38 Alarm on the Article 25 event (Loss of water injection function)
 - 12th 12:36 Spray to SFP
 - 12th 12:28 Increase of the Article 15 event (Normal increase of PCI pressure)
 - 12th 12:28 Sound of vibration
 - 12th 12:20 Alarm water observed
 - 12th 9:46 - 10:03 Water discharge by the activation of Self-Defense Force (A. Force)
 - 12th 12:05 - 22:09 Water spray by High pressure water injection tracks (No. 1 & 2)
 - 12th Self-Defense Force (A. Force)
 - 12th 10:00 - 10:20 Water spray by A. Force member Self-Defense Force (A. Force)
 - 12th 8:45 Water spray (A. Force member) 1 floor
 - 12th 8:05 - 12:00
 - 12th 12:00 - 22:00 Water spray (Tokyo Fire Department)
 - 12th 11:00 Increase of PCI pressure (SGRW) and decrease
 - 12th 12:30 - 21:50 Water spray (Tokyo Fire Department)
 - 12th 12:55 Black smoke observed 12:55 observed
 - 12th 12:20 - 12:30 Upper Section of Tokyo and Guide
 - 12th 22:45 Recovery of Lightning in NW
 - 12th 12:05 12:20 Seawater Injection to SFP from SFPCS
 - 12th 12:20 Black smoke observed 22:30 and 22:40 observed
 - 12th 05:15 - 05:25 12th fire monitor to SFP
 - 12th 12:20 - 16:30 Water spray by Kanashi Fire Agency
 - 12th 12:42 Start injection track water to the core

Current Status of Fukushima Dai-ichi Nuclear Power Stations Unit 4 (As of 18:00 March 25th, 2011)

**Periodical Outage:
At the time of Earthquake**

Pool water temperature not available

No fuel in the core

Current Conditions: No fuel the RPV. Water is evaluated to remain in the Pool (TEPCO)	
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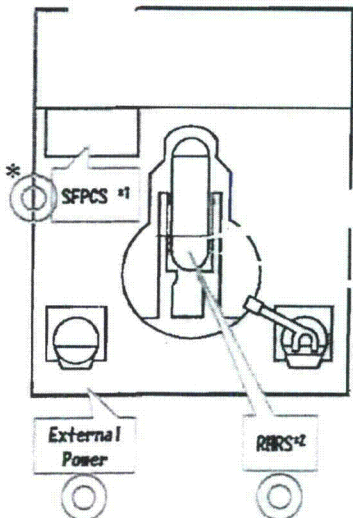
1) Spent Fuel Pool Cooling System.
2) Emergency Diesel Generator
3) Residual Heat Removal System

PERSONAL TRANSLATION

- Major events after the earthquake**
- Plant under periodical outage at the time of earthquake
 - 12th 12:42 Alarm on the Article 33 (Loss of all A.C. Power)
 - 12th 04:30 Water temperature in the Spent Fuel Pool, 10°C
 - 12th 4:14 Rupture of wall in the 4th floor basement
 - 12th 9:30 Fire occurred in the 3rd floor (12:25 extinguished)
 - 12th 5:45 Fire occurred. EDG could not confirm any fire on site. 10:15
 - 12th 09:43 Spray to SFP by Self-Defense Force
 - 12th 12:30 - 19:44 Spray to SFP by Self-Defense Force
 - 12th 06:17 - 06:41 Spray to SFP by Self-Defense Force
 - 12th 12:00 Cable installation to Power Center completed
 - 12th 10:35 Connected to Power Center
 - 12th 11:17 - 20:32 Spray by Concrete Injection Truck
 - 12th 10:00 - 12:42 4/f fire
 - 12th 14:30 - 17:30 4/f fire
 - 12th 06:05 - 10:20 Seawater Injection to SFP from SFPCS
 - 12th 12:30 Spray by Concrete Pump Truck

Current Status of Fukushima Dai-ichi Nuclear Power Stations Unit 5 (As of 18:00 March 25th, 2011)

Water Temperature in SFP: 37.9 °C
Current Status: Recovery of SFPCS #1



Periodical Outage: At the time of Earthquake

Reactor Pressure :
0.108MPa
Reactor Water Level :
2.288mm
Reactor Water
Temperature :
43.2C
Current Status : Pressure
etc. under control

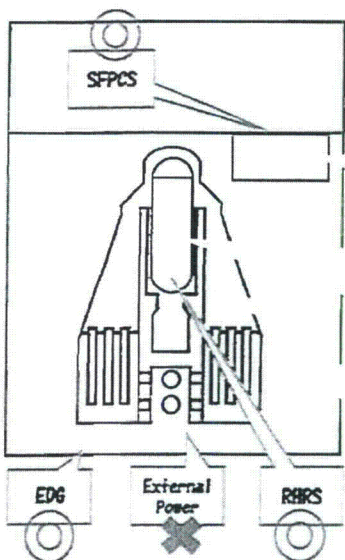
PRV Temp. : Monitored by
RPV water

Current Status:
20th 14:30 cold shutdown
21st 11:30 Start receiving
electricity from external
power supply
23rd 17:28 RR pump
automatically stopped when
switched to permanent power
supply
24th 16:34 Repair of RR
pump completed
26th 16:35 Start cooling

#1: Spent Fuel Pool Cooling
System
#2: Residual Heat Removal System

PERSONAL TRANSLATION

Conditions of Fukushima Dai-ichi Nuclear Power Stations Unit 6 (As of 18:00 March 25th, 2011)



Periodical Outage: At the time of Earthquake

Pool Water : 37.9 °C
Current Status : Recovery of
heat removal established

Reactor Pressure : 0.108 MPa
Reactor Water Level : 2.288mm
Reactor Water Tem : 43.2C
Current Status : Pressure
under control

PRV Temp. : Monitored by
RPV water

Current Status:
20th 19:27 cold shutdown
22nd 19:52 Start receiving
electricity at startup
transformer

#1 Spent Fuel Pool Cooling System,
#2: Emergency Diesel Generator
#3: Residual Heat Removal System

PERSONAL TRANSLATION

Fact Sheets

Fact Sheet: Summarization of the NRC's Regulatory Framework for Seismic Safety (High level overview)

The seismic regulatory basis for licensing of the currently operating nuclear power reactors is contained in the following regulations: 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," including the "General Design Criteria for Nuclear Power Plants," and 10 CFR Part 100 ("Seismic and Geologic Siting Criteria For Nuclear Power Plants") and Appendix A to that Part, which describes the general criteria that guide the evaluation of the suitability of proposed sites for nuclear power plants. General Design Criterion (GDC) 2, "Design Bases for Protection Against Natural Phenomena," in Appendix A requires that the structures and components in nuclear power plants be designed to withstand the effects of natural phenomena, including earthquakes and tsunamis, without loss of capability to perform their intended safety functions. GDC 2 also requires that the design bases include sufficient margin to account for the limited accuracy, quantity, and period of time in which the historical data have been accumulated. The earthquake which could cause the maximum vibratory ground motion at the site is designated as the **Safe Shutdown Earthquake (SSE)**. Under SSE ground motions, nuclear power plant structures and components must remain functional and within applicable stress, strain, and deformation limits. Each plant must also have seismic instrumentation to determine if the **Operating Basis Earthquake (OBE)**, typically one-half or one-third the level of the SSE, has been exceeded. If the OBE is exceeded or significant plant damage has occurred, then the nuclear power plant must be shutdown.

Each plant is designed to a ground-shaking level (the SSE) that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of the earthquake, the distance of the earthquake to the site, and the local geology. The magnitude alone cannot be used to predict ground motions. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant. This required an assessment of earthquakes that had occurred in the region around each plant site.

Design basis loads for nuclear power plant structures include combined loads for seismic, wind, tornado, normal operating conditions (pressure and thermal), and accident conditions. Codes and standards, such as the American Society of Mechanical Engineers, the American Concrete Institute, and the American Institute of Steel Construction, are used in the design of nuclear power plant structures to ensure a conservative, safe design under design basis loads.

In the mid to late 1990s, NRC staff reviewed the potential consequences of severe earthquakes (earthquakes beyond the safety margin included in each plant's design basis), as part of the Individual Plant Examination of External Events (or IPEEE) program. From this review, the staff determined that seismic designs of operating plants in the United States have adequate safety margins, for withstanding earthquakes, built into the designs. Currently, the NRC staff is reassessing the seismic designs of operating plants through our Generic Issues program. The initial results of this assessment found that: 1) seismic hazard estimates have increased at some operating plants in the central and eastern US; 2) there is no immediate safety concern, plants have significant safety margin and overall seismic risk estimates remain small; and 3) assessment of updated seismic hazards and plant performance should continue.

Fact Sheet: Summarization of the NRC's Regulatory Framework for Seismic Safety (The policy wonk version)

(Jon to clean up upon his return from vaca) NRC's regulatory framework for seismic safety of nuclear reactors and facilities is based on: reactor site suitability with respect to geological, seismological, hydrological and other site specific hazards; classification of structures, systems and components (SSCs) as Seismic Category I, seismic design of Seismic Category I SSCs, seismic and environmental qualification of Category I SSCs; and maintenance and in-service inspection of equipment and structures, including the containment structure. The NRC's regulatory framework with respect to seismic issues has evolved through time.

Currently Operating Reactors (licensed prior to 1997):

The seismic regulatory basis for licensing of the currently operating nuclear power reactors is contained in the following regulations: 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," including the "General Design Criteria for Nuclear Power Plants," and 10 CFR Part 100 ("Seismic and Geologic Siting Criteria For Nuclear Power Plants") and Appendix A to that Part which describes general criteria that guide the evaluation of the suitability of proposed sites for nuclear power plants. General Design Criterion (GDC) 2, "Design Bases for Protection Against Natural Phenomena," in Appendix A requires that the SSCs important to safety be designed to withstand the effects of natural phenomena, including earthquakes, tsunamis, and seiches without loss of capability to perform their intended safety functions. GDC 2 requires that the design bases shall include sufficient margin to account for the limited accuracy, quantity, and period of time in which the historical data have been accumulated, and shall consider appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena. The earthquake which could cause the maximum vibratory ground motion at the site is designated the **Safe Shutdown Earthquake (SSE)**.

Each plant is designed to a ground-shaking level (the SSE) that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of an earthquake and the distance from the fault to the site. The magnitude alone cannot be used to predict ground motions. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant based on an assessment of earthquakes that had occurred in the region historically. There is no specification of frequency of occurrence in the deterministic approach. There is no requirement for a periodic reassessment of the seismic design basis.

Paragraph VI(a)(3) of Appendix A requires that suitable seismic instrumentation must be provided so that the seismic response of nuclear power plant features important to safety can be determined promptly after an earthquake to permit comparison of such response to that used as the design basis. Such a comparison is needed to decide whether the plant can continue to be operated safely and to permit appropriate action in a timely manner. Appendix A requires that in addition to seismic loads, including aftershocks, applicable concurrent functional and accident induced loads shall be taken into account in the design of safety-related SSCs. Paragraph VI(c) requires that seismically induced flood, water waves from either locally or distantly generated seismic activity and other design conditions shall be taken into account in nuclear power plant design.

Proposed New Reactors (submitted after 1997):

In 1997 new rules governing reactor siting were established. 10 CFR Part 50 Appendix A (GDC 2), 100.23 and Appendix S establish the seismic design basis for plants licensed after January 10, 1997. Similar to pre-1997, Appendix S defines the SSE as "the *Safe-shutdown earthquake ground motion* is the vibratory ground motion for which certain structures, systems, and components must be designed to remain functional." 10 CFR Part 100.23 "Geologic and Seismic Siting Criteria" requires that the applicant determine the SSE and its uncertainty, the potential for surface tectonic and nontectonic deformations.

Regulatory Guide 1.165 (and subsequently Regulatory Guide 1.208) provides guidance on satisfying 10 CFR Part 100.23, one of which is performing a probabilistic seismic hazard assessment (PSHA). Appendix S to 10 CFR Part 50 requires for SSE ground motions, SSCs will remain functional and within applicable stress, strain, and deformation limits. The required safety functions of SSCs must be assured during and after the vibratory ground motion through design, testing, or qualification methods. The evaluation must take into account soil-structure interaction effects and the expected duration of the vibratory motions. Appendix S also requires that the horizontal component of the SSE ground motion in the free field at the foundation elevation of structures must be an appropriate response spectrum with a peak ground acceleration (PGA) of at least 0.10g. Design basis loads for nuclear power plant structures, important to safety, include combined loads for seismic, wind, tornado, normal operating conditions (pressure and thermal), and accident conditions. Codes and standards, such as the ASME B&PV Code, the American Institute of Concrete Institute (ACI-359/ASME Section III Division 2, ACI-349) and the American Institute of Steel Construction (AISC N690), are used in the design of nuclear power plant structures to ensure a conservative, safe design under design basis loads.

In contrast to the deterministic approach used prior to 1997, the probabilistic method is used and explicitly accounts for possible earthquakes of various magnitudes that come from all plausible potential sources (including background seismicity) and the likelihood that each particular hypothetical earthquake occurs. The PSHA process provides a complete characterization of the ground motion and comprehensively addresses uncertainties in nuclear power plant seismic demands. The PSHA results are major input to seismic risk evaluation using either SPRA or SMA approaches. As for plants licensed prior to 1997, there is no requirement for a periodic reassessment of the seismic design basis.

In addition to the nominal seismic design, all new generation reactors have to demonstrate a **Seismic margin of 1.67** relative to the site-specific seismic demands. These designs are required to perform a Probabilistic Risk Assessment (PRA) based seismic margins analysis (SMA) to identify the vulnerabilities of their design to seismic events. The minimum high confidence, low probability of failure (HCLPF) for the plant should be at least 1.67 times the ground motion acceleration of the design basis safe-shutdown earthquake (SSE).

The Standard Review Plan (NUREG-0800), Regulatory Guides and Interim Staff Guidance provide the basis for staff reviews of existing reactors and new license applications. Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," requires that suitable instrumentation must be provided so that the seismic response of nuclear power plant features important to safety can be evaluated promptly after an earthquake. Paragraph 10 CFR 50.54(ff) and Paragraph IV(a)(3) of Appendix S to 10 CFR Part 50 requires shutdown of the nuclear power plant if vibratory ground motion exceeding that of the operating basis earthquake ground motion (OBE) occurs. The OBE is typically one-half or one-third the level of the SSE. If systems, structures, or components necessary for the safe shutdown of the nuclear power plant are not available after occurrence of the OBE, the licensee must consult with the NRC and must propose a plan for the timely, safe shutdown of the nuclear power plant. Paragraph IV(c) requires that seismically induced flood, water waves from either locally or distantly generated seismic activity and other design conditions shall be taken into account in nuclear power plant design so as to prevent undue risk to health and safety of the public.

Fact Sheet: Summarization of the NRC's Regulatory Framework for Seismic Safety (The cliff notes)

NRC Regulations and Guidelines for Seismic Safety:

- The seismic regulatory basis for licensing of the currently operating nuclear power reactors is contained in the following regulations:
 - 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," including the "General Design Criteria for Nuclear Power Plants," and
 - 10 CFR Part 100 ("Seismic and Geologic Siting Criteria For Nuclear Power Plants") and Appendix A to that Part, which describes the general criteria that guide the evaluation of the suitability of proposed sites for nuclear power plants.
- In addition, General Design Criterion (GDC) 2, "Design Bases for Protection Against Natural Phenomena," in Appendix A requires that:
 - The structures and components in nuclear power plants be designed to withstand the effects of natural phenomena, including earthquakes and tsunamis, without loss of capability to perform their intended safety functions.
 - GDC 2 also requires that the design bases include sufficient margin to account for the limited accuracy, quantity, and period of time in which the historical data have been accumulated.
 - The earthquake which could cause the maximum vibratory ground motion at the site is designated as the **Safe Shutdown Earthquake (SSE)**. Under SSE ground motions, nuclear power plant structures and components must remain functional and within applicable stress, strain, and deformation limits.
 - Each plant must also have seismic instrumentation to determine if the **Operating Basis Earthquake (OBE)**, typically one-half or one-third the level of the SSE, has been exceeded. If the OBE is exceeded or significant plant damage has occurred, then the nuclear power plant must be shutdown.

Plant Design /Design Basis (Seismic):

- Each plant is designed to a ground-shaking level (the SSE) that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of the earthquake, the distance of the earthquake to the site, and the local geology. The magnitude alone cannot be used to predict ground motions. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant. This required an assessment of earthquakes that had occurred in the region around each plant site.
- Design basis loads for nuclear power plant structures include combined loads for seismic, wind, tornado, normal operating conditions (pressure and thermal), and accident conditions. Codes and standards, such as the American Society of Mechanical Engineers, the American Concrete Institute, and the American Institute of Steel Construction, are used in the design of nuclear power plant structures to ensure a conservative, safe design under design basis loads.

Fact Sheet: Summarization of the NRC's Regulatory Framework for Tsunami

Review Guidance and Guidelines Related to Tsunami:

- General Design Criterion 2 (GDC 2), 10CFR50, requires, in part, that structures, systems, and components important to safety be designed to withstand the effects of natural phenomena such as floods, tsunami, and seiches without loss of capability to perform their safety functions. Design bases for these SSCs are also required to reflect:
- 10 CFR 100.23, requires, in part, that the size of seismically induced floods and water waves that could affect a site from either locally or distantly generated seismic activity must be determined.
- RG 1.102 – Flood Protection for Nuclear Power Plants, describes types of flood protection acceptable to the NRC staff
 - Exterior Barriers (e.g.)
 - Levee – embankment to protect land from inundation
 - Seawall or floodwall - a structure separating land and water areas, primarily to prevent erosion and other damages due to wave action
 - Bulkhead – similar to seawall, purpose is to restrain the land area
 - Incorporated Barriers
 - Protection provided by specially designed walls and penetration closures. Walls are usually reinforced concrete designed to resist static and dynamic forces of a Design Basis Flood Level of a Probable Maximum Flood.
- RG 1.59 – Design Basis Floods for Nuclear Power Plants
 - The most severe seismically induced floods reasonably possible should be considered for each site.
 - Tsunami requires consideration of seismic events of the severity of the Safe Shutdown Earthquake occurring at the location that would produce the worst such flood at the nuclear power plant site.
- US NRC, Standard Review Plan, "Probable Maximum Tsunami Flooding," Section 2.4.6, Rev. 2
 - Areas of Review
 - Probable maximum tsunami postulated for a site should include wave runup and drawdown
 - Hydrologic characteristics of maximum locally and distantly generated tsunami (e.g., volcanoes, landslides)
 - Geological and seismic characteristics of potential tsunami faults (e.g., magnitude, focal depth, source dimensions, fault orientation, and vertical displacement)

Fact Sheet: Tsunami Assessment Method for Nuclear Power Plants in Japan

[This section is a placeholder and needs to be expanded]

- An overview of the tsunami assessment method for NPP in Japan is available in ADAMs:
ML110770010
- Information is also available at:
http://www.jsce.or.jp/committee/ceofnp/Tsunami/eng/tsunami_eng.html
- The Japan Society of Civil Engineers is currently finalizing guidance PTHA = probabilistic tsunami hazard analysis

Fact Sheet: Summarization of the NRC's Regulatory Framework for Flooding

Flooding Issues:

- General Design Criterion 2 (GDC 2), 10CFR50, requires, in part, that structures, systems, and components important to safety be designed to withstand the effects of natural phenomena such as floods, tsunami, and seiches without loss of capability to perform their safety functions. Design bases for these SSCs are also required to reflect:
 - Appropriate consideration of the most severe of the natural phenomena that have been historically reported for the site and surrounding region, with sufficient margin for the limited accuracy and quantity of the historical data and the period of time in which the data have been accumulated.
 - Appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena.
 - The importance of the safety functions to be performed.
- Design basis floods for most of the present fleet of operating reactors were calculated using deterministic methods to determine the maximum credible flood levels at the site. These deterministic methods include the site specific calculation of parameters such as the probable maximum precipitation, which is defined as the theoretically greatest depth of precipitation for a given duration that is physically possible over a particular drainage basin. Other potential flooding hazards such as flooding due to storm surge, river flooding, coastal flooding including tsunamis, are evaluated at each site using maximum credible levels from each hazard. Over the life of the operating reactor, if new information becomes available that could affect the design basis, licensees are required to evaluate the new information. Based on this review, if needed, licensees are required to take appropriate mitigation measures, update their final safety analysis report and submit it to the NRC for review and approval.
- In order to impose new requirements on existing plants, the NRC must be able to justify the new requirements in accordance with the "Backfit Rule" (10 CFR 50.109).

Questions and Answers for Flooding Issues

180) Does the NRC consider severe floods in the design of nuclear power plants?

Yes. NRC regulations require that nuclear power plants are, at all times, capable of safely shutting down and maintaining a safe shutdown condition under severe flooding situations. Safety-related Structures, Systems and Components (SSCs) of Nuclear reactors in the U.S. are required to withstand the design basis flood (DBF). The design basis flood may be caused by the following natural Phenomena:

- Intense rainfall occurring at the site (known as local intense precipitation).
- Intense rainfall (known as the Probable Maximum Precipitation) occurring on other areas of the watershed leading to riverine or coastal flooding (known as Probable Maximum Flood" or "PMF".
- Floods from upstream dam failure or a combination of upstream dam failures.
- Failure of On-site Water Control or Storage Structures (i.e. tanks).
- Storm Surge, Seiche and Tsunami including wave effects.(See Tsunami Q&A Sheet)
- Flooding caused by ice effects (i.e. ice dams both upstream and downstream).
- Floods caused by diversions of stream channels toward the site.

- Other potential site specific flood hazard(s).

181) What about droughts and conditions which lead to low water? Are these considered?

Yes. Impacts to the plant from low water conditions brought about by ice effects, downstream dam breach, tsunamis, hurricanes and channel diversions away from the site are reviewed to ensure the plant remains safe under these scenerios.

182) Periods of long rainfall can cause the groundwater elevation to rise which can cause structures such as deeply embedded tanks to fail due to buoyancy. Are nuclear power plants designed to withstand this effect?

Yes. Worst-case groundwater levels are estimated for each site and the impacts of these levels are considered in the design of the plant to ensure the plant remains safe under these conditions. During the safety review, impacts due to groundwater levels and other hydrodynamic effects on the design bases of plant foundations and other safety-related structures systems and components (SSCs) are evaluated. Impacts to a safety-related structure such as a deeply embedded tank or a structure containing a deeply embedded tank are considered in the safety review.

183) Some of the Reports from the National Weather Service used to estimate the design precipitation are 30-40 years old. Are these estimates still valid?

The NRC has funded research by the U.S. Bureau of Reclamation to review the information and methods developed by the National Weather Service and the U.S. Army Corps of Engineers (HMR 51), focusing on South and North Carolina. To date, reviews of precipitation records from extreme storm events (e.g., tropical storms, hurricanes) since the publication of HMR 51 does not indicate any exceedance or potential for exceedance of those precipitation (PMP) estimates in this region. We have not seen any information or data that would indicate that HMR precipitation (PMP) estimates for the U.S. have been exceeded. As expected, individual point rainfall gauges have recorded rainfall amounts that have exceeded these areal estimates.

Fact Sheet: Summarization of Seismological Information from Regional Instrumentation

Placeholder: text document available from Rasoci. It just needs to be formatted and added to this section.

Fact Sheet: Seismic considerations of Western U.S. NPP sites

Placeholder: to be developed (Information below is based on a presentation by C. Munson and J. Ake).

Regulatory Background:

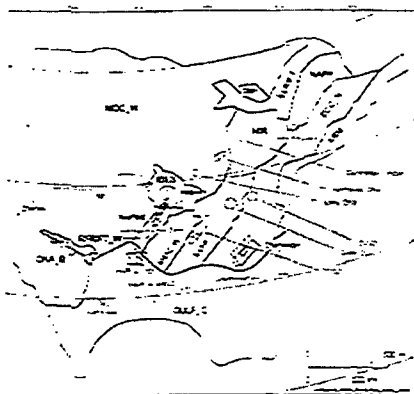
- The principal geologic and seismic considerations for site suitability and engineering criteria are given in 10 CFR 100.23 and Appendix S to Part 50.
- Regulatory Guide 1.208 provides more detailed guidance on:
 - Investigations and applications of PSHA and development of the ground motion response spectra (GMRS). Contains some general discussion on WUS approaches
 - Application of the Senior Seismic Hazard Analysis Committee (SSHAC) guidelines for determination of source characterization and GMPEs (NUREG/CR-6372)
 - Integrated site response (NUREG/CR-6728)
- ANS/ANSI Standards 2.27 (*Criteria for Investigations of Nuclear Facility Sites for Seismic Hazard Assessments*) and 2.29 (*Probabilistic Seismic Hazards Analysis*) have been issued subsequent to the publication of RG 1.208
- Regulatory requirements are the same for WUS and CEUS

WUS Seismic Siting Considerations:

- For NPP siting studies in the central and eastern U.S. (CEUS), NRC staff has endorsed existing regional seismic source characterization (EPRI-SOG-1989, LLNL-1994) and ground motion models (EPRI-GM-2004) as starting points for seismic hazard assessment.
- A new multi-sponsor source characterization project will replace EPRI-SOG and LLNL: CEUS-SSC (2011). Site specific updates still required.
- No such endorsed regional studies exist for potential NPP sites in the western U.S. (WUS).

CEUS-SSC Model:

- Discrete seismic sources and regional zones of seismic activity defined.
- Developed following SSHAC Guidelines
- Areas west of ~103.5 W do not have established source characterization or ground motion models.



Geotectonic Regions, RLME Source Zones
 Zones of Elevated Seismicity and "Hot Spots"

USGS-National Seismic Hazard Mapping Project: WUS Source Characterization Model:

- Identified major regional zones and fault sources.

- Focus on hazard impacts at annual exceedance levels of interest to Building Codes, potential for missing issues important to critical facilities.
- National fold and fault database a valuable tool for starting any new PSHA in WUS.

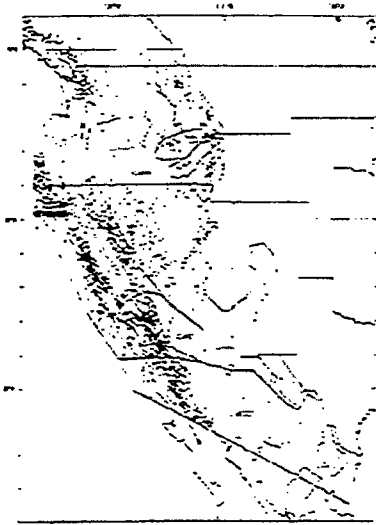


Figure 10. Historical tectonic activity related to tectonic activity in the regional area. Figure 10 is a summary resulting from a review of the Western United States Geological Survey maps, National Earthquake Information Center (NEIC) Catalog, California Geological Survey (CGS) Catalog, California State University (CSU) Catalog, and the National Earthquake Information Center (NEIC) Catalog. The map shows the locations of major faults and folds in the Western United States. The map is based on data from the National Earthquake Information Center (NEIC) Catalog, California Geological Survey (CGS) Catalog, California State University (CSU) Catalog, and the National Earthquake Information Center (NEIC) Catalog. The map is based on data from the National Earthquake Information Center (NEIC) Catalog, California Geological Survey (CGS) Catalog, California State University (CSU) Catalog, and the National Earthquake Information Center (NEIC) Catalog.

Identified Faults in the WUS:

- There are many more identified faults in the WUS than in the CEUS. Not all well characterized.
- Within 320 km regional area of investigation potential for large number of sources requiring characterization.
- May require hazard informed, phased approach

Uncertainty and SSHAC:

- Significant uncertainties exist regarding appropriate ground motion and seismo-tectonic models, robustness and applicability of various of data sets, etc.

- SSHAC provides a framework for incorporating experts into scientific assessments through structured processes and interactions
- Fundamental concepts behind guidelines
 - Views of the larger technical community are fundamental inputs
 - Competing scientific hypotheses can be considered and uncertainties captured
 - PSHA is a snapshot in time of our knowledge and uncertainties
- Application of SSHAC Guidelines necessary for new WUS sites

Significant Seismic Siting Considerations for WUS:

- Goal: Efficient review process consistent with NRC Regulations and Guidance
- Potential Issues:
 - Transition between CEUS and WUS ground motion characteristics, Intermountain West
 - Definition of "rock" shear-wave velocity
 - Specific details for performing hazard informed screening evaluations (focus on characterizing important sources)
 - Robustness of data used in screening assessments
 - Applicability of minimum slip-rate estimates as a screening tool
 - Development of comprehensive, regional moment magnitude based seismicity catalog
 - Maximum magnitude determination for background zones
 - Appropriate minimum magnitude for hazard calculations
 - Applicability of geodetic information for seismic source characterization
 - Appropriate SSHAC Level for new studies (Level 3/4)
 - Methodologies and bases for smoothing of seismicity
 - Development of realistic spectral shapes for regions influenced by Cascadia subduction zone
 - Consider what has been working in the CEUS

Path Forward:

- Interaction with Stakeholders (Industry, DOE, USGS)
- Develop Interim Staff Guidance
- Emphasize integration between site characterization/hazard assessment and engineering
- Evaluate the potential for engineering solutions (ex., base isolation)

Fact Sheet: Regulatory Framework for Protection of Nuclear Power Plants against Tsunami Flooding

Nuclear power plants are designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunamis, and seiches without loss of capability to perform their safety functions. The word tsunami literally means harbor wave. Tsunamis can be generated by large offshore earthquakes (usually greater than magnitude 6.5), submarine or on shore land slides or volcanoes. Some large onshore earthquakes close to the shoreline can generate tsunami. The Nuclear Regulatory Commission (NRC) requires all nuclear power plants to be protected against earthquakes, tsunamis and other natural hazards.

Background

Protection against tsunami effects was required for all operating plants and is required for all new reactors. Following the Indian Ocean tsunami on December 26, 2004, the President moved to protect lives and property by launching an initiative to improve domestic tsunami warning capabilities. This plan was placed under the auspices of the National Science and Technology Council through the President's initiative in July 2005 in the context of a broad national effort of tsunami risk reduction, and United States participated in international efforts to reduce tsunami risk worldwide. In response to the president's initiative, the NRC reviewed its licensing criteria and conducted independent studies and participated in international forums under the auspices of the International Atomic Energy Agency with many participating countries including India and Japan. The final report of the study was published in April 2009 as NUREG/CR 6966, "Tsunami Hazard Assessment at Nuclear Power Plant Sites in the United States of America," ADAMS Accession # ML0915901933. NRC revised its Standard Review Plan for conducting safety reviews of nuclear power plants in 2007. Section 2.4.6 specifically addresses tsunamis. The Office of Nuclear Regulatory Research is conducting tsunami studies in collaboration with the United States Geological Survey and has published a report on tsunami hazard in the Atlantic, Gulf and Pacific coastal areas. Selected nuclear power plants now get tsunami warning notification. The agency requires plant designs to withstand the effects of natural phenomena including effects of tsunamis. The agency's requirements, including General Design Criteria for licensing a plant, are described in Title 10 of the *Code of Federal Regulations* (10 CFR). These license requirements consist of incorporating margins in the initiating hazard and additional margins are due to traditional engineering practices such as "safety factors." Practices such as these add an extra element of safety into design, construction, and operations.

The NRC has always required licensees to design, operate, and maintain safety-significant structures, systems, and components to withstand the effects of natural hazards and to maintain the capability to perform their intended safety functions. The agency ensures these requirements are satisfied through the licensing, reactor oversight, and enforcement processes.

Tsunami Hazard Evaluation

Tsunami hazard evaluation is one component of the complete hydrological review requirements provided in the Standard Review Plan under Chapter 2.4. The safety determination of reactor sites requires consideration of major flood causing events, including consideration of combined flood causing conditions. These conditions include Probable Maximum Flood (PMF) on Streams and Rivers, Potential Dam Failures, Probable Maximum Surge and Seiche Flooding and Probable Maximum Tsunami Hazards, among others. The most significant flooding event is called the design basis flood and flooding protection requirements are correlated to this flood level in 2.4.10.

The Probable Maximum Tsunami (PMT) is defined as that tsunami for which the impact at the site is derived from the use of best available scientific information to arrive at a set of scenarios reasonably expected to affect the nuclear power plant site taking into account (a) appropriate consideration of the most severe of the natural phenomena that have been historically reported or determine from

geological and physical data for the site and surrounding area, with sufficient margin for the limited accuracy, quantity, and period of time in which the historical data have been accumulated, (b) appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena, and (c) the importance of the safety functions to be performed.

Site-specific tsunami data are collected from historical tsunami records, paleotsunami evidence, regional tsunami assessments, site-specific tsunami mechanisms, site-specific data, such as submarine survey of sea bed and approach channel geometry. Effects of tsunami on a nuclear power plant can be flooding due to water run up, hydro-dynamic pressure on exterior walls of structures, impact of floating debris, and foundation scouring. In addition, tsunami can draw down water from the intake source of plant cooling water.

The tsunami database is available for interactive search and downloads on the internet at <http://www.ngdc.noaa.gov/hazard/tsu.shtml>.

Tsunami Safety Assessment

The licensing bases for existing nuclear power plants are based on historical data at each site. This data is used to determine probable maximum tsunami and the tsunami effects are evaluated for each site with potential for tsunami flooding. The potential for tsunami hazard is determined on a hierarchical analysis process that can identify tsunami potential based primarily on distance from tsunami source and site elevation. The NRC also required existing plants to assess their potential vulnerability to external events, as part of the Individual Plant Examination of External Events Program. This process ensured that existing plants are not vulnerable to tsunami hazard, and they continue to provide adequate public health and safety.

Today, the NRC utilizes a risk-informed regulatory approach, including insights from probabilistic assessments and traditional deterministic engineering methods to make regulatory decisions about existing plants (e.g., licensing amendment decisions). Any new nuclear plant the NRC licenses will use a probabilistic, performance-based approach to establish the plant's seismic hazard and the seismic loads for the plant's design basis.

Operating Plants

The NRC is fully engaged in national international tsunami hazard mitigation programs, and is conducting active research to refine the tsunami sources in the Atlantic, Gulf Coast and Pacific Coast areas. Diablo Canyon (DC) and San Onofre (SONGS) are two nuclear plant sites that have potential for tsunami hazard. Both the DC (main plant) and SONGS are located above the flood level associated with tsunami. However, the intake structures and Auxiliary Sea Water System at DC are designed for combination of tsunami-storm wave activity to 45 ft msl. SONGS has a reinforced concrete cantilevered retaining seawall and screen well perimeter wall designed to withstand the design basis earthquake, followed by the maximum predicted tsunami with coincident storm wave action, designed to protect at approximately 27 ft msl. These reactors are adequately protected against tsunami effects. Distant tsunami sources for DC include the Aleutian area, Kuril-Kamchatka region, and the South American coast (for Songs the Aleutian area). Distant sources for SONGS is limited by the presence of a broad continental shelf. Local or near sources for DC include the Santa Lucia Bank and Santa Maria Basin Faults (for Songs the Santa Ana wind).

Additional Information

To read more about risk-related NRC policy, see the fact sheets on Probabilistic Risk Assessment (<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/probabilistic-risk-asses.html>) and Nuclear Reactor Risk (<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/reactor-risk.html>). Each provides more information on the use of probability in evaluating hazards (including earthquakes) and their potential impact on plant safety margins. Other regulatory framework includes General Design Criterion 2, 10 CFR Part 100.23, Regulatory Guide 1.102 "Flood Protection for Nuclear Power Plants", Rev. 1 1976,

Regulatory Guide 1.59 "Design Basis for Nuclear Power Plants" Rev. 2 1977 (update in progress), and
USNRC Standard Review Plan "Probable Maximum Tsunami Flooding" Section 2.4.6, Rev. 2.
March 2011

Fact Sheet: Seismic Zones and US Plants

Note: This is some basic information...staff is developing this into a fact sheet

Some Key Points:

- Although we often think of the US as having "active" and "non-active" earthquake zones, earthquakes can actually happen almost anywhere. Seismologists typically separate the US into low, moderate, and high seismicity zones; not into "active" and "inactive".
- The boundaries of the low, medium and high zones are not hard, are not well constrained, and are open to interpretation. Below we've pulled together a list based on our judgment and based on multiple interpretations in the technical community. But this is just for guidance; it is subjective.
- Faults are often well mapped and characterized in active zones, such as the west. But there are very few mapped faults in the east, which doesn't mean that there aren't earthquakes. For example, the most widely felt historical earthquakes in the US occurred in the New Madrid seismic zone in 1811 and 1812. The zones is (clearly shown on figure 1, the hazard map. However, the fault has never been identified and so is only shown as an area source on figure 2. In fact, most CEUS earthquakes are not tied to a known fault.
- The NRC has a seismic research program which has—with DOE and EPRI—sponsored and undertaken a ground breaking project to create a new state of the art seismic source model for the central and eastern US. This project, the Central and Eastern US Seismic Source Characterization for Nuclear Facilities project, is expected to finish at the end of this year.
- The NRC is also undertaking the Generic Issue 199 program to reassess seismic risk in light of the potential for higher seismic hazard (ground shaking) in the CEUS. This shows an ongoing dedication to seismic safety.
- The NRC requires that every nuclear plant be designed for site-specific ground motions that are appropriate for their locations. In addition, the NRC has specified a minimum ground motion level to which nuclear plants must be designed.

This is a preliminary (and subjective) list from seismic staff: Please consider this sensitive information

High Seismicity:

- Diablo Canyon
- SONGS

Moderate Seismicity:

Charleston Seismic Zone

- Brunswick
- Robinson
- Summer
- Vogtle
- Hatch (maybe depends on interpretation)

Wabash Valley Seismic Zone

- Clinton

East Tennessee Seismic Zone (a real point of contention)

- Watts Bar

- Sequoya
- Central Virginia Seismic Zone
- North Anna

Notes:

Also minimum standard on shaking

Note that new Madrid has several subzones.

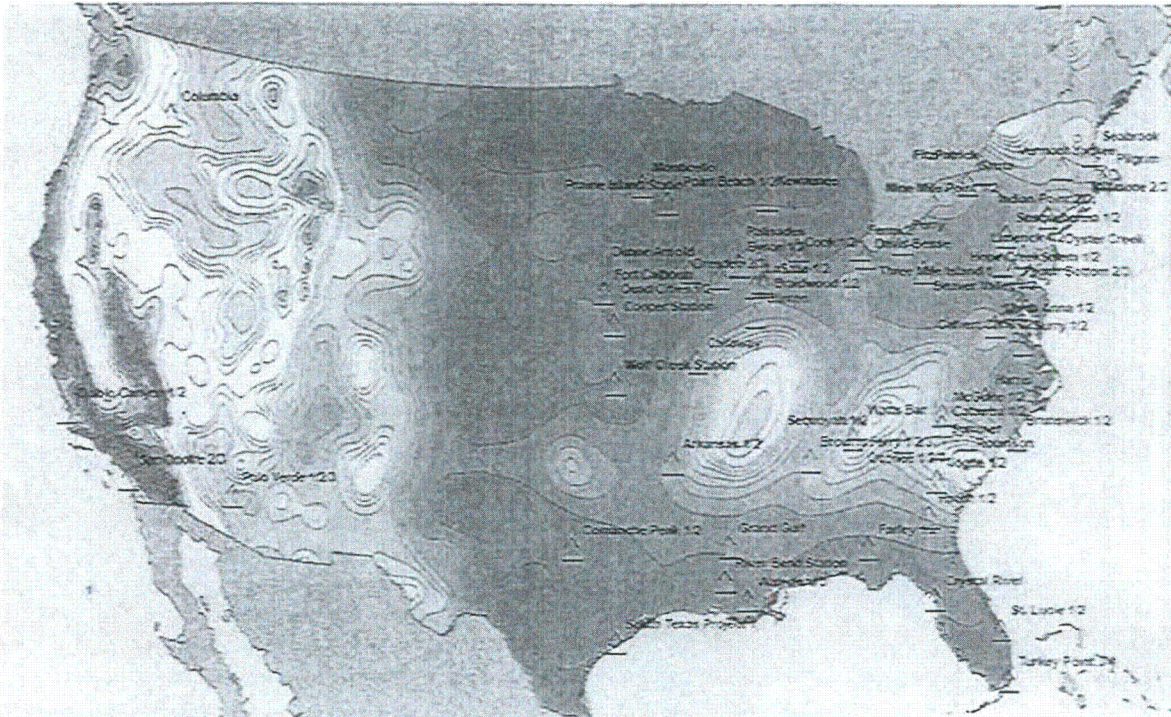


Figure 1: US Nuclear Plants overlain on the USGS National Seismic Hazard Map

As you can see the seismic source regions in the central and eastern east are not well defined. So to state a specific number of plants that are in the moderate seismicity zones is challenging and open to interpretation. This is just one interpretation, which is provided by the USGS.

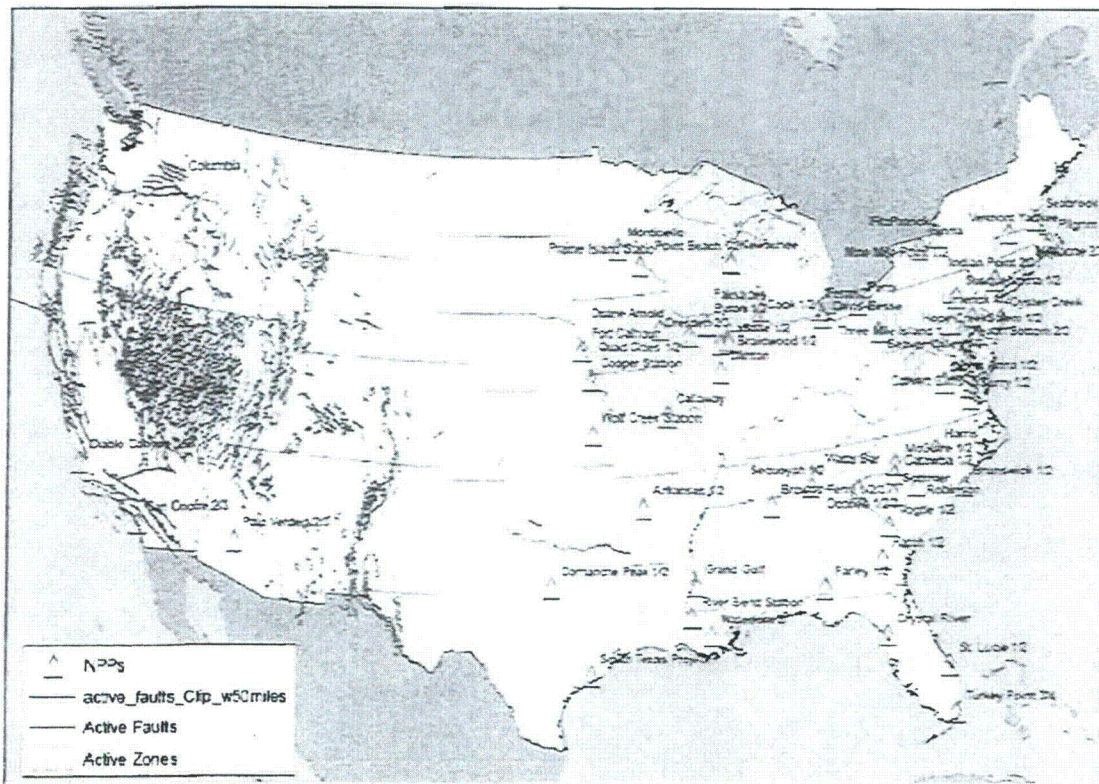


Figure 2: This figure shows mapped active faults and US Nuclear plants. As you can see, there are very few mapped active faults in the east, which doesn't mean that there aren't earthquakes. The most widely felt historical earthquakes in the US happened in the New Madrid seismic zone (clearly shown on figure 1, the hazard map). However, the fault is not shown here because we can't find it under all that Mississippi sand! You can (faintly) see the source one interpretation of a source zone on the figure. However, this is just the interpretation that was in the GIS map we were working with. We will likely put nested "blobs" onto this figure to the widest and narrowest zone interpretations.

If someone asks about plants being very near *mapped* active faults, there are two...but that doesn't mean that there isn't hazard elsewhere because in the central and eastern US the seismicity comes from "seismic zones" not faults. It's a hard balance between saying things that make it seem that we have a lot of problems and saying things that make it seem we are underestimate the hazard or not taking it seriously.

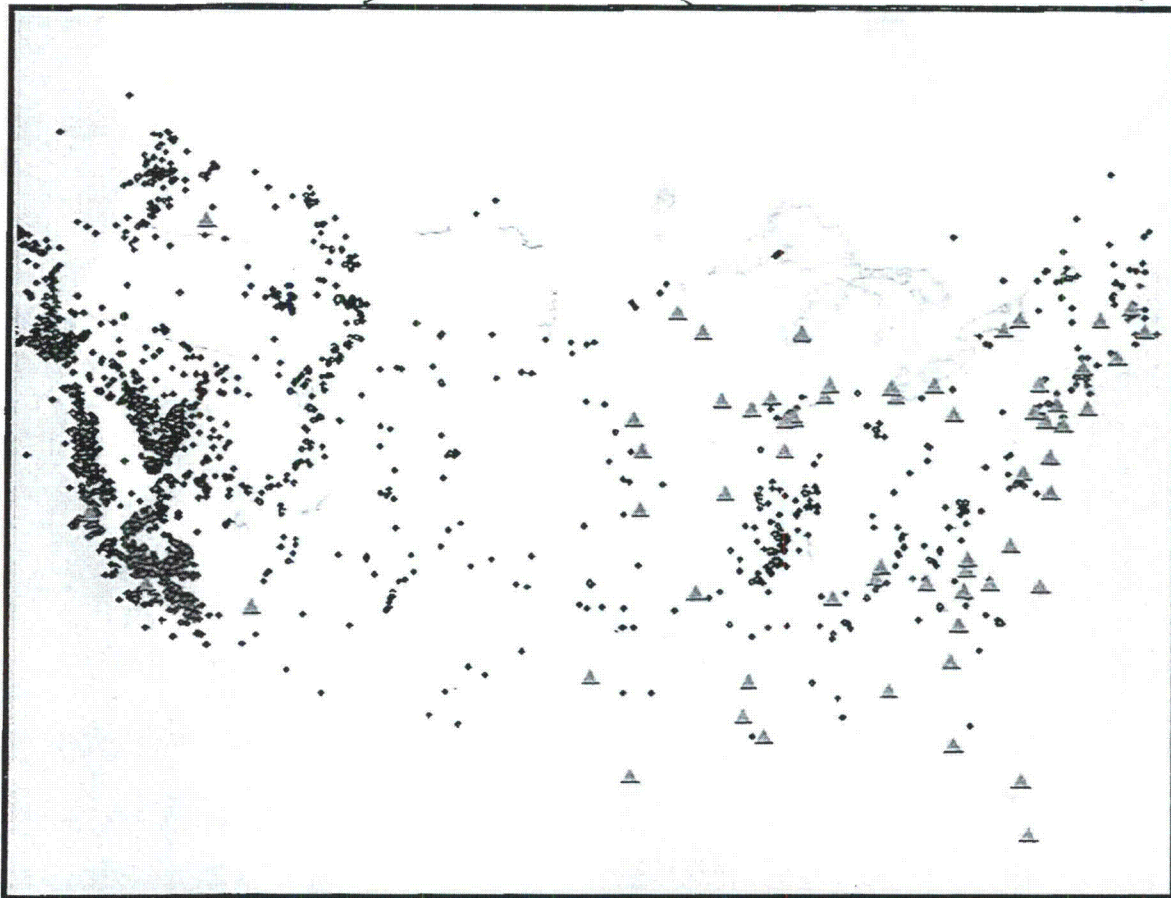


Figure 3: Earthquakes Plotted with US Nuclear Plants

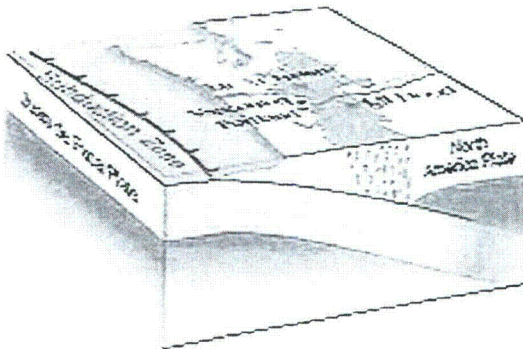
We are remaking a plot like this with a more complete set of earthquake (we're not sure that the time frame of the quakes is), this speaks to the fact that earthquakes occur everywhere, even where we don't have mapped faults.

Fact Sheet: Seismicity of the Central and Eastern US (In-depth technical information)

Key Points:

2. To date, very large earthquakes (Magnitudes greater than 8.25) have only occurred in specific geological settings, in particular the interfaces between tectonic plates in major subduction zones. The only subduction zone that potentially impacts the continental US is the Cascadia zone off the coast of northern California, Oregon and Washington.
3. Recent analyses of the magnitudes of the largest earthquakes not associated with subduction zones indicates magnitudes are less than ~8.25.
4. The size (magnitude) of earthquakes is proportional to the fault area that slips in a given earthquake. The prediction of earthquake magnitudes for a specific fault considers the dimensions of the fault. Extremely large earthquakes do not occur on small faults.
5. Nuclear power plants are licensed based on vibratory ground shaking, not earthquake magnitude. The ground shaking (accelerations) are used to estimate forces which are used in the seismic design process. In many cases smaller magnitude earthquakes closer to a site produce more severe ground shaking than larger, more distant earthquakes. Hence it is important to consider all potential earthquake sources regardless of magnitude.

Discussion: Earthquakes with very large magnitudes such as the March 2011 earthquake off the northeast coast of the Japanese island of Honshu occur within subduction zones, which are locations where one of the earth's tectonic plates is subducting beneath (being thrust under) another. The fault that defines the Japan Trench plate boundary dips to the west, i.e., becomes deeper towards the coast of Honshu. Large offshore earthquakes have historically occurred in the same subduction zone (in 1611, 1896, and 1933) all of which produced significant tsunami waves. The magnitudes of these previous large earthquakes have been estimated to be between 7.6 and 8.6. Prior to March 2011, the Japan Trench subduction zone has produced nine earthquakes with magnitudes greater than 7 just since 1973. The only subduction zone that is capable of directly impacting the continental US is the Cascadia subduction zone, which lies off of the coast of northern California, Oregon, and Washington. The fault surface defined by this interface dips to the east (becomes deeper) beneath the coast. The Cascadia subduction zone is capable of producing very large earthquakes if all or a large portion of the fault area ruptures in a single event. However, the rate of earthquake occurrence along the Cascadia subduction zone is much less than has been observed along the Japan Trench subduction zone. The only operating nuclear power plant in that area is Columbia, which is far from the coast (~220 miles/350 km) and the Cascadia subduction zone. The occurrence of earthquakes on the Cascadia subduction zone has been considered in the evaluation of the Columbia NPP.



Schematic Illustration of the Cascadia Subduction Zone

The size (magnitude) of earthquakes is proportional to the surface area of a fault that slips in a given earthquake. Large earthquakes are associated with large (long) faults. Hence, the prediction of earthquake magnitudes for a specific fault considers the dimensions of the fault. Identification of fault size

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is usually based on geologic mapping or the evaluation of spatial patterns of small earthquakes. To provide a point of comparison, the length of the fault that slipped during the March 11, 2011 magnitude 9 Japanese earthquake was >620 km, the length of the fault(s) that slipped during the magnitude 7.3 1992 Landers, CA earthquake was ~90 km and the estimated length of the Hosgi fault near Diablo Canyon NPP is 140 km and a magnitude of 7.5 is assigned to that fault. A number of major crustal faults or fault zones (not associated with the Cascadia subduction zone) have been identified that have produced earthquakes of magnitude 7.5 to 8 in the continental US (including California). ***These fault sources have been identified and characterized in seismic hazard assessments.***

Seismic designs at US nuclear power plants are developed in terms of seismic ground motion spectra, which are called the Safe Shutdown Earthquake ground motion response spectra (SSE). Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location. Currently operating nuclear power plants developed their SSEs based on a "deterministic" or "scenario earthquake" basis that account for the largest earthquake expected in the area around the plant. Seismic activity in the regions surrounding US plants is much lower than that for Japan since most US plants are located in the interior of the stable continental US. The largest earthquakes within the continental US are the 1811-12 New Madrid sequence and the 1886 Charleston, SC, which were estimated to be between about magnitude 6.8 to 7.5. On the west coast of the US, the two nuclear power plants are designed to specific ground motions from earthquakes of about magnitude 7+ on faults located just offshore of the plants. The earthquakes on these faults are mainly strike-slip (horizontal motion on near vertical planes) type earthquakes, not subduction zone earthquakes. This fault geometry does not produce large tsunamigenic waves. Therefore, the likelihood of a significant tsunami from these faults is very remote.

Fact Sheet: US Portable Array Information

NOTE: This is provided because IRIS participants let us know that here was a discussion about the NRC's involvement in this program during a meeting with congressional staffers. We have been involved in this for the last couple years.

IRIS

The Incorporated Research Institutions for Seismology is the Consortium of United States Universities with Major Research Programs in Seismology and Related Fields.

The Transportable Array: A Science Investment that Can Be Leveraged

IRIS is installing the Transportable Array – a set of 400 broadband seismic instruments – in each of more than 1600 sites across the contiguous United States. The instruments operate at each site for two years and then are removed and redeployed further east. Roughly 1100 stations have been installed since 2003, and instruments have been removed from more than 600 of those sites in the western United States.

The National Science Foundation is funding the full cost to “roll” the Transportable Array across the US, more than \$90,000,000 over ten years. Comparatively small incremental investments could add significant data that are relevant to the safety of nuclear power plants. These efforts would be uniquely cost effective, since NSF is already funding installation, and they would feed data into an existing, standardized and widely used data management system that already incorporates the vast majority of seismic data from US networks. But these opportunities are time constrained: the array will be fully installed in the contiguous 48 states by late 2013.

More Value from Longer Term Regional Observations

A dense, uniform seismic network is necessary for long-term, broad-area seismic monitoring of the central and eastern United States due to low event recurrence rates and the risk of significant earthquakes ($M > 5$) anywhere in the region. Monitoring seismicity in the central and eastern US can be improved by turning selected sites into permanent seismic stations. A total of more than 35 Transportable Array stations have already been “adopted” by several organizations, creating a permanent legacy, but only in the western United States.

A strategic “1-in-4” plan would involve “adoption” of systematically selected stations in the central and eastern United States – every other station in both the east-west and north-south directions, creating a uniform grid of some 250 stations. Long-term regional operation could be combined with two optional enhancements to create a unique observatory for the study of seismicity, source characteristics, attenuation, and local ground acceleration.

Enhancement 1: Acquire Higher Frequency Data

Crustal rigidity in the central and eastern US makes it desirable to record high frequency characteristics of local and regional earthquakes. The existing instruments could be reconfigured to record high frequencies but doing so would nearly triple the data flow, necessitating improvements to the communications infrastructure.

Enhancement 2: Add Strong Motion Sensors

Acquiring strong motion sensors and reconfiguring field computers that record and telemeter the data would help to measure unique effects of severe shaking. The design anticipated this augmentation, and several stations in California and Washington were operated that way. Upgrade would be more efficient at sites that have not yet been installed.

Estimate of annual acquisition and O&M costs for the 1-in-4, 250-station network in central and eastern US.

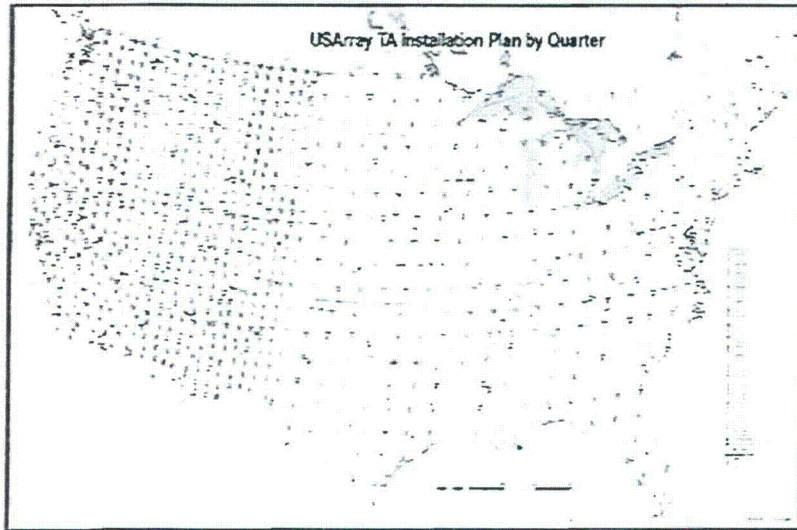
Year	Stations	Acquisition ¹	O&M ²	Total
2011	50	\$1,800,000	\$ 400,000	\$2,200,000
2012	50	\$1,800,000	\$ 800,000	\$2,600,000
2013	50	\$1,800,000	\$1,200,000	\$3,000,000
2014	50	\$1,800,000	\$1,600,000	\$3,400,000
2015	50	\$1,800,000	\$2,000,000	\$3,800,000
2016	–	–	\$2,000,000	\$2,000,000

¹ Assumes upgrades to six channel data loggers with strong motion sensors.

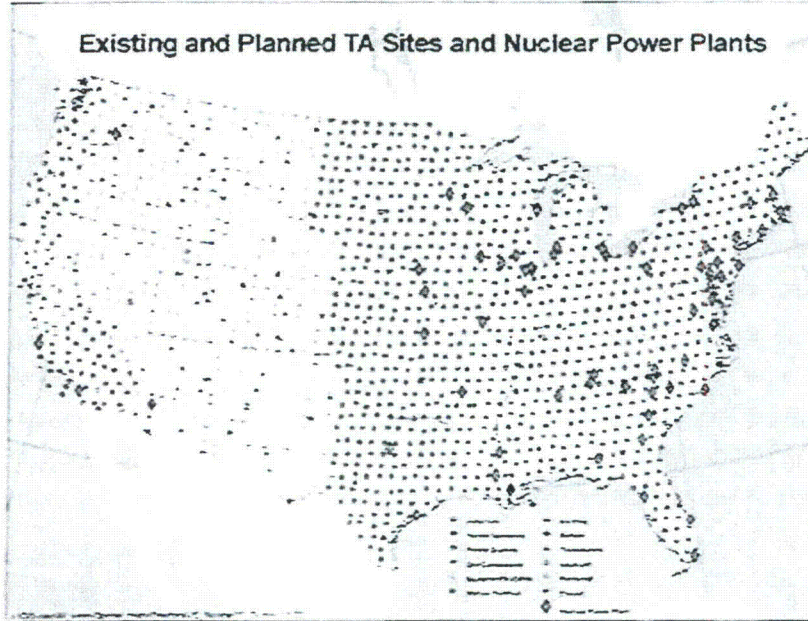
² Assumes a conservative estimate of \$8,000/station/year.

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The 1-in-4, 250-station network that could be created in the central and eastern US by "leaving behind" one out of every four Transportable Array stations during the years 2011 through 2015



A large majority of nuclear power plants are located in the central and eastern parts of the US, where it is still possible to "leave behind" 1-in-4 Transportable Array stations for long-term regional observations



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Fact Sheet: The B.5.b Rule (10 CFR 50.54hh/B.5.b)

The following was taken from the Commission Briefing (3/21) notes:

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

In June 2005 the NRC developed a phased approach to implement the B.5.b requirements:

- For Phase 1, the NRC expected licensees to use information from (1) existing programs and equipment and operational know-how, including maintaining capabilities currently in place, (2) industry best practices, and (3) application of generic lessons learned from engineering analyses.
- Phase 2 addressed assessment of SFPs including additional mitigation strategies that use existing or readily available resources to further enhance the plant's effectiveness in maintaining SFP cooling, and identify potential practicable options for the use of generic, deployable, or other backup mitigation capabilities that exceed the NRC's requirements.
- Phase 3 addressed assessment of the reactor and containment mitigation. This change allowed the staff to give priority to the assessment of SFPs before the reactor and containment.

On February 25, 2005, the NRC issued guidance for implementing Section B.5.b of the ICM Order. This included guidance on:

- Actions to Mitigate Fuel damage, which included:
 - Develop procedures to facilitate primary containment to secondary containment venting without AC power as an alternate remove heat from primary containment,
 - Develop/Modify procedures to start safety and or operate equipment to facilitate plant cooldown (Diesel generators, AFPs, RCIC) without DC power,
 - Identification and use of alternate water sources and pumping sources (such as a site fire pump as an alternate supply water for core cooling and SFP water),
 - Development of strategies for use of portable and offsite equipment to support recovery efforts (prefabricated and pre-staged cables, adapters, jumpers spool pieces, equipment needed for primary to secondary containment venting),
- Spent Fuel pool mitigation measures, which included:
 - Strategies for dispersing higher decay power (hottest) fuel amongst older low decay power (coolest) fuel to facilitate cooling, enabling air cooling if water level is lost in the reduced timeframes
 - Maintenance of empty space in the SFP to provide for a downcomer effect, facilitating natural circulation within the pool
 - Provide for emergency water makeup sources, and/or emergency repair

By December 2006, the staff had completed Phase 1 inspections at all operating reactor sites. In December 2006, the NRC endorsed NEI 06-12, Revision 2, "B.5.b Phase 2 & 3 Submittal Guideline," which provided specifications for standard mitigative strategies to address the maintenance or restoration of core cooling, containment and spent fuel pool cooling, including the use of some equipment that would have been beyond readily available. The strategies included those listed below:

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

- Enhanced response strategies for challenges to core cooling and containment.

The B.5.b Guidance and NEI 06-12, Revision 2, were used by each licensee in preparing information submitted to the NRC that describes a plant specific approach to implementing mitigating strategies and supports each plant specific license condition.

The NRC Performed Section B.5.b Phase 2 Assessments (June – December 2005) to Identify SFP Mitigation Strategies.

The NRC and Industry Performed B.5.b Phase 3 Assessments (October 2005 – June 2006) to Identify Reactor and Containment Mitigation Strategies.

In 2007, the NRC staff completed safety evaluations of licensee commitments submitted using the NEI 06-12 Guideline and imposed license conditions requiring them to provide a regulatory footprint. By December 2008 the NRC staff completed its inspection to verify the implementation of strategies and guidance at each facility.

On March 27, 2009, the NRC amended 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants," and Part 73, "Physical Protection of Plants and Materials," with new requirements.

This rulemaking added 10 CFR 50.54(hh)(2) in order to impose the same mitigating strategies requirements on new reactor applicants and licensees as those imposed by the ICM Order and associated license conditions.

This rulemaking also added paragraph (i) to 10 CFR 50.34, "Contents of applications; technical information," to require submittal of a "description and plans for implementation of the guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with the loss of large areas of the plant due to explosions or fire as required by § 50.54(hh)(2) of this chapter." (A parallel requirement was added as paragraph (d) to 10 CFR 52.80 for reactors licensed under 10 CFR Part 52, under the purview of the Office of New Reactors.)

The Statement of Considerations for this rulemaking specifically noted that the requirements described in Section 50.54(hh) are for addressing certain events that are the cause of large fires and explosions that affect a substantial portion of the nuclear power plant contemplates that the initiating event for such large fires and explosions could be any number of beyond-design basis events, including natural phenomena such as those described in General Design Criteria (i.e., earthquakes, tornadoes, floods, tsunamis, and seiches).

Fact Sheet: Generic Issue GI-199, "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants"

The objective of the GI-199 Safety/Risk Assessment was to perform a conservative, screening-level assessment to evaluate if further investigations of seismic safety for operating reactors in the central and eastern U.S. (CEUS) are warranted consistent with NRC directives.

- (i) The results of the GI-199 safety risk assessment should not be interpreted as definitive estimates of plant-specific seismic risk.
- (ii) The nature of the information used (both seismic hazard data and plant-level fragility information) make these estimates useful only as a screening tool. The NRC does not rank plants by seismic risk.

Key Messages from the GI-199 Communications Plan:

- (i) In August 2010, the Safety/Risk Assessment for GI-199 was completed. That assessment found that operating nuclear power plants are safe: Plants have adequate safety margin for seismic issues. The NRC's Safety/Risk Assessment confirmed that overall seismic risk estimates remain small and that adequate protection is maintained.
- (ii) Though still small, some seismic hazard estimates have increased: Updates to seismic data and models indicate increased seismic hazard estimates for some operating nuclear power plant sites in the Central and Eastern United States.
- (iii) Assessment of GI-199 will continue: Plants are safe (see key message 1), but the NRC has separate criteria for evaluating whether plant improvements may be imposed.

The NRC's Safety/Risk Assessment used readily available information and found that for about one-quarter of the currently operating plants, the estimated core damage frequency change is large enough to warrant further attention. Action may include obtaining additional, updated information and developing methods to determine if plant improvements to reduce seismic risk are warranted.

Note: GI-199 Communication Plan is available in ADAMS: ML081850477.

Status of Operating Plants and Need of Additional Actions due to Japanese Event:

- Currently operating nuclear plants in the United States remain safe, with no need for immediate action.
- This determination is based on NRC staff reviews of updated seismic hazard information and the conclusions of the Generic Issue 199 Screening Panel.
- Existing plants were designed with considerable margin to be able to withstand the ground motions from the "deterministic" or "scenario earthquake" that accounted for the largest earthquake expected in the area around the plant.
- During the mid-to late-1990s, the NRC staff reassessed the margin beyond the design basis as part of the Individual Plant Examination of External Events (IPEEE) program.
- The results of the GI-199 assessment demonstrate that the probability of exceeding the design basis ground motion may have increased at some sites, but only by a relatively small amount. In addition, the Safety/Risk Assessment stage results indicate that the probabilities of seismic core damage are lower than the guidelines for taking immediate action.
- In summary, US plants are designed for appropriate earthquake levels and are safe. As addressed above, the NRC is conducting a program called Generic Issue 199, which is reviewing the adequacy of the earthquake design of US NPPs in central and eastern North America based

on the latest data and analysis techniques. The NRC will look closely at all aspects of the response of the plants in Japan to the earthquake and tsunami to determine if any actions need to be taken in US plants and if any changes are necessary to NRC regulations.

Timeline for Preparation and Issuance of GI-199 Generic Letter:

- The NRC is working on developing a Generic Letter (GL) to request information of all affected plants (96 plants that are east of the Rockies).
- The GL is planned to be issued in draft form within the next 2 months to stimulate discussions with industry in a public meeting.
- Process will be followed, i.e., Committee to Review Generic Requirements, Advisory Committee on Reactor Safeguards Meeting and then GL will be issued as a draft for formal public comments (60 days), followed by a second meeting with ACRS.
- We expect to issue the GL by the end of this calendar year, as the new consensus seismic hazard estimates become available. (This effort is being coordinated with US NRC, DOE, EPRI, and USGS).
- The information from licensees will likely require 3 to 6 months to complete. Staff's review will commence after receiving licensees' responses. Based on staff's review, a determination can be made regarding cost beneficial backfits where it can be justified.

Fact Sheet: Station Blackout Rule

The NRC designated station blackout (SBO), which is a loss of all offsite and onsite ac power concurrent with a turbine trip, as an Unresolved Safety Issue in 1980. In 1988, the Commission concluded that additional SBO regulatory requirements were justified and issued the SBO rule, 10 CFR 50.63, to provide further assurance that a loss of both offsite and onsite emergency AC power systems would not adversely affect public health and safety. As a result of the SBO rule all plants have (1) established SBO coping and recovery procedures; (2) completed training for these procedures; (3) implemented modifications as necessary to cope with an SBO; and (4) ensured a 4-16 hour coping capability. The coping capability was based on the reliability and redundancy of the on-site electrical system, the frequency of a loss of off-site power and the time needed to restore off-site power. The staff also performed pilot inspections at 8 sites to verify proper implementation of the SBO rule.

Based on the outcomes of those inspections the NRC staff concluded that the industry was properly implementing the rule. Each light-water-cooled nuclear power plant licensed to operate must be able to withstand for a specified duration and recover from a station blackout (as defined in 10 CFR 50.2). Forty-four (44) U.S reactors rely on battery power (4-hour coping) and sixty (60) have opted to use an alternate AC source (4 to 16 hour coping) to cope with a SBO. The NRC staff reviewed the responses from every nuclear power plant and issued a SER accepting the proposed coping methods. Studies conducted by the NRC have shown that the hardware and procedures that have been implemented to meet the station blackout requirements have resulted in significant risk reduction and have further enhanced defense in depth. The NRC plans to carefully evaluate the lessons learned from the events in Japan to determine if enhancements to the station blackout rule are warranted.

Staff issued implementation guidance, Regulatory Guide (RG) 1.155, "Station Blackout," issued August 1988. Industry Issued SBO Rule Implementation Guidance NUMARC 87-00. During License renewal of power plants, staff reviewed aging management of SBO SSCs. SBO Rule requires that each light-water-cooled nuclear power plant licensed to operate under this part, each light-water-cooled nuclear power plant must be able to withstand for a specified duration and recover from a station blackout as defined in § 50.2. The specified station blackout duration shall be based on the following factors:

- (iv) The redundancy of the onsite emergency ac power sources;
- (v) The reliability of the onsite emergency ac power sources;
- (vi) The expected frequency of loss of offsite power; and
- (vii) The probable time needed to restore offsite power.

SBO Rule also requires that the reactor core and associated coolant, control, and protection systems, including station batteries and any other necessary support systems, must provide sufficient capacity and capability to ensure that the core is cooled and appropriate containment integrity is maintained in the event of a station blackout for the specified duration. The capability for coping with a station blackout of specified duration shall be determined by an appropriate coping analysis. Licensees are expected to have the baseline assumptions, analyses, and related information used in their coping evaluations available for NRC review. Currently, all plants are in compliance with 50.63, "Loss of all Alternating current Power". **All U.S. plants have the capability, capacity, and operating procedures in place to cope with a station blackout event.**

Additional reference: NUREG/CR-6890 (2005) , "Reevaluation of Station Blackout Risk at Nuclear Power Plants."

Other useful resources:

- Piping systems:

- A paper was published in the Journal of Pressure Vessel Technology (May 1995, Volume 117) that provides a regulatory perspective on appropriate seismic loading stress criteria for advanced light-water reactor (ALWR) piping systems. It discusses the comprehensive review program by NRC and industry to develop appropriate design criteria for piping systems in ALWRs.

- A note from the paper's author (David Terao): In light of the recent Tohoku earthquake, I thought it might be interesting to see what our (NRC's) thoughts on piping seismic design were at that time. In reading it after all these years, I find it provides a regulatory perspective that is still relevant and meaningful today.

Acronyms

A4NR – Alliance For Nuclear Responsibility
AAC – Alternate Alternating Current (AC)
ABWR (ABWRs) – Advanced Boiling Water Reactor(s)
ACRS – Advisory Committee on Reactor Safeguards
ACI – American Institute of Concrete
ADAMS – Agency wide Documents Access and Management System
AEF – Annual Exceedance Frequency
AISC – American Institute of Steel Construction
ANS – American Nuclear Society
ASME – American Society of Mechanical Engineers
B&PV – Boiler and Pressure Vessel
BWR (BWRs) – Boiling Water Reactor(s)
CAV – Cumulative Absolute Velocity
CCF – Common-Cause Failure
CEUS – Central and Eastern United States
CEUS-SSC – Central and Eastern United States Seismic Source Characterization
CDF – Core Damage Frequency
CDFM – Conservative Deterministic Failure Method
CFR – Code of Federal Regulations
COL – Combined License
COLA – Combined License Application
CSDRS – Certified Seismic Design Response Spectra
DART – Deep-ocean Assessment and Reporting of Tsunamis
DBE – Design Basis Earthquake
DBF – Design Basis Flood
DBGM – Design Basis Ground Motion
DC – Diablo Canyon, or Design Certification
DCD – Design Control Document
DCNPP – Diablo Canyon Nuclear Power Plant
DOE – Department of Energy
DORL – Division of Operating Reactor Licensing
EAL (EALs) – Emergency Action Level(s)
EDG (EDGs) – Emergency Diesel Generator(s)
EOP (EOPs) – Emergency Operating Procedure(s)
EPRI – Electric Power Research Institute
EPRI SMA – Electric Power Research Institute Seismic Margin Assessment
ESP (ESPs) – Early Site Permit(s)
FBR – Fast Breeder Reactor
FEMA – Federal Emergency Management Agency
FOSID – Frequency of Onset of Significant Inelastic Deformation
FSAR (FSARs) – Final Safety Analysis Report(s)
GDC – General Design Criterion
GMPE – Ground Motion Prediction Equation
GI – Generic Issue
GIP – Generic Issues Program

GIS – Graphic Information System
GL – Generic Letter
GMRS – Ground Motion Response Spectra
HCLPF – High Confidence of Low Probability of Failure
HMR – Hydrometeorological Reports
HQ – Headquarters
IAEA – International Atomic Energy Agency
ICM – Interim Compensatory Measures
IE (IEs) – Internal Event(s), or Initiating Event(s)
IEEE – Institute of Electrical and Electronics Engineers
IP – Office of International Programs
IPEEE (IPEEEs) – Individual plant examination for external event(s)
IRIS – Incorporated Research Institutions for Seismology
ISLOCA – Interfacing Systems Loss-of-Coolant Accident
KKNPP – Kashiwazaki-Kariwa Nuclear Power Plant
LERF – Large Early Release Frequency
LIC – a type of NRC document
LOCA – Loss-of-Coolant Accident
LOSP – Loss of Offsite Power
LTSBO – Long-Term Station Blackout
MLLW – Mean Lower Low Water
MLLWL – Mean Lower Low Water Line
MLW – Mean Low Water
MMI – Modified Mercalli Intensity
MSL – MEAN Sea Level
MSNBC – Microsoft/National Broadcasting Company
N/A (n/a) – Not applicable
NFPA – National Fire Protection Association
NISA – Nuclear and Industrial Safety Agency
NOAA – National Oceanic and Atmospheric Administration
NPP (NPPs) – Nuclear Power Plant(s)
NRC – Nuclear Regulatory Commission
NRO – Office of New Reactors
NRR – Office of Reactor Regulations
NSF – National Science Foundation
NUREG – NRC Regulatory Guidance Document
NWS – National Weather Service
OBE – Operating-Basis Earthquake
OPA – Office of Public Affairs
OSID – Onset of Significant Inelastic Deformation
PDF – Portable Document Format
PF – Target Performance Goal
PGA – Peak Ground Acceleration
PMEL – Pacific Marine Environmental Laboratory
PMF – Probable Maximum Flood
PMH – Probable Maximum Hurricane
PMP – Probable Maximum Precipitation
PMT – Probable Maximum Tsunami

PRA – Probabilistic Risk Assessment
PSA – Probabilistic Safety Assessment
PSHA – Probabilistic Seismic Hazard Analysis
PWR (PWRs) – Pressurized Water Reactor(s)
QME – Qualification of Active Mechanical Equipment
Q&As – Questions and Answers
RCP (RCPs) – Reactor Cooling Pump(s)
RCS – Reactor Coolant System
RES – Office of Nuclear Regulatory Research
RG – Regulatory Guide
RIL – Research Information Letter
RLE – Review Level Earthquake
RSZ – Ramapo Source Zone
SAMG (SAMGs) – Severe Accident Mitigation Guidelines(s)
SBO – Station blackout
SCDF – Seismic Core Damage Frequency
SCEC – Southern California Earthquake Center
SCR – Stable Continental Region
SDC – Seismic Design Category
SEL – Seismic Equipment List
SMA – Seismic Margin Assessment
SONGS – San Onofre Nuclear Generating Station
SPRA – Seismic Probabilistic Risk Assessment
SRA – Seismic Risk Assessment
S_s, S₁, S₂ – Specified Earthquake Ground Motions
SSC (SSCs) – Seismic Source Characteristics (Characterizations), or Structure, System, or Component
SSE – Safe Shutdown Earthquake
SSEL – Safe Shutdown Equipment List
SSHAC – Senior Seismic Hazard Analysis Committee
SZ – Seismic Zone
TEPCO – Tokyo Electric Power Company
UCERF – Uniform California Earthquake Rupture Forecast
UHRS (UHS) – Uniform Hazard Response Spectra
US – United States
USACE – United States Army Corps of Engineers
USGS – United States Geological Survey
VCT – Volume Control Tank
VDC – Volts Direct Current (DC)

Terms and Definitions

Acceptable Method – In many places, this standard contains statements indicating that a certain reference provides an “acceptable method” for satisfying the intent of a given requirement. The plain meaning of such a statement is that the referenced method is one way to meet the given requirement. The intent is to be permissive, meaning that the analysis team can use another method, if justified, without prejudice. However, it is important to understand that the intent of the standard goes beyond the plain meaning, as follows: Whenever the phrasing “acceptable method” is used, the intent is that if the analysis uses another method, the other method must satisfy the stated requirement with a comparable level of conservatism considering a similar level of details pertinent to the analysis scope. It is not acceptable to use another method that does not satisfy the requirement at least as well as the acceptable method would satisfy it. Whenever an alternative to the acceptable method is selected, it is understood that the peer review team will pay particular attention to this topic.

Accident Consequences – The extent of plant damage or the radiological release and health effects to the public or the economic costs of a core damage accident.

Accident Sequence – A representation in terms of an initiating event (IE) followed by a sequence of failures or successes of events (such as system, function, or operator performance) that can lead to undesired consequences, with a specified end state (e.g., core damage or large early release).

Accident Sequence Analysis – The process to determine the combinations of IEs, safety functions, and system failures and successes that may lead to core damage or large early release.

Active or Seismogenic Fault – need to add definition of active fault

Aleatory Variability (or Aleatory Uncertainty) – The variability inherent in a nondeterministic (i.e., stochastic, random) phenomenon. Aleatory variability is accounted for by modeling the phenomenon in terms of a probability model. In principle, aleatory uncertainty cannot be reduced by the accumulation of more data or additional information, but the detailed characteristics of the probability model can be improved. Sometimes aleatory variability is called “randomness.”

Annual Exceedance Frequency (AEF) – Number of times per year that a site’s ground motion is expected to exceed a specified acceleration.

Area Source – An area at the surface of the earth’s crust that is assumed to have experienced relatively uniform earthquake source characteristics for use in the PSHA. (See also “Volumetric Source Zone”.)

At Power – Those plant operating states characterized by the reactor being critical and producing power, with automatic actuation of critical safety systems not blocked and with essential support systems aligned in their normal power operation configuration.

Background Source Zone – A part of the earth’s crust, usually of large surface area dimension, within which potentially damaging earthquakes could occur that are not associated either with known fault sources or even with the uniform pattern, rate, or style of deformation or seismicity commonly identified with volumetric seismic source zones. In PSHA calculations, earthquakes that cannot be associated with other sources default to a background source zone.

Basic Event – An event in a fault tree model that requires no further development, because the appropriate limit of resolution has been reached.

Bounding Analysis – Analysis that uses assumptions such that the assessed outcome will meet or exceed the maximum severity of all credible outcomes.

Capable Tectonic Source – A capable tectonic source is a tectonic structure that can generate both vibratory ground motion and tectonic surface deformation such as faulting or folding at or near the earth’s surface in the present seismotectonic regime. It is described by at least one of the following characteristics:

1. presence of surface or near-surface deformation of landforms or geologic deposits of a recurring nature within the last approximately 500,000 years or at least once in the last approximately 50,000 years
2. a reasonable association with one or more moderate to large earthquakes or sustained earthquake activity that are usually accompanied by significant surface deformation
3. a structural association with a capable tectonic source that has characteristics of either item a or b (above), such that movement on one could be reasonably expected to be accompanied by movement on the other

In some cases, the geological evidence of past activity at or near the ground surface along a potential capable tectonic source may be obscured at a particular site. This might occur, for example, at a site having a deep overburden. For these cases, evidence may exist elsewhere along the structure from which an evaluation of its characteristics in the vicinity of the site can be reasonably based. Such evidence is to be used in determining whether the structure is a capable tectonic source within this definition. Notwithstanding the foregoing paragraphs, the association of a structure with geological structures that are at least pre-Quaternary, such as many of those found in the central and eastern regions of the United States, in the absence of conflicting evidence, will demonstrate that the structure is not a capable tectonic source within this definition.

CDFM Method – Refers to the Conservative Deterministic Failure Margin (CDFM) method as described in EPRI NP-6041-56, Rev. 1 wherein the seismic margin of the component is calculated using a set of deterministic rules that are more realistic than the design procedures.

Central and Eastern United States (CEUS) – That portion of the United States east of the Rocky Mountains (approximately the 104th parallel).

Certified Seismic Design Response Spectra (CSDRS) – Site-independent seismic design response spectra that have been approved under Subpart B of 10 CFR Part 52 as the seismic design response spectra for an approved certified standard design nuclear power plant. The input or control location for the CSDRS is specified in the certified standard design.

Combined License – A combined construction permit and operating license with conditions for a nuclear power facility issued pursuant to Subpart C of 10 CFR Part 52.

Common-Cause Failure (CCF) – A failure of two or more components during a short period of time as a result of a single shared cause.

Component – An item in a nuclear power plant, such as a vessel, pump, valve, or circuit breaker.

Composite Variability – The composite variability includes the aleatory (randomness) uncertainty (β_R) and the epistemic (modeling and data) uncertainty (β_U). The logarithmic standard deviation of composite variability, β_C is expressed as $(\beta_R^2 + \beta_U^2)^{1/2}$.

Containment Analysis – The process to evaluate the failure thresholds or leakage rates of the containment.

Containment Failure – Loss of integrity of the containment pressure boundary from a core damage accident that results in unacceptable leakage of radionuclides to the environment.

Controlling Earthquakes – Earthquakes used to determine spectral shapes or to estimate ground motions at the site for some methods of dynamic site response. There may be several controlling earthquakes for a site. As a result of the probabilistic seismic hazard analysis (PSHA), controlling earthquakes are characterized as mean magnitudes and distances derived from a deaggregation analysis of the mean estimate of the PSHA.

Core Damage Frequency (CDF) – Expected number of core damage events per unit of time.

Core Damage – Refers to the uncovering and heat-up of the reactor core, to the point that prolonged oxidation and severe fuel damage are not only anticipated but also involve enough of the core to result

in off-site public health effects if released. *Seismic core damage frequency* refers to the component of total CDF that is due to seismic events.

Cumulative Absolute Velocity (CAV) – For each component of the free-field ground motion, the CAV should be calculated as follows: (1) the absolute acceleration (g units) time-history is divided into 1-second intervals, (2) each 1-second interval that has at least 1 exceedance of 0.025g is integrated over time, and (3) all the integrated values are summed together to arrive at the CAV. The CAV is exceeded if the calculation is greater than 0.16 g-second. The application of the CAV in siting requires the development of a CAV model because the PSHA calculation does not use time histories directly.

Deaggregation – The process for determining the fractional contribution of each magnitude-distance pair to the total seismic hazard. To accomplish this, a set of magnitude and distance bins are selected and the annual probability of exceeding selected ground acceleration parameters from each magnitude-distance pair is computed and divided by the total probability for earthquakes.

Dependency – Requirement external to an item and upon which its function depends and is associated with dependent events that are determined by, influenced by, or correlated to other events or occurrences.

Design Basis Earthquake (DBE) or Safe Shutdown Earthquake (SSE) – A design basis earthquake is a commonly employed term for the safe shutdown earthquake (SSE); the SSE is the earthquake ground shaking for which certain structures, systems, and components are designed to remain functional. In the past, the SSE has been commonly characterized by a standardized spectral shape associated with a peak ground acceleration value.

Design Factor – The ratio between the site-specific GMRS and the UHRS. The design factor is aimed at achieving the target annual probability of failure associated with the target performance goals.

Distribution System – Piping, raceway, duct, or tubing that carries or conducts fluids, electricity, or signals from one point to another.

Early Site Permit (ESP) – A Commission approval, issued pursuant to Subpart A of 10 CFR Part 52, for a site or sites for one or more nuclear power facilities.

Earthquake Recurrence – The frequency of occurrence of earthquakes as a function of magnitude. Recurrence relationships or curves are developed for each seismic source, and they reflect the frequency of occurrence (usually expressed on an annual basis) of magnitudes up to the maximum, including measures of uncertainty.

Epicenter – The point on the earth's surface directly above the focus (i.e., hypocenter) of the earthquake source.

Epistemic Uncertainty – Uncertainty attributable to incomplete knowledge about a phenomenon that affects the ability to model it. Epistemic uncertainty is captured by considering a range of model parameters within a given expert interpretation or multiple expert interpretations and each of which is assigned an associated weight representing statistical confidence in the alternatives. In principle, epistemic uncertainty can be reduced by the accumulation of additional information associated with the phenomenon. The uncertainty in the parameters of the probability distribution of a random phenomenon is epistemic.

Event Tree – A logic diagram that begins with an IE or condition and progresses through a series of branches that represent expected system or operator performance that either succeeds or fails and arrives at either a successful or failed end state.

External Event – An IE originating outside a nuclear power plant that causes safety system failures, operator errors, or both, that in turn may lead to core damage or large early release. Events such as earthquakes, tornadoes, and floods from sources outside the plant and fires from sources inside or outside the plant are considered external events (see also internal event). By convention, LOSP not caused by another external event is considered by convention to be an internal event.

Failure Mechanism – Any of the processes that result in failure modes, including chemical, electrical, mechanical, physical, thermal, and human error.

Failure Mode – A specific functional manifestation of a failure (i.e., the means by which an observer can determine that a failure has occurred) by precluding the successful operation of a piece of equipment, a component, or a system (e.g., fails to start, fails to run, leaks).

Failure Probability – The likelihood that an SSC will fail to operate upon demand or fail to operate for a specific mission time.

Failure Rate – Expected number of failures per unit of time, evaluated, for example, by the ratio of the number of failures in a total population of components to the total time observed for that population.

Fault – A fracture in the earth along which blocks of crust on either side have moved with respect to one another.

Fault Source – A fault or zone for which the tectonic features causing earthquakes have been identified. These are usually individual faults, but they may be zones comprising multiple faults or regions of faulting if surface evidence of these faults is lacking but the faults are suspected from seismicity patterns, tectonic interpretations of crustal stress and strain, and other evidence. Regions of blind thrust faults are a good example of the latter.

Fault Tree – A deductive logic diagram that depicts how a particular undesired event can occur as a logical combination of other undesired events.

Fractile Hazard Curve – Epistemic uncertainty is expressed by a distribution of exceedence probability values; a distribution of hazard curves, rather than a single value; or a single curve. In a fractile hazard curve, all the points on the curve correspond to the same fractile of the distribution of the probability of exceedence. A 5% percentile hazard curve indicates that we have a 5% confidence that the calculated hazard would be less than that given by the curve. A 95% percentile hazard curve indicates that we are 95% confident that the hazard is below the hazard given by the hazard curve.

Fragility – Fragility of an SSC is the conditional probability of its failure at a given hazard input level. The input could be earthquake motion, wind speed, or flood level. The fragility model used in seismic PRA is known as a double lognormal model with three parameters, A_m , b_R , and b_U , which are, respectively, the median acceleration capacity, the logarithmic standard deviation of the aleatory (randomness) uncertainty in capacity, and the logarithmic standard deviation of the epistemic (modeling and data) uncertainty in the median capacity.

Frequency of Onset of Significant Inelastic Deformation (FOSID) – The annual probability of the onset of significant inelastic deformation (OSID). OSID is just beyond the occurrence of insignificant (or localized) inelastic deformation, and in this way corresponds to “essentially elastic behavior.” As such, OSID of a

structure, system, or component (SSC) can be expected to occur well before seismically induced core damage, resulting in much larger frequencies of OSID than seismic core damage frequency (SCDF) values. In fact, OSID occurs before SSC "failure," where the term failure refers to impaired functionality.

Ground Acceleration – Acceleration produced at the ground surface by seismic waves, typically expressed in units of g , the acceleration of gravity at the earth's surface.

Ground Motion Response Spectra (GMRS) – A site-specific ground motion response spectra characterized by horizontal and vertical response spectra determined as free-field motions on the ground surface or as free-field outcrop motions on the uppermost in-situ competent material using performance-based procedures. When the GMRS are determined as free-field outcrop motions on the uppermost in-situ competent material, only the effects of the materials below this elevation are included in the site response analysis.

Ground Motion Slope Ratio – Ratio of the spectral accelerations, frequency by frequency, from a seismic hazard curve corresponding to a 10-fold reduction in hazard exceedance frequency. (See Equation 3 in Regulatory Position 5.1.)

Hazard – The physical effects of a natural phenomenon such as flooding, tornado, or earthquake that can pose potential danger (for example, the physical effects such as ground shaking, faulting, landsliding, and liquefaction that underlie an earthquake's potential danger).

Hazard (as used in probabilistic hazard assessment) – Represents the estimate of expected frequency of exceedance (over some specified time interval) of various levels of some characteristic measure of a natural phenomenon [for example, peak ground acceleration (PGA) to characterize ground shaking from earthquakes]. The time period of interest is often taken as 1 year, in which case the estimate is called the annual frequency of exceedance.

Hazard Curve – A curve that gives the probability of a certain ground motion parameter (usually the PGA, PGV, or response spectral values) being exceeded. Hazard curves are generally generated for periods of exposure of one year, and they give annual probabilities of exceedance.

HCLPF Capacity – Refers to the High Confidence of Low Probability of Failure capacity, which is a measure of seismic margin. In seismic PRA, this is defined as the earthquake motion level at which there is a high (95 percent) confidence of a low (at most 5 percent) probability of failure. Using the lognormal fragility model, the HCLPF capacity is expressed as $A_m \exp[-1.65(\beta_R + \beta_U)]$. When the logarithmic standard deviation of composite variability β_c is used, the HCLPF capacity could be approximated as the ground motion level at which the composite probability of failure is at most 1 percent. In this case, HCLPF capacity is expressed as $A_m \exp[-2.33\beta_c]$. In deterministic SMAs, the HCLPF capacity is calculated using the CDFM method.

High Confidence of Low Probability of Failure (HCLPF) Capacity – A measure of *seismic margin*. In *seismic risk assessment*, *HCLPF capacity* is defined as the earthquake motion level, at which there is high confidence (95%) of a low probability (at most 5%) of failure of a structure, system, or component.

High Winds – Tornadoes, hurricanes (or cyclones or typhoons as they are known outside the United States), extratropical (thunderstorm) winds, and other wind phenomena depending on the site location.

Hypocenter – The point of the earth's crust where a rupture initiates, creating an earthquake.

In-column Motion – Motion that is within a soil column, as opposed to the motion at the surface or treated as if it is at the surface.

Initiating Event (IE) – Any event either internal or external to the plant that perturbs the steady-state operation of the plant, if operating, thereby initiating an abnormal event such as a transient or loss-of-coolant accident (LOCA) within the plant. Initiating events trigger sequences of events that challenge plant control and safety systems whose failure could potentially lead to core damage or large early release.

Intensity – The intensity of an earthquake is a qualitative description of the effects of the earthquake at a particular location, as evidenced by observed effects on humans, on human-built structures, and on the earth's surface at a particular location. Commonly used scales to specify intensity are the Rossi-Forel, Mercalli, and Modified Mercalli. The Modified Mercalli Intensity (MMI) scale describes intensities with values ranging from I to XII in the order of severity. MMI of I indicates an earthquake that was not felt except by a very few, whereas MMI of XII indicates total damage of all works of construction, either partially or completely.

Interfacing Systems LOCA (ISLOCA) – A loss-of-coolant accident (LOCA) when a breach occurs in a system that interfaces with the reactor coolant system (RCS), where isolation between the breached system and the RCS fails. An ISLOCA is usually characterized by the overpressurization of a low-pressure system when subjected to RCS pressure and can result in containment bypass.

Internal Event – An event originating within a nuclear power plant that in combination with safety system failures, operator errors, or both, can affect the operability of plant systems and may lead to core damage or large early release. By convention, loss of off-site power not caused by an external event is considered to be an internal event, and internal fire is considered to be an external event.

Key Assumption – An assumption made in response to a key source of uncertainty in the knowledge that a different reasonable alternative assumption would produce different results, or an assumption that results in an approximation made for modeling convenience in the knowledge that a more detailed model would produce different results. For the base PRA, the term "different results" refers to a change in the plant risk profile (e.g., total CDF and total LERF, the set of initiating events and accident sequences that contribute most to CDF and to LERF) and the associated changes in insights derived from the changes in risk profile. A "reasonable alternative" assumption is one that has broad acceptance within the technical community and for which the technical basis for consideration is at least as sound as that of the assumption being challenged.

Key Source of Uncertainty – A source of uncertainty that is related to an issue for which there is no consensus approach or model and where the choice of approach or model is known to have an impact on the risk profile (e.g., total CDF and total LERF, the set of initiating events and accident sequences that contribute most to CDF and LERF) or a decision being made using the PRA. Such an impact might occur, for example, by introducing a new functional accident sequence or a change to the overall CDF or LERF estimates significant enough to affect insights gained from the PRA.

Large Early Release – The rapid, unmitigated release of airborne fission products from the containment to the environment occurring before the effective implementation of off-site emergency response and protective actions, such that there is a potential for early health effects.

Large Early Release Frequency (LERF) – The expected number of large early releases per unit of time. A *large early release* is the rapid, unmitigated release of airborne fission products from the containment building to the environment, occurring before the effective implementation of off-site emergency

response and protective actions, such that there is a potential for early health effects. *Seismic large early release frequency* refers to the component of total LERF that is due to seismic events.

Level 1 Analysis – Identification and quantification of the sequences of events leading to the onset of core damage.

Level 2 Analysis – Evaluation of containment response to severe accident challenges and quantification of the mechanisms, amounts, and probabilities of subsequent radioactive material releases from the containment.

Liquefaction – The sudden loss of shear strength and rigidity of saturated, cohesionless soils, due to steady-state groundwater flow or vibratory ground motion. The term “seismic liquefaction” is used in this standard for liquefaction phenomena induced by seismic motions.

Magnitude – An earthquake’s magnitude is a measure of the strength of the earthquake as determined from seismographic observations and is an objective, quantitative measure of the size of an earthquake. The magnitude can be expressed in various ways based on seismographic records (e.g., Richter Local Magnitude, Surface Wave Magnitude, Body Wave Magnitude, and Moment Magnitude). Currently, the most commonly used magnitude measurement is the Moment Magnitude, M_w , which is based on the seismic moment computed as the rupture force along the fault multiplied by the average amount of slip, and thus is a direct measure of the energy released during an earthquake.

Maximum Magnitude – The maximum magnitude is the upper bound to earthquake recurrence curves.

Median Hazard Curve – Corresponds to a 50%, or the 50th fractile, hazard curve.

Mean Hazard Curve – Corresponds to the mean of the probability distribution of hazard curves.

Mean Site Amplification Function – The mean amplification function is obtained for each controlling earthquake, by dividing the response spectrum from the computed surface motion by the response spectrum from the input hard rock motion, and computing the arithmetic mean of the individual response spectral ratios.

Nontectonic Deformation – Nontectonic deformation is distortion of surface or near-surface soils or rocks that is not directly attributable to tectonic activity. Such deformation includes features associated with subsidence, karst terrain, glaciation or deglaciation, and growth faulting.

Operating-Basis Earthquake (OBE) – To satisfy the requirements of paragraph IV(a)(2)(A) of Appendix S to 10 CFR Part 50, the operating-basis earthquake (OBE) ground motion is defined as follows:

- For the certified design portion of the plant, the OBE ground motion is one-third of the CSDRS.
- For the safety-related noncertified design portion of the plant, the OBE ground motion is one-third of the design motion response spectra, as stipulated in the design certification conditions specified in design control document (DCD).
- The spectrum ordinate criterion to be used in conjunction with Regulatory Guide 1.166, "Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Post-earthquake Actions," issued March 1997, is the lowest of (i) and (ii).

That earthquake ground motion that, when exceeded (along with a CAV value exceedance) requires shutdown of the plant. In the past, the OBE was commonly chosen to be one-half of the safe shutdown earthquake (SSE). However, newer guidance sets the OBE at 1/3 of the SSE unless additional calculations are performed.

Peak Ground Acceleration (PGA) – Maximum absolute value of acceleration displayed on an accelerogram, the largest ground acceleration produced by an earthquake at a site.

Peak Ground Displacement – The largest ground displacements produced by an earthquake at a site.

Peak Ground Velocity – The largest ground velocity produced by an earthquake at a site.

Plant – A general term used to refer to a nuclear power facility (for example, "plant" could be used to refer to a single unit or multiunit site).

Point Estimate – Estimate of a parameter in the form of a single number.

Probabilistic Risk Assessment (PRA) – A qualitative and quantitative assessment of the risk associated with plant operation and maintenance that is measured in terms of frequency of occurrence of risk metrics, such as core damage or a radioactive material release and its effects on the health of the public [also referred to as a probabilistic safety assessment (PSA)].

Probability of Exceedence – The probability that a specified level of seismic hazard will be exceeded at a site or in a region during a specified exposure time.

PRA Configuration Control Plan – The process and document used by the owner of the PRA to define the PRA technical elements that are to be periodically maintained and/or upgraded and to document the methods and strategies for maintenance and upgrading of those PRA technical elements.

Randomness (as used in seismic-fragility analysis) – The variability in seismic capacity arising from the randomness of the earthquake characteristics for the same acceleration and to the structural response parameters that relate to these characteristics. Also see "Aleatory Variability."

Response Spectrum – A plot of the maximum responses (acceleration, velocity, or displacement) of idealized single-degree-of-freedom oscillators as a function of the natural frequencies of the oscillators for a given damping value. The response spectrum is calculated for a specified vibratory motion input at the oscillators' supports.

Review Level Earthquake (RLE) – An earthquake larger than the plant SSE and is chosen in seismic margin assessment (SMA) for initial screening purposes. Typically, the RLE is defined in terms of a ground motion spectrum. (Note—A majority of plants in the Eastern and Midwestern United States have conducted SMA reviews for an RLE of 0.3g PGA anchored to a median NUREG0CR-0098 spectrum.)

Ring Area – Annular region bounded by radii associated with the distance rings used in hazard deaggregation (RG 1.208, Appendix D, Table D.1, "Recommended Magnitude and Distance Bins").

Risk – Probability and consequences of an event, as expressed by the "risk triplet" that is the answer to the following three questions: (a) What can go wrong? (b) How likely is it? and (c) What are the consequences if it occurs?

Safe Shutdown Earthquake Ground Motion (SSE) – The vibratory ground motion for which certain structures, systems, and components are designed, pursuant to Appendix S to 10 CFR Part 50, to remain functional. The SSE for the site is characterized by both horizontal and vertical free-field ground motion response spectra at the free ground surface. [paragraph IV(a)(1)(i) of Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants," to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the Code of Federal Regulations (10 CFR Part 50).]

Staff's current guidance on SSE is found in Regulatory Guide 1.208 (2007)

Safe Shutdown Equipment List (SSEL) – The list of all SSCs that require evaluation in the seismic-margins-calculation task of an SMA. Note that this list can be different from the seismic equipment list (SEL) used in a seismic PRA.

Safety Function – Function that must be performed to control the sources of energy in the plant and radiation hazards.

Safety Related – SSCs that are relied upon to remain functional during and following design-basis events to ensure (a) the integrity of the reactor coolant pressure boundary, (b) the capability to shut down the reactor and maintain it in a safe shutdown condition, or (c) the capability to prevent or mitigate the consequences of accidents that could result in potential off-site exposures comparable to the applicable exposures established by the regulatory authority.

Safety Systems – Those systems that are designed to prevent or mitigate a design-basis accident.

Screening Analysis – An analysis that eliminates items from further consideration based on their negligible contribution to the frequency of an accident or of its consequences.

Screening Criteria – The values and conditions used to determine whether an item is a negligible contributor to the probability of an accident sequence or its consequences.

Seismic Design Category (SDC) – A category assigned to an SSC that is a function of the severity of adverse radiological and toxicological effects of the hazards that may result from the seismic failure of the SSC on workers, the public, and the environment. SSCs may be assigned to SDCs that range from 1 through 5. For example, a conventional building whose failure may not result in any radiological or toxicological consequences is assigned to SDC-1; a safety-related SSC in a nuclear material processing facility with a large inventory of radioactive material may be placed in SDC-5. In this standard, the term SDC has a different meaning than in the International Building Code. ANSI/OANS-2.26-2004 [1] provides guidance on the assignment of SSCs to SDCs.

Seismic Equipment List (SEL) – The list of all SSCs that require evaluation in the seismic-fragilities task of a seismic PRA. Note that this list can be different from the SSEL used in an SMA.

Seismic Hazard – Any physical phenomenon, such as ground motion or ground failure, that is associated with an earthquake and may produce adverse effects on human activities (such as posing a risk to a nuclear facility).

Seismic margin – The difference between a plant's capacity and its seismic design basis (*safe shutdown earthquake, or SSE*).

Seismic Margin Assessment (SMA) – The process or activity to estimate the seismic margin of the plant and to identify any seismic vulnerabilities in the plant. This is described further in Appendix C.

Seismic Risk – The risk (frequency of occurrence multiplied by its consequence) of severe earthquake-initiated accidents at a nuclear power plant. A severe accident is an accident that causes core damage, and, possibly, a subsequent release of radioactive materials into the environment. Several risk metrics may be used to express *seismic risk*, such as *seismic core damage frequency* and *seismic large early release frequency*.

Seismic Source – A general term referring to both seismogenic sources and capable tectonic sources. A seismogenic source is a portion of the earth assumed to have a uniform earthquake potential (same expected maximum earthquake and recurrence frequency), distinct from the seismicity of the surrounding regions. A capable tectonic source is a tectonic structure that can generate both vibratory ground motion and tectonic surface deformation such as faulting or folding at or near the earth's surface. In a probabilistic seismic hazard analysis (PSHA), all seismic sources in the site region with a potential to contribute to the frequency of ground motions (i.e., the hazard) are considered.

Seismic Spatial Interaction – An interaction that could cause an equipment item to fail to perform its intended safety function. It is the physical interaction of a structure, pipe, distribution system, or other equipment item with a nearby item of safety equipment caused by relative motions from an earthquake. The interactions of concern are (a) proximity effects, (b) structural failure and falling, and (c) flexibility of attached lines and cables.

Seismic Source Characteristics (SSC) – The parameters that characterize a seismic source for PSHA, including source geometry, probability of activity, maximum magnitude, and earthquake recurrence.

Seismic Wave Transmission (Site Amplification) – The amplification (increase or decrease) of earthquake ground motion by rock and soil near the earth's surface in the vicinity of the site of interest. Topographic effects, the effect of the water table, and basin edge wave-propagation effects are sometimes included under site response.

Seismogenic Crust – The brittle portion of the earth's crust capable of generating earthquakes.

Seismogenic Source – A portion of the earth that is assumed to have a uniform earthquake potential (same expected maximum earthquake and recurrence frequency), distinct from that of surrounding sources. A seismogenic source will generate vibratory ground motion but is assumed to not cause surface displacement. Seismogenic sources cover a wide range of seismotectonic conditions, from a well-defined tectonic structure to simply a large region of diffuse seismicity.

Seismotectonic – Rock-deforming processes and resulting structures and seismicity that occur over large sections of the earth's crust and upper mantle.

Senior Seismic Hazard Analysis Committee (SSHAC) – A committee sponsored by the NRC, DOE, and EPRI to review the state of the art and improve the overall stability of the PSHA process. SSHAC [4] concluded that most of the differences were consequences of differences in the process of elicitation of the information from experts. SSHAC made recommendations on the process, which are now almost uniformly adopted by analysts worldwide.

Severe Accident – An accident that usually involves extensive core damage and fission product release into the reactor vessel, containment, or the environment.

Shall, Should, and May – The word "shall" is used to denote a requirement; the word "should" is used to denote a recommendation; and the word "may" is used to denote permission, neither a requirement nor a recommendation.

Required Plant Shutdown Criteria – Appendix S to 10 CFR Part 50 (3) has the following information: Required Plant Shutdown. If vibratory ground motion exceeding that of the Operating Basis Earthquake Ground Motion or if significant plant damage occurs, the licensee must shut down the nuclear power plant. If systems, structures, or components necessary for the safe shutdown of the nuclear power plant are not available after the occurrence of the Operating Basis Earthquake Ground Motion, the licensee must consult with the Commission and must propose a plan for the timely, safe shutdown of the nuclear power plant. Prior to resuming operations, the licensee must demonstrate to the Commission that no functional damage has occurred to those features necessary for continued operation without undue risk to the health and safety of the public and the licensing basis is maintained.

Significant Contributor – (a) In the context of an accident sequence, a significant basic event or an initiating event that contributes to a significant sequence; (b) in the context of an accident progression

sequence, a contributor that is an essential characteristic (e.g., containment failure mode, physical phenomena) of a significant accident progression sequence, and if not modeled would lead to the omission of the sequence.

Significant Basic Event – A basic event that has a Fussell-Vesely importance greater than 0.005 OR a risk-achievement worth greater than 2. significant cutset (relative to sequence): Those cutsets that, when rank ordered by decreasing frequency, comprise 95 percent of the sequence CDF OR that individually contribute more than 1 percent to the sequence CDF.

Significant Cutset (relative to CDF) – Those cutsets that, when rank ordered by decreasing frequency, comprise 95 percent of the CDF OR that individually contribute more than 1 percent to CDF.

Significant Accident Sequence – A significant accident sequence is one of the set of sequences, defined at the functional or systemic level that, when rank ordered by decreasing frequency, comprise 95 percent of the core damage frequency (CDF), OR that individually contribute more than; 1 percent to the CDF.

Significant Accident Progression Sequence – One of a set of containment event tree sequences that, when rank ordered by decreasing frequency, comprise 95 percent of the large early release frequency (LERF), OR that individually contribute more than; 1 percent to the LERF.

Site Response (Amplification) – The amplification (i.e., increase or decrease) of earthquake ground motion by rock and soil near the earth's surface in the vicinity of the site of interest. Topographic effects, the effect of the water table, and basin edge wave-propagation effects are sometimes included under site response.

Spectral Acceleration – Peak acceleration response of an oscillator as a function of period or frequency and damping ratio when subjected to an acceleration time history. It is equal to the peak relative displacement of a linear oscillator of frequency, f , attached to the ground, times the quantity $(2Bf)^2$. It is expressed in units of gravity (g) or cm/second².

Stable Continental Region (SCR) – An SCR is composed of continental crust, including continental shelves, slopes, and attenuated continental crust, and excludes active plate boundaries and zones of currently active tectonics directly influenced by plate margin processes. It exhibits no significant deformation associated with the major Mesozoic-to-Cenozoic (last 240 million years) orogenic belts. It excludes major zones of Neogene (last 25 million years) rifting, volcanism, or suturing.

Stationary Poisson Process – A probabilistic model of the occurrence of an event over time (or space) that has the following characteristics: (1) the occurrence of the event in small intervals is constant over time (or space), (2) the occurrence of two (or more) events in a small interval is negligible, and (3) the occurrence of the event in non-overlapping intervals is independent.

Structure, System, or Component – A "structure" is an element, or a collection of elements, to provide support or enclosure, such as a building, free-standing tanks, basins, dikes, or stacks. A "system" is a collection of components assembled to perform a function, such as piping; cable trays; conduits; or heating, ventilation, and air-conditioning. A "component" is an item of mechanical or electrical equipment, such as a pump, valve, or relay, or an element of a larger array, such as a length of pipe, elbow, or reducer.

Support System – A system that provides a support function (e.g., electric power, control power, or cooling) for one or more other systems.

System Failure – Loss of the ability of a system to perform a modeled function.

Systems Analysis – That portion of the external events PRA analysis that applies to evaluating the impact of external events within the plant PRA model. In this context, the term “systems analysis” encompasses the tasks related to identification of the SSCs to be included in the analysis, event sequence modeling, analysis of the failure of individual system functions within the sequences, and the integration and quantification of the overall PRA model.

Target Performance Goal (PF) – Target annual probability of exceeding the 1 E-05 frequency of onset of significant inelastic deformation (FOSID) limit state.

Tectonic Structure – A large-scale dislocation or distortion, usually within the earth’s crust. Its extent may be on the order of tens of meters (yards) to hundreds of kilometers (miles).

Uncertainty – A representation of the confidence in the state of knowledge about the parameter values and models used in constructing the PRA. Also see “Variability,” “Epistemic Uncertainty,” and “Aleatory Variability.”

Uncertainty (as used in seismic-fragility analysis) – The variability in the median seismic capacity arising from imperfect knowledge about the models and model parameters used to calculate the median capacity.

Uniform Hazard Response Spectrum (UHRS) – A plot of a ground response parameter (for example, spectral acceleration or spectral velocity) that has an equal likelihood of exceedance at different frequencies.

Up to Date – As used in this standard [for example, when the standard speaks of an “up-to-date database” in (HLR-HA-B)], the concept is that a reasonable attempt should be made to use all available data at the time of the application. However, routine updating of the data is not required if the data used reasonably represent what is needed for the application.

Variability – See “Epistemic Uncertainty” and “Aleatory Variability.”

Verify – To determine that a particular action has been performed in accordance with the rules and requirements of this standard, either by witnessing the action or by reviewing records.

Volumetric Source Zone – A volume of the earth’s crust within which future seismicity is assumed to have distributions of source properties and locations of energy release that do not vary in time and space.

Walkdown – Inspection of local areas in a nuclear power plant where SSCs are physically located in order to ensure accuracy of procedures and drawings, equipment location, operating status, and environmental effects or system interaction effects on the equipment that could occur during accident conditions. For seismic-PRA and SMA reviews, the walkdown is explicitly used to confirm preliminary screening and to collect additional information for fragility or margin calculations.

Within Motion – An earthquake record modified for use in a site response model. Within motions are developed through deconvolution of a surface recording to account for the properties of the overburden material at the level at which the record is to be applied. The within motion can also be called the “bedrock motion” if it occurs at a high-impedance boundary where rock is first encountered.

List of Questions

Natural Hazards and Ground Shaking Design Levels 1

1) Does the NRC consider earthquakes of magnitude 9? 1

2) Did the Japanese underestimate the size of the maximum credible earthquake that could affect the plants? 1

3) Can an earthquake and tsunami as large as happened in Japan also happen here? 1

4) What if an earthquake like the Sendai earthquake occurred near a US plant? 1

5) What magnitude earthquake are US nuclear plants designed to? 1

6) How many US reactors are located in active earthquake zones? 2

7) Has this changed our perception of earthquake risk to the plants in the US? 3

8) Why do we have confidence that US nuclear power plants are adequately designed for earthquakes and tsunamis? 3

9) Can significant damage to a nuclear plant like we see in Japan happen in the US due to an earthquake? Are the Japanese nuclear plants similar to US nuclear plants? 3

10) If the earthquake in Japan was a larger magnitude than considered by plant design, why can't the same thing happen in the US? 3

11) What level of earthquake hazard are the US reactors designed for? 3

12) How was the seismic design basis for existing nuclear plants established? 4

13) What is the likelihood of the design basis or "SSE" ground motions being exceeded over the life of a nuclear plant? 4

14) What is magnitude anyway? What is the Richter Scale? What is intensity? 4

15) How do magnitude and ground motion relate to each other? 5

16) What is a seismic response spectrum? 5

17) Which reactors are along coastal areas that could be affected by a tsunami? 6

18) How are combined seismic and tsunami events treated in risk space? Are they considered together? 6

19) How are aftershocks treated in terms of risk assessment? 6

20) Could a "mega-tsunami" strike the U.S. East Coast as indicated in a recent Washington Post Weather Gang article? 6

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21) Are US nuclear plants designed for tsunamis? If so, what level of tsunami are they designed for? 8

22) Is there a minimum earthquake shaking that nuclear plants are designed for? 8

- 23) Which plants are close to known active faults? What are the faults and how far away are they from the plants? 8
- 24) Is there margin above the design basis?..... 8
- 25) Are US plants safe? Would a plant in the U.S. be able to withstand a large earthquake?..... 9
- 26) Could an accident sequence like the one at Japan’s Fukushima Daiichi nuclear plants happen in the US? 9
- 27) Should US nuclear facilities be required to withstand earthquakes and tsunamis of the kind just experienced in Japan? If not, why not? 9
- 28) Do any plants have special design considerations associated with seismic design?..... 10
- 29) How do we know equipment will work if the magnitude is bigger than expected, like in Japan? 10
- 30) How do we know that the equipment in plants is safe in earthquakes? 10
- 31) Are US plants susceptible to the same kind of loss of power as happened in Japan? 10
- 32) How do we know that the emergency diesel generators will not fail to operate like in Japan? 11
- 33) Is there a risk of loss of water during tsunami drawdown? Is it considered in design?..... 11
- 34) Are aftershocks considered in the design of equipment at the plants? Are aftershocks considered in design of the structure? 11
- 35) Are there any special issues associated with seismic design at the plants? For example, Diablo Canyon has special requirements. Are there any others?..... 11
- 36) Is the NRC planning to require seismic isolators for the next generation of nuclear power plants? How does that differ from current requirements and/or precautions at existing US nuclear power plants? 11
- 37) Are there any US nuclear power plants that incorporate seismic isolators? What precautions are taken in earthquake-prone areas? 11
- 38) Do you think that the recent Japan disaster will cause any rethinking of the planned seismic isolation guidelines, particularly as it regards earthquakes and secondary effects such as tsunamis? 12

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- 39) How does the NRC address seismic-induced fire?..... 13
- 40) Does the NRC require the fire protection water supply system be designed to withstand an earthquake?..... 13
- 41) How are safe shutdown equipment protected from an oil spill which can cause potential fire? 13
- 42) How are safe shutdown equipment protected from a hydrogen fire? 14

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- 43) How does the NRC consider seismically induced equipment failures leading to internal flooding? 15
- 44) How is the potential source of internal flooding from the seismically induced equipment failures postulated in the internal flood analysis?..... 15
- 45) Are the non-safety-related equipment failures assumed to occur at the same time? 15

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- 46) Was the damage to the Japanese nuclear plants mostly from the earthquake or the tsunami?..... 17
- 47) What was the disposition of the plant during the time after the earthquake struck and before the tsunami arrived? Was there indication of damage to the plant solely from the earthquake (if so, what systems) and did emergency procedures function during this time..... 17
- 48) What magnitude earthquake was the plant designed to withstand? For example, what magnitude earthquake was the plant expected to sustain with damage but continued operation? And with an expected shutdown but no release of radioactive material? 17
- 49) Did this reactor sustain damage in the July 16, 2007 earthquake, as the Kashiwazaki power plant did? What damage and how serious was it? 17
- 50) Was the Fukushima power plant designed to withstand a tsunami of any size? What specific design criteria were applied?..... 18
- 51) What is the design level of the Japanese plants? Was it exceeded?..... 18
- 52) What are the Japanese S_1 and S_2 ground motions and how are they determined? 18
- 53) Did this earthquake affect the Kashiwazaki-Kariwa nuclear power plant? 19
- 54) How high was the tsunami at the Fukushima nuclear power plants? 19
- 55) Wikileaks has a story that quotes US embassy correspondence and some un-named IAEA expert stating that the Japanese were warned about this ... Does the NRC want to comment? 19

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- 56) Was there any damage to US reactors from either the earthquake or the resulting tsunami? 20
- 57) Have any lessons for US plants been identified? 20
- 58) It appears that the estimates of the tsunami are changing frequently. The NOAA and TEPCO estimates are different. Why? 20
- 59) How well can we predict a tsunami wave height? What have we learned about our prediction abilities based on the events in Japan?..... 20

NRC Response and Future Licensing Actions..... 22

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60) What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there? 22

61) With NRC moving to design certification, at what point is seismic capability tested – during design or modified to be site-specific? If in design, what strength seismic event must these be built to withstand? 22

62) What are the near term actions that U.S. plants are taking in consideration of the events in Japan? 22

63) What are the immediate steps NRC is taking? 23

64) Should U.S. residents be using Potassium iodide? 23

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65) What is Generic Issue 199 about? 24

66) Does the NRC have a position on the MSNBC article that ranked the safety of US plants? .. 24

67) A recent Can we get the rankings of the plants in terms of safety? (Actually this answer should be considered any time GI-199 data is used to “rank” plants) 24

68) What are the current findings of GI-199?..... 24

69) If the plants are designed to withstand the ground shaking why is there so much risk from the design level earthquake..... 24

70) Overall, how would the NRC characterize the CDF numbers? A quirk of numbers? A serious concern?..... 25

71) Describe the study and what it factored in – plant design, soils, previous quakes, etc. 25

72) Explain “seismic curve” and “plant level fragility curve” 25

73) Explain the “weakest link model” 25

74) What would constitute fragility at a plant? 26

75) Can someone put that risk factor into perspective, using something other than MSNBC’s chances of winning the lottery?..... 26

76) What, if anything, can be done at a site experiencing such a risk? (Or at Limerick in particular.)..... 26

77) Has anyone determined that anything SHOULD be done at Limerick or any of the other PA plants? 26

78) Page 20 of the report: This result confirms NRR’s conclusion that currently operating plants are adequately protected against the change in seismic hazard estimates because the guidelines in NRR Office Instruction LIC-504 “Integrated Risk-Informed Decision Making Process for Emergent Issues” are not exceeded. Can someone please explain? 26

79) Is the earthquake safety of US plants reviewed once the plants are constructed? 26

80) Does the NRC ever review tsunami risk for existing plants? 26

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81) Does GI-199 consider tsunami? 27

82) Where can I get current information about Generic Issue 199? 27

83) Are all US plants being evaluated as a part of Generic Issue 199? 27

84) Are the plants safe? If you are not sure they are safe, why are they not being shut down? If you are sure they are safe, why are you continuing evaluations related to this generic issue? 27

85) What do you mean by "increased estimates of seismic hazards" at nuclear power plant sites? 28

86) Does the SCDF represent a measurement of the risk of radiation RELEASE or only the risk of core damage (not accounting for secondary containment, etc.)? 28

87) Did an NRC spokesperson tell MSNBC's Bill Dedman that the weighted risk average was invalid and useless? He contends to us that this is the case. 28

88) 3. If it was "invalid" as he claims, why would the USGS include that metric?..... 29

89) Can you explain the weighted average and how it compares to the weakest link average?. 29

90) Ultimately would you suggest using one of the models (average, weighted, weakest link) or to combine the information from all three?..... 29

91) Were there any other factual inaccuracies or flaws in Mr. Dedman's piece you would like clarify/point out. 29

92) Mr. Dedman infers that the plant quake risk has grown (between the 1989 and 2008 estimates) to the threshold of danger and may cross it in the next study. Is this the NRC's position? 29

93) What document has the latest seismic hazard estimates (probabilistic or not) for existing nuclear power plants in the western US?..... 30

94) The GI-199 documents refer to newer data on the way. Have NRC, USGS et al. released those? I'm referring to this: "New consensus seismic-hazard estimates will become available in late 2010 or early 2011 (these are a product of a joint NRC, US Department of Energy, US Geological Survey (USGS) and Electric Power Research Institute (EPRI) project). These consensus seismic hazard estimates will supersede the existing EPRI, Lawrence Livermore National Laboratory, and USGS hazard estimates used in the GI-199 Safety/Risk Assessment." 30

95) What is the timetable now for consideration of any regulatory changes from the GI-199 research?..... 30

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106) What do we know about the potential for and consequences of a zirconium fire in the spent fuel pool? 37

107) Can a zirconium fuel fire be prevented by wide spacing of spent fuel assemblies in the spent fuel pool? 37

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131) Could an earthquake and tsunami the size of the one in Japan happen at San Onofre? 45

132) What magnitude earthquake are currently operating US nuclear plants such as SONGS designed to? 45

133) Could San Onofre withstand an earthquake of the magnitude of the Japanese earthquake? 45

134) Is possible to have a tsunami at San Onofre that is capable of damaging the plant? 45

135) Has the earthquake hazard at San Onofre been reviewed like Diablo Canyon nuclear power plant is doing? Are they planning on doing an update before relicensing? 46

136) How do we know that the emergency diesel generators in San Onofre will not fail to operate like in Japan? 46

137) Was there any damage to San Onofre from either the earthquake or the resulting tsunami? 46

138) What about emergency planning for San Onofre. Does it consider tsunami? 47

139) SONGS received a white finding in 2008 for 125VDC battery issue related to the EDGs that went undetected for 4 years. NRC issued the white finding as there was increased risk that one EDG may not have started due to a low voltage condition on the battery on one Unit (Unit 2). Aren't all plants susceptible to the unknown? Is there any assurance the emergency cooling systems will function as desired in a Japan-like emergency? 47

140) What is the height of water that SONGS is designed to withstand? 47

141) What about drawdown and debris? 47

142) Will this be reviewed in light of the Japan earthquake. 47

143) Could all onsite and offsite power be disrupted from SONGS in the event of a tsunami, and if that happened, could the plant be safely cooled down if power wasn't restored for days after? 47

144) Are there any faults nearby SONGS that could generate a significant tsunami? 48

145) What magnitude or shaking level is SONGS designed to withstand? How likely is an earthquake of that magnitude for the SONGS site? 48

146) Could SONGS withstand an earthquake of the magnitude of the Japanese earthquake? 48

147) What about the evacuation routes at SONGS? How do we know they are reasonable?..... 48

148) Regarding tsunami at DCNPP and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami? 49

149) What is the design level flooding for San Onofre? Can a tsunami be larger? 49

150) Is there potential linkage between the South Coast Offshore fault near SONGS and the Newport-Inglewood Fault system and/or the Rose Canyon fault? Does this potential linkage impact the maximum magnitude that would be assigned to the South Coast Offshore fault and ultimately to the design basis ground motions for this facility? 1

151) Recently, a new fault was discovered near Diablo Canyon Nuclear Power Plant.. Have any new faults been discovered near SONGS?..... 1

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155) Could Diablo Canyon withstand an earthquake of the magnitude of the Japanese earthquake?..... 50

156) Is Diablo Canyon's equipment vulnerable to tsunami? 50

157) How do we know that the emergency diesel generators in Diablo Canyon will not fail to operate like in Japan? 50

158) Was there any damage to Diablo Canyon from either the earthquake or the resulting tsunami?..... 50

159) How do we know the evacuation routes in the region around Diablo Canyon are realistic? 50

160) Now after the Japan tragedy, will the NRC finally hear us (A4NR) and postpone DC license renewal until seismic studies are complete? How can you be sure that what happened there is not going to happen at Diablo with a worse cast earthquake and tsunami? 51

161) The evacuation routes at DCNPP see are not realistic. Highway 101 is small...and can you imagine what it will be like with 40K people on it? Has the evacuation plan been updated w/ all the population growth? 51

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163) Are there other seismically induced failure modes (other than tsunami) that would yield LTSBO? Flooding due to dam failure or widespread liquefaction are examples. 51

164) Ramifications of beyond design basis events (seismic and tsunami) and potential LTSBO on spent fuel storage facilities? 51

165) Why did the Emergency Warning go out for a 'tsunami' that was only 6 ft (1.8 m) high? Do these guys really know what they're doing? Would they know it if a big one was really coming? Crying wolf all the time doesn't instill a lot of confidence. 51

The Japanese were supposed to have one of the best tsunami warning systems around. What went wrong last week? 51

166) Shouldn't the NRC make licensees consider a Tsunami coincident with a seismic event that triggers the Tsunami? 52

167) Given that SSCs get fatigued over time, shouldn't the NRC consider after-shocks in seismic hazard analyses? 52

168) Did the Japanese also consider an 8.9 magnitude earthquake and resulting tsunami "way too low a probability for consideration"?..... 52

169) GI-199 shows that the scientific community doesn't know everything about the seismicity of CEUS. And isn't there a prediction that the West coast is likely to get hit with some huge earthquake in the next 30 years or so? Why does the NRC continue to license plants on the west coast? 52

170) Has anyone done work to look at the effect of many cycles of low amplitude acceleration following a larger event. How do we know a plant would be fit to start back up after an event? We cannot possibly do NDE on everything to determine if flaws have propagated to the point where they need to be replaced. 52

171) Aren't the California plants right on the San Andreas fault? 53

172) I heard that, at the urging of PG&E, effective acceleration was calculated at an average value, rather than peak. For a magnitude 7.5 quake, peak ground acceleration would be 1.25 times gravity at the plant. The change reduced that to .75g, with the adjustment from peak ground acceleration to effective ground acceleration. Is this true? 54

173) (Continued from previous question) A so-called "tau factor" was used, which reduced it again to .67g. Can you please explain this? 54

174) (Continued from previous question) To assess the strength of concrete, actual values were used, rather than code allowable minimums. Can you please explain this?..... 55

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176) We are trying to understand why our plants in low-seismic areas (see below) would appear on the list of 27 plants that the NRC intends to review for seismic issues. While the story below notes that these plants have been identified based on "largest increase in seismic risk from a 1980s-era USGS study," the USGS maps show a low probability for seismic activity. I'm not aware of any major changes that would have increased seismic risk... can you help explain? 57

177) My basic understanding - especially in the case of St. Lucie and Duane Arnold - is that highly conservative values were input into your screening process for plants with low-seismic probability, therefore moving plants like those previously mentioned up in the listing. Can you help me to understand this? 57

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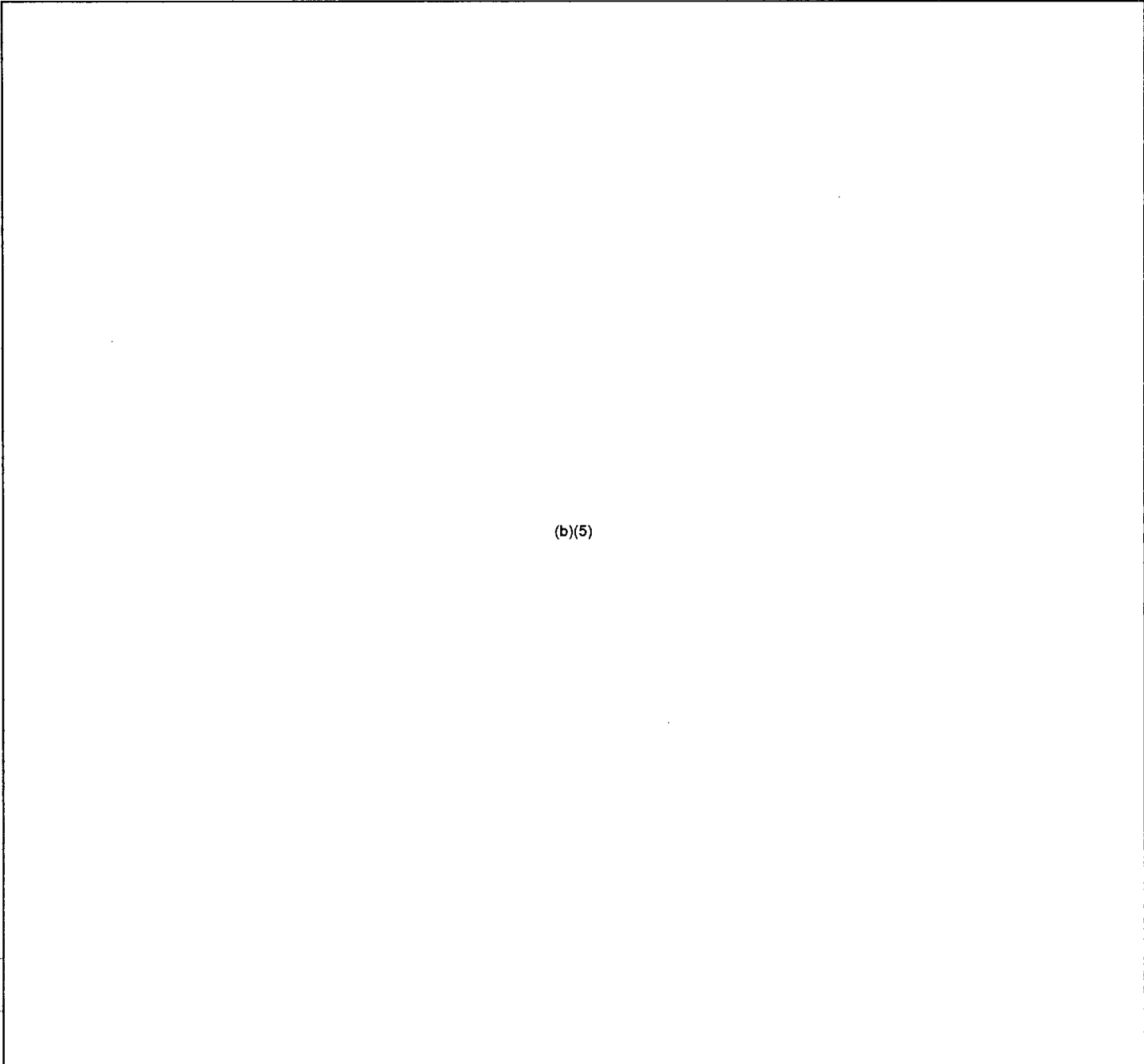
Baggett, Steven

~~NOT FOR PUBLIC DISCLOSURE~~

From: Frazier, Alan
Sent: Thursday, March 31, 2011 2:38 PM
To: Bradford, Anna; Thoma, John; Baggett, Steven; Tadesse, Rebecca; Kock, Andrea
Cc: Andersen, James; Bowman, Gregory; Wittick, Brian
Subject: FYI: Response to Questions on the use of MOX fuel
Attachments: Background Information MOX rev1 .docx

Commissioner's Assistants,

Below are answers to questions from a Commission office regarding MOX Fuel and the Fukushima Daiichi Plants. Please see the attached document for additional information.



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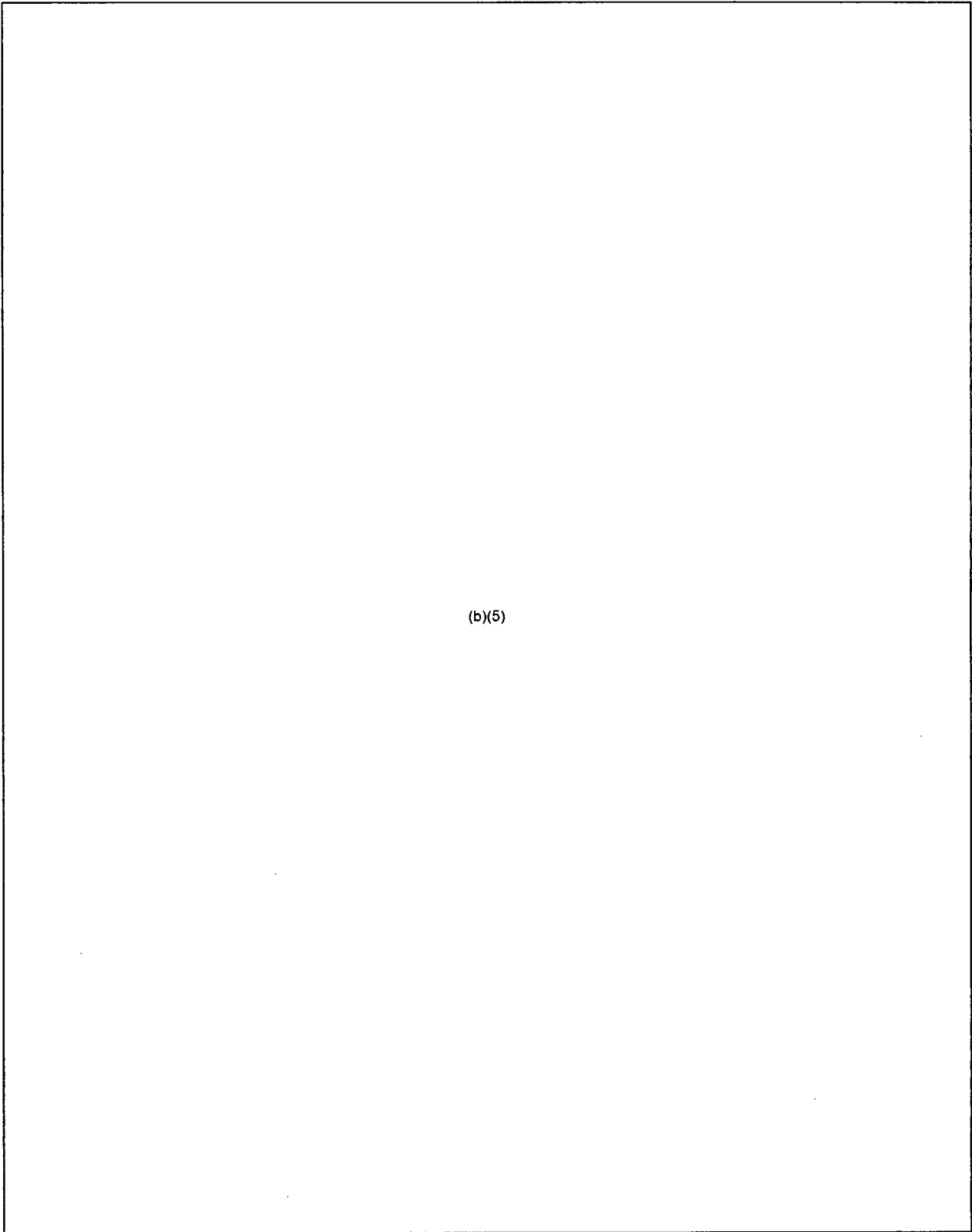
Please let us know if you have any other questions.

Alan

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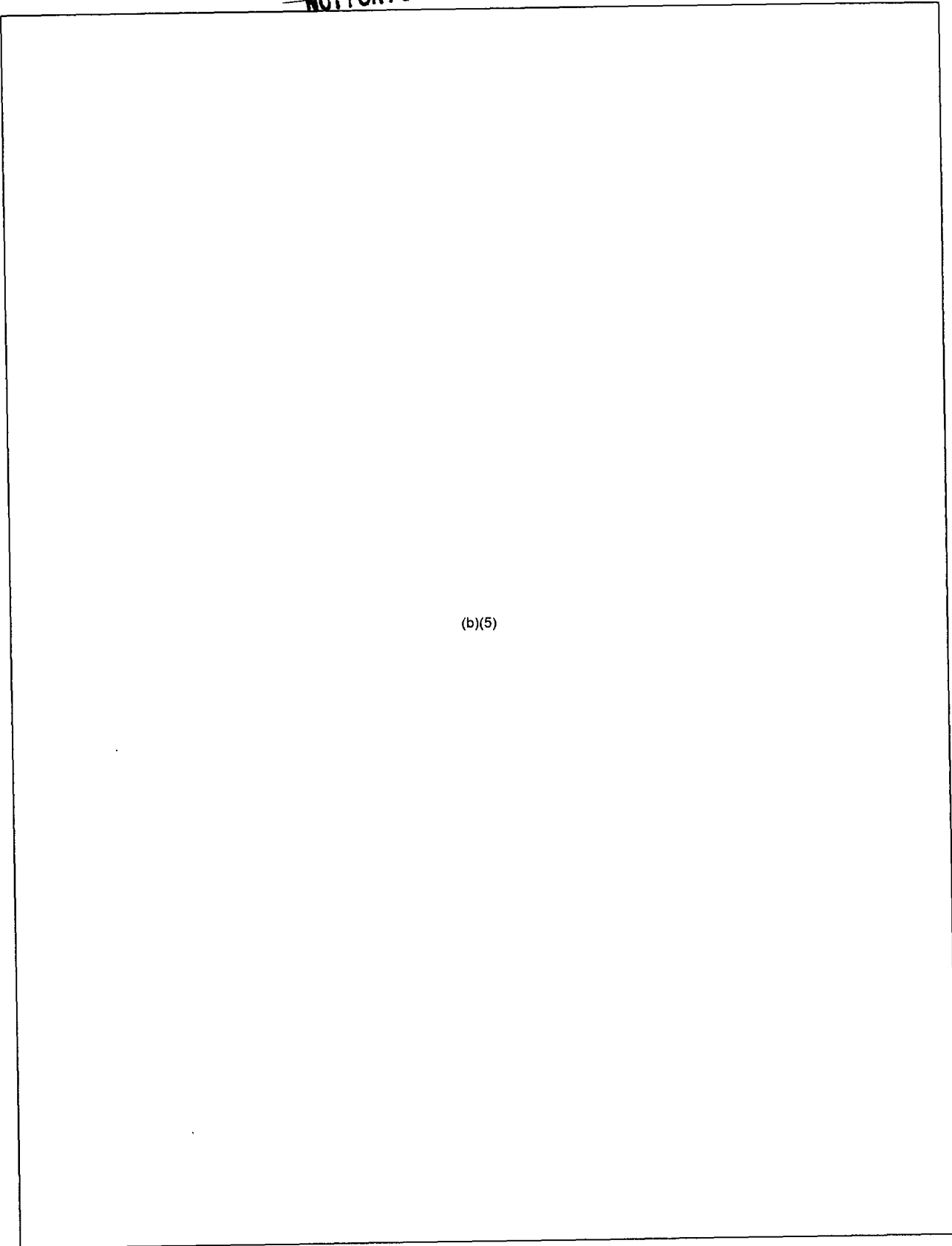
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MOX Impact on Operation and on Severe Accident Consequences



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Snodderly, Michael

NOT FOR PUBLIC DISCLOSURE

From: Thaggard, Mark
ent: Thursday, March 31, 2011 7:20 PM
fo: Hipschman, Thomas; Marshall, Michael; Snodderly, Michael; Orders, William; Franovich, Mike; Castleman, Patrick
Subject: AMS Data for the Fukushima Daiiicha Event

It is my understanding that during a Commission TA briefing this morning on the Fukushima Daiiicha event, there was a request to get AMS data. A link to the DOE site where updates to this information can be viewed has been added to the Executive Briefing Background Book Sharepoint site at <http://nsir-ops.nrc.gov>.

Please let me know if you have any problems accessing the information.

Mark Thaggard, ET Response Advisor

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Yellow Announcement

~~NOT FOR PUBLIC DISCLOSURE~~



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

Announcement No. 042

Date: April 1, 2011

To: All NRC Employees
SUBJECT: AGENCY TASK FORCE TO CONDUCT NEAR-TERM EVALUATION OF THE NEED FOR AGENCY ACTIONS FOLLOWING THE EVENTS IN JAPAN

On March 11, 2011, Japan experienced a severe earthquake resulting in the shutdown of multiple reactors. It appears that the reactors' response to the earthquake went according to design. At the Fukushima Daiichi site, the earthquake caused the loss of normal AC power. In addition, it appears that the ensuing tsunami caused the loss of emergency AC power at the Fukushima Daiichi site. Subsequent events caused damage to fuel and radiological releases offsite.

The Chairman, via Tasking Memorandum – COMGBJ-11-0002, "NRC Actions Following the Events in Japan," directed the staff to convene an agency task force of U.S. Nuclear Regulatory Commission (NRC) senior leaders and experts. The task force will conduct a methodical and systematic review of relevant NRC regulatory requirements, programs, and processes, and their implementation, to recommend whether the agency should make near-term improvements to our regulatory system. The task force will also identify a framework and topics for review and assessment for the longer-term effort.

Charter for the task force has been issued and is located at [ML11089A050](#). The charter defines the objective, scope, coordination and communication, expected products, schedule, staffing, and EDO interface. The task force will update the Commission on the near-term review at approximately 30 and 60 days, and provide its observations, findings, and recommendations in the form of a written report and briefing at the completion of the near-term effort occurring at approximately 90 days.

The task force will report to Martin Virgilio, Deputy Executive Director for Reactor and Preparedness Programs. Members of the task force include:

- | | |
|---------------------|---|
| Lead | Charles Miller, FSME |
| Senior Managers | Daniel Dorman, NMSS
Jack Grobe, NRR
Gary Holahan, NRO |
| Senior Staff | Amy Cabbage, NRO
Nathan Sanfilippo, OEDO |
| Administrative Asst | Cynthia Davidson, OGC |

For the near-term review, other staff members may be consulted for technical expertise on a part-time basis.

/RA/

R. W. Borchardt
Executive Director for Operations

[NRC Yellow Announcements Index](#)

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Davis, Roger

From: HRMSBulletin Resource
Sent: Friday, April 01, 2011 1:59 PM
To: HRMSBulletin Resource
Cc: HRMSBulletin Resource
Subject: NEW TAC'S ASSOCIATED WITH SUPPORTING THE EVENTS IN JAPAN

NRC will need to provide information relating to the costs associated with supporting the events in Japan that directly relates to the Earthquake and Tsunami. For pay periods 6 and 7 we created TAC ZG0061, this was used by all staff that directly performed duties that supported the Japan event. Going forward starting with pay period 8(March 27 – April 9), we will need to track any costs associated with support of the Japan event relating to the earthquake and tsunami in greater detail. Please do not use TAC ZG0061 after pay period 7 (PP 7 ended March 26, 2011). The separation into multiple TAC's for different activities is necessary for appropriate fee billing.

The new TAC's are listed below with a brief description.

ZG0064 – Japan Support Team (In Japan). This TAC is to be used to record hours worked while employees are in Japan, for those employees who traveled to Japan to support the earthquake and tsunami.

ZG0063 – Japan Event HQ Operations Watchstanders. This TAC is to be used to record hours worked when employees are working in the Operations Center. This is for employees who are working directly on activities that are supporting the Japan events relating to the earthquake and tsunami and who did not travel to Japan.

ZG0062 – Work Performed, Lessons Learned relating to the Japan Event. This TAC is to be used for work that will be performed by staff in the agency as a lessons learned approach to improve the NRC's ability relating to operating reactors. This TAC is not to be used for any work that is described in the TAC's above.

It will not be necessary to do corrected cards for pay periods prior to pay period 8, the Division of the Controller will make all necessary corrections.

If you have any questions on these new TAC's please send an e-mail to mary.matheson@nrc.gov.

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

From: Snodderly, Michael
Sent: Saturday, April 02, 2011 3:11 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Baggett, Steven; Davis, Roger; Lui, Christiana
Subject: Summary of 4/2/2011 Commission TA Briefing
Attachments: NRC Status Update 4.2.11--0430.pdf

Commissioner,

First, I wanted to clarify that the current Japanese evacuation instructions is for residents within a 20km radius of the site boundary and sheltering in place out to 30 km. The Japanese government officials have recommended to residents living within 20 to 30 km of the site to voluntarily evacuate their homes – not because of changing conditions at the site – but because of increasingly difficult logistical issues.

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From: LIA07 Hoc
Sent: Saturday, April 02, 2011 5:24 AM
To: LIA07 Hoc
Subject: 0430 EDT (April 2, 2011) USNRC Earthquake/Tsunami Status Update

Attached, please find a 0430 EDT, April 2, 2011 status update from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami.

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

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

-Jim

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Jim Anderson

Executive Briefing Team Coordinator

Office of Nuclear Security and Incident Response

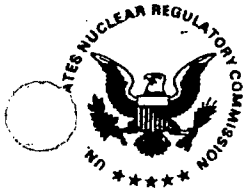
U.S. Nuclear Regulatory Commission

LIA07.HOC@nrc.gov (Operations Center)

james.anderson@nrc.gov

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

~~NOT FOR PUBLIC DISCLOSURE~~

April 4, 2011

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[Handwritten Signature]
Belkys Sosa 4/4/11

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Rebecca L. Schmidt, Director *RS*
Office of Congressional Affairs

SUBJECT: DRAFT TESTIMONY FOR THE HEARING ON THE NRC RESPONSE TO
RECENT NUCLEAR EVENTS IN JAPAN BEFORE THE HOUSE
COMMITTEE ON ENERGY AND COMMERCE, SUBCOMMITTEE ON
OVERSIGHT AND INVESTIGATIONS

Attached for your review and comment is the subject testimony that will be presented to the House
Committee on Energy and Commerce, Subcommittee on Investigations, on Wednesday, April 6,
2011. Please return your comments to the Office of Congressional Affairs by **3:00 p.m, Monday,**
April 4, 2011.

Attachment:
As stated

- cc: SECY
- OGC
- OGC/Burns
- EDO
- OIP
- OCAA
- OPA
- OIG
- CFO

CONTACT: Raeann Shane, 415-1699

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TESTIMONY OF MARTIN VIRGILIO
DEPUTY EXECUTIVE DIRECTOR FOR REACTOR AND PREPAREDNESS PROGRAMS
UNITED STATES NUCLEAR REGULATORY COMMISSION
TO THE COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
UNITED STATES HOUSE OF REPRESENTATIVES

NRC RESPONSE TO RECENT NUCLEAR EVENTS IN JAPAN AND THE CONTINUING
SAFETY OF THE U.S. COMMERCIAL NUCLEAR REACTOR FLEET

APRIL 6, 2011

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Snodderly, Michael

From: LIA06 Hoc
ent: Tuesday, April 05, 2011 9:58 AM
ro: Orders, William; Castleman, Patrick; Franovich, Mike; Snodderly, Michael; Hipschman, Thomas; Marshall, Michael
Subject: IAEA daily report on the Status of the Fukushima Daiichi Nuclear Power Plant and related environmental conditions.

Does your office have access to the IAEA ENAC site? There is a comprehensive daily status of the Fukushima Daiichi Nuclear Power Plant and related environmental conditions available. Let me know if you would like access.

John Adams
Liaison Team Director
U.S. Nuclear Regulatory Commission
Operations Center
301-816-5188

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Josh,

Here's some information we've compiled, but it is very preliminary. We have not run this by everyone who may want to weigh in. However, it may be helpful in the short term, such as for tomorrow.

We are working on getting this information written up properly so that we can publish it as a fact sheet as soon as possible. Sorry this is messy, we are all pretty tired.

Some Key Points:

- Although we often think of the US as having "active" and "non-active" earthquake zones, earthquakes can actually happen almost anywhere. Seismologists typically separate the US into low, moderate, and high seismicity zones; not into "active" and "inactive".
- The boundaries of the low, medium and high zones are not hard, are not well constrained, and are open to interpretation. Below we've pulled together a list based on our judgment and based on multiple interpretations in the technical community. But this is just for guidance; it is subjective.
- Faults are often well mapped and characterized in active zones, such as the west. But there are very few mapped faults in the east, which doesn't mean that there aren't earthquakes. For example, the most widely felt historical earthquakes in the US occurred in the New Madrid seismic zone in 1811 and 1812. The zone is (clearly shown on figure 1, the hazard map. However, the fault has never been identified and so is only shown as an area source on figure 2. In fact, most CEUS earthquakes are not tied to a known fault.
- The NRC has a seismic research program which has—with DOE and EPRI—sponsored and undertaken a ground breaking project to create a new state of the art seismic source model for the central and eastern US. This project, the Central and Eastern US Seismic Source Characterization for Nuclear Facilities project, is expected to finish at the end of this year.
- The NRC is also undertaking the Generic Issue 199 program to reassess seismic risk in light of the potential for higher seismic hazard (ground shaking) in the CEUS. This shows an ongoing dedication to seismic safety.
- The NRC requires that every nuclear plant be designed for site-specific ground motions that are appropriate for their locations. In addition, the NRC has specified a minimum ground motion level to which nuclear plants must be designed.

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*from Kammerer
~ 4/10/2011*

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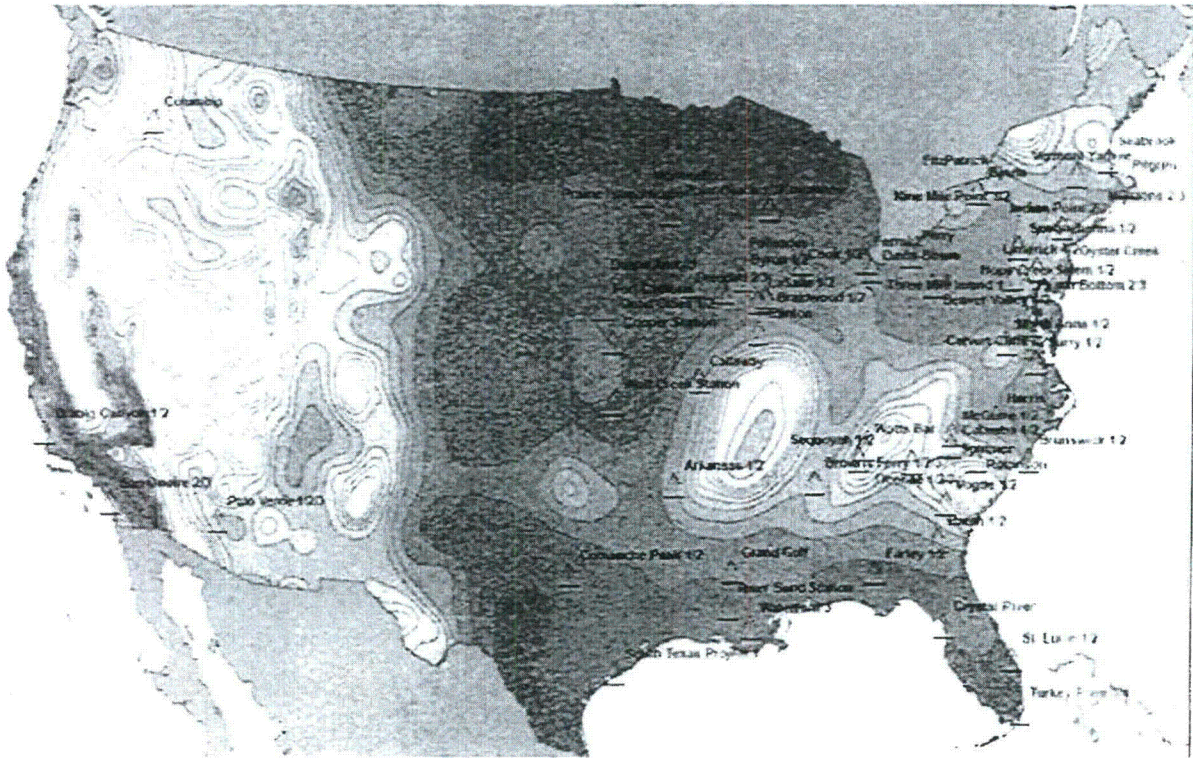


Figure 1: US Nuclear Plants overlain on the USGS National Seismic Hazard Map

As you can see the seismic source regions in the central and eastern east are not well defined. So to state a specific number of plants that are in the moderate seismicity zones is challenging and open to interpretation. This is just one interpretation, which is provided by the USGS.

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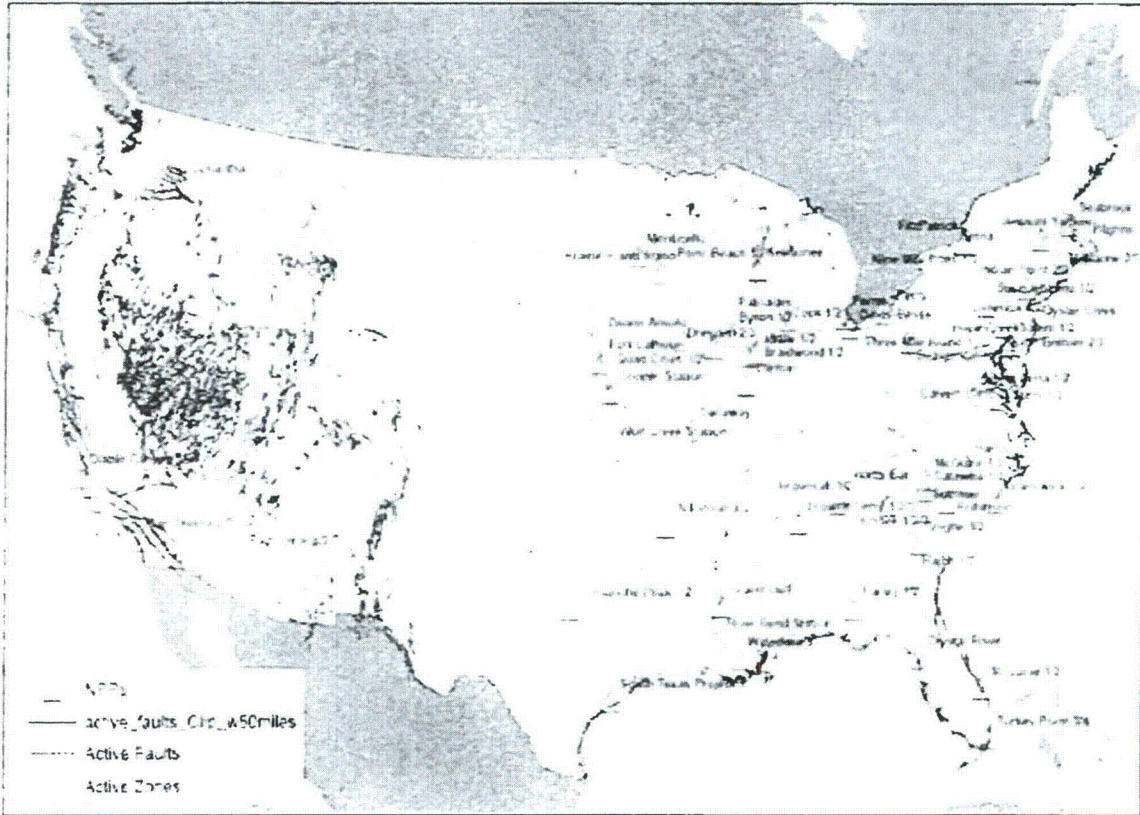


Figure 2: This figure shows mapped active faults and US Nuclear plants

As you can see, there are very few mapped active faults in the east, which doesn't mean that there aren't earthquakes. The most widely felt historical earthquakes in the US happened in the New Madrid seismic zone (clearly shown on figure 1, the hazard map). However, the fault is not shown here because we can't find it under all that Mississippi sand! You can (faintly) see the source one interpretation of a source zone on the figure. However, this is just the interpretation that was in the GIS map we were working with. We will likely put nested "blobs" onto this figure to the widest and narrowest zone interpretations.

If someone asks about plants being very near mapped active faults, there are two...but that doesn't mean that there isn't hazard elsewhere because in the central and eastern US the seismicity comes from "seismic zones" not faults. It's a hard balance between saying things that make it seem that we have a lot of problems and saying things that make it seem we are underestimate the hazard or not taking it seriously.

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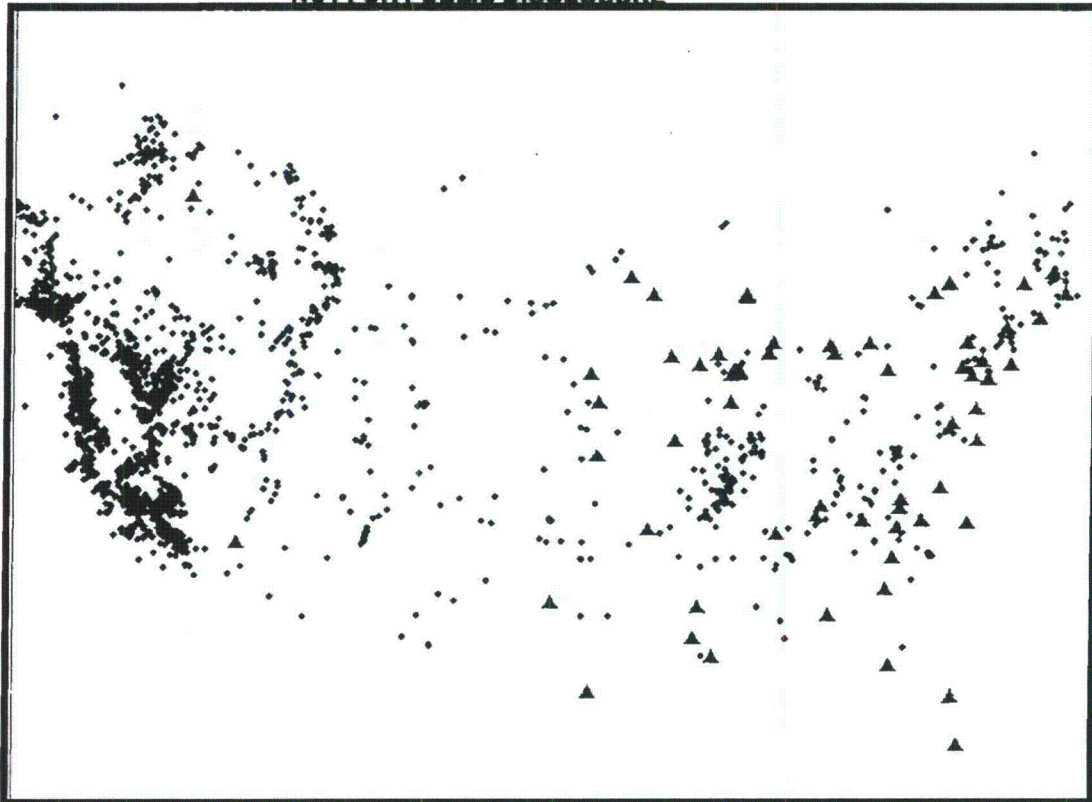
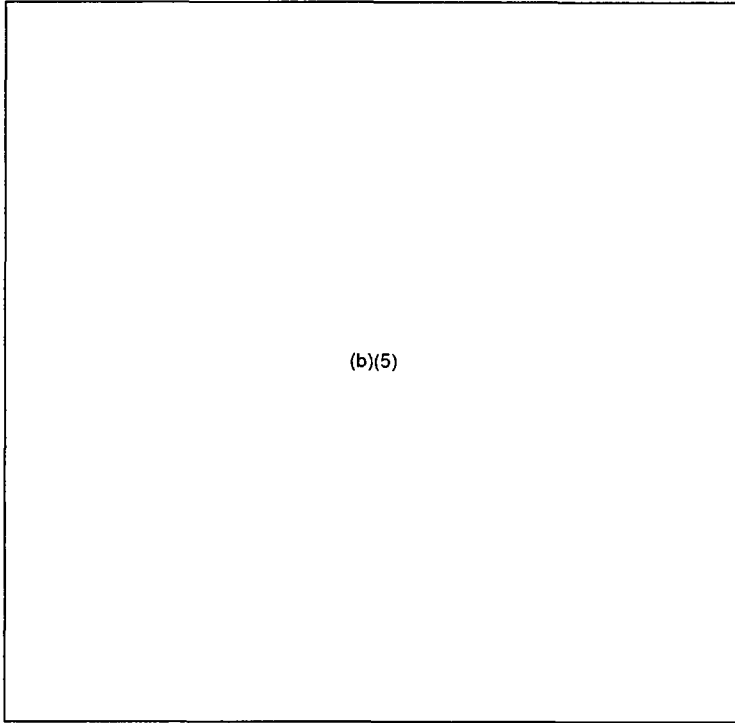


Figure 3: Earthquakes Plotted with US Nuclear Plants

We are remaking a plot like this with a more complete set of earthquake (we're not sure that the time frame of the quakes is), this speaks to the fact that earthquakes occur everywhere, even where we don't have mapped faults.

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This is the preliminary (and subjective) list:



Other useful info: we just answered this question for OPA as a result of a really bad DOE interview...

"Aren't the California plants right on the san andreas fault?"

No. Both plants are approximately 50 miles from the San Andreas Fault. However, both are closer to other active fault zones. Diablo Canyon is closer to the Hosgri fault zone and has been retrofit to be safe in ground motions from a magnitude 7.5 earthquake on the Hosgri, which is 3 miles away. Recently there was a new fault, called the Shoreline fault discovered, about a 1/2 mile from the plant. But it is smaller and only capable of about a 6.5 earthquake at the most. The ground motions from the Hosgri's 7.5 earthquake would be larger than an 6.5 on the Shoreline fault. San Onofre is closes to the Newport-Inglewood fault which is about 5 miles away and capable of a magnitude 7. San Onofre was built to withstand the ground motions from that earthquake.

Apostolakis, George

From: Baggett, Steven
Sent: Wednesday, April 06, 2011 5:59 PM
To: Apostolakis, George; Sosa, Belkys; Snodderly, Michael; Davis, Roger
Subject: Fw: RST Assessment of reactor and SFP conditions with recommendations
Attachments: 03-26-2100 Final RST assessment of Daiichi Units document.docx

All,

Please for give the following text. The attachment is what you want.

Steve

From: Castleman, Patrick
To: Kock, Andrea; Tadesse, Rebecca; Baggett, Steven
Sent: Wed Apr 06 12:12:07 2011
Subject: FW: RST Assessment of reactor and SFP conditions with recommendations

First of three documents I promised. This is the document that was leaked to the NYT.

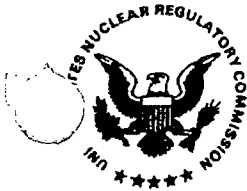
From: LIA08 Hoc
Sent: Sunday, March 27, 2011 10:08 PM
To: Franovich, Mike; Orders, William; Snodderly, Michael; Castleman, Patrick; Marshall, Michael; Batkin, Joshua; Hipschman, Thomas
Cc: LIA06 Hoc; RST01 Hoc
Subject: RST Assessment of reactor and SFP conditions with recommendations

Gentlemen

Attached for your information is the RST's assessment of plant conditions in Japan with recommendations. We talked to the NRC Japan Team, who plans to pass this document on to their Japanese counterparts in a meeting that begins in a few minutes.

Please let us know if you would like more information.

Jeff Temple
Response Program Manager
Liaison Team
301-816-5185



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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 7, 2011

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

(b)(5)

FROM: Rebecca L. Schmidt, Director *RLS*
Office of Congressional Affairs

George Apostolakis
George Apostolakis 4/8/11

SUBJECT: DRAFT TESTIMONY FOR HEARING BEFORE THE SENATE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS ON
"REVIEW OF THE NUCLEAR EMERGENCY IN JAPAN AND
IMPLICATIONS FOR THE U.S."

Attached for your review and comment is the subject testimony that will be presented to the Senate Committee on Environment and Public Works on Tuesday, April 12, 2011. Please return your comments to the Office of Congressional Affairs by **close of business, Friday, April 8, 2011.**

Attachment:
As stated

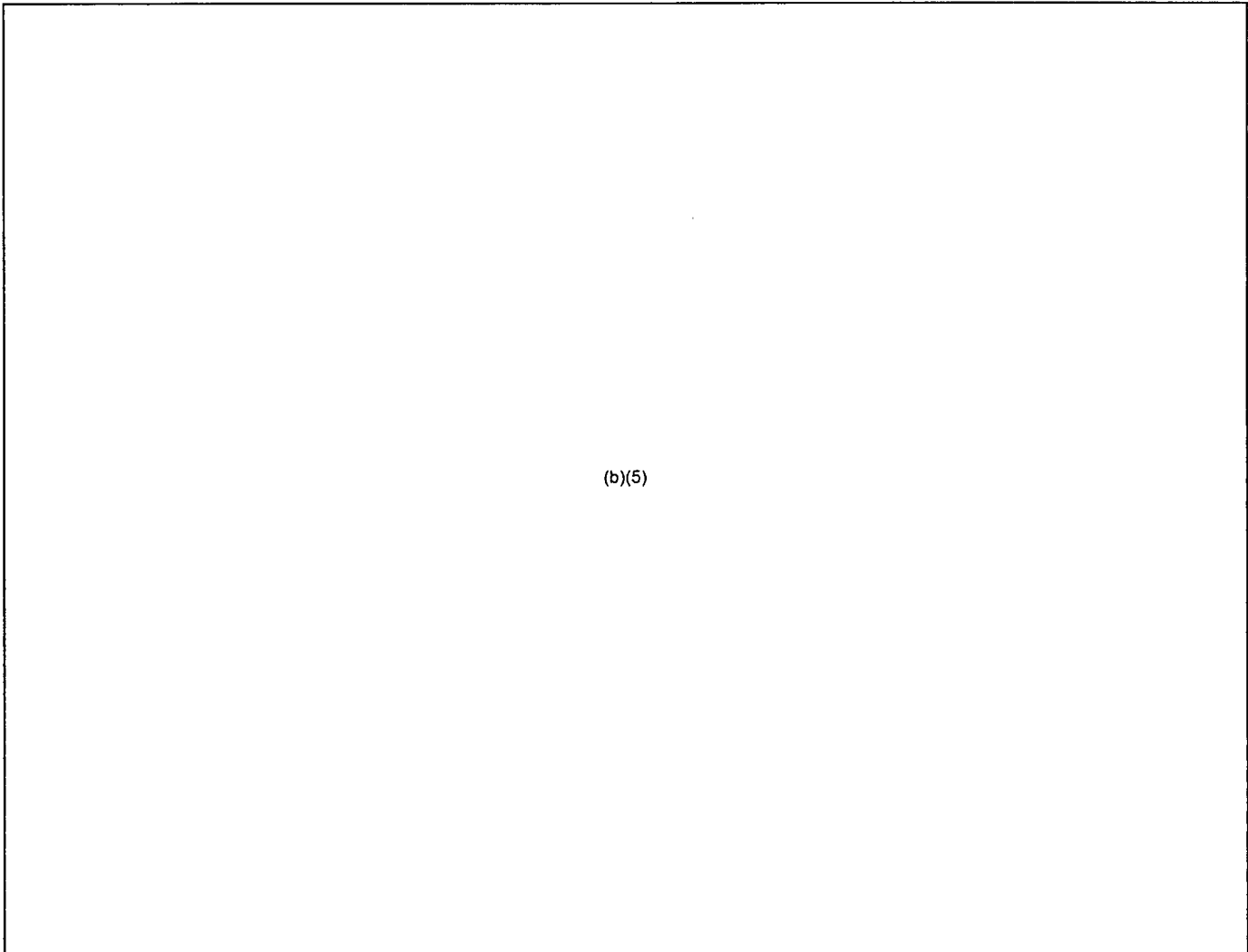
cc: SECY
OGC
OGC/Burns
EDO
OIP
OCAA
OPA
OIG
CFO

CONTACT: Gene Dacus, 415-1697

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~~NOT FOR PUBLIC DISCLOSURE~~

WRITTEN STATEMENT
BY GREGORY B. JACZKO, CHAIRMAN
UNITED STATES NUCLEAR REGULATORY COMMISSION
TO THE
ENVIRONMENT AND PUBLIC WORKS COMMITTEE
AND THE
CLEAN AIR AND NUCLEAR SAFETY SUBCOMMITTEE
UNITED STATES SENATE
APRIL 12, 2011



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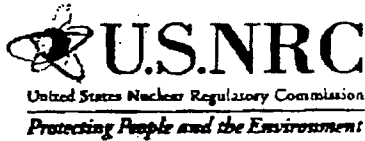
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Apostolakis, George

From: EDO Update [nrc.announcement@nrc.gov]
Sent: Monday, April 11, 2011 2:27 PM
To: Taylor, Renee
Subject: EDO Update



EDO Update

Monday, April 11, 2011



I am sure that you are all aware that a federal government shutdown was averted on Friday when the leadership of the House and Senate and the President agreed, in principle, to a budget outline for Fiscal Year (FY) 2011 and temporary budget funding until midnight April 14th. Of course, the details have not yet been made public, so we do not know at this point what the final impact of the budget reductions—if any—will be for the NRC. The final outcome should become clearer throughout this week as the Congress develops the appropriations law for FY 2011 before the current Continuing Resolution expires. In the meantime, of course, we will carry on normal operations, including travel and training. As always, I will share any significant new information about the budget as it becomes available.

On a different topic, it has been more than a month since Northern Japan was struck by the devastating earthquake and tsunami and the resulting nuclear emergency. Although the situation at Fukushima Daiichi nuclear power station has improved, it still requires monitoring and NRC continues to provide assistance to our Japanese counterparts. We will continue to maintain a fully-engaged site team in Japan, but beginning this week we will be increasing the size and adjusting the skill set of the team to effectively support the work activities in Japan. Additional NRC employees are preparing to depart for Japan to replace current staff, allowing them to return home. The headquarters Operations Center, meanwhile, is realigning to better serve the changing needs of stakeholders in other parts of the U.S. Government and the Japanese Government.

Beginning today, the Ops Center will continue to have enhanced staffing around the clock, but will have fewer individuals per shift. Their focus will be coordination and communications, with most technical work associated with the Fukushima response shifting to the line organizations, such as NRR, RES, and NSIR. The line offices will be leveraged to perform the detailed analysis previously performed by the full Reactor

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Safety, Protective Measures, and Liaison Teams in the Operations (Ops) Center. Taskings to the line organizations will include specific expectations for internal coordination and schedules—with deadlines sometimes measured in hours—to reflect the needs and priorities of the response effort, especially the site team in Japan. I have asked that Office Directors and other supervisors recognize the importance of rapid response, when indicated, and authorize staff overtime as appropriate. This is a pilot approach to help shape our longer-term plans for staffing the Ops Center for this response, and will be re-evaluated at the end of the week.

I continue to encourage you to consult the multiple information resources available on the special section of our public website devoted to events in Japan: <http://www.nrc.gov/japan/japan-info.html>. Everything in this section, including testimony before Congress, is public information, so you can feel free to share the information from this website with interested friends and family.

Bill
Bill Borchardt, EDO

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Baggett, Steven

From: Merzke, Daniel
Sent: Wednesday, April 13, 2011 8:43 AM
To: Bradford, Anna; Warren, Roberta; Thoma, John; Baggett, Steven; Tadesse, Rebecca; Kock, Andrea
Cc: Vietti-Cook, Annette; Muessle, Mary; Andersen, James
Subject: FW: FYI - PARs for Deputies Meeting Rev 19a (2).docx
Attachments: PARs for Deputies Meeting Rev 19a (2).docx

Please find attached the latest **draft** document with the criteria for short-term re-entry of U.S. citizens inside the 50 mile zone around Fukushima, and the long-term re-entry criteria. I would like to stress this is still a draft document at this time. I'm still working on locating a copy of the Global Assessment, and will forward that when I find it.

Dan

From: Dudek, Michael
Sent: Wednesday, April 13, 2011 7:42 AM
To: Merzke, Daniel
Subject: FYI - PARs for Deputies Meeting Rev 19a (2).docx

Dan,

Here is one of the documents for distribution, as appropriate. OOU at this time.

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@nrc.gov

Snodderly, Michael

~~NOT FOR PUBLIC DISCLOSURE~~

From: OST01 HOC
Sent: Sunday, April 17, 2011 2:05 AM
To: Weber, Michael; Virgilio, Martin; Castleman, Patrick; Orders, William; Franovich, Mike; Hipschman, Thomas; Snodderly, Michael
Cc: Tracy, Glenn; Zimmerman, Roy; LIA08 Hoc; RST01 Hoc; Hoc, PMT12; Moore, Scott; Reynolds, Steven
Subject: Final Slides - NRC INTERIM COMPREHENSIVE ASSESSMENT OF FUKUSHIMA EVENT
Attachments: JapenGlobalAssessmentFinalApril15.pptx

These are the final slides that were provided by the site team for the SoS briefing package.

The attachments are ~~000~~.

From: Casto, Chuck
Sent: Saturday, April 16, 2011 10:57 PM
To: ET07 Hoc; HOO Hoc
Cc: Moore, Scott; Zimmerman, Roy; Virgilio, Martin; Reynolds, Steven
Subject: Final slides for the ET - please pass along

Attached are the final slides I sent to the Ambassador's secretary. They will have them for the on-site briefing package. If SoS wants a few minutes we will give quick verbal. Otherwise Ast. Sec. Donohue (DOE) is traveling with her and will have these details. We've briefed him and his staff previously so he is up to speed. It is expected that she will at least say something to the NRC folks.....The ambassador recommended to her that she discuss the NRC.

Thanks
chuck

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NRC INTERIM COMPREHENSIVE ASSESSMENT of FUKUSHIMA EVENT

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4/15/2011

Official Use Only - Sensitive Internal
Information

1

FM 2025 of 2929 319

Background

- Consortium of U.S. nuclear organizations completed assessment
 - NRC; Department of Energy; Naval Reactors; Institute of Nuclear Power Operations; Electric Power Research Institute; General Electric
- Collaborated to complete technical assessments for safety issues for reactors and spent fuel pools
- Finishing major technical assessments
- Provided results to TEPCO and NISA

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Assessment Conclusions

- U.S. Protective Action decisions remain conservative through all scenarios
 - Tokyo is not seriously threatened
- Unknown Ocean impacts
- Active radiation releases ongoing
- Accident conditions static but fragile
- Mitigating features temporary and highly unconventional

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Assessment of Conditions

- Fuel Damage estimates: U-1 70%; U-2 30%; U-3 25% (est.)
- Reliance on steam cooling for reactors
- Time to react on a loss of injection is short – less than 10 hours for Unit 1
- Current situation results in a 1-10 to 1-100 probability of future energetic release
- Probability driven by seismic events without diversity or redundancy of injection system
- Can get 1-100,000 probability with training & preplanning of fire equipment and diverse & redundant injection system
- Containment flooding remains primary suggestion – especially for Units 1 & 3
- Flooding reduces consequences by one-to-two orders of magnitude

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Next Steps

- Steam cooling assessment recommends more actions to mitigate additional events
 - Diversity and redundancy in feeding system
 - Automation of Giraffes and feeding systems
 - Additional feeding system injection points
 - Additional venting system
- Stability requires more actions
 - Completing actions to Phase 1 and Phase 2 stability
 - For example - decay heat removal system

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Apostolakis, George

~~NOT FOR PUBLIC DISCLOSURE~~

From: Kammerer, Annie
Sent: Friday, April 29, 2011 1:43 PM
To: Apostolakis, George
Subject: RE: SSE

(b)(5)

Cheers,
Annie

From: Apostolakis, George
Sent: Friday, April 29, 2011 9:44 AM
To: Kammerer, Annie
Subject: SSE

Annie:

Your e-mails to me have been very informative. Thank you.

(b)(5)

Thanks.

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20

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FM 2030 of 2929

299

GA

Commissioner George Apostolakis
Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(301) 415-1810

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~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

NOT FOR PUBLIC DISCLOSURE

From: Apostolakis, George
Sent: Friday, April 29, 2011 2:20 PM
To: Kammerer, Annie
Subject: RE: SSE

Annie:

Thank you very much.

(b)(6)

GA

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(301) 415-1810

From: Kammerer, Annie
Sent: Friday, April 29, 2011 1:43 PM
To: Apostolakis, George
Subject: RE: SSE

(b)(5)

NOT FOR PUBLIC DISCLOSURE

(b)(5)

Cheers,
Annie

From: Apostolakis, George
Sent: Friday, April 29, 2011 9:44 AM
To: Kammerer, Annie
Subject: SSE

Annie:

Your e-mails to me have been very informative. Thank you.

(b)(5)

Thanks.

GA

Commissioner George Apostolakis
US Nuclear Regulatory Commission
1500 White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(301) 415-1810

NOT FOR PUBLIC DISCLOSURE

Apostolakis, George

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sosa, Belkys
Sent: Friday, April 29, 2011 2:38 PM
To: Apostolakis, George
Cc: Snodderly, Michael; Baggett, Steven; Davis, Roger
Subject: FYI: DRAFT Document - Recommendation on Update to Travel Advisory OUG

Importance: High

fyi

From: Frazier, Alan
Sent: Friday, April 29, 2011 2:23 PM
To: Hipschman, Thomas; Marshall, Michael; Castleman, Patrick; Snodderly, Michael; Orders, William; Franovich, Mike
Cc: Monninger, John; Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho; Andersen, James; Muessle, Mary; Virgilio, Martin; Merzke, Daniel; Brock, Kathryn; Bowman, Gregory; Bush-Goddard, Stephanie; Weber, Michael; Sanfilippo, Nathan
Subject: DRAFT Document - Recommendation on Update to Travel Advisory OUG
Importance: High

Commissioner's Assistants,

A "Recommendation on Update to Travel Advisory" document has been posted to the Japan SharePoint page. You may access the folder directly at <http://nsir-ops.nrc.gov/Travel%20Advisory/Forms/AllItems.aspx> or you may click on the Travel Advisory link on the left side of the main page <http://nsir-ops.nrc.gov/>.

The document provides draft language to assist with communications regarding a reduction in the US Government's recommended evacuation area for American citizens around the Fukushima Daiichi site, and provides considerations for the decision to endorse the reduction. The draft has been reviewed by NRC HQ and has been cleared for sharing with interagency partners to ensure awareness and enable the identification of any critical issues. The PMT will take the lead for collection of the comments and discussions with the interagency partners.

The Japan team is currently reviewing the document. If you have any questions, please contact Kathryn Brock (pmt12.hoc@nrc.gov) or Brian McDermott (Brian.McDermott@nrc.gov). You can also contact them through the Operations Center.

The path forward is to collect any critical comments by no later than COB on Monday 2MAY11 ET, integrate/resolve any issues raised, and provide a final revision for discussion with AMB Roos by COB on Tuesday 3MAY11 ET. Once finalized, our understanding is that the NRC team in Japan will provide the document to the AMB and provide the team's current assessment of the decision considerations.

Regards,

Alan L. Frazier
Executive Technical Assistant
Office of the Executive Director for Operations
U.S. Nuclear Regulatory Commission
1-415-1763

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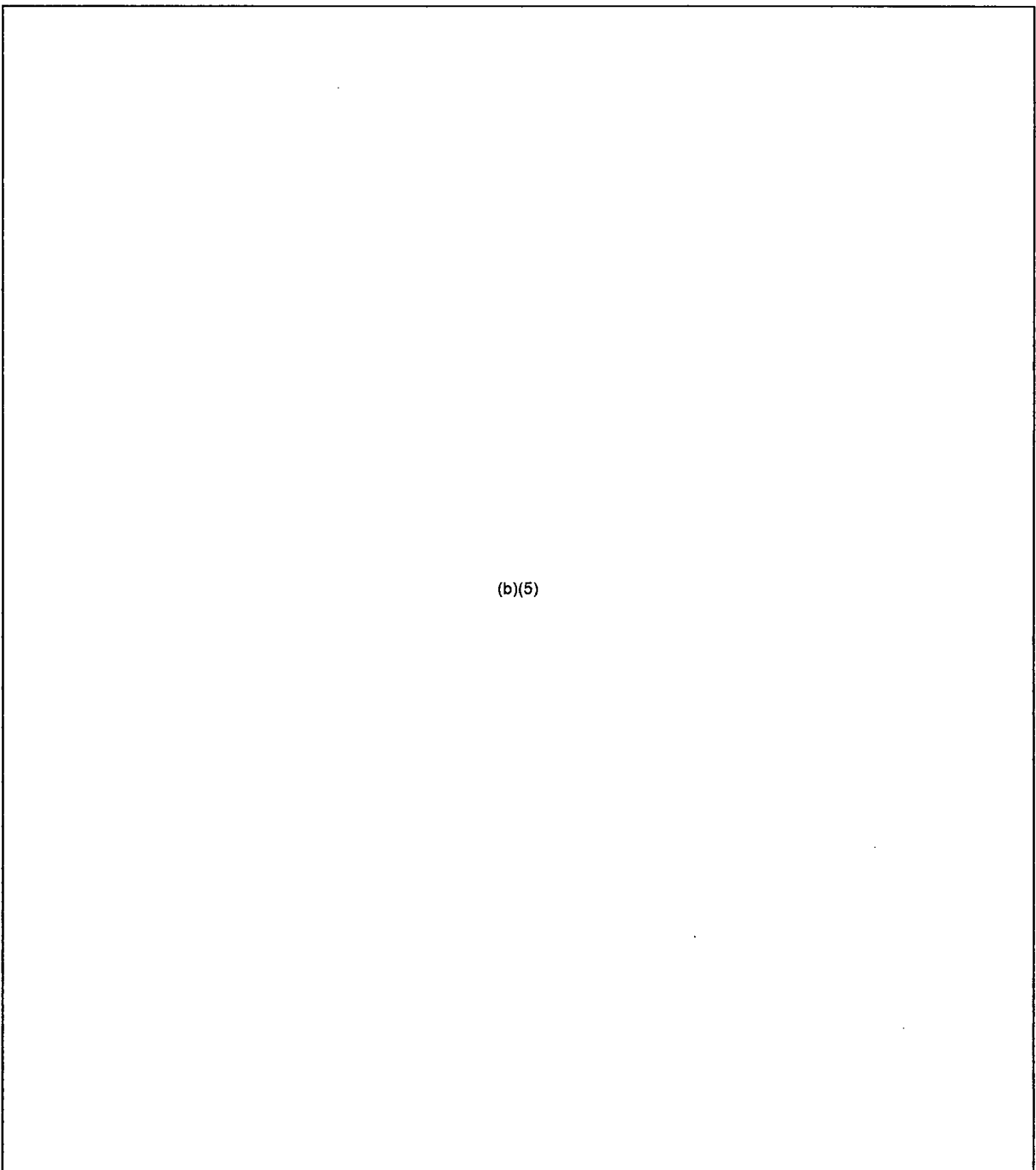
4/29/11

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~~OFFICIAL USE ONLY~~

Assessments and recommendations are based on the best available technical information and are subject to change or refinement.

Recommendation on Update of Travel Advisory for US Citizens Regarding Areas around the Fukushima Daiichi site



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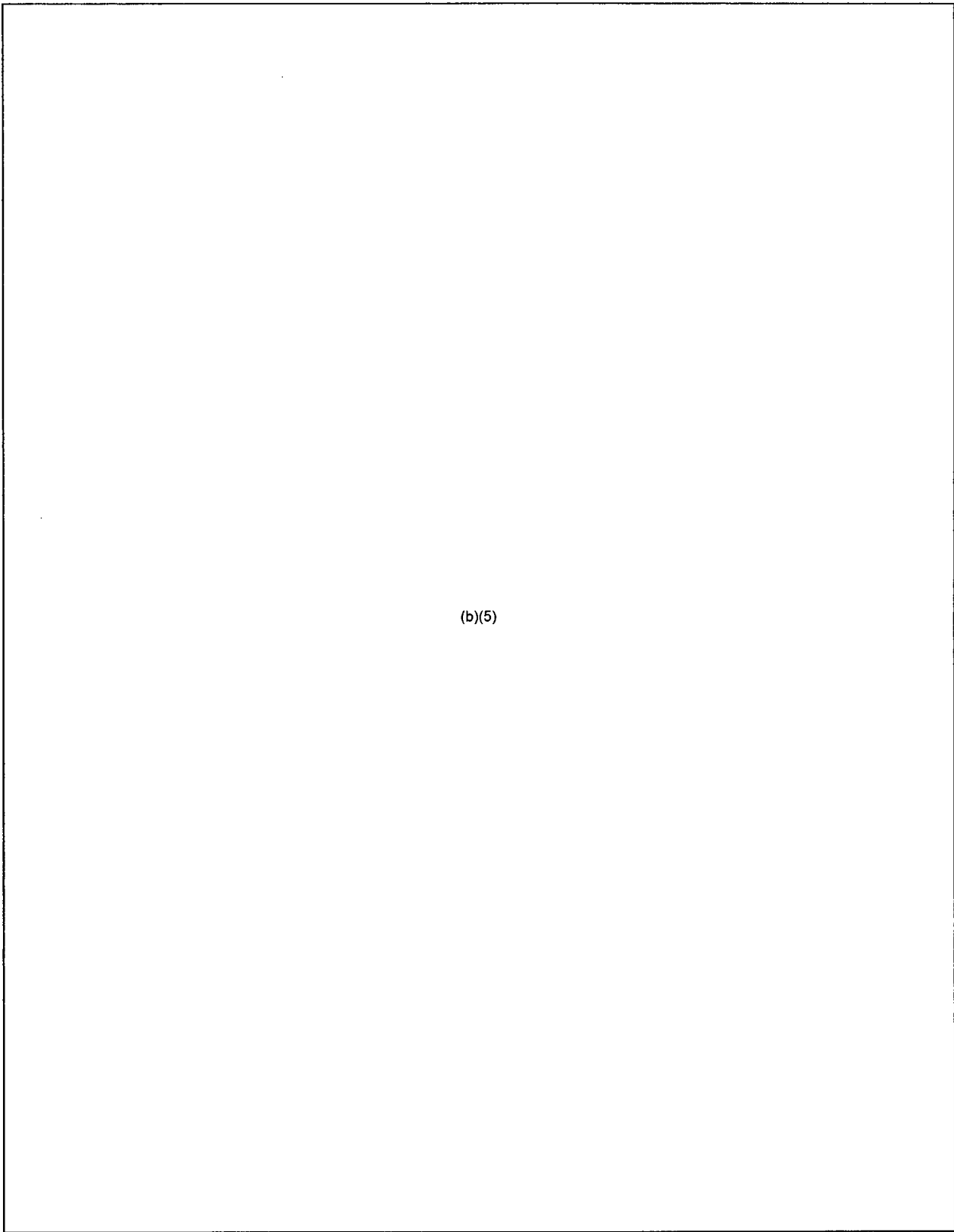
DRAFT as of 09:15 hrs 29 April 11

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— OFFICIAL USE ONLY —

Assessments and recommendations are based on the best available technical information and are subject to change or refinement.



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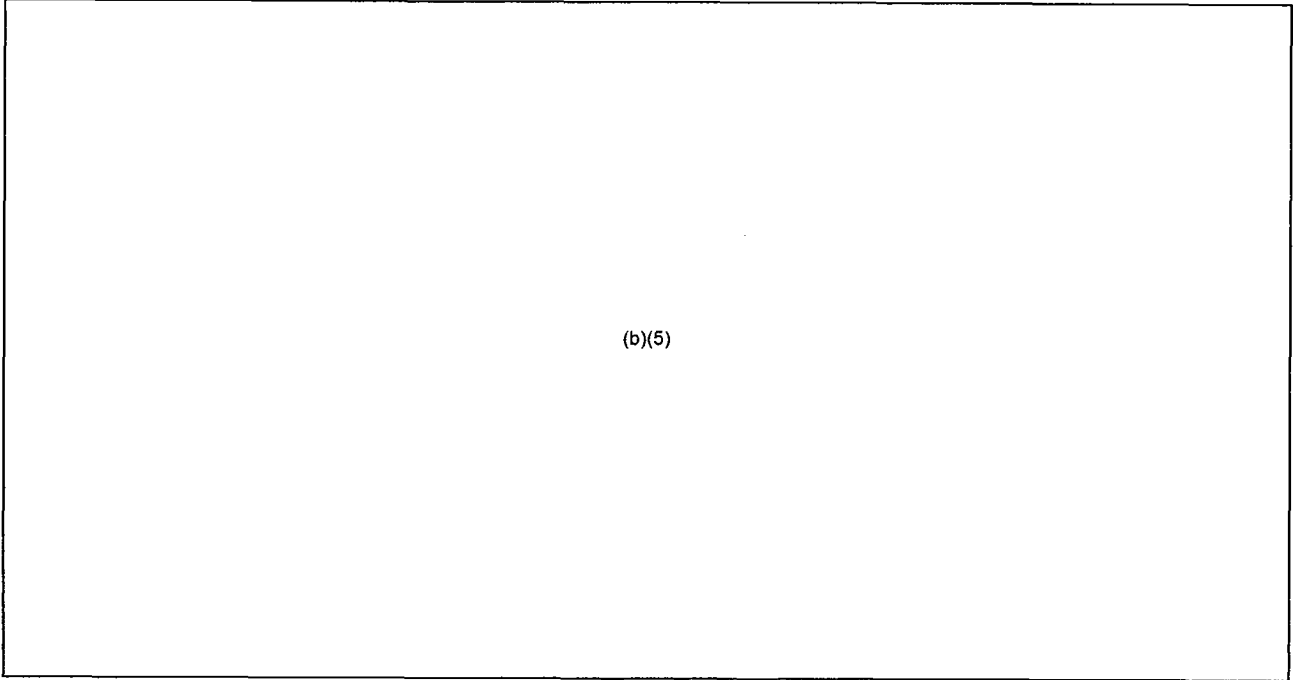
DRAFT as of 09:15 hrs 29 April 11

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~~OFFICIAL USE ONLY~~

Assessments and recommendations are based on the best available technical information and are subject to change or refinement.



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Pre-Decision

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09:15 hrs 29 April 11

Gilles, Nanette

~~NOT FOR PUBLIC DISCLOSURE~~

From: Snodderly, Michael
Sent: Monday, May 02, 2011 9:10 AM
To: Gilles, Nanette
Subject: FW: SharePoint Information
Attachments: SharePoint Information Japan.pdf

I am sorry I deleted the ENAC e-mail already. Please see the attached link for the NSIR Japan sharepoint site. This site is intended to store all pertinent info for the Commission TAs on the Japan Event. I was going to go over the sharepoint site this afternoon at 3 pm with you.

From: Zimmerman, Roy
Sent: Thursday, April 21, 2011 2:29 PM
To: Hipschman, Thomas; Castleman, Patrick; Snodderly, Michael; Orders, William; Franovich, Mike; Bartley, Jonathan; Hay, Michael; Ruland, William; Howell, Linda; Hart, Ken; Easton, Earl; Cook, William; Cook, William; Burnell, Scott; McIntosh, Angela; Kokajko, Lawrence; Camper, Larry
Cc: Virgilio, Martin; Weber, Michael; OST01 HOC; Kowalczyk, Jeffrey; Jackson, Karen; LIA08 Hoc; Tracy, Glenn; Johnson, Michael; Uhle, Jennifer; Carpenter, Cynthia; Leeds, Eric
Subject: SharePoint Information

As we discussed during this morning's briefing, we would like to use a recently developed SharePoint site (site address and details in the attachment) to allow you to view the latest and prior updates of our regularly issued documents, as well as those of other organizations. Also, there will be access to videos and other information that we think you will find useful.

Our intention is to put our updates on the SharePoint site now, but to continue to send you the routine updates through next Tuesday, 4/26, and then stop emailing those updates starting 4/27 after the transition period ends, unless we receive concerns. The attachment will allow you to set up alerts so you will get an email when the SharePoint site is updated.

Thank you for your willingness to give this approach a chance, we think it will provide for a more efficient process and you will find it useful.

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Gilles, Nanette

From: Jones, Andrea
Sent: Monday, May 02, 2011 9:33 AM
To: Snodderly, Michael
Cc: Gilles, Nanette
Subject: FW: ENAC report
Attachments: Summary of reactor unit status at 28-April 1700 UTC.pdf

From: Jones, Andrea
Sent: Friday, April 29, 2011 10:59 AM
To: LIA08 Hoc; Castleman, Patrick; Orders, William; Franovich, Mike; Snodderly, Michael; Wittick, Brian; Jones, Cynthia; Hipschman, Thomas
Cc: Doane, Margaret; Mamish, Nader; Larson, Emily; Abrams, Charlotte; Whitney, James
Subject: FW: ENAC report

Attached are the IAEA ENAC report dated April 28, 2011.

Please note the sensitivity of the information.

From: Schwartzman, Jennifer
Sent: Friday, April 29, 2011 9:05 AM
To: Jones, Andrea
Subject: ENAC report

Login for ENAC:

Username:
Password:

In the documents section it is called the "Updated status of the Fukushima Daiichi NPP"

Jennifer Schwartzman Holzman
Office of International Programs
U.S. Nuclear Regulatory Commission
+1-301-415-2317
jennifer.schwartzman@nrc.gov

NOTE: Please note new email address above. My old email address, jks1@nrc.gov, will no longer work on this system. Please update your contact lists accordingly.*

~~**NOT FOR PUBLIC DISCLOSURE**~~

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Gilles, Nanette

From: Jones, Andrea
Sent: Monday, May 02, 2011 1:07 PM
To: Jones, Andrea; LIA08 Hoc; Castleman, Patrick; Orders, William; Franovich, Mike; Snodderly, Michael; Wittick, Brian; Jones, Cynthia; Hipschman, Thomas
Cc: Doane, Margaret; Mamish, Nader; Larson, Emily; Abrams, Charlotte; Whitney, James; Gilles, Nanette; Young, Francis
Subject: ENAC reports for April 30th and May 1st
Attachments: Summary of reactor unit status at 30-April 1600 UTC[1].pdf; Summary of reactor unit status at 01-May[1].pdf

Attached are the IAEA ENAC report dated April 30th and May 1st, 2011.

Please note the sensitivity of the information.

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Davis, Roger

From: Snodderly, Michael
 Sent: Tuesday, May 03, 2011 6:15 PM
 To: Apostolakis, George
 Cc: Sosa, Belkys; Baggett, Steven; Gilles, Nanette; Davis, Roger; Lui, Christiana
 Subject: Summary of 5/3/2011 Reactor TA Briefing by Ops Center

Fred Brown, NRR, led telecom.

TEPCO released revised estimates of core damage in reactors 1-3. Estimated damage in No.1 reactor decreased from 70 to 55 percent due to data error. Core damage estimates for reactors 2 and 3 raised to 35 and 30 percent respectively. TEPCO says corrected estimates will not affect Nuclear and Industrial Safety Agency's crisis rating of 7.

Increased water injection into No. 1 reactor yielded positive signs, with both the temperature and pressure inside the reactor vessel falling as expected. TEPCO increased cooling water injection into Unit No. 1 reactor. TEPCO increased the cooling water injection rate water into the No. 1 reactor in order to monitor changes in water depth in the containment vessel and check for leakage. Rate increased from 5.9 cubic meters per hour to 10 cubic meters per hour. Further injection rate increases (to a planned 14 cubic meters per hour) were halted due to slowly decreasing drywell pressure. Water levels had increased by 10 cm at 6pm JST. The test is part of the plan to fill the No 1 and 3 reactors containment vessels with water by July, to cool the fuel rods in a stable manner.

TEPCO announced that it is unlikely that water is leaking from the spent fuel rod pool of the Fukushima Daiichi power plant's No.4 reactor, contradicting earlier reports. Instead, TEPCO attributed the lower than expected water levels to the water evaporating due to the high temperature of its 1,535 spent fuel rods. TEPCO said that the water has been evaporating at a rate in line with calculations by experts. While the utility concluded the overall integrity of the pool is maintained, they noted that there might be some minor leakage from the pool.

Per an email update provided to DOE by TEPCO at 1132 EDT on May 2, TEPCO has announced a plan to construct a coastal levee against future tsunamis caused by large aftershocks as large as Magnitude 8.0, which are predicted by several experts. The coastal levee will be built assuming flooding by the tsunami of up to 4 m in altitude on the sea side of the site and 10 m in altitude around major buildings. TEPCO will construct a temporary coastal levee with sufficient ground height of 10 m near Units 3 and 4. Also, TEPCO has moved power supply equipment and designated diesel generators for reactor cooling on elevated ground, so that TEPCO could continue cooling of reactors and spent fuel pools even when an unexpectedly large tsunami hits the site.

Finally, Congressman Markey's staff inquired about how the reactor core isolation cooling system could operate for 67 hours if the batteries were only designed for 6-8 hours? The staff responded: 1) shedding lower priority loads from the batteries, 2) recharging the batteries, and 3) operating the RCIC system in the manual mode.

Mike Snodderly
 Technical Assistant for Reactors
 to Commissioner Apostolakis
 U. S. Nuclear Regulatory Commission

Phone: 301-415-2241
 Email: michael.snodderly@nrc.gov

Gilles, Nanette

From: Baggett, Steven
ent: Tuesday, May 10, 2011 12:04 PM
io: Gilles, Nanette
Subject: Japan update

Nan,

SharePoint site has the updated information.

Bob Weber, ET for day shift this week

- Unit 3 decreasing temperatures reported on 5/8 are now being questioned to determine if correct, more to follow.
- Unrelated to radiation but an impact on Japan gov't ability to respond to the reactor events. Apparently 4 people have died from e-coli in foodstuffs. Japan gov't has shifted some resources to ensure food safety.
- Staff completed is coordination with Department of State (DOS) on the Travel Advisory and plan to provide to the Japan team today. No health threat to us persons traveling on the roadway or rail nearby the reactor site.
- Staff completing its response to question from Senator Boxer, and will issue response later today. Apparently no Commission involvement.
- Staff and industry reps reviewing Japan's scoping plan to construct a groundwater wall around the entire site. They plan to call at 6:15 pm with Japan site team to report its review.
- Staff clarified NRC had no role in the Japan Prime Minster closing NPPs. NRC issued the statement at the request of the DOS

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Gilles, Nanette

From: Franovich, Mike
Sent: Wednesday, May 11, 2011 9:18 AM
To: Bowman, Gregory
Cc: Orders, William; Castleman, Patrick; Gilles, Nanette; Marshall, Michael
Subject: RE: Proposed Bulletin 2011-01: Mitigating Strategies

Greg,

(b)(5)

Mike

From: Bowman, Gregory
Sent: Tuesday, May 10, 2011 5:06 PM
To: Franovich, Mike
Cc: Orders, William; Castleman, Patrick; Gilles, Nanette; Marshall, Michael
Subject: RE: Proposed Bulletin 2011-01: Mitigating Strategies
Importance: High

Mike,

I attached responses to the questions you sent yesterday evening.

Please note that the staff intends to issue the bulletin around noon tomorrow, May 11. If you have any additional questions, please let me know as soon as possible.

Greg

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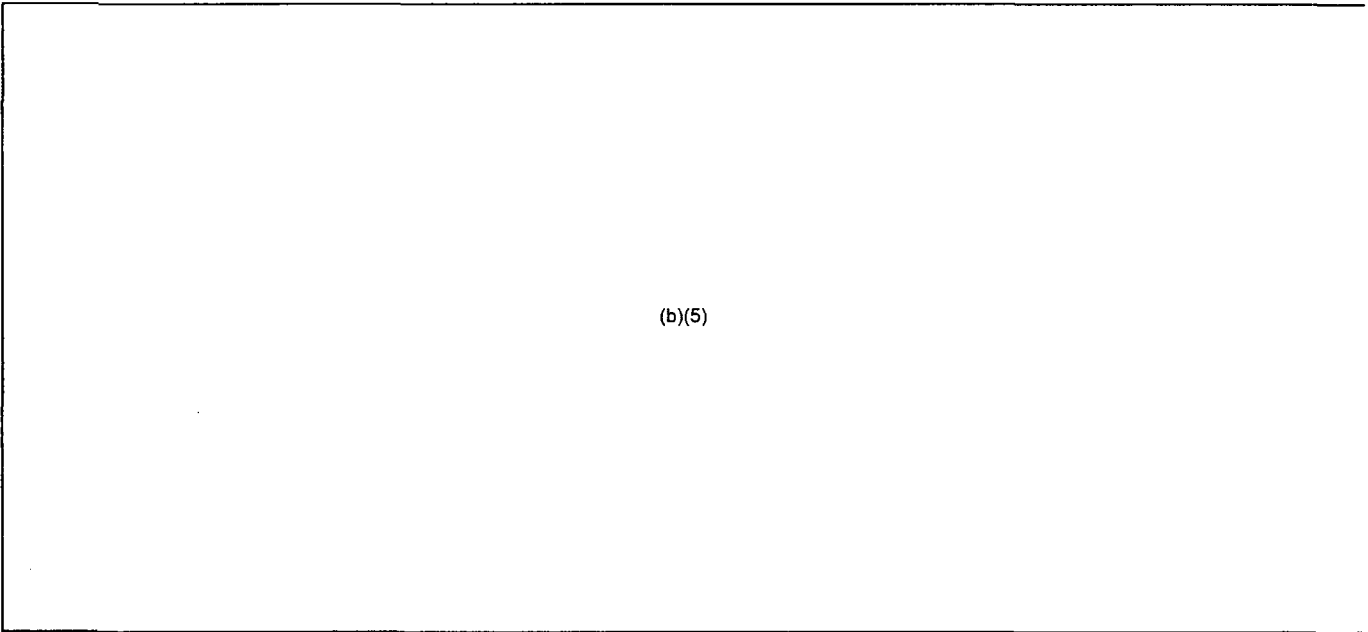
From: Franovich, Mike
Sent: Monday, May 09, 2011 6:21 PM
To: Bowman, Gregory

~~NOT FOR PUBLIC DISCLOSURE~~
~~NOT FOR PUBLIC DISCLOSURE~~

cc: Virgilio, Martin; Orders, William; Castleman, Patrick; Gilles, Nanette; Marshall, Michael
Subject: Proposed Bulletin 2011-01: Mitigating Strategies

Greg,

Thanks for the walk-around last week. I reviewed the proposed bulletin this weekend and have a few questions.



Thanks,

Mike Franovich
Technical Assistant for Reactors
Office of Commissioner Ostendorff
301-415-1784

NOT FOR PUBLIC DISCLOSURE

Gilles, Nanette

~~NOT FOR PUBLIC DISCLOSURE~~

From: Gilles, Nanette
Sent: Thursday, May 12, 2011 9:07 AM
To: Castleman, Patrick; Merzke, Daniel; Franovich, Mike
Cc: Orders, William; Marshall, Michael; Hipschman, Thomas
Subject: RE: CA Call Proposal

I do not object to canceling this morning's call.

From: Castleman, Patrick
Sent: Thursday, May 12, 2011 8:31 AM
To: Merzke, Daniel; Franovich, Mike
Cc: Orders, William; Gilles, Nanette; Marshall, Michael; Hipschman, Thomas
Subject: RE: CA Call Proposal

(b)(5)

Thanks, Pat

From: Merzke, Daniel
Sent: Thursday, May 12, 2011 7:34 AM
To: Castleman, Patrick; Franovich, Mike
Subject: CA Call Proposal

I hadn't heard back from you guys regarding the proposal I sent you yesterday to reduce the CA calls for the Japan event status to once a week; I believe Tuesday is being proposed. Please let me know if you're on board with that proposal. Thanks.

Dan

~~NOT FOR PUBLIC DISCLOSURE~~

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Gilles, Nanette

From: Merzke, Daniel
Sent: Thursday, May 12, 2011 3:04 PM
To: Castleman, Patrick
Cc: Orders, William; Gilles, Nanette; Franovich, Mike; Hipschman, Thomas; Marshall, Michael; Webber, Robert; Wiggins, Jim; McDermott, Brian; Andersen, James
Subject: RE: CA Call Proposal

Pat, I talked to Marty this afternoon about your questions and concerns. He said most of your questions are addressed one way or another on the Sharepoint site. According to the most recent status report, we entered Monitoring mode on March 11th, and we have not exited. I believe the rationale is that we still have a substantial site team to support, and the conditions for all affected units have not stabilized. The status report also states the 50 mile evacuation recommendation is still in effect. We provided the Ambassador a draft document with conditions staff felt needed to be met in order to relax the recommendation. It was couched as a travel advisory recommendation, and I think it's up to the State Department to decide if conditions in Japan are stable enough to allow U.S. residents to relax to the Japanese evacuation zone, taking into consideration the criteria we provided. I didn't see that document on the Sharepoint site because I'm pretty sure it was still draft when it was sent to the site team and Ambassador for comments, and they have not been populating the Sharepoint site with draft documents. I understand the desire on the part of the Commissioners to be kept fully informed of all policy matters and important recommendations and major actions.

As the Sharepoint site will continue to be updated with the most current information, and the other four offices concurred on the proposal, Marty is directing that we proceed with the proposal to provide once weekly CA status briefs on Tuesdays. Again, if conditions change, there will be additional briefings provided to ensure all offices are kept informed of current conditions. If you have specific questions, we can get them answered as expeditiously as possible at any time. If you have any questions, feel free to let me know.

Jan

From: Castleman, Patrick
Sent: Thursday, May 12, 2011 9:02 AM
To: Merzke, Daniel
Cc: Orders, William; Gilles, Nanette; Franovich, Mike; Hipschman, Thomas; Marshall, Michael
Subject: RE: CA Call Proposal

I need to consult with my principal before I give you a firm answer. Some sort of feedback on the concerns presented would help me in my discussions with the Commissioner.

Again, I do not object to cancelling today's call (which conflicts with the Commission meeting) if that is the consensus of my counterparts.

From: Merzke, Daniel
Sent: Thursday, May 12, 2011 8:34 AM
To: Castleman, Patrick
Subject: RE: CA Call Proposal

Pat, my only question was do you have any objections to going to a once per week status call? None of the other CAs objected. If you do object, then I'll pass that back to the team to keep the twice weekly call going.

From: Castleman, Patrick
Sent: Thursday, May 12, 2011 8:31 AM

NOT FOR PUBLIC DISCLOSURE

To: Merzke, Daniel; Franovich, Mike
Cc: Orders, William; Gilles, Nanette; Marshall, Michael; Hipschman, Thomas
Subject: RE: CA Call Proposal

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

Thanks, Pat

From: Merzke, Daniel
Sent: Thursday, May 12, 2011 7:34 AM
To: Castleman, Patrick; Franovich, Mike
Subject: CA Call Proposal

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Dan

~~NOT FOR PUBLIC DISCLOSURE~~



United States Nuclear Regulatory Commission

Protecting People and the Environment

Communications with States During an Emergency Response

Mark Thaggard

Deputy Director for Emergency
Preparedness, NSIR

May 18, 2011

(b)(5)

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~~NOT FOR PUBLIC DISCLOSURE~~

- Rich Tontal - FINE
- Jane Marshall - NSIR

201



United States Nuclear Regulatory Commission

Protecting People and the Environment

Briefing Outline

- Anticipated interactions during a domestic response
- Interactions during the Japanese response
- Preliminary feedback
- Potential follow-up actions

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United States Nuclear Regulatory Commission

Protecting People and the Environment

What is anticipated during a domestic response

- The NRC would have jurisdiction
- HQ Operation Center staffs its Liaison Team (*Activation Mode*)
 - LT will typically have two State Liaison persons
- Region Operation Center staffs its Base Team (*Monitoring Mode*)
- Communicate Directly with Affected States
 - Want to know what the protective action decision is
 - Need to know if any assistance is needed
 - NRC primary communication with States is through the Region

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United States Nuclear Regulatory Commission

Protecting People and the Environment

What is anticipated during a domestic response (cont.)

- Communications with other States will likely occur through OPA and/or Regional State Liaison Officers

All information released during an event must be approved by the Executive Team

- Important to avoid communicating misinformation

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United States Nuclear Regulatory Commission

Protecting People and the Environment

Communications with States during the Japanese Response

- DOS Overall lead responsibility for the U.S. response
 - Coordination lead by the White House
- HQ Op Ctr partially staffed
 - Agency in a Monitoring Mode
 - Initially no State Liaison staff in LT (not a domestic event)
- Communication challenges
 - International event (desire not to get out in front of Japanese)
 - Early on very limited information (heavy reliance on media reports)
 - Large uncertainty in the information
 - Rapidly evolving event
 - Strong impetus to limit release of information

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~~NO FOR PUBLIC DISCLOSURE~~



United States Nuclear Regulatory Commission

Protecting People and the Environment

Communications with States during the Japanese Response (cont.)

- 2nd day State Liaison staff added to LT
 - SL staff worked closely with RSLOs to develop Q/As
- Calls involving States
 - HHS
 - Initially included only CA, OR, and WA; later included all States
 - Other Federal agencies included: CDC, CBP, DOE, NOAA, FDA, EPA, and NRC
 - WH telecon with western states
 - OR, WA, CA, HI, AK, Guam, Samoa, Northern Marianas
 - Other Federal agencies included: DOE, DOS, EPA, DHS, USDA, NOAA, and USAID
 - Federal Radiological Preparedness Coordinating Committee
- DOE/EPA designated as lead agency for communicating with States on radiation monitoring
- OPA/RSLOs involved throughout

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(b)(5)

(b)(5)



United States Nuclear Regulatory Commission

Protecting People and the Environment

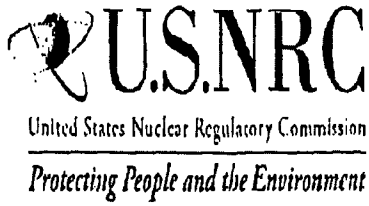
Feedback for After-action Assessment for Foreign Response

- Need clear and consistent directions on what and how information should be released to the States
- Identify lead agencies early on and post contact information

Hold regular calls to handle State questions

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Follow-on actions

- Complete after-action assessment
- Engagement with States

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(b)(5)
GA 6/1/11

May 31, 2011

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Rebecca L. Schmidt, Director
Office of Congressional Affairs

SUBJECT: QUESTIONS FOR THE RECORD FROM THE MARCH 30, 2011,
SENATE APPROPRIATIONS COMMITTEE HEARING ON
NUCLEAR SAFETY IN LIGHT OF THE IMPACT OF NATURAL
DISASTERS ON JAPANESE NUCLEAR FACILITIES

Attached for your review and comment are the draft answers to the Questions for the Record (QFRs) submitted by the Senate Appropriations Committee associated with the March 30, 2011, on the Impact of Natural Disasters on Japanese Nuclear Facilities hearing. Please provide your comments to OCA by **close of business, Monday, June 6, 2011**.

The QFRs 4a, 5b, 7d, 8a, 12a-c, and 13a-b are more directly budget related, and thus are more important to review, given the House Appropriations Subcommittee FY 2012 markup of the draft Energy and Water Development bill this Thursday. **Please review these QFRs first, and provide comments by 2pm tomorrow, Wednesday, June 1st**. Thank you very much for your continued help on these.

Attachment: As stated

- cc: SECY
- OGC
- OGC/Burns
- EDO
- OIP
- OCAA
- OPA
- OIG
- CFO

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CONTACT: David Decker, 415-1693



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 31, 2011

~~NOT FOR PUBLIC DISCLOSURE~~

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CFO

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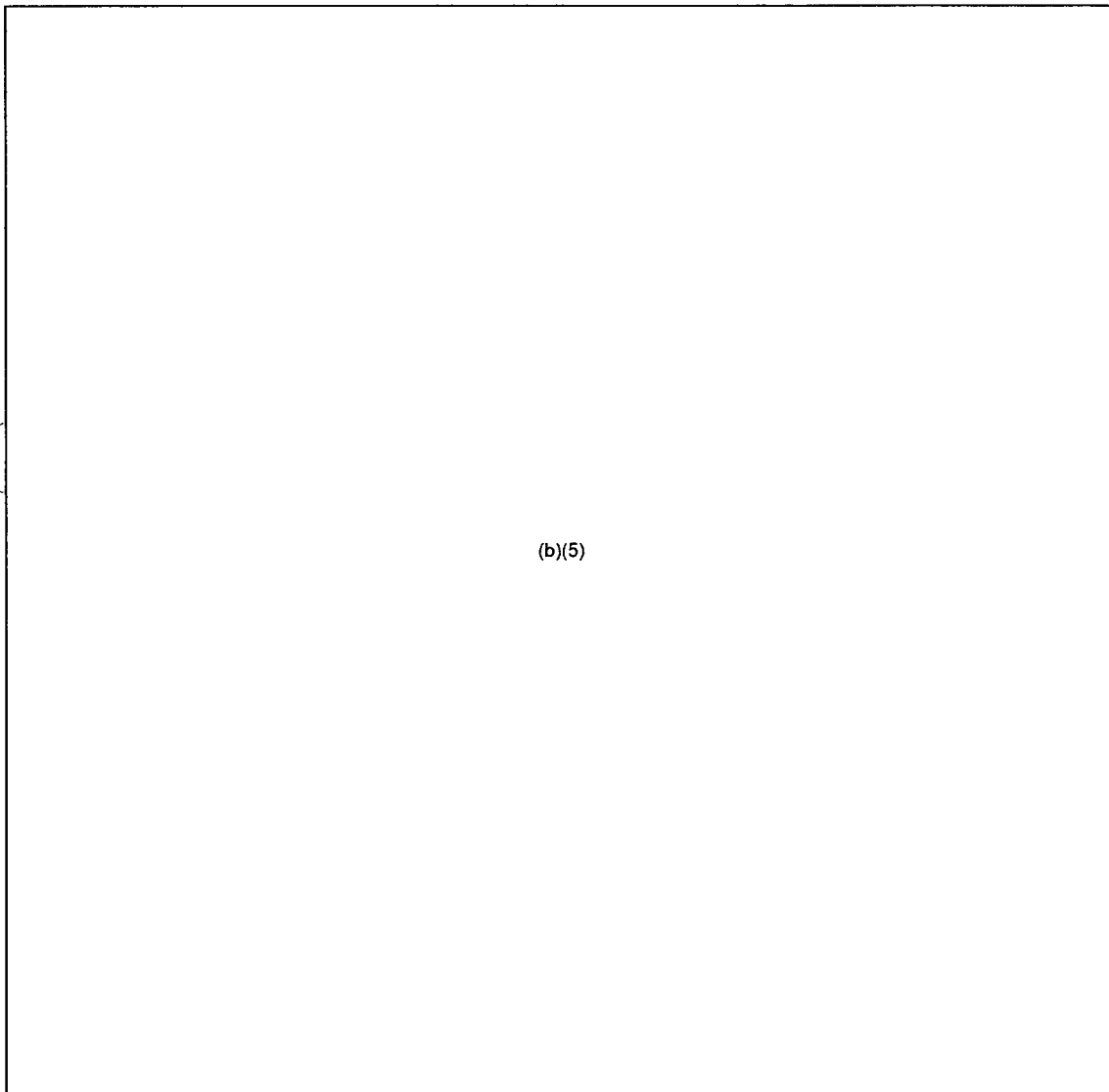
QUESTIONS FOR THE RECORD
FOR THE NUCLEAR REGULATORY COMMISSION
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
Hearing on FY 2012 Budget Request
March 31, 2011

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QUESTION 1.

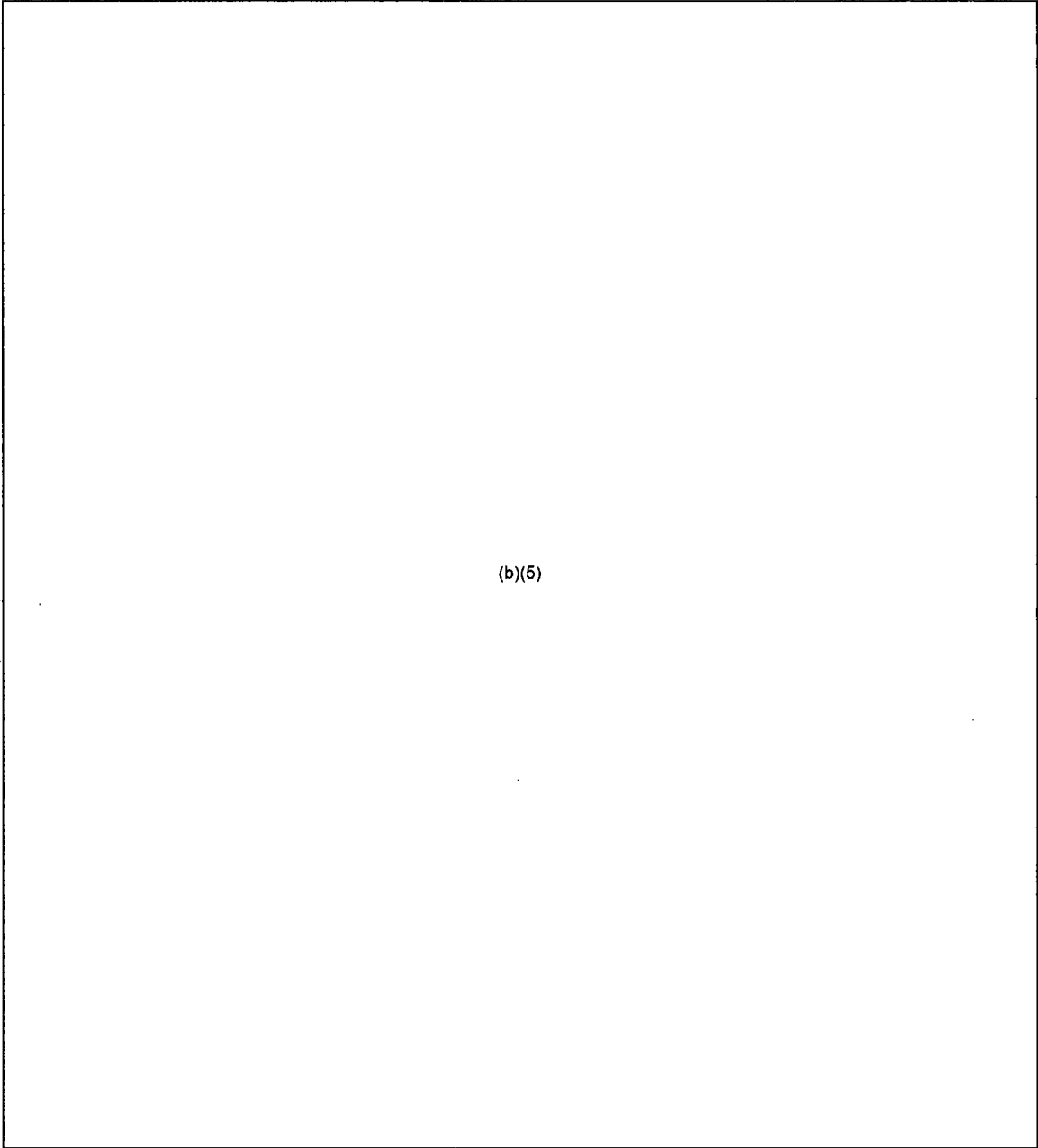
Given that nuclear power is and will play an important role in our energy mix, how do you think these events might impact your programs and the nuclear industry in the short term? And how - if at all - might it impact where we are heading in the long term?

ANSWER.



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(b)(5)

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QUESTION 2a.

First, I hear disagreement over whether there was a flaw in the reactor design at Fukushima, or whether there was a systems issue – a failure to adequately protect the reactor's auxiliary systems. What is your take on that question, Dr. Lyons and Chairman Jaczko?

ANSWER.

(b)(5)

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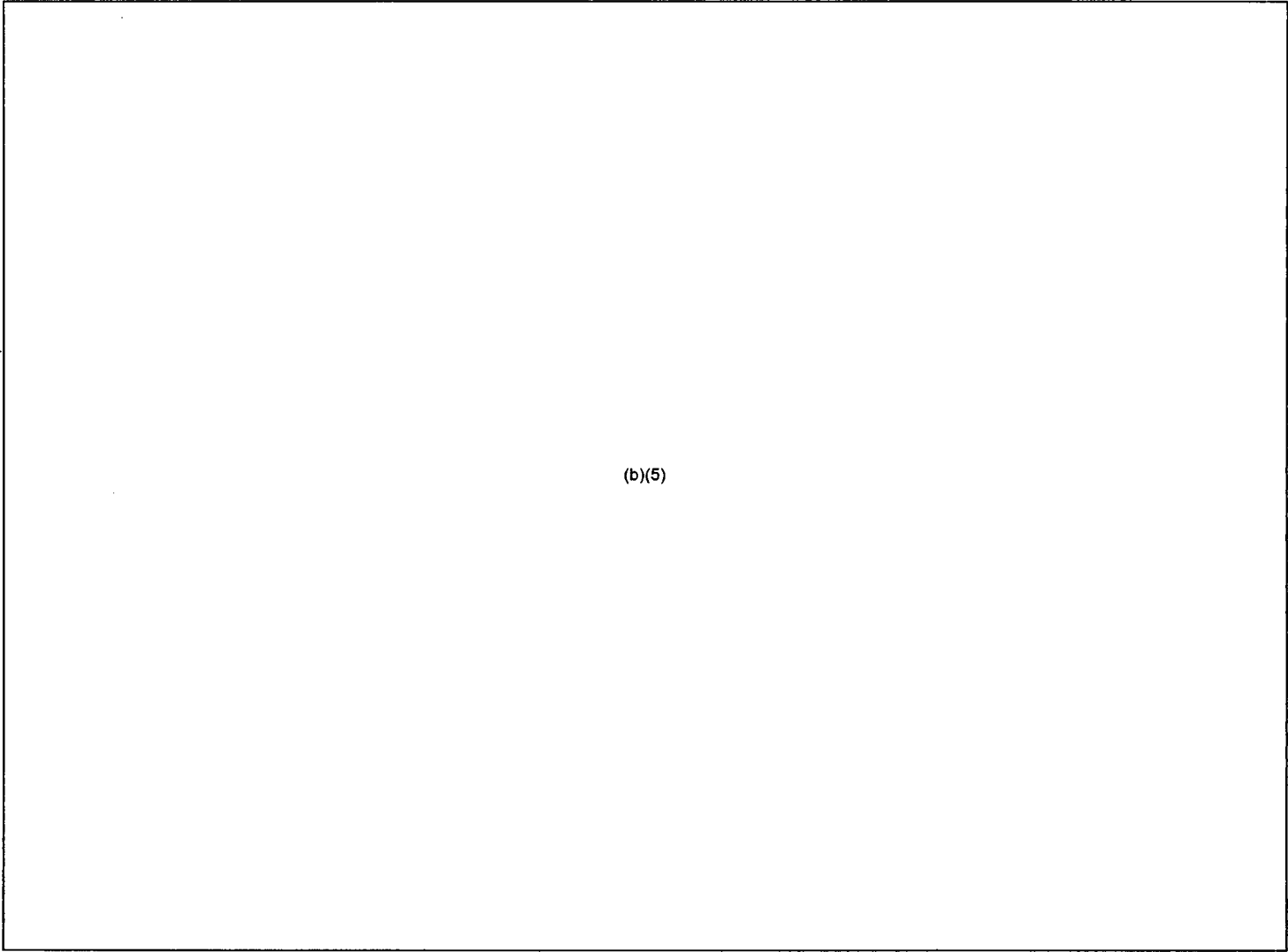
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QUESTION 2b.

I understand that the United States has nuclear reactors of the same "make and model" as the Fukushima Daiichi reactors – six U.S. reactors have the same reactor and secondary containment structure designs, I believe. Do our plants have the same safety risks as Fukushima, or are there regulatory differences, construction differences, and other precautions that make our plants safer?



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(b)(5)

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QUESTION 2c.

What about hydrogen venting? Do our reactors have different venting systems or other precautions that would prevent the hydrogen explosions that affected some of the outer containment building at Fukushima?

ANSWER

(b)(5)

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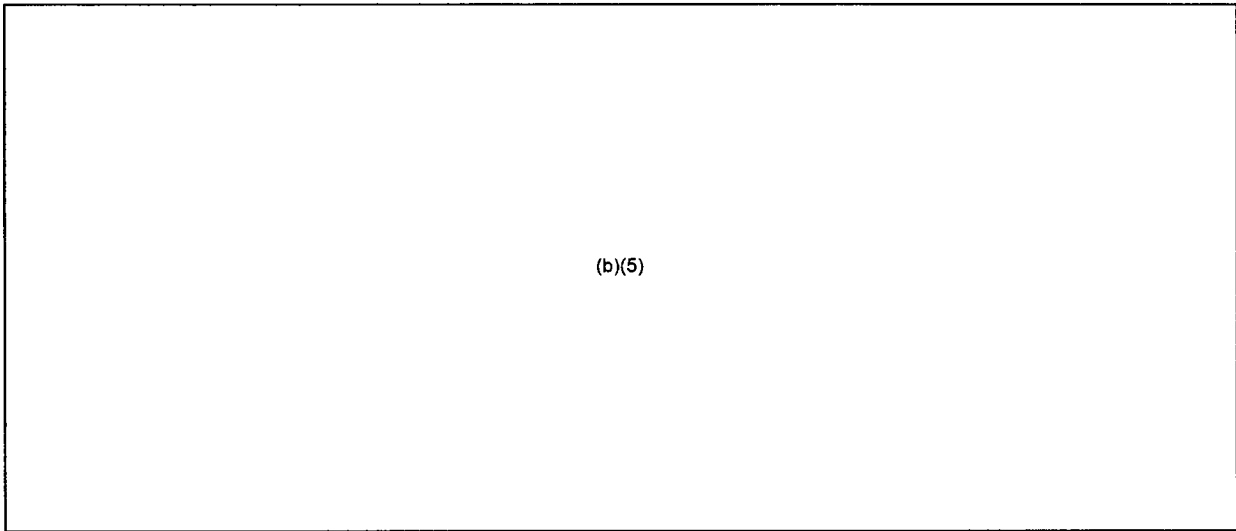
QUESTION 2d.

We've talked about our current reactors, but what about the new class of reactors that are just starting construction in the United States? Are those "Gen III+" reactors safer than the Fukushima Daiichi reactors? Can you explain the safety advantages?

ANSWER.

(b)(5)

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(b)(5)

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QUESTION 2e. Is the next generation of reactor designs beyond Gen III+, like small modular and high temperature gas reactors, even safer? What would make them safer?

ANSWER.

(b)(5)

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QUESTION 3a. What are the obstacles to effective cooperation on licensing and safety oversight between the Department [of Energy] and the Nuclear Regulatory Commission?

ANSWER.

(b)(5)

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QUESTION 3b. What is being done to remove these obstacles?

ANSWER

(b)(5)

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QUESTION 4.

With the American nuclear engineer workforce nearing a time of high retirements and the pipeline of graduating students still not growing sufficiently to fill the spots, why have you eliminated the University Program – especially given our need to keep our reactors safe both now and in the future?

We have heard that only a small portion of nuclear engineers currently go to work for industry. Given that, why do you believe that industry will fill in financial support in place of the university programs, as state in the Department of Energy's budget request?

ANSWER.

(b)(5)

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QUESTION 5a. How many lawsuits is the U.S. government defending against, resulting from the government's failure to assume responsibility of spent nuclear fuel or otherwise resulting from the Administration's attempt to shut down Yucca Mountain?

ANSWER.

(b)(5)

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QUESTION 5b. How much funding is in the fiscal year 2012 budget request for the NRC and other U.S. government agencies for legal fees and/or damages resulting from these or expected cases? What are your estimates for future years?

ANSWER.

(b)(5)

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QUESTION 6a.

Chairman Jaczko, what is the NRC doing to support efforts in Japan to stabilize and secure the damaged nuclear plants?

ANSWER:

(b)(5)

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QUESTION 6b.

The NRC announced last week the formation of a task force to conduct both a short- and long-term analysis of the lessons we can learn from the events in Japan. Realizing that we don't yet have all the information on Japan or the task-force's recommendations, what types of short-term changes to your regulatory framework do you think are possible? What about long-term changes?

ANSWER.

(b)(5)

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QUESTION 6c. Will the NRC continue processing existing license applications while the task force conducts its analysis?

ANSWER

(b)(5)

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QUESTION 6d.

How will the task force's timeline of 90 days for its short-term analysis and approximately six months for its long-term recommendations impact existing license applications?

ANSWER.

(b)(5)

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QUESTION 7a.

Chairman Jaczko, your budget request includes an increase of \$13.7 million for oversight of operating reactors. Since you submitted this request, you have been charged by the president to undertake a comprehensive review of all nuclear facilities, and last week the NRC announced a task force whose work I assume represents at least part of this review. What is the scope of this review? Are enrichment facilities, waste repositories, spent fuel pools, and non-commercial reactors all included?

ANSWER

(b)(5)

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QUESTION 7b.

Do you expect that applications for reactor extensions or power uprates will be slowed because of this review? What about new reactor licenses?

ANSWER.

(b)(5)

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QUESTION 7c. How long will it take for you to complete this review? Will the Task Force's anticipated timeframe of six months for its long-term analysis conclude the review?

ANSWER.

(b)(5)

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QUESTION 7d:

How much funding do you expect the comprehensive review of all nuclear facilities that was charged by the President to cost, and do you expect the 2012 request will need to change in order to accommodate it?

ANSWER:

(b)(5)

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NOT FOR PUBLIC DISCLOSURE

QUESTION 8.

Chairman, your request for licensing activities for new plants is a slight increase over fiscal year 2010. It looks like your budget would fund two new combined licenses and continued work on new designs and early site permits. Have your plans changed following the tragedy in Japan?

ANSWER.

(b)(5)

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QUESTION 9a.

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?

ANSWER

(b)(5)

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QUESTION 9b. 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?

ANSWER.

(b)(5)

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QUESTION 9c.

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?

ANSWER.

(b)(5)

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QUESTION 10.

Chairman Jaczko, your claim on March 16 that the spent fuel ponds at Fukushima's Reactor 4 were dry was factually incorrect and caused not a small amount of concern, both within Japan and internationally. What conclusive evidence did you have before you made this claim? Please submit for the record this evidence, since the information that we are receiving is that because the area was covered with carbon, the pictures were inconclusive.

ANSWER.

(b)(5)

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QUESTION 11.

Chairman, one of the largest increases in your request is for oversight activities of new plants. According to your request, you will need to be inspecting a total of four new reactors expected to be under construction this year, an increase of two over last year. What are the four reactors you expected to be under construction this year? Have there been any changes to these plans?

ANSWER.

(b)(5)

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QUESTION 12a:

What is the estimate of your carryover funds for fiscal year 2010?

ANSWER:

(b)(5)

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QUESTION 12b:

Do you think the amount of FY 2010 carryover funds is appropriate? If not, what are you doing to "spend down" the funding to an appropriate level?

ANSWER:

(b)(5)

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QUESTION 12c: Can we expect to see a reprogramming?

ANSWER:

(b)(5)

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QUESTION 13a:

What is the total budget request for construction activities of a new office building, and how much has already been spent on these activities?

ANSWER:

(b)(5)

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~~NOT FOR PUBLIC DISCLOSURE~~

QUESTION 13b:

What is the projected total cost of construction activities of a new office building?

ANSWER:

(b)(5)

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QUESTION 14.

Chairman Jaczko, the President unilaterally shut down the Yucca Mountain project over the protests of the vast majority of Americans – this is likely one of the least "democratic" actions I have seen from an Administration since I have been in Congress. One of the greatest tragedies is that the Administration's approach is to halt any useful understanding from being gained through the expenditure of over \$12 billion in research on the site. Under a Freedom of Information Act filing, your staff recently released a heavily redacted version of Volume 3 of the Safety Evaluation Report – the document which is to show your staff's technological and scientific qualifications of the site. This report should have been released in November, 2010. Now your staff is saying that they're not going to even archive an unredacted version because, as they put it, the information is "predecisional" and could cause confusion.

- Chairman, this report was due months ago. Why has no decision been made?
- If I'm to understand correctly, this report is going to be buried because it's predecisional, and the reason it's predecisional is that the Administration killed the program?
- Closing down the program before the license application could be approved is shameful enough, but hiding what has been learned betrays the trust of the American people and literally wastes years of hard work and billions of dollars. Chairman Jaczko, what is in this document that the Administration would find so damaging if it were made public? That, perhaps, the site is technically qualified for a million years?

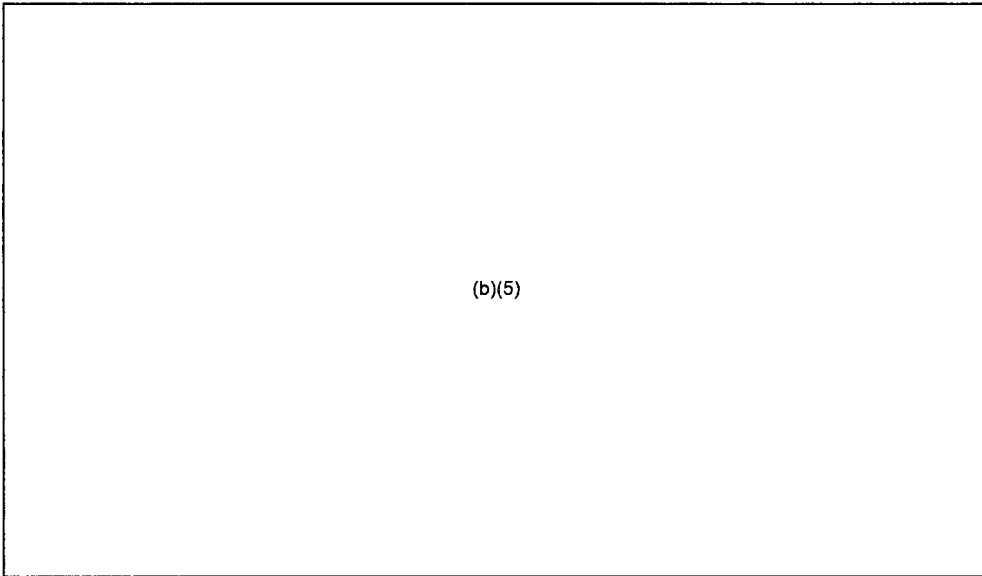
ANSWER

(b)(5)

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QUESTION 15.

Given that the American public is rightly concerned about this waste spread across the country at 129 sites, especially in the wake of what happened in Japan, what is the Administrations Timeline for fulfilling its obligations in assuming responsibility of this waste?

ANSWER.

(b)(5)

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QUESTION 16a.

Dr. Jaczko, in your testimony you have repeatedly characterized the voting process in adjudicatory matters as a less than formal process. This seems inconsistent with statements provided by other Commissioners and the procedures identified in Chapter III [of] the Commission's Internal Procedures. Appendix 3 of those procedures provides an example voting sheet to be used in matters pending before the Commission. Was this voting process used in establishing the Commission's position on this matter and were these [vote] sheets submitted to the Secretary of the Commission for tally and reporting? Or was some other less formal process used? Please clarify the process used in voting and provide any changes to Commission procedures that may not be publicly available.

ANSWER.

(b)(5)

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QUESTION 16b.

In your testimony, you state that in adjudicatory matters, processes used to achieve decisions are different from routine matters. Would you explain that process?

ANSWER

(b)(5)

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QUESTION 16c. Also, please clarify if the process described in Appendix 5 of the Commission's Internal Procedures is used in resolving 2-2 votes in adjudicatory matters and if not, what process is followed?

ANSWER.

(b)(5)

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QUESTION 16d.

Also, please have the Secretary for the Commission review the historical records and provide the following for each matter before the Commission where a quorum of Commissioners have affirmed their votes but a majority decision was not reached.

- a. A brief description of the matter
- b. The date when the matter was first brought to the Commission.
- c. The date when a quorum of Commissioners filed their votes with the Secretary of the Commission.
- d. The date when all participating Commissioners filed their votes with the Secretary.
- e. The length of time between the last filing of votes and the issuance of a draft Staff Requirements Memo (SRM) or order.
- f. The length of time between the draft SRM or order and the completion of voting on the final SRM or order.
- g. The length of time between the completion of voting on the final SRM or order and affirmation of their vote by the Commission.
- h. A copy of each final SRM or order and affirmation statements, if any, by individual Commissioners.

ANSWER

(b)(5)

(b)(5)

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QUESTION 16elf/g.

Dr. Jaczko, in your testimony you stated that the Commission policy to begin to close down the review of the application was established in the Commission's FY-11 Budget.

- Yet is it not true that policy was established when the NRC only had 3 Commissioners, two of whom have publicly stated that you are not correctly implementing the Commissions' decision?
- Furthermore, this matter was not taken up by the current Commission and therefore is it not true you have acted unilaterally and did not seek the Commission's approval?
- How is that consistent with Commission procedures and statements you have made before this committee?

ANSWER.

(b)(5)

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QUESTION 16h/ii. Dr. Jaczko, you testified that "there are ongoing discussions" among the commissioners to try to reach an agreement on a final order.

-Is that correct?

-When was the last time that such "ongoing discussions" have occurred between you and your fellow commissioners?

-Isn't it true that there have been no discussion since September, 2010. Yes or no?

ANSWER

(b)(5)

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QUESTION 16k. To be requested of all Commissioners to respond – Chairman Jaczko has stated on several occasions that this matter is under active deliberation within the Commission.

- Would you please explain that deliberative process and what actions each of you are taking to achieve a timely resolution of this matter?

ANSWER

(b)(5)

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QUESTION 16 I/m.

Dr Jaczko, you testified that "it was your view" supported by the general counsel that budget document provided the guideline and the direction to move forward on Yucca close out activities.

- Please provide the GC's memo and all citations of precedents for this position.
- Was your view supported by all the other commissioners at that time?

ANSWER.

(b)(5)

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QUESTION 16n. Dr. Jaczko, is there a time limit in which the Commission is required to render a final decision to uphold or reverse the ASLB?

ANSWER.

(b)(5)

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QUESTION 16o. Will you agree not to dissolve the ASLB until you have issued a final order on whether to uphold or reverse their decision that DOE lacks the authority to withdraw the Yucca license?

ANSWER.

(b)(5)

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Gilles, Nanette

~~NOT FOR PUBLIC DISCLOSURE~~

From: Gilles, Nanette
Sent: Tuesday, June 07, 2011 5:05 PM
To: Apostolakis, George
Subject: MIT Background - Japan and EP
Attachments: Attachment - NRC Daily Assessment of Daiichi 060711.pdf, EP Rulemaking Topics and Significant Changes from the Proposed Rule to the Final Rule.docx

Commissioner -- I've attached two pieces of background for the MIT slides:

1-Latest status of Fukushima Daiichi units (I can send you the latest update on Friday if this format meets your needs).

2-Summary of the EP rule changes (taken from the SECY).

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

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NRC's Periodic Stoplight Report of Conditions at Fukushima Daiichi Nuclear Power Plant

NOT FOR PUBLIC DISCLOSURE

Reactor One	<ul style="list-style-type: none"> core damaged and uncovered primary containment breached injecting via feed water 5.0m³/hr Reactor metal temperatures trending down
Reactor Two	<ul style="list-style-type: none"> core damaged and uncovered primary containment breached injecting via feed water 5.5m³/hr Reactor metal temperatures trending down
Reactor Three	<ul style="list-style-type: none"> core damaged and uncovered primary containment breached injecting via feed water 11.5m³/hr Reactor metal temperatures fluctuating
SFP One	<ul style="list-style-type: none"> SFP intact water level maintained with installed fuel pool cooling system
SFP Two	<ul style="list-style-type: none"> SFP intact, water level maintained with installed fuel pool cooling system closed loop cooling installed
SFP Three	<ul style="list-style-type: none"> SFP intact water level maintained with installed spent fuel pool cooling system caustic water conditions/concrete water interactions
SFP Four	<ul style="list-style-type: none"> SFP intact, water level maintained with spray added 80 ton OS/28 installation of structural reinforcement underway adding 210m³ water treated with hydrazine on June 3, 2011
Reactors 5 & 6	<ul style="list-style-type: none"> cold shutdown

Japan News Headlines
<ul style="list-style-type: none"> Radiation in No. 1 reactor building at highest level yet TEPCO workers exposed to excessive radiation NISA doubles early fallout estimate Probe poised to take TEPCO to task Plutonium found in soil at Okuma
Events
<ul style="list-style-type: none"> No notable events in the last 24 hours

General Site
Major TEPCO Identified Site Concerns
<ul style="list-style-type: none"> Water Management <ul style="list-style-type: none"> Water storage limitations Closed cycle water treatment system Closed loop SFP cooling systems Site containment <ul style="list-style-type: none"> Sub terrain water wall Building enclosure
NRC Focus Areas
RST Focus
<ul style="list-style-type: none"> On site work coordination Severe Accident Management Guidelines/Extreme Damage Mitigation Guidelines Shutdown Technical Specifications MELCOR analysis Hydrogeology Water treatment/debris removal Safety Culture (event response) Analyze 1F3 core dynamics given fluctuating RPV metal temperatures
PMT Focus
<ul style="list-style-type: none"> Food Safety Modify travel advisory Modify maritime advisory Radiation Monitoring

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Stoplights will be published Monday, Wednesday and Friday

EP Rulemaking Topics and Significant Changes from the Proposed Rule to the Final Rule

The amendments are summarized in the following 11 topics. The first six are security-related EP issues associated with NRC Order EA-02-026 or Bulletin 2005-02 and five are non-security related issues resulting from the comprehensive review of EP regulations and guidance.

1. Amended Emergency Plan Change Process – The final rule ensures that (1) the effectiveness of the emergency plans will be maintained, (2) changes to the approved emergency plan will be properly evaluated, and (3) any change that reduces the effectiveness of the plan will be reviewed by the NRC prior to implementation.
2. Evacuation Time Estimate (ETE) Updating – The final rule amends the regulations to require licensees to review and update ETEs periodically. The staff changed the threshold for interim ETE updates in Section IV of Appendix E to 10 CFR Part 50 from a 10-percent population change in the proposed rule to a site-specific population increase that causes the longest ETE values to increase by 30 minutes or 25 percent, whichever is less from the licensee's currently NRC-approved or updated ETE. The staff made corresponding changes to NUREG/CR-7002, "Criteria for Development of Evacuation Time Estimates."
3. Licensee Coordination with Offsite Response Organizations (OROs) – The final rule amends the regulations to require licensees to identify and describe the assistance expected from ORO resources during an emergency, including hostile action. The proposed rule contained language in Section IV.A.7 of Appendix E to 10 CFR Part 50 that would have required licensees to ensure that offsite resources are available to respond to their sites during an emergency, including hostile action. The staff removed the requirement for licensees to ensure that offsite resources are available to respond and added a requirement for licensees to identify and provide a description of the assistance expected from OROs during an emergency, including hostile action. The staff made corresponding changes to the interim staff guidance (ISG), NSIR/DPR-ISG-01, "Interim Staff Guidance: Emergency Planning for Nuclear Power Plants."
4. On-Shift Staffing Analysis – The final rule would require licensees to perform a staffing analysis of on-shift personnel assigned emergency response duties to ensure that these emergency responders do not become overburdened during an emergency event.
5. Emergency Action Levels (EALs) for Hostile Action – The final rule amends the regulations to require licensees to have EALs for events involving hostile action. The staff revised Section IV.B.2 of Appendix E in the proposed rule to require licensees to submit entire emergency action level scheme changes via a license amendment request.
6. Emergency Declaration Timeliness – The final rule amends the regulations to ensure that licensees have the capability to complete emergency declarations within 15 minutes in the event of a radiological emergency.
7. Alert and Notification System (ANS) Backup Means – The final rule amends the regulations to require that backup measures for the public ANS be available. The backup measures would be implemented if the primary means of alerting and

notification were unavailable during an emergency. The staff revised the language in Section IV.D.3 of Appendix E to 10 CFR Part 50 in the proposed rule to recognize that governmental authorities, not licensees, are generally responsible for primary ANS activation and implementation of the backup ANS. The NRC staff made changes to the ISG and the Federal Emergency Management Agency (FEMA) made corresponding changes to NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Supplement 4. NUREG-0654/FEMA-REP-1, Supplement 4 comprises FEMA's updates to NUREG-0654/FEMA-REP-1, which were coordinated with the NRC and this rulemaking.

8. Emergency Operations Facility (EOF) – Performance Based Approach – The final rule amends the regulations to provide performance based criteria for EOFs. The regulations were also revised to remove the references to an EOF as a "near-site" facility and to incorporate specific EOF distance criteria in relation to a nuclear power plant site into the regulations.
9. Emergency Response Organization (ERO) Augmentation at Alternate Facility – The final rule amends the regulations to require licensees to identify alternative facilities to support ERO augmentation during hostile action. This codifies the Interim Compensatory Measures requirements associated with EA-02-026 and the enhancement examples described in Bulletin 2005-02. The staff revised Section IV.E.8.d in the proposed rule to clarify that each alternative facility must be accessible during hostile action where more than one alternative facility has been designated. The staff also clarified the rule language to state the required alternative facility characteristics in terms of capabilities instead of specific types of equipment to allow licensees flexibility in meeting the new requirements. The staff made corresponding changes to the ISG.
10. Challenging Drills and Exercises – The final rule amends the regulations to require licensees to include hostile action scenarios and other scenario variations in drills and exercises, and submit the scenarios for NRC review. The staff revised Section IV.F.2.j of Appendix E to 10 CFR Part 50 in the proposed rule to increase the exercise cycle from 6 to 8 years and eliminate the 8-year frequency requirement for hostile action exercises to allow more flexibility in varying scenarios. For States involved with multiple nuclear power plant sites, Section IV.F.2.d was revised to specify that these States should fully participate in one hostile action exercise each exercise cycle and rotate their participation from site to site. The staff made corresponding changes to the ISG and FEMA changed NUREG-0654/FEMA-REP-1, Supplement 4.
11. Protection for Onsite Personnel – The final rule amends the regulations to require specific emergency plan provisions to protect onsite emergency responders, and other onsite personnel, in emergencies resulting from hostile action at nuclear power plants.



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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 9, 2011

~~NOT FOR PUBLIC DISCLOSURE~~

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Magwood
Commissioner Apostolakis ✓
Commissioner Ostendorff

FROM: Margaret M. Doane, Director *[Signature]*
Office of International Programs

SUBJECT: VISIT TO THE U.S. NUCLEAR REGULATORY COMMISSION BY
MR. GOSHI HOSONO, SPECIAL ADVISOR TO THE PRIME
MINISTER, JAPAN

On June 10, Mr. Goshi Hosono, Special Advisor to the Prime Minister, Japan, will visit the U.S. Nuclear Regulatory Commission (NRC). His delegation will include Mr. Noriaki Ozawa, Counsellor, Cabinet Secretariat and Mr. Takeo Mori, Minister for Economic Affairs (Head of Economy Section, Embassy of Japan). They will be accompanied by additional staff and an interpreter from the Embassy of Japan.

The purpose of Mr. Hosono's visit to the NRC is to inform and update the Chairman about the Japanese report to the International Atomic Energy Agency on the Fukushima event and to discuss the summary of the report. Mr. Hosono was responsible for compiling the report. In addition, he will be discussing the general situation of Fukushima, US-Japan communication issues and information from the recent meeting between Mr. Hosono and Ambassador Roos.

Enclosures:

- 1. Meeting Schedule
- 2. Talking Points and Background
- 3. Biography
- 4. Country Profile

cc: SECY
EDO
OGC
NRO
K. Sargent, OCA

CONTACT: Steven Bloom, OIP
301-415-2431

Cmr. Apostolakis
1 Belkys Sosa *[Signature]*
2 Roger Davis *[Signature]*
3 Steve Baggett *[Signature]*
4 Nanette Gittes *[Signature]*
Kathleen Blake
6 Carmel Savoy
5 Christiana Lui *[Signature]*
File *[Signature]*

~~NOT FOR PUBLIC DISCLOSURE~~

June 9, 2011

~~NOT FOR PUBLIC DISCLOSURE~~

MEMORANDUM TO: Chairman Jaczko
 Commissioner Svinicki
 Commissioner Magwood
 Commissioner Apostolakis
 Commissioner Ostendorff

FROM: Margaret M. Doane, Director /RA Nader L. Mamish, for/
 Office of International Programs

SUBJECT: VISIT TO THE U.S. NUCLEAR REGULATORY COMMISSION BY
 MR. GOSHI HOSONO, SPECIAL ADVISOR TO THE PRIME
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cc: SECY
 EDO
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 K. Sargent, OCA

CONTACT: Steven Bloom, OIP
 301-415-2431

Distribution:
 OIP r/f

ADAMS Accession No: ML11159A123

OFFICE	OIP/ICA	BC: OIP/ICA	DD: OIP	D:OIP
NAME	SBloom: SB	CAbrams: CA	NMamish:	MDoane:
DATE	06/9/11	06/9/11	06/9/11	06/9/11

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Meeting Schedule

**Visit to the Nuclear Regulatory Commission by Mr. Goshi Hosono,
Special Advisor to the Prime Minister, Japan**

Schedule

June 10, 2011

2:00 – 2:50 PM, Chairman Jaczko
3:00 – 4:00 PM, Tour of Operations Center

Purpose of visit

The purpose of Mr. Hosono's visit to the Nuclear Regulatory Commission is to inform and update the Chairman about the Japanese report to the International Atomic Energy Agency on the Fukushima event and to discuss the summary of the report. Mr. Hosono was responsible for compiling the report. In addition, he will be discussing the general situation of Fukushima, US-Japan communication issues and information from the recent meeting between Mr. Hosono and Ambassador Roos.

Previous Interaction

The Chairman has not previously met with Mr. Hosono.

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Enclosure 1

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TALKING POINTS

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Enclosure 2

FM 2194 of 2929

BACKGROUND

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Mr. Goshi Hosono

(Special Advisor to the Prime Minister, Japan,
Member of the House of Representatives)

Date of Birth: (b)(6)

Academic Career:

BA in Faculty of Law, University of Kyoto (1995)

Occupational Career:

1995-1999 Sanwa Research and Consulting (currently Mitsubishi UFJ Research and Consulting)

June 2000 Elected as a Member of the House of Representatives (1st term: Shizuoka-7 constituency). Served as a counselor of the Budget Committee and Cabinet Committee

Nov 2003 Elected as a Member of the House of Representatives (2nd term: Shizuoka-5 constituency). Served as a counselor of the National Security Committee and Economy and Industry Committee

Sep 2005 Elected as a Member of the House of Representatives (3rd term: Shizuoka-5 constituency). Served as a counselor of the Budget Committee. Drafted Maritime Law and Space Law. Acted as Director of the DPJ Executives Office.

Aug 2009- Elected as a Member of the House of Representatives (4th term: Shizuoka-5 constituency). Appointed as DPJ's Deputy Secretary General (later Acting Secretary General), Chairman of DPJ's Organization Committee and Corporate Issues Committee.

Jan 2011- Special Advisor to the Prime Minister, covering social security and taxation reform and parliamentary issues (since March, covering accidents of nuclear power plants).

Mar 2011- Secretary General of the Government-TEPCO Joint Headquarter. Overseeing the drafting of the Government's report to the IAEA ministerial meeting regarding the Fukushima Daiichi NPS accident.

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JAPAN COUNTRY PROFILE



NUCLEAR PROGRAM

Nuclear Power

Nuclear technology provides a substantial portion of Japan's electricity. Currently, nuclear energy accounts for 35% of the country's total electricity production (29% in 2009), from 47.9 GWe of capacity (net). There are plans to increase this to 41% by 2017, and 50% by 2030.

In 2008, Japan generated 1085 billion kWh gross, 30% from coal, 25% from gas, 24% from nuclear, 11% from oil, and 7.5% from hydro, though 8 GWe of nuclear capacity was unused during the shutdown and inspection of Kashiwasaki-Kariwa following a massive earthquake in mid 2007. Per capita consumption is about 7900 kWh/yr.

On March, 11, an earthquake of magnitude 9 on the Richter Scale occurred. The epicentre was approximately 80 miles off the north east coast. A subsequent tsunami severely affected the entire north east coast and caused widespread loss of life and destruction. The natural disasters led to a loss of power and general decreased ability for Japan to respond to multiple events at the Fukushima Daiichi Nuclear Power Plant (150 miles from Tokyo). The GoJ has put in place an evacuation/exclusion order for 20km-30km around the plant. The U.S. issued a travel advisory and a 50-mile exclusion/evacuation zone.

On May 17, 2011, Tokyo Electric Power Company (TEPCO) announced that fuel rods in unit 1 were fully exposed within 5 hours of the earthquake, and have completely melted down. A review of data suggests the number 1 reactor's fuel rods were fully exposed within five hours of the quake, causing them to heat rapidly. If this data and analysis is correct, it means the facility was mainly damaged by the quake itself, not the resulting tsunami, as previously thought. TEPCO has also announced that units 2 and 3 fuel rods experienced about 30-35 percent damage. Although the reactors have been stabilizing, the situation regarding the Fukushima Nuclear Power Plant remains uncertain.

Currently, ten utilities operate in Japan and prior to the March 11, 2011 Tōhoku earthquake, 54 nuclear power reactors (47,930 MWe) were operating to produce 30 percent of Japan's electricity. On May 10, 2011, Prime Minister Naoto Kan announced that Japan will halt its new construction plans. This abandons Japan's previous plans to build 14 nuclear reactors by 2030 and increase the share of nuclear power in Japan's electricity supply to 50 percent. Shimane 3, an Advanced Boiling Water Reactor (ABWR) was scheduled for operation by December 2011, but this may not occur due to the events at the Fukushima reactors

On May 27, 2011, Chubu electric announced the shutdown of the Hamaoka nuclear plant indefinitely until it can be better defended against a massive earthquake and tsunami. This was announced after Prime Minister Kan cited the risk of a massive earthquake in the Tōkai region, which is about 200 km (125 miles) southwest of Tokyo. Japan's Chubu Electric Power Co said on Friday that a lawsuit seeking a permanent shutdown of its Hamaoka nuclear plant had been filed by residents who live near the controversial facility south of Tokyo.

Enclosure 4

The Tokai Power Station is currently undergoing decommissioning. Monju, which was shut down in 1995, restarted in May 2010. On June 3rd, 2011, it was announced that damage had occurred in the cylinder liners of the emergency diesel generators at Monju, which are the same design as the emergency diesel generators at Fukushima Dai-ichi. TEPCO is checking these liners and formulating a roadmap to address and correct the problem.

Nuclear Fuel Cycle

Japan operates a complete fuel cycle that includes 1 enrichment facility, 5 operating fuel fabrication facilities and 2 reprocessing facilities. Operations at the Rokkasho Reprocessing Plant began in February 2008. In November 2006, Japan Nuclear Fuel Ltd. produced its first plutonium-uranium mixed oxide (MOX) solution.

On November 9, 2009, the Genkai-3 Nuclear Power Station (NPS) (PWR, 1,180 MW), owned and operated by the Kyushu Electric Power Co. (Kyushu EP), began generating electricity for the first time using MOX. The nuclear power station underwent adjustment operations and a comprehensive load evaluation on December 2, 2009, before returning to commercial operation as the country's first reactor generating electricity using MOX fuel.

Waste Management

One low-level waste storage facility, located at the Rokkasho Fuel Cycle Facility in Aomori Prefecture, supports Japan's nuclear industry. It has a capacity of 3 million drums. Japan plans to vitrify high-level waste and store it in surface facilities for 30-50 years before its final deep underground disposal. The Japanese Cabinet has formally declared that a spent fuel facility will be in operation by the 2030's. In 2005, Tokyo Electric Power Company (TEPCO) announced that a Recyclable Fuel Storage Center would be established in Mutsu, and operating some time in 2012 with a 5,000 ton capacity. The facility will provide interim storage for up to 50 years before used fuel is reprocessed.

Research and Development

There is close collaboration between the Nuclear Regulatory Commission (NRC) and Japan on nuclear safety research programs. Direct contact and working closely together on research programs of mutual interest have proven to be an effective means for obtaining useful test data, including results from large-scale test programs not available anywhere else in the world. Key research partners in Japan include Japan Nuclear Energy Safety Organization (JNES) and Japan Atomic Energy Agency (JAEA). Of the 23 research reactors in Japan, Monju, Japan's only fast breeder reactor is the most noteworthy because it was shut down for over 15 years because of a secondary leak. It restarted on May 6, 2010.

Nuclear Regulatory Structure

Japan has a complicated nuclear regulatory structure that involves multiple organizations collaborating according to the Japanese "Double Check" system. In recent years the government has begun a gradual transition to form a regulatory organization similar to the NRC's. Where once regulatory responsibility was split more closely 50/50 between the two organizations of the Nuclear and Industrial Safety Agency (NISA) and the Ministry of Education, Culture, Sports, Science and Technology (MEXT), today NISA is responsible for about 85% of the regulatory program. Japan still uses a two-step construction/operating licensing process.

Before either NISA or MEXT issues a license, their findings are independently checked by the Nuclear Safety Commission (NSC).

Ministry of Economy, Trade and Industry (METI) and NISA

On January 6, 2001, as part of the government's structural reform, the newly formed METI established NISA, which is responsible for nuclear safety, including the regulation of nuclear power generation, uranium refining, fuel fabrication, spent fuel storage and reprocessing, and radioactive waste management and disposal. NISA is incorporating the use of Probabilistic Risk Assessment into its regulations. NISA also announced that it will develop a safety rating system based on operational performance, shutdowns, events, etc.

JNES

On October 1, 2003, in a further reform of its regulatory regime (b)(5)
(b)(5) the Japanese government combined the talents of the Nuclear Power Engineering Corporation with the Japan Power Engineering and Inspection Corporation to create JNES. JNES supports NISA in its regulatory inspection program.

MEXT

MEXT, like NISA, was also established on January 6, 2001, resulting from the integration of the Science and Technology Agency and the Ministry of Education. In the nuclear area, MEXT regulates research reactors, use of nuclear material for research, and use of radioisotopes.

NSC

The NSC, a nuclear safety policy organization, now located within the Prime Minister's Secretariat, provides the "Double Check" function for METI in Japan's regulatory licensing process. The five-member body, with a technical support staff of about 100, provides independent review and comment to METI on nuclear safety matters.

JAEA

The JAEA was created to merge the two main government research and develop agencies in Japan, The Japan Atomic Energy Research Institute (JAERI) and the Japan Nuclear Cycle Development Institute (JNC). JAEA is under MEXT, and is now a major integrated nuclear research and development organization, with 4400 employees at ten facilities and an annual budget of JPY 161 billion (US\$ 1.7 billion).

Japan Nuclear Technology Institute (JANTI)

In December 2000, the Japanese Federation of Electric Power Companies established a Japanese version of the World Association of Nuclear Operators (WANO) to improve information exchange and enhance nuclear safety. The Nuclear Safety Network (NSNET) was created along the same policy lines as WANO, and incorporates some of its methodologies. NSNET made a common database available to its members - some 35 Japanese nuclear-related companies - encouraging the timely reporting of safety events, as well as good practices. NSNET also established a peer review system modeled after WANO's Peer Review

consisting of specialists from member organizations. In 2005, NSNET was incorporated into JANTI, based on the U.S. Institute of Nuclear Power Operations.

Atomic Energy Commission (AEC)

The AEC is composed of five Commissioners appointed by the Prime Minister, with the Diet's consent, for three-year terms. The mission of the AEC is to plan, deliberate, and decide basic policies or strategies for the promotion of research, development, and utilization of nuclear energy, and to provide opinions to the relevant Ministers on the adequacy of applying the Law on the regulation of nuclear source material, nuclear fuel material, and reactors.

NON-PROLIFERATION

Japan is a member of the International Atomic Energy Agency (IAEA) and became a party to the Treaty on the Nonproliferation of Nuclear Weapons (NPT) on June 8, 1976. The Safeguards Agreement with the IAEA, required by the NPT, entered into force December 2, 1977, and is referred to as INFCIRC/255. IAEA safeguards are applied in Japan pursuant to the NPT. Japan has full scope safeguards coverage on its peaceful nuclear activities and is cooperating with the IAEA on the implementation of the IAEA's strengthened safeguards system under INFCIRC/540. In 1988, the U.S. and Japan entered into an Agreement for Peaceful Nuclear Cooperation, which expires in June 2018. Sensitive Nuclear Technology transfer is not covered under this Agreement. This Agreement is a post-Nuclear Nonproliferation Act (NNPA) Agreement and meets all of the NNPA requirements. Japan is also a member of the Nuclear Suppliers Group and the Zangger Committee.

PRIVATIZATION

All nuclear business in Japan is run by private companies.

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HUMAN RESOURCES

Government

NISA (808 employees; 369 of which are inspectors)

NSC (110 employees)

MEXT (90 employees)

Supporting Organizations

JNES (450; 100 of which are inspectors)

JAEA (210; primarily researchers)

RELATIONS WITH THE NRC

Provision of Safety Assistance

Japan is one of NRC's most active safety partners, with almost daily information exchanges occurring. On a more formal level, the NISA and NRC hold an annual meeting on nuclear safety regulatory matters.

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Bilateral Arrangements and Agreements

Japan was one of the NRC's first bilateral partners, having signed a trilateral arrangement between NRC and the two regulatory agencies in Japan at that time in May 1974. They have continued to be an important collaborative partner in sharing safety information and confirmatory safety research. Today, the NRC maintains bilateral arrangements for the exchange of technical information with METI and MEXT. The 5-year NRC umbrella arrangement with METI and MEXT, which serves as the basis for the agreements with NISA and JAEA, was most recently renewed in September 2010 and May 2010, respectively. Chairman Jaczko and NISA Deputy Director General Nakamura signed a 5-year extension of the NRC-METI Arrangement during the September 2010 IAEA General Conference.

Commission Visits

Apr 2011 – Chairman Jaczko
Oct 2010 – Commissioner Svinicki
Sep 2010 – Commissioner Magwood
Dec 2009 – Commissioner Klein
May 2009, April 2008 – Commissioner Lyons
May 2007, June 2005 – Commissioner Jaczko
April 2007 – Chairman Klein
Feb. 2007, Nov. 2004, April 2002 - Commissioner Merrifield
April 2004 - Chairman Diaz

Foreign Assignees

Japan's regulatory and research institutions have been actively involved in NRC's Foreign Assignee Program. Typically, NRC has hosted one to two assignees for up to 12 months, every year for the last few years. Currently, Mr. Nagai, is assigned to the Office of Nuclear Reactor Regulation for a 12-month period, his rotation ends July 2011.

NRC LICENSED EXPORTS

Title 10 of the *Code of Federal Regulations* Part 110, Export and Import of Nuclear Equipment and Material, was amended in May 2003 to issue a general license for the import of major reactor components for end-use at NRC licensed reactors. As a result, Mitsubishi Heavy Industries (MHI) is now among the companies supplying reactor vessel closure heads (RVCH) as well as control rod drive mechanisms to several U.S. reactors. When a U.S. utility purchases a RVCH from MHI, the Japanese Government may notify the U.S. State Department and ask that this equipment be placed under the terms of the U.S.-Japan Agreement for Cooperation (123 Agreement). The U.S. utility would then be contacted and advised that when the Japanese-supplied RVCH is installed in the reactor, the utility will be responsible for tracking and accounting for the nuclear material used in or produced through the use of that reactor as "Japanese-obligated."

NUCLEAR REGULATORY AUTHORITY LIST OF PRINCIPALS

NISA

Director General: Mr. Nobuaki Terasaka
Deputy Director General: Mr. Koichi Nakamura

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- 6 -

JNES

President: Mr. Katsuhiko Sogabe
Vice President: Mr. Yoshihiro Nakagome

NSC

Chairman: Dr. Haruki Madarame (area: fluid and thermo engineering)
Commissioner: Dr. Yutaka Kukita (expertise: reactor thermal engineering)
Commissioner: Dr. Shizuyo Kusumi (area: radiation medicine)
Commissioner: Mr. Osamu Oyamada (expertise reactor structural engineering)
Commissioner: Dr. Seiji Shiroya (expertise: nuclear reactor physics and engineering)

MEXT

Director General: Mr. Yasutaka Moriguchi, Science and Technology Policy Bureau
Deputy Director-General: Mr. Itaru Watanabe, Executive Director for Nuclear Safety

JAEA

President: Mr. Atsuyuki Suzuki

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Apostolakis, George

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From: Apostolakis, George
Sent: Thursday, June 09, 2011 6:00 PM
To: Sosa, Belkys; Baggett, Steven; Davis, Roger; Gilles, Nanette; Lui, Christiana
Subject: RE: Draft 3
Attachments: Senate EPW GA Draft 3 GA edits-16Jun11.doc

Minor edits included.

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(301) 415-1810

From: Sosa, Belkys
Sent: Thursday, June 09, 2011 4:57 PM
To: Apostolakis, George; Baggett, Steven; Davis, Roger; Gilles, Nanette; Lui, Christiana
Subject: Draft 3

Commissioner, here is draft 3. Also attached is the Draft of the Chairman's testimony for review. Thanks, -
Belkys

From: Apostolakis, George
Sent: Thursday, June 09, 2011 1:17 PM
To: Baggett, Steven; Davis, Roger; Gilles, Nanette; Lui, Christiana; Sosa, Belkys
Subject: Draft 2

Let's discuss at 2pm.

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD .20852

(301) 415-1810

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Gilles, Nanette

From: Gilles, Nanette
Date: Friday, June 10, 2011 2:10 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Baggett, Steven; Davis, Roger; Lui, Christiana
Subject: Latest Fukushima Status
Attachments: Attachment - NRC Daily Assessment of Daiichi 061011.pdf; Latest Fukushima Status; Latest Fukushima Status

Commissioner – Today's Fukushima status update (for MIT next week) was just made available. See attached. Ignore my earlier message (something strange happened with it attaching itself).

One notable change is that this is the first time we are listing the cores as "ex-vessel" for Units 1 and 2. I talked to the Japan Support Team and they said that this was based on the admission by the Japanese in their report to the IAEA that this is the case for Units 1, 2, and 3. The team said it was just an administrative error that they missed updating it for Unit 3. Next update will reflect cores as ex-vessel for Units 1, 2, and 3.

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180

Email: nanette.gilles@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

NRC's Periodic Stoplight Report of Conditions at Fukushima Daiichi Nuclear Power Plant

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Reactor One	<ul style="list-style-type: none"> core ex-vessel primary containment breached injecting via feed water 5.0m³/hr Reactor metal temperatures trending down
Reactor Two	<ul style="list-style-type: none"> core ex-vessel primary containment breached injecting via feed water 5.0m³/hr Reactor metal temperatures trending down
Reactor Three	<ul style="list-style-type: none"> core damaged and uncovered primary containment breached injecting via feed water 11.3m³/hr Reactor metal temperatures fluctuating
SFP One	<ul style="list-style-type: none"> SFP intact water level maintained with installed fuel pool cooling system
SFP Two	<ul style="list-style-type: none"> SFP intact, water level maintained with installed fuel pool cooling system closed loop cooling installed
SFP Three	<ul style="list-style-type: none"> SFP intact water level maintained with installed spent fuel pool system caustic water conditions/concrete water interaction added 45 ton on 6/09
SFP Four	<ul style="list-style-type: none"> SFP intact, water level maintained with spray added 120 ton 06/08 Installation of structural reinforcement underway
Reactors 5 & 6	<ul style="list-style-type: none"> cold shutdown

General Site
Major TEPCO Identified Site Concerns
<ul style="list-style-type: none"> Water Management <ul style="list-style-type: none"> Water storage limitations Closed cycle water treatment system Closed loop SFP cooling systems Site containment <ul style="list-style-type: none"> Sub terrain water wall Building enclosure Structural Integrity of 1F4 Spent Fuel Pool
NRC Focus Areas
RST Focus <ul style="list-style-type: none"> On site work coordination Severe Accident Management Guidelines/Extreme Damage Mitigation Guidelines Shutdown Technical Specifications MELCOR analysis Hydrogeology Water treatment/debris removal Safety Culture (event response) Analyze 1F3 core dynamics given fluctuating RPV metal temperatures Structural Integrity of 1F4 Spent Fuel Pool
PMT Focus <ul style="list-style-type: none"> Food Safety Modify travel advisory Radiation Monitoring

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Japan News Headlines
<ul style="list-style-type: none"> Radioactive strontium detected 82 km from Fukushima No.1 plant Blackout hits Fukushima Nuclear Plant's Nos. 1, 2 Units (no loss of cooling) Official probe begins into nuclear disaster-evacuation of hot spots mullied Beaches face nuke readings Probe poised to take TEPCO to task Plutonium found in soil at Okuma
Events
<ul style="list-style-type: none"> 06-08-11 loss of power for 1F1 and 1F2 instrumentation and control room lighting duration 3 hours.

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Stoplights will be published Monday, Wednesday and Friday

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June 28, 2011

NOTE TO COMMISSIONERS' ASSISTANTS

OCM/GBJ

- cc Josh Batkin
- cc John Monninger
- Angela Coggins
- Lisa Clark
- Tom Hipschman
- Michael Marshall
- Anna Bradford
- Nehi Dhir
- Roberta Warren
- Melody Fopma
- Susan Loyd
- David Montes
- Patti Pace
- Herald Speiser
- Catina Gibbs

OCM/KLS

- Jeffrey Sharkey
- Darani Reddick
- Patrick Castleman
- John Thoma
- Janet Lepre
- Carolyn Harves

OCM/GEA

- Belkys Sosa
- Roger Davis
- Michael Snodderly
- Steve Baggett
- Kathleen Blake
- Carmel Savoy

OCM/WDM

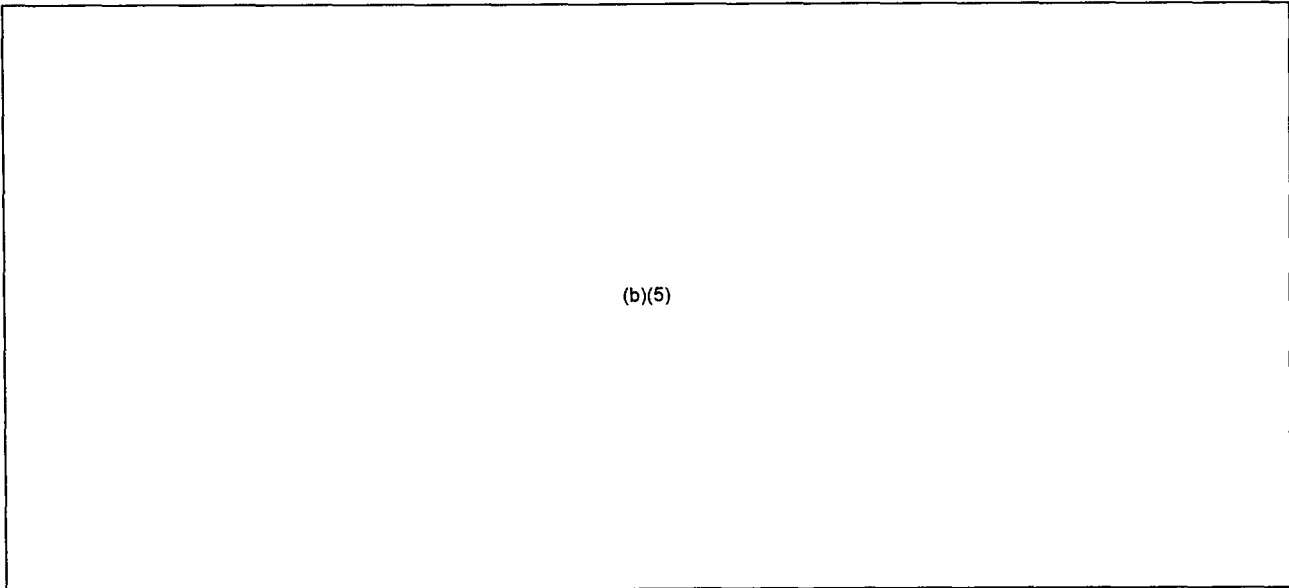
- Patrice Bubar
- Bill Orders
- Rebecca Tadesse
- Margaret Bupp
- Carrie Crawford

OCM/WCO

- Ho Nieh
- Michael Franovich
- Andrea Kock
- Jason Zorn
- Linda Herr
- Sunny Bozin

FROM: Nader L. Mamish /RA/
Assistant for Operations, OEDO

SUBJECT: DRAFT CHARTER AND TIMELINE FOR TRANSITION TO THE NRC'S
LONGER-TERM REVIEW OF THE EVENTS IN JAPAN



Enclosures:
As stated

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cc: R. W. Borchardt, EDO	SECY
M. Virgilio, DEDR	OCA
M. Weber, DEDMRT	OGC
D. Ash, DEDCM	OPA
N. Mamish, AO	OIP
K. Brock, OEDO	OIS
G. Bowman, OEDO	CFO

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CHARTER FOR THE NUCLEAR REGULATORY COMMISSION (NRC)
STEERING COMMITTEE TO CONDUCT A LONGER-TERM REVIEW
OF THE EVENTS IN JAPAN

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ENCLOSURE 1

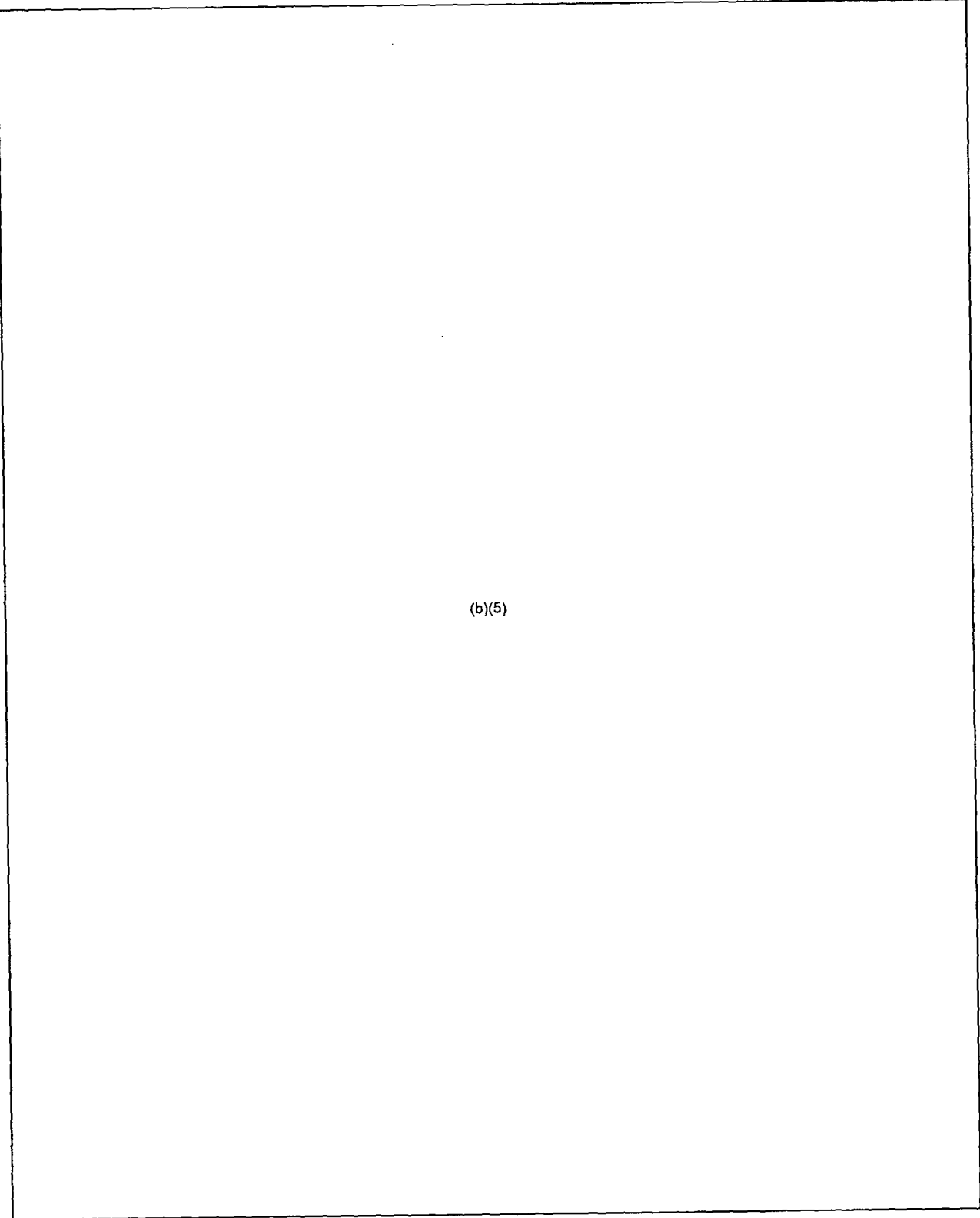
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Japan Near-Term Task Force Report Timeline

Date¹

Action

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ENCLOSURE 2

Apostolakis, George

~~NOT FOR PUBLIC DISCLOSURE~~

From: Apostolakis, George
Wednesday, June 29, 2011 4:15 PM
Sosa, Belkys; Baggett, Steven; Gilles, Nanette
Subject: RE: NRC Incident Response Program Lessons Learned Review Post-Fukushima
Attachments: image001.gif

(b)(5)

From: Sosa, Belkys
Sent: Wednesday, June 29, 2011 3:34 PM
To: Apostolakis, George; Baggett, Steven; Gilles, Nanette
Subject: Fw: NRC Incident Response Program Lessons Learned Review Post-Fukushima

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Morris, Scott
To: Batkin, Joshua; Bubar, Patrice; Nieh, Ho; Sosa, Belkys; Sharkey, Jeffrey
Cc: Merzke, Daniel
Sent: Wed Jun 29 14:48:22 2011
Subject: NRC Incident Response Program Lessons Learned Review Post-Fukushima

Josh, Patty, Ho, Belkys and Jeff ...

As you likely already know, the NRC incident response program staff is soliciting feedback from stakeholders regarding the agency's response to the events at Fukushima. Input concerning the NRC response program, including interagency coordination, and state communications will be included in our After Action Report.

We are interested in any feedback you or your principal may have regarding our response to the Fukushima events. If your office would like to provide input, please let me know by emailing your responses back to me. If you would prefer to meet in person to provide this feedback, please contact Jason Kozal and we will set something up ASAP.

Thanks!

Scott A. Morris
Director (Acting)
Division of Preparedness and Response
Office of Nuclear Security and Incident Response

U.S. Nuclear Regulatory Commission
Mail Stop T4-A43
11555 Rockville Pike
Rockville, MD 20852

scott.morris@nrc.gov
301-415-7482 (Office)

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(6) (BlackBerry/Cell)
301-415-5278 (Fax)

~~NOT FOR PUBLIC DISCLOSURE~~



~~NOT FOR PUBLIC DISCLOSURE~~



GENERAL COUNSEL

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 1, 2011










~~NOT FOR PUBLIC DISCLOSURE~~

Note to: Lisa Clark
Darani Reddick
Roger Davis
Molly Bupp
Ho Nieh

From: Stephen G. Burns 

Enclosed for your information is a brief note to file I prepared at the height of the Japan crisis in support of a request from the Chairman's office. Although I have spoken to most if not all of you on this subject and have previously disseminated the 2001 Cyr memo referenced in my memo, I have not previously distributed it to other offices. Because it was referenced (in the abstract) at a recent hearing and has been requested by the Congress, I wanted to be sure you are aware of it.

Enclosure: As stated

- Mr. Apostolakis 
- 1. Betlys Sosa 
- 2. Roger Davis 
- 3. Steve Baggott 
- 4. Monette Gillis 
- Kathleen Blake 
- 6. Carmel Savoy 
- 5. Christina Lui 
- File 

~~NOT FOR PUBLIC DISCLOSURE~~



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 6, 2011

The Honorable Darrell E. Issa
Chairman, Committee on Oversight and Government Reform
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

In response to your letter of May 26, 2011; this transmittal addresses requests for documents and information #1, 2, and 4-7. We continue to work with your staff on documents responsive to information request #3.

Please note that several of the documents in this delivery have not been released to the public and have thus been marked "not for public disclosure." We respectfully ask that the Committee honor these markings.

Sincerely,

Rebecca Schmidt
Director, Office of Congressional Affairs

B -

7/6/11

FYI, THIS
WILL GO
TO HILL
BY COB TODAY.

Amy

Wertz, Trent

From: Wertz, Trent
Sent: Monday, April 18, 2011 4:22 PM
To: Ruland, William
Subject: FW: Response to ACRS

Importance: High

Bill,

I sent the draft below to Randy for comment. I have not heard anything back from him.

Trent

From: Wertz, Trent
Sent: Monday, April 18, 2011 1:30 PM
To: Sullivan, Randy
Subject: Response to ACRS
Importance: High

Randy,

Bill Ruland asked me to put together an email from him to the Chairman of the ACRS to ensure that the ACRS understands that we will not be submitting any information to them regarding the calculations done by the Ops Center (based on a conversation between the NRC Chairman and the ACRS Chairman). Below is my draft, which I based on the transcripts of the meeting. Please let me know if you have any comments or concerns.

(b)(5)

If you have any questions, please do not hesitate to give me a call."

Trent L. Wertz
Technical Assistant
Office of Nuclear Reactor Regulation
301-415-5000
trent.wertz@nrc.gov

Ruland, William

From: Ruland, William
Int: Monday, April 11, 2011 12:38 PM
J: Sullivan, Randy
Subject: FW: Followup to the ACRSmeeting on Fukushima

From: Leeds, Eric
Sent: Saturday, April 09, 2011 7:50 PM
To: Ruland, William; Boger, Bruce
Subject: Fw: Followup to the ACRSmeeting on Fukushima

From: Virgilio, Martin
To: Miller, Charles
Cc: Sanfilippo, Nathan; Cabbage, Amy; Leeds, Eric; Sheron, Brian; Wiggins, Jim; Johnson, Michael; Dean, Bill; Satorius, Mark; McCree, Victor; Collins, Elmo; Howell, Art; Casto, Chuck; Dorman, Dan; Frazier, Alan; Andersen, James; Muessle, Mary; Wittick, Brian; Bowman, Gregory; Borchardt, Bill; Weber, Michael; Ahn, Darren
Sent: Sat Apr 09 14:03:06 2011
Subject: Followup to the ACRSmeeting on Fukushima

Charlie

(b)(5)

(b)(5)

Marty

**Responses to Information Requests from House Oversight and Government Reform
Committee
Letter of May 26, 2011**

Please see the following documents responsive to Request #2

Documents created by the Office of the General Counsel regarding the use of emergency powers, the 50-mile evacuation zone, or any other aspect of the NRC's response to the situation in Japan.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 11, 2011

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: R. W. Borchardt *0600 [Signature]*
Executive Director for Operations

SUBJECT: RESOURCE ESTIMATES FOR IMPLEMENTATION OF THE
NEAR-TERM TASK FORCE RECOMMENDATIONS

On July 12, 2011, the U.S. Nuclear Regulatory Commission near-term Task Force provided its report to the Commission. The enclosure was developed by the Task Force and provides the Commission with the estimated resource impacts associated with the Task Force's recommendations.

Enclosure:
As stated

cc: SECY
OGC
OCA
OPA
CFO

- ~~1. Cmr. Apostolakis~~
- ~~1. Belkys Sosa~~
- ~~2. Roger Davis~~
- ~~3. Steve Baggett~~
- ~~4. Nanette Gillis~~
- ~~5. Kathleen Blake~~
- ~~6. Carmel Savoy~~
- ~~5. Christiana Lui~~
- File

Resource Estimates for Implementation of the Task Force Recommendations

(b)(5)

Estimated Resources by Recommendation

(b)(5)

(b)(5)

NOT FOR PUBLIC DISCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
1615 L STREET, N.W.
WASHINGTON, D.C. 20542



July 11, 2011

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: R. W. Borchardt
Executive Director for Operations

SUBJECT: RESOURCE ESTIMATES FOR IMPLEMENTATION OF THE
NEAR-TERM TASK FORCE RECOMMENDATIONS

On July 12, 2011, the U.S. Nuclear Regulatory Commission near-term Task Force provided its report to the Commission. The enclosure was developed by the Task Force and provides the Commission with the estimated resource impacts associated with the Task Force's recommendations.

Enclosure:
As stated

cc: SECY
OGC
OCA
OPA
CFO

	Cmr. Apostolakis	_____
1	Belkys Sosa	_____
2	Roger Davis	_____
3	Steve Baggett	_____
4	Nanette Gillis	_____
	Kathleen Blake	_____
6	Carmel Savoy	_____
5	Christiana Lui	_____
	File	_____

NOT FOR PUBLIC DISCLOSURE

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Resource Estimates for Implementation of the Task Force Recommendations

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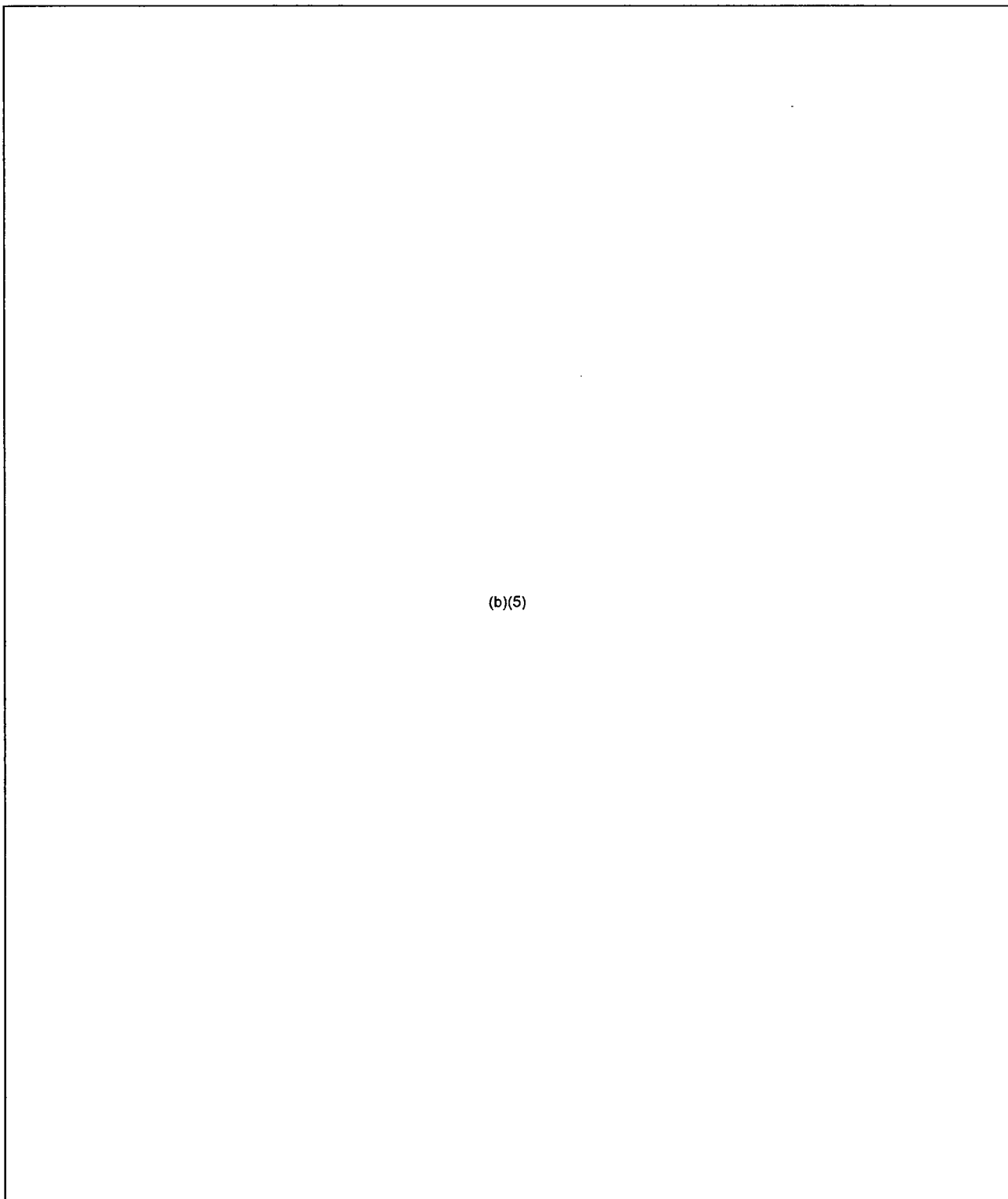
Enclosure

FM 2225 of 2929

~~PUBLIC DISCLOSURE~~

NOT FOR PUBLIC DISCLOSURE

Estimated Resources by Recommendation



(b)(5)

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

From:
Sent:
To:

Landau, Mindy
Tuesday, July 12, 2011 9:15 AM
Ash, Darren; Borchardt, Bill; Boyce, Thomas (OIS); Cohen, Miriam; Collins, Elmo; Dapas, Marc; Dean, Bill; Greene, Kathryn; Haney, Catherine; Howard, Patrick; Howell, Art; Johnson, Michael; Kelley, Corenthis; Leeds, Eric; Mamish, Nader; McCrary, Cheryl; McCree, Victor; Miller, Charles; Sheron, Brian; Virgilio, Martin; Weber, Michael; Wiggins, Jim; Satorius, Mark; Zimmerman, Roy; Brenner, Eliot; Hayden, Elizabeth; Schmidt, Rebecca; Powell, Amy; Casto, Chuck; Skeen, David; Shaffer, Mark; Magwood, William; Ostendorff, William; Svinicki, Kristine; Apostolakis, George; Nieh, Ho; Bubar, Patrice; Sharkey, Jeffrey; Sosa, Belkys; Doane, Margaret
Cc: Rihm, Roger; Ellmers, Glenn; Rakovan, Lance
Subject: Final Communication Plan for Japan Task Force Report
Attachments: Task Force Comm Plan.doc

Attached for your information is the final communication plan for the Task Force Report. Please note that distribution of the report itself to the public and the staff is planned on Wednesday, July 13.

Regards,
Mindy

Mindy S. Landau
Deputy Assistant for Operations
Communication and Performance Management
Office of the Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
301-415-8703
mindy.landau@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

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~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys



Landau, Mindy
Tuesday, July 12, 2011 3:21 PM
Landau, Mindy; Ash, Darren; Borchardt, Bill; Boyce, Thomas (OIS); Cohen, Miriam; Collins, Elmo; Dapas, Marc; Dean, Bill; Greene, Kathryn; Haney, Catherine; Howard, Patrick; Howell, Art; Johnson, Michael; Kelley, Corenthis; Leeds, Eric; Mamish, Nader; McCrary, Cheryl; McCree, Victor; Miller, Charles; Sheron, Brian; Virgilio, Martin; Weber, Michael; Wiggins, Jim; Satorius, Mark; Zimmerman, Roy; Brenner, Eliot; Hayden, Elizabeth; Schmidt, Rebecca; Powell, Amy; Casto, Chuck; Skeen, David; Shaffer, Mark; Magwood, William; Ostendorff, William; Svinicki, Kristine; Apostolakis, George; Nieh, Ho; Bubar, Patrice; Sharkey, Jeffrey; Sosa, Belkys; Doane, Margaret
Cc: Rihm, Roger; Ellmers, Glenn; Rakovan, Lance
Subject: URGENT UPDATE to Final Communication Plan for Japan Task Force Report

Please note that with respect to my earlier email, the release of the Task Force Report to the public (originally scheduled for July 13) could be delayed. Please do not distribute or communicate any messages with respect to the content of the communication plan until you are informed of the final public release date.

Thank you!
Mindy

From: Landau, Mindy
Sent: Tuesday, July 12, 2011 9:15 AM
To: Ash, Darren; Borchardt, Bill; Boyce, Thomas (OIS); Cohen, Miriam; Collins, Elmo; Dapas, Marc; Dean, Bill; Greene, Kathryn; Haney, Catherine; Howard, Patrick; Howell, Art; Johnson, Michael; Kelley, Corenthis; Leeds, Eric; Mamish, Nader; McCrary, Cheryl; McCree, Victor; Miller, Charles; Sheron, Brian; Virgilio, Martin; Weber, Michael; Wiggins, Jim; Satorius, Mark; Zimmerman, Roy; Brenner, Eliot; Hayden, Elizabeth; Schmidt, Rebecca; Powell, Amy; Casto, Chuck; Skeen, David; Shaffer, Mark; Magwood, William; Ostendorff, William; Svinicki, Kristine; Apostolakis, George; Nieh, Ho; Bubar, Patrice; Sharkey, Jeffrey; Sosa, Belkys; Doane, Margaret
Cc: Rihm, Roger; Ellmers, Glenn; Rakovan, Lance
Subject: Final Communication Plan for Japan Task Force Report

Attached for your information is the final communication plan for the Task Force Report. Please note that distribution of the report itself to the public and the staff is planned on Wednesday, July 13.

Regards,
Mindy

Mindy S. Landau
Deputy Assistant for Operations
Communication and Performance Management
Office of the Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
301-415-8703
mindy.landau@nrc.gov



~~NOT FOR PUBLIC DISCLOSURE~~

FM 2242 of 2929 510

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NOT FOR PUBLIC DISCLOSURE

Apostolakis, George



Magwood, William
Wednesday, July 13, 2011 7:00 AM
Jaczeko, Gregory

Cc: Ostendorff, William; Svinicki, Kristine; Apostolakis, George; Bubar, Patrice; Burns, Stephen; Vietti-Cook, Annette

Subject: This morning's press release

Greg,

Thanks for sharing the planned press release on the task force report. A few comments:

First, I think it is absolutely vital that the headline of this press release focus on the fact that the task force found no imminent threat to safety or security as a result of its analysis. I think that should be the central message and it isn't even mentioned in the draft release. As it is, someone reading this would think that every reactor in the country is a time bomb waiting to go off.

Second, I think it is ill-advised to place so much focus on the task force's comment about the "patchwork of regulatory requirements." The press release does not place this in sufficient context and the comment could be viewed as a condemnation of our entire regulatory framework.

Finally, whereas our press releases are generally dispassionate, this one is almost breathless. I think the tone is too forward-leaning. It should treat the report in much the same way it would treat any proposal coming to the Commission.

 these comments are of some help. Let me know if I can do anything to support your efforts as this is rolled out.

Bill



NOT FOR PUBLIC DISCLOSURE

NOT FOR PUBLIC DISCLOSURE

Apostolakis, George

From: Svinicki, Kristine
Wednesday, July 13, 2011 7:05 AM
To: Magwood, William; Jaczko, Gregory
Cc: Ostendorff, William; Apostolakis, George; Bubar, Patrice; Burns, Stephen; Vietti-Cook, Annette; Sharkey, Jeffrey
Subject: Re: This morning's press release

I share the concerns about this draft release that were raised by Commissioner Magwood and support its revision to address the points he has raised.

From: Magwood, William
To: Jaczko, Gregory
Cc: Ostendorff, William; Svinicki, Kristine; Apostolakis, George; Bubar, Patrice; Burns, Stephen; Vietti-Cook, Annette
Sent: Wed Jul 13 06:59:36 2011
Subject: This morning's press release

Greg,

Thanks for sharing the planned press release on the task force report. A few comments:

First, I think it is absolutely vital that the headline of this press release focus on the fact that the task force found no imminent threat to safety or security as a result of its analysis. I think that should be the central message and it isn't even mentioned in the draft release. As it is, someone reading this would think that every car in the country is a time bomb waiting to go off.

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Hope these comments are of some help. Let me know if I can do anything to support your efforts as this report is rolled out.

Bill

NOT FOR PUBLIC DISCLOSURE

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(b)(5)

(b)(5)

NOT FOR PUBLIC DISCLOSURE

Apostolakis, George

OPA Resource

Wednesday, July 13, 2011 8:21 AM

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

Subject:

Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

11-127.docx

Attachments:

The attached for release in approximately one hour.

Please note: The link to the report is not yet live, but will be at the time of public release.

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

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NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Telephone: 301/415-8200

Washington, D.C. 20555-0001

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

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

No. 11-127

July 13, 2011

NRC'S JAPAN TASK FORCE RECOMMENDS CHANGES TO DEFENSE IN DEPTH MEASURES AT NUCLEAR PLANTS; CITES STATION BLACKOUT, SEISMIC, FLOODING AND SPENT FUEL POOLS AS AREAS FOR IMPROVEMENT

The Nuclear Regulatory Commission's Japan Task Force has proposed improvements in areas ranging from loss of power to earthquakes, flooding, spent fuel pools, venting and preparedness, and said a "patchwork of regulatory requirements" developed "piece-by-piece over the decades" should be replaced with a "logical, systematic and coherent regulatory framework" to further bolster reactor safety in the United States.

The report has been given to the five members of the Nuclear Regulatory Commission, who are responsible for making decisions regarding the Task Force's recommendations.

While declaring that "a sequence of events like the Fukushima accident is unlikely to occur in the United States" and that plants can be operated safely, the Task Force also recognized that "an accident involving core damage and uncontrolled release of radioactivity to the environment, even one without significant health consequences, is inherently unacceptable." Thus, the Task Force developed a comprehensive set of 12 recommendations – many with both short and long term elements – to increase safety and redefine what level of protection of public health is regarded as adequate. It also recommended additional study of some issues.

"Our recommendations are grouped into four areas beyond the overarching suggestion to clarify the agency's regulatory framework," said Charles Miller, an NRC veteran who was about to retire when tapped to lead the review team. "We looked at ensuring protection, enhancing accident mitigation, strengthening emergency preparedness and improving the efficiency of NRC programs. The independence given our team was outstanding. Everything was on the table and we felt free to take a holistic approach to these key subjects."

"We asked the Japan Task Force to undertake a systematic and methodical review of our processes and regulations to determine if the Commission should make additional improvements in our regulations and to give us recommendations for policy direction. This comprehensive report fulfills that charter," said NRC Chairman Gregory Jaczko. "I am proud of the diligence and dedication of the Task Force and look forward to working with my fellow commissioners to respond to these recommendations."

NOT FOR PUBLIC DISCLOSURE

On July 19 the Commission will meet to hear from Miller and his team, and pose questions about their nearly four-month effort. On July 28 the Task Force will hold a public meeting to discuss the report, and members will appear before the Advisory Committee on Reactor Safeguards on Aug. 17. Additional meetings may be scheduled to seek public input on the recommendations.

The report noted that the current NRC approach to regulation includes requirements for protection and mitigation of design-basis events, requirements for some "beyond-design-basis" events through regulations, and voluntary industry initiatives to address severe accident issues.

"This regulatory approach, established and supplemented piece-by-piece over the decades, has addressed many safety concerns and issues, using the best information and techniques available at the time. The result is a patchwork of regulatory requirements and other safety initiatives, all important, but not given equivalent consideration and treatment by licensees or during NRC technical review and inspection. Consistent with the NRC's organizational value of excellence, the Task Force believes that improving the NRC's regulatory framework is an appropriate, realistic and achievable goal," said the report.

The authors added, "Continued operation and continued licensing activities do not pose an imminent risk to public health and safety. However, the Task Force also concludes that a more balanced application of the Commission's defense-in-depth philosophy using risk insights would provide an enhanced regulatory framework that is logical, systematic, coherent and better understood. Such a framework would support appropriate requirements for increased capability to address events of low likelihood and high consequence, thus significantly enhancing safety."

By recommending a more "coherent regulatory framework for adequate protection that appropriately balances defense-in-depth and risk considerations," the report recommends:

- Requiring plants to reevaluate and upgrade as necessary their design-basis seismic and flooding protection of structures, systems and components for each operating reactor and reconfirm that design basis every 10 years;
- Strengthening Station Black Out (SBO) mitigation capability for existing and new reactors for design-basis and beyond-design-basis natural events – such as floods, hurricanes, earthquakes, tornadoes or tsunamis – with a rule to set minimum coping time without offsite or onsite AC power at 8 hours; establishing equipment, procedures and training to keep the core and spent fuel pool cool at least 72 hours; and preplanning and pre-staging offsite resources to be delivered to the site to support uninterrupted core and pool cooling and coolant system and containment integrity as needed;
- Requiring that facility emergency plans address prolonged station blackouts and events involving multiple reactors;
- Requiring additional instrumentation and seismically protected systems to provide additional cooling water to spent fuel pools if necessary; and requiring at least one system of electrical power to operate spent fuel pool instrumentation and pumps at all times. The Task Force noted it will take some time for a full understanding of the sequence of events and condition of the spent fuel pools. The report said based on information available to date the two most cogent insights related to the availability of pool instrumentation and the plant's capability for cooling and water inventory management;

- Requiring reliable hardened vent designs in boiling water reactors (BWRs) with Mark I and Mark II containments;
- Strengthening and integrating onsite emergency response capabilities such as emergency operating procedures, severe accident management guidelines and extensive damage mitigation guidelines;
- Identifying, as part of the longer term review, insights about hydrogen control and mitigation inside containment or in other buildings as more is learned about the Fukushima accident;
- Evaluating, as part of the longer term review, potential enhancements to prevent or mitigate seismically induced fires or floods;
- Pursuing, as part of the longer term review, additional emergency preparedness topics related to SBO and multiunit events;
- Pursuing, as part of the longer term review, emergency preparedness topics on decision making, radiation monitoring and public education;
- Strengthened regulatory oversight of plant safety performance – the NRC’s Reactor Oversight Process by which plants are monitored on a daily basis – by focusing more attention on defense-in-depth requirements.

The report also acknowledged work on flooding and seismic issues under way at the NRC before the March 11 Fukushima event. The short-term review will be followed by a longer term review with a report with recommendations for the Commission’s consideration within six months.

Editors: The full report can be found at this [link](#). The broad area recommendations are contained in the Executive Summary. Detailed proposed actions – either rulemaking or “orders” – can be found in Appendix A.

###

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

NOT FOR PUBLIC DISCLOSURE

Gilles, Nanette

From: Sosa, Belkys
Date: Wednesday, July 13, 2011 10:11 AM
Subject: Apostolakis, George; Gilles, Nanette; Baggett, Steven; Davis, Roger
FYI: Staff Notes regarding EU Stress Tests in response to Fukushima Daiichi
Attachments: Talking Points - EU Stress Tests (2).docx

Commissioner here is the NRC position on the EU stress test. Thanks, - Belkys

From: Doane, Margaret
Sent: Tuesday, July 12, 2011 6:47 PM
To: Sosa, Belkys
Cc: Virgilio, Martin; Bloom, Steven; Moore, Scott; Sharkey, Jeffrey; Bubar, Patrice; Nieh, Ho; Batkin, Joshua; Holahan, Gary
Subject: Staff Notes regarding EU Stress Tests in response to Fukushima Daiichi

Belkys,

At my periodic this week with Commissioner Apostolakis we discussed the "stress tests" that the European regulators are conducting in response to the events at Fukushima Daiichi. He asked if there was something discussing staff's views about these tests. Attached is a quick one-page document listing the staff's immediate impressions. Gary Holahan provided the input and Marty discussed these issues at the IAEA in meetings with international counterparts. Also, below Steve Bloom provides two links: one is the President of ENSREGs statement about the stress tests and the other is the actual stress tests.

Regards,
Margie
From: Bloom, Steven
Sent: Tuesday, July 12, 2011 4:08 PM
To: Doane, Margaret; Abrams, Charlotte
Cc: Larson, Emily
Subject: Talking Points for Apostolakis

Margie and Charlotte,

Attached in the file containing the talking points.

The background information is found at

http://www.ensreg.eu/sites/default/files/EU%20Stress%20tests%20specifications_0.pdf

<http://www.ensreg.eu/sites/default/files/25-05-11%20Statement%20of%20ENSREG%20Chairman%20about%20EU%20Stress%20Tests.pdf>

Steve

Steven Bloom, International Relations Officer
International Cooperation and Assistance Branch (ICA)
415-2431 (W)
(b)(6) (BB)
O-4F4

NOT FOR PUBLIC DISCLOSURE

M/S O-4E21

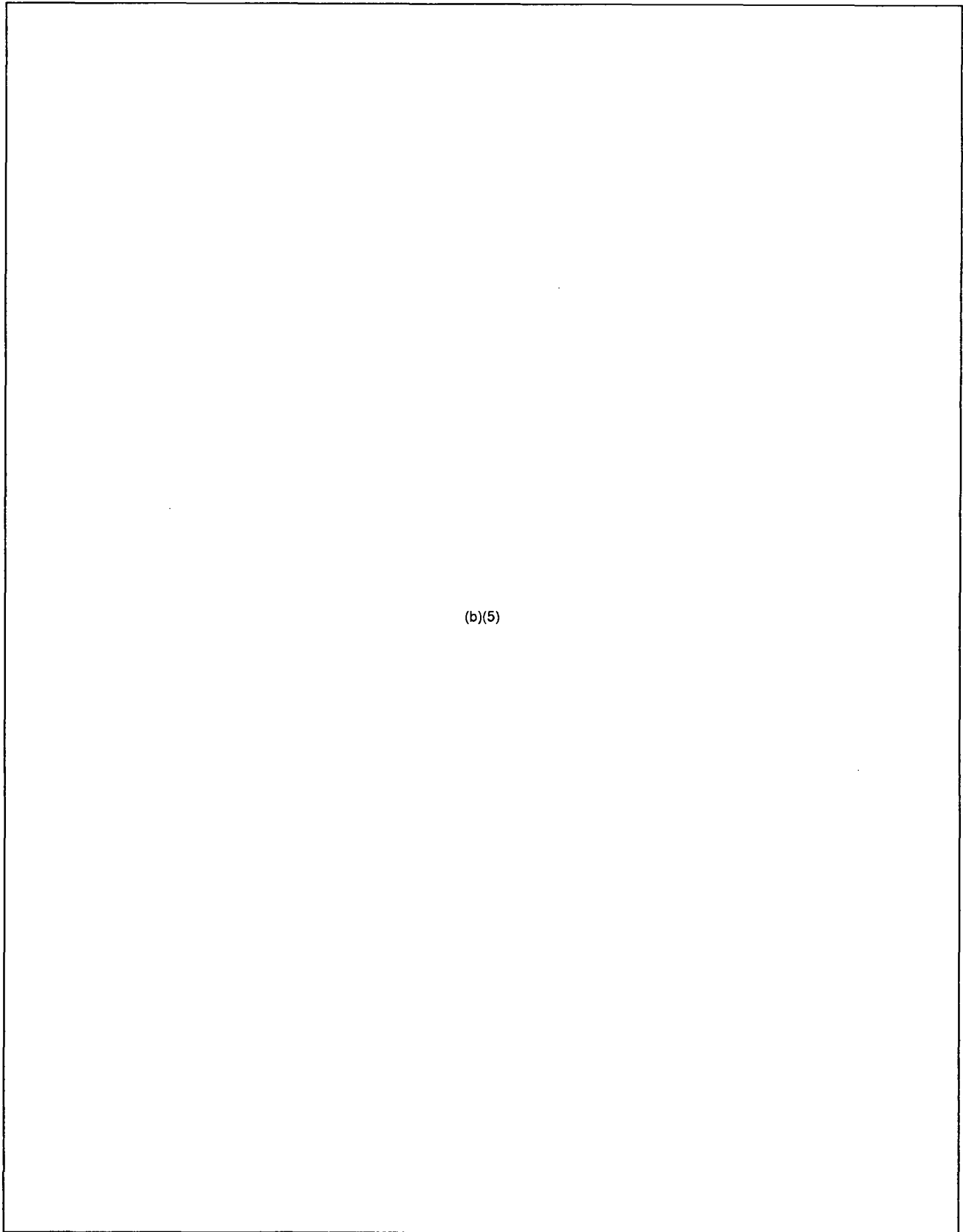


Talking Points Regarding EU Stress Tests

Background and Comparison

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

Talking Points Regarding EU Stress Tests



(b)(5)

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Davis, Roger

From: Apostolakis, George
Date: Wednesday, July 13, 2011 12:06 PM
To: Sosa, Belkys; Davis, Roger; Baggett, Steven; Gilles, Nanette; Lui, Christiana
Subject: FW: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement
Attachments: 11-127.docx

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(301) 415-1810

From: Ostendorff, William
Sent: Wednesday, July 13, 2011 8:33 AM
To: Jaczko, Gregory
Cc: Magwood, William; Svinicki, Kristine; Apostolakis, George; Batkin, Joshua; Brenner, Eliot
Subject: FW: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement


(b)(5)

From: OPA Resource
Sent: Wednesday, July 13, 2011 8:21 AM
To: Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bollwerk, Paul; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Cutler, Iris; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Hollan, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mityng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Scredl, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Nell; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucc), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Well, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy; Zorn, Jason
Subject: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

The attached for release in approximately one hour.

NOT FOR PUBLIC DISCLOSURE

Please note: The link to the report is not yet live, but will be at the time of public release.

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

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NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Telephone: 301/415-8200

Washington, D.C. 20555-0001

E-mail: opa_resource@nrc.gov Site: www.nrc.gov

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

No. 11-127

July 13, 2011

NRC'S JAPAN TASK FORCE RECOMMENDS CHANGES TO DEFENSE IN DEPTH MEASURES AT NUCLEAR PLANTS; CITES STATION BLACKOUT, SEISMIC, FLOODING AND SPENT FUEL POOLS AS AREAS FOR IMPROVEMENT

The Nuclear Regulatory Commission's Japan Task Force has proposed improvements in areas ranging from loss of power to earthquakes, flooding, spent fuel pools, venting and preparedness, and said a "patchwork of regulatory requirements" developed "piece-by-piece over the decades" should be replaced with a "logical, systematic and coherent regulatory framework" to further bolster reactor safety in the United States.

The report has been given to the five members of the Nuclear Regulatory Commission, who are responsible for making decisions regarding the Task Force's recommendations.

While declaring that "a sequence of events like the Fukushima accident is unlikely to occur in the United States" and that plants can be operated safely, the Task Force also recognized that "an accident involving core damage and uncontrolled release of radioactivity to the environment, even one without significant health consequences, is inherently unacceptable." Thus, the Task Force developed a comprehensive set of 12 recommendations -- many with both short and long term elements -- to increase safety and redefine what level of protection of public health is regarded as adequate. It also recommended additional study of some issues.

"Our recommendations are grouped into four areas beyond the overarching suggestion to clarify the agency's regulatory framework," said Charles Miller, an NRC veteran who was about to retire when tapped to lead the review team. "We looked at ensuring protection, enhancing accident mitigation, strengthening emergency preparedness and improving the efficiency of NRC programs. The independence given our team was outstanding. Everything was on the table and we felt free to take a holistic approach to these key subjects."

"We asked the Japan Task Force to undertake a systematic and methodical review of our processes and regulations to determine if the Commission should make additional improvements in our regulations and to give us recommendations for policy direction. This comprehensive report fulfills that charter," said NRC Chairman Gregory Jaczko. "I am proud of the diligence and dedication of the Task Force and look forward to working with my fellow commissioners to respond to these recommendations."

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FM 2267 of 2929

On July 19 the Commission will meet to hear from Miller and his team, and pose questions about their nearly four-month effort. On July 28 the Task Force will hold a public meeting to discuss the report, and members will appear before the Advisory Committee on Reactor Safeguards on Aug. 17. Additional meetings may be scheduled to seek public input on the recommendations.

The report noted that the current NRC approach to regulation includes requirements for protection and mitigation of design-basis events, requirements for some "beyond-design-basis" events through regulations, and voluntary industry initiatives to address severe accident issues.

"This regulatory approach, established and supplemented piece-by-piece over the decades, has addressed many safety concerns and issues, using the best information and techniques available at the time. The result is a patchwork of regulatory requirements and other safety initiatives, all important, but not given equivalent consideration and treatment by licensees or during NRC technical review and inspection. Consistent with the NRC's organizational value of excellence, the Task Force believes that improving the NRC's regulatory framework is an appropriate, realistic and achievable goal," said the report.

The authors added, "Continued operation and continued licensing activities do not pose an imminent risk to public health and safety. However, the Task Force also concludes that a more balanced application of the Commission's defense-in-depth philosophy using risk insights would provide an enhanced regulatory framework that is logical, systematic, coherent and better understood. Such a framework would support appropriate requirements for increased capability to address events of low likelihood and high consequence, thus significantly enhancing safety."

By recommending a more "coherent regulatory framework for adequate protection that appropriately balances defense-in-depth and risk considerations," the report recommends:

- Requiring plants to reevaluate and upgrade as necessary their design-basis seismic and flooding protection of structures, systems and components for each operating reactor and reconfirm that design basis every 10 years;
- Strengthening Station Black Out (SBO) mitigation capability for existing and new reactors for design-basis and beyond-design-basis natural events – such as floods, hurricanes, earthquakes, tornadoes or tsunamis – with a rule to set minimum coping time without offsite or onsite AC power at 8 hours; establishing equipment, procedures and training to keep the core and spent fuel pool cool at least 72 hours; and preplanning and pre-staging offsite resources to be delivered to the site to support uninterrupted core and pool cooling and coolant system and containment integrity as needed;
- Requiring that facility emergency plans address prolonged station blackouts and events involving multiple reactors;
- Requiring additional instrumentation and seismically protected systems to provide additional cooling water to spent fuel pools if necessary; and requiring at least one system of electrical power to operate spent fuel pool instrumentation and pumps at all times. The Task Force noted it will take some time for a full understanding of the sequence of events and condition of the spent fuel pools. The report said based on information available to date the two most cogent insights related to the availability of pool instrumentation and the plant's capability for cooling and water inventory management;

~~NOT FOR PUBLIC DISCLOSURE~~

- Requiring reliable hardened vent designs in boiling water reactors (BWRs) with Mark I and Mark II containments;
- Strengthening and integrating onsite emergency response capabilities such as emergency operating procedures, severe accident management guidelines and extensive damage mitigation guidelines;
- Identifying, as part of the longer term review, insights about hydrogen control and mitigation inside containment or in other buildings as more is learned about the Fukushima accident;
- Evaluating, as part of the longer term review, potential enhancements to prevent or mitigate seismically induced fires or floods;
- Pursuing, as part of the longer term review, additional emergency preparedness topics related to SBO and multiunit events;
- Pursuing, as part of the longer term review, emergency preparedness topics on decision making, radiation monitoring and public education;
- Strengthened regulatory oversight of plant safety performance – the NRC’s Reactor Oversight Process by which plants are monitored on a daily basis – by focusing more attention on defense-in-depth requirements.

The report also acknowledged work on flooding and seismic issues under way at the NRC before the March 11 Fukushima event. The short-term review will be followed by a longer term review with a report with recommendations for the Commission’s consideration within six months.

Editors: The full report can be found at this [link](#). The broad area recommendations are contained in the Executive Summary. Detailed proposed actions – either rulemaking or “orders” – can be found in Appendix A.

###

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NOT FOR PUBLIC DISCLOSURE

Davis, Roger

From: Apostolakis, George
Sent: Wednesday, July 13, 2011 12:24 PM
To: Cunningham, Mark; Lui, Christiana; Pangburn, George; Reckley, William
Cc: Sosa, Belkys; Gilles, Nanette; Baggett, Steven; Davis, Roger
Subject: FW: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement
Attachments: 11-127.docx

(Our) Task Force Members:

I am wondering how our work can contribute to changing the "patchwork of regulatory requirements". Let's discuss at our workshop next week. It's a great opportunity to do something of consequence.

Bill: To what extent did you discuss our approach with Gary Holahan? The similarities between our proposal and what the Near-Term Task Force recommends cannot be due to chance.

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

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Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy; Zorn, Jason

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No. 11-127

July 13, 2011

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Sosa, Belkys

From: Sosa, Belkys
Date: Friday, July 15, 2011 1:42 PM
To: Gilles, Nanette; Davis, Roger; Baggett, Steven
Subject: Fw: Japan Task Force Report - Distribution
Attachments: Text for ALDAC (rev 3 7-15-2011).docx

Sent from an NRC Blackberry

Belkys Sosa

(b)(6)

From: Doane, Margaret
To: Batkin, Joshua; Sharkey, Jeffry; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Virgilio, Martin; Weber, Michael; Moore, Scott
Sent: Fri Jul 15 13:40:06 2011
Subject: Japan Task Force Report - Distribution

Hello EAs,

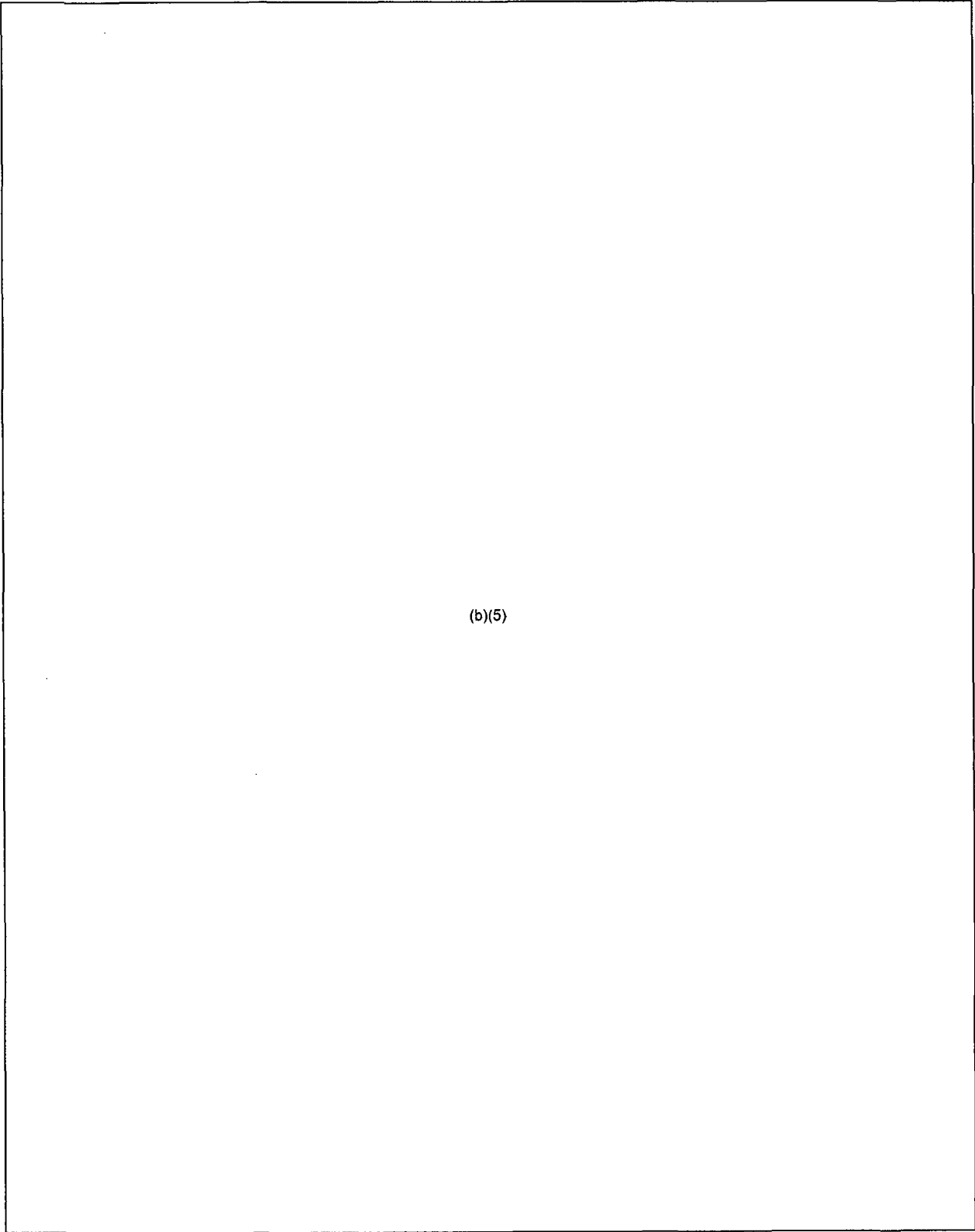
This note is for information only, no action is requested. Today in response to a request from the Department of State OIP sent the following input regarding the Task Force report and next steps. The information will be used in development of an ALDAC cable. An ALDAC is simply a cable to all diplomatic and Consular posts, and is the method of transmission the interagency informed us that they would be using. Department of State take the attached draft, put it into final form and distribute it. We have also by e-mail informed our foreign counterparts with nuclear power programs of the Commission briefing next week, and attached a copy of the Report. This was a useful way to ensure a consistent message would go out, rather than piecemeal messages in response to inquiries.

Feel free to call with questions or concerns.
Have a nice weekend,
Margie

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Text for ALDAC



(b)(5)

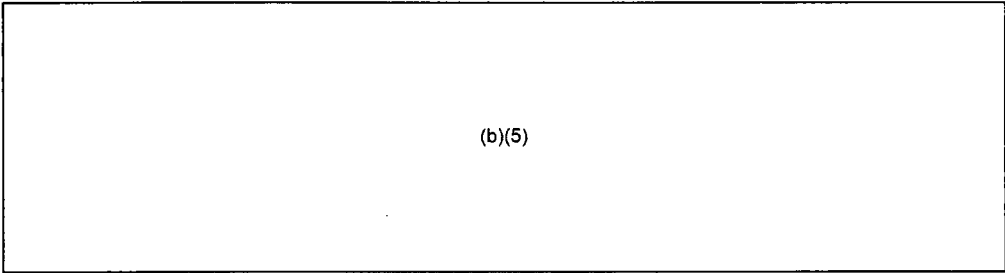
~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

NOT FOR PUBLIC DISCLOSURE

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

NOT FOR PUBLIC DISCLOSURE

(b)(5)

~~**NOT FOR PUBLIC DISCLOSURE**~~

NOT FOR PUBLIC DISCLOSURE

Davis, Roger

From: Gilles, Nanette
Sent: Friday, July 15, 2011 5:06 PM
To: Apostolakis, George; Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: FW: Roadmap
Attachments: [Untitled].pdf

The attached materials for Monday's agenda planning were just delivered by Rochelle from SECY. I think this roadmap is quite a bit different than the process we have been discussing.

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

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

From: NANETTE.GILLES@NRC.GOV [<mailto:nanette.gilles@nrc.gov>]
Sent: Friday, July 15, 2011 4:58 PM
To: Gilles, Nanette
Subject: Roadmap

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Gilles, Nanette

From: Gilles, Nanette
Sent: Tuesday, July 19, 2011 1:03 PM
To: Apostolakis, George
Subject: FW: Tsunami Frequency in Japan
Attachments: Lessons from Fukushima (5) dist (2).pdf

Commissioner – Unfortunately, the staff was a little late in answering my request for tsunami information. Nevertheless, the attached presentation from a professor at the Tokyo Institute of Technology has a few slides (10-14) that provide a good summary of the issue.

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Taylor, Robert
Sent: Tuesday, July 19, 2011 12:32 PM
To: Gilles, Nanette
Cc: Skeen, David; RST01_F Resource
Subject: Tsunami Frequency in Japan

Nan,

Sorry for the delay in getting this to you. I knew I had seen the information on tsunami frequency, but, of course, it was harder to find than I had anticipated. We will be trying to get you some additional information as well, but please take a look at the attached presentation by Professor Hisashi Ninokata of the Tokyo Institute for Technology. While we can't vouch for the accuracy of the information in the presentation, one of the NRR SLs informed us that he is a very well known, respected member of the American Nuclear Society's Thermal Hydraulics Division.

Rob

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Lessons from Fukushima

Hisashi Ninokata
Professor
Tokyo Institute of Technology
Tokyo, Japan
+81-3-5734-3056; hninokat@nr.titech.ac.jp
June 16, 2011

Q1. Should we have anticipated a tsunami run-up of 14 m?
Was the tsunami unforeseeable?

Q2. Did we earn response capabilities against a disaster that
exceeded the worst scenario?

Q3. Were there any possibilities to avoid core damages in that
long term SBO?



Introduction-1

- March 11, 2011 M9 the Great East Japan Earthquake and Tsunami
- 15,365 dead + 8,206 missing as of June 5, 2011
- 98,505 refugees from the quake and tsunami

- ~88,000 evacuees from Fuk-I NPP (within the radius 30 km)
- The earthquake caused:
 - The loss of off-site power initiating event
 - Severely hampering recovery activities because of the damage to the local infrastructure
 - Possible seismic damage to the piping systems and concrete that may never be known, in some cases, because of the damage caused by the tsunami and hydrogen explosions
- Tsunami "unforeseeable"?

2



Introduction-2

- Status of the No.1 to No. 3 BWR units as of June 2011
 - Decay power level at ~ 0.15~0.2%
 - 500 tons water/day poured into RPVs = make up for the evaporation + leakage
 - More than 100,000 tons of highly contaminated water (710k TBq) accumulated in the basement of reactor buildings as well as turbine buildings
 - The water level in the basement and trench is increasing everyday due ~~not only~~ to core cooling water ~~but to the under-ground water flowing in~~
 - All units look stabilized but far from stable while overall risks to the environment and workers are still high
 - 6 – 12 months of "feed & bleed" before establishing cooling loop and containment for cold shutdown (Tepco's Road Map)

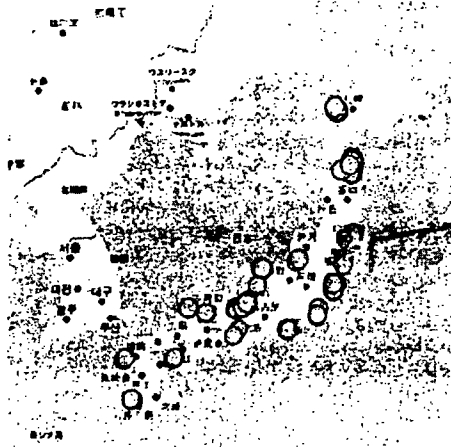
3

Consequences

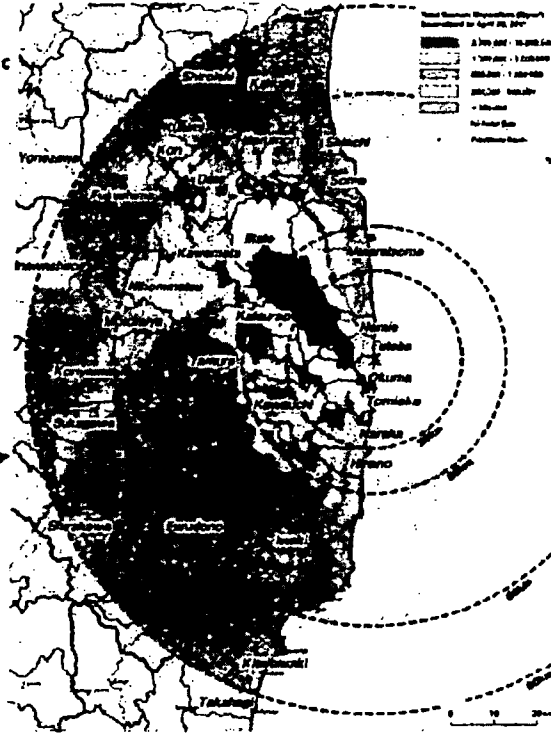
System for Prediction of Environment Emergenc
Dose Information

*SPEEDI prediction
authorities (MEXT):*

IAEA Briefing on Fukushima Nuclear Accident (4 - 11 May 2011, 17:00 UTC)



Aerial Measuring Results Joint US / Japan Survey Data



Before delving into NPP
Take a look at the disaster education



Tsunami Disaster Education for School Kids (1)

- 99.8%, almost all the elementary and junior high school children of Kamaishi, a small coastal town (pop: ~ 40,000) in Iwate Prefecture, managed to survive the tsunami
- As a result the lives of 1,927 elementary school children and 999 junior high children were saved
- Many people said it was a miracle, but it wasn't
- The response capabilities they learned in the disaster education at school helped them to overcome a disaster that exceeded all worst-case scenarios

6



Tsunami Disaster Education for School Kids (2)

- The tsunami disaster education by NPO instructors
 - Children learned the history, watch a video, do the simulation with evacuation drills backed up by their teachers and parents
 - In short, don't put too much faith in hazard maps, which are no more than scenarios
 - You have to assess the situation for yourself and act accordingly
 - Evacuate using the best available option
 - Learn to think always what is the best when a quake strikes:
 - ◆ Act immediately
 - ◆ Run to high place
 - ◆ Don't feel safe until all is over
 - ◆ Don't go back down to lower area
- The disaster education incorporated in the regular curriculum of all grades in routine developed the capabilities to save their lives from the tsunami

7



Junior high school children led elementary school kids to safety (<http://wedge.ismedia.jp/>)



No miracle that 99.8% of the school kids survived in Kamaishi-City

WEDGE Infinity
日本をもっと、考える



The Response Capability must be earned

School Education

- Tsunami disaster education
- Use the best available options
- If the best not found, just run
- Evacuation drills

Fuk-I NPP Accident

To save the life/property of the public

or

To save the nuclear reactors

Here, let me start with the latter reality, status to save NRx

Prepared for crisis? (1)

against the unforeseeable

- NPP was unprepared for tsunami of 14 m high. As a result:
 - All power sources lost;
 - Most of the safety systems of all units damaged simultaneously (multi-unit effect)
- Long term Station Blackouts (SBO) was not assumed in a hope that the off-site power and/or DG would be restored soon
 - Insufficient safety considerations for severe accidents
- Was it a disaster that exceeded all worst-case scenarios? *“Yes” but the unexpected should have been expected*

10

“Unforeseeable” Tsunami

- Should TEPCO have anticipated a tsunami run-up of 14m?
- The recurrence interval for a large-scale tsunami is 800 to 1100 years. After Jogan 869, was 3/11 2011

Year of big tsunami	Name of region	Mag	Height or traveled distance	Casualty
869	Jogan	8.6	4 km	~1,000
1811	Kaicho	8.1		2,000-3,000
1783	Sanriku	8.4	7	9
1856	Sanriku	7.5	?	30
1896	Meiji-sanriku	7.2	38 m	22,000-27,000
1833	Sanriku	8.4	28.7 m	1,500-3,000
1952	Kamchatka	9.0	1-3 m	-
1960	Chile	9.5	5-8 m	142
1988	Tokachi-oki	7.9	3-5 m	52



*Source "A PRA Practitioner looks at the Great East Japan Earthquake and Tsunami" White Paper by Woody Epstein's May, 2011, Tokyo Institute of Technology

11

Historical Earthquakes in the Sendai/Sanriku Area Greater than 8.0M_w

Year	Magnitude	Interval in Years
869	8.6	
1611	8.1	742
1793	8.2	182
1896	8.5	103
1933	8.1	37
1960	8.5	27

Source "A PRA Practitioner looks at the Great East Japan Earthquake and Tsunami" White Paper by Woody Epstein' May, 2011, Tokyo Institute of Technology

"... earthquake recurrence may be a non-ergodic stochastic process (instationary), therefore the use of Bayes theorem is to some extent misleading - stationary data distributions are not applicable ... [but] a 'temporary stable state' of the stochastic non-ergodic process of earthquake occurrence in Japan is applicable for about 400 years - but this is only temporary."

Dr. Jens-Uwe Klügel
Project Pegasos

No Tsunami Defense in Depth

- No tsunami defence in depth
- The consequences of a tsunami which could breach the tsunami 5.7m wall were especially high
- The turbine building especially vulnerable because of its location
- Imagine a mean value of a 8m tsunami run-up height at Daiichi at $5.0e-5/year$ (10 times smaller than our calculations)
- Then the dominant accident sequence would have a value uncomfortably close to a *CDF/year* of $1.0e-4$ and greater than uncontrolled release regulations of $1.0e-5/year$
- NPP operators in Japan should prepare for the maximum tsunami run-up height which could happen within a large radius, make extensive changes where possible in plant layout, and create defence in depth capabilities, such as the Notstand system at the Beznau NPP in Switzerland* (Note: this does not mean the 30m tsunami wall)

* "A PRA Practitioner looks at the Great East Japan Earthquake and Tsunami" White Paper by Woody Epstein's May, 2011, Tokyo Institute of Technology

Prepared for crisis? (2)

information disclosure

- Information disclosure insufficient; seemed under security guard in this crisis
 - Typical Japanese attitude
 - ◆ Not open until confirmed
 - ◆ Afraid of panic
 - The public as well as Tepco employee, as a result, exposed to the risk without knowing what were going on
 - TEPCO and the central government continue obfuscation: NISA admitted that it "failed" to release radiation data near Daiichi from March 12 - 15
- INES provisional rating starting from level 4, level 5 and jumped up to level 7 in two months, too belatedly
- More info was readily available in USDOE, USNRC, Areva, CEA, IAEA ... in the beginning and is likely so at present than any official governmental sites in Japan

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Prepared for crisis? (3)

Who was responsible for crisis management?

- Poor crisis management in emergency
 - More chains of commands added instead of cutting off many circumferential lines of commands/orders to a slim system
 - Possible interferences to the Tepco's struggles in despair in the SBO to prevent/mitigate the accident
- Nevertheless, Japanese people have stayed calm and well organized, kept their composure and helped each other; in particular in the fear of radiation dose, they tried to suppress their anger and learn radiological facts and effects

15



What went wrong and how likely was it
Focus on the events during the station blackout

WHAT HAPPENED TO FUKUSHIMA-DAICHI NP STATION – AN OUTLINE

16



Multi-unit station effects -1

- 6 units \supset 3 units under operation
- This time, not single natural phenomenon on one multi-unit station
- Fuk-I multi-unit station faced the double natural phenomena: **earthquake and tsunami** (From the public point: triple disasters -- earthquake, tsunami and nuclear radioactivity)
- Example: H₂ migrated from Unit-3 to Unit-4 and exploded near the SFSP of Unit-4; H₂ explosion in the Unit-3 destroyed the vent line of Unit-2, ... , etc.
- No consideration for multi-unit site impacts by natural or external events, therefore
- No multi-unit strategy and contingency plans for tsunami induced long term station blackout (SBO)

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Multi-unit station effects -2

- **Necessary to evaluate:**
 - **accessibility of different installations given radioactive releases from one or more reactors at the same site**
 - **accessibility of the site itself and possibility of supplying material/components etc. when having serious damage in the surrounding areas**
- **As of now in the effort of recovery, multi-unit, not single-unit, continual high radiation hinders workers from working in comfort; errors in one unit affects the other units;**
- **Moreover, contaminated water is continuing to leak into the ground, the groundwater, and the ocean from the reactors as a result of cooling measures necessarily undertaken.**

18



Multi-unit station effects -3

- **Any one of external events like floods, typhoon, tornados threatens all units on one site simultaneously**
- **Given that each unit stands natural hazards by hardening structures, water tightness, moving batteries/DGs and electricity driven components and circuits from low to high levels (in case of tsunami and floods), the off-site and contingency strategies are to be formulated in close cooperation with local communities and local governments.**
- **Participation from self-defense forces, fire fighters, police forces, local and central**

19

DHR before Tsunami with AC power

- Shutdown upon the earthquake, followed by LOOP
- Main Steam Line Isolation valves closed (loss of either AC power or DC triggers MSIV closure in Fuk-I units)
- With MSIV closed; then DG started up (AC power available)
(In case with MSIV open, the steam bypasses the turbine and condensed at the Feed Water Condenser)
- Added enthalpy (corresponding to decay power) pressurizes RPV
- For Unit-1, the vapor condenses at the Isolation Condenser (IC) and returns to RPV by natural circulation.
- For Unit-2 and -3, the vapor, after working at RCIC turbine, condenses at S/C
- Pressure Relief Valves (PRV) or ~~Automatic Depressurization System (ADS)~~ valves opened and the vapor produced by the added enthalpy in the core is moved to S/C
- S/C water is pumped to and cooled by RHR heat exchanger; the heat is dumped to sea eventually

20

Overview of the event sequence

- After LOOP, SBO due to tsunami and subsequent loss of ultimate heat sink
- Eventual loss of core cooling, still at a higher decay heat level, i.e., one day after SBO for Unit-1, ~2.5 days for Unit-3 and in ~3 days for Unit-2, resulted in:
 - ◆ Rapid loss of coolant;
 - ◆ Core exposure [tens of minutes];
 - ◆ Fuel melt;
 - ◆ Progression into core melt and meltdown, and possible melt-throughAll in less than a few hours
- Hydrogen explosions following the ventilation, leading to release of radioactive materials (at max on March 15)
- All PCVs damaged and failed to confine radioactive materials [hrs]

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Where did the decay heat go?

- Evaporation was the only mechanism to remove decay heat from the core
- Isolation Condenser (IC) removes the heat passively and returns the condensate to the core (Unit-1)
- RCIC pumps send the CST water into the main feed water line for make up and cooling the core (Unit-2 and -3)
- When over-pressurized, the vapor released into S/C through Pressure Relief Valve (PRV) opened → otherwise over-pressurize RPV (Note: ADS did not work)
- Decay heat transported to the S/C was not transported to RHR (- service water line closed w/o DC power; no AC power to RHR pump)
- All the decay heat stayed within PCVs; nowhere else
- Note: IC provides an ultimate heat sink outside PCV. This worked as evidenced in Unit-1. An improved Isolation Condenser system would be the key to survive the long term SBO and would be recommended to be equipped on the other BWRs. (as done for ESBWR)

22



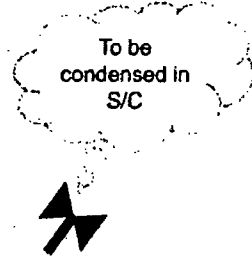
Core melt was inevitable in Fuk-I SBO without heat sink

- SBO and Loss of Ultimate Heat Sink
- Nowhere to go for the core enthalpy, i.e., a sum of
 - the enthalpy at the onset of scram; and
 - the subsequent decay heat generated in the corebut to the Suppression Chamber (Unit-1 to Isolation Condenser (IC) at the beginning) through PRV
- Without removing decay heat from the S/C and PCV, a closed system consisting of S/C, Primary Containment Vessel (PCV) and Reactor Pressure Vessel (RPV), nothing could be done to avoid the eventual core damage and meltdown.
- What could be done was to delay the core melt and mitigate the consequences under the situation

23

Immediately after IC or RCIC/HPCI termination

At the onset of SBO and loss of heat sink (isolation), no heat transport from inside the RPV



Note: The heat transported to the suppression chamber was not removed out of the PCV, resulting in PCV overpressure

>7 MPa Vapor, Pressurized due to evaporation with added decay heat



1st law TD Principle

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Depressurization due to SRV/ADS opening



Lower water level and pressurization by low saturation pressure evaporation due to added decay heat



$\frac{dT_{fuel}}{dt} \geq 1000$ to $2000^{\circ}\text{C}/\text{hour}$ depending on the time after shutdown

∴ Require DHR w/o AC/DC power

- With DC power lost, termination of IC and RCIC resulted in a rapid core exposure and fuel melt — *Unit 1*
- With DC power continuously available (recharged or replaced or ..), the core would survive until the S/C water starts boiling and eventually start melting — *Units-2 and -3*
- As RHR or other alternative heat removal system did not work as a result of tsunami flood, DC and AC power recovery were not useful
- Therefore, decay heat removals (DHR) under the SBO condition require DHR systems that do not require electricity
- Current GEN-III+ NRx meets this requirement; so do sodium cooled fast reactors and SMRs
- One of the strong candidates to overcome the long-term SBO is Natural Circulation Decay Heat Removal (NCDHR) system
- NCDHR system should survive the earthquake and tsunami as the added defense in depth

How they could not cope with long-term station blackout
What went wrong and how likely was it

LONG TERM SBO FIRST THREE DAYS AT FUK-I

26

Daiichi vs Daini

- Off-site power
- DG power
- RHR pumps
- Sea water pumps in Daiichi

Note:

Daiichi (第一) is No. 1 or First
Daini (第二) is No. 2 or Second

27

Fukushima Daini NP Station

- Quick action of an on-duty manager saved the NPP (Private source: W. Epstein)
 - 3 out of 4 power lines failed at the quake
 - Off-site power taken away from one of four units under operation
 - Diesel generators at Daini were soaked by sea water and not operable
 - An on-duty manager quickly acted and distributed the remaining power line to the unit w/o power
- How was it saved?
 - Core cooling was made by RCIC without S/C cooling mode in 3 units (RHR not available at the beginning) except for Unit-3
 - Units-1, 2 and 4: Just in time before the water in S/C started boiling, RHR was restored and so was the S/C cooling mode. The decay heat removals to the sea was successful and NRx's have made a narrow escape from core damages
- Lessons: Quick understanding of the situations, right and quick decisions, and immediate actions

Where make-up water available for core cooling after tsunami?

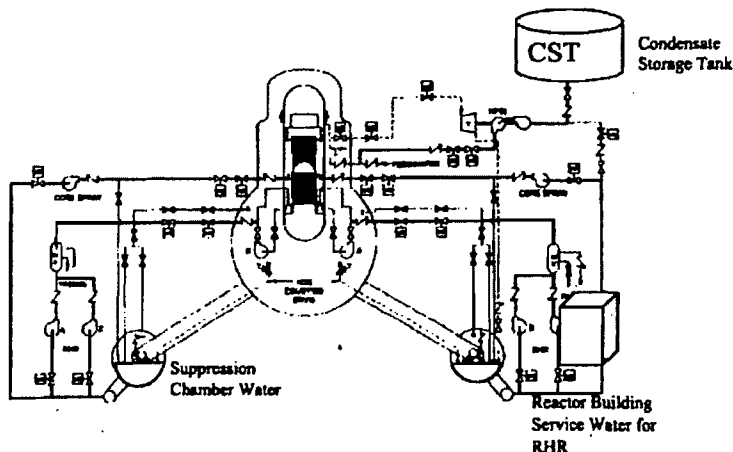


Figure 10-1 Emergency Core Cooling System

Source: USNRC Boiling Water Reactor
GE BWR/4 Technology
Technology Manual

IC and RCIC

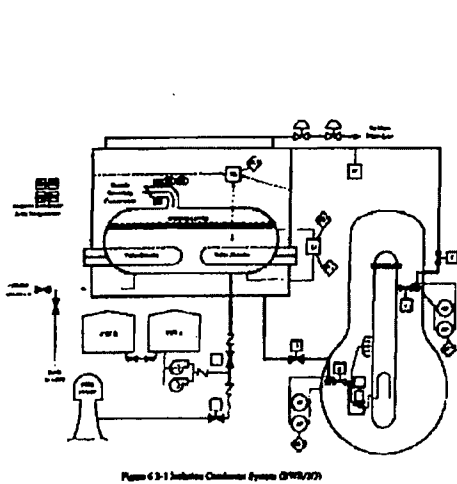
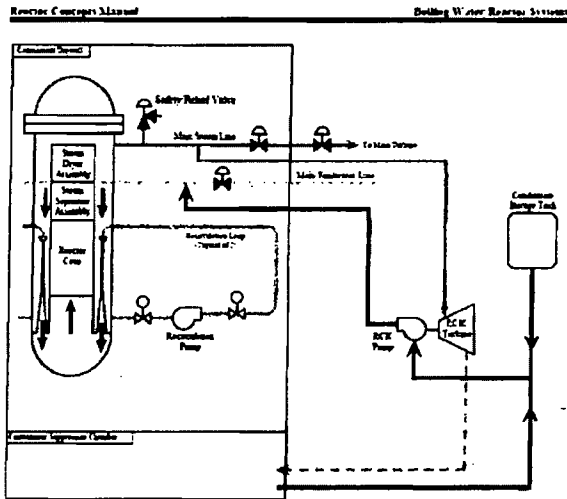


Figure 4-3-1 Isolation Condenser System (BWR/3)

Isolation Condenser

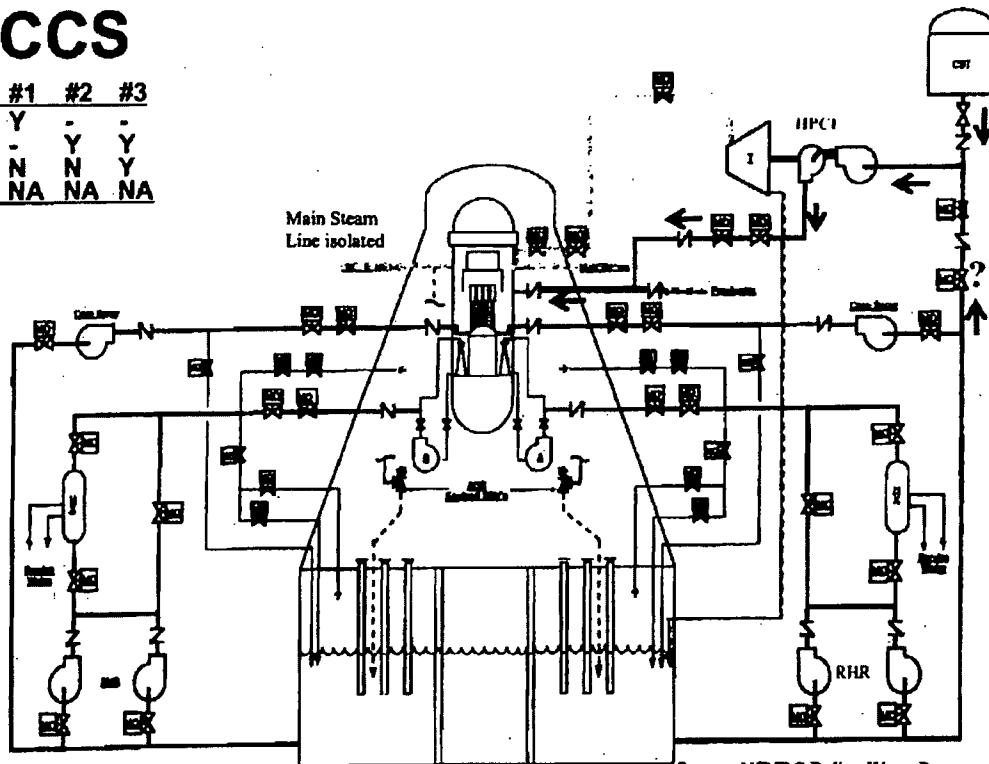


Reactor Core Isolation Cooling

Source: Boiling Water Reactor (BWR) Systems
USNRC Technical Training Center

ECCS

Unit	#1	#2	#3
IC	Y	-	-
RCIC	-	Y	Y
HPCI	N	N	Y
LPCI	NA	NA	NA

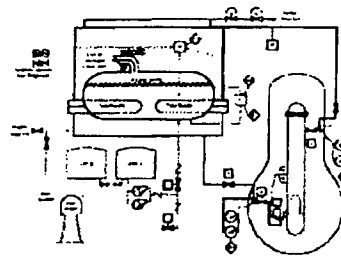


Source: USNRC Boiling Water Reactor
GE BWR/4 Technology
Technology Manual

Figure 10.0-1 Emergency Core Cooling Systems

Where make-up water available for core cooling after tsunami?

A summary of the system responses until core melt



Unit	#1	#2	#3
DC source	Lost in tsunami Battery charger; panels – unavailable	Lost in tsunami (but DC available for RCIC)	Battery survived tsunami (dead after ~10 hrs)
Make-up water:	IC feeds the water into the RPV; (service water. With fire pumps @ 6 am- 3/12: 80 ton in ? hrs)	RCIC from CST	RCIC from CST
Condensation at:	IC shell side	S/C	S/C
Coolant injection and core cooling chronology :	IC automatic startup (two trains); Manual stop ~330PM [-100°C/hr] (then tsunami; activated later – results unknown; refill water at night)	3/11 1502 RCIC on ← in spite of the battery lost; with backup batteries plugged? Lasted ~70 hours by good on-off battery management	3/11 1506 RCIC on 3/12 1136 RCIC off 1230 HPCI on
Core cooling lost and major events that followed:	3/11 IC unknown (~1930 TAF uncovered: est) (~2000-2100 core melt starting: est) 3/12 5 am (radiation ext high in RB and TB) PCV vent delayed – PCV failure 6 am core meltdown suspected 1430 First vent 1536 H ₂ explosion	3/14 1325 RCIC off 1800 TAF uncovered 1900 whole core exp fuel melting; (21 hrs to core meltdown) 3/15 8 am (H ₂ expl? near S/C) 2000 a large fraction of the core meltdown to the RPV bottom head (est)	3/13 0242 HPCI off – 7 am TAF uncovered (20 hrs to core melt d) 3/14 ~ 3 am whole core melt down – 11 am H ₂ detonation

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What went wrong in a first few days

1

- DC power supply: necessary to keep cooling and make-up, to wait for RHR or the countermeasures to be put in place; Note: not sufficient to avoid core melt w/o countermeasures in place
- Reactor core cooling:
 - Termination of IC for Unit-1 due to failure in re-opening a MO-valve
 - Termination of RCIC due to loss of DC power for logic circuits, control valve opening, etc
- IC for Unit-1 to the atmosphere worked: but difficult to control
 - After LOOP, auto start-up; ~ -100°C/hr (too rapid vs. - 55°C/hr); manually stopped following the operation manual, w/o knowing tsunami coming
 - After tsunami, not usable (?) in spite of the efforts to resurrect the IC, refilling the water by fire pumps
- 3/11 midnight: 50 mobile generators were summoned but arrival delayed due to traffic jam. Most could not make access to the NRx units because of rubbles and drifts of tsunami; some of them made it but in vain with connection mismatch. One mobile AC line was connected but the pump did not start work
- Fire pumps: available but little use at the beginning in the place of HPCI ; later useful

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What went wrong in a first few days

2

- Depressurization and makeup were extremely difficult after IC or RCIC/HPCI stopped functioning and after the core was uncovered
- Venting should have been made immediately to protect PCV
- PCV flooding should have been initiated prior to the core melt and prevent RPV failures by cooling the outer RPV wall. Problems foreseen are:
 - No powerful pumps were available
 - Flooding the Mark-I PCV would have taken much longer time than the time from the loss of core cooling to core melt
 - The timing was too late to prevent core melt but maybe not too late to prevent the RPV failure
 - Flooding disables the suppression capabilities at S/C
 - PCV might not stand the self-weight and dynamic load during a big aftershock
- PCV flooding has been "carried out" since the mid March, although not intentionally but with the RPV leak
- Flooding has never been attained because the water injected into RPV kept leaking out of PCV to the Reactor Building to Turbine Building, spreading the contamination

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What went wrong in a first few days

3

- The on-site duty manager was not given the authority; waiting for the PM's authorization
- The delay in venting caused the PCV failure and H2 explosions
 - ◆ Tepco decided to vent 1:30am 3/12
 - ◆ The central government command center was busy (?) on evacuation scheme and vent order was delayed; issued 6:50am (ventilation should be notified to the public)
 - ◆ Frequent aftershocks and tsunami warnings at the site
 - ◆ No instruction manual for MO-valve opening by hands; no experience before; started working on the MO-valve 9:40am
 - ◆ Already radiation level was high
 - ◆ Finally vent was successful 2:30pm: 13 hours after the Tepco's midnight decision
- Delays in injecting water/seawater were due partly to technical problems and to complicated lines of command and communication problems; this has created useless mishaps later among Cabinet, Tepco, ...

35

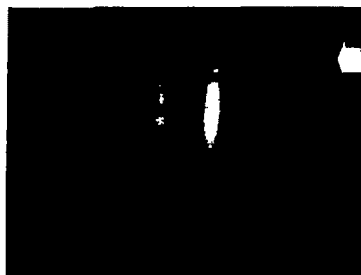
What went wrong in a first few days

4

- Without light in the darkness; no information without telephone communication but with public mobile phones, hand-to-hand relay, ...
- Added confusions from many lines of command and order
- H₂ explosion 3:30PM was not made public but 2 hours later
- Reported as another Chernobyl in some countries in Europe
- Results from SPEEDI (System for Prediction of Environment Emergency Dose Information) or WSPEEDI (World ...) were not released
- Some residents were evacuating in the wind blowing direction without knowing critical situation
- 3/12 9PM Evacuation order... w/o information for evacuees
- INES provisional level 4 to 5 (evacuation is not an absolute requirement)
- A lot of confusions but less confusions in the public

External factors that made field work difficult (inside the building)

- As there was no power, work inside the building was conducted in complete darkness.
- As there was no power, temporary instrument power had to be installed separately for each instrument.



Work in complete darkness

Photo of the Service Building entrance taken from inside the building. Objects were scattered on the floor. Temporary instrument power

As there was no power, temporary batteries were connected and used as a power supply for instruments.



Monitoring by the assistant shift supervisor

Confirmed readings in complete darkness using a light

Monitoring by the assistant shift supervisor

Condition of the assistant shift supervisor's desk. Monitoring in complete darkness wearing a full-face mask



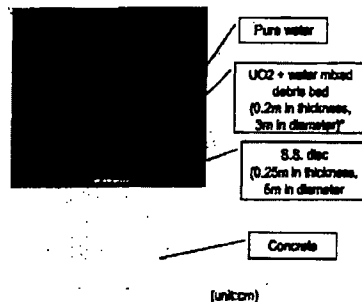
Prepare for a disaster that exceeds all worst-case scenarios

- When off-site power restored and connected to the panel about 10 days later, the risk of fire was at high stakes
- The risk did not prevail this time thanks to Tepco's professionalism
- However, to the dismay, RHR pumps and other MO-valves did not operate once soaked by the sea water
- Some of AM measures added 2002 worked and some not:
 - Connection points to fire water; Hardened vent lines; Recombiners
- Keep RHR systems and safety systems from being wet; place at high elevations or all in watertight cells or chambers; against tsunami??.....
- Be prepared for the long term SBO
 - [Plug & Play needed] **Mobile pumps** and various kinds of power supplies should be standardized and be ready to use in place including Stand-by DG (air-cooled, ...), mobile generators, additional batteries at high elevations with sufficiently long cables with matching power socket and plug
 - Compressed air or nitrogen reservoir for AO-valves and couplers (connectors) wherever necessary
 - Carry out stress tests
 - SBO exercises and frequent training without scenario-base to nourish response capabilities

Recriticality of Debris Bed

A technical issue when sea water injection was about to start.
Not likely to occur but it has become political issues

Model of debris on the floor of pedestal underneath the RPV bottom head: set up for the MVP code



Mixture and particle effects on multiplication factors of debris

U235 enrichment (%)	UO ₂ volume fraction (%)	debris bed thickness (m)	debris bed diameter (m)	Keff	Model
19.0	50	0.1	0.5	0.9812	Homogenized mix. with 50 % volume of pure water
19.0	50	0.1	1.0	1.0322	Ditto.
3.8	50	0.2	1.0	0.9812	Ditto.
3.8	50	0.2	3.0	1.0322	Ditto.
3.8	50	0.2	3.0	1.1275	UO ₂ particle mixed with 50 % volume of pure water (diameter of particle: 1mm, for statistical geometry model)
3.8	90	0.5	3.0	0.8255	UO ₂ particle mixed with 10 % volume of pure water (diameter of particle: 5mm for statistical geometry model)
3.8	90	1.0	3	0.8492	Homogenized mix. with 10 % volume of pure water.

To be published in ANS Winter Meeting, Nov 2011

Why in Fukushima-Daiichi?

- Onagawa Unit-1 PCV is Mark-I, Unit-2 to 3 are of improved Mark-I and Fuk-2 four units are of Mark-II
The newer design, the better prepared for tsunami with new knowledge on the tsunami history
- Fuk-1 units of concern consist of BWR-3 and BWR-4 with Mark-I PCV
- In particular the Unit-1 of Fuk-I was constructed based on the imported technology. After having digested the imported technology, at least that was the way we thought, Japan has spent more efforts in improvement and new development.
- Vulnerability of Fuk-I has long been pointed out against tsunami but has been put aside, given its First of a Kind nature in Tepco, given that it was constructed almost 40 years ago before many updates in regulations, given that constructing new defense was extremely expensive.

The lessons would be useful for new nuclear countries who import foreign technology for a starter.

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Complacency of Tepco and the regulators

- Tepco's and regulators' complacency that a 5.7 m tsunami wall was adequate
 - No tsunami defense-in-depth caused major damage
 - Fukushima Daiichi nuclear plant was not prepared for and vulnerable to tsunami because the regulators did not require Tepco the bounding analysis
- Also the complacency about SBO has been pointed out as one of the causes of the severe accidents
 - AMG and EPG for the long term SBO were not assumed
 - The safety design guidelines in Japan state explicitly **that a long-term power failure can be ignored** as emergency back-up systems are restored, if failed, and expected to supply electricity shortly
 - They were last modified by the commission in 1990 but finally revision has been decided after the accident

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Some other comments from the disaster 1

- Strong domestic and international criticism that the government and TEPCO have bungled their response to the disaster
- SAM guidelines, emergency response procedures, safety design guidelines to improve containment vent, core cooling system (natural circulation capabilities), for long term SBO [due to tsunami in this case]
- Those were already there before Fuk-I. Nonetheless, the discussions were not put into practice. Probably due to Japanese culture: consensus needed before decisions after Nemawashi
- Risk of NPP, the mistakes committed, success, .. were learned and better understood from the disaster → Lessons to learn
- Resilience Nuclear power plants would be made much safer by learning the lessons from Fuk-I

42

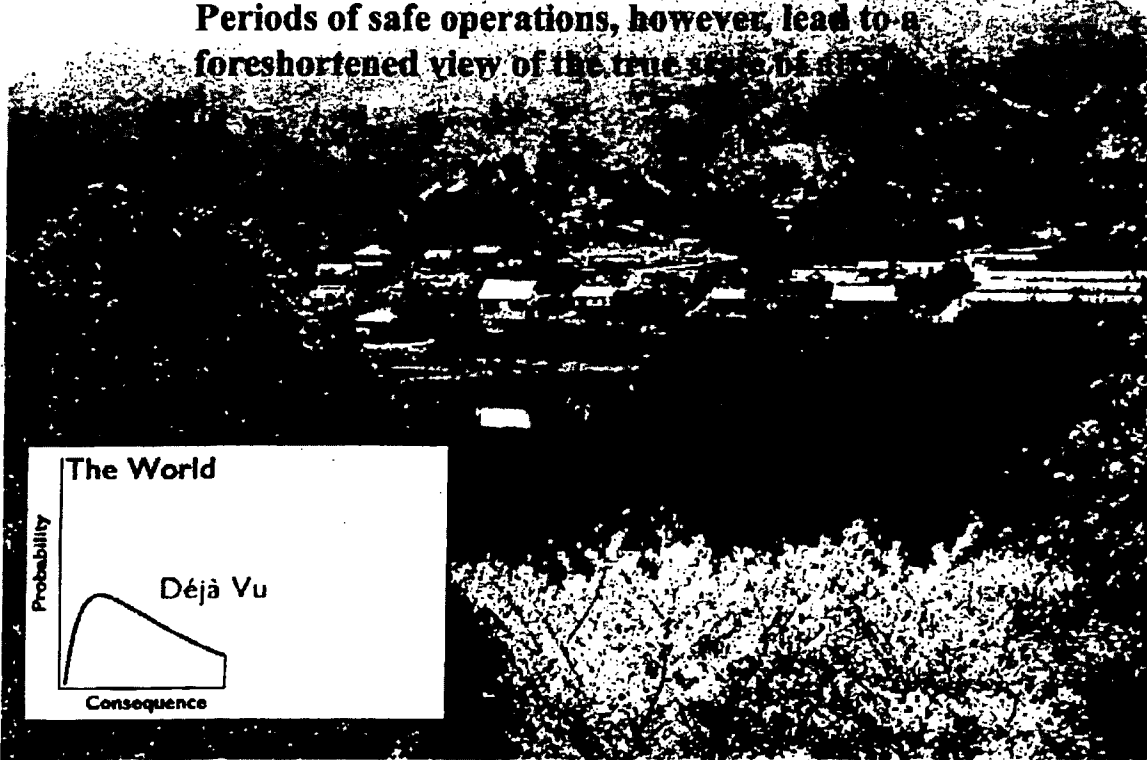
Some other comments from the disaster 2

- Worldwide: Fukushima Daiichi events lead
 - numerous NPPs to likely but premature shutdown; and
 - not a few new orders to cancellation although new reactors are much safer by orders of magnitude than any reactors under currently operation
- In Japan, nuclear engineering professionals and seismologists should make their best efforts to communicate with the public, government and utilities on both what they know and what they don't
- Prepare for the unexpected, educate the employers/employees, politicians, and the public. Just in the same way as the tsunami disaster education was carried out for school children
- The public makes the decision

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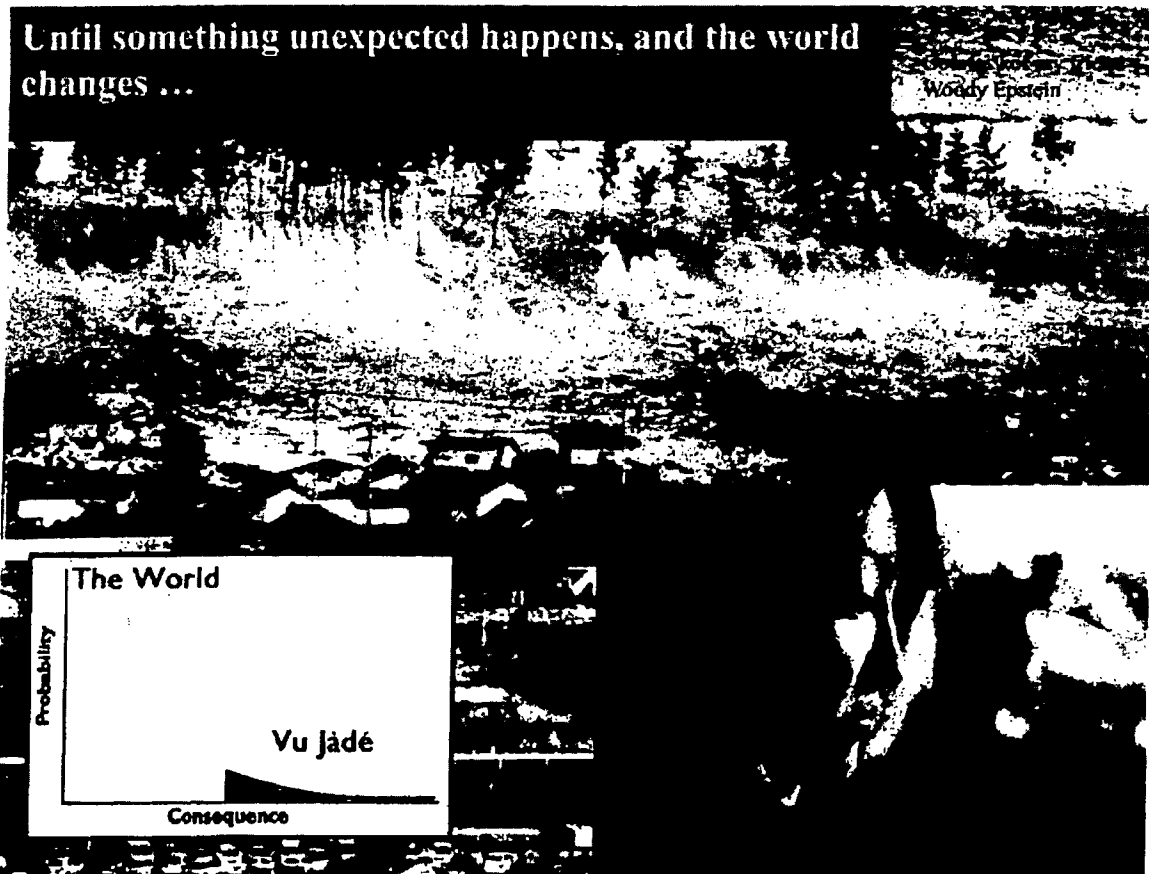
Courtesy of my friend
Woody Epstein

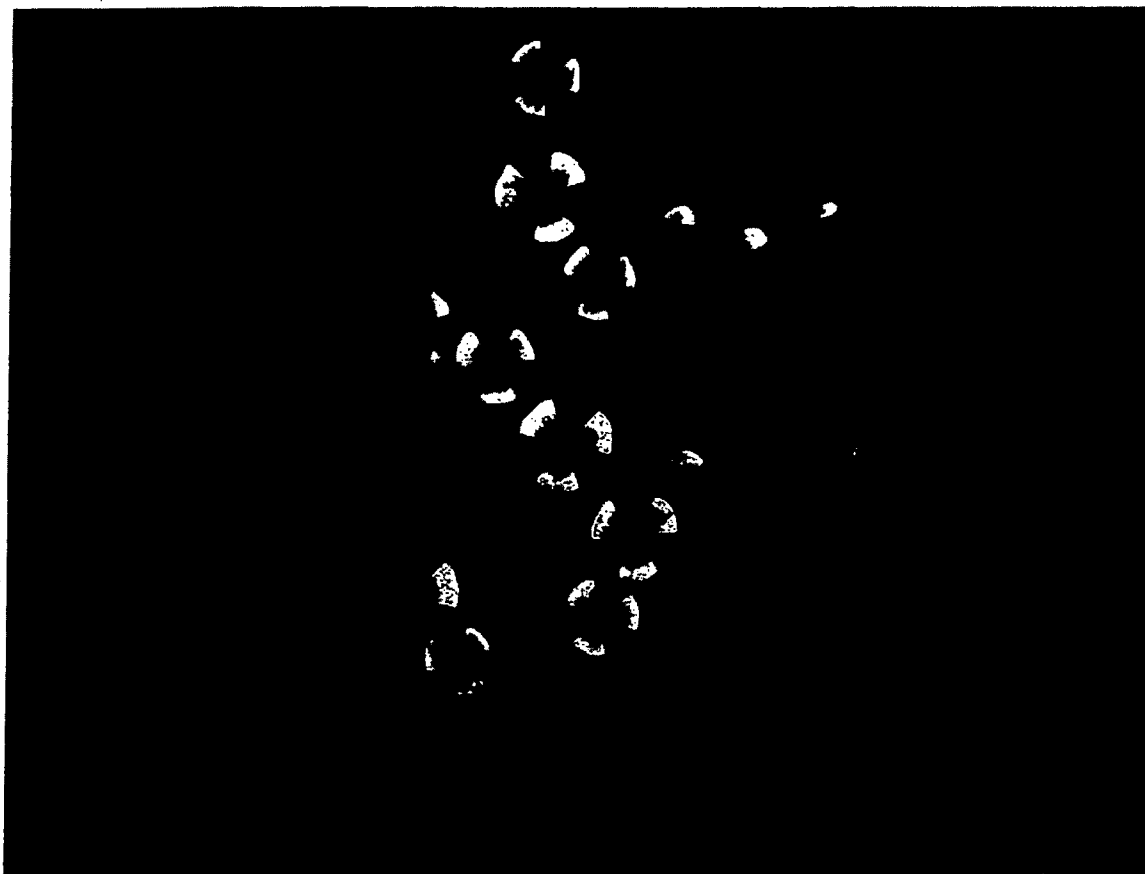
Periods of safe operations, however, lead to a
foreshortened view of the true state of affairs



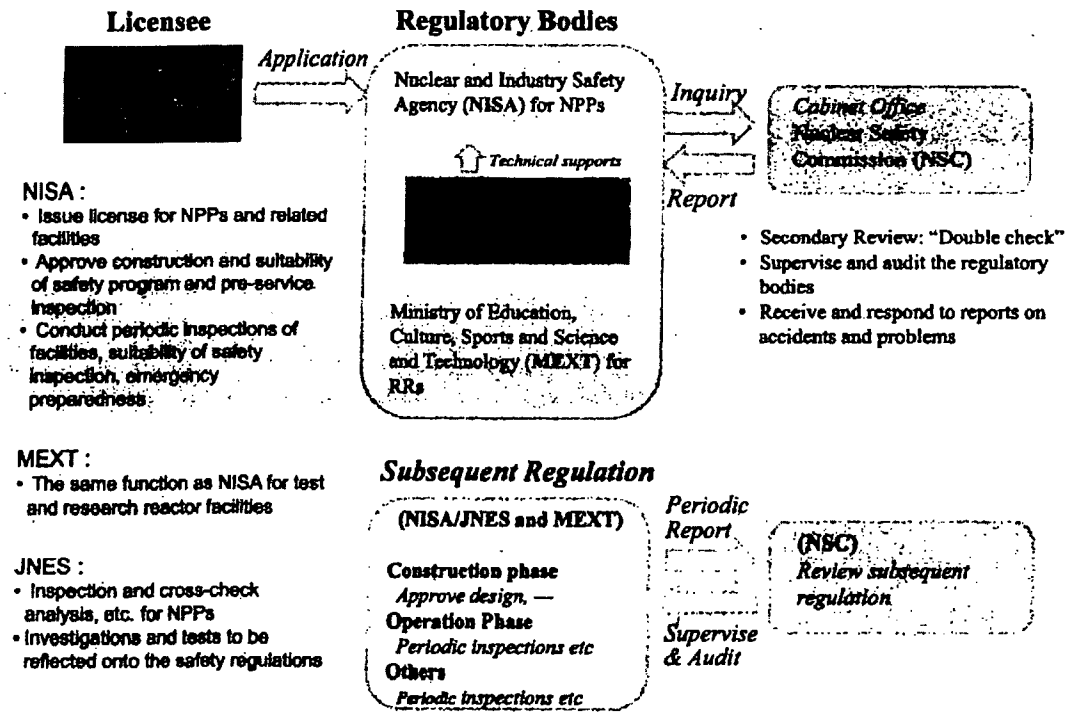
Until something unexpected happens, and the world
changes ...

Woody Epstein





Nuclear Safety Regulation System in Japan



For specific lessons, visit the following web-site:

Atomic Energy Society of Japan

http://www.aesj.or.jp/en/release/gbcom_kyokun_EN_20110530.pdf

LESSONS LEARNED

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Doane, Margaret
nt: Friday, July 15, 2011 1:40 PM
: Batkin, Joshua; Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
cc: Virgilio, Martin; Weber, Michael; Moore, Scott
Subject: Japan Task Force Report - Distribution
Attachments: Text for ALDAC (rev 3 7-15-2011).docx

Hello EAs,

This note is for information only, no action is requested. Today in response to a request from the Department of State OIP sent the following input regarding the Task Force report and next steps. The information will be used in development of an ALDAC cable. An ALDAC is simply a cable to all diplomatic and Consular posts, and is the method of transmission the interagency informed us that they would be using. Department of State will take the attached draft, put it into final form and distribute it. We have also by e-mail informed our foreign counterparts with nuclear power programs of the Commission briefing next week, and attached a copy of the Report. This was a useful way to ensure a consistent message would go out, rather than piecemeal messages in response to inquiries.

Feel free to call with questions or concerns.
Have a nice weekend,
Margie

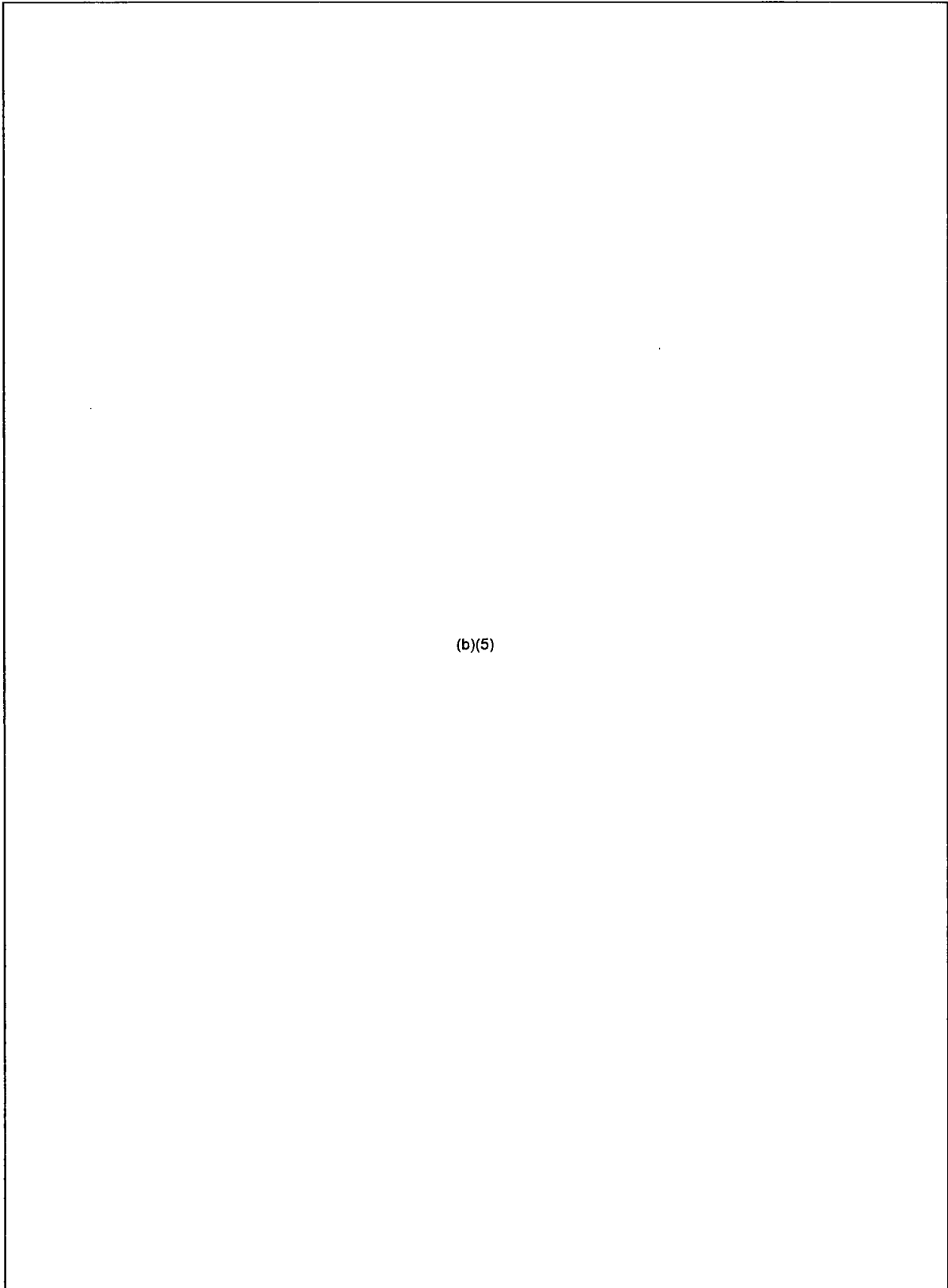
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Text for ALDAC

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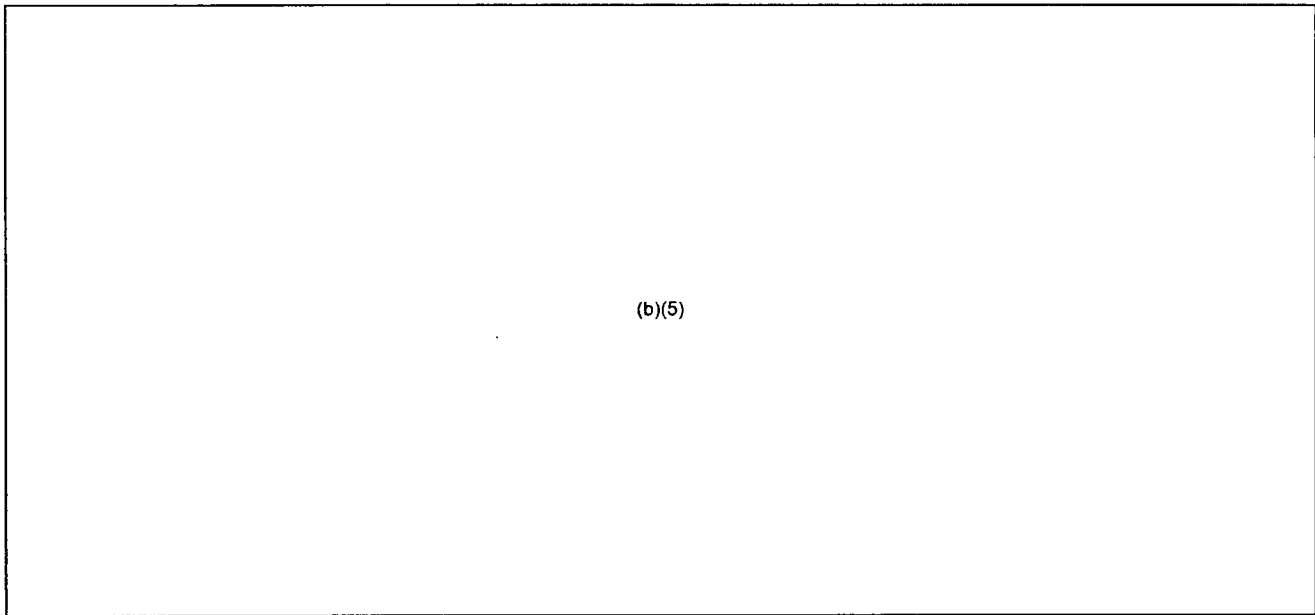
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Davis, Roger

From: Sosa, Belkys
Sent: Thursday, July 28, 2011 1:48 PM
To: Apostolakis, George; Gilles, Nanette; Biggins, James; Baggett, Steven; Davis, Roger
Subject: FYI: Agenda planning tomorrow

(b)(5)

From: Nieh, Ho
Sent: Thursday, July 28, 2011 1:28 PM
To: Bubar, Patrice; Sharkey, Jeffrey; Sosa, Belkys
Subject: Agenda planning tomorrow

If it is helpful to you, here are some thoughts from our office:

(b)(5)

Many thanks,

Ho

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

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Baggett, Steven

From: Lui, Christiana
Sent: Monday, August 01, 2011 1:44 PM
To: Sosa, Belkys; Baggett, Steven; Gilles, Nanette
Subject: FYI - Op Center Lessons Learned from Fukushima Response
Attachments: ML1119405300.docx

~~RE~~

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July 28, 2011

MEMORANDUM TO: James T. Wiggins, Director
Office of Nuclear Security and Incident Response

FROM: Scott A. Morris, Acting Director */RA/*
Division of Preparedness and Response
Office of Nuclear Security and Incident Response

SUBJECT: INCIDENT RESPONSE LESSONS LEARNED
REVIEW – PROGRESS OF FUKUSHIMA
DAI-ICHI AFTER ACTION REPORT

(b)(5)

CONTACT: Dong H. Park, NSIR/DPR
(301) 415-0696

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FM 2314 of 2929

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NAME	DHPark	JKozal	JMarshall	CEvans	SMorris
DATE	07/14/11	07/19/11	07/20/11	7/26/11	07/28/11

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Gilles, Nanette

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From: Apostolakis, George
Sent: Thursday, August 04, 2011 11:28 AM
To: Gilles, Nanette; Sosa, Belkys
Subject: Fw: RES List
Attachments: Potential Long term Issues.docx

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Sheron, Brian
To: Apostolakis, George
Sent: Thu Aug 04 11:26:58 2011
Subject: RES List

Commissioner, at our last periodic I mentioned that Jennifer and I compiled a list of items we thought would be good to evaluate as a result of the Fukushima event. You asked if I would send them. They are attached.

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Potential Long term Issues

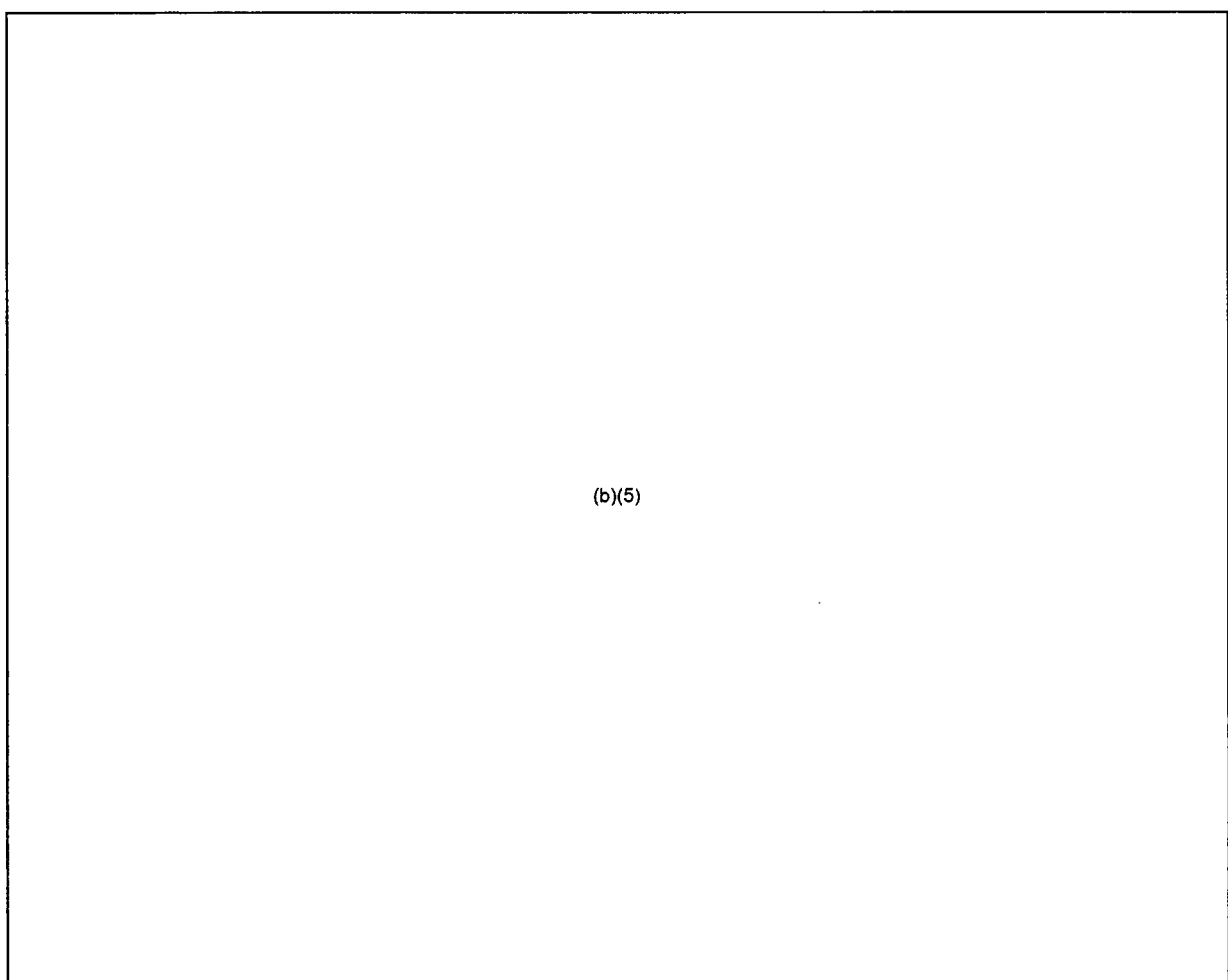
- 1.) Is there a justifiable cost-benefit to off-loading from spent fuel pools all of the fuel that can be safely stored in dry casks? Removing all of the fuel that can be safely loaded in casks will not substantially reduce the heat load in the pool, but removing the fuel will increase the water volume in the pool. This will provide more time to boil off and uncover in a SBO. Also, spreading the fuel out in the pool will enhance cooling in the event of an uncover (e.g., no radiation heat source from adjacent assemblies) and may prevent or substantially delay melting.
- 2.) Are East and Gulf coast plants adequately protected from natural phenomena? There are reports that say that global warming is heating up the oceans, and this, in turn, spawns more violent hurricanes (e.g., Katrina). Have we conservatively estimated the storm surges associated with worst-case hurricanes that could hit the coasts, and are the plants along those coasts adequately protected from those storm surges and associated flooding?
- 3.) PWR Containments do not have filtered vents. It is also not clear if they have vents that can be operated without AC power. The benefits of putting a filtered vent on a PWR containment, along with vents that can be actuated without AC power (e.g. compressed air) should be evaluated.
- 4.) Do we need to revisit the need for non-AC dependent hydrogen igniters on IC plants?
- 5.) Are their accident management strategies in place for lower vessel flooding, and how well do we understand whether lower vessel flooding will work to retain a molten core inside the vessel?
- 6.) How well can we predict tsunami wave height? Can scale model testing help improve models?
- 7.) Do U.S. plants have the capability to inject ultimate heat sink water? How much time do plants with cooling ponds, like Palo Verde, have if they injected their ponds. Does that affect long term cooling strategies?
- 8.) Do plants have EDGs and their associated fuel tanks sufficiently protected from natural phenomena, especially floods?
- 9.) Do we need AC powered (with battery backup) hydrogen igniters in reactor buildings and/or in the vicinity of SFPs?
- 10.) Are there natural phenomena that can damage dry casks? Dry casks are designed for earthquakes. Do we know how well they can withstand a beyond DBA earthquake?
- 11.) Fukushima 3 had several MOX fuel assemblies in it. How would a core with more or a full load of MOX assemblies affect the outcome of severe accidents?

12.) Do we have sufficient instrumentation in plants to accurately assess plant conditions following an accident, including severe accidents (e.g., water levels at various locations)? Is the instrumentation sufficiently robust to survive in the accident conditions?

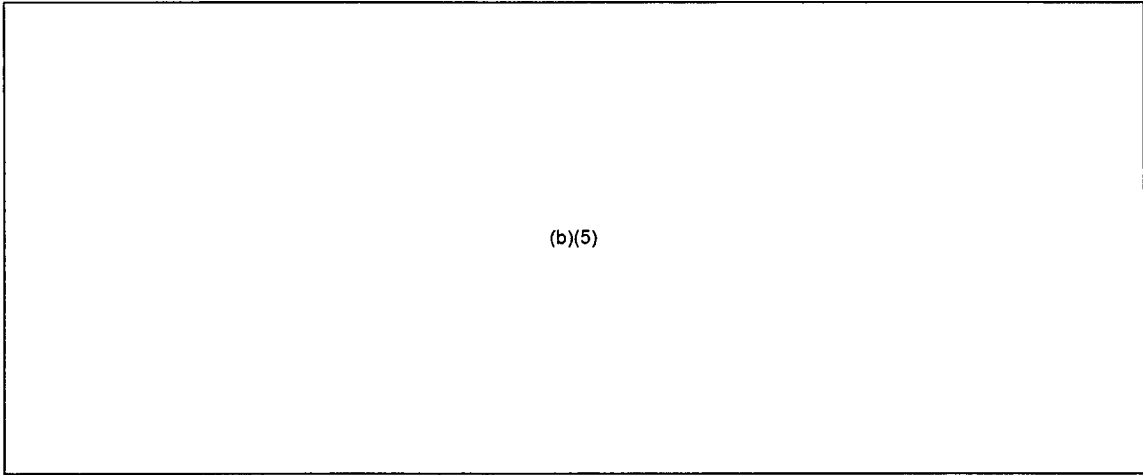
13.) The Fukushima event seemed to bring out shortcomings of our dose assessment codes, particularly RASCAL. Should we re-evaluate the need for improved, easy to use radiological dose assessment codes?

14.) During the evolution of the accident at Fukushima, there was not a lot of coordination (at least initially) among various agencies (e.g., DOE and NRC). Concern was that everyone was advising the Japanese, with no coordination. In the event of another reactor accident outside of the U.S., should U.S. agencies have worked out plans for coordination beforehand? Does the international community need to coordinate better?

15) It took a while before we called in industry and got an industry consortium going to interact directly with their Japanese counterparts (TEPCO). Should we encourage industry to create a standing consortium that would be poised to move in the event of another accident? Is this really a role for WANO?



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Board of Governors General Conference

GOV/2011/59-GC(55)/14

Date: 5 September 2011

General Distribution
Original: English

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Item 3(b) of the Board's provisional agenda
(GOV/2011/46)

Item 14(b) of the Conference's provisional agenda
(GC(55)/1; Add.1 and 2)

Draft IAEA Action Plan on Nuclear Safety

Report by the Director General

Summary

- In accordance with paragraphs 23 and 24 of the Declaration adopted by the Ministerial Conference on Nuclear Safety held on 20-24 June 2011, the Director General was requested to prepare and present to the Board of Governors and the General Conference at their September 2011 meetings a report on the Ministerial Conference and a draft Action Plan, building on the Ministerial Declaration, the conclusions and recommendations of the working sessions of the Ministerial Conference and the expertise and knowledge available therein, and to facilitate consultations among Member States on the draft Action Plan.
- The attached draft Action Plan is the result of an extensive process of consultations with Member States and responds to the request contained in the Ministerial Declaration.

Recommended Action

- It is recommended that the Board approve the Action Plan and that the Board recommend that the General Conference endorse the Board's decision.

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Draft IAEA Action Plan on Nuclear Safety

In June 2011 a Ministerial Conference on Nuclear Safety was convened to direct, under the leading role of the IAEA, the process of learning and acting upon lessons following the accident at TEPCO's Fukushima Daiichi Nuclear Power Station in order to strengthen nuclear safety, emergency preparedness and radiation protection of people and the environment worldwide. At the conference a Ministerial Declaration was adopted which inter alia:

- "Requested the IAEA Director General to prepare a Report on the June 2011 IAEA Ministerial Conference on Nuclear Safety and a draft Action Plan, building on the Declaration of the Ministerial Conference and the conclusions and recommendations of the three Working Sessions, and the expertise and knowledge available therein, and to promote coordination and cooperation, as appropriate, with other relevant international organizations to follow up on the outcomes of the Conference, as well as facilitate consultations among Member States on the draft Action Plan";
- "Requested the IAEA Director General to present the Report and the draft Action Plan covering all the relevant aspects relating to nuclear safety, emergency preparedness and response, and radiation protection of people and the environment, as well as the relevant international legal framework, to the IAEA Board of Governors and the General Conference at their forthcoming meetings in 2011";
- "Called upon the IAEA Board of Governors and the General Conference to reflect the outcome of the Ministerial Conference in their decisions and to support the effective, prompt and adequately resourced implementation of the Action Plan".

In considering this Action Plan, it is important to note that:

- The responsibility for ensuring the application of the highest standards of nuclear safety and for providing a timely, transparent and adequate response to nuclear emergencies, including addressing vulnerabilities revealed by accidents, lies with each Member State and operating organization.
- The IAEA Safety Standards provide the basis for what constitutes a high level of safety for protecting people and the environment from harmful effects of ionizing radiation, and will continue to be objective, transparent and technologically neutral.
- Transparency in all aspects of nuclear safety through timely and continuous sharing and dissemination of objective information, including information on nuclear emergencies and their radiological consequences, is of particular importance to improve safety and to meet the high level of public expectation. Nuclear accidents may have transboundary effects; therefore it is important to provide adequate responses based on scientific knowledge and full transparency.
- As understanding of the accident develops, additional analysis of the root causes will be carried out. Further lessons may be learned and, as appropriate, be incorporated into the proposed actions by updating the Action Plan. A High Level Conference to be organized by Japan and the IAEA in 2012 will provide an opportunity for learning further lessons and for enhancing transparency.

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- The Agency's prompt and effective implementation of activities under the Action Plan will be funded through prioritization and continuing efficient use of resources from the regular budget, and through voluntary contributions of extrabudgetary resources.

The purpose of the Action Plan is to define a programme of work to strengthen the global nuclear safety framework. The plan consists of actions building on the Ministerial Declaration, the conclusions and recommendations of the Working Sessions, and the experience and knowledge therein, including the INSAG letter report (GOVIN/2011/11), and the facilitation of consultations among Member States.

The success of this Action Plan in strengthening nuclear safety is dependent on its implementation through the full cooperation and participation of Member States and will require also the involvement of many other stakeholders¹. They are therefore encouraged to work cooperatively to implement the Action Plan to maximize the benefit of the lessons learned from the accident and to produce concrete results as soon as possible. Progress on the implementation of the Action Plan will be reported to the September 2012 meeting of the Board of Governors and the 2012 General Conference and subsequently on an annual basis as may be necessary. In addition, the extraordinary meeting of the Contracting Parties to the Convention on Nuclear Safety (CNS) in 2012 will provide an opportunity to consider further measures to strengthen nuclear safety.

Strengthening nuclear safety in light of the accident is addressed through a number of measures proposed in this Action Plan including 12 main actions, each with corresponding sub-actions, focusing on: safety assessments in the light of the accident at TEPCO's Fukushima Daiichi Nuclear Power Station; IAEA peer reviews; emergency preparedness and response; national regulatory bodies; operating organizations; IAEA Safety Standards; international legal framework; Member States planning to embark on a nuclear power programme; capacity building; protection of people and the environment from ionizing radiation; communication and information dissemination; and research and development.

Safety assessments in the light of the accident at TEPCO's Fukushima Daiichi Nuclear Power Station

Undertake assessment of the safety vulnerabilities of nuclear power plants in the light of lessons learned to date from the accident

- Member States to promptly undertake a national assessment of the design of nuclear power plants against site specific extreme natural hazards and to implement the necessary corrective actions in a timely manner.
- The IAEA Secretariat, taking into account existing experiences, to develop a methodology and make it available for Member States that may wish to use it in carrying out their national assessments.
- The IAEA Secretariat, upon request, to provide assistance and support to Member States in the implementation of a national assessment of the design of nuclear power plants against site specific extreme natural hazards.
- The IAEA Secretariat, upon request, to undertake peer reviews of national assessments and to provide additional support to Member States.

¹ Stakeholders include, amongst others, governments, relevant international organizations and associations, regulatory bodies, operating organizations, nuclear industry, radioactive waste management organizations, technical support and safety organizations, research organizations, education and training institutions and other relevant bodies.

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IAEA peer reviews

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Strengthen IAEA peer reviews in order to maximize the benefits to Member States

- The IAEA Secretariat to strengthen existing IAEA peer reviews by incorporating lessons learned and by ensuring that these reviews appropriately address regulatory effectiveness, operational safety, design safety, and emergency preparedness and response; Member States to provide experts for peer review missions.
- The IAEA Secretariat, in order to enhance transparency, to provide summary information on where and when IAEA peer reviews have taken place, and to make publicly available in a timely manner the results of such reviews with the consent of the State concerned.
- Member States to be strongly encouraged to voluntarily host IAEA peer reviews, including follow-up reviews, on a regular basis; the IAEA Secretariat to respond in a timely manner to requests for such reviews.
- The IAEA Secretariat to assess, and enhance as necessary, the effectiveness of the IAEA peer reviews.

Emergency preparedness and response

Strengthen emergency preparedness and response

- Member States to conduct a prompt national review and thereafter regular reviews of their emergency preparedness and response arrangements and capabilities, with the IAEA Secretariat providing support and assistance through Emergency Preparedness Review (EPREV) missions, as requested.
- The IAEA Secretariat, Member States and relevant international organizations to review and strengthen the international emergency preparedness and response framework, taking into account recommendations given in the final report of the International Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological Emergencies, and encouraging greater involvement of the relevant international organizations in the Joint Radiation Emergency Management Plan of the International Organizations.
- The IAEA Secretariat, Member States and relevant international organizations to strengthen the assistance mechanisms to ensure that necessary assistance is made available promptly. Consideration to be given to enhancing and fully utilizing the IAEA Response and Assistance Network (RANET), including expanding its rapid response capabilities.
- Member States to consider, on a voluntary basis, establishing national rapid response teams that could also be made available internationally through RANET.
- The IAEA Secretariat, in case of a nuclear emergency and with the consent of the State concerned, to conduct timely fact-finding missions and to make the results publicly available.

National regulatory bodies

Strengthen the effectiveness of national regulatory bodies

- Member States to conduct a prompt national review and thereafter regular reviews of their regulatory bodies, including an assessment of their effective independence, adequacy of human and financial resources and the need for appropriate technical and scientific support, to fulfil their responsibilities.
- The IAEA Secretariat to enhance the Integrated Regulatory Review Service (IRRS) for peer review of regulatory effectiveness through a more comprehensive assessment of national regulations against IAEA Safety Standards.
- Each Member State with nuclear power plants to voluntarily host, on a regular basis, an IAEA

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IRRS mission to assess its national regulatory framework. In addition, a follow-up mission to be conducted within three years of the main IRRS mission.

Operating organizations

Strengthen the effectiveness of operating organizations with respect to nuclear safety

- Member States to ensure improvement, as necessary, of management systems, safety culture, human resources management, and scientific and technical capacity in operating organizations; the IAEA Secretariat to provide assistance to Member States upon request.
- Each Member State with nuclear power plants to voluntarily host at least one IAEA Operational Safety Review Team (OSART) mission during the coming three years, with the initial focus on older nuclear power plants. Thereafter, OSART missions to be voluntarily hosted on a regular basis.
- The IAEA Secretariat to strengthen cooperation with WANO by amending their Memorandum of Understanding to enhance information exchange on operating experience and on other relevant safety and engineering areas and, in consultation with other relevant stakeholders, to explore mechanisms to enhance communication and interaction among operating organizations.

IAEA Safety Standards

Review and strengthen IAEA Safety Standards and improve their implementation

- The Commission on Safety Standards and the IAEA Secretariat to review, and revise as necessary using the existing process in a more efficient manner, the relevant IAEA Safety Standards² in a prioritised sequence.
- Member States to utilize as broadly and effectively as possible the IAEA Safety Standards in an open, timely and transparent manner. The IAEA Secretariat to continue providing support and assistance in the implementation of IAEA Safety Standards.

International legal framework

Improve the effectiveness of the international legal framework

- States parties to explore mechanisms to enhance the effective implementation of the Convention on Nuclear Safety, the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management, the Convention on the Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, and to consider proposals made to amend the Convention on Nuclear Safety and the Convention on the Early Notification of a Nuclear Accident.
- Member States to be encouraged to join and effectively implement these Conventions.
- Member States to work towards establishing a global nuclear liability regime that addresses the concerns of all States that might be affected by a nuclear accident with a view to providing appropriate compensation for nuclear damage. The IAEA International Expert Group on Nuclear Liability (INLEX) to recommend actions to facilitate achievement of such a global regime. Member States to give due consideration to the possibility of joining the international nuclear liability instruments as a step toward achieving such a global regime.

² This review could include, inter alia, regulatory structure, emergency preparedness and response, nuclear safety and engineering (site selection and evaluation, assessment of extreme natural hazards including their combined effects, management of severe accidents, station blackout, loss of heat sink, accumulation of explosive gases, nuclear fuel behaviour and ways to ensure the safety of spent fuel storage).

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Member States planning to embark on a nuclear power programme

Facilitate the development of the infrastructure necessary for Member States embarking on a nuclear power programme

- Member States to create an appropriate nuclear infrastructure based on IAEA Safety Standards and other relevant guidance, and the IAEA Secretariat to provide assistance as may be requested.
- Member States to voluntarily host Integrated Nuclear Infrastructure Reviews (INIR) and relevant peer review missions, including site and design safety reviews, prior to commissioning the first nuclear power plant.

Capacity Building

Strengthen and maintain capacity building

- Member States with nuclear power programmes and those planning to embark on such a programme to strengthen, develop, maintain and implement their capacity building programs, including education, training and exercises at the national, regional and international levels; to continuously ensure sufficient and competent human resources necessary to assume their responsibility for safe, responsible and sustainable use of nuclear technologies; the IAEA Secretariat to assist as requested. Such programmes to cover all the nuclear safety related areas, including safe operation, emergency preparedness and response and regulatory effectiveness and to build upon existing capacity building infrastructures.
- Member States with nuclear power programmes and those planning to embark on such a programme, to incorporate lessons learned from the accident into their nuclear power programme infrastructure; the IAEA Secretariat to assist as requested.

Protection of people and the environment from ionizing radiation

Ensure the on-going protection of people and the environment from ionizing radiation following a nuclear emergency

- Member States, the IAEA Secretariat and other relevant stakeholders to facilitate the use of available information, expertise and techniques for monitoring, decontamination and remediation both on and off nuclear sites and the IAEA Secretariat to consider strategies and programmes to improve knowledge and strengthen capabilities in these areas.
- Member States, the IAEA Secretariat and other relevant stakeholders to facilitate the use of available information, expertise and techniques regarding the removal of damaged nuclear fuel and the management and disposal of radioactive waste resulting from a nuclear emergency.
- Member States, the IAEA Secretariat and other relevant stakeholders to share information regarding the assessment of radiation doses and any associated impacts on people and the environment.

Communication and information dissemination

Enhance transparency and effectiveness of communication and improve dissemination of information

- Member States, with the assistance of the IAEA Secretariat, to strengthen the emergency notification system, and reporting and information sharing arrangements and capabilities.
- Member States, with the assistance of the IAEA Secretariat, to enhance the transparency and effectiveness of communication among operators, regulators and various international

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organizations, and strengthen the IAEA's coordinating role in this regard, underlining that the freest possible flow and wide dissemination of safety related technical and technological information enhances nuclear safety.

- The IAEA Secretariat to provide Member States, international organizations and the general public with timely, clear, factually correct, objective and easily understandable information during a nuclear emergency on its potential consequences, including analysis of available information and prognosis of possible scenarios based on evidence, scientific knowledge and the capabilities of Member States.
- The IAEA Secretariat to organize international experts meetings to analyse all relevant technical aspects and learn the lessons from the Fukushima Daiichi nuclear power station accident.
- The IAEA Secretariat to facilitate and to continue sharing with Member States a fully transparent assessment of the accident at TEPCO's Fukushima Daiichi Nuclear Power Station, in cooperation with Japan.
- The IAEA Secretariat and Member States, in consultation with the OECD/NEA and the IAEA International Nuclear and Radiological Event Scale (INES) Advisory Committee to review the application of the INES scale as a communication tool.

Research and development

Effectively utilize research and development

- Relevant stakeholders, with assistance provided by the IAEA Secretariat as appropriate, to conduct necessary research and development in nuclear safety, technology and engineering³, including that related to existing and new design-specific aspects.
- Relevant stakeholders and the IAEA Secretariat to utilize the results of research and development and to share them, as appropriate, to the benefit of all Member States.

³ For example, extreme natural hazards, management of severe accidents, station blackout, loss of heat sink, feed and bleed system, containment venting system, structural integrity of containment building and spent fuel pool structure and behaviour of fuel assembly, and post-accident monitoring system under extreme harsh environment

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Baggett, Steven

From: Apostolakis, George
Sent: Monday, August 08, 2011 12:47 PM
To: Sosa, Belkys; Gilles, Nanette; Davis, Roger; Baggett, Steven; Lui, Christiana
Subject: FW: Early Copy of INPO IER 11-4
Attachments: INPO IERL1-11-4 -- Limited Distribution.pdf

INPO's assessment of Fukushima.

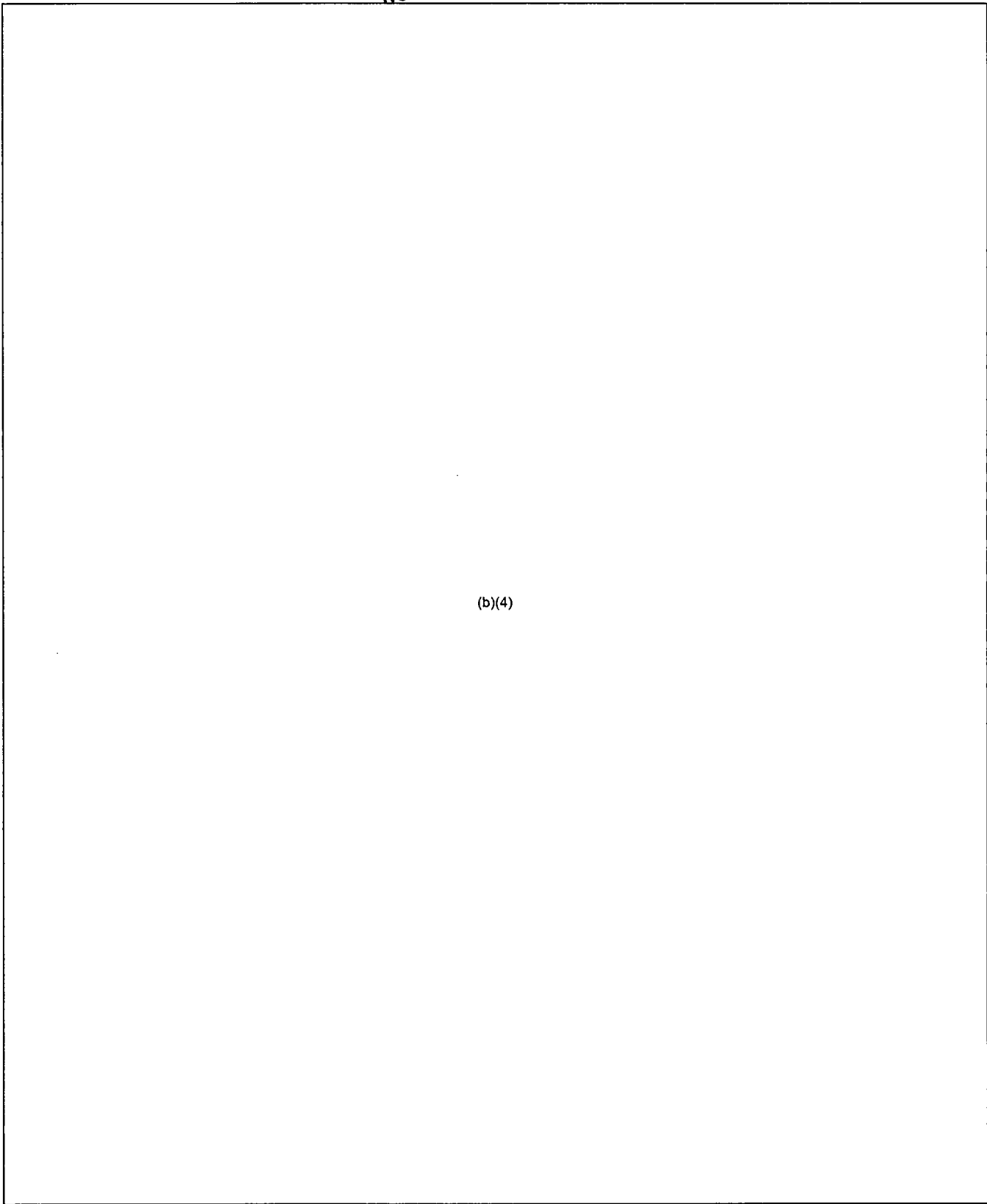
From: Virgilio, Martin
Sent: Monday, August 08, 2011 11:46 AM
To: Apostolakis, George
Subject: Early Copy of INPO IER 11-4

Commissioner

Per our conversation.

Marty

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OFFICE OF COMMISSIONER APOSTOLAKIS

ROUTING SLIP

ROUTINE

SUBJECT: Japan's Cabinet Recommends Plan for Restructuring the Japanese Nuclear Regulatory Authority

1	Belkys Sosa, EA	DATE: 9/18/11
2	Roger Davis, LA	DATE: 11/15
3	Steve Baggett, MA	DATE: 1/2
4	Nan Gilles	DATE: 10/25
5	Ben Beasley	DATE:
65	Christiana Lui	DATE: 10/28
	Comr Apostolakis	DATE:
	Kathleen Blake, AA	DATE:
86	Carmel Savoy, AA	DATE:

NOTES:

*Attent, please highlight for EA
Per 10/17*

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OIP NOTE TO COMMISSIONER ASSISTANTS

DISTRIBUTION: OCM/GJ <input checked="" type="checkbox"/> Batkin, Josh <input type="checkbox"/> Monninger, John <input type="checkbox"/> Coggins, Angela <input type="checkbox"/> Bradford, Anna <input type="checkbox"/> Hipschman, Thomas <input type="checkbox"/> Warren, Roberta OCM/KLS <input checked="" type="checkbox"/> Sharkey, Jeffrey <input type="checkbox"/> Reddick Darani <input type="checkbox"/> Castleman, Patrick <input type="checkbox"/> Astwood, Heather OCM/GA <input checked="" type="checkbox"/> Sosa, Belkys <input type="checkbox"/> Davis, Roger <input type="checkbox"/> Gilles, Nan <input type="checkbox"/> Baggett, Steven OCM/WM <input checked="" type="checkbox"/> Patrice M. Bubar <input type="checkbox"/> Bupp, Molly <input type="checkbox"/> Orders, William <input type="checkbox"/> Tadesse, Rebecca OCM/WO <input checked="" type="checkbox"/> Nieh, Ho <input type="checkbox"/> Sexton, Kimberly <input type="checkbox"/> Franovich, Michael <input type="checkbox"/> Kock, Andrea	From: Margaret M. Doane, Director <i>Margaret M. Doane</i> Office of International Programs Date: August 16, 2011 Subject: JAPAN'S CABINET RECOMMENDS PLAN FOR RESTRUCTURING THE JAPANESE NUCLEAR REGULATORY AUTHORITY
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Comment:

On August 15, 2011, the Japanese Cabinet announced further details about their official recommendation for restructuring Japan's nuclear safety agencies. The Nuclear and Industrial Safety Agency will be renamed the, "Nuclear Safety and Security Agency (NSSA)," and it will report to the Ministry of Environment. In addition, the Nuclear Safety Commission, which was previously a completely separate advisory board, will be folded into NSSA to further consolidate nuclear safety regulatory functions. These changes are pending the Japanese legislative process. The Cabinet Secretariat is drafting the legislation in accordance with this plan, which sets forth a goal for the new agency to be established by April 2012. Although many details remain undecided, attached is an update of the proposed organizational changes versus the current existing organizational structure depicted on the second page of the attachment.

More broadly, the government will conduct a policy review of future nuclear and energy policy that should be addressed. This review will incorporate outcomes of the ongoing investigation into the accident. Roles and responsibilities covered by NSSA will be examined in light of relevant findings. The government will present the result of its review by the end of 2012.

Contact: D. Emche, 301-415-2644

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 Confidential (Standard Form 705), Blue
 Secret (Standard Form 704), Red

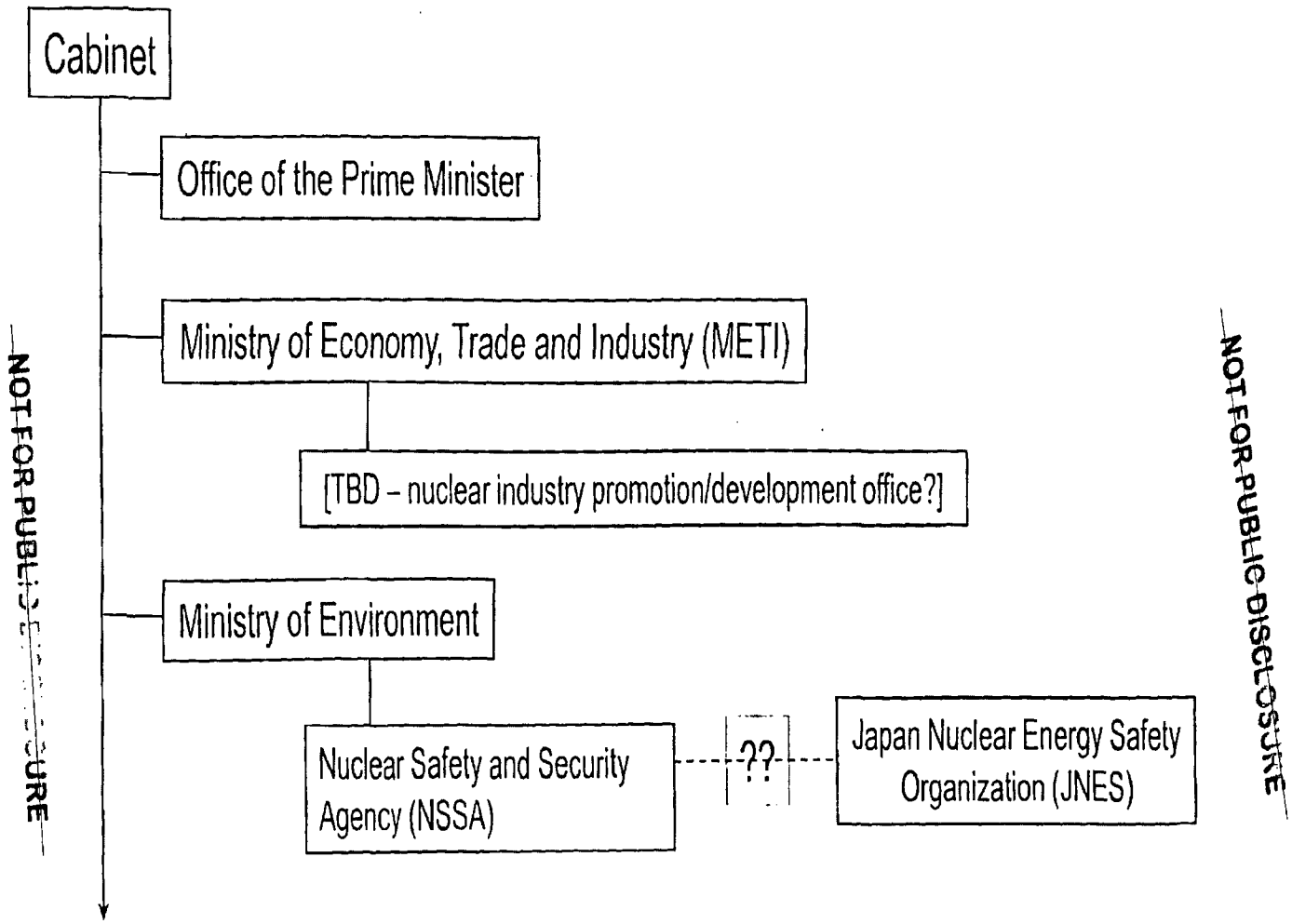
- W. Borchardt, EDO
- M. Weber, DEDMRT
- M. Virgilio, DEDR
- D. Ash, DEDIS
- N. Mamish, OEDO
- S. Williams, OEDO
- S. Bums, OGC
- T. Rothschild, OGC
- C. Haney, NMSS
- D. Dorman, NMSS
- S. Smith, NMSS
- B. Sheron, RES
- J. Uhle, RES
- D. Sangimino, RES
- J. Dehn, RES

- E. Leeds, NRR
- B. Boger, NRR
- J. Grobe, NRR
- M. Cullingford, NRR
- H. Astwood, NRR
- J. Wiggins, NSIR
- M. Dapas, NSIR
- D. Diec, NSIR
- C. Jones, NSIR
- C. Carpenter, FSME
- M. Sartorius, FSME
- D. Cool, FSME
- M. Johnson, NRO
- G. Holahan, NRO
- C. Rosales-Cooper, NRO
- OIP Distribution

ADAMS Accession No.:
 Package: ML11227A209
 Note: ML11227A064
 Attachment: ML11227A214

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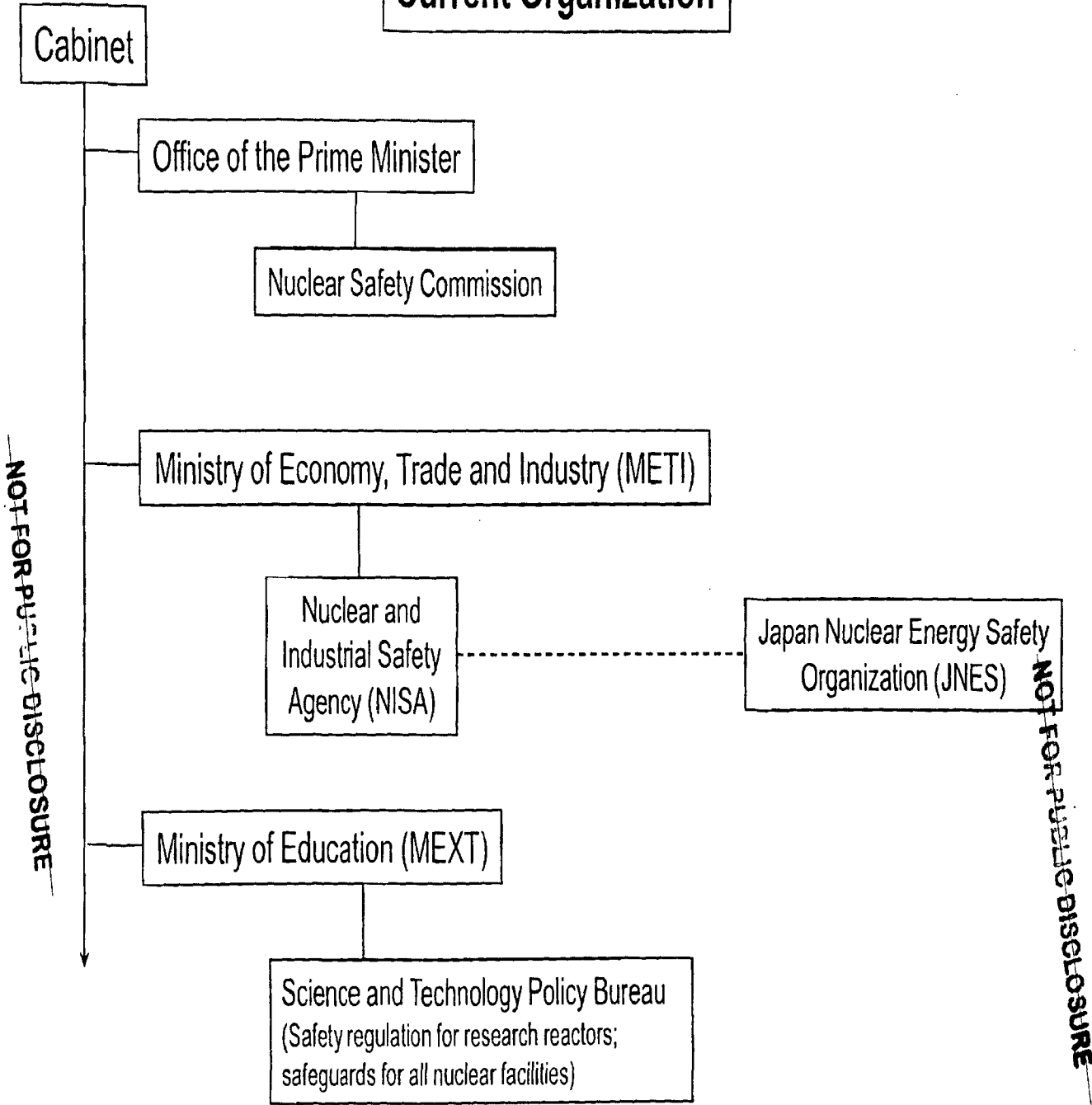
Proposed Organization



Notes:

(b)(5)

Current Organization



Notes:

- 1) NISA Director General and JNES President appointed by METI Minister.
- 2) JNES director-level vice-presidents appointed by JNES President.

Gilles, Nanette

From: Gilles, Nanette
Sent: Thursday, August 25, 2011 10:02 AM
To: Castleman, Patrick; Skeen, David; Taylor, Robert
Cc: Orders, William; Franovich, Mike
Subject: Re: News From Japan

Thanks, Pat. It's about time.

Sent from my NRC Blackberry

From: Castleman, Patrick
To: Skeen, David; Taylor, Robert
Cc: Orders, William; Gilles, Nanette; Franovich, Mike
Sent: Thu Aug 25 09:36:14 2011
Subject: News From Japan

I'm sure you're already aware of this, but...it looks like the Japanese are beginning to fess up on the actual root cause of the core melts.

~~NOT FOR PUBLIC DISCLOSURE~~

Japan's Nuclear Regulatory Agency Says TEPCO Was Aware Of Tsunami Risk. The AP (8/24, Yamaguchi) reports that Japan's Nuclear and Industrial Safety Agency "said Wednesday" that Tokyo Electric Power Co., the operator of the stricken Fukushima nuclear plant "knew it might be hit by a far bigger tsunami than it was designed to withstand." The regulator said Tepco "informed it just four days before Japan's massive March 11 earthquake and tsunami." Officials said that "they recommended that Tokyo Electric Power Co. take measures to prepare for a bigger tsunami but did not give specific instructions."

Meanwhile, the Yomiuri Shimbun (8/25) reports, "Tokyo Electric Power Co. estimated in 2008 that tsunami higher than 10 meters could hit its Fukushima No. 1 nuclear power plant, but failed to take necessary measures, such as relocating emergency power generators to higher ground." The company "has explained the 2008 estimate to the government's task force investigating the crisis at the nuclear plant." Sources said that "the government's nuclear accident investigation and verification committee is examining the case, assuming that damage caused by the disaster could have been less serious if the utility took precautions based on the 2008 estimate."

Gilles, Nanette

From: Gilles, Nanette
It: Thursday, August 25, 2011 9:58 AM
To: Apostolakis, George
Cc: Davis, Roger; Sosa, Belkys; Baggett, Steven
Subject: Fw: News From Japan

Commissioner - Have you seen this?

It's about time.

Nan

Sent from my NRC Blackberry

From: Castleman, Patrick
To: Skeen, David; Taylor, Robert
Cc: Orders, William; Gilles, Nanette; Franovich, Mike
Sent: Thu Aug 25 09:36:14 2011
Subject: News From Japan

I'm sure you're already aware of this, but...it looks like the Japanese are beginning to fess up on the actual root cause of the core melts.

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Meanwhile, the Yomiuri Shimbun (8/25) reports, "Tokyo Electric Power Co. estimated in 2008 that tsunami higher than 10 meters could hit its Fukushima No. 1 nuclear power plant, but failed to take necessary measures, such as relocating emergency power generators to higher ground." The company "has explained the 2008 estimate to the government's task force investigating the crisis at the nuclear plant." Sources said that "the government's nuclear accident investigation and verification committee is examining the case, assuming that damage caused by the disaster could have been less serious if the utility took precautions based on the 2008 estimate."

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

From: Castleman, Patrick
Sent: Thursday, September 01, 2011 2:11 PM
To: Sosa, Belkys; Davis, Roger
Subject: FW: FYI - Organization Chart for Fukushima Lessons Learned Project Directorate
Attachments: PD Org Chart.pptx

From: Bowman, Gregory
Sent: Thursday, September 01, 2011 11:54 AM
To: Hipschman, Thomas; Marshall, Michael; Castleman, Patrick; Gilles, Nanette; Orders, William; Franovich, Mike
Subject: FYI - Organization Chart for Fukushima Lessons Learned Project Directorate

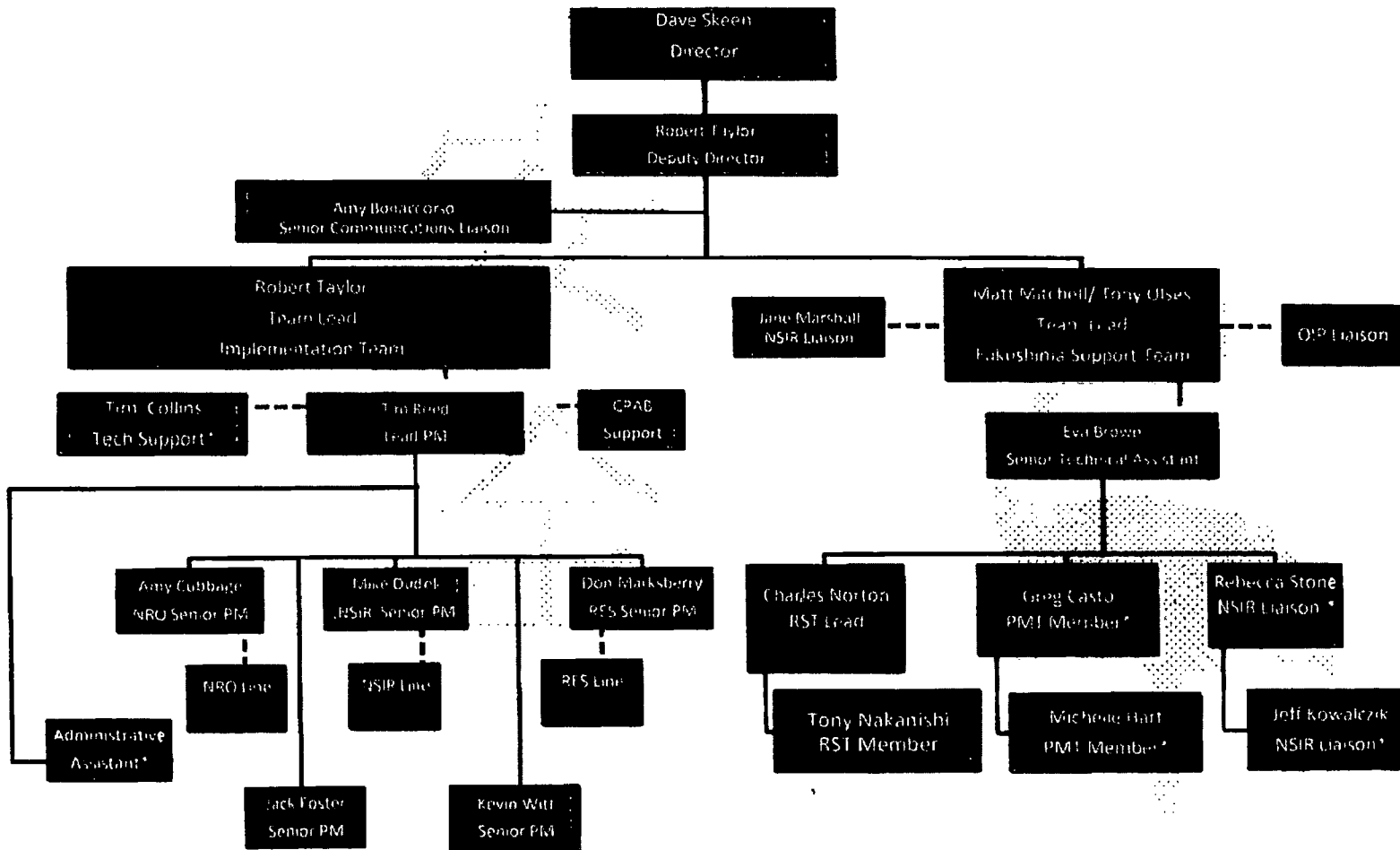
We got a request for the organization chart for the Fukushima Lessons Learned Project Directorate. That's the group that is responsible for developing the 21- and 45-day papers required by the SRM for SECY-11-0093, and also for providing support to the team in Japan.

The chart is attached. If you have any questions, please give me a call.

Greg

~~NOT FOR PUBLIC DISCLOSURE~~

Organizational Chart – Japan Lessons-Learned Project Directorate



* Indicates occasional support position

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Nieh, Ho
Sent: Thursday, September 01, 2011 5:54 PM
To: Batkin, Joshua; Sharkey, Jeffry; Bubar, Patrice
Cc: Coggins, Angela; Reddick, Darani; Sosa, Belkys; Hipschman, Thomas; Castleman, Patrick; Gilles, Nanette; Orders, William; Franovich, Mike
Subject: Steering Committee Charter

Josh, Jeff, Patty,

(b)(5)

Ho

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

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Nieh, Ho
Sent: Friday, September 02, 2011 7:47 AM
To: Batkin, Joshua; Sharkey, Jeffrey; Bubar, Patrice
Cc: Sosa, Belkys; Hipschman, Thomas; Castleman, Patrick; Gilles, Nanette; Orders, William; Franovich, Mike
Subject: FW: Steering Committee Charter

FYI.

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

From: Hackett, Edwin
Sent: Friday, September 02, 2011 7:44 AM
To: Nieh, Ho
Subject: RE: Steering Committee Charter

(b)(5)

Ed

From: Nieh, Ho
Sent: Thursday, September 01, 2011 9:00 PM
To: Hackett, Edwin
Subject: FW: Steering Committee Charter

See below (b)(5)

Ho

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

ho.nieh@nrc.gov

NOT FOR PUBLIC DISCLOSURE

From: Nieh, Ho

Sent: Thursday, September 01, 2011 5:53 PM

To: Batkin, Joshua; Sharkey, Jeffry; Bubar, Patrice

Cc: Coggins, Angela; Reddick, Darani; Sosa, Belkys; Hipschman, Thomas; Castleman, Patrick; Gilles, Nanette; Orders, William; Franovich, Mike

Subject: Steering Committee Charter

Josh, Jeff, Patty,

(b)(5)

Ho

Ho Nieh

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NOT FOR PUBLIC DISCLOSURE

NOT FOR PUBLIC DISCLOSURE

Davis, Roger

From: Gilles, Nanette
Sent: Monday, September 05, 2011 10:02 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Davis, Roger
Subject: FW: Steering Committee Charter

(b)(5)

Nan

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

From: Nieh, Ho
Sent: Friday, September 02, 2011 7:47 AM
To: Batkin, Joshua; Sharkey, Jeffrey; Bubar, Patrice
Cc: Sosa, Belkys; Hipschman, Thomas; Castleman, Patrick; Gilles, Nanette; Orders, William; Franovich, Mike
Subject: FW: Steering Committee Charter

FYI.

Ho Nieh
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(301) 415-1811 (office)
(b)(6) (mobile)
(301) 415-1757 (fax)
ho.nieh@nrc.gov

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

From: Hackett, Edwin
Sent: Friday, September 02, 2011 7:44 AM
To: Nieh, Ho
Subject: RE: Steering Committee Charter

(b)(5)

Ed

From: Nieh, Ho
Sent: Thursday, September 01, 2011 9:00 PM
To: Hackett, Edwin
Subject: FW: Steering Committee Charter

NOT FOR PUBLIC DISCLOSURE

NOT FOR PUBLIC DISCLOSURE

See below.

(b)(5)

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff U.S. Nuclear Regulatory Commission
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(b)(6) (mobile)
(301) 415-1757 (fax)
ho.nieh@nrc.gov

From: Nieh, Ho
Sent: Thursday, September 01, 2011 5:53 PM
To: Batkin, Joshua; Sharkey, Jeffrey; Bubar, Patrice
Cc: Coggins, Angela; Reddick, Darani; Sosa, Belkys; Hipschman, Thomas; Castleman, Patrick; Gilles, Nanette; Orders, William; Franovich, Mike
Subject: Steering Committee Charter

Josh, Jeff, Patty,

(b)(5)

Ho

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(b)(6) (mobile)
(301) 415-1757 (fax)
ho.nieh@nrc.gov

NOT FOR PUBLIC DISCLOSURE

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Gilles, Nanette
Sent: Wednesday, September 07, 2011 9:57 AM
To: Apostolakis, George
Subject: FW: FYI - Organization Chart for Fukushima Lessons Learned Project Directorate
Attachments: PD Org Chart.pptx

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Bowman, Gregory
Sent: Thursday, September 01, 2011 11:54 AM
To: Hipschman, Thomas; Marshall, Michael; Castleman, Patrick; Gilles, Nanette; Orders, William; Franovich, Mike
Subject: FYI - Organization Chart for Fukushima Lessons Learned Project Directorate

We got a request for the organization chart for the Fukushima Lessons Learned Project Directorate. That's the group that is responsible for developing the 21- and 45-day papers required by the SRM for SECY-11-0093, and also for providing support to the team in Japan.

The chart is attached. If you have any questions, please give me a call.

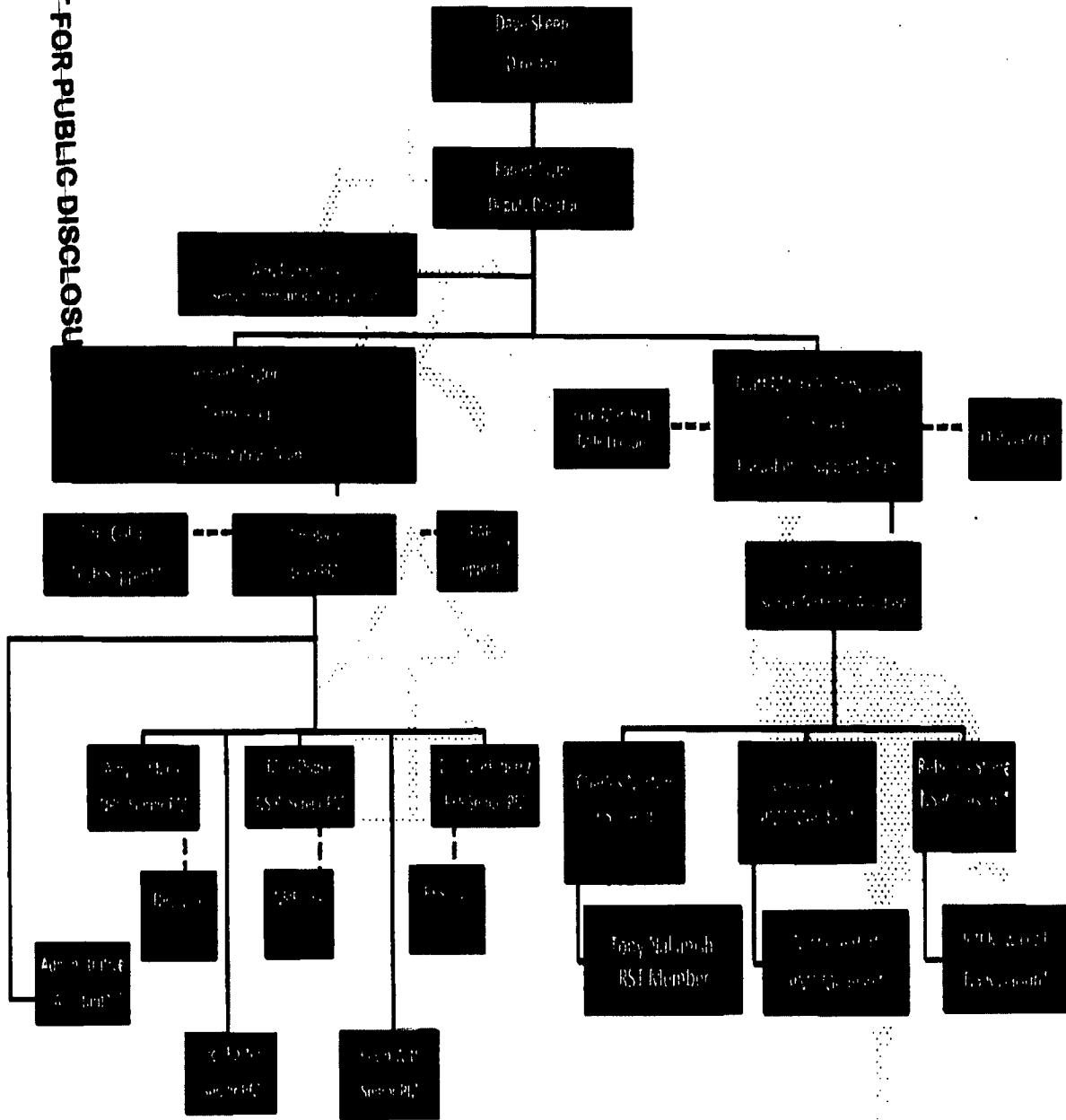
Greg

~~NOT FOR PUBLIC DISCLOSURE~~

Organizational Chart – Japan Lessons-Learned Project Directorate

NOT FOR PUBLIC DISCLOSURE

NOT FOR PUBLIC DISCLOSURE



* Indicates occasional support position

NOT FOR PUBLIC DISCLOSURE

Gilles, Nanette

From: Gilles, Nanette
Sent: Monday, September 12, 2011 9:26 AM
To: Skeen, David; Taylor, Robert
Cc: Bowman, Gregory
Subject: NEI Comments on Fukushima SFPs

Dave/Rob – In NEI's Sept. 2 letter commenting on the NTF recommendations, they say the following with respect to Recommendation 7 on SFPs:

"Now, with the benefit of visual inspections and samples from the four affected spent fuel pools, it is evident that the spent fuel rods did not experience significant failure."

Can you tell me if you all have seen the results of these "visual inspections and samples"? Can you summarize the evidence we have that there was no damage to fuel in any of the SFPs? If you discussed this at any of the recent briefings that I missed, I apologize.

Thanks,
Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

NOT FOR PUBLIC DISCLOSURE

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Taylor, Robert
Sent: Monday, September 12, 2011 8:01 PM
To: Gilles, Nanette; Skeen, David
Cc: Bowman, Gregory
Subject: Re: NEI Comments on Fukushima SFPs

Nan,

The videos of the SFP are on TEPCO's website. While not showing all of the pool, the portion visible does not indicate any damage consistent with a Zirc fire. I have also seen data on the radionuclide isotopics in the Unit 4 SFP although that was some time ago. They do not support a conclusion of significant fuel damage. Overall, we would agree that it is unlikely that there has been significant fuel damage.

Rob

Sent from an NRC BlackBerry
Robert Taylor

(b)(6)

From: Gilles, Nanette
To: Skeen, David; Taylor, Robert
Cc: Bowman, Gregory
Sent: Mon Sep 12 09:25:32 2011
Subject: NEI Comments on Fukushima SFPs

Save/Rob – In NEI's Sept. 2 letter commenting on the NTF recommendations, they say the following with respect to Recommendation 7 on SFPs:

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Thanks,
Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Gilles, Nanette
Sent: Monday, September 12, 2011 10:10 PM
To: Taylor, Robert
Subject: Re: NEI Comments on Fukushima SFPs

Thanks, Rob.

Sent from my NRC Blackberry

From: Taylor, Robert
To: Gilles, Nanette; Skeen, David
Cc: Bowman, Gregory
Sent: Mon Sep 12 20:01:27 2011
Subject: Re: NEI Comments on Fukushima SFPs

Nan,

The videos of the SFP are on TEPCO's website. While not showing all of the pool, the portion visible does not indicate any damage consistent with a Zirc fire. I have also seen data on the radionuclide isotopics in the Unit 4 SFP although that was some time ago. They do not support a conclusion of significant fuel damage. Overall, we would agree that it is unlikely that there has been significant fuel damage.

Rob

Sent from an NRC BlackBerry
Robert Taylor

(b)(6)

From: Gilles, Nanette
To: Skeen, David; Taylor, Robert
Cc: Bowman, Gregory
Sent: Mon Sep 12 09:25:32 2011
Subject: NEI Comments on Fukushima SFPs

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Thanks,
Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Phone: 301-415-1180

Mail: nanette.gilles@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys.

From: Frazier, Alan
Sent: Friday, September 16, 2011 10:25 AM
To: Baggett, Steven; Bradford, Anna; Astwood, Heather; Tadesse, Rebecca; Kock, Andrea
Cc: Monninger, John; Reddick, Darani; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Subject: RE: PLANS TO ISSUE TI 2600/015 to Fuel Cycle Facilities: Evaluation of Licensee Strategies for the Prevention and/or Mitigation of Emergencies

Steve,

This activity is not part of the "formal" Japan review activities in that it is not being conducted pursuant to that group's direction, recommendations or activities. It is a recognition that there are likely insights for the fuel cycle industry, and for us as the regulator, and is intended to assess whether and how the events in Japan indicate that we should change the way we license fuel facilities and/or whether any of the existing facilities need to make changes either in their physical plant, procedures or both. We plan to closely monitor the results obtained by the staff we have assigned to the activity and take appropriate actions if and when needed. I would add that each facility has told us that they are reviewing the events in Japan to see how they might apply to their facility and we expect that the results of those reviews will be helpful to our staff when they visit the facilities.

We can certainly provide the ML# when the TI is finalized.

Alan

From: Baggett, Steven
Sent: Friday, September 16, 2011 9:59 AM
To: Frazier, Alan; Bradford, Anna; Astwood, Heather; Tadesse, Rebecca; Kock, Andrea
Cc: Monninger, John; Reddick, Darani; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Subject: RE: PLANS TO ISSUE TI 2600/015 to Fuel Cycle Facilities: Evaluation of Licensee Strategies for the Prevention and/or Mitigation of Emergencies

Alan,

How does this fit in the Japan event review activities and the longer term review charter? I recall reading the draft charter applies to non-reactor licensees, but it was not clear how that would happen.

Can you provide the ML number once the TI is issued?

Thanks

Steve

From: Frazier, Alan
Sent: Friday, September 16, 2011 9:48 AM
To: Bradford, Anna; Astwood, Heather; Baggett, Steven; Tadesse, Rebecca; Kock, Andrea
Cc: Monninger, John; Reddick, Darani; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Subject: PLANS TO ISSUE TI 2600/015 to Fuel Cycle Facilities: Evaluation of Licensee Strategies for the Prevention and/or Mitigation of Emergencies

Commissioner Assistants.

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

I will walk around alter today to see if any of you have any comments or concerns.

Regards,

Alan L. Frazier
Executive Technical Assistant
Office of the Executive Director for Operations
U.S. Nuclear Regulatory Commission
301-415-1763

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

From: Haney, Catherine
Sent: Friday, September 16, 2011 7:52 AM
To: Weber, Michael
Cc: Frazier, Alan; McCree, Victor
Subject: FW: TI

Mike,

(b)(5)

Any concerns?

Cathy

This is what I called about. No need to call me back.

Gilles, Nanette

From: Gilles, Nanette
Sent: Tuesday, September 20, 2011 8:12 PM
To: Apostolakis, George
Cc: Sosa, Belkys
Subject: FW: Questions for JNES Seismic Expert

FYI

From: Holahan, Gary
Sent: Tuesday, September 20, 2011 9:09 AM
To: Gilles, Nanette
Cc: Johnson, Michael; Virgilio, Martin; Grobe, Jack; Skeen, David; Williams, Donna
Subject: RE: Questions for JNES Seismic Expert

Nan,

(b)(5)

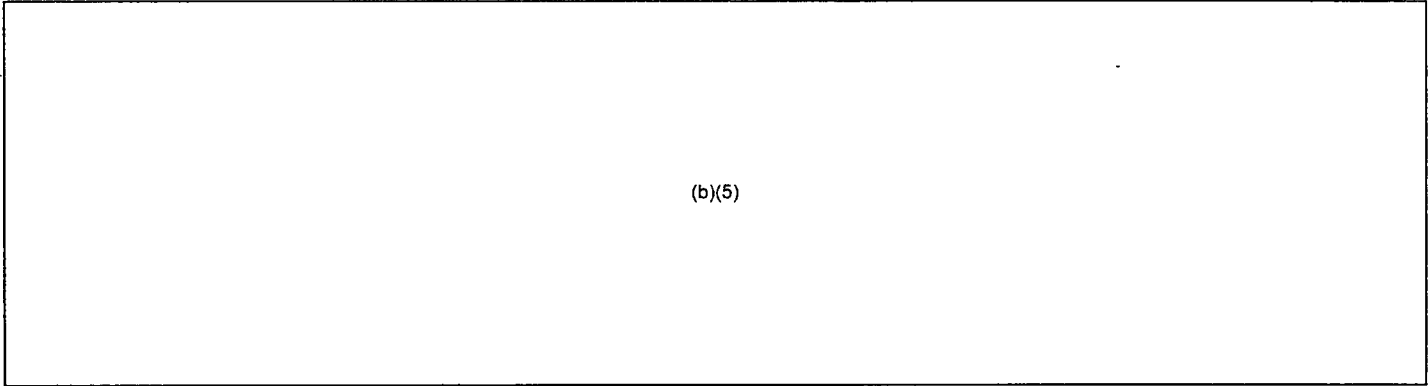
Gary

NOT FOR PUBLIC DISCLOSURE

From: Gilles, Nanette
Sent: Friday, September 09, 2011 3:28 PM

To: Holahan, Gary

Subject: Questions for JNES Seismic Expert



Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180

Email: nanette.gilles@nrc.gov

NOT FOR PUBLIC DISCLOSURE

Gilles, Nanette

~~NOT FOR PUBLIC DISCLOSURE~~

From: Holahan, Gary
Sent: Tuesday, September 20, 2011 9:09 AM
To: Gilles, Nanette
Cc: Johnson, Michael; Virgilio, Martin; Grobe, Jack; Skeen, David; Williams, Donna
Subject: RE: Questions for JNES Seismic Expert

Nan,

(b)(5)

Gary

From: Gilles, Nanette
Sent: Friday, September 09, 2011 3:28 PM
To: Holahan, Gary
Subject: Questions for JNES Seismic Expert

(b)(5)

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180

Email: nanette.gilles@nrc.gov

NOT FOR PUBLIC DISCLOSURE

Baggett, Steven

From: Erlanger, Craig
Sent: Friday, October 14, 2011 12:20 PM
To: Frazier, Alan; Baggett, Steven; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca
Cc: Brock, Kathryn
Subject: FW: REPLY: Chairman's Question Regarding Plutonium and SOARCA

FYI.

Craig

From: Rini, Brett
Sent: Thursday, October 13, 2011 10:06 AM
To: Taylor, Robert; Marksberry, Don; Erlanger, Craig; Brown, Eva; RST01_F Resource; Skeen, David
Cc: Santiago, Patricia; Armstrong, Kenneth; Gibson, Kathy; Scott, Michael
Subject: REPLY: Chairman's Question Regarding Plutonium and SOARCA

Rob,

RES/DSA has drafted a response to the Chairman's question below that you sent a week ago. The response has been approved by Brian Sheron.

Craig, please share with OEDO and the other Commissioners' offices if needed.

Question: Could SOARCA have predicted the plutonium found 45 km to the northwest of the site (45Bq/m2).

Answer: No, the radioactivity attributed to the plutonium radioisotope cannot be extracted from the SOARCA analyses. The SOARCA analyses consider 69 isotopes in the treatment of consequences grouped by radionuclides that behave similar both chemically and physically. Plutonium is in the cerium radionuclide group. The contribution to dose and contamination from radionuclide groups is calculated by factoring in additional input parameters (e.g., wind speed/direction, dose conversion factors, and population distributions). Nonetheless, we can provide the data for the group of nuclides that are bundled with plutonium to give an idea of the distance plutonium is dispersed for the Peach Bottom analyses.

The actual contribution to the dose and contamination at any location in the environment from a particular radionuclide such as plutonium is not straightforward, and other analyses would have to be run. The MELCOR and MAACS2 codes used for SOARCA could be used to isolate the effects of plutonium for Fukushima. The MELCOR code would predict the release of plutonium and the MAACS2 code calculates its distribution in the environment. However, the differences between Peach Bottom and Fukushima such as weather, fuel burnup, reactor operating power, and other parameters would have to be obtained. As part of a DOE initiative, Sandia National Laboratory is developing MELCOR models of the Fukushima reactors making this type of analysis possible in the near future.

Thanks,

Brett

Brett A. Rini
Technical Assistant
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission

(301)251-7615
Brett.Rini@nrc.gov

NOT FOR PUBLIC DISCLOSURE

From: Taylor, Robert
Sent: Thursday, October 06, 2011 6:19 AM
To: RST01_F Resource
Cc: Brown, Eva; Skeen, David; Marksberry, Don
Subject: Pu and SOARCA

Eva,

During yesterday's briefing of the Chairman, he asked if SOARCA could have predicted the Plutonium found 45 km to the northwest of the site (45Bq/m²). Would you please work with RES to get an answer. He indicated that there was no hurry. I would like to be able to respond to his question at next week's regular Thursday briefing so we probably need an answer by Wednesday. I only need a 2-3 sentence response.

Rob

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Gilles, Nanette
Date: Tuesday, October 18, 2011 8:01 AM
To: Sosa, Belkys
Cc: Davis, Roger
Subject: FW: Steering Committee Charter -- SECY-11-0117

Importance: High

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Nieh, Ho
Sent: Tuesday, October 18, 2011 7:33 AM
To: Sharkey, Jeffry; Gilles, Nanette
Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick
Subject: Steering Committee Charter -- SECY-11-0117
Importance: High

Jeff, Nan,

(b)(5)

Thanks.

~~NOT FOR PUBLIC DISCLOSURE~~

Ho Nieh

Chief of Staff
Office of Commissioner William C. Ostendorff
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ho.nieh@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sosa, Belkys
Sent: Tuesday, October 18, 2011 10:49 AM
To: Gilles, Nanette
Cc: Davis, Roger
Subject: RE: Steering Committee Charter -- SECY-11-0117

(b)(5)

Thanks,
Belkys

From: Gilles, Nanette
Sent: Tuesday, October 18, 2011 8:01 AM
To: Sosa, Belkys
Cc: Davis, Roger
Subject: FW: Steering Committee Charter -- SECY-11-0117
Importance: High

(b)(5)

In

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Nieh, Ho
Sent: Tuesday, October 18, 2011 7:33 AM
To: Sharkey, Jeffry; Gilles, Nanette
Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick
Subject: Steering Committee Charter -- SECY-11-0117
Importance: High

Jeff, Nan,

(b)(5)

(b)(5)

Thanks.

Ho

Ho Nieh
Chief of Staff
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(b)(6) (mobile)
(301) 415-1757 (fax)
ho.nieh@nrc.gov

NOT FOR PUBLIC DISCLOSURE

Davis, Roger

From: Gilles, Nanette
Sent: Tuesday, October 18, 2011 11:11 AM
To: Sosa, Belkys
Cc: Davis, Roger
Subject: Re: Steering Committee Charter -- SECY-11-0117

Understand. Will wait to hear from Roger on results of the LA meeting.

Sent from my NRC Blackberry

From: Sosa, Belkys
To: Gilles, Nanette
Cc: Davis, Roger
Sent: Tue Oct 18 10:49:06 2011
Subject: RE: Steering Committee Charter -- SECY-11-0117

(b)(5)

Thanks,
Belkys

From: Gilles, Nanette
Sent: Tuesday, October 18, 2011 8:01 AM
To: Sosa, Belkys
Cc: Davis, Roger
Subject: FW: Steering Committee Charter -- SECY-11-0117
Importance: High

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Nieh, Ho
Sent: Tuesday, October 18, 2011 7:33 AM
To: Sharkey, Jeffry; Gilles, Nanette
Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick
Subject: Steering Committee Charter -- SECY-11-0117
Importance: High

~~NOT FOR PUBLIC DISCLOSURE~~

Jeff, Nan,

(b)(5)

Thanks.

Ho

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6) (mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

NOT FOR PUBLIC DISCLOSURE

Davis, Roger

From: Gilles, Nanette
Sent: Tuesday, October 18, 2011 5:50 PM
To: Nieh, Ho; Sharkey, Jeffry
Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick; Davis, Roger
Subject: RE: Steering Committee Charter -- SECY-11-0117

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Nieh, Ho
Sent: Tuesday, October 18, 2011 8:39 AM
To: Gilles, Nanette; Sharkey, Jeffry
Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick
Subject: RE: Steering Committee Charter -- SECY-11-0117

(b)(5)

Ho

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
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(301) 415-1757 (fax)
ho.nieh@nrc.gov

From: Gilles, Nanette
Sent: Tuesday, October 18, 2011 8:03 AM
To: Nieh, Ho; Sharkey, Jeffry
Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick
Subject: RE: Steering Committee Charter -- SECY-11-0117

Thanks, Ho. I intend to discuss with GA today.

Nanette V. Gilles
Technical Assistant for Reactors

~~NOT FOR PUBLIC DISCLOSURE~~

to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

~~NOT FOR PUBLIC DISCLOSURE~~

Phone: 301-415-1180

Email: nanette.gilles@nrc.gov

From: Nieh, Ho

Sent: Tuesday, October 18, 2011 7:33 AM

To: Sharkey, Jeffrey; Gilles, Nanette

Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick

Subject: Steering Committee Charter -- SECY-11-0117

Importance: High

Jeff, Nan,

(b)(5)

Thanks.

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

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~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From:
To:
Cc:

Nieh, Ho
Thursday, October 20, 2011 10:59 AM
OPA Resource; Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffry; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy
RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Subject:

Attachments:

(b)(5)

Importance:

High

(b)(5)

Thanks.

Ho

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

From: OPA Resource

Sent: Thursday, October 20, 2011 9:56 AM

To: Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen,

~~NOT FOR PUBLIC DISCLOSURE~~

Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Jill; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

For distribution in approximately one hour.

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

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(b)(5)

(b)(5)

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Gilles, Nanette

From: Sosa, Belkys
Sent: Thursday, October 20, 2011 11:09 AM
To: OPA Resource; Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

(b)(5)

From: OPA Resource
Sent: Thursday, October 20, 2011 9:56 AM
To: Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy
Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

For distribution in approximately one hour.

Office of Public Affairs
US Nuclear Regulatory Commission
301-415-8200

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From: Sosa, Belkys
Sent: Friday, March 11, 2011 10:08 AM
To: Baggett, Steven; Snodderly, Michael
Subject: FYI: Tsunami

From: Monninger, John
Sent: Friday, March 11, 2011 9:34 AM
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Dhir, Neha
Cc: Batkin, Joshua; Hipschman, Thomas; Marshall, Michael
Subject: Tsunami

NRC HQ and Region IV are monitoring the potential impact of tsunamis impacting NRC licensees and licensed materials.

Diablo Canyon issued a NOUE due to the Tsunami WARNING. Expected wave is predicted to be well within the Design Basis. Licensees evaluating the potential for loss of circulating water pumps and need for potential shutdown due to sea level draw down in advance of wave. No decision on shutdown at this time. Humboldt Bay ISFSI is also monitoring the event and wave heights are predicted to be within the design basis.

San Onofre is in the Tsunami ADVISORY area so they are monitoring the event. Wave heights are predicted to be well within the design basis.

ff does not expect any impact to material licensees, including Hawaii, Alaska, Guam, and the Marianas Islands.

Staff from the Japanese regulator (NISA) were attending the RIC and are still in the US. NRC offered them access to the HQ Operations Center to facilitate communications with their government and other entities back home.

OIP has checked and is not aware of any NRC staff in Japan.

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Sosa, Belkys

From: Batkin, Joshua
Sent: Friday, March 11, 2011 11:32 PM
To: Sosa, Belkys; Snodderly, Michael
Cc: Monninger, John
Subject: 1115 TA brief

Hey – not sure if you have anyone on the call tonight but please feel free to call John or I if you have any questions.

Joshua C. Batkin
Chief of Staff
Office of Chairman Jaczko
(301) 415-1820 ph

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~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sharkey, Jeffrey
Sent: Friday, March 11, 2011 5:21 PM
To: Batkin, Joshua; Bubar, Patrice; Coggins, Angela
Cc: Nieh, Ho; Sosa, Belkys
Subject: RE: Process for Keeping Commission Informed on Japan - as weekend begins

Josh,

To build on Patty's e-mail below, our office did not received e-mails or phone calls for either the 1:00 pm status call or the upcoming 5:30 pm call. We contacted the HOO to reaffirm that Pat Castleman is our lead for TA briefs, but I just received a call from the Ops Center about the 5:30 pm TA call. Understand that it is a busy and somewhat confusing situation in the Ops Ctr but the HOO should have a call list with the designated TA for each office to contact. We can and should do better in coordinating the TA briefings so that principals are kept fully and currently informed.

Thanks,

Jeff

From: Batkin, Joshua
Sent: Friday, March 11, 2011 5:07 PM
To: Bubar, Patrice; Coggins, Angela
Cc: Sharkey, Jeffrey; Nieh, Ho; Sosa, Belkys
Subject: RE: Process for Keeping Commission Informed on Japan - as weekend begins

The next TA call is scheduled for 530pm today. Notifications are going out now (I got mine a minute ago.)

From: Bubar, Patrice
Sent: Friday, March 11, 2011 5:06 PM
To: Batkin, Joshua; Coggins, Angela
Cc: Sharkey, Jeffrey; Nieh, Ho; Sosa, Belkys
Subject: Process for Keeping Commission Informed on Japan - as weekend begins

Josh and Angela – please clarify how the Commission will be kept informed on what is happening in Japan as well as the US.

After the 1:00 status call today, Bill Orders has received some information while he was at the Ops. Center so we have kept Commissioner Magwood informed based on that information.

As we head into the weekend – we are making our communication plans for staying in touch within our office. Commissioner Magwood has asked that he be kept informed. Will there be another status call?

Thank you in advance.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
11-415-1895

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~~NOT FOR PUBLIC DISCLOSURE~~
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OPA

TALKING POINTS

MARCH 11, 2011 JAPAN EARTHQUAKE AND WEST COAST TSUNAMI

As of 3/12/2011 5:30 a.m. EST

- The Nuclear Regulatory Commission is following events in Japan, including media reports and footage of an apparent explosion at one of the Japanese reactors damaged in the wake of the March 11 earthquake in Japan and associated tsunami.
- The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States.
- The NRC is ready to provide whatever assistance we can to our Japanese counterparts, should there be a specific request. The NRC is closely

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coordinating its activities with other federal agencies. An NRC staff person is participating in the USAID team headed to Japan.

- The NRC resident inspector at the Diablo Canyon nuclear power plant on the central California coast remained on site for the duration of that area's tsunami warning and kept track of the plant's response. The plant is operating normally -- it declared an Unusual Event at 4:23 a.m. EST on March 11 and exited the Event at 6:30 p.m. EST the same day; the plant reported minimal tsunami effects.
- The San Onofre nuclear power plant on the southern California coast is operating normally.
- The Humboldt Bay spent fuel storage site on the northern California coast was in the tsunami warning area; site personnel have informed the NRC they were unaffected by the tsunami.
- NRC-regulated nuclear materials sites in Hawaii and Alaska were unaffected by the tsunami; 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 design structures, systems, and components important to safety to withstand the effects of natural phenomenon, including tsunamis.)
- At Diablo Canyon, the plant is safe from a tsunami. The 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.

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- Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.
- The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy. In other words, U.S. nuclear power plants are designed to be safe based on historical data from the area's maximum credible earthquake.

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Questions and Answers for Chairman Jaczko
March 11, 2011 Japan Earthquake/Tsunami Aftermath
As of 6 a.m. 3/12/2011

1. What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?

Public Answer: We are closely following events in Japan, working with other agencies of the federal government, and have been in direct contact with our counterparts in that country. In addition, we are ready to provide assistance if there is a specific request. An NRC staffer is participating in the USAID team headed to Japan.

Additional technical, non-public information:

We are taking the knowledge that the staff has about the design of the US nuclear plants and we are applying this knowledge to the Japan situation. For example, this includes calculations of severe accident mitigation that have been performed.

2. What's going to happen following the explosion everyone's seen from the video footage?

Public Answer: If a similar event occurred at a U.S. nuclear power plant, the NRC would be seeking information to answer several questions, including: What's the status of the reactor core, the reactor vessel and the containment building? What radiation measurement equipment is available and what measurements are being reported? What efforts are being taken to keep the public safe? How did the explosion affect efforts to keep the nearby reactors in a safe condition? And most importantly – What can the NRC do to help?

Additional technical, non-public information:

3. What should people in Alaska, Hawaii and the West Coast do to protect themselves from fallout?

Public Answer: The available evidence shows the United States can be expected to avoid any impacts from radioactive material, so no public action is necessary. We believe there is very low risk to the US considering the long distance from the US and the type of event. The NRC continues to analyze the available information, and existing monitoring equipment can detect any materials before they could present a hazard.

Additional technical, non-public information: NRC is working with DHS, EPA and other federal partners to ensure monitoring equipment is properly positioned, based on meteorological and other relevant information.

4. Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?

Public Answer: All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive

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seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area and then goes further. Nuclear power plants are designed to be safe based on historical data and projections regarding the area's maximum credible earthquakes.

The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information:

The reactor design is a Boiling Water Reactor that is similar to some of the designs here in the US.

5. What would U.S. plants do in this situation?

Public Answer: The NRC requires plant designs to include multiple and diverse safety systems, and plants must test their emergency preparedness capabilities on a regular basis. Plant operators are very capable of responding to significant events. In addition, NRC regulations require plants to have plans in place that would allow them to mitigate even "worst case scenarios".

Since 9/11, we have implemented requirements for licensees to have additional response capabilities for extreme situations.

Additional technical, non-public information:

Our nuclear plants have procedures in place to address a variety of accident scenarios, including abnormal operating procedures and emergency plans.

6. Are U.S. power plants designed to withstand tsunamis?

Public Answer: Yes. Plants are built to withstand a variety of environmental hazards and those plants that might face a threat from tsunami are required to withstand large waves and the maximum wave height at the intake structure (which varies by plant.)

Additional, technical, non-public information:

Tsunami have been considered in the design of US nuclear plants since the publication of Regulatory Guide 1.59 in 1977. Nuclear plants are designed to withstand flooding from not only tsunami, but also hurricane and storm surge. Currently the US NRC has a tsunami research program that is focused on developing additional guidance through cooperation with the National Oceanic and Atmospheric Administration and the United States Geological Survey.

7. Could the Japanese situation in the nuclear power plants there end up like Chernobyl?

Public Answer: Japanese nuclear power plant designs avoid the design flaws that contributed to the Chernobyl accident. That being said, our regulatory counterparts in Japan are the best source for information regarding the current situation there.

Additional, technical, non-public information:

Japanese nuclear power plants are built to a significant level of robustness where the Chernobyl facility was definitely not. The design and reactor physics of Chernobyl plant are fundamentally

different from those of the Japanese plant. The reactor core is expected to be contained and containment is a part of the design.

8. What happens when/if a plant "melts down"?

Public Answer: In short, nuclear power plants in the United States are designed to be safe. To prevent the release of radioactive material, there are multiple barriers between the radioactive material and the environment, including the fuel cladding, the heavy steel reactor vessel itself and the containment building, usually a heavily reinforced structure of concrete and steel several feet thick.

Additional, technical, non-public information:

The melted core may melt through the bottom of the vessel and flow onto the concrete containment floor. The core may melt through the containment liner and release radioactive material to the environment.

9. Should people in Japan take KI?

Public Answer: The Japanese people should listen to the public authorities in Japan regarding protective actions. KI – potassium iodide – is one of the protective measures that might be taken in a radiological emergency in this country. We do not know if this measure is necessary or appropriate in the Japanese situation.

Additional, technical non-public information.

There are a range of protective measures that we use ... the most effective is evacuation. Government officials are responsible for determining the best means to protect their public. KI is another means for protection but evacuation and sheltering are the primary means that is used.

10. Was there any damage to U.S. reactors from either the earthquake or the resulting tsunami?

Public Answer: No

Additional, technical non-public information:

Diablo Canyon Units 1 and 2 declared an "unusual event" based on tsunami warning following the Japanese earthquake. They have since exited the "unusual event" declaration, based on a downgrade to a tsunami advisory.

11. Has this incident changed the NRC perception about earthquake risk?

Public Answer: As is prudent, the NRC will certainly be looking closely at this incident and the effects on the Japanese nuclear power plant in the future to see if any changes are necessary to NRC regulations.

Additional, technical, non-public information.

We expect that there would be lessons learned, etc.

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12. Will this incident affect new reactor licensing?

Public Answer: It is not appropriate to hypothesize on such a future scenario at this point.

Additional, technical non-public information:

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NOT FOR PUBLIC DISCLOSURE

Questions and Answers for Chairman Jaczko
March 11, 2011 Japan Earthquake/Tsunami Aftermath
As of 7:30 a.m. 3/12/2011

1. What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?

Public Answer: We are closely following events in Japan, working with other agencies of the federal government, and have been in direct contact with our counterparts in that country. In addition, we are ready to provide assistance if there is a specific request. An NRC staffer is participating in the USAID team headed to Japan.

Additional technical, non-public information:

We are taking the knowledge that the staff has about the design of the US nuclear plants and we are applying this knowledge to the Japan situation. For example, this includes calculations of severe accident mitigation that have been performed.

2. What's going to happen following the steam explosion everyone's seen from the video footage?

Public Answer: If a similar event occurred at a U.S. nuclear power plant, the NRC would be seeking information to answer several questions, including: What's the status of the reactor core, the reactor vessel and the containment building? What radiation measurement equipment is available and what measurements are being reported? What efforts are being taken to keep the public safe? How did the explosion affect efforts to keep the nearby reactors in a safe condition? And most importantly – What can the NRC do to help?

Additional technical, non-public information:

3. What should people in Alaska, Hawaii and the West Coast do to protect themselves from fallout?

Public Answer: The available evidence shows the United States can be expected to avoid any impacts from radioactive material, so no public action is necessary. We believe there is very low risk to the US considering the long distance from the US and the type of event. The NRC continues to analyze the available information, and existing monitoring equipment can detect any materials before they could present a hazard.

Additional technical, non-public information: NRC is working with DHS, EPA and other federal partners to ensure monitoring equipment is properly positioned, based on meteorological and other relevant information.

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4. Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?

Public Answer: All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area and then goes further. Nuclear power plants are designed to be safe based on historical data and projections regarding the area's maximum credible earthquakes.

The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information:

The reactor design is a Boiling Water Reactor that is similar to some of the designs here in the US.

5. What would U.S. plants do in this situation?

Public Answer: The NRC requires plant designs to include multiple and diverse safety systems, and plants must test their emergency preparedness capabilities on a regular basis. Plant operators are very capable of responding to significant events. In addition, NRC regulations require plants to have plans in place that would allow them to mitigate even "worst case scenarios".

Since 9/11, we have implements requirements for licensees to have additional response capabilities for extreme situations.

Additional technical, non-public information:

Our nuclear plants have procedures in place to address a variety of accident scenarios, including abnormal operating procedures and emergency plans.

6. Are U.S. power plants designed to withstand tsunamis?

Public Answer: Yes. Plants are built to withstand a variety of environmental hazards and those plants that might face a threat from tsunami are required to withstand large waves and the maximum wave height at the intake structure (which varies by plant.)

Additional, technical, non-public information:

Tsunami have been considered in the design of US nuclear plants since the publication of Regulatory Guide 1.59 in 1977. Nuclear plants are designed to withstand flooding from not only tsunami, but also hurricane and storm surge. Currently the US NRC has a tsunami research program that is focused on developing additional guidance through cooperation with the National Oceanic and Atmospheric Administration and the United States Geological Survey.

7. What happens when/if a plant "melts down"?

Public Answer: In short, nuclear power plants in the United States are designed to be safe. To prevent the release of radioactive material, there are multiple barriers between the radioactive

material and the environment, including the fuel cladding, the heavy steel reactor vessel itself and the containment building, usually a heavily reinforced structure of concrete and steel several feet thick.

Additional, technical, non-public information:

The melted core may melt through the bottom of the vessel and flow onto the concrete containment floor. The core may melt through the containment liner and release radioactive material to the environment.

8. Should people in Japan take KI?

Public Answer: The Japanese people should listen to the public authorities in Japan regarding protective actions. KI – potassium iodide – is one of the protective measures that might be taken in a radiological emergency in this country. We do not know if this measure is necessary or appropriate in the Japanese situation.

Additional, technical non-public information.

There are a range of protective measures that we use ... the most effective is evacuation. Government officials are responsible for determining the best means to protect their public. KI is another means for protection but evacuation and sheltering are the primary means that is used.

9. Was there any damage to U.S. reactors from either the earthquake or the resulting tsunami?

Public Answer: No

Additional, technical non-public information:

Diablo Canyon Units 1 and 2 declared an "unusual event" based on tsunami warning following the Japanese earthquake. They have since exited the "unusual event" declaration, based on a downgrade to a tsunami advisory.

10. Has this incident changed the NRC perception about earthquake risk?

Public Answer: As is prudent, the NRC will certainly be looking closely at this incident and the effects on the Japanese nuclear power plant in the future to see if any changes are necessary to NRC regulations.

Additional, technical, non-public information.

We expect that there would be lessons learned, etc.

11. Will this incident affect new reactor licensing?

Public Answer: It is not appropriate to hypothesize on such a future scenario at this point.

Additional, technical non-public information:

OPA

TALKING POINTS

MARCH 11, 2011 JAPAN EARTHQUAKE AND WEST COAST TSUNAMI

As of 3/12/2011 9:45 a.m. EST

- The Nuclear Regulatory Commission has spoken with its counterpart agency in Japan, offering the assistance of U.S. technical experts. Should the Japanese want to make use of U.S. expertise, NRC staffers with extensive background in boiling water reactors are available to assist efforts in Japan.
- The NRC is coordinating its actions with other Federal agencies as part of the U.S. government response.
- The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States.

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- 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 design structures, systems, and components important to safety to withstand the effects of natural phenomenon, including tsunamis.)
- Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.
- The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy. In other words, U.S. nuclear power plants are designed to be safe based on historical data from the area's maximum credible earthquake.

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NRC Talking Points- Current as of 3/14/11, 2:45 PM EST

Reactor Status

- Fukushima Daiichi Units 1 - 6 (no AC power, limited DC power).

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Unit 1

- Partial core damage from exposed fuel.
- As of 2200 on March 14, Japan time, sea water is being injected.
- The reactor was described as "more stable."
- Containment described as "functional."
- Hydrogen explosion has damaged reactor building roof.

Unit 2

- Hydrogen explosion possibility has been mitigated because a part of the reactor building roof has been removed.
- RCIC has failed.
- Coolant was stopped for quite some time so core damage is assumed. Core was most likely totally uncovered for some time.
- As of 2200 on March 14, Japan time, sea water is being injected.
- Unit 2 containment is described as "functioning."

Unit 3

- Condition described as essentially the same as Unit 1.
- As of 2200 on March 14, Japan time, sea water is being injected.
- Hydrogen explosion has damaged reactor building roof.
- Containment described as "functional."
- Units 4 - 6 stable.
- Other Japanese Nuclear Sites:
 - Fukushima Daiichi Units 1 - 4: stable offsite power available, preparing to vent, evacuation to 10 km, ultimate heat sink unavailable.
 - Onagawa Units 1 - 3: shutdown, stable, turbine building basement fire extinguished.
 - Kashiwazaki Kariwa Nuclear Power Station (Advanced Reactors): Units 1, 5, 6, 7: normal operation / Units 2 to 4: regular outage.
- Currently no concerns regarding spent nuclear fuel pools.

General Talking Points

- Tepco and US Forces in Japan (USFJ) are working together to allocate firefighting and heavy equipment capable of pumping seawater from the ocean into containment.
 - A list of additional equipment to provide for accident mitigation has been developed by NRC and provided to USAID.
- Disaster Assistance Response Team arrived Sunday:
 - Two NRC team members are in Tokyo working with Ambassador Roos and getting direct information from Japanese officials.
 - Additional NRC experts are being dispatched to support the Ambassador and Japanese government.

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- NRC continues coordination with other Federal agencies and outreach to Congress and State.
- Press releases with message for US citizens: No harmful levels of radiation expected to reach US. Japanese protective action recommendations consistent with US. US citizens in Japan should follow Japanese government directions.
- NRC continues to develop projections of the accident's progression, dose estimates and Q&As, including those addressing the safety of reactors in operation in the US.

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CONTROLLED INFORMATION~~

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Date: 3/13/2011

Time: 1:55am

State Q&A's:

Q. What is the radiological consequence of the event in Japan for the U.S.?

A. At this time, there is no indication that materials from the incidents in Japan have the potential to have any significant radiological effect on the U.S.

Q. Are there any protective measures that residents in the U.S. should be considering?

A. No, not given current information.

Q. What is the Federal family, i.e., NRC-EPA-DOE, doing to monitor the radiological consequence of the event in Japan on the United States?

A. The NRC is coordinating its actions with other Federal agencies as part of the U.S. government response. The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States.

U.S. nuclear power plants have sensitive equipment to monitor the status of radiological conditions. Additionally, personnel at nuclear power plants have specific knowledge in radiological field monitoring techniques and could assist State and Federal personnel in environmental sampling activities, should that be necessary to evaluate public health and safety concerns.

EPA has permanent stationary radiological monitoring stations on the West coast. In the event of a confirmed radiological release with a potential to impact the U.S., EPA is the Federal agency responsible for radiological monitoring. DOE would be responsible for aerial monitoring, should there be a confirmed radiological release.

Non-Public Info For States Only: Questions about any radiological impact on the U.S. West coast is Adora Andy, the Deputy Associate Administrator for EPA's Office of External Affairs: cell is (b)(6); email andy.adora@epa.gov

Key Messages:

The NRC is coordinating its actions with other Federal agencies as part of the U.S. government response. The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States. The NRC's headquarters Operations Center in Rockville, MD has been stood up since the beginning of the emergency in Japan and is operating on a 24-hour basis.

NRC officials in Rockville, MD have spoken with the agency's counterpart in Japan and offered the assistance of U.S. technical experts. Two officials from NRC with expertise in boiling water nuclear reactors have deployed to Japan as part of a U.S. International Agency for International Development (USAID) team. USAID is the federal government agency primarily responsible for providing assistance to countries recovering from disaster administering.

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

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The NRC will not provide information on the status of Japan's nuclear power plants. See NRC's web site at www.nrc.gov or blog at <http://public-blog.nrc-gateway.gov> for the latest information on NRC actions.

For background information on generic operations at a boiling-water reactor, including an animated graphic, visit the NRC's website at www.nrc.gov

Other sources of information:

USAID -- www.usaid.gov

U.S. Dept. of State -- www.state.gov

FEMA -- www.fema.gov

White House -- www.whitehouse.gov

Nuclear Energy Institute -- www.nei.org

International Atomic Energy Agency -- www.iaea.org/press

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Quaketalking points march 14.docx

OPA

TALKING POINTS

JAPAN NUCLEAR SITUATION

As of 3/14/2011 3 P.M. EST

In a White House briefing this morning, Chairman Jaczko said the type and design of the Japanese reactors and the way events have unfolded give us confidence in saying radiation at harmful levels will not reach the U.S.

Jaczko also said today that we believe the protective steps the Japanese are taking are comparable to ones we would use here and that we advise Americans in Japan to follow the guidance of Japanese officials.

According to Chairman Jaczko, the NRC is always looking to learn information that can be applied to the U.S. reactors and we will certainly be looking at the information that comes from this incident.

The Japanese government has formally asked for assistance from the United States as it continues to respond to nuclear power plant cooling issues triggered by an earthquake and tsunami on March 11. The NRC is assembling a team to send over in response to the request for help.

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The NRC already has two experts in boiling-water reactors (BWR) in Tokyo offering technical assistance. They are part of a USAID team.

The NRC is working with other U.S. agencies to monitor radioactive releases from Japan and to predict their path. All the available information indicates weather conditions have taken the small releases from the Fukushima reactors out to sea away from the population.

Given the results of the monitoring and distance between Japan and Hawaii, Alaska, the U.S. Territories and the U.S. West Coast, the NRC does NOT expect the U.S. to experience any harmful levels of radioactivity.

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

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

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

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Sosa, Belkys

From: Sosa, Belkys
Sent: Monday, March 14, 2011 3:16 PM
To: Apostolakis, George; Snodderly, Michael; Baggett, Steven
Cc: Blake, Kathleen
Subject: ACTION: 4:30pm Call for Update from the Chairman

fyi

From: Baval, Rochelle
Sent: Monday, March 14, 2011 2:43 PM
To: Lepre, Janet; Blake, Kathleen; Herr, Linda; Crawford, Carrie
Cc: Pace, Patti; Batkin, Joshua; Vietti-Cook, Annette; Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho; Pulley, Deborah; Burns, Stephen
Subject: 4:30pm Call for Update from the Chairman

Just to confirm our conversations this afternoon...The Chairman will brief the Commissioners at 4:30pm. The Commissioners should call into the OPs Center 301-816-5100 to be connected to the bridge. Remember, even from inside NRC, to dial an outside line (9-301-816-5100).

Rochelle

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Sosa, Belkys

From: Coggins, Angela
Sent: Tuesday, March 15, 2011 5:57 PM
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
Subject: Prep Material for
Attachments: Talking Points for Chairman 1030 am 3-15-11.doc

Hi everyone! In addition to the Q&As that I believe you already received from OPA, this is a one-pager that staff has been updating for the Chairman's use and that Mr. Borhardt used as prep for today's hill briefing. I believe it is just a summary of the more detailed status reports you receive, but in case you find it useful, I thought I would provide. Thanks!

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

Sosa, Belkys

From: Bubar, Patrice
Sent: Tuesday, March 15, 2011 6:17 PM
To: Coggins, Angela; Sharkey, Jeffrey; Sosa, Belkys; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
Subject: RE: Prep Material for

Angela – please clarify how this material relates to the hearing tomorrow. Is there a prepared statement the Chairman is using tomorrow?

I don't believe Commissioner Magwood's office has received the Qs and As from OPA.

Additionally – please clarify what the Chairman will be using as remarks at the meeting/hearing with the Senate Environment and Public Works Committee tomorrow.

Thank you.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Coggins, Angela
Sent: Tuesday, March 15, 2011 5:57 PM
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
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301-415-1828/angela.coggins@nrc.gov

U.S. Nuclear Regulatory Commission
301-415-1895

~~NOT FOR PUBLIC DISCLOSURE~~

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Sent: Tuesday, March 15, 2011 5:57 PM
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
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U.S. Nuclear Regulatory Commission
301-415-1828/angela.coggins@nrc.gov

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Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Coggins, Angela
Sent: Tuesday, March 15, 2011 6:25 PM
To: Bubar, Patrice; Sharkey, Jeffrey; Sosa, Belkys; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
Subject: RE: Prep Material for

(b)(5)

Thanks!

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

From: Bubar, Patrice
Sent: Tuesday, March 15, 2011 6:17 PM
To: Coggins, Angela; Sharkey, Jeffrey; Sosa, Belkys; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
Subject: RE: Prep Material for

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U.S. Nuclear Regulatory Commission
301-415-1895

From: Coggins, Angela
Sent: Tuesday, March 15, 2011 5:57 PM
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
Subject: Prep Material for

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Angela B. Coggins
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Sosa, Belkys

NOT FOR PUBLIC DISCLOSURE

From: Sosa, Belkys
Sent: Tuesday, March 15, 2011 6:40 PM
To: Apostolakis, George; Blake, Kathleen
Subject: Fw: FYI: Prep Material for
Attachments: Talking Points for Chairman 1030 am 3-15-11.doc

I'm having trouble sending materials to you via bb. Hope this works.

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Sosa, Belkys
To: 'apostolakis.george@nrc.gov' <apostolakis.george@nrc.gov>; Snodderly, Michael; Baggett, Steven; Davis, Roger
Sent: Tue Mar 15 18:37:50 2011
Subject: FYI: Prep Material for

Fyi

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Coggins, Angela
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
Sent: Tue Mar 15 17:56:43 2011
Subject: Prep Material for

Hi everyone! In addition to the Q&As that I believe you already received from OPA, this is a one-pager that staff has been updating for the Chairman's use and that Mr. Borchardt used as prep for today's hill briefing. I believe it is just a summary of the more detailed status reports you receive, but in case you find it useful, I thought I would provide. Thanks!

Angela B. Coggins
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[301-415-1828](tel:301-415-1828)/angela.coggins@nrc.gov

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Current as of 3/15/2011, 11:30am

**Questions and Answers for Chairman Jaczko
March 11, 2011 Japan Earthquake/Tsunami Aftermath**

What is the Situation In Japan?

What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?

Public Answer: We are closely following events in Japan, working with other agencies of the federal government, and have been in direct contact with our counterparts in that country. We have sent a total of 11 staff to Tokyo in response to the Japanese government's request for assistance. Two of those NRC staff members, knowledgeable about boiling water reactors, are already in Japan participating in the USAID team.

Additional technical, non-public information:

We are taking the knowledge that the staff has about the design of the US nuclear plants and we are applying this knowledge to the Japan situation. For example, this includes calculations of severe accident mitigation that have been performed. Tony Ulises and Jim Trapp are in-country. Team led by Chuck Casto enroute from various locations.

What resources are the Japanese asking for?

The Japanese have formally requested equipment needed to cool the reactor fuel. This includes such things as pumps, fire hoses, portable generators, and diesel fuel. The NRC is coordinating with General Electric, which has plant design specifications, to ensure any equipment provided will be capable of meeting the needs of the Japanese.

Are we providing additional KI to the Japanese?

We have not been asked to provide KI.

What should the American public know about the incident in Japan?

The events unfolding in Japan are the result of a catastrophic series of natural disasters. These include the fifth largest earthquake in recorded history and the resulting devastating tsunami. Despite these unique circumstances, the Japanese appear to have taken reasonable actions to mitigate the event and protect the surrounding population. Since the beginning of the event, the NRC has continuously manned its Operations Center in Rockville, MD in order to gather and examine all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States.

Are any Americans in danger – armed forces, citizens in Tokyo?

The NRC, in consultation with the White House and U.S. Embassy, has advised United States citizens in Japan to follow the protective measures recommended by the Japanese government. These measures appear to be consistent with steps the United States would take. The Department of Defense has personnel trained in radiation protective measures and is responsible for providing guidance to U.S.

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armed forces. Inquiries regarding U.S. citizens in Japan should be directed to the State Department, Consular Services at 202-647-7004.

What's going to happen following the hydrogen explosions everyone's seen from the video footage?

Public Answer: The NRC is aware of the Japanese efforts to stabilize conditions at the affected reactors, and those actions are in line with what would be done in the United States. The NRC continues to monitor information on the status of the reactor core, the reactor vessel and the containment structure -- all three areas are important to controlling the situation and protecting the public.

Additional technical, non-public information:

The explosions affected the secondary containment buildings for Units 1 and 3 of the reactor plant. The primary containment was unaffected by the explosion. This does expose the spent fuel pools to atmosphere but should not affect the integrity of the spent fuel pool. With the integrity of the Secondary Containment breached it is more essential to maintain Primary Containment intact.

To provide additional protection to Primary Containment, US reactors of the containment type similar to Fukushima Unit 1 installed a hardened vent line from primary containment directly to the vent stack. A hardened vent provides a release path which would prevent an overpressurization of containment as experienced at Fukushima Unit One. Venting from the hardened vent is typically a manual operation that is controlled by the Emergency Operating Procedures as a last resort to protect the containment from failure. This vent path can be directly from the upper containment or from the torus (the preferred vent path due to scrubbing effect of the torus water).

Why did the seawater fail to cool the reactor?

Based on information available to the NRC, it appears that the seawater has been effective at providing some cooling for the reactor. While it appears that some fuel damage has occurred, there will be plenty of time once this crisis is resolved to determine the effectiveness of the measures taken in response to this event.

If Chernobyl was a 7 and Three Mile Island was a 5, when does this event move from the 4 level?

The International Atomic Energy Agency (IAEA) rates nuclear events in accordance with its International Nuclear and Radiological Event Scale (INES). IAEA has assigned the events in Japan an INES rating of 4, "Accident with Local Consequences." This rating is subject to change as events unfold and additional information becomes available. INES classifies nuclear accidents based on the radiological effects on people and the environment and the status of barriers to the release of radiation. IAEA determinations regarding the INES rating of events are made independently.

Three Mile Island was assigned an INES rating of 5, "Accident with Wider Consequences," due to the severed damage to the reactor core.

What is the worst case scenario for the plant?

In a nuclear emergency, the most important action is ensure the core is covered with water to provide cooling to remove any heat from the fuel rods. Without adequate cooling, the fuel rods will melt. Should the final containment structure fail, radiation from these melting fuel rods would be released to the

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atmosphere and additional protective measures may be necessary, depending on factors such as prevailing wind patterns.

As time goes on, does the chance for a meltdown increase?

Not necessarily. Each passing hour the fuel rods will become cooler. If adequate cooling can be established and maintained, the risk of a meltdown will be mitigated.

What happens next in Japan? How long will it take to assess the damage to the reactors?

The current focus is ensuring that adequate cooling of the reactor fuel at each of the affected Japanese reactors is established and maintained. In the days, weeks, and months that follow, there will be adequate time to assess the damage and determine next steps.

Is There Any Direct Impact to US?

What should be done to protect people in Alaska, Hawaii and the West Coast from radioactive fallout?

Public Answer: The NRC continues to believe that the type and design of the Japanese reactors, combined with how events have unfolded, will prevent radiation at harmful levels from reaching U.S. territory.

Additional technical, non-public information: NRC is working with DHS, EPA and other federal partners to ensure monitoring equipment for confirmatory readings is properly positioned, based on meteorological and other relevant information.

Was there any damage to U.S. reactors from either the earthquake or the resulting tsunami?

Public Answer: No

Additional, technical non-public information: Diablo Canyon Units 1 and 2 were the only US plants to declare any type of an emergency classification. The site entered an "unusual event" based on a tsunami warning from the State, NOAA, NWS, Coast Guard or System Dispatcher following the Japanese earthquake. They have since exited the "unusual event" declaration, based on a downgrade to a tsunami advisory.

Could it Happen Here?

Could an earthquake in the US significantly damage a nuclear power plant? Are the Japanese plants similar to U.S. plants?

Public Answer: All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located in areas with low and moderate seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account even very rare and extreme seismic and tsunami events.

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The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information:

Currently operating reactors were designed using a "deterministic" or "maximum credible earthquake" approach. Seismic hazard for the new plants is determined using a much more robust probabilistic seismic hazard assessment approach that explicitly addresses uncertainty and very rare events, as described in RG1.208. The NRC requires that adequate margin beyond the design basis ground shaking levels is assured. The NRC further enhances seismic safety for beyond-design-basis events through the use of a defense-in-depth approach.

In addition, the NRC periodically reviews the seismic risk at operating reactors when information may have changed. Over the last few years the NRC has undertaken a program called Generic Issue 199, which is focused on assessing hazard for plants in the central and eastern US using the latest techniques (developed in part during reviews of Western U.S. plants) and determining the possible risk implications of any increase in the anticipated ground shaking levels. This program will help us assure that the plants are safe under exceptionally rare and extreme ground motions that represent beyond-design-basis events.

What would U.S. plants do in this situation?

Public Answer: The NRC requires plant designs to include multiple and diverse safety systems, and plants must test their emergency preparedness capabilities on a regular basis. Plant operators are very capable of responding to significant events. In addition, NRC regulations require plants to have plans in place that would allow them to mitigate even "worst case scenarios".

Since 9/11, we have implemented requirements for licensees to have additional response capabilities for extreme situations.

Additional technical, non-public information:

U.S. nuclear plants have procedures in place to address a variety of accident scenarios, including abnormal operating procedures, emergency operating procedures, severe accident management guidelines and emergency plans. Additionally, the NRC activates Incident Response centers in Headquarters and individual Regions as necessary for the event to provide technical monitoring and support.

The NRC is capable of providing access to many external agencies (i.e., FEMA, Homeland Security, Military, etc.) to provide any additional help that individual plant sites may need. Additionally, the NRC has access to real-time plant information through the ERDS System for each site in the US and can monitor the status anytime.

Are U.S. power plants designed to withstand tsunamis?

Public Answer: Yes. Plants are built to withstand a variety of environmental hazards. Those plants that might face a threat from tsunami are required to withstand large waves and the maximum and minimum wave heights at the intake structure (which varies by plant.)

Additional technical, non-public information:

Tsunami have been considered in the design of US nuclear plants since the publication of Regulatory Guide 1.59 in 1977, although the approaches that were used for design of the existing plants varied

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significantly. Nuclear plants are designed to withstand flooding from not only tsunami, but also hurricane and storm surge; therefore there is often significant margin against tsunami flooding. However, it should be noted that Japanese experience has shown that drawdown can be a significant problem. Drawdown was not generally analyzed in the past.

Currently the US NRC has a tsunami research program that is focused on developing modern hazard assessment techniques and additional guidance through cooperation with the National Oceanic and Atmospheric Administration and the United States Geological Survey. This has already lead to several technical reports and an update to NUREG 0-800. The NOAA and USGS contractors are also assisting with NRO reviews of tsunami hazard. A new regulatory guide on tsunami hazard assessment is currently planned in the office of research, although it is not expected to be available in draft form until 2012.

How many reactors are along coastal areas that could be affected by a tsunami (and which ones)?

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Additional, technical non-public information: None

What magnitude earthquake are US plants designed to?

Public Answer: Each plant is designed to a ground-shaking level that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of and earthquake and the distance from the fault plane to the site. The probabilistic approaches currently used by the NRC account for a large number of different magnitudes.

Additional, technical non-public information:

In the past, "deterministic" or "scenario based" analyses were used to determine ground shaking (seismic hazard) levels. Now a probabilistic method is used that accounts for all possible earthquakes coming from all possible sources (including background seismicity) and the likelihood that each particular hypothetical earthquake occurs.

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Public Answer: Although we often think of the US as having "active" and "non-active" earthquake zones, earthquakes can actually happen almost anywhere. Seismologists typically separate the US into low, moderate, and high seismicity zones. The NRC requires that every plant is designed for site-specific ground motions that are appropriate for their location. In addition, the NRC has specified a minimum ground shaking level to which the plants must be designed.

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Additional, technical, non-public information: No additional.

Has this incident changed the NRC perception about earthquake risk?

Public Answer: There has been no change in the NRC's perception of earthquake hazard (i.e. ground shaking levels) for US nuclear plants. As is prudent, the NRC will certainly be looking closely at this incident and the effects on the Japanese nuclear power plant in the future to see if any changes are necessary to NRC regulations.

Additional, technical, non-public information.

We expect that there would be lessons learned, etc. It appears that the sites did not have any critical damage due to the earthquake from the fact that the emergency diesel generators initially responded to provide power to the site. The tsunami and consequential site flooding was responsible for the complete loss of power to the site, including the diesel generators which resulted in a Station Blackout.

How many U.S. plants have designs similar to the affected Japanese reactors (and which ones)?

Public answer: Thirty-five of the 104 operating nuclear power plants in the U.S. are boiling water reactors (BWRs), as are the reactors at Fukushima. Twenty-three of the U.S. BWRs have the same Mark I containment as the Fukushima reactors.

Four of the U.S. BWRs are early designs which are similar to Fukushima Unit 1.

Nineteen U.S. BWRs are similar to Fukushima Unit 3.

Additional Information

Fukushima Unit 1 is a BWR-3 with a Mark 1 containment similar to Oyster Creek, Nine Mile Point Unit 1, and Dresden Units 2 and 3.

Fukushima Unit 3 is a BWR-4 with a Mark 1 containment and a Reactor Core Isolation Cooling (RCIC) system. The remaining 31 U.S. BWRs use a Reactor Core Isolation Cooling (RCIC) system instead of an isolation condenser. Nineteen of those 31 reactors have a Mark 1 containment, while the remainder are more recent designs.

What could you say about the dangers to the American public from our nuclear plants?

As the events in Japan continue to unfold, the NRC is focused on supporting the Japanese government and people in bringing this crisis to closure in the safest manner possible. The NRC remains convinced that U.S. nuclear power plants are designed and operated in a manner that protects public health and safety. The time will come, after this crisis is behind us, to evaluate what, if any, changes are needed at U.S. nuclear power plants. We will assess all the available information and, as we have done with previous natural disasters, such as the 2007 earthquake in the Sea of Japan and the 2004 tsunami in the Indian Ocean, evaluate whether enhancements to U.S. nuclear power plants are warranted.

Compare this incident to the Three Mile Island. What are the similarities?

The events at Three Mile Island in 1979 were the result of an equipment malfunction that resulted in the loss of cooling water to the reactor fuel. Subsequent operator actions compounded the malfunction

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ultimately resulting in the partial core meltdown. While details are still developing, the events in Japan appear to be the result of an earthquake and subsequent tsunami that knocked out electrical power to emergency safety systems designed to cool the reactor fuel. In both events the final safety barrier, the containment building, contained the majority of the radioactivity preventing its release to the environment.

Is our battery backup power less effective than the Japanese?

No. US regulations do not specify the length of time that you need to have the batteries operate following a loss of offsite power (most sites plan to have battery backup capability for 8 hours). Instead, the amount of time is dependent on the site recovery strategy and is based on providing sufficient capacity to assure that the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

What are US plants required to have for backup power? More than what the Japanese reactors did?

US plants need to meet 10 CFR 50 Appendix A criterion 17. Reactor units must have 2 independent power supplies. All US (except Oconee) plants have diesels and battery backup systems. Most of the US plants with diesels have two diesels per unit and those that have only one dedicated diesel have a swing diesel available. The regulations do not specify the length of time that you need to have the diesels and batteries operate following a loss of offsite power (most sites plan to run the diesels for multiple days and have battery backup capability for 8 hours). Instead the amount of time is dependent on the site recovery strategy and is based on providing sufficient capacity to assure that the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

Some in the media and in Hill briefings are suggesting that Mark 1 containment is flawed. What are the concerns about this type of containment? Are the US plants with this safe?

BWR Mark I containments have relatively small volumes in comparison with PWR containments. This makes the BWR Mark I containment relatively more susceptible to containment failure given a core meltdown severe enough to (1) fail the reactor vessel and also (2) severe enough so that the core melt reaches the containment boundary. On the positive side, BWRs have more ways of adding water to the core than PWRs. This includes 2 water injection sources which do not rely on AC electric power. These systems include Reactor Core Isolation Cooling (RCIC) and High pressure coolant injection (HPCI).

The NRC considers BWRs with Mark I containment designs to be safe.

Will this incident affect new reactor licensing?

Public Answer: It is not appropriate to hypothesize on such a future scenario at this point.

Additional, technical non-public information:

This event could potentially call into question the NRC's seismic requirements which could require the staff to re-evaluate the staff's approval of the AP1000 and ESBWR design and certifications.

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With NRC moving to design certification, at what point is seismic capability tested – during design or modified to be site-specific? If in design, what strength seismic event must these be built to withstand?

The regulations related to seismic requirements are contained in 10 CFR 50 Appendix A criterion 2.

During design certification, vendors propose a seismic design in terms of a ground motion spectrum for their nuclear facility. This spectrum is called a standard design response spectrum and is developed so that the proposed nuclear facility can be sited at most locations in the central and eastern United States.

The vendors show that this design ground motion is suitable for a variety of different subsurface conditions such as hard rock, deep soil, or shallow soil over rock. Combined License and Early Site Permits applicants are required to develop a site specific ground motion response spectrum that takes into account all of the earthquakes in the region surrounding their site as well as the local site geologic conditions. Applicants estimate the ground motion from these postulated earthquakes to develop seismic hazard curves. These seismic hazard curves are then used to determine a site specific ground motion response spectrum that has a maximum annual likelihood of 1×10^{-4} of being exceeded. This can be thought of as a ground motion with a 10,000 year return period. This site specific ground motion response spectrum is then compared to the standard design response spectrum for the proposed design. If the standard design ground motion spectrum envelopes the site specific ground motion spectrum then the site is considered to be suitable for the proposed design. If the standard design spectrum does not completely envelope the site specific ground motion spectrum, then the COL applicant must do further detailed structural analysis to show that the design capacity is adequate. Margin beyond the standard design and site specific ground motions must also be demonstrated before fuel loading can begin.

Emergency Preparedness Information

What happens when/if a plant “melts down”?

Public Answer: In short, nuclear power plants in the United States are designed to be safe. To prevent the release of radioactive material, there are multiple barriers between the radioactive material and the environment, including the fuel cladding, the heavy steel reactor vessel itself and the containment building, usually a heavily reinforced structure of concrete and steel several feet thick.

Additional, technical, non-public information:

The melted core may melt through the bottom of the vessel and flow onto the concrete containment floor. The core may melt through the containment liner and release radioactive material to the environment.

Why is KI administered during nuclear emergencies?

Public Answer: KI – potassium iodide – is one of the protective measures that might be taken in a radiological emergency in this country. A KI tablet will saturate the thyroid with non radioactive iodine and prevent the absorption of radioactive iodine that could be part of the radioactive material mix of radionuclides in a release. KI does not prevent exposure from these other radionuclides.

Additional, technical non-public information.

There are a range of protective measures that we use ... the most effective is evacuation. Local government officials are responsible for determining the best means to protect their public. KI is another means for protection but evacuation and sheltering are the primary means that are used.

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Other Topics

Any quick-hit info about how the Southeast Reactors performed during Katrina? What damage did the flood water do? Any power loss?

The reactors performed as designed. Waterford was the most impacted while River Bend also experienced some effects.

Waterford 3 (near New Orleans, LA) did not have damage to any safety equipment during, or shortly after Katrina. They shut down on August 28, 2005, in advance of the hurricane strike. The flooding did affect local infrastructure, including communications and power distribution. However, the plant successfully used their emergency diesel generators to furnish plant power. Access was maintained to the plant throughout the event. On September 9, 2005, after a comprehensive review by FEMA and the NRC, the plant was authorized to restart.

River Bend Station (30 miles north of Baton Rouge, LA) did not experience damage to any safety relate equipment and only minimal damage to emergency planning equipment (one siren) during and after Hurricane Katrina. The station reduced power to 70 percent core thermal power on August 28, 2005, due to reduced electrical grid loads. Access was maintained to the plant throughout the event. On September 2, 2005, the plant returned to 100% power.

Also, in 1992 the eye of Hurricane Andrew, a category 5 hurricane, passed directly over the Turkey Point nuclear plant. The plant was shut down prior to the hurricane making landfall and an assessment of the plant following the hurricane demonstrated that the plant sustained very little damage and all of the safety equipment was intact. (Most of the damage was too the security fences being blown down).

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Sosa, Belkys

From: Sosa, Belkys
nt: Tuesday, March 15, 2011 6:43 PM
Subject: Apostolakis, George; Baggett, Steven; Snodderly, Michael
Attachments: FYI: Prep Material for
Chairman JaczkoQA7_031511.docx

Q/As

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Bradford, Anna
To: Bubar, Patrice; Sharkey, Jeffry; Sosa, Belkys; Nieh, Ho
Cc: Batkin, Joshua; Coggins, Angela
Sent: Tue Mar 15 18:37:31 2011
Subject: RE: Prep Material for

Hi Patty,

Attached are the Q&As that we received from OPA at 11:30 today. I'm not sure if the other Commission offices already received it or not, so I apologize if this is a duplicate. Anyway, this is the most recent version that we have.

Anna Bradford
Policy Advisor for Nuclear Materials
Office of Chairman Jaczko
U.S. Nuclear Regulatory Commission
301-415-1827

From: Bubar, Patrice
Sent: Tuesday, March 15, 2011 6:17 PM
To: Coggins, Angela; Sharkey, Jeffry; Sosa, Belkys; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
Subject: RE: Prep Material for

Angela – please clarify how this material relates to the hearing tomorrow. Is there a prepared statement the Chairman is using tomorrow?

I don't believe Commissioner Magwood's office has received the Qs and As from OPA.

Additionally – please clarify what the Chairman will be using as remarks at the meeting/hearing with the Senate Environment and Public Works Committee tomorrow.

Thank you.

Patrice Bubar
of Staff
Office of Commissioner William D. Magwood

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FM 2416 of 2929 58

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Sosa, Belkys

From: Bradford, Anna
Sent: Tuesday, March 15, 2011 6:38 PM
To: Bubar, Patrice; Sharkey, Jeffrey; Sosa, Belkys; Nieh, Ho
Cc: Batkin, Joshua; Coggins, Angela
Subject: RE: Prep Material for
Attachments: Chairman JaczkoQA7_031511.docx

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Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Coggins, Angela
Sent: Tuesday, March 15, 2011 5:57 PM
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Batkin, Joshua; Bradford, Anna
Subject: Prep Material for

everyone! In addition to the Q&As that I believe you already received from OPA, this is a one-pager that staff has been updating for the Chairman's use and that Mr. Borchardt used for today's hill briefing. I believe it is just a

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summary of the more detailed status reports you receive, but in case you find it useful, I thought I would provide. Thanks!

Angela B. Coggins
Policy Director
Office of Chairman Gregory B. Jaczko
U.S. Nuclear Regulatory Commission
[301-415-1828](tel:301-415-1828)/angela.coggins@nrc.gov

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March 11, 2011 Japan Earthquake/Tsunami Aftermath
As of 11:30 a.m. 3/15/2011

1. What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?

Public Answer: We are closely following events in Japan, working with other agencies of the federal government, and have been in direct contact with our counterparts in that country. We have sent a total of 11 staff to Tokyo in response to the Japanese government's request for assistance. Two of those NRC staff members, knowledgeable about boiling water reactors, are already in Japan participating in the USAID team.

Additional technical, non-public information:

We are taking the knowledge that the staff has about the design of the US nuclear plants and we are applying this knowledge to the Japan situation. For example, this includes calculations of severe accident mitigation that have been performed. Tony Ulises and Jim Trapp are in-country. Team led by Chuck Casto enroute from various locations.

2. What's going to happen following the hydrogen explosions everyone's seen from the video footage?

Public Answer: The NRC is aware of the Japanese efforts to stabilize conditions at the affected reactors, and those actions are in line with what would be done in the United States. The NRC continues to monitor information on the status of the reactor core, the reactor vessel and the containment structure -- all three areas are important to controlling the situation and protecting the public.

Additional technical, non-public information:

The explosions affected the secondary containment buildings for Units 1 and 3 of the reactor plant. The primary containment was unaffected by the explosion. This does expose the spent fuel pools to atmosphere but should not affect the integrity of the spent fuel pool. With the integrity of the Secondary Containment breached it is more essential to maintain Primary Containment intact.

To provide additional protection to Primary Containment, US reactors of the containment type similar to Fukushima Unit 1 installed a hardened vent line from primary containment directly to the vent stack. A hardened vent provides a release path which would prevent an overpressurization of containment as experienced at Fukushima Unit One. Venting from the hardened vent is typically a manual operation that is controlled by the Emergency Operating Procedures as a last resort to protect the containment from failure. This vent path can be directly from the upper containment or from the torus (the preferred vent path due to scrubbing effect of the torus water).

3. What should be done to protect people in Alaska, Hawaii and the West Coast from radioactive fallout?

Public Answer: The NRC continues to believe that the type and design of the Japanese reactors, combined with how events have unfolded, will prevent radiation at harmful levels from reaching U.S. territory.

Additional technical, non-public information: NRC is working with DHS, EPA and other federal partners to ensure monitoring equipment for confirmatory readings is properly positioned, based on meteorological and other relevant information.

Questions and Answers developed by Rob Taylor

4. Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?

Public Answer: All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located in areas with low and moderate seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account even very rare and extreme seismic and tsunami events.

The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information:

Currently operating reactors were designed using a "deterministic" or "maximum credible earthquake" approach. Seismic hazard for the new plants is determined using a much more robust probabilistic seismic hazard assessment approach that explicitly addresses uncertainty and very rare events, as described in RG1.208. The NRC requires that adequate margin beyond the design basis ground shaking levels is assured. The NRC further enhances seismic safety for beyond-design-basis events through the use of a defense-in-depth approach.

In addition, the NRC periodically reviews the seismic risk at operating reactors when information may have changed. Over the last few years the NRC has undertaken a program called Generic Issue 199, which is focused on assessing hazard for plants in the central and eastern US using the latest techniques (developed in part during reviews of Western U.S. plants) and determining the possible risk implications of any increase in the anticipated ground shaking levels. This program will help us assure that the plants are safe under exceptionally rare and extreme ground motions that represent beyond-design-basis events.

5. What would U.S. plants do in this situation?

Public Answer: The NRC requires plant designs to include multiple and diverse safety systems, and plants must test their emergency preparedness capabilities on a regular basis. Plant operators are very capable of responding to significant events. In addition, NRC regulations require plants to have plans in place that would allow them to mitigate even "worst case scenarios".

Since 9/11, we have implemented requirements for licensees to have additional response capabilities for extreme situations.

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Additional technical, non-public information:

U.S. nuclear plants have procedures in place to address a variety of accident scenarios, including abnormal operating procedures, emergency operating procedures, severe accident management guidelines and emergency plans. Additionally, the NRC activates Incident Response centers in Headquarters and individual Regions as necessary for the event to provide technical monitoring and support.

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There are a range of protective measures that we use ... the most effective is evacuation. Local government officials are responsible for determining the best means to protect their public. KI is another means for protection but evacuation and sheltering are the primary means that are used.

9. Was there any damage to U.S. reactors from either the earthquake or the resulting tsunami?

Public Answer: No

Additional, technical non-public information: Diablo Canyon Units 1 and 2 were the only US plants to declare any type of an emergency classification. The site entered an "unusual event" based on a tsunami warning from the State, NOAA, NWS, Coast Guard or System Dispatcher following the Japanese earthquake. They have since exited the "unusual event" declaration, based on a downgrade to a tsunami advisory.

10. Has this incident changed the NRC perception about earthquake risk?

Public Answer: There has been no change in the NRC's perception of earthquake hazard (i.e. ground shaking levels) for US nuclear plants. As is prudent, the NRC will certainly be looking closely at this incident and the effects on the Japanese nuclear power plant in the future to see if any changes are necessary to NRC regulations.

Additional, technical, non-public information.

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11. Will this incident affect new reactor licensing?

Public Answer: It is not appropriate to hypothesize on such a future scenario at this point.

Additional, technical non-public information:

This event could potentially call into question the NRC's seismic requirements which could require the staff to re-evaluate the staff's approval of the AP1000 and ESBWR design and certifications.

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Public Answer: Each plant is designed to a ground-shaking level that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of an earthquake and the distance from the fault plane to the site. The probabilistic approaches currently used by the NRC account for a large number of different magnitudes.

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Additional, technical non-public information: No additional.

14. How many reactors are along coastal areas that could be affected by a tsunami (and which ones)?

Public Answer: Many plants are located in coastal areas that could theoretically be affected by tsunami. Two plants, Diablo Canyon and San Onofre, are on the Pacific Coast, which is known to have tsunami hazard. There are also two plants on the Gulf Coast, South Texas and Crystal River. There are many plants on the Atlantic Coast or on rivers that may be affected by a tidal bore. These include St. Lucie, Turkey Point, Brunswick, Oyster Creek, Millstone, Pilgrim, Seabrook, Calvert Cliffs, Salem/Hope Creek, and Surry. Tsunami on the Gulf and Atlantic Coasts occur, but are very rare. Generally the flooding anticipated from hurricane storm surge exceeds the flooding expected from a tsunami for plants on the Atlantic and Gulf Coast.

Additional, technical non-public information: None

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15. How many U.S. plants have designs similar to the affected Japanese reactors (and which ones)?

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16. What resources are the Japanese asking for?

The Japanese have formally requested equipment needed to cool the reactor fuel. This includes such things as pumps, fire hoses, portable generators, and diesel fuel. The NRC is coordinating with General Electric, which has plant design specifications, to ensure any equipment provided will be capable of meeting the needs of the Japanese.

17. What should the American public know about the incident in Japan?

The events unfolding in Japan are the result of a catastrophic series of natural disasters. These include the fifth largest earthquake in recorded history and the resulting devastating tsunami. Despite these unique circumstances, the Japanese appear to have taken reasonable actions to mitigate the event and protect the surrounding population. Since the beginning of the event, the NRC has continuously manned its Operations Center in Rockville, MD in order to gather and examine all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States.

18. What could you say about the dangers to the American public from our nuclear plants?

As the events in Japan continue to unfold, the NRC is focused on supporting the Japanese government and people in bringing this crisis to closure in the safest manner possible. The NRC remains convinced that U.S. nuclear power plants are designed and operated in a manner that protects public health and safety. The time will come, after this crisis is behind us, to evaluate what, if any, changes are needed at U.S. nuclear power plants. We will assess all the available information and, as we have done with previous natural disasters, such as the 2007 earthquake in the Sea of Japan and the 2004 tsunami in the Indian Ocean, evaluate whether enhancements to U.S. nuclear power plants are warranted.

19. What happens next in Japan? How long will it take to assess the damage to the reactors?

The current focus is ensuring that adequate cooling of the reactor fuel at each of the affected Japanese reactors is established and maintained. In the days, weeks, and months that follow, there will be adequate time to assess the damage and determine next steps.

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20. Compare this incident to the Three Mile Island. What are the similarities?

The events at Three Mile Island in 1979 were the result of an equipment malfunction that resulted in the loss of cooling water to the reactor fuel. Subsequent operator actions compounded the malfunction ultimately resulting in the partial core meltdown. While details are still developing, the events in Japan appear to be the result of an earthquake and subsequent tsunami that knocked out electrical power to emergency safety systems designed to cool the reactor fuel. In both events the final safety barrier, the containment building, contained the majority of the radioactivity preventing its release to the environment.

21. Why did the seawater fail to cool the reactor?

Based on information available to the NRC, it appears that the seawater has been effective at providing some cooling for the reactor. While it appears that some fuel damage has occurred, there will be plenty of time once this crisis is resolved to determine the effectiveness of the measures taken in response to this event.

22. If Chernobyl was a 7 and Three Mile Island was a 5, when does this event move from the 4 level?

The International Atomic Energy Agency (IAEA) rates nuclear events in accordance with its International Nuclear and Radiological Event Scale (INES). IAEA has assigned the events in Japan an INES rating of 4, "Accident with Local Consequences." This rating is subject to change as events unfold and additional information becomes available. INES classifies nuclear accidents based on the radiological effects on people and the environment and the status of barriers to the release of radiation. IAEA determinations regarding the INES rating of events are made independently.

Three Mile Island was assigned an INES rating of 5, "Accident with Wider Consequences," due to the severed damage to the reactor core.

23. Are any Americans in danger – armed forces, citizens in Tokyo?

The NRC, in consultation with the White House and U.S. Embassy, has advised United States citizens in Japan to follow the protective measures recommended by the Japanese government. These measures appear to be consistent with steps the United States would take. The Department of Defense has personnel trained in radiation protective measures and is responsible for providing guidance to U.S. armed forces. Inquiries regarding U.S. citizens in Japan should be directed to the State Department, Consular Services at 202-647-7004.

24. What is the worst case scenario for the plant?

In a nuclear emergency, the most important action is ensure the core is covered with water to provide cooling to remove any heat from the fuel rods. Without adequate cooling, the fuel rods will melt. Should the final containment structure fail, radiation from these melting fuel rods would be released to the atmosphere and additional protective measures may be necessary, depending on factors such as prevailing wind patterns.

25. As time goes on, does the chance for a meltdown increase?

Not necessarily. Each passing hour the fuel rods will become cooler. If adequate cooling can be established and maintained, the risk of a meltdown will be mitigated.

26. Is our battery backup power less effective than the Japanese?

No. US regulations do not specify the length of time that you need to have the batteries operate following a loss of offsite power (most sites plan to have battery backup capability for 8 hours). Instead, the amount of time is dependent on the site recovery strategy and is based on

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River Bend Station (30 miles north of Baton Rouge, LA) did not experience damage to any safety related equipment and only minimal damage to emergency planning equipment (one siren) during and after Hurricane Katrina. The station reduced power to 70 percent core thermal power on August 28, 2005, due to reduced electrical grid loads. Access was maintained to the plant throughout the event. On September 2, 2005, the plant returned to 100% power.

Also, in 1992 the eye of Hurricane Andrew, a category 5 hurricane, passed directly over the Turkey Point nuclear plant. The plant was shut down prior to the hurricane making landfall and an assessment of the plant following the hurricane demonstrated that the plant sustained very little damage and all of the safety equipment was intact. (Most of the damage was to the security fences being blown down).

31. With NRC moving to design certification, at what point is seismic capability tested – during design or modified to be site-specific? If in design, what strength seismic event must these be built to withstand?

The regulations related to seismic requirements are contained in 10 CFR 50 Appendix A criterion 2.

During design certification, vendors propose a seismic design in terms of a ground motion spectrum for their nuclear facility. This spectrum is called a standard design response spectrum and is developed so that the proposed nuclear facility can be sited at most locations in the central and eastern United States. The vendors show that this design ground motion is suitable for a variety of different subsurface conditions such as hard rock, deep soil, or shallow soil over rock. Combined License and Early Site Permits applicants are required to develop a site specific ground motion response spectrum that takes into account all of the earthquakes in the region surrounding their site as well as the local site geologic conditions. Applicants estimate the ground motion from these postulated earthquakes to develop seismic hazard curves. These seismic hazard curves are then used to determine a site specific ground motion response spectrum that has a maximum annual likelihood of 1×10^{-4} of being exceeded. This can be thought of as a ground motion with a 10,000 year return period. This site specific ground motion response spectrum is then compared to the standard design response spectrum for the proposed design. If the standard design ground motion spectrum envelopes the site specific ground motion spectrum then the site is considered to be suitable for the proposed design. If the standard design spectrum does not completely envelope the site specific ground motion spectrum, then the COL applicant must do further detailed structural analysis to show that the design capacity is adequate. Margin beyond the standard design and site specific ground motions must also be demonstrated before fuel loading can begin.

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Sosa, Belkys

From: Snodderly, Michael
Wednesday, March 16, 2011 6:49 PM
Apostolakis, George; Baggett, Steven; Sosa, Belkys; Davis, Roger
Subject: Fw: Seismic Q&As 3-16-11 3am version
Attachments: Seismic Questions for Incident Response 3-16-11 3am.pdf

I found these Q and A helpful

Sent from my NRC Blackberry
at (b)(6)

From: Orders, William
To: Snodderty, Michael
Sent: Wed Mar 16 18:33:01 2011
Subject: FW: Seismic Q&As 3-16-11 3am version

From: Kammerer, Annie
Sent: Wednesday, March 16, 2011 3:59 PM
To: Morris, Scott; Orders, William
Subject: Fw: Seismic Q&As 3-16-11 3am version

Here's today's version

Cheers,
Annie

Sent from an NRC blackberry
Annie Kammerer
mobile (b)(6)
bb (b)(6)
annie.kammerer@nrc.gov

From: Kammerer, Annie
To: Kammerer, Annie; Hiland, Patrick; Skeen, David
Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Chokshi, Niles; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Glitter, Joseph; Howe, Allen; Case, Michael; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael; Devlin, Stephanie; Nguyen, Quynh; Meighan, Sean; Vogel, Anton; Lantz, Ryan; Jones, Henry; Bagchi, Goutam; McIntyre, David; Thomas, Eric; Mahoney, Michael; Polickoski, James
Sent: Wed Mar 16 04:14:09 2011
Subject: Seismic Q&As 3-16-11 3am version

Ali,

Here's the latest version of the seismic Q&As. It is (I believe) a big improvement from yesterday. We had quite a few new questions today, which were included here (not all with answers yet).

A sharepoint site is being set up for the Q&As. The link will be provided as soon as we have it so that anyone can get the latest version.

We are continuing to compile the questions that come in and update the seismic Q&A document. If you have suggested changes, or want to provide missing answers, please forward them to me (annie) for compilation. Please also CC Cliff Munson and Jon Ake.

This is a living document and will be updated daily in the foreseeable future.

Cheers,
Annie

PS: the following people have questions assigned in this document or volunteered to help. Please look for your name or for the gaps in your area of expertise. Also, please review the questions in your area of expertise: Goutam Bagchi, Nilesh Chokshi, Henry Jones, Rich Raione, Mike Markley (if you can get me help on some), Jose Pires, Lara Uselding (help me get the RIV questions to the right people), Jon and Cliff. Thanks for the help!

From: Kammerer, Annie
Sent: Tuesday, March 15, 2011 3:41 AM
To: Hiland, Patrick; Skeen, David
Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Glitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Glitter, Joseph; Howe, Allen; Case, Michael; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael
Subject: latest version of Q&As

All,

This is the first draft of the seismic-specific Q&As. It is pretty rough and there are many answers still missing, but people have contributed a lot and we thought it may be useful for many people trying to answer questions coming in.

We are continuing to compile the questions that come in and update the seismic Q&A document. If you have suggested changes, or want to provide missing answers, please forward them to me for compilation.

This is a living document and will be updated daily in the foreseeable future.

Annie

Dr. Annie Kammerer, PE
Senior Seismologist and Earthquake Engineer
US Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Washington DC 20555

(b)(6)

mobile
BB

Compiled Seismic Questions for NRC Response to the March 11, 2011 Japanese Earthquake and Tsunami

This is current as of 3-16-11 at 3 am.

The keeper of this file is Annie Kammerer. Please provide comments, additions and updates to Annie with CC to Clifford Munson and Jon Ake.

A SharePoint site has been set up so that anyone can download the latest Q&As. Information will be provided as soon as we have a link to this document on line.

We greatly appreciate the assistance of the many people who have contributed. The enclosed list of questions and answers has been compiled from multiple sources including, questions forwarded from NRC staff, GI-199 communications plan, Diablo Canyon communications plan, the NEI website, lists of questions that followed the 2007 earthquake that shut down the Kashiwazaki-Kariwa plant, and others. Please do not distribute beyond the NRC.

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Natural Hazards and Ground Shaking Design Levels

1) Did the Japanese underestimate the size of the maximum credible earthquake that could affect the plants?

Public response: The magnitude of the earthquake was somewhat greater than was expected for that part of the subduction zone by seismologists worldwide. The Japanese plants were recently reviewed to ground shaking similar to that observed. The review level ground motions were expected to result from a smaller earthquake closer to the sites.

Additional, technical, non-public information: None.

2) Can a very large earthquake and tsunami happen here?

Public response: This earthquake was caused by a "subduction zone" event, which is the type of mechanism that produces the largest magnitude earthquakes. A subduction zone is a tectonic plate boundary where one tectonic plate is pushed under another plate. In the continental US, the only subduction zone is the Cascadia subduction zone which lies off the coast of northern California, Oregon and Washington. So, an earthquake and tsunami this large could only happen in that region. The only plant in that area is Columbia, which is far from the coast and the subduction zone. Outside of the Cascadia subduction zone, earthquakes are not expected to exceed a magnitude of approximate 8, which is about 10 times smaller than a magnitude 8.9.

Additional, technical, non-public information: Magnitude is on a log scale, so 9 is 10 times bigger than an 8.

3) Has this changed our perception of Earthquake risk?

Public Answer: This does not change the NRC's perception of earthquake hazard (i.e. ground shaking) at US plants. It is too early to tell what the lessons from this earthquake are from an engineering perspective. The NRC will look closely at all aspects of response of the plants to the earthquake and tsunami to determine if any actions need to be taken in US plants and if any changes are necessary to NRC regulations.

Additional, technical, non-public information: We expect that there would be lessons learned and we may need to seriously relook at common cause failures, including dam failure and tsunami.

4) What magnitude earthquake are US plants designed to?

Public Answer: Each plant is designed to a ground-shaking level that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of an earthquake and the distance from the fault to the site. The magnitude alone cannot be used to predict ground motions. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant. Several tables that include plant design ground motions are provided as the first table in the "additional information" section of this document.

Additional, technical non-public information: In the past, "deterministic" or "scenario based" analyses were used to determine ground shaking (seismic hazard) levels. Now a probabilistic method is used that accounts for possible earthquakes of various magnitudes that come from potential sources (including background seismicity) and the likelihood that each particular hypothetical earthquake occurs.

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5) How many US reactors are located in active earthquake zones (and which reactors)?

Public Answer: Although we often think of the U.S. as having “active” and “non-active” earthquake zones, earthquakes can actually happen almost anywhere. Seismologists typically separate the U.S. into low, moderate, and high seismicity zones. The NRC requires that every plant be designed for site-specific ground motions that are appropriate for their locations. In addition, the NRC has specified a minimum ground shaking level to which plants must be designed.

Seismic designs at U.S. nuclear power plants are developed in terms of seismic ground motion spectra, which are called the Safe Shutdown Earthquake ground motion response spectra (SSE). Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location. Currently operating nuclear power plants developed their SSEs based on a “deterministic” or “scenario earthquake” that accounts for the largest earthquake expected in the area around the plant.

Generally speaking, seismic activity in the regions surrounding U.S. plants is much lower than that for Japan since most U.S. plants are located in the interior of the stable continental U.S. However, the most widely felt earthquakes within the continental U.S. are the 1811-12 New Madrid sequence and the 1886 Charleston, SC, which were estimated to be between about magnitude 7.0 to 7.75. Nuclear power plants in the U.S. are sited far away from these two earthquake zones as well as other identified potential seismic sources.

On the west coast of the U.S., the two nuclear power plants are designed to specific ground motions from earthquakes of about magnitude 7+ on faults located just offshore of the plants. The earthquakes on these faults are mainly strike-slip (horizontal motion) type earthquakes, not subduction zone earthquakes. Therefore, the likelihood of a tsunami from these faults is remote.

Additional, technical non-public information: None.

6) How many reactors are along coastal areas that could be affected by a tsunami (and which ones)?

Public Answer: Many plants are located in coastal areas that could potentially be affected by tsunami. Two plants, Diablo Canyon and San Onofre, are on the Pacific Coast, which is known to have tsunami hazard. There are also two plants on the Gulf Coast, South Texas and Crystal River. There are many plants on the Atlantic Coast or on rivers that may be affected by a tidal bore resulting from a tsunami. These include St. Lucie, Turkey Point, Brunswick, Oyster Creek, Millstone, Pilgrim, Seabrook, Calvert Cliffs, Salem/Hope Creek, and Surry. Tsunami on the Gulf and Atlantic Coasts occur, but are very rare. Generally the flooding anticipated from hurricane storm surge exceeds the flooding expected from a tsunami for plants on the Atlantic and Gulf Coast.

Additional, technical non-public information: A table with information on tsunami design levels is provided in the “Additional Information” section of this document.

7) If the earthquake in Japan was a larger magnitude than considered by plant design, why can't the same thing happen in the US?

Public response: *Discuss in terms of, IPEEE, Seismic PRA to be provided by Nilesh*

Additional, technical, non-public information: ADD

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- 8) If the earthquake in Japan was a larger magnitude than considered by plant design, why can't the same thing happen in the US?

Public response: *Discuss in terms of, IPEEE, Seismic PRA to be provided by Nilesh*

Additional, technical, non-public information: ADD

- 9) What if an earthquake like the Sendai earthquake occurred near a US plant?

Public response: *ADD*

Additional, technical, non-public information: ADD

- 10) What would be the results of a tsunami generated off the coast of a US plant? (Or why are we confident that large tsunamis will not occur relatively close to US shores?)

Public response: *Request for answer by Henry Jones, Goutam Bagchi and/or Richard Raione (once the tsunami fact sheet is done and you have time).*

Additional, technical, non-public information: ADD

- 11) Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?

Public Answer: All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located within areas with low and moderate seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account even rare and extreme seismic and tsunami events.

The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information: Currently operating reactors were designed using a "deterministic" or "maximum credible earthquake" approach. Seismic hazard for the new plants is determined using a probabilistic seismic hazard assessment approach that explicitly addresses uncertainty, as described in Regulatory Guide 1.208. The NRC requires that adequate margin beyond the design basis ground shaking levels is assured. The NRC further enhances seismic safety for beyond-design-basis events through the use of a defense-in-depth approach.

In addition, the NRC reviews the seismic risk at operating reactors as needed when information may have changed. Over the last few years the NRC has undertaken a program called Generic Issue 199, which is focused on assessing hazard for plants in the central and eastern US using the latest techniques and data and determining the possible risk implications of any increase in the anticipated ground shaking levels. This program will help us assure that the plants are safe under exceptionally rare and extreme ground motions that represent beyond-design-basis events.

- 12) What level of earthquake hazard are the US reactors designed for?

Public Answer: Each reactor is designed for a different ground motion that is determined on a site-specific basis. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant. New reactors are designed using probabilistic techniques that characterize the hazard (i.e. ground shaking levels) and uncertainty at the proposed site. Ground motions from all potential seismic sources in the region are estimated and used to develop an appropriate site specific ground motion, which has a return period of 10,000 years on average over very long time periods.

Additional technical, non-public information: None

13) Does the NRC consider earthquakes of magnitude 8.9?

Public Answer: Earthquakes with very large magnitudes, such as the recent earthquake of the coast of Japan, occur only within subduction zones. Subduction zones are regions where one of the earth's tectonic plates is subducting beneath another. In the continental US, the only subduction zone is the Cascadia subduction zone, which lies off of the coast of northern California, Oregon, and Washington. The only nuclear power plant in that area is Columbia, which is far from the coast and the subduction zone.

Seismic designs at U.S. nuclear power plants are developed in terms of seismic ground motion spectra, which are called the Safe Shutdown Earthquake ground motion response spectra (SSE). Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location. Currently operating nuclear power plants developed their SSEs based on a "deterministic" or "scenario earthquake" basis that account for the largest earthquake expected in the area around the plant. Seismic activity in the regions surrounding U.S. plants is much lower than that for Japan since most U.S. plants are located in the interior of the stable continental U.S. The largest earthquakes within the continental U.S. are the 1811-12 New Madrid sequence and the 1886 Charleston, SC, which were estimated to be between about magnitude 7 to 7.5. Nuclear power plants in the U.S. are sited far away from these two earthquake zones as well as other potential seismic sources. On the west coast of the U.S., the two nuclear power plants are designed to specific ground motions from earthquakes of about magnitude 7 on faults located just offshore of the plants. The earthquakes on these faults are mainly strike-slip (horizontal motion) type earthquakes, not subduction zone earthquakes. Therefore, the likelihood of a tsunami from these faults is very remote.

Additional technical, non-public information: None.

14) What are the definitions of the SSE and OBE?

CLEAN UP BELOW Information – late question

From RG1.208 Safe Shutdown Earthquake Ground Motion (SSE). The vibratory ground motion for which certain structures, systems, and components are designed, pursuant to Appendix S to 10 CFR Part 50, to remain functional. The SSE for the site is characterized by both horizontal and vertical free-field ground motion response spectra at the free ground surface

Appendix S to 10 CFR Part 50 (3) has the following information: Required Plant Shutdown. If vibratory ground motion exceeding that of the Operating Basis Earthquake Ground Motion or if significant plant damage occurs, the licensee must shut down the nuclear power plant. If systems, structures, or components necessary for the safe shutdown of the nuclear power plant are not available after the occurrence of the Operating Basis Earthquake Ground Motion, the licensee must consult with the Commission and must propose a plan for the timely, safe shutdown of the nuclear power plant. Prior to resuming operations, the licensee must demonstrate to the Commission that no functional damage has occurred to those features necessary for continued operation without undue risk to the health and safety of the public and the licensing basis is maintained.

The the ratio is provided in guidance as the ratio that the licensees can chose without additional analysis. The OBE mostly used to be half for existing plants, but now it's a 1/3 unless you do analyses to show why it should be 1/2.

Definition of Safe Shutdown	The safe-shutdown earthquake (SSE) for the site is the ground motion response spectra (GMRS), which also satisfies the minimum requirement of paragraph IV(a)(1)(i) of Appendix S,
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Earthquake	"Earthquake Engineering Criteria for Nuclear Power Plants," to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the Code of Federal Regulations (10 CFR Part 50).
Definition of Operating Basis Earthquake:	<p>To satisfy the requirements of paragraph IV(a)(2)(A) of Appendix S to 10 CFR Part 50, the operating-basis earthquake (OBE) ground motion is defined as follows:</p> <ul style="list-style-type: none"> (i) For the certified design portion of the plant, the OBE ground motion is one-third of the CSDRS. (ii) For the safety-related noncertified design portion of the plant, the OBE ground motion is one-third of the design motion response spectra, as stipulated in the design certification conditions specified in design control document (DCD). (iii) The spectrum ordinate criterion to be used in conjunction with Regulatory Guide 1.166, "Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Post-earthquake Actions," issued March 1997, is the lowest of (i) and (ii).

15) What is the likelihood of the ground motions occurring over the life of the plant?

TO BE CLEANED UP BY MUNSON AND AKE

Assuming independent Poisson behavior, the relationship is—Return Period = Exposure Period/ln(1/P), where P=probability of non-exceedance, and exposure period is 50 years say. IF we plug 10,000 years for the return period we find that the probability of non-exceedance is .995, i.e. the probability of exceedance is 0.5%.

To properly emphasize the conservatism in our current process I suggest we refer to this as: our design ground motions are required to have an annual probability of exceedance of 1E-4 or less which alternatively can be viewed as a 0.5% probability of exceedance (or less) in a 50 year period.

Thanks for clarifying. I think in our effort to make this understandable that we sometimes don't consider all of the ramifications. I like using "about 0.5-1.0% probability of exceedance in 50 years" because that provides a straight comparison to the USGS hazard maps

The point you make is quite true and part of my concern. However, keep in mind we interested in the ground motions that are possibly going to happen in the design life of the plant (a few years to a few decades). We want ensure that the design ground motions have a very low probability of being exceeded (i.e. 1E-4 AFE is equal to about 0.5-1.0% probability of exceedance in 50 years). Use of the "10,000 year ground motion" invites goofy questions like "how can we guarantee consistency in seismic/tectonic characteristics over 10,000 or 100,000 years?", as well as potential sampling issues, i.e. how do we sample a few years and estimate behavior over 10,000? I think it best to just leave it at 1E-4 or 0.5% in 50 years or some way to express it that is consistent with our intended use.

16) What is magnitude anyway? What is the Richter Scale? What is intensity?

17)

Design Against Natural Hazards & Plant Safety in the US

18) Are power plants designed for Tsunami's?

Public Answer: Yes. Plants are built to withstand a variety of environmental hazards and those plants that might face a threat from tsunami are required to withstand large waves and the maximum wave height at the intake structure (which varies by plant.)

Additional, technical, non-public information: Tsunami are considered in the design of US nuclear plants. Nuclear plants are designed to withstand flooding from not only tsunami, but also hurricane and storm surge; therefore there is often significant margin against tsunami flooding. However, it should be noted that Japanese experience has shown that drawdown can be a significant problem.

Currently the US NRC has a tsunami research program that is focused on developing modern hazard assessment techniques and additional guidance through cooperation with the National Oceanic and Atmospheric Administration and the United States Geological Survey. This has already lead to several technical reports and an update to NUREG 0-800. The NOAA and USGS contractors are also assisting with NRO reviews of tsunami hazard. A new regulatory guide on tsunami hazard assessment is currently planned in the office of research, although it is not expected to be available in draft form until 2012.

19) What level of Tsunami are we designed for?

Public Answer: Like seismic hazard, the level of tsunami that each plant is designed for is site-specific and is appropriate for what may occur at each location.

Additional, technical, non-public information: None.

20) How was the seismic design basis for an existing nuclear power plant established?

Public Answer: The seismic ground motion used for the design basis was determined from the evaluation of the maximum historic earthquake within 200 miles of the site, without explicitly considering the time spans between such earthquakes; safety margin was then added beyond this maximum historic earthquake to form a hypothetical *design basis earthquake*. The relevant regulation for currently operating plants is 10 CFR Part 100, Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants" (<http://www.nrc.gov/reading-rm/doc-collections/cfr/part100/part100-appa.html>).

Additional, technical, non-public information: See discussion at end of GI-199 section for discussion of safety margin and design basis.

21) Is there margin above the design basis?

Public Answer: Yes, there is margin beyond the design basis). In the mid to late 1990s, NRC staff reviewed the plants' assessments of potential consequences of severe earthquakes (earthquakes beyond the safety margin included in each plant's design basis), which licensees performed as part of the Individual Plant Examination of External Events (or IPEEE) program. From this review, the staff determined that seismic designs of operating plants in the United States have adequate safety margins, for withstanding earthquakes, built into the designs.

Additional, technical, non-public information: None.

22) Are US plants safe?

Public Answer: US plants are designed for appropriate earthquake shaking levels and are safe. Currently the NRC is also conducting a program called Generic Issue 199, which is reviewing the adequacy of earthquake design of US NPPs in the central and eastern North America based on the latest data and analysis techniques.

Additional, technical, non-public information: None.

23) Was the Japanese plant designed for this type of accident? Are US plants?

Public Answer: Plants in both the US and Japan area designed for earthquake shaking. In addition to the design of the plants, significant effort goes into emergency response planning and accident mitigation. This approach is called defense-in-depth.

Additional, technical, non-public information: None.

24) Why do we have confidence that US nuclear power plants are adequately designed for earthquakes and tsunamis?

Public Answer: Plants in both the US and Japan area designed for earthquake shaking. In addition to the design of the plants, significant effort goes into emergency response planning and accident mitigation. This approach is called defense-in-depth.

Additional, technical, non-public information: None.

25) Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?

Public Answer: All U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located within areas with low and moderate seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account even rare and extreme seismic and tsunami events. Nuclear power plants are designed to be safe based on the most severe natural phenomena historically reported for the site and surrounding area. The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information: Currently operating reactors were designed using a "deterministic" or "maximum credible earthquake" approach. Seismic hazard for the new plants is determined using a probabilistic seismic hazard assessment approach that explicitly addresses uncertainty, as described in Regulatory Guide 1.208. The NRC requires that adequate margin beyond the design basis ground shaking levels is assured. The NRC further enhances seismic safety for beyond-design-basis events through the use of a defense-in-depth approach.

In addition, the NRC reviews the seismic risk at operating reactors as needed when information may have changed. Over the last few years the NRC has undertaken a program called Generic Issue 199, which is focused on assessing hazard for plants in the central and eastern US using the latest techniques and data and is determining the possible risk implications of any increase in the anticipated ground shaking levels. This program will help us assure that the plants are safe under exceptionally rare and extreme ground motions that represent beyond-design-basis events.

The reactor design is a Boiling Water Reactor that is similar to some U.S. designs, including Oyster Creek, Nine Mile Point and Dresden Units 2 and 3.

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

Public response: *ADD. Can someone discuss how we deal with station blackout? I need help with this one...*

Additional, technical, non-public information: ADD

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

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

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

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

Additional technical, non-public information: None

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

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

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

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

Additional technical, non-public information: None

29) Can you summarize the plant seismic design basis for the US plants? Are there any special issues associated with seismic design?

Public response: Please see one of the several tables provided in the "Additional information" section of this document

Additional, technical, non-public information: None

30) How do we know that the equipment in plants is safe in earthquakes?

Public response: All equipment important to safety (required to safely shutdown a nuclear power plant) is qualified to withstand earthquakes in accordance with plants' licensing basis and NRC regulations.

Additional, technical, non-public information: 10 CFR 50, Appendix A, General Design Criterion 2 and 4, 10 Part 100, and Appendix S. Guidance: Regulatory Guides 1.100, IEEE 344 and ASME QME-1

31) How do we know equipment will work if the magnitude is bigger than expected, like in Japan?

Public response: Plant systems are designed to mitigate a design basis earthquake which includes margin above the postulated site specific earthquake. (reviewers comment: this needs to be expanded)

Additional, technical, non-public information: See part 100 Reactor Site Criteria

32) Are US plants susceptible to the same kind of loss of power as happened in Japan?

Public response: Yes in the sense that sites can lose offsite power. Also, hurricane or tornado related high winds may potentially damage the transmission network in the vicinity of a nuclear plant. Flood waters can also affect transformers used to power station auxiliary system. These types of weather related events have the potential to degrade the offsite power source to a plant.

The onsite Emergency Diesel Generators need fuel oil stored in tanks that are normally buried underground. These tanks and associated pumps/piping require protection from the elements.

Above ground tanks have tornado/missile protection.

In case both offsite and onsite power supplies fail, NRC has required all licensee to evaluate for a loss of all AC power (station blackout) scenario and implement coping measures to safely shutdown the plant law 10 CFR 50.63.

Additional, technical, non-public information: Some plants have safeguards equipment below sea level and rely on watertight doors or Bilge pumps to remove water from equipment required to support safe shutdown. Overflowing rivers can result in insurmountable volume of water flooding the vulnerable areas.

33) How do we know that the EDGs in Diablo Canyon and SONGS will not fail to operate like in Japan?

Public response: EDGs are installed in a seismically qualified structure. Even if these EDGs fail, plants can safely shutdown using station blackout power source law 10 CFR 50.63.

Additional, technical, non-public information: None.

34) Is all equipment at the plant vulnerable to tsunami?

Public response: Plants are designed law GDC 2 to withstand protection against natural phenomena such as tsunami, earthquakes. (reviewers comment: this needs to be expanded. I need assistance with this)

Additional, technical, non-public information: ADD

35) What protection measures do plants have against tsunami?

Public response: Plants are designed iaw GDC 2 to withstand protection against natural phenomena such as tsunami, earthquakes. (note from reviewer: add information on breakwater from songs and Diablo example. I need assistance with this)

Additional, technical, non-public information: ADD

36) Is there a risk of loss of water during tsunami drawdown? Is it considered in design?

Public response: *Goutam, Henry and Rich, can you guys answer this?*

Additional, technical, non-public information: ADD

37) Are nuclear buildings built to withstand earthquakes? What about tsunami?

Public response: *There is language elsewhere in this document that answers that...copy here.*

Additional, technical, non-public information: ADD

38) Are aftershocks considered in the design of equipment at the plants? Are aftershocks considered in design of the structure?

Public response: ADD

Additional, technical, non-public information: ADD

39) Are there any special issues associated with seismic design at the plants? For example, Diablo Canyon has special requirements. Are there any others?

Public response: Both SONGS and Diablo canyon are licensed with an automatic trip for seismic events. *(can this be expanded? any others?) Mike Markley, can your group assist with this?*

Additional, technical, non-public information: ADD

40) Is the NRC planning to require seismic isolators for the next generation of nuclear power plants? How does that differ from current requirements and/or precautions at existing U.S. nuclear power plants?

Public response: The NRC would not require isolators for the next generation of plants. However, it is recognized that a properly designed isolation system can be very effective in mitigating the effect of earthquake. Currently the NRC is preparing guidance for plant designers considering the use of seismic isolation devices.

Additional, technical, non-public information: A NUREG is in the works in the office of research. It is expected to be available for comment in 2011.

41) Are there any U.S. nuclear power plants that incorporate seismic isolators? What precautions are taken in earthquake-prone areas?

Public response: No currently constructed nuclear power plants in the US use seismic isolators. However seismic isolation is being considered for a number of reactor designs under development. Currently seismic design of plants is focused on assuring that design of structures, systems, and components are designed and qualified to assure that there is sufficient margin beyond the design basis ground motion.

Additional, technical, non-public information: None.

42) Do you think that the recent Japan disaster will cause any rethinking of the planned seismic isolation guidelines, particularly as it regards earthquakes and secondary effects such as tsunamis?

Public response: Whenever an event like this happens, the NRC thoroughly reviews the experience and tries to identify any lessons learned. The NRC further considers the need to change guidance or regulations. In this case, the event will be studied and any necessary changes will be made to the guidance under development. However, it should be noted that Japan does not have seismically isolated nuclear plants.

Additional, technical, non-public information: None.

About Japanese Hazard, Design and Earthquake Impact

43) Was the damage done to the plants from the Earthquake or the Tsunami?

Public response: It is hard to tell at this point. In the nuclear plants there seems to have been some damage from the shaking. However, the tsunami lead to some of the biggest problems in terms of the loss of backup power. This is also true in the general population; the tsunami seems to have lead to most of the deaths.

Additional, technical, non-public information: None

44) What is the design level of the Japanese plants? Was it exceeded?

Public response: As a result of a significant change in seismic regulations in 2006, the Japanese regulator initiated a program to reassess seismic hazard and seismic risk for all nuclear plants in Japan. This resulted in new assessments of higher ground shaking levels (i.e. seismic hazard) and a review of seismic safety for all Japanese plants. The program is still on-going, but has already resulted in retrofit in some plants. Therefore, it is useful to discuss both the design level and a review level ground motion for the plants, as shown below.

Currently we do not have official information. However, it appears that the ground motions (in terms of peak ground acceleration) are similar to the S_2 shaking levels, although the causative earthquakes are different. Thus the design basis was exceeded, but the review level may not have been.

Table: Original Design Basis Ground Motions (S_2) and New Review Level Ground Motions (S_3) Used for Review of Japanese Plants

Plant sites	Contributing earthquakes used for determination of hazard	New DBGM S_3	Original DBGM S_2
Onagawa	Soutei Miyagiken-oki (M8.2)	580 gal (0.59g)	375 gal (0.38g)
Fukushima	Earthquake near the site (M7.1)	600 gal (0.62g)	370 gal (0.37g)
Tokai	Earthquakes specifically undefined	600 gal (0.62g)	380 gal (0.39g)
Hamaoka	Assumed Tokai (M8.0), etc.	800 gal (0.82g)	600 gal (0.62g)

Additional, technical, non-public information: None

45) What are the Japanese S_1 and S_2 ground motions and how are they determined?

Public response: Japanese nuclear power plants are designed to withstand specified earthquake ground motions, previously specified as S_1 and S_2 , but now simply S_3 . The design basis earthquake ground motion S_1 was defined as the largest earthquake that can reasonably be expected to occur at the site of a nuclear power plant, based on the known seismicity of the area and local faults that have shown activity during the past 10,000 years. A power reactor could continue to operate safely during an S_1 level earthquake, though in practice they are set to trip at lower levels. The S_2 level ground motion was based on a larger earthquake from faults that have shown activity during the past 50,000 years and assumed to be closer to the site. The revised seismic regulations in May 2007 replaced S_1 and S_2 with S_3 .

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The S₅ design basis earthquake is based on evaluating potential earthquakes from faults that have shown activity during the past 130,000 years. The ground motion from these potential earthquakes are simulated for each of the sites and used to determine the revised S₅ design basis ground motion level. Along with the change in definition, came a requirement to consider "residual risk", which is a consideration of the beyond-design-basis event.

Additional, technical, non-public information: None

46) Did this earthquake affect Kashiwazaki-Kariwa NPP?

Public response: No, this earthquake did not affect Kashiwazaki-Kariwa NPP and all reactors remained in their pre-earthquake operating state. It also did not trip during an earthquake of magnitude XX that occurred on the western side subsequent to the 8.9 earthquake. This is very important for the stability of Japan's energy supply due to the loss of production at TEPCO's Fukushima NPPs.

Additional, technical, non-public information: None

47) How high were the tsunami at the plants?

Public response: The actual tsunami height at the plants is not currently known. However, NOAA has publically information on the recordings at sea for many areas.

Additional, technical, non-public information: A preliminary rough estimate of tsunami height at the plant locations was provided to NRC by NOAA shortly after the earthquake. This was developed using NOAA's global ocean model and is shown in the "additional information" section. Most notably, there was a 6 meter wave at Fukushima and the wave at Onogawa may have been between 18 and 23 meters.

What happened in US Plants during the earthquake?

48) Was there any damage to U.S. reactors from either the earthquake or the resulting tsunami?

Public Answer: No

Additional, technical non-public information: Two US plants on the Pacific Ocean (Diablo Canyon and San Onofre) experienced higher than normal sea level due to tsunami. However, the wave heights were consistent with previously predicted levels and this had no negative impact to the plants. In response, Diablo Canyon Units 1 and 2 declared an "unusual event" based on tsunami warning following the Japanese earthquake. They have since exited the "unusual event" declaration, based on a downgrade to a tsunami advisory.

49) Have any lessons for US plants been identified?

Public Answer: The NRC is in the process of following and reviewing the event in real time. This, inevitably, leads to the indemnification of lessons that warrant further study. However, a complete understanding of lessons learned requires more information than is currently available to NRC staff.

Additional, technical non-public information: We need to take a closer look at common cause failures, such as earthquake and tsunami, and earthquake and dam failure.

Future Actions, Reassessment of US Plants and GI-199

50) What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?

Public Answer: We are closely following events in Japan, working with other agencies of the federal government, and have been in direct contact with our counterparts in that country. In addition, we are ready to provide assistance if there is a specific request. An NRC staffer is participating in the USAID team headed to Japan.

Additional technical, non-public information: We are taking the knowledge that the staff has about the design of the US nuclear plants and we are applying this knowledge to the Japan situation. For example, this includes calculations of severe accident mitigation that have been performed.

51) With NRC moving to design certification, at what point is seismic capability tested - during design or modified to be site-specific? If in design, what strength seismic event must these be built to withstand?

Public Answer: During design certification, vendors propose a seismic design in terms of a ground motion spectrum for their nuclear facility. This spectrum is called a standard design response spectrum and is developed so that the proposed nuclear facility can be sited at most locations in the central and eastern United States. The vendors show that this design ground motion is suitable for a variety of different subsurface conditions such as hard rock, deep soil, or shallow soil over rock. Combined License and Early Site Permits applicants are required to develop a site specific ground motion response spectrum that takes into account all of the earthquakes in the region surrounding their site as well as the local site geologic conditions. Applicants estimate the ground motion from these postulated earthquakes to develop seismic hazard curves. These seismic hazard curves are then used to determine a site specific ground motion response spectrum that has a maximum annual likelihood of 1×10^{-4} of being exceeded. This can be thought of as a ground motion with a 10,000 year return period. This site specific ground motion response spectrum is then compared to the standard design response spectrum for the proposed design. If the standard design ground motion spectrum envelopes the site specific ground motion spectrum then the site is considered to be suitable for the proposed design. If the standard design spectrum does not completely envelope the site specific ground motion spectrum, then the COL applicant must do further detailed structural analysis to show that the design capacity is adequate. Margin beyond the standard design and site specific ground motions must also be demonstrated before fuel loading can begin.

Additional technical, non-public information: None.

52) Is the earthquake safety of US plants reviewed once the plants are constructed?

Public response: Yes, earthquake safety is reviewed during focused design inspections, under the Generic Issues Program (GI-199) and as part of the Individual Plant Evaluation of External Events program (IPEEE) that was conducted in response to Generic Letter 88-20 Supplement 4.

Additional, technical, non-public information: None.

53) Does the NRC ever review tsunami risk for existing plants?

Public Answer: The NRC has not conducted a generic issue program on tsunami risk to date. However, some plants have been reviewed as a result of the application for a license for a new reactor. In the ASME/ANS 2009 seismic probabilistic risk assessment standard, all external hazards are included.

Additional, technical, non-public information: None.

54) Does GI-199 consider tsunami?

Public response: GI-199 stems from the increased in perceived seismic hazard focused on understanding the impact of increased ground motion on the risk at a plant. GI-199 does not consider tsunami

Additional, technical, non-public information: In the past there has been discussion about a GI program on tsunami, but the NRC's research and guidance was not yet at the point it would be effective. We are just getting to this stage and the topic should be revisited.

55) What is Generic Issue 199 about?

Public Answer: Generic Issue 199 investigates the safety and risk implications of updated earthquake-related data and models. These data and models suggest that the probability for earthquake ground shaking above the seismic design basis for some nuclear power plants in the Central and Eastern United States is still low, but larger than previous estimates.

Additional, technical, non-public information: See additional summary/discussion of GI-199 and terms below.

56) Where can I get current information about Generic Issue 199?

Public Answer: The public NRC Generic Issues Program (GIP) website (<http://www.nrc.gov/about-nrc/regulatory/gen-issues.html>) contains program information and documents, background and historical information, generic issue status information, and links to related programs. The latest Generic Issue Management Control System quarterly report, which has regularly updated GI-199 information, is publicly available at <http://www.nrc.gov/reading-rm/doc-collections/generic-issues/quarterly/index.html>. Additionally, the U.S. Geological Survey provides data and results that are publicly available at <http://earthquake.usgs.gov/hazards/products/conterminous/2008/>.

Additional, technical, non-public information: The GI-199 section of the NRC internal GIP website (<http://www.internal.nrc.gov/RES/projects/GIP/Individual%20GIs/GI-0199.html>) contains additional information about Generic Issue 199 (GI-199) and is available to NRC staff.

57) How was the seismic design basis for an existing nuclear power plant established?

Public Answer: The seismic ground motion used for the design basis was determined from the evaluation of the maximum historic earthquake within 200 miles of the site, without explicitly considering the time spans between such earthquakes; safety margin was then added beyond this

maximum historic earthquake to form a hypothetical *design basis earthquake*. The relevant regulation for currently operating plants is 10 CFR Part 100, Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants" (<http://www.nrc.gov/reading-rm/doc-collections/cfr/part100/part100-appa.html>).

Additional, technical, non-public information: See discussion at end of GI-199 section for discussion of safety margin and design basis.

58) Is there margin above the design basis?

Public Answer: Yes, there is margin beyond the design basis. In the mid to late 1990s, NRC staff reviewed the plants' assessments of potential earthquakes beyond the safety margin included in each plant's design basis), which licensees performed as part of the Individual Plant Examination of External Events (or IPEEE) program. From this review, the staff determined that seismic designs of operating plants in the Central and Eastern United States have considerable safety margins, for withstanding earthquakes, built into the designs.

Additional, technical, non-public information: The goal of seismic engineering is to design structures, systems and components that explicitly do not fail at the design level. The application of specific codes, standards, and analysis techniques results in margin beyond the design level. The assessments carried out as part of the IPEEE program demonstrated that margin exists in the operating reactors against seismic demand.

59) Are all U.S. plants being evaluated as a part of Generic Issue 199?

Public Answer: The scope of the Generic Issue 199 (GI-199) Safety/Risk Assessment is limited to all plants in the Central and Eastern United States. Although plants at the Columbia, Diablo Canyon, Palo Verde, and San Onofre sites are not included in the GI-199 Safety/Risk Assessment, the Information Notice on GI-199 is addressed to all operating power plants in the U.S. (as well as all independent spent fuel storage installation licensees). The staff will also consider inclusion of operating reactors in the Western U.S. in its future generic communication information requests.

Additional, technical, non-public information: The staff is currently developing specific information needs to be included in a Generic Letter to licensees in the CEUS.

60) Are the plants safe? If you are not sure they are safe, why are they not being shut down? If you are sure they are safe, why are you continuing evaluations related to this generic issue?

Public Answer: Yes, currently operating nuclear plants in the United States remain safe, with no need for immediate action. This determination is based on NRC staff reviews associated with Early Site Permits and updated seismic hazard information, the conclusions of the Generic Issue 199 Screening Panel (comprised of technical experts), and the conclusions of the Safety/Risk Assessment Panel (also comprised of technical experts).

No immediate action is needed because: (1) existing plants were designed to withstand anticipated earthquakes with substantial design margins, as confirmed by the results of the Individual Plant Examination of External Events program; (2) the probability of exceeding the *safe shutdown earthquake* ground motion may have increased at some sites, but only by a relatively small amount; and (3) the Safety/Risk Assessment Stage results indicate that the probabilities of seismic core damage are lower than the guidelines for taking immediate action.

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Even though the staff has determined that existing plants remain safe, the Generic Issues Program criteria (Management Directive 6.4) direct staff to continue their analysis to determine whether any cost-justified plant improvements can be identified to make plants enhance plant safety.

Additional, technical, non-public information : The Safety/Risk Assessment results confirm that plants are safe. The relevant risk criterion for GI-199 is total *core damage frequency* (CDF). The threshold for taking immediate regulatory action (found in NRR Office Instruction LIC-504, see below) is a total CDF greater than or on the order of 10^{-3} (0.001) per year. For GI-199, the staff calculated seismic CDFs of 10^{-4} (0.0001) per year and below for nuclear power plants operating in the Central and Eastern U.S. (CEUS) (based on the new U.S. Geological Survey seismic hazard curves). The CDF from internal events (estimated using the staff-developed Standardized Plant Analysis of Risk models) and fires (as reported by licensees during the IPSEE process and documented in NUREG-1742), when added to the seismic CDF estimates results in the total risk for each plant to be, at most, 4×10^{-4} (0.0004) per year or below. This is well below the threshold (a CDF of 10^{-3} [0.001] per year) for taking immediate action. Based on the determination that there is no need for immediate action, and that this issue has not changed the licensing basis for any operating plant, the CEUS operating nuclear power plants are considered safe. In addition, as detailed in the GI-199 Safety/Risk Assessment there are additional, qualitative considerations that provide further support to the conclusion that plants are safe.

Note: The NRC has an integrated, risk-informed decision-making process for emergent reactor issues (NRR Office Instruction LIC-504, ADAMS Accession No. ML100541776 [not publically available]). In addition to deterministic criteria, LIC-504 contains risk criteria for determining when an emergent issue requires regulatory action to place or maintain a plant in a safe condition.

61) What do you mean by "increased estimates of seismic hazards" at nuclear power plant sites?

Public Answer: *Seismic hazard* (earthquake hazard) represents the chance (or probability) that a specific level of ground shaking could be observed or exceeded at a given location. Our estimates of seismic hazard at some Central and Eastern United States locations have changed based on results from recent research, indicating that earthquakes occurred more often in some locations than previously estimated. Our estimates of seismic hazard have also changed because the models used to predict the level of ground shaking, as caused by a specific magnitude earthquake at a certain distance from a site, changed. The increased estimates of seismic hazard at some locations in the Central and Eastern United States were discussed in a memorandum to the Commission, dated July 26, 2006. (The memorandum is available in the NRC Agencywide Documents Access and Management System [ADAMS] under Accession No. ML052360044).

Additional, technical, non-public information: See additional discussion of terms below.

62) What do the following terms mean?

- Annual exceedance frequency
- Core damage frequency
- Design basis earthquake or safe shutdown earthquake
- Ground acceleration
- High confidence of low probability of failure capacity
- Large early release frequency
- Seismic hazard
- Seismic margin
- Seismic risk

Public Answer: The terms are defined as follows:

Annual exceedance frequency (AEF) – Number of times per year that a site's ground motion is expected to exceed a specified acceleration.

Core damage frequency (CDF) – Expected number of core damage events per unit of time. *Core damage* refers to the uncovering and heat-up of the reactor core, to the point that prolonged oxidation and severe fuel damage are not only anticipated but also involve enough of the core to result in off-site public health effects if released. *Seismic core damage frequency* refers to the component of total CDF that is due to seismic events.

Design basis earthquake or safe shutdown earthquake (SSE) – A *design basis earthquake* is a commonly employed term for the *safe shutdown earthquake (SSE)*; the SSE is the earthquake ground shaking for which certain structures, systems, and components are designed to remain functional. In the past, the SSE has been commonly characterized by a standardized spectral shape associated with a peak *ground acceleration* value.

Ground acceleration – Acceleration produced at the ground surface by seismic waves, typically expressed in units of *g*, the acceleration of gravity at the earth's surface.

High confidence of low probability of failure (HCLPF) capacity – A measure of *seismic margin*. In *seismic risk* assessment, *HCLPF capacity* is defined as the earthquake motion level, at which there is high confidence (95%) of a low probability (at most 5%) of failure of a structure, system, or component.

Large early release frequency (LERF) – The expected number of large early releases per unit of time. A *large early release* is the rapid, unmitigated release of airborne fission products from the containment building to the environment, occurring before the effective implementation of off-site emergency response and protective actions, such that there is a potential for early health effects. *Seismic large early release frequency* refers to the component of total LERF that is due to seismic events.

Seismic hazard – Any physical phenomenon, such as ground motion or ground failure, that is associated with an earthquake and may produce adverse effects on human activities (such as posing a risk to a nuclear facility).

Seismic margin – The difference between a plant's capacity and its seismic design basis (*safe shutdown earthquake, or SSE*).

Seismic risk – The risk (frequency of occurrence multiplied by its consequence) of severe earthquake-initiated accidents at a nuclear power plant. A severe accident is an accident that causes core damage, and, possibly, a subsequent release of radioactive materials into the environment. Several risk metrics may be used to express *seismic risk*, such as *seismic core damage frequency* and *seismic large early release frequency*.

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63) Let's say there's an estimate expressed as "2.5E-06." (I'm looking at Table D-2 of the safety/risk assessment of August 2010.) I believe that this expression means the same as 2.5×10^{-6} , or 0.0000025, or 2.5 divided by one million. In layman's terms, that means an expectation, on average, of 2.5 events every million years, or once every 400,000 years. Similarly, "2.5E-05" would be 2.5 divided by 100,000, or 2.5 events every 100,000 years, on average, or once every 40,000 years. Is this correct?

Public Response: Yes, at least partly. In the subject documents the frequencies for core damage or ground motion exceedance have been expressed in the form "2.5E-06". As you noted this is equivalent to 2.5×10^{-6} , or 0.000025 per year. If, for example, the core damage frequency was estimated as 2.5E-06, this would be equivalent to an expectation of 2.5 divided by a million per year. It is not really correct to think of these values as "once every 400,000 years," the two numbers are mathematically equivalent but do not convey the same statistical meaning within this context. Rather, you could characterize it as 1 in 400,000 per year of something occurring.

Additional, technical, non-public information: None

64) The GI-199 documents give updated probabilistic seismic hazard estimates for existing nuclear power plants in the Central and Eastern U.S. What document has the latest seismic hazard estimates (probabilistic or not) for existing nuclear power plants in the Western U.S.?

Public Response: At this time the staff has not formally developed updated probabilistic seismic hazard estimates for the existing nuclear power plants in the Western U.S. However, NRC staff during the mid-to late-1990's reviewed the plants' assessments of potential consequences of severe ground motion from earthquakes beyond the plant design basis as part of the Individual Plant Examination of External Events (IPEEE) program. From this review, the NRC staff determined that the seismic designs of operating plants in the U.S. have adequate safety margin. NRC staff has continued to stay abreast of the latest research on seismic hazards in the Western U.S. and interface with colleagues at the U.S. Geological Survey. The focus of Generic Issue 199 has been on the CEUS. However, the Information Notice that summarized the results of the Safety/Risk Assessment was sent to all existing power reactor licensees. The documents that summarize existing hazard estimates are contained in the Final Safety Analysis Reports (FSARS) and in the IPEEE submittals. It must be noted that following 9/11 the IPEEE documents are no longer publicly available.

Additional, technical, non-public information: None

65) The GI-199 documents refer to newer data on the way. Have NRC, USGS et al. released those? I'm referring to this: "New consensus seismic-hazard estimates will become available in late 2010 or early 2011 (these are a product of a joint NRC, U.S. Department of Energy, U.S. Geological Survey (USGS) and Electric Power Research Institute (EPRI) project). These consensus seismic hazard estimates will supersede the existing EPRI, Lawrence Livermore National Laboratory, and USGS hazard estimates used in the GI-199 Safety/Risk Assessment."

Public Response: The new consensus hazard curves are being developed in a cooperative project that has NRC, U.S. Department of Energy, U.S. Geological Survey (USGS) and Electric Power Research Institute (EPRI) participation. The title is: the Central and Eastern U.S. Seismic Source Characterization (CEUS-SSC) project. The project is being conducted following comprehensive standards to ensure quality and regulatory defensibility. It is in its final phase and is expected to be publicly released in the fall of 2011. The project manager is Larry Salamone (Lawrence.salamone@srs.gov, 803-645-9195) and the technical lead on the project is Dr. Kevin Coppersmith (925-974-3335, (b)(6)).

Additional information on this project can be found at: <http://mydocs.epri.com/docs/ANT/2008-04.pdf>, and http://my.epri.com/portal/server.pt?open=512&objID=319&&PageID=218833&mode=2&in_hi_us_erid=2&cached=true.

Additional, technical, non-public information: None

66) What is the timetable now for consideration of any regulatory changes from the GI-199 research?

Public Response: The NRC is working on developing a Generic Letter (GL) to request information from affected licensees. The GL will likely be issued in a draft form within the next 2 months to stimulate discussions with industry in a public meeting. After that it has to be approved by the Committee to Review Generic Requirements, presented to the Advisory Committee on Reactor Safeguards and issued as a draft for formal public comments (60 days). After evaluation of the public comments it can then be finalized for issuance. We expect to issue the GL by the end of this calendar year, as the new consensus seismic hazard estimates become available. The information from licensees will likely require 3 to 6 months to complete. Staff's review will commence after receiving licensees' responses. Based on staff's review, a determination can be made regarding cost beneficial backfits where it can be justified.

Additional, technical, non-public information: None

Seismic Probabilistic Risk Assessment (SPRA)

67) The NRC increasingly uses risk-information in regulatory decisions. Are risk-informed PRAs useful in assessing an event such as this?

Public response: Nilesh Chokshi to provide Q&As on SPRA

Additional, technical, non-public information: None

Plant-Specific Questions

SONGS questions

Note, these were added 3/15 and have not yet been reviewed.

68) SONGS received a white finding in 2008 for 125VDC battery issue related to the EDGs that went undetected for 4 years. NRC issued the white finding as there was increased risk that one EDG may not have started due to a low voltage condition on the battery on one Unit (Unit 2). Aren't all plants susceptible to the unknown? Is there any assurance the emergency cooling systems will function as desired in a Japan-like emergency?

Public response: The low voltage condition was caused by a failure to properly tighten bolts on a electrical breaker that connected the battery to the electrical bus that would be relied on to start the EDG in case of a loss of off-site power. This was corrected immediately on identification and actions taken to prevent its reoccurrence. The 3 other EDGs at SONGS were not affected.

Additional, technical, non-public information: None

69) Has the earthquake hazard at SONGS been reviewed like DCNPP is doing? Are they planning on doing an update before relicensing?

Public Answer: Relicensing does not evaluate the potential change to seismic siting of a plant. If there is a seismic design concern, it would be addressed for the plant as it is currently operating.

The closest active fault is approximately five miles offshore from San Onofre, a system of folds and faults exist called the OZD. The Cristianitos fault is ½ mile southeast, but is an inactive fault. Other faults such as the San Andreas and San Jacinto, which can generate a larger magnitude earthquake, are far enough away that they would produce ground motions less severe than the OZD for San Onofre.

Past history relative to nearby major quakes have been of no consequences to San Onofre. In fact, three major earthquakes from 1992 to 1994 (Big Bear, Landers and Northridge), ranging in distance from 70-90 miles away and registering approximately 6.5 to 7.3 magnitude, did not disrupt power production at San Onofre. The plant is expected to safely shutdown if a major earthquake occurs nearby. Safety related structures, systems and components have been designed and qualified to remain functional and not fail during and after an earthquake.

Additional, technical, non-public information: None

70) Is possible to have a tsunami at songs that is capable of damaging the plant?

Public Information: The San Onofre Units 2 and 3 plant grade is elevation +30.0 feet MLLW. The controlling tsunami for San Onofre occurring during simultaneous high tide and storm surge produces a maximum runup to elevation +15.6 feet MLLW at the Unit 2 and 3 seawall. When storm waves are superimposed, the predicted maximum runup is to elevation +27 MLLW. Tsunami protection for the SONGS site is provided by a reinforced concrete seawall constructed to elevation +30.0 MLLW. A tsunami greater than this height is extremely unlikely.

Additional, technical, non-public information: None

71) Does SONGS have an emergency plan for tsunami?

Public Response: The SONGS emergency plan does initiate the emergency response organization and results in declaration of emergency conditions via their EALS. The facility would then make protective

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action recommendations to the Governor, who would then decide on what protective actions would be ordered for the residents around SONGS.

Additional, technical, non-public information: None

72) Has evacuation planning at SONGS considered tsunami?

Public Response: These considerations would be contained in the State and local (City, County) emergency plans, which are reviewed by FEMA. FEMA then certifies to the NRC that they have "reasonable assurance" that the off-site facilities can support operation of SONGS in an emergency.

Additional, technical, non-public information: None

73) Is SONGS designed against tsunami and earthquake?

Public Response: Yes. SONGS is designed against both tsunami and earthquake.

Additional, technical, non-public information: None

74) What is the height of water that SONGS is designed to withstand?

Public Response: 30 feet. Information for all plants can be found in the "Additional Information" section of this document.

Additional, technical, non-public information: None

75) What about drawdown and debris?

Public Response: *Good question...can HQ answer? Goutam, Henry, or Rich...can you help with this one?*

Additional, technical, non-public information: None

76) Will this be reviewed in light of the Japan quake.

Public Response: The NRC will do a thorough assessment of the lessons learned from this event and will review all potential issues at US nuclear plants as a result.

Additional, technical, non-public information: None

77) Could all onsite and offsite power be disrupted from SONGS in the event of a tsunami, and if that happened, could the plant be safely cooled down if power wasn't restored for days after?

Public Response: Seismic Category I equipment is equipment that is essential to the safe shutdown and isolation of the reactor or whose failure or damage could result in significant release of radioactive material. All Seismic Category I equipment at SONGS is designed to function following a DBE with ground acceleration of 0.67g.

The operating basis earthquake (1/2 of the DBE) is characterized by maximum ground shaking of 0.33g. Historically, even this level of ground shaking has not been observed at the site. Based on expert analysis, the average recurrence interval for 0.33g ground shaking at the San Onofre site would be in excess of 1000 years and, thus, the probability of occurrence in the 40-year design life of the plant would be less than 1 in 25. The frequency of the DBE would be much more infrequent, and very unlikely to occur during the life of the plant. Even if an earthquake resulted in greater than the DBE movement/acceleration at SONGS, the containment structure would ultimately protect the public from harmful radiation release, in the event significant damage occurred to Seismic category 1 equipment.

Additional, technical, non-public information: None

78) Are there any faults nearby SONGS that could generate a significant tsunami?

Public Response: Current expert evaluations estimate a magnitude 7 earthquake about 4 miles from SONGS. This is significantly less than the Japan quake, and SONGS has been designed to withstand this size earthquake without incident. Should discuss the different tectonic nature (not a subduction zone like Japan)?

Additional, technical, non-public information: None

79) What magnitude or shaking level is SONGS designed to withstand? How likely is an earthquake of that magnitude for the SONGS site?

Public Response: The design basis earthquake (DBE) is defined as that earthquake producing the maximum vibratory ground motion that the nuclear power generating station is designed to withstand without functional impairment of those features necessary to shut down the reactor, maintain the station in a safe condition, and prevent undue risk to the health and safety of the public. The DBE for SONGS was assessed during the construction permit phase of the project. The DBE is postulated to occur near the site (5 miles), and the ground accelerations are postulated to be quite high (0.67g), when compared to other nuclear plant sites in the U.S (0.25g or less is typical for plants in the eastern U.S.). Based on the unique seismic characteristics of the SONGS site, the site tends to amplify long-period motions, and to attenuate short-period motions. These site-specific characteristics were accounted for in the SONGS site-specific seismic analyses.

Additional, technical, non-public information: None

80) Could SONGS withstand an earthquake of the magnitude of the Japanese earthquake?

Public Response: We do not have current information on the ground motion at the Japanese reactors. SONGS was designed for approximately a 7.0 magnitude earthquake 4 miles away. The Japanese earthquake was much larger (8.9), but was also almost 9 miles away. The local ground motion at a particular plant is significantly affected by the local soil and bedrock conditions. SONGS was designed (.67g) to withstand more than 2 times the design motion at average US plants.

Additional, technical, non-public information: None

81) What about the evacuation routes at SONGS? How do we know they are reasonable?

Public Response: FEMA reviews off-site evacuation plans formally every 2 years during a biennial emergency preparedness exercise. NRC evaluates on-site evacuation plans during the same exercise. Population studies are formally done every 10 years, and evacuation time estimates are re-evaluated at that time. FEMA reviews these evacuation plans, and will conclude their acceptability through a finding of "reasonable assurance" that the off-site facilities and infrastructure is capable of protecting public health and safety in the event of an emergency at SONGS. The next such exercise is planned for April 12, 2011.

Additional, technical, non-public information: None

82) Regarding tsunami at Diablo and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami?

Public response: See below

83) What is the design level flooding for DNCPP and SONGS? Can a tsunami be larger?

Public response: Both the Diablo Canyon (main plant) and SONGS are located above the flood level associated with tsunami. However, the intake structures and Auxiliary Sea Water System at Diablo canyon are designed for combination of tsunami-storm wave activity. SONGS has reinforced concrete cantilevered retaining seawall and screen well perimeter wall designed to withstand the design basis earthquake, followed by the maximum predicted tsunami with coincident storm wave action

Additional, technical, non-public information: None

Diablo Canyon Questions

84) Now after the Japan tragedy, will the NRC finally hear us (A4NR) and postpone DC license renewal until seismic studies are complete? How can you be sure that what happened there is not going to happen at Diablo with a worse cast quake and tsunami?

Public response: ADD

Additional, technical, non-public information: ADD

85) The evacuation routes at DCNPP see are not realistic. Highway 101 is small...and can you imagine what it will be like with 40K people on it? Has the evacuation plan been updated w/ all the population growth?

Public Response: FEMA reviews off-site evacuation plans formally every 2 years during a biennial emergency preparedness exercise. NRC evaluates on-site evacuation plans during the same exercise. Population studies are formally done every 10 years, and evacuation time estimates are re-evaluated at that time. FEMA reviews these evacuation plans, and will conclude their acceptability through a finding of "reasonable assurance" that the off-site facilities and infrastructure is capable of protecting public health and safety in the event of an emergency at DCNPP.

Additional, technical, non-public information: None

86) Are there local offshore fault sources capable of producing a tsunami with very short warning times?

Public Response: ADD- question forwarded to region

Additional, technical, non-public information: ADD

87) Are there other seismically induced failure modes (other than tsunami) that would yield LTSBO? Flooding due to dam failure or widespread liquefaction are examples.

Public Response: ADD question forwarded to region

Additional, technical, non-public information: ADD

88) Ramifications of beyond design basis events (seismic and tsunami) and potential LTSBO on spent fuel storage facilities?

Public Response: ADD question forwarded to region

Additional, technical, non-public information: ADD

89) Why did a Emergency Warning go out for a 'tsunami' that was only 6 ft high? Do these guys really know what they're doing? Would they know it if a big one was really coming? Crying wolf all the time doesn't instill a lot of confidence.

Public Response: The warning system performed well. The 6 foot wave was predicted many hours before and arrived at the time it was predicted. Federal officials to accurately predicted the tsunami arrival time and size; allowing local official to take appropriate measures as they saw necessary to warn and protect the public. It should be understood that even a 6 foot tsunami is very dangerous. Tsunami have far more energy and power than wind-driven waves.

Additional, technical, non-public information: ADD

90) How big did the Japanese think a quake/tsunami could be before 3/11? Why were they so wrong (assuming this quake/tsunami was bigger than what they had designed the plant for)?

Public Response: ADD can HQ answer?

Additional, technical, non-public information: ADD

The Japanese were supposed to have one of the best tsunami warning systems around. What went wrong last week (both with the reactors and getting the people out...see #1, evacuation plan above)?

Public Response: ADD can HQ answer?

Additional, technical, non-public information: ADD

91) Regarding tsunami at Diablo and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami?

Public Response: Both the Diablo Canyon (main plant) and SONGS are located above the flood level associated with tsunami. However, the intake structures and Auxiliary Sea Water System at Diablo canyon are designed for combination of tsunami-storm wave activity. SONGS has reinforced concrete cantilevered retaining seawall and screen well perimeter wall designed to withstand the design basis earthquake, followed by the maximum predicted tsunami with coincident storm wave action

Additional, technical, non-public information: ADD

Indian Point Questions

92) Why is Indian Point safe if there is a fault line underneath it?

Public Response: The Ramapo fault system, which passes through the Indian Point area, is a group of Mesozoic age faults, extending from southeastern New York to northern New Jersey, as well as further southwest. The fault system is composed of a series of southeast-dipping, northeast-striking faults. Various faults of the system contain evidence of repeated slip in various directions since Proterozoic time, including Mesozoic extensional reactivation. However, the USGS staff, who reviewed 31 geologic features in the Appalachian Mountains and Coastal Plain and compiled a National Database on Quaternary Faulting (Crone and Wheeler, 2000), listed the Ramapo fault system as low risk because the fault system lacks evidence for Quaternary slip. They further pointed out that the Ramapo fault system, and 17 other geologic features, "have little or no published geologic evidence of Quaternary tectonic faulting that could indicate the likely occurrence of earthquakes larger than those observed historically" (Wheeler and Crone, 2004). Among these faults, the Ramapo fault system is one of the three that underwent a paleoseismological study. In two trenches excavated across the Ramapo fault, no evidence of Quaternary tectonic faulting was found (Wheeler and Crone, 2000). Because the Ramapo fault system is relatively inactive, because the Indian Point plants are built on solid bedrock, and because the plants are designed to safely shutdown in the event of an earthquake of the highest intensity ever recorded in that area, the NRC has concluded that the risk of significant damage to the reactors due to a probable earthquake in the area is extremely small.

Additional, technical, non-public information: None.

Questions for the Japanese

NOTE: These were all collected from what we produced after the KKNPP earthquake. These need to be gone through and revised for this event. We should separate into high, medium and low priorities:

The below is pulled from an KKNPP summary...to be reviewed...

- What seismic monitoring equipment exists at the plants? Can we get the recordings from the
- Are there recordings of the tsunami at the plant location?
- What is the geology and soil profile at the plants?
- NOAA has a prediction of very large tsunami waves at Onagawa. Are these accurate?

The below is pulled from an KKNPP summary...to be reviewed...

DESIGN BASES: Exactly what is the design basis ground motion for each of the plants? Did it change through time (i.e. from the first plant to the seventh)? Where was the design basis motion defined, at the top of rock, at the ground surface, at the floor level or somewhere else? Were the site-specific geotechnical properties used in the development of the design basis ground motions for each plant?

SEISMIC HAZARDS: What assumptions were used in the seismic hazard evaluation to arrive at the design basis ground motions? What faults were considered, what magnitudes and geometries were assumed? What activity rates were assumed for both fault sources and "background" earthquakes?

OBSERVATIONS-GROUND MOTIONS: What ground motions were recorded and where were they recorded? Specifically, what free-field, in-structure and down-hole recordings were obtained? What are the locations of the instruments that obtained records? Did all the instruments respond as planned, or are there lessons to be learned? Can the digital data be shared with the NRC? Is there any way of evaluating how well the existing analysis methods predicted the observed motions at different points within the plant?

OBSERVATIONS-DAMAGE: What damage was observed at the plants? How well did equipment such as cranes perform? Were there observations of displacements of equipment from anchorages, were cracks observed in any of the buildings? How well did non-nuclear safety type of buildings and equipment perform? What types of geotechnical phenomena were observed, was there ground deformation/slope failures, lateral spreading or liquefaction near the facility? Did the ABWRs perform better or similar to the older designs?

And another set from the KKNPP earthquake...to be reviewed...

Please provide the following information in the time frame indicated:

Highest Priority Questions -- as soon as possible

- A timeline describing the order of events and the individual plant responses to the earthquake
- Confirmation that all operating and shut down units achieved or maintained safe-shutdown conditions without manual operator intervention or complications. Did all safety-related systems respond to the seismic scram as designed? Please note if there were any unexpected plant responses to the event, including any spurious signals.
- A more detailed description of the impacts of the earthquake on the plant (e.g., what systems were involved, which pipes were damaged, where did the leakage occur (pipe wall, joints, fittings,,etc).
- A description of seismic instrumentation at the site and at each of the 7 units, soil/rock shear wave properties through depth, instrument location and mounting condition, all the recorded

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data on the basis of unified starting time, such that the coherency of motion through the surface or the foundations and at depth can be determined

- Full spectrum seismic design basis for the plant.
- What actually caused the Unit 3B house transformer fire?

Additional Questions – please provide answers as more information is developed

- Damage to buildings, slope failures, intake structure failure, if any
- Behavior of cranes, cables and conduits
- Failures of any large pumps and valves, pipe mounted control or valve failure
- Instances of any relay or vibration sensitive components malfunctioning
- Nature of damage to service water and fire-suppression piping - their diameter, material they are made of including their elastic properties, design standards used for the piping design, nature of failure (at support, anchor motion, failure of anchors, subsidence differential movement etc)
- Were there any systems that changed state?
- Impact on physical security, and any vulnerabilities identified
- Were there any impacts on the grid because of the event?
- Please describe the switchyard performance?
- What emergency preparedness concerns have been identified as a result of the event?

3B Transformer Specific Questions – please respond when there is time and other issues have been addressed

- What are the primary and secondary voltages of the transformer?
- What type of transformer - liquid or dry-type (air-cooled)?
- Who was the manufacturer of the transformer?
- What are the physical dimensions of the transformer?
- How are the transformer coils restrained within the cabinet?
- What is the clearance between transformer energized component and cabinet?
- What is the relative displacement for connection between the high voltage leads and the first anchor point (adequate slack?) in the transformer?
- What was the natural frequency of the burned transformer, if known?
- What was the acceleration level (or the response spectrum, if available) at the support location of the burned transformer?
- What seismic requirements exist for the burned transformer? Was the transformer tested or analyzed to a specific acceleration or response spectra, and if so, what are they?
- Are there any of the same type of transformer installed at other locations in the plant?

Additional Information

Table of Design Basis Ground Motions for US Plants

Design Basis Earthquake Information					
Nuclear Plant By State/Location	Maximum Observed Or Inferred Intensity (MMI Scale)	Relative Distance Of Seismic Source	Design SSE Peak Acceleration, g	OBE Peak Acceleration, g	Soil Condition
New York					
Fitzpatrick	VI	Near	0.15	0.08	Soil
GINNA 1	VIII/IX	>60 miles	0.2	0.08	Rock
Indian Point 2, 3	VII	Near	0.15	0.1	Rock
Nine Mile Point 1	IX-X	>60 miles	0.11	0.06	Rock
Nine Mile Point 2	VI	Near	0.15	0.075	Rock
New Jersey					
Salem 1,2	VII-VIII	Near	0.2	0.1	Deep Soil
Connecticut					
Millstone 1, 2, 3	VII	Near	0.17	0.07	Rock
Vermont					
Vermont Yankee	VI	Near	0.14	0.07	Rock
Ohio					
Davis Besse 1	VII	Near	0.15	0.08	Rock
Perry 1	VII	Near	0.15	0.08	Rock
Georgia					
Hatch 1, 2	VII	Near	0.15	0.08	Deep Soil
Vogtle 1, 2	VII-VIII	Near	0.2	0.12	Deep Soil
Tennessee					
Sequoyah 1, 2	VIII	Near	0.18	0.09	Rock
Watts Bar 1	VIII	Near	0.18	0.09	Rock
California					
San Onofre 2, 3	IX-X	Near	0.67	0.34	Soil
Diablo Canyon 1, 2	X-XI	Near	0.75	0.20	Rock
Florida					

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Crystal River 3	V	Near	0.10	0.05	Rock
St. Lucie 1, 2	VI	Near	0.10	0.05	Soil
Turkey Point 3, 4	VII	Near	0.15	0.05	Rock

NOTES:

MMI=Modified Mercalli Intensity, a measure of observed/reported damage and severity of shaking.
Relative distance measure used in FSAR to develop SSE acceleration, "Near" indicates distance less than 10 miles.

SSE=Safe Shutdown Earthquake ground motion, for horizontal acceleration, in units of earth's gravity, *g*.
OBE=Operating Basis Earthquake ground motion, level of horizontal acceleration, which if exceeded requires plant shutdown.

Table of SSE, OBE and Tsunami Water Levels

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Alabama			
Browns Ferry	0.200	0.100	N/A (Non-Coastal)
Farley	0.100	0.050	N/A (Non-Coastal)
Arkansas			
Arkansas Nuclear	0.200		N/A (Non-Coastal)
Arizona			
Palo Verde	0.200	0.100	N/A (Non-Coastal)
California			
Diablo Canyon	0.400	0.200	The design basis maximum combined wave runup is the greater of that determined for near-shore or distantly-generated tsunamis, and results from near-shore tsunamis. For distantly-generated tsunamis, the combined runup is 30 feet For near-shore tsunamis, the combined wave runup is 34.6 feet, as determined by hydraulic model testing. The safety-related equipment is installed in watertight compartments to protect it from adverse sea wave events to elevation +48 feet above MLLW.
San Onofre	0.670	0.340	The controlling tsunami occurs during simultaneous high tide and storm surge produces a maximum runup to elevation +15.6 feet mean lower low water line (mllw) at the Unit 2 and 3 seawall. When storm waves are superimposed, the predicted maximum runup is to elevation +27 mllw. Tsunami protection for the SONGS site is provided by a reinforced concrete seawall constructed to elevation +30.0 mllw.
Connecticut			
Millstone	0.170	0.090	18 ft SWL
Florida			
Crystal River	0.050	0.025	N/A (Non-Coastal)

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
St. Lucie	0.100	0.050	No maximum tsunami level, bounded by PMH surge of +18 MLW wave runup, with plant openings at +19.5 MLW
Turkey Point	0.150	0.050	No maximum tsunami level, bounded by PMH surge of +18.3 MLW water level, site protected to +20 MLW with vital equipment protected to +22 MLW
Georgia			
Hatch	0.150	0.080	N/A (Non-Coastal)
Vogtle	0.200	0.120	N/A (Non-Coastal)
Illinois			
Braidwood	0.200	0.090	N/A (Non-Coastal)
Byron	0.200	0.090	N/A (Non-Coastal)
Clinton	0.250	0.100	N/A (Non-Coastal)
Dresden	0.200	0.100	N/A (Non-Coastal)
LaSalle	0.200	0.100	N/A (Non-Coastal)
Quad Cities	0.240	0.120	N/A (Non-Coastal)
Iowa			
Duane Arnold	0.120	0.060	N/A (Non-Coastal)
Kansas			
Wolf Creek	0.120	0.060	N/A (Non-Coastal)
Louisiana			
River Bend	0.100	0.050	
Waterford	0.100		Floods - 30 feet MSL
Maryland			
Calvert Cliffs	0.150	0.080	14 ft design wave
Massachusetts			
Pilgrim	0.150	0.080	*Storm flooding design basis - 18.3ft
Michigan			
D.C. Cook	0.200	0.100	N/A
Fermi	0.150	0.080	N/A
Palisades	0.200	0.100	N/A

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Missouri			
Callaway	0.200		N/A (Non-Coastal)
Mississippi			
Grand Gulf	0.150	0.075	N/A
Minnesota			
Monticello	0.120	0.060	N/A (Non-Coastal)
Prarie Island	0.120	0.060	N/A (Non-Coastal)
Nebraska			
Cooper	0.200	0.100	N/A (Non-Coastal)
Fort Calhoun	0.170	0.080	N/A (Non-Coastal)
New York			
Fitzpatrick	0.150	0.080	N/A (Non-Coastal)
Ginna	0.200	0.080	N/A
Indian Point	0.150	0.100	15 ft msl
Nine Mile Point, Unit 1	0.110	0.060	N/A
Nine Mile Point, Unit 2	0.150	0.075	N/A
New Hampshire			
Seabrook	0.250	0.125	(+) 15.6' MSL Still Water Level (Tsunami Flooding -Such activity is extremely rare on the U.S. Atlantic coast and would result in only minor wave action inside the harbor.)
New Jersey			
Hope Creek	0.200	0.100	35.4 MSL The maximum probable tsunami produces relatively minor water level changes at the site. The maximum runup height reaches an elevation of 18.1 feet MSL with coincident 10 percent exceedance high tide)
Oyster Creek	0.184	0.092	(+) 23.5' MSL Still Water Level (Probable Maximum Tsunami - Tsunami events are not typical of the eastern coast of the United States and have not, therefore, been addressed.)

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Salem	0.200	0.100	21.9 MSL (There is no evidence of surface rupture in East Coast earthquakes and no history of significant tsunami activity in the region)
North Carolina			
Brunswick	0.160	0.030	N/A
McGuire	0.150	0.080	N/A (Non-Coastal)
Shearon Harris	0.150		N/A (Non-Coastal)
Ohio			
Davis-Besse	0.150	0.080	N/A
Perry	0.150	0.080	N/A
Pennsylvania			
Beaver Valley	0.130	0.060	N/A (Non-Coastal)
Limerick	0.150	0.075	N/A (Non-Coastal)
Peach Bottom	0.120	0.050	N/A (Non-Coastal)
Three Mile Island	0.120	0.060	N/A (Non-Coastal)
Susquehanna	0.150	0.080	N/A (Non-Coastal)
South Carolina			
Catawba	0.150	0.080	N/A (Non-Coastal)
Oconee	0.150	0.050	N/A (Non-Coastal)
Robinson	0.200	0.100	N/A (Non-Coastal)
V.C. Summer	0.250	0.150	N/A (Non-Coastal)
Tennessee			
Sequoyah	0.180	0.090	N/A (Non-Coastal)
Watts Bar, Unit 1	0.180	0.090	N/A (Non-Coastal)
Texas			
Comanche Peak	0.120	0.060	N/A
South Texas Project	0.100	0.050	N/A
Vermont			

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Vermont Yankee	0.140	0.070	N/A
Virginia			
North Anna	0.180		N/A
Surry	0.150	0.080	N/A
Washington			
Columbia	0.250		N/A (Non-Coastal)
Wisconsin			
Kewaunee	0.120	0.060	N/A
Point Beach	0.120		N/A
Definition of Safe Shutdown Earthquake	The safe-shutdown earthquake (SSE) for the site is the ground motion response spectra (GMR5), which also satisfies the minimum requirement of paragraph IV(a)(1)(i) of Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants," to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the Code of Federal Regulations (10 CFR Part 50).		
Definition of Operating Basis Earthquake:	<p>To satisfy the requirements of paragraph IV(a)(2)(A) of Appendix S to 10 CFR Part 50, the operating-basis earthquake (OBE) ground motion is defined as follows:</p> <ul style="list-style-type: none"> (iv) For the certified design portion of the plant, the OBE ground motion is one-third of the CSDRS. (v) For the safety-related noncertified design portion of the plant, the OBE ground motion is one-third of the design motion response spectra, as stipulated in the design certification conditions specified in design control document (DCD). (vi) The spectrum ordinate criterion to be used in conjunction with Regulatory Guide 1.166, "Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Post-earthquake Actions," issued March 1997, is the lowest of (i) and (ii). 		

Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level Earthquakes, and Seismic Core Damage Frequencies

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Arkansas 1	05000313	0.2	2.8E-04	0.3	4.1E-06	0.3g full-scope EPRI SMA	GI-199
Arkansas 2	05000368	0.2	9.7E-05	0.3	4.1E-06	0.3g focused-scope EPRI SMA	GI-199
Beaver Valley 1	05000334	0.12	3.3E-04	n/a	4.8E-05	seismic PRA	GI-199
Beaver Valley 2	05000412	0.12	2.7E-04	n/a	2.2E-05	seismic PRA	GI-199
Braidwood 1	05000456	0.2	6.7E-05	0.3	7.3E-06	0.3g focused-scope EPRI SMA	GI-199
Braidwood 2	05000457	0.2	6.7E-05	0.3	7.3E-06	0.3g focused-scope EPRI SMA	GI-199
Browns Ferry 1	05000259	0.2	2.5E-04	0.3	3.7E-06	0.3g focused-scope EPRI SMA	GI-199
Browns Ferry 2	05000260	0.2	2.5E-04	0.26	5.4E-06	0.3g focused-scope EPRI SMA	GI-199
Browns Ferry 3	05000296	0.2	2.5E-04	0.26	5.4E-06	0.3g focused-scope EPRI SMA	GI-199
Brunswick 1	05000325	0.16	7.3E-04	0.3	1.5E-05	0.3g focused-scope EPRI SMA	GI-199
Brunswick 2	05000324	0.16	7.3E-04	0.3	1.5E-05	0.3g focused-scope EPRI SMA	GI-199
Byron 1	05000454	0.2	5.2E-05	0.3	5.8E-06	0.3g focused-scope EPRI SMA	GI-199
Byron 2	05000455	0.2	5.2E-05	0.3	5.8E-06	0.3g focused-scope EPRI SMA	GI-199
Callaway	05000483	0.2	3.8E-05	0.3	2.0E-06	0.3g focused-scope EPRI SMA	GI-199
Calvert Cliffs 1	05000317	0.15	1.9E-04	n/a	1.0E-05	seismic PRA	GI-199
Calvert Cliffs 2	05000318	0.15	1.9E-04	n/a	1.2E-05	seismic PRA	GI-199
Catawba 1	05000413	0.15	1.4E-04	n/a	3.7E-05	seismic PRA	GI-199
Catawba 2	05000414	0.15	1.4E-04	n/a	3.7E-05	seismic PRA	GI-199
Clinton	05000461	0.25	5.8E-05	0.3	2.5E-06	0.3g focused-scope EPRI SMA	GI-199
Columbia	05000397	0.25	1.7E-04	n/a	2.1E-05	seismic PRA	IPEEE
Comanche Peak 1	05000445	0.12	1.6E-05	0.12	4.0E-06	reduced-scope EPRI SMA; SSE = 0.12g	GI-199
Comanche	05000446	0.12	1.6E-05	0.12	4.0E-06	reduced-scope EPRI SMA; SSE =	GI-199

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Peak 2						0.12g	
Cooper	05000298	0.2	1.5E-04	0.3	7.0E-06	0.3g focused-scope EPRI SMA	GI-199
Crystal River 3	05000302	0.1	8.9E-05	0.1	2.2E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
D.C. Cook 1	05000315	0.2	2.1E-04	n/a	2.2E-05	seismic PRA	GI-199
D.C. Cook 2	05000316	0.2	2.1E-04	n/a	2.2E-05	seismic PRA	GI-199
Davis Besse	05000346	0.15	6.3E-05	0.26	6.7E-06	reduced-scope EPRI SMA	GI-199
Diablo Canyon 1	05000275	0.75	3.9E-03	n/a	4.2E-05	seismic PRA	IPEEE
Diablo Canyon 2	05000323	0.75	3.9E-03	n/a	4.2E-05	seismic PRA	IPEEE
Dresden 2	05000237	0.2	9.7E-05	0.26	1.9E-05	0.3g focused-scope EPRI SMA	GI-199
Dresden 3	05000249	0.2	9.7E-05	0.26	1.9E-05	0.3g focused-scope EPRI SMA	GI-199
Duane Arnold	05000331	0.12	2.3E-04	0.12	3.2E-05	reduced-scope EPRI SMA; SSE = 0.12g	GI-199
Farley 1	05000348	0.1	1.0E-04	0.1	2.8E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Farley 2	05000364	0.1	1.0E-04	0.1	2.8E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Ferri 2	05000341	0.15	1.0E-04	0.3	4.2E-06	0.3g focused-scope EPRI SMA	GI-199
Fitzpatrick	05000333	0.15	3.2E-04	0.22	6.1E-06	0.3g focused-scope NRC SMA	GI-199
Fort Calhoun 1	05000285	0.17	3.7E-04	0.25	5.4E-06	0.3g focused-scope NRC SMA	GI-199
Ginna	05000244	0.2	1.0E-04	0.2	1.3E-05	0.3g focused-scope EPRI SMA	GI-199
Grand Gulf	05000416	0.15	1.0E-04	0.15	1.2E-05	reduced-scope EPRI SMA; SSE = 0.15g	GI-199
Hatch 1	05000400	0.148	3.9E-04	0.29	2.3E-06	0.3g focused-scope EPRI SMA	GI-199
Hatch 2	05000321	0.15	2.7E-04	0.3	2.5E-06	0.3g focused-scope EPRI SMA	GI-199

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (MCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Hope Creek	05000366	0.2	9.7E-05	0.3	2.5E-06	0.3g focused-scope EPRI SMA	GI-199
Indian Point 2	05000354	0.15	4.9E-04	n/a	2.8E-06	seismic PRA	GI-199
Indian Point 3	05000247	0.15	4.9E-04	n/a	3.3E-05	seismic PRA	GI-199
Kewaunee	05000286	0.12	2.8E-04	n/a	1.0E-04	seismic PRA	GI-199
LaSalle 1	05000305	0.2	1.7E-04	n/a	5.1E-06	seismic PRA	GI-199
LaSalle 2	05000373	0.2	1.7E-04	n/a	2.8E-06	seismic PRA	GI-199
Limerick 1	05000374	0.15	1.8E-04	n/a	2.8E-06	seismic PRA	GI-199
Limerick 2	05000352	0.15	1.8E-04	0.15	5.3E-05	reduced-scope EPRI SMA	GI-199
McGuire 1	05000353	0.15	9.5E-05	0.15	5.3E-05	reduced-scope EPRI SMA	GI-199
McGuire 2	05000369	0.15	9.5E-05	n/a	3.1E-05	seismic PRA	GI-199
Millstone 1	05000370	0.254	9.3E-05	n/a	3.1E-05	seismic PRA	GI-199
Millstone 2	05000336	0.17	8.3E-05	0.25	1.1E-05	0.3g focused-scope EPRI SMA	GI-199
Millstone 3	05000423	0.17	8.3E-05	n/a	1.5E-05	seismic PRA	GI-199
Monticello	05000263	0.12	9.3E-05	0.12	1.9E-05	modified focused/expended reduced-scope EPRI SMA	GI-199
Nine Mile Point 1	05000220	0.11	1.5E-04	0.27	4.2E-06	0.3g focused-scope EPRI SMA	GI-199
Nine Mile Point 2	05000410	0.15	4.8E-05	0.23	5.6E-06	SPRA and focused-scope EPRI SMA	GI-199
North Anna 1	05000338	0.12	2.1E-04	0.16	4.4E-05	0.3g focused-scope EPRI SMA	GI-199
North Anna 2	05000339	0.12	2.1E-04	0.16	4.4E-05	0.3g focused-scope EPRI SMA	GI-199
Oconee 1	05000269	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oconee 2	05000270	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oconee 3	05000287	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oyster Creek	05000219	0.17	1.5E-04	n/a	1.4E-05	seismic PRA	GI-199
Palisades	05000255	0.2	1.4E-04	n/a	6.4E-06	seismic PRA	GI-199
Palo Verde 1	05000528	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE
Palo Verde 2	05000529	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE

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Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Palo Verde 3	05000530	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE
Peach Bottom 2	05000277	0.12	2.0E-04	0.2	2.4E-05	modified focused-scope EPRI SMA	GI-199
Peach Bottom 3	05000278	0.12	2.0E-04	0.2	2.4E-05	modified focused-scope EPRI SMA	GI-199
Perry	05000440	0.15	2.2E-04	0.3	2.1E-05	0.3g focused-scope EPRI SMA	GI-199
Pilgrim 1	05000293	0.15	8.1E-04	n/a	6.9E-05	seismic PRA	GI-199
Point Beach 1	05000266	0.12	2.0E-04	n/a	1.1E-05	seismic PRA	GI-199
Point Beach 2	05000301	0.12	2.0E-04	n/a	1.1E-05	seismic PRA	GI-199
Prairie Island 1	05000282	0.12	2.0E-04	0.28	3.0E-06	0.3g focused-scope EPRI SMA	GI-199
Prairie Island 2	05000306	0.12	2.0E-04	0.28	3.0E-06	0.3g focused-scope EPRI SMA	GI-199
Quad Cities 1	05000254	0.24	8.2E-04	0.09	2.7E-05	0.3g focused-scope EPRI SMA	GI-199
Quad Cities 2	05000265	0.24	8.2E-04	0.09	2.7E-05	0.3g focused-scope EPRI SMA	GI-199
River Bend	05000458	0.1	2.4E-04	0.1	2.5E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Robinson (HR)	05000261	0.2	1.1E-03	0.28	1.5E-05	0.3g full-scope EPRI SMA	GI-199
Saint Lucie	05000335	0.1	1.4E-04	0.1	4.6E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Salem 1	05000389	0.2	2.6E-04	0.1	4.6E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Salem 2	05000272	0.2	2.6E-04	n/a	9.3E-06	seismic PRA	GI-199
San Onofre 2	05000361	0.67	1.2E-04	n/a	1.7E-05	seismic PRA	IPEEE
San Onofre 3	05000362	0.67	1.2E-04	n/a	1.7E-05	seismic PRA	IPEEE
Seabrook	05000311	0.25	1.3E-04	n/a	9.3E-06	seismic PRA	GI-199
Sequoyah 1	05000443	0.18	7.1E-04	n/a	2.2E-05	seismic PRA	GI-199
Sequoyah 2	05000327	0.18	7.1E-04	0.27	5.1E-05	0.3g full-scope EPRI SMA	GI-199
Shearon Harris 1	05000328	0.15	4.6E-05	0.27	5.1E-05	0.3g full-scope EPRI SMA	GI-199
South Texas 1	05000498	0.1	3.0E-05	n/a	6.2E-06	seismic PRA	GI-199

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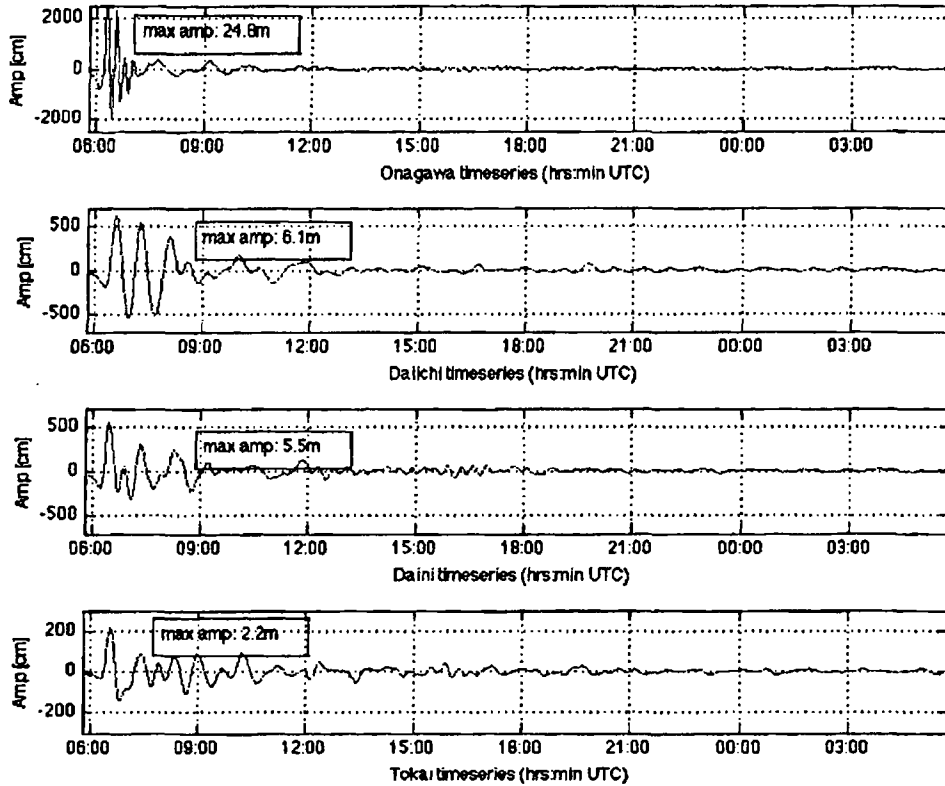
Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
South Texas 2	05000499	0.1	3.0E-05	n/a	6.2E-06	seismic PRA	GI-199
Summer	05000395	0.15	3.9E-04	0.22	3.8E-05	0.3g focused-scope EPRI SMA	GI-199
Surry 1	05000280	0.15	2.2E-04	n/a	5.7E-06	seismic PRA	GI-199
Surry 2	05000281	0.15	2.2E-04	n/a	5.7E-06	seismic PRA	GI-199
Susquehanna 1	05000387	0.1	1.9E-04	0.21	1.3E-05	0.3g focused-scope EPRI SMA	GI-199
Susquehanna 2	05000388	0.1	1.9E-04	0.21	1.3E-05	0.3g focused-scope EPRI SMA	GI-199
Three Mile Island 1	05000289	0.12	1.0E-04	n/a	4.0E-05	seismic PRA	GI-199
Turkey Point 3	05000250	0.15	3.8E-05	0.15	1.0E-05	site-specific approach; SSE=0.15g	GI-199
Turkey Point 4	05000251	0.15	3.8E-05	0.15	1.0E-05	site-specific approach; SSE=0.15g	GI-199
Vermont Yankee	05000271	0.14	1.2E-04	0.25	8.1E-06	0.3g focused-scope EPRI SMA	GI-199
Vogtle 1	05000424	0.2	1.5E-04	0.3	1.8E-05	0.3g focused-scope EPRI SMA	GI-199
Vogtle 2	05000425	0.2	1.5E-04	0.3	1.8E-05	0.3g focused-scope EPRI SMA	GI-199
Waterford 3	05000382	0.1	1.1E-04	0.1	2.0E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Watts Bar	05000390	0.18	2.9E-04	0.3	3.6E-05	0.3g focused-scope EPRI SMA	GI-199
Wolf Creek	05000482	0.12	3.7E-05	0.2	1.8E-05	reduced-scope EPRI SMA	GI-199
25th percentile			9.6E-05		6.0E-06		
min			1.6E-05		2.0E-06		
median			1.7E-04		1.5E-05		
mean			3.1E-04		2.1E-05		
max			3.9E-03		1.0E-04		
75th percentile			2.6E-04		3.2E-05		

Summary of seismological information from regional instrumentation

Placeholder: Jon Ake is developing.

Tsunami wave heights from NOAA (very preliminary. For basic situational awareness only)

Offshore wave amplitudes, scaled to the coastline



Tsunami Fact Sheet

Placeholder: Goutam Bagchi, Henry Jones and Rich Raone are developing.

Seismicity of the Central and Eastern US Fact Sheet

Placeholder: Jon Ake is developing.

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Design Basis Ground Motions and New Review Level Ground Motions Used for Review of Japanese Plants

Plant sites	Contributing earthquakes	New DBGM S ₁	Original DBGM S ₂
Tomari	Earthquakes undefined specifically	550 Gal	370 Gal
Onagawa	Soutei Miyagiken-oki (M8.2)	580	375
Higashidoori	Earthquakes undefined specifically	450	375
Fukushima	Earthquake near the site (M7.1)	600	370
Tokai	Earthquakes undefined specifically	600	380
Hamaoka	Assumed Tokai (M8.0), etc.	800	600
Shika	Sasanami-oki Fault (M7.6)	600	490
Tsuruga	Urazoko-Uchiikemi Fault (M6.9), etc. →Mera-Kareizaki - Kaburagi(M7.8), Shelf edge+B+Nosaka (M7.7)	800	532
Mihama	C, Fo-A Fault (M6.9)→ Shelf edge+B+Nosaka(M7.7)	750	405
Ohi	C, Fo-A Fault (M6.9)→Fo-A+Fo-B (M7.4)	700	405
Takahama	Fo-A Fault (M6.9) →Fo-A+Fo-B(M7.4)	550	370
Shimane	Shinji Fault (M7.1)	600	456
Ikata	Central Tectonic Structure (M7.6)	570	473
Genkai	Takekoba F. (M6.9) → Enhanced uncertainty consideration	540	370
Sendai	Gotandagawa F.(M6.9), F-A(M6.9)	540	372
Kashiwazaki-Kariwa	F-B Fault (M7.0), Nagaoka-plain-west Fault (M8.1)	2300 (R1 side) 1209 (R5 side)	450
Monju (Proto Type FBR)	Shiraki-Niu F.(M6.9) , C F.(M6.9)→Shelf edge+B+Nosaka(M7.7), Small Damping	760	408
Shimokita Reprocessing F.	Deto-Seiho F.(M6.8), Yokohama F.(M6.8)	450	320

Status of Review of Japanese NPPs to New Earthquake Levels Based on 2006 Guidance

Utility	Site (Unit)	Type	Dec.2010
Hokkaido	Tomari	PWR	△
Tohoku	Onagawa (Unit1)	BWR	◎
	Higashi-dori	BWR	△
Tokyo	Kashiwazaki-Kariwa	BWR	Unit 1,5,6,7 ◎
	Fukushima-No1	BWR	Unit 3 ◇, 5 ◎
	Fukushima-No2	BWR	Unit 4,5 ◎
Chubu	Hamaoka	BWR	△
Hokuriku	Shika (Unit 2)	BWR	◎
Kansai	Mihama(Unit 1)	PWR	◎
	Ohi(Unit 3,4)	PWR	◎
	Takahama (Unit 3,4)	PWR	◎
Chugoku	Shimane (Unit 1, 2)	BWR	◎
Shikoku	Ikata (Unit 3)	PWR	◎
Kyushu	Genkai (Unit 3)	PWR	◎
	Sendai (Unit 1)	PWR	◎
Japan Atomic Power	Tokai-Daini	BWR	○
	Tsuruga	BWR/PWR	△
JAEA	Monju	Proto Type FBR	◎
Japan Nuc. Fuel	Rokkasyo	Reprocessing	◎
◎: NSC review finished, ○: NISA review finished and in NSC review, △: Under review by NISA			

US Portable Array briefing sheet for brief congressional staffers

NOTE: This is provided because IRIS participants let us know that here was a discussion about the NRC's involvement in this program. We have been involved in this for the last couple years.

IRIS

The Incorporated Research Institutions for Seismology is the Consortium of United States Universities with Major Research Programs in Seismology and Related Fields.

The Transportable Array: A Science Investment that Can Be Leveraged

IRIS is installing the Transportable Array – a set of 400 broadband seismic instruments – in each of more than 1600 sites across the contiguous United States. The instruments operate at each site for two years and then are removed and redeployed further east. Roughly 1100 stations have been installed since 2003, and instruments have been removed from more than 600 of those sites in the western United States.

The National Science Foundation is funding the full cost to "roll" the Transportable Array across the US, more than \$90,000,000 over ten years. Comparatively small incremental investments could add significant data that are relevant to the safety of nuclear power plants. These efforts would be uniquely cost effective, since NSF is already funding installation, and they would feed data into an existing, standardized and widely used data management system that already incorporates the vast majority of seismic data from US networks. But these opportunities are time constrained: the array will be fully installed in the contiguous 48 states by late 2013.

More Value from Longer Term Regional Observations

A dense, uniform seismic network is necessary for long-term, broad-area seismic monitoring of the central and eastern United States due to low event recurrence rates and the risk of significant earthquakes ($M > 5$) anywhere in the region. Monitoring seismicity in the central and eastern US can be improved by turning selected sites into permanent seismic stations. A total of more than 35 Transportable Array stations have already been "adopted" by several organizations, creating a permanent legacy, but only in the western United States.

A strategic "1-in-4" plan would involve "adoption" of systematically selected stations in the central and eastern United States – every other station in both the east-west and north-south directions, creating a uniform grid of some 250 stations. Long-term regional operation could be combined with two optional enhancements to create a unique observatory for the study of seismicity, source characteristics, attenuation, and local ground acceleration.

Enhancement 1: Acquire Higher Frequency Data

Crustal rigidity in the central and eastern US makes it desirable to record high frequency characteristics of local and regional earthquakes. The existing instruments could be reconfigured to record high frequencies but doing so would nearly triple the data flow, necessitating improvements to the communications infrastructure.

Enhancement 2: Add Strong Motion Sensors

Acquiring strong motion sensors and reconfiguring field computers that record and telemeter the data would help to measure unique effects of severe shaking. The design anticipated this augmentation, and several stations in California and Washington were operated that way. Upgrade would be more efficient at sites that have not yet been installed.

Estimate of annual acquisition and O&M costs for the 1-in-4, 250-station network in central and eastern US.

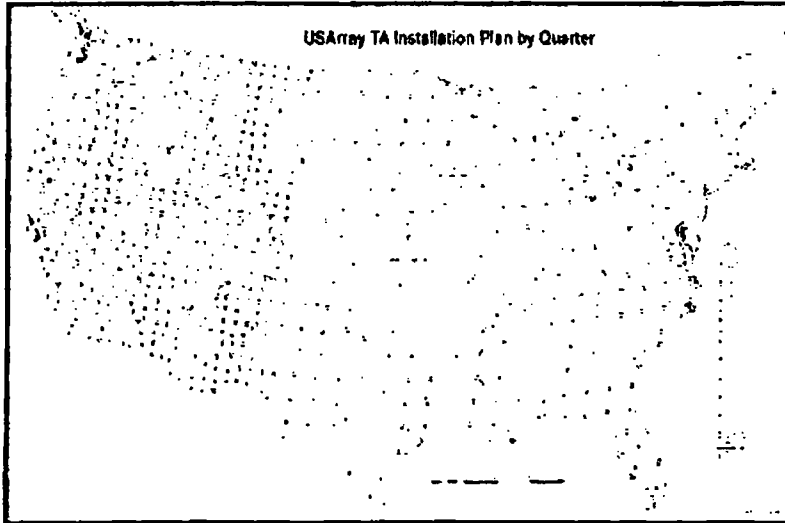
Year	Stations	Acquisition ¹	O&M ²	Total
2011	50	\$1,800,000	\$ 400,000	\$2,200,000
2012	50	\$1,800,000	\$ 800,000	\$2,600,000
2013	50	\$1,800,000	\$1,200,000	\$3,000,000
2014	50	\$1,800,000	\$1,600,000	\$3,400,000
2015	50	\$1,800,000	\$2,000,000	\$3,800,000
2016	–	–	\$2,000,000	\$2,000,000

¹ Assumes upgrades to six channel data loggers with strong motion sensors.

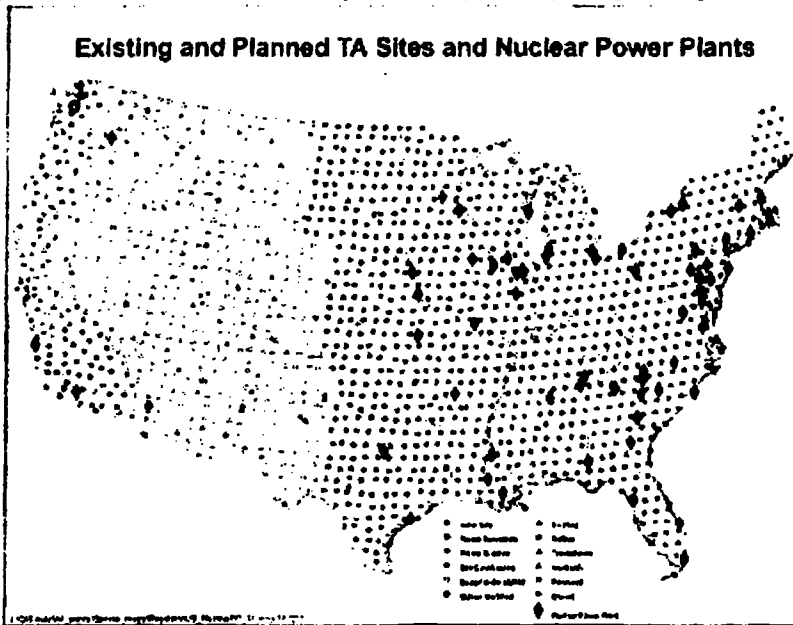
² Assumes a conservative estimate of \$8,000/station/year.

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The 1-in-4, 250-station network that could be created in the central and eastern US by "leaving behind" one out of every four Transportable Array stations during the years 2011 through 2013



A large majority of nuclear power plants are located in the central and eastern parts of the US, where it is still possible to "leave behind" 1-in-4 Transportable Array stations for long-term regional observations



List of Questions

Natural Hazards and Ground Shaking Design Levels 1

1) Did the Japanese underestimate the size of the maximum credible earthquake that could affect the plants? 1

2) Can a very large earthquake and tsunami happen here? 1

3) Has this changed our perception of Earthquake risk? 1

4) What magnitude earthquake are US plants designed to? 1

5) How many US reactors are located in active earthquake zones (and which reactors)? 2

6) How many reactors are along coastal areas that could be affected by a tsunami (and which ones)? 2

7) If the earthquake in Japan was a larger magnitude than considered by plant design, why can't the same thing happen in the US? 2

8) If the earthquake in Japan was a larger magnitude than considered by plant design, why can't the same thing happen in the US? 3

9) What if an earthquake like the Sendai earthquake occurred near a US plant? 3

10) What would be the results of a tsunami generated off the coast of a US plant? (Or why are we confident that large tsunamis will not occur relatively close to US shores?) 3

11) Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants? 3

12) What level of earthquake hazard are the US reactors designed for? 3

13) Does the NRC consider earthquakes of magnitude 8.9? 4

14) What are the definitions of the SSE and OBE? 4

15) What is the likelihood of the ground motions occurring over the life of the plant? 5

16) What is magnitude anyway? What is the Richter Scale? What is intensity? 5

17) 6

Design Against Natural Hazards & Plant Safety in the US 6

18) Are power plants designed for Tsunami's? 6

19) What level of Tsunami are we designed for? 6

20) How was the seismic design basis for an existing nuclear power plant established? 6

21) Is there margin above the design basis? 6

22) Are US plants safe? 7

23) Was the Japanese plant designed for this type of accident? Are US plants? 7

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24) Why do we have confidence that US nuclear power plants are adequately designed for earthquakes and tsunamis?..... 7

25) Can this happen here i.e. an earthquake that significantly damages a nuclear power plant? Are the Japanese plants similar to U.S. plants?..... 7

26) Are US plants susceptible to the same sort of loss of all power?..... 8

27) Could an accident like the one at Japan’s Fukushima Daiichi nuclear plant happen in the United States?..... 8

28) Should U.S. nuclear facilities be required to withstand earthquakes and tsunamis of the kind just experienced in Japan? If not, why not? 8

29) Can you summarize the plant seismic design basis for the US plants? Are there any special issues associated with seismic design?..... 9

30) How do we know that the equipment in plants is safe in earthquakes? 9

31) How do we know equipment will work if the magnitude is bigger than expected, like in Japan? 9

32) Are US plants susceptible to the same kind of loss of power as happened in Japan? 9

33) How do we know that the EDGs in Diablo Canyon and SONGS will not fail to operate like in Japan? 9

34) Is all equipment at the plant vulnerable to tsunami?..... 10

35) What protection measures do plants have against tsunami? 10

36) Is there a risk of loss of water during tsunami drawdown? Is it considered in design?..... 10

37) Are nuclear buildings built to withstand earthquakes? What about tsunami?..... 10

38) Are aftershocks considered in the design of equipment at the plants? Are aftershocks considered in design of the structure? 10

39) Are there any special issues associated with seismic design at the plants? For example, Diablo Canyon has special requirements. Are there any others?..... 10

40) Is the NRC planning to require seismic isolators for the next generation of nuclear power plants? How does that differ from current requirements and/or precautions at existing U.S. nuclear power plants? 10

41) Are there any U.S. nuclear power plants that incorporate seismic isolators? What precautions are taken in earthquake-prone areas? 11

42) Do you think that the recent Japan disaster will cause any rethinking of the planned seismic isolation guidelines, particularly as it regards earthquakes and secondary effects such as tsunamis? 11

About Japanese Hazard, Design and Earthquake Impact..... 12

43) Was the damage done to the plants from the Earthquake or the Tsunami?..... 12

44) What is the design level of the Japanese plants? Was it exceeded?..... 12

45) What are the Japanese S₁ and S₂ ground motions and how are they determined?..... 12

46) Did this earthquake affect Kashiwazaki-Kariwa NPP? 13

47) How high were the tsunami at the plants?..... 13

What happened in US Plants during the earthquake? 14

48) Was there any damage to U.S. reactors from either the earthquake or the resulting tsunami?..... 14

49) Have any lessons for US plants been identified?..... 14

Future Actions, Reassessment of US Plants and GI-199 15

50) What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there? 15

51) With NRC moving to design certification, at what point is seismic capability tested – during design or modified to be site-specific? If in design, what strength seismic event must these be built to withstand? 15

52) Is the earthquake safety of US plants reviewed once the plants are constructed? 16

53) Does the NRC ever review tsunami risk for existing plants? 16

54) Does GI-199 consider tsunami? 16

55) What is Generic Issue 199 about? 16

56) Where can I get current information about Generic Issue 199? 16

57) How was the seismic design basis for an existing nuclear power plant established? 16

58) Is there margin above the design basis? 17

59) Are all U.S. plants being evaluated as a part of Generic Issue 199? 17

60) Are the plants safe? If you are not sure they are safe, why are they not being shut down? If you are sure they are safe, why are you continuing evaluations related to this generic issue?..... 17

61) What do you mean by “increased estimates of seismic hazards” at nuclear power plant sites? 18

62) What do the following terms mean? 18

63) Let's say there's an estimate expressed as "2.5E-06." (I'm looking at Table D-2 of the safety/risk assessment of August 2010.) I believe that this expression means the same as 2.5 x 10⁻⁰⁶, or 0.0000025, or 2.5 divided by one million. In layman's terms, that means an expectation, on average, of 2.5 events every million years, or once every 400,000 years. Similarly, "2.5E-05" would be 2.5 divided by 100,000, or 2.5 events every 100,000 years, on average, or once every 40,000 years. Is this correct? 20

64) The GI-199 documents give updated probabilistic seismic hazard estimates for existing nuclear power plants in the Central and Eastern U.S. What document has the latest seismic hazard estimates (probabilistic or not) for existing nuclear power plants in the Western U.S.? 20

65) The GI-199 documents refer to newer data on the way. Have NRC, USGS et al. released those? I'm referring to this: "New consensus seismic-hazard estimates will become available in late 2010 or early 2011 (these are a product of a joint NRC, U.S. Department of Energy, U.S. Geological Survey (USGS) and Electric Power Research Institute (EPRI) project). These consensus seismic hazard estimates will supersede the existing EPRI, Lawrence Livermore National Laboratory, and USGS hazard estimates used in the GI-199 Safety/Risk Assessment." 20

66) What is the timetable now for consideration of any regulatory changes from the GI-199 research?..... 21

Seismic Probabilistic Risk Assessment (SPRA)..... 22

67) The NRC increasingly uses risk-information in regulatory decisions. Are risk-informed PRAs useful in assessing an event such as this? 22

Plant-Specific Questions 23

SONGS questions 23

68) SONGS received a white finding in 2008 for 125VDC battery issue related to the EDGs that went undetected for 4 years. NRC issued the white finding as there was increased risk that one EDG may not have started due to a low voltage condition on the battery on one Unit (Unit 2). Aren't all plants susceptible to the unknown? Is there any assurance the emergency cooling systems will function as desired in a Japan-like emergency? 23

69) Has the earthquake hazard at SONGS been reviewed like DCNPP is doing? Are they planning on doing an update before relicensing? 23

70) Is possible to have a tsunami at songs that is capable of damaging the plant?..... 23

71) Does SONGS have an emergency plan for tsunami? 23

72) Has evacuation planning at SONGS considered tsunami? 24

73) Is SONGS designed against tsunami and earthquake? 24

74) What is the height of water that SONGS is designed to withstand? 24

75) What about drawdown and debris? 24

76) Will this be reviewed in light of the Japan quake. 24

77) Could all onsite and offsite power be disrupted from SONGS in the event of a tsunami, and if that happened, could the plant be safely cooled down if power wasn't restored for days after? 24

78) Are there any faults nearby SONGS that could generate a significant tsunami? 25

79) What magnitude or shaking level is SONGS designed to withstand? How likely is an earthquake of that magnitude for the SONGS site? 25

80) Could SONGS withstand an earthquake of the magnitude of the Japanese earthquake? 25

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81) What about the evacuation routes at SONGS? How do we know they are reasonable?..... 25

82) Regarding tsunami at Diablo and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami?..... 25

83) What is the design level flooding for DNCPP and SONGS? Can a tsunami be larger?..... 26

Diablo Canyon Questions..... 27

84) Now after the Japan tragedy, will the NRC finally hear us (A4NR) and postpone DC license renewal until seismic studies are complete? How can you be sure that what happened there is not going to happen at Diablo with a worse cast quake and tsunami? 27

85) The evacuation routes at DCNPP see are not realistic. Highway 101 is small...and can you imagine what it will be like with 40K people on it? Has the evacuation plan been updated w/ all the population growth? 27

86) Are there local offshore fault sources capable of producing a tsunami with very short warning times?..... 27

87) Are there other seismically induced failure modes (other than tsunami) that would yield LTSBO? Flooding due to dam failure or widespread liquefaction are examples. 27

88) Ramifications of beyond design basis events (seismic and tsunami) and potential LTSBO on spent fuel storage facilities? 27

89) Why did a Emergency Warning go out for a 'tsunami' that was only 6 ft high? Do these guys really know what they're doing? Would they know it if a big one was really coming? Crying wolf all the time doesn't instill a lot of confidence. 27

90) How big did the Japanese think a quake/tsunami could be before 3/11? Why were they so wrong (assuming this quake/tsunami was bigger than what they had designed the plant for)? 28

The Japanese were supposed to have one of the best tsunami warning systems around. What went wrong last week (both with the reactors and getting the people out...see #1, evacuation plan above)?..... 28

91) Regarding tsunami at Diablo and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami?..... 28

Indian Point Questions..... 29

92) Why is Indian Point safe if there is a fault line underneath it?..... 29

Questions for the Japanese..... 30

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Tsunami wave heights from NOAA (very preliminary. For basic situational awareness only) 45

Tsunami Fact Sheet 46

Seismicity of the Central and Eastern US Fact Sheet 47

Design Basis Ground Motions and New Review Level Ground Motions Used for Review of Japanese Plants 48

Status of Review of Japanese NPPs to New Earthquake Levels Based on 2006 Guidance 49

US Portable Array briefing sheet for brief congressional staffers 50

List of Questions 52

Sosa, Belkys

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From: Snodderly, Michael
Sent: Wednesday, March 16, 2011 9:02 AM
To: Sosa, Belkys; Baggett, Steven; Davis, Roger
Subject: Fw: March 16 0800 Ops Center Update

Major change in status please see attached

Sent from my NRC Blackberry

at (b)(6)

From: Hipschman, Thomas
To: Franovich, Mike; Snodderly, Michael; Castleman, Patrick; Orders, William
Sent: Wed Mar 16 08:28:11 2011
Subject: March 16 0800 Ops Center Update

~~Internal Information Only~~

As many of you heard the Chairman said no briefing at 8am. New briefing format at a later time. Commission Offices will be informed.

However, Brian McDermott came on shortly after and did give an brief update. He agreed I could sent you a quick update

Unit 4 serious explosion – degradation of building, spent fuel pool no longer retains water, some of the building walls have collapsed spent fuel pool heating up, indication of smoke
Unit 2 also challenged – spent fuel pool also degraded, lot of focus,
Units 1 and 3, not in a lot better shape

(b)(5)

Coordinating with DOE with dose projections

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STATEMENT
BY GREGORY B. JACZKO, CHAIRMAN
UNITED STATES NUCLEAR REGULATORY COMMISSION
TO THE
HOUSE COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEES ON ENERGY AND POWER, ENVIRONMENT AND THE ECONOMY
MARCH 16, 2011

Mr. Chairmen, Ranking Members Rush and Green, and Members of the Subcommittees, I am honored to appear before you today on behalf of the U.S. Nuclear Regulatory Commission. Given the events that are unfolding overseas, my opening remarks will focus on the crisis in Japan, and I have additional information on the Fiscal Year 2012 budget that I have submitted for the record.

I would first like to offer my condolences to all those affected by the earthquake and tsunami in Japan over the last few days. My heart goes out to those who have been dealing with the aftermath of these natural disasters.

I want to publicly acknowledge the tireless efforts, professionalism and dedication of the NRC staff in reacting to the events in Japan. This is just another example from my 6 ½ years on the Commission of the dedication of the NRC staff to the mission of protection of public health and safety. The American people can be proud of the commitment and dedication within the Federal workforce, exemplified by our staff every day.

While the NRC regulates the safe and secure commercial uses of radioactive materials in the United States, we also interact with nuclear regulators from around the world. Since Friday, the NRC's headquarters Operations Center has been operating on a 24-hour basis to monitor events unfolding at nuclear power plants in Japan. Since the earthquake hit northeastern Japan last Friday, some reactors at the Fukushima No. 1 plant have lost their cooling functions, leading to hydrogen explosions and rises in radiation levels. Two NRC experts on boiling-water reactors have already been deployed to Japan as part of a U.S. International Agency for International Development team, and they are currently in Tokyo. Since then, the Japanese government has formally asked for assistance from the United States as it continues to respond to the situation. Another NRC team is scheduled to land today.

Within the U.S., the NRC has been coordinating its efforts with other Federal agencies as part of the government response to the situation. This includes monitoring radioactive releases and predicting their path. Given the thousands of miles between Japan and the United States, Hawaii, Alaska, the U.S. Territories and the West Coast are not expected to experience any harmful levels of radioactivity.

Examining all available information is part of the effort to analyze the event and understand its implications both for Japan and the United States. The NRC has been working with several agencies to assess recent seismic research for the central and eastern part of the

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country. That work continues to indicate that the U. S. public remains safe; we will continue to work to maintain that level of protection.

U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. 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 accuracy. This means that U.S. nuclear power plants are designed to be safe based on historical data from the area's maximum credible earthquake.

The NRC remains attentive to any information that can be applied to U.S. reactors. Our focus is always on keeping plants in this country safe and secure. As this immediate crisis in Japan comes to an end, we will look at whatever information we can gain from the event and see if there are changes we need to make to our own system. Within the next few days, I intend to meet with my colleagues on the Commission on the current status and to begin a discussion of how we will systematically and methodically review information from the events in Japan. In the meantime, we continue to oversee and monitor plants to ensure that U. S. reactors remain safe.

The NRC will continue to monitor the situation and provide updates via press releases and our public blog. The NRC also stands ready to offer further technical assistance as needed. We hope that this situation will be resolved soon so that Japan can begin to recover from this terrible tragedy.

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Apostolakis, George

From: Apostolakis, George
Date: Thursday, March 17, 2011 9:15 PM
To: Vietti-Cook, Annette; Svinicki, Kristine; Magwood, William; Ostendorff, William
Cc: Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill
Subject: Re: Briefing on NRC Response to Recent Nuclear Events in Japan followed by Agenda Planning, Monday, 3/21 Beginning 9 am

Annette: (b)(5) George Apostolakis.

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Vietti-Cook, Annette
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill
Sent: Thu Mar 17 19:33:24 2011
Subject: Briefing on NRC Response to Recent Nuclear Events in Japan followed by Agenda Planning, Monday, 3/21 Beginning 9 am

Because of the short timeframe and great interest in this event, I am sending this to you directly. Attached for your review and approval is the Scheduling Note for the Commission Briefing on NRC Response to Recent Nuclear Events in Japan. The Commission agreed on Tuesday, March 15, 2011, to hold this meeting on short notice. My plan is to announce the Commission Briefing tomorrow morning on the NRC public website, which provides the title of the meeting, date, time and location. A Federal Register Notice is also sent, but will not be published before the meeting. My understanding is that OPA will be doing a press release. Once you have approved the Scheduling Note it will be posted on the public website along with NRC staff presentation slides that are consistent with the Commission's approved scheduling note. This is our usual practice. Staff is working on background material and slides which we expect tomorrow.

This Commission meeting will be followed by an Agenda Planning Session in the 18th floor conference room. The Commission would discuss the scheduling of meetings the Commission would like to have in response to the events in Japan. The Commission will also consider the scheduling of the meetings and papers that are already on its agenda.

Annette

Final: 3/17/11

SCHEDULING NOTE

Title: **BRIEFING ON THE § 50.46a RISK-INFORMED EMERGENCY CORE COOLING SYSTEM (ECCS) RULE (Public)**

Purpose: To provide the Commission a discussion and facilitate voting on the draft final § 50.46a risk-informed ECCS rule which would establish an alternative set of risk-informed ECCS requirements that licensees may choose to comply in lieu of meeting the current emergency core cooling system requirements in § 50.46. Using these alternative ECCS requirements would provide some licensees with opportunities to change various aspects of facility design and operation.

Scheduled: **March 24, 2011**
9:00 am

Duration: Approx. 3.5 hours

Location: Commissioners' Conference Room, 1st floor OWFN

Participants:	Presentation
<u>NRC Staff Panel</u>	50 mins.*
Bill Borchardt , Executive Director for Operations Eric Leeds , Director, NRR	
William Ruland , Director, Division of Safety Systems, NRR <u>Topic:</u> General overview of § 50.46a rule	10 mins*
Richard Dudley , Division of Policy and Rulemaking, NRR <u>Topic:</u> History of rulemaking and overview of rule requirements	20 mins*
Robert Tregoning , Division of Engineering, RES <u>Topic:</u> Generic studies performed to support determining the transition break size	20 mins*
Commission Q & A	50 mins.
Break	5 mins.

External Panel	50 mins*
John Butler , Senior Director, Engineering and Operations Support, Nuclear Energy Institute <u>Topic:</u> Broader perspectives on risk-informed regulation in general and applicability of § 50.46a to both BWRs and PWRs.	10 mins*
Ron Jones , Member, PWROG Executive Committee, and Senior Vice President, Nuclear Development, Duke Energy <u>Topic:</u> Industry views on usefulness of and likelihood of adopting draft final § 50.46a rule.	10 mins*
David Czufin , Member, BWROG Executive Oversight Committee and Vice President, Engineering, Exelon Corporation <u>Topic:</u> BWROG perspective on why they are not interested in the alternative process and what they would do differently.	10 mins*
Tim Bowman , General Manager, Nuclear Safety Assurance, South Texas Project Nuclear Operating Company <u>Topic:</u> Issues considered by individual licensees when deciding whether to adopt the alternative rule.	10 mins*
Edwin Lyman , Senior Scientist, Union of Concerned Scientists <u>Topic:</u> Public stakeholder perspectives on draft final § 50.46a rule.	10 mins*
Commission Q & A	50 mins.
Discussion – Wrap-up	5 mins.

*For presentation only and does not include time for Commission Q & As

Documents:

- SECY-10-0161, 12/13/10 - Final Rule: Risk-Informed Changes to Loss-of-Coolant Accident Technical Requirements (10 CFR 50.46a) (RIN 3150-AH29)
Background material distributed: March 10, 2011.
Slides distributed: March 17, 2011.

BRIEFING ON § 50.46a RISK-INFORMED ECCS RULE (Public)
Thursday, March 24, 2011, 9:00 a.m.

External Panel

David Czufin, BWROG.

Ron Jones, PWROG

Tim Bowman, South Texas

John Butler, NEI

Edwin Lyman, UCS

OGC

SECY

Commissioner Ostendorff

Commissioner Magwood

Commissioner Apostolakis

Commissioner Svinicki

Chairman Jaczko

COMMISSIONERS

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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March 17, 2011

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MEMORANDUM TO: Files

FROM: Stephen G. Burns
General Counsel 

SUBJECT: CHAIRMAN'S EMERGENCY AUTHORITY

I have been asked whether the Chairman's communication of protective action guidance and related information in an agency press release related to the nuclear emergency in Japan is a valid exercise of his authorities under the Energy Reorganization Act of 1974 and the Reorganization Plan No. 1 of 1980. I believe it is, based on the Chairman's role as agency spokesman and under his authorities for coping with an emergency.

First, the Chairman as spokesman may communicate factual data and recommendations that fall within existing Commission policies and procedures. As I understand the facts here, the agency's press release recommending that US citizens evacuate an area with a 50 mile radius of the Fukushima Daiichi Plant was based on factual information obtained by and modeling conducted by NRC. Moreover, the recommendation was based on existing guidance that would be used by the agency in the event of a domestic accident or incident of similar potential severity. On this basis, the communication of such information and guidance would not appear to raise a new policy issue and would appear consistent with the obligation to conform to existing policy. Such communications are consistent with the Chairman's role as agency spokesman.

Second, although this may be a novel question, I believe that the Chairman's actions fit within his authorities under section 3 of the Reorganization Plan under which all authorities vested in the Commission pertaining to an emergency are transferred to the Chairman. Although the language in the plan refers to "an emergency concerning a particular facility or materials licensed or regulated by the Commission," I do not view this language as limiting the scope of the Chairman's emergency response authority to only incidents involving particular NRC-licensed facilities. In this regard, I note that former General Counsel Cyr gave a similar opinion in the context of agency response to the 9/11/2001 terrorist attacks in determining that the absence of an actual event or damage to a nuclear facility or materials did not limit the Chairman's authority to exercise his emergency powers. Memo from K. Cyr to Chairman Meserve (Nov. 7, 2001).

Section 3 of the Reorganization Plan of 1980 speaks variously of the Chairman's authority in terms of an "emergency," "emergency incident" and "emergency functions" without defining these terms, nor are the terms defined in the Atomic Energy Act. The absence of precise definitions is consistent with the need to ensure that the person accountable for emergency response is not unduly constrained from determining when an emergency exists and when and how the agency's emergency capabilities should

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be deployed. The legislative history of the Reorganization Plan makes clear that the intent was to ensure that a single politically accountable official would be responsible during an emergency. In transmitting the Plan, President Carter stated:

The [NRC's] ability to respond decisively and responsibly to any nuclear emergency must be fully ensured in advance. Experience has shown that the Commission as a whole cannot deal expeditiously with emergencies or communicate in a clear, unified voice to civil authorities or to the public. But present law prevents the Commission from delegating its emergency authority to any of its members. The Plan would correct this situation by specifically authorizing the Chairman to act for the Commission in an emergency.

H. Doc. No. 96-288, at 3. In carrying out these functions, the Chairman is expected to follow the Commission's established policy guidelines, but has "maximum" discretion to adapt or refashion such policies to the specific emergency." Senate Report No. 96-790 at 20; House Report No. 96-1043 at 12.

Although the immediate threat of the earthquake and tsunami to US facilities has passed, ongoing efforts to monitor the state of the Fukushima reactor complex, assess potential impacts on the U.S. Homeland, and provide protective advice to US citizens as well as U.S. personnel, including NRC personnel, stationed in Japan are reasonably construed as part of emergency monitoring and response. Such activities are also being conducted in circumstances in which the President and other agencies are looking to support and advice of the NRC in emergency response activities intended to protect U.S. interests as well as provide assistance to Japan in responding to the nuclear crisis. In context of the current situation and considering the legal authorities and prior opinions thereon, the Chairman's actions are a reasonable application of his authority under section 3 of the Reorganization Plan.

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2011 JUL -1 PM 4:00

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Sosa, Belkys

From: Sharkey, Jeffry
Sent: Thursday, March 17, 2011 3:59 PM
To: Batkin, Joshua; Bubar, Patrice; Nieh, Ho; Sosa, Belkys
Cc: Reddick, Darani
Subject: FW: eWash: WH 124
Attachments: 4411001653b.pdf

Annette,

(b)(5)

Thanks,

Jeff

From: Vietti-Cook, Annette
Sent: Thursday, March 17, 2011 8:26 AM
To: Jaczko, Gregory
Cc: Batkin, Joshua; Coggins, Angela; Monninger, John; Brenner, Eliot; Hayden, Elizabeth; Borchardt, Bill; Virgilio, Martin; Weber, Michael; Svinicki, Kristine; Sharkey, Jeffry; Apostolakis, George; Sosa, Belkys; Bubar, Patrice; Magwood, William; Ostendorff, William; Nieh, Ho; Burns, Stephen; Rothschild, Trip; Doane, Margaret; Marnish, Nader; Harrington, Holly; Borchardt, Bill; Virgilio, Martin; Weber, Michael; Schmidt, Rebecca; Powell, Amy
Subject: FW: eWash: WH 124

Summary of conclusion from the Deputies meeting March 14.

From: NRCHQ
Sent: Wednesday, March 16, 2011 5:42 PM
To: Dodmead, James; Mangefrida, Michael; Giles, Vanessa; Parsons, Darryl
Subject: FW: eWash: WH 124

From: eWash-WHSR(SMTP); [redacted] (b)(6)
Sent: Wednesday, March 16, 2011 5:41:48 PM
To: eWash-USAID (AID.EStaskerMailLISTUSAID@usaid.gov); ewash@state.gov; [redacted] (b)(6); ewash@doc.gov; Ekaterini Malliou (HHS Executive Secretariat); HHSComSec@hhs.gov; HHSExecSec@hhs.gov; DOE.Commcenter@in.doe.gov; CommCenterStaff@hq.dhs.gov; [redacted] (b)(6); DOI_Watch_office@ios.doi.gov; Fay_Iudicello@ios.doi.gov; NRCHQ
Cc: eWash-WHSR
Subject: eWash: WH 124
Auto forwarded by a Rule

CLASSIFICATION: UNCLASSIFIED

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Sosa, Belkys

From: Baval, Rochelle
Sent: Thursday, March 17, 2011 7:01 PM
To: Svinicki, Kristine; Montes, David; Adler, James; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Pearson, Laura; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Zorn, Jason; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Tadesse, Rebecca; Thoma, John; Franovich, Mike; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William; Snodderly, Michael; Warnick, Greg
Cc: Dudley, Richard; Ruland, William; Tregoning, Robert; Wittick, Brian; Andersen, James; Blake, Kathleen; Bozin, Sunny; Cianci, Sandra; Crawford, Carrie; Gibbs, Catina; Harves, Carolyn; Hasan, Nasreen; Jimenez, Patricia; KLS Temp; Landau, Mindy; Lepre, Janet; Lewis, Antoinette; Herr, Linda; Muessle, Mary; Pace, Patti; Pulley, Deborah; Savoy, Carmel; Speiser, Herald; Taylor, Renee; Temp, GEA; Temp, WCO; Temp, WDM; Wright, Darlene
Subject: Materials for March 24th Commission Briefing on 50.46a ECCS Rule
Attachments: 110324 50.46(a) Scheduling Note.docx; Slides NRC Staff.pptx; Seating External Panel.docx; Seating NRC Staff.docx; Slides Bowman STP.pptx; Slides Czufin BWROG .ppt; Slides Jones PWROG.ppt

Attached are final scheduling note and seating charts for the March 24th Commission briefing on the 50.46a ECCS Rule. Also attached are slides from the staff, PWROG, BWROG, and STP. Hard copies will be distributed in the morning. I still expect slides from NEI and UCS, and we'll forward those when we receive them.

Tim Powell, STP, will not be able to participate in the briefing due to the events in Japan, so Tim Bowman will be representing STP.

Note that Commissioner Magwood goes first with questions.

Rochelle

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Sosa, Belkys

From: Ostendorff, William
Sent: Thursday, March 17, 2011 7:45 PM
To: Vietti-Cook, Annette; Svinicki, Kristine; Apostolakis, George; Magwood, William
Cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill
Subject: Re: Briefing on NRC Response to Recent Nuclear Events in Japan followed by Agenda Planning, Monday, 3/21 Beginning 9 am

Annette- I approve the attached scheduling note. Commissioner Ostendorff

From: Vietti-Cook, Annette
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill
Sent: Thu Mar 17 19:33:24 2011
Subject: Briefing on NRC Response to Recent Nuclear Events in Japan followed by Agenda Planning, Monday, 3/21 Beginning 9 am

Because of the short timeframe and great interest in this event, I am sending this to you directly. Attached for your review and approval is the Scheduling Note for the Commission Briefing on NRC Response to Recent Nuclear Events in Japan. The Commission agreed on Tuesday, March 15, 2011, to hold this meeting on short notice. My plan is to announce the Commission Briefing tomorrow morning on the NRC public website, which provides the title of the meeting, date, time and location. A Federal Register Notice is also sent, but will not be published before the meeting. My understanding is that OPA will be doing a press release. Once you have approved the Scheduling Note it will be posted on the public website along with NRC staff presentation slides that are consistent with the Commission's approved scheduling note. This is our usual practice. Staff is working on background material and slides which we expect tomorrow.

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Annette

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Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sharkey, Jeffrey
sent: Thursday, March 17, 2011 8:45 PM
To: Sosa, Belkys; Bubar, Patrice
Subject: Question

Belkys/Patty,

(b)(5)

Your thoughts?

Jeff

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Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Ostendorff, William
Sent: Thursday, March 17, 2011 8:54 PM
To: Vietti-Cook, Annette; Svinicki, Kristine; Apostolakis, George; Magwood, William
cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill
Subject: Re: Briefing on NRC Response to Recent Nuclear Events in Japan followed by Agenda Planning, Monday, 3/21 Beginning 9 am

(b)(5)

WCO

From: Ostendorff, William
To: Vietti-Cook, Annette; Svinicki, Kristine; Apostolakis, George; Magwood, William
Cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill
Sent: Thu Mar 17 19:44:46 2011
Subject: Re: Briefing on NRC Response to Recent Nuclear Events in Japan followed by Agenda Planning, Monday, 3/21 Beginning 9 am

Annette- I approve the attached scheduling note. Commissioner Ostendorff

From: Vietti-Cook, Annette
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill
Sent: Thu Mar 17 19:33:24 2011
Subject: Briefing on NRC Response to Recent Nuclear Events in Japan followed by Agenda Planning, Monday, 3/21 Beginning 9 am

Because of the short timeframe and great interest in this event, I am sending this to you directly. Attached for your review and approval is the Scheduling Note for the Commission Briefing on NRC Response to Recent Nuclear Events in Japan. The Commission agreed on Tuesday, March 15, 2011, to hold this meeting on short notice. My plan is to announce the Commission Briefing tomorrow morning on the NRC public website, which provides the title of the meeting, date, time and location. A Federal Register Notice is also sent, but will not be published before the meeting. My understanding is that OPA will be doing a press release. Once you have approved the Scheduling Note it will be posted on the public website along with NRC staff presentation slides that are consistent with the Commission's approved scheduling note. This is our usual practice. Staff is working on background material and slides which we expect tomorrow.

This Commission meeting will be followed by an Agenda Planning Session in the 18th floor conference room. The Commission would discuss the scheduling of meetings the Commission would like to have in response to the events in Japan. The Commission will also consider the scheduling of the meetings and papers that are already on its agenda.

Annette

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Apostolakis, George
Sent: Thursday, March 17, 2011 9:15 PM
To: Vietti-Cook, Annette; Svinicki, Kristine; Magwood, William; Ostendorff, William
Cc: Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill
Subject: Re: Briefing on NRC Response to Recent Nuclear Events in Japan followed by Agenda Planning, Monday, 3/21 Beginning 9 am

Annette: [redacted (b)(5)] George Apostolakis.

George Apostolakis
Commissioner, US NRC
Blackberry [redacted (b)(6)]

From: Vietti-Cook, Annette
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill
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Annette

120

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sosa, Belkys
Sent: Thursday, March 17, 2011 9:29 PM
o: Sharkey, Jeffry; Bubar, Patrice
Subject: Re: Question

I thought that is what was discussed during CoS mntg today...

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

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

From: Sharkey, Jeffry
To: Sosa, Belkys; Bubar, Patrice
Sent: Thu Mar 17 20:45:21 2011
Subject: Question

Belkys/Patty,

(b)(5)

our thoughts?

Jeff

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Jaczko, Gregory
Sent: Friday, March 18, 2011 1:10 PM
To: Vietti-Cook, Annette; Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill; Pace, Patti; 3WFN Core Team List Resource
Subject: RE: Monday's Commission Briefing on NRC Response to Recent Nuclear Events in Japan

(b)(5)

From: Vietti-Cook, Annette
Sent: Friday, March 18, 2011 1:04 PM
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William; Jaczko, Gregory
Cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill; Pace, Patti; 3WFN Core Team List Resource
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I need to leave a little early this afternoon (b)(6). Andy Bates is Acting for me this afternoon (415-1963). Richard Laufer is working details of Monday's Commission meeting (415-1661).

I am available by cell phone, from the time I leave and over the weekend. I will of course be here bright and early Monday.

Annette (b)(6) cell blackberry home

If you have any trouble reaching me, please contact the following people in this order for assistance:

Andrew Bates (b)(6) home cell

Rochelle Baval (b)(6) cell home

Richard Laufer (b)(6) home cell

Ken Hart, although a SECY MVP, is not listed because he is working shift work at the ops center.

Sosa, Belkys

From: Nieh, Ho
sent: Friday, March 18, 2011 2:00 PM
To: Vietti-Cook, Annette; Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William; Jaczko, Gregory
Cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill; Pace, Patti; 3WFN Core Team List Resource
Subject: RE: Monday's Commission Briefing on NRC Response to Recent Nuclear Events in Japan

(b)(5)

Thanks.

Ho

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

From: Vietti-Cook, Annette
sent: Friday, March 18, 2011 1:04 PM
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William; Jaczko, Gregory
Cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill; Pace, Patti; 3WFN Core Team List Resource
Subject: Monday's Commission Briefing on NRC Response to Recent Nuclear Events in Japan

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nette

(b)(6)

cell
blackberry
home

NOT FOR PUBLIC DISCLOSURE

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cell

Rochelle Baval [redacted] cell
home

Rich Laufer [redacted] home
cell

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~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Bubar, Patrice
Sent: Friday, March 18, 2011 2:07 PM
To: Vietti-Cook, Annette; Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William; Jaczko, Gregory
Cc: Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill; Pace, Patti; 3WFN Core Team List Resource
Subject: RE: Monday's Commission Briefing on NRC Response to Recent Nuclear Events in Japan

Commissioner Magwood approves the revised scheduling note.

Patty Bubar
 Chief of Staff
 Office of Commissioner William D. Magwood
 U.S. Nuclear Regulatory Commission
 301-415-1895

From: Vietti-Cook, Annette
Sent: Friday, March 18, 2011 1:04 PM
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William; Jaczko, Gregory
Cc: Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill; Pace, Patti; 3WFN Core Team List Resource
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[Redacted] (b)(5)

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Annette [Redacted] (b)(6) cell
 [Redacted] (b)(6) blackberry
 [Redacted] (b)(6) home

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Andrew Bates [Redacted] (b)(6) home
 [Redacted] (b)(6) cell
 Rochelle Baval [Redacted] (b)(6) cell
 [Redacted] (b)(6) home
 Rich Laufer [Redacted] (b)(6) home

(b)(6) cell

~~NOT FOR PUBLIC DISCLOSURE~~

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~~NOT FOR PUBLIC DISCLOSURE~~

~~DISCLOSURE~~

Sosa, Belkys

From: Sosa, Belkys
Sent: Friday, March 18, 2011 3:59 PM
To: Sosa, Belkys; Snodderly, Michael; Baggett, Steven; Davis, Roger
Subject: RE: Action: Monday's Commission Briefing on NRC Response to Recent Nuclear Events in Japan

(b)(5)
Please note there is folder under Japan event for the subject meeting.

Thanks,
Belkys

From: Sosa, Belkys
Sent: Friday, March 18, 2011 2:43 PM
To: Snodderly, Michael; Baggett, Steven; Davis, Roger
Subject: Action: Monday's Commission Briefing on NRC Response to Recent Nuclear Events in Japan

Please prepare some proposed questions for the subject meeting. Thanks, - Belkys

From: Vietti-Cook, Annette
Sent: Friday, March 18, 2011 1:04 PM
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William; Jaczko, Gregory
Cc: Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Rorhardt, Bill; Pace, Patti; 3WFN Core Team List Resource
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Rich Laufer

(b)(6)

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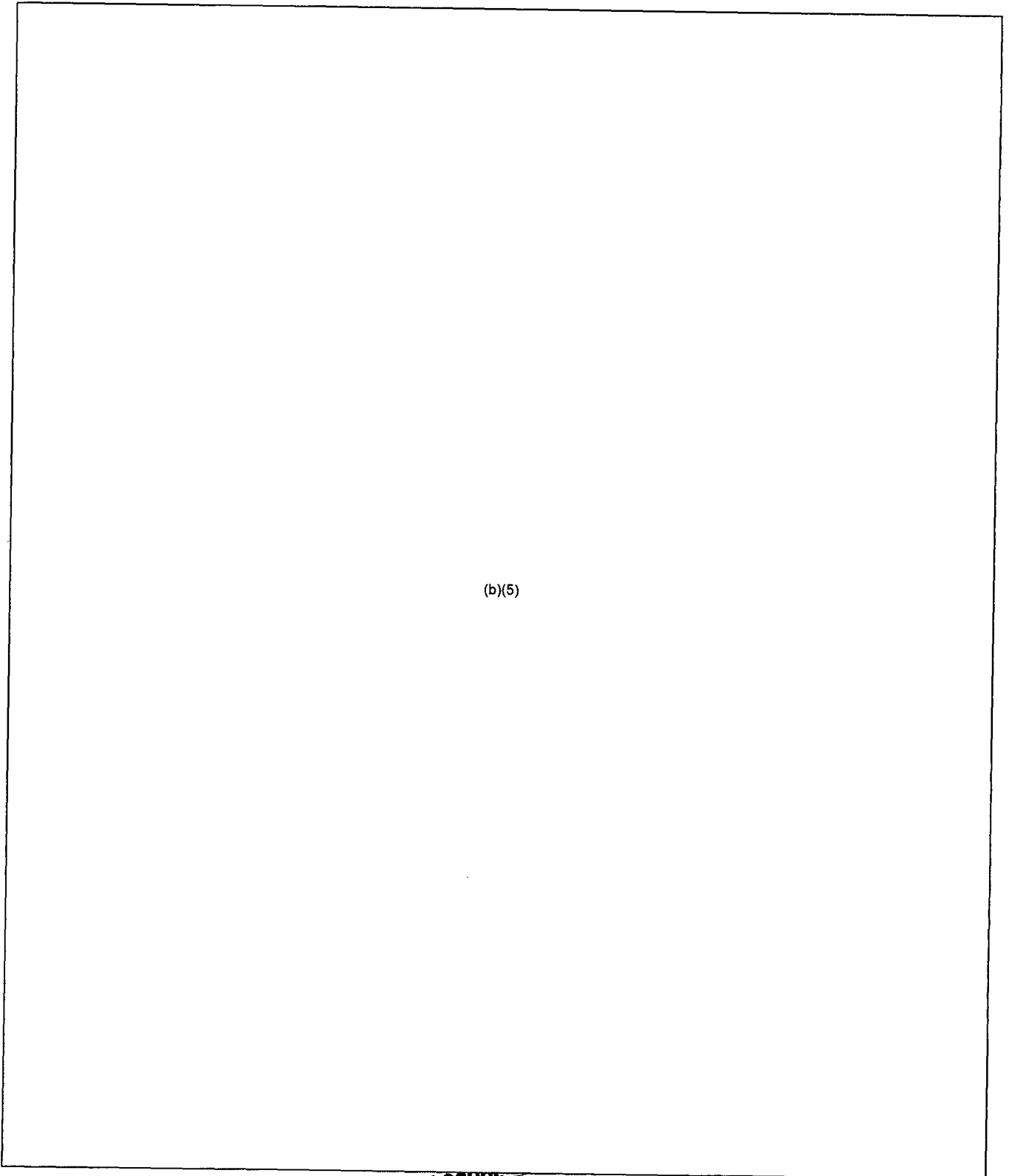
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~~DISCLOSURE~~

NOT FOR PUBLIC DISCLOSURE

WCO Vision for NRC Due Diligence in Response to the Fukushima Accident



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

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Cc: Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Zorn, Jason; Coggins, Angela; Batkin, Joshua; Burns, Stephen; Rothschild, Trip; Bates, Andrew; Baval, Rochelle; Laufer, Richard; Borchardt, Bill; Pace, Patti; 3WFN Core Team List Resource
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~~NOT FOR PUBLIC DISCLOSURE~~

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~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

NOT FOR PUBLIC DISCLOSURE

Sosa, Belkys

From: Coggins, Angela
ent: Friday, March 18, 2011 5:33 PM
cc: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Subject: Vietti-Cook, Annette; Laufer, Richard; Baval, Rochelle
Monday's agenda planning

Hi everyone! SECY has done a great job putting together a packet as background for the agenda planning session on Monday. You should probably have it by now (SECY is walking it around). The Chairman will be working this weekend on providing a proposed plan for discussion at the meeting and we're hoping to share that by early evening Sunday. In the meantime though, we thought it might be helpful for everyone to have a packet that shows what was currently planned for the Commission during the next few months so that your bosses would have this as background as they think about what might need to be adjusted. We'll get you additional info as soon as we have it and please call if you have any questions. Thanks!!

Angela B. Coggins
Policy Director
Office of Chairman Gregory B. Jaczko
U.S. Nuclear Regulatory Commission
[301-415-1828](tel:301-415-1828)/angela.coggins@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Castleman, Patrick
Sent: Friday, March 18, 2011 8:36 PM
To: Sosa, Belkys; Orders, William; Franovich, Mike
Subject: Re: Call

That and more

(b)(5)

Sent from an NRC Blackberry
Patrick Castleman

(b)(6)

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

From: Sosa, Belkys
To: Orders, William; Castleman, Patrick; Franovich, Mike
Sent: Fri Mar 18 20:29:54 2011
Subject: Re: Call

No kidding...I detected a significant amount of a-- kissing...

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

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

From: Orders, William
To: Castleman, Patrick; Sosa, Belkys; Franovich, Mike
Sent: Fri Mar 18 20:27:00 2011
Subject: Call

What a bunch of shit!!

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Castleman, Patrick
Sent: Friday, March 18, 2011 8:46 PM
To: Orders, William; Sosa, Belkys; Franovich, Mike
Subject: Re: Call

It is an outrage. And nobody is talking about the Japanese people who are freezing in the snow.

Sent from an NRC Blackberry
Patrick Castleman

(b)(6)

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

From: Orders, William
To: Sosa, Belkys; Castleman, Patrick; Franovich, Mike
Sent: Fri Mar 18 20:42:28 2011
Subject: Re: Call

For Gods sake we have reports from 2 countries that unit 4 sfp has water in it and WE are saying all of it is in the plume. Please!!!!

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

To: Belkys Sosa
To: Patrick Castleman
To: Mike Franovich
Subject: Re: Call
Sent: Mar 18, 2011 8:31 PM

would that be aSsssss kissing ??

We have to find a spine on 18 !!!!

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

From: Belkys Sosa
To: Orders, William
To: Patrick Castleman
To: Mike Franovich
Subject: Re: Call
Sent: Mar 18, 2011 8:29 PM

No kidding...I detected a significant amount of a-- kissing...

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(b)(6)

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

From: Orders, William
To: Castleman, Patrick; Sosa, Belkys; Franovich, Mike
Sent: Fri Mar 18 20:27:00 2011
Subject: Call

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NOT FOR PUBLIC DISCLOSURE

Apostolakis, George

~~NOT FOR PUBLIC DISCLOSURE~~

From: Jaczko, Gregory
Sent: Saturday, March 19, 2011 12:38 PM
To: Apostolakis, George; Magwood, William; Ostendorff, William; Svinicki, Kristine
Subject: Fw: Japan Follow-up

Thoughts? If we could come to some consensus I think that would be great .

From: Borchardt, Bill
To: Jaczko, Gregory
Cc: Weber, Michael; Virgilio, Martin; Ash, Darren; Batkin, Joshua
Sent: Sat Mar 19 10:13:27 2011
Subject: Japan Follow-up

Chairman,

The following is my initial thinking of NRC lessons learned follow-up from the Japan event. Both of the activities would use a combination of current NRC staff (and SES managers) as well as rehired annuitants. I would also like to explore the possibility of using some existing senior managers for the task force and then backfilling behind them as a succession planning tool.

Near Term Review:

- 90 day effort
- Evaluate currently available technical and operational information from the event to identify near term (or immediate) operational or regulatory issues affecting US operating reactors of all designs
- Develop recommendations for generic communications, orders, etc
- This would possibly include a 30 day quick look report
- Limited stakeholder involvement
- Public report

Longer Term Review:

- Would start after we have sufficient technical information from Japan
- Evaluate all technical and policy issues to identify additional research, generic issues, changes to ROP, rulemakings, adjustments to the regulatory framework, etc that should be conducted by NRC
- Evaluate interagency issues (EP)
- Applicability to non-operating reactor facilities
- Substantive stakeholder involvement
- Public report

These are only initial thoughts and will benefit from the input of others.

Bill

~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

From: Ostendorff, William
Date: Saturday, March 19, 2011 1:42 PM
Subject: Jaczko, Gregory; Apostolakis, George; Magwood, William; Svinicki, Kristine
Re: Japan Follow-up

(b)(5)

From: Jaczko, Gregory
To: Apostolakis, George; Magwood, William; Ostendorff, William; Svinicki, Kristine
Sent: Sat Mar 19 12:37:56 2011
Subject: Fw: Japan Follow-up

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From: Borchardt, Bill
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Weber, Michael; Virgilio, Martin; Ash, Darren; Batkin, Joshua
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Apostolakis, George

From: Jaczko, Gregory
Date: Saturday, March 19, 2011 12:38 PM
Subject: Apostolakis, George; Magwood, William; Ostendorff, William; Svinicki, Kristine
Fw: Japan Follow-up

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~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

From: Apostolakis, George
Saturday, March 19, 2011 2:00 PM
Subject: Ostendorff, William; Jaczko, Gregory; Magwood, William; Svinicki, Kristine
RE: Japan Follow-up

Colleagues:

(b)(5)

George

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(301) 415-1810

From: Ostendorff, William
Sent: Saturday, March 19, 2011 1:42 PM
To: Jaczko, Gregory; Apostolakis, George; Magwood, William; Svinicki, Kristine
Subject: Re: Japan Follow-up

(b)(5)

From: Jaczko, Gregory
To: Apostolakis, George; Magwood, William; Ostendorff, William; Svinicki, Kristine
Sent: Sat Mar 19 12:37:56 2011
Subject: Fw: Japan Follow-up

Thoughts? If we could come to some consensus I think that would be great

From: Borchardt, Bill
To: Jaczko, Gregory
Cc: Weber, Michael; Virgilio, Martin; Ash, Darren; Batkin, Joshua
Sent: Sat Mar 19 10:13:27 2011
Subject: Japan Follow-up

man,
...following is my initial thinking of NRC lessons learned follow-up from the Japan event. Both of the activities would use a combination of current NRC staff (and SES managers) as well as rehired annuitants. I

would also like to explore the possibility of using some existing senior managers for the task force and then backfilling behind them as a succession planning tool.

7r Term Review:

90 day effort

- Evaluate currently available technical and operational information from the event to identify near term (or immediate) operational or regulatory issues affecting US operating reactors of all designs
- Develop recommendations for generic communications, orders, etc
- This would possibly include a 30 day quick look report
- Limited stakeholder involvement
- Public report

Longer Term Review:

- Would start after we have sufficient technical information from Japan
- Evaluate all technical and policy issues to identify additional research, generic issues, changes to ROP, rulemakings, adjustments to the regulatory framework, etc that should be conducted by NRC
- Evaluate interagency issues (EP)
- Applicability to non-operating reactor facilities
- Substantive stakeholder involvement
- Public report

These are only initial thoughts and will benefit from the input of others.

Bill

NOT FOR PUBLIC DISCLOSURE

Apostolakis, George

From: Magwood, William
Date: Saturday, March 19, 2011 3:06 PM
Subject: Jaczko, Gregory; Apostolakis, George; Ostendorff, William; Svinicki, Kristine
Re: Japan Follow-up

Greg,

(b)(5)

Thanks,
Bill

From: Jaczko, Gregory
To: Apostolakis, George; Magwood, William; Ostendorff, William; Svinicki, Kristine
Sent: Sat Mar 19 12:37:56 2011
Subject: Fw: Japan Follow-up

Thoughts? If we could come to some consensus I think that would be great

From: Borchardt, Bill
To: Jaczko, Gregory
Cc: Weber, Michael; Virgilio, Martin; Ash, Darren; Batkin, Joshua
Sent: Sat Mar 19 10:13:27 2011
Subject: Japan Follow-up

Chairman,
The following is my initial thinking of NRC lessons learned follow-up from the Japan event. Both of the activities would use a combination of current NRC staff (and SES managers) as well as rehired annuitants. I would also like to explore the possibility of using some existing senior managers for the task force and then backfilling behind them as a succession planning tool.

Near Term Review:

- 90 day effort
- Evaluate currently available technical and operational information from the event to identify near term (or immediate) operational or regulatory issues affecting US operating reactors of all designs
- Develop recommendations for generic communications, orders, etc
- This would possibly include a 30 day quick look report
- Limited stakeholder involvement
- Public report

Longer Term Review:

- Would start after we have sufficient technical information from Japan

NOT FOR PUBLIC DISCLOSURE

~~NOT FOR PUBLIC DISCLOSURE~~

- Evaluate all technical and policy issues to identify additional research, generic issues, changes to ROP, rulemakings, adjustments to the regulatory framework, etc that should be conducted by NRC
- Evaluate interagency issues (EP)
- Applicability to non-operating reactor facilities
- Substantive stakeholder involvement
- Public report

These are only initial thoughts and will benefit from the input of others.
Bill

~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

m: Apostolakis, George
: Sunday, March 20, 2011 10:10 PM
Subject: Davis, Roger; Baggett, Steven; Snodderly, Michael; Sosa, Belkys
Fw: draft COM and Items for Agenda Planning

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Ostendorff, William
To: Magwood, William; Jaczko, Gregory; Apostolakis, George; Svinicki, Kristine
Sent: Sun Mar 20 21:25:15 2011
Subject: Re: draft COM and Items for Agenda Planning

(b)(5)

From: Magwood, William
To: Jaczko, Gregory; Apostolakis, George; Svinicki, Kristine; Ostendorff, William
t: Sun Mar 20 20:57:21 2011
ject: Re: draft COM and Items for Agenda Planning

Greg,

Thanks. As you indicate, your draft reflects recent exchanges. We should be able to come to closure in a timely fashion.

The only significant comment I would make at this stage is that I encourage that the longer-term effort begin at a defined time subsequent to completion of the proposed near-term review. I recognize that not all the facts will be in from the aftermath of the Fukushima event, but it could take months if not longer to develop a full understanding of what happened. An indefinite start-point has technical merit but practical challenges. I'm also uncertain how we should best consider any specific conclusions about Mark I BWRs in a framework that should perhaps focus on the broader issues you've highlighted.

Moreover, the events of the last week have already raised significant questions with which the agency must grapple. I don't see much to be gained by delaying the inevitable effort to look at issues such as SBO.

One other thought, which I don't think should be part of a "Japan Response" task force, is that we will need to deal with questions being raised about specific plants. They aren't going to go away.

Thanks,
Bill

From: Jaczko, Gregory
To: Apostolakis, George; Magwood, William; Svinicki, Kristine; Ostendorff, William
ts: Sun Mar 20 19:44:26 2011
ect: Fw: draft COM and Items for Agenda Planning

Hi all - please see below.

From: Greg Jaczko <(b)(6)>

NOT FOR PUBLIC DISCLOSURE

Jaczko, Gregory

Date: Sun Mar 20 19:42:07 2011

Subject: draft COM and Items for Agenda Planning

Attached are 3 items I hope will facilitate our discussion at tomorrow's agenda planning meeting and open meeting. First, you'll find a draft COM, that I would like to issue tomorrow, which lays out a plan for us to task the staff to address the events in Japan with both near and long term actions. Next, is a meeting list which lays out by week a proposed new calendar for the next 3 months and identifies where I've recommended some additional meetings or recommended moving around some of our existing meetings. The final item is a spreadsheet of the voting items that were on our priority list through June with some recommendations for modification to the prioritization of some of those items.

I would appreciate any thoughts you have on the draft com tonight. If there are simple tweaks that could facilitate more timely decision, let me know. The COM is basically what I emailed y'all yesterday incorporating some feedback i've received. I then tried to make it a more readable is all.

NOT FOR PUBLIC DISCLOSURE

NOT FOR PUBLIC DISCLOSURE

Davis, Roger

m: Snodderly, Michael
t: Tuesday, March 22, 2011 1:28 PM
Apostolakis, George; Sosa, Belkys
Cc: Davis, Roger; Baggett, Steven
Subject: FW: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)
Attachments: gbj11-0002.srm.docx
Importance: High

Commissioner and Belkys,

(b)(5)

From: Wright, Darlene
Sent: Tuesday, March 22, 2011 1:19 PM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Harves, Carolyn; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Thoma, John; Vietti-Cook, Annette; Warren, Roberta; Zorn, Jason; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Muessle, Mary; Nieh, Ho; Ostendorff, Sam; Warnick, Greg; Apostolakis, George; Pearson, Laura; Lui, Christiana; Lisann, Elizabeth Lewis, Antoinette
Subject: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)
Importance: High

The attached file contains a draft SRM which is being circulated for Commission review. Your response is requested as soon as practical today. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review the SRM to ensure that the Commission decision is clear and understandable and that resource, scheduler, and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

March 22, 2011

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Annette L. Vietti-Cook, Secretary /s/

SUBJECT: DRAFT CHAIRMAN TASKING MEMORANDUM – COMGBJ-11-0002 – NRC ACTIONS FOLLOWING THE EVENTS IN JAPAN

Attached is the draft Chairman tasking memorandum on COMGBJ-11-0002. Your response is requested as soon as practical today.

The attached tasking memorandum, the subject COM, and the individual Commissioner votes are considered to be "final Commission decisions" and as such will be released to the public upon issuance.

Attachment:
As stated

cc: EDO
OGC
OPA
OCA

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

MEMORANDUM TO: Chairman Jaczko
FROM: Annette Vietti-Cook, Secretary
SUBJECT: COMGBJ-11-0002 – NRC ACTIONS FOLLOWING THE EVENTS
IN JAPAN

(b)(5)

Attachment:
As stated

cc: Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
EDO
OGC
OPA
OCA

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

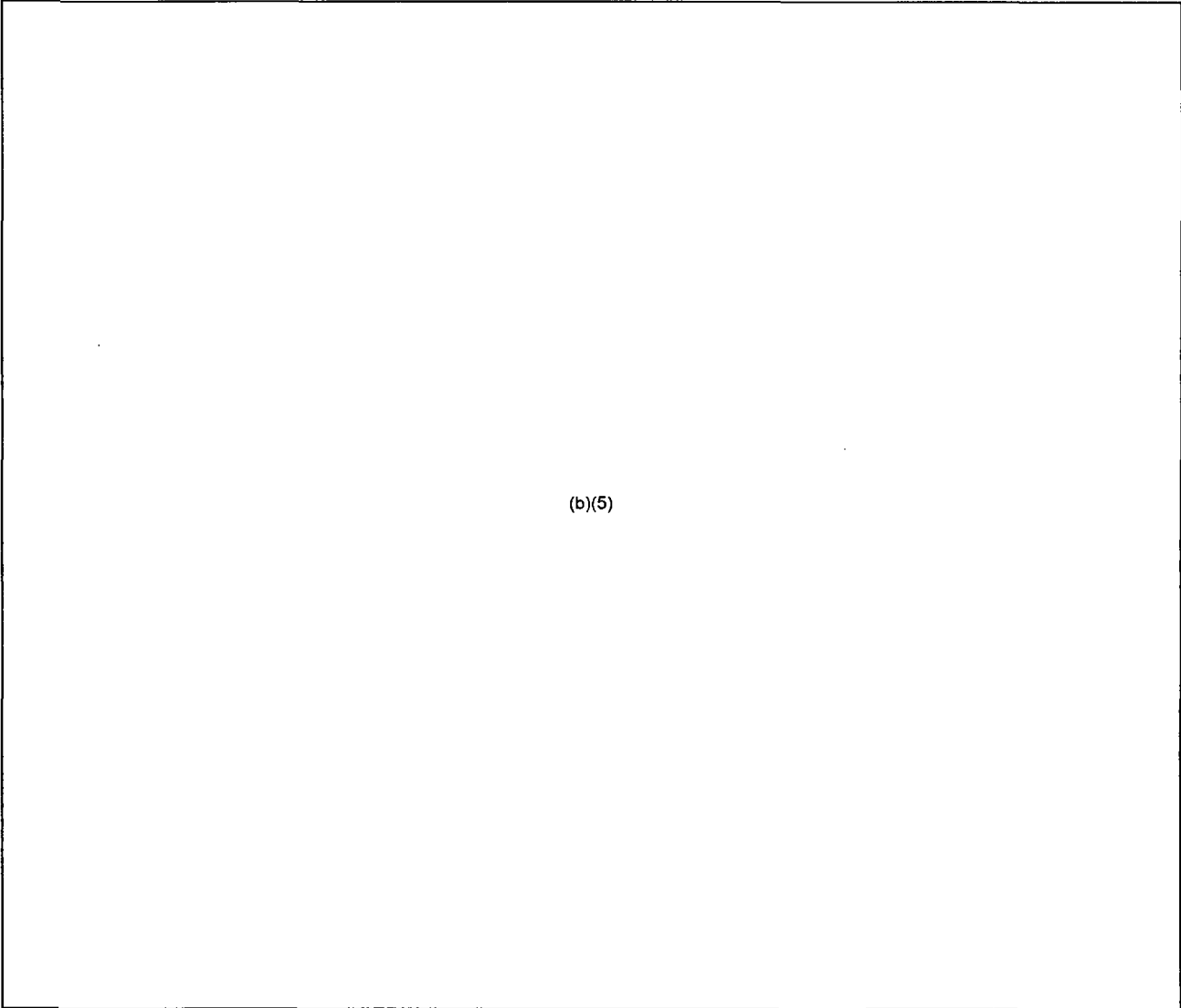
FROM: Chairman Jaczko

SUBJECT: TASKING MEMORANDUM – COMGBJ-11-0002 – NRC ACTIONS
FOLLOWING THE EVENTS IN JAPAN

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

- cc: Chairman Jaczko
- Commissioner Svinicki
- Commissioner Apostolakis
- Commissioner Magwood
- Commissioner Ostendorff
- OGC
- CFO
- OCA
- OPA
- Office Directors, Regions, ACRS, ASLBP (via E-Mail)
- PDR

~~NOT FOR PUBLIC DISCLOSURE~~

**Additional Commissioner Comments to be Included in the SRM
if Agreed to by a Majority of the Commission**

(b)(5)

NOT FOR PUBLIC DISCLOSURE

Davis, Roger

From: Apostolakis, George
Date: Tuesday, March 22, 2011 1:33 PM
To: Snodderly, Michael; Sosa, Belkys
Cc: Davis, Roger; Baggett, Steven
Subject: Re: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Snodderly, Michael
To: Apostolakis, George; Sosa, Belkys
Cc: Davis, Roger; Baggett, Steven
Sent: Tue Mar 22 13:27:59 2011
Subject: FW: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)

Commissioner and Belkys,

(b)(5)

From: Wright, Darlene
Sent: Tuesday, March 22, 2011 1:19 PM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Harves, Carolyn; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Thoma, John; Vietti-Cook, Annette; Warren, Roberta; Zorn, Jason; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Muessle, Mary; Nieh, Ho; Ostendorff, William; Warnick, Greg; Apostolakis, George; Pearson, Laura; Lui, Christiana; Lisann, Elizabeth
Cc: Lewis, Antoinette
Subject: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)
Importance: High

The attached file contains a draft SRM which is being circulated for Commission review. Your response is requested as soon as practical today. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review the SRM to ensure that the Commission decision is clear and understandable and that resource, schedular, and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sosa, Belkys
Tuesday, March 22, 2011 1:40 PM
Apostolakis, George; Snodderly, Michael
Cc: Davis, Roger; Baggett, Steven
Subject: Re: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Apostolakis, George
To: Snodderly, Michael; Sosa, Belkys
Cc: Davis, Roger; Baggett, Steven
Sent: Tue Mar 22 13:32:42 2011
Subject: Re: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Snodderly, Michael
To: Apostolakis, George; Sosa, Belkys
Cc: Davis, Roger; Baggett, Steven
Sent: Tue Mar 22 13:27:59 2011
Subject: FW: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)

Commissioner and Belkys

(b)(5)

From: Wright, Darlene
Sent: Tuesday, March 22, 2011 1:19 PM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Harves, Carolyn; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Thoma, John; Vietti-Cook, Annette; Warren, Roberta; Zorn, Jason; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Muessle, Mary; Nieh, Ho; Ostendorff, Warnick, Greg; Apostolakis, George; Pearson, Laura; Lui, Christiana; Lisann, Elizabeth
Sosa, Antoinette
Subject: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)
Importance: High

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NOT FOR PUBLIC DISCLOSURE

Snodderly, Michael

~~NOT FOR PUBLIC DISCLOSURE~~

From: Hipschman, Thomas
Wednesday, March 23, 2011 1:49 PM
Cc: Snodderly, Michael; Franovich, Mike; Marshall, Michael; Castleman, Patrick; Orders, William
Subject: Batkin, Joshua; Bradford, Anna
High Resolution Photos of Fukushima

I talked to the Ops Center and they said they would put them on a SharePoint site and include your names for access.

The Ops Center told me these are very large files, and they are still downloading them, as they can only do one photo at a time because of the way they were made available - so it might take some time.

Tom

Thomas Hipschman
Policy Advisor for Reactors
Office of Chairman Gregory B. Jaczko
301-415-1832

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Snodderly, Michael
Date: Wednesday, March 23, 2011 2:00 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Harves, Carolyn; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Thoma, John; Vietti-Cook, Annette; Warren, Roberta; Zorn, Jason; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Muessle, Mary; Nieh, Ho; Ostendorff, William; Warnick, Greg; Apostolakis, George; Pearson, Laura; Lui, Christiana; Lisann, Elizabeth
Cc: Lewis, Antoinette
Subject: RE: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events in Japan)

Commissioner Apostolakis approves the draft SRM, as follows:

- [Redacted]
- [Redacted]
- [Redacted]

(b)(5)

[Redacted]

(b)(5)

Mike Snodderly
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-2241
Email: michael.snodderly@nrc.gov

From: Wright, Darlene
Sent: Tuesday, March 22, 2011 1:19 PM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Harves, Carolyn; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO;

~~NOT FOR PUBLIC DISCLOSURE~~

Temp, WDM; Thoma, John; Vietti-Cook, Annette; Warren, Roberta; Zorn, Jason; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Muessle, Mary; Nieh, Ho; Ostendorff, William; Warnick, Greg; Apostolakis, George; Pearson, Laura; Lui, Christiana; Lisann, Elizabeth

- Lewis, Antoinette

Subject: DRAFT SRM - COMGBJ-11-0002 (NRC Actions Following the Events In Japan)

Importance: High

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~~NOT FOR PUBLIC DISCLOSURE~~

NOT FOR PUBLIC DISCLOSURE

Snodderly, Michael

From: Hipschman, Thomas
Sent: Thursday, March 24, 2011 10:39 AM
To: Marshall, Michael; Snodderly, Michael; Franovich, Mike; Castleman, Patrick; Orders, William
Subject: SharePoint link for Fukushima photos

The Ops center let me know that NRR has given space on their SharePoint site to post the digital photos from Japan. The Ops Center is still uploading the photos that they received on DVD this morning and should be done shortly. There are no special access requirements to view them and they can be accessed here:

<http://portal.nrc.gov/edo/nrr/NRR%20TA/FAQ%20Related%20to%20Events%20Occuring%20in%20Japan/Forms/AllItems.aspx?View=%7b282DC699%2dFA97%2d430B%2dA1F9%2d6008558261C5%7d&RootFolder=%2fedo%2fnrr%2fNRR%20TA%2fFAQ%20Related%20to%20Events%20Occuring%20in%20Japan%2fFukushima%20Daiichi%20Aerial%20Photos>

Tom

Thomas Hipschman
Policy Advisor for Reactors
Office of Chairman Gregory B. Jaczko
301-415-1832

NOT FOR PUBLIC DISCLOSURE

~~NOT FOR PUBLIC DISCLOSURE~~

Snodderly, Michael

From: Franovich, Mike
ent: Sunday, March 27, 2011 9:25 PM
ro: Batkin, Joshua
Cc: Coggins, Angela; Hipschman, Thomas; Marshall, Michael; Castleman, Patrick; Snodderly, Michael; Orders, William
Subject: Request for copy of NRC recommendations on severe accident management measures for the Fukushima-Daiichi plant

Good evening Josh,

I am requesting a copy of the NRC's recommendations on severe accident management measures for the Fukushima-Daiichi plant. Last week during a periodic TA briefing, I requested a copy of the NRC's recommendations. Other Commission offices have subsequently requested a copy of the recommendations and supporting analysis. These recommendations supposedly represent a U.S. Government consensus position on additional accident management measures. The recommendations were coordinated with GE-Hitachi, EPRI, INPO, Naval Reactors, and DOE. My understanding is that this severe accident report was provided to Ambassador Roos and will be shared with NISA and TEPCO.

(b)(5)

Thanks in advance,

Mike

~~NOT FOR PUBLIC DISCLOSURE~~

Snodderly, Michael

From: Franovich, Mike
It: Thursday, April 14, 2011 11:20 AM
To: OST01 HOC; Zimmerman, Roy; RST01 Hoc; Hoc, PMT12; LIA08 Hoc; ET05 Hoc; ETO7 Hoc
Cc: Virgilio, Martin; Weber, Michael; Leeds, Eric; Orders, William; Hipschman, Thomas; Snodderly, Michael; Castleman, Patrick; Marshall, Michael; Muessle, Mary; Mamish, Nader; Merzke, Daniel; Bowman, Gregory; Andersen, James; Nieh, Ho
Subject: Suggestion to Improve Fukushima Daiichi Information Flow to Commissioners' Offices

Roy, et al.,

Leveraging IT capabilities to make life a little bit easier, I have a suggestion regarding requested documents that are in the queue to be sent to the Commissioners' offices. It may be more efficient to post these documents and future requested information at a single share point site that the commissioner assistants may then access. Using share point could also help with accounting of information that has been sent previously to Commissioners' offices. If need be, you may institute limited access for control and accounting purposes.

Previously, photos from flyovers were posted at the following share point site that the CAs accessed as needed.

~~<http://portal.nrc.gov/edo/nrr/NRR%20TA/FAQ%20Related%20to%20Events%20Occuring%20in%20Japan/Forms/AllItems.aspx?View=%7b282DC699%2dFA97%2d430B%2dA1F9%2d6008558261C5%7d&RootFolder=%2fedo%2fnrr%2fNRR%20TA%2fFAQ%20Related%20to%20Events%20Occuring%20in%20Japan%2ffukushima%20Daiichi%20Aerial%20Photos>~~

v/r,

*Mike Franovich
Technical Assistant for Reactors
Office of Commissioner Ostendorff
301-415-1784*

Apostolakis, George

~~NOT FOR PUBLIC DISCLOSURE~~

om: Apostolakis, George
nt: Saturday, April 16, 2011 2:01 PM
Subject: Sosa, Belkys; Davis, Roger
Re: Fyi: Commissioners call

I have talked to Annette. I'll participate.

George Apostolakis
Commissioner, US NRC
Blackberry [redacted] (b)(6)

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

From: Sosa, Belkys
To: Apostolakis, George; Davis, Roger
Sent: Sat Apr 16 12:11:31 2011
Subject: Fyi: Commissioners call

The Chairman is planning a telecon on Japan this afternoon. Annette will set it up.

Sent from an NRC Blackberry
Belkys Sosa

[redacted] (b)(6)

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

om: Batkin, Joshua
nt: Vietti-Cook, Annette
cc: Coggins, Angela; Sharkey, Jeffrey; Nieh, Ho; Sosa, Belkys; Bubar, Patrice
Sent: Sat Apr 16 08:12:46 2011
Subject: Commissioners call

[redacted] (b)(5)

Joshua C. Batkin
Chief of Staff
Chairman Gregory B. Jaczko
(301) 415-1820

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Snodderly, Michael

Franovich, Mike
Friday, April 22, 2011 1:52 PM
OST01 HOC

Cc: Orders, William; Castleman, Patrick; Snodderly, Michael; Hipschman, Thomas; Bowman, Gregory
Subject: NRC Report on Fukushima

Good afternoon,

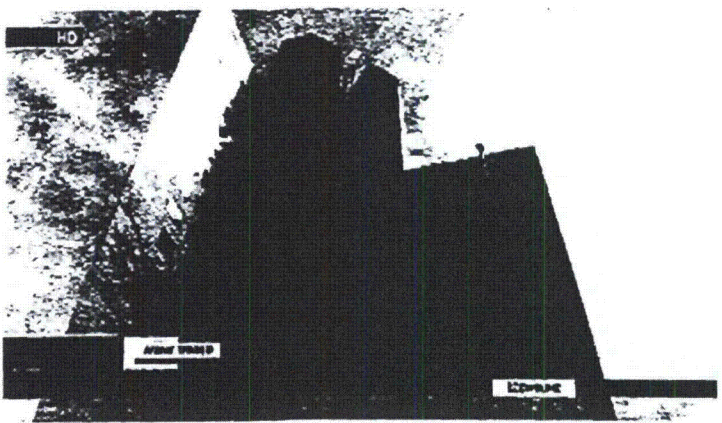
Does the staff know which NRC report is being referred to in this NHK report? I believe it might be the OUC interim comprehensive assessment slides from Chuck that were used to brief NISA/GOJ representatives for the event, but would like confirmation.

Thanks,

Mike

*Mike Franovich
Technical Assistant for Reactors
Office of Commissioner Ostendorff
201-415-1784*

~~NOT FOR PUBLIC DISCLOSURE~~



US NRC: Fukushima plant "static but fragile"

The US Nuclear Regulatory Commission says conditions at the Fukushima Daiichi nuclear plant are "static but fragile" in its latest assessment of the nuclear emergency.

The Commission compiled the report as of April 15th, along with the US Energy Department and other nuclear organizations.

The report suggests that ongoing operations to feed the reactors with water could be affected by the occurrence of more aftershocks.

It recommends a more diversified and redundant feeding system, along with the automation of operations involving large cranes and other equipment to douse the reactors with water.

The report estimates that 67 percent of nuclear fuel has been damaged at reactor No.1, 44 percent at reactor No.2 and 30 percent at reactor No.3.

It says these estimates do not differ greatly from those provided by the plant operator, Tokyo Electric Power Company.

TEPCO has estimated the rate of damage at 70 percent at reactor No.1, 30 percent at No.2, and 25 percent at No.3.

The US Nuclear Regulatory Commission is due to brief the Senate on the latest conditions at the plant on April 28th.

Friday, April 22, 2011 17:42 +0900 (JST)

Gilles, Nanette

From: Snodderly, Michael
Sent: Monday, May 09, 2011 5:08 PM
To: Gilles, Nanette
Cc: Baggett, Steven; Davis, Roger
Subject: FW: DRAFT SRM - M110428 - Briefing on the Status of NRC Response to Events in Japan and Briefing on Station Blackout

(b)(5)

From: Castleman, Patrick
Sent: Monday, May 09, 2011 5:00 PM
To: Lewis, Antoinette; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Harves, Carolyn; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Thoma, John; Vietti-Cook, Annette; Warren, Roberta; Zorn, Jason; Tadesse, Rebecca; Joosten, Sandy; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Muessle, Mary; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer
Cc: Wright, Darlene
Subject: RE: DRAFT SRM - M110428 - Briefing on the Status of NRC Response to Events in Japan and Briefing on Station Blackout

(b)(5)

From: Lewis, Antoinette
Sent: Friday, April 29, 2011 9:43 AM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Harves, Carolyn; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Thoma, John; Vietti-Cook, Annette; Warren, Roberta; Zorn, Jason; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Muessle, Mary; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer
Cc: Wright, Darlene; Lewis, Antoinette
Subject: DRAFT SRM - M110428 - Briefing on the Status of NRC Response to Events in Japan and Briefing on Station Blackout

~~CONFIDENTIAL~~

The attached file contains a draft SRM which is being circulated for the normal 3-day period for Commission review. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review the SRM to ensure that the Commission decision is clear and understandable and that resource, scheduler, and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Aufer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

NOT FOR PUBLIC DISCLOSURE

From: Gilles, Nanette
nt: Thursday, May 12, 2011 9:07 AM
: Castleman, Patrick; Merzke, Daniel; Franovich, Mike
Cc: Orders, William; Marshall, Michael; Hipschman, Thomas
Subject: RE: CA Call Proposal

I do not object to canceling this morning's call.

From: Castleman, Patrick
Sent: Thursday, May 12, 2011 8:31 AM
To: Merzke, Daniel; Franovich, Mike
Cc: Orders, William; Gilles, Nanette; Marshall, Michael; Hipschman, Thomas
Subject: RE: CA Call Proposal

(b)(5)

Thanks, Pat

From: Merzke, Daniel
Sent: Thursday, May 12, 2011 7:34 AM
To: Castleman, Patrick; Franovich, Mike
Subject: CA Call Proposal

I hadn't heard back from you guys regarding the proposal I sent you yesterday to reduce the CA calls for the Japan event status to once a week; I believe Tuesday is being proposed. Please let me know if you're on board with that proposal. Thanks.

Dan

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Gilles, Nanette
Sent: Monday, May 16, 2011 10:35 PM
To: Castleman, Patrick
Subject: RE: SBO Commission Meeting SRM

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Castleman, Patrick
Sent: Monday, May 16, 2011 10:21 AM
To: Gilles, Nanette
Subject: SBO Commission Meeting SRM

Hi Nan,

(b)(5)

Hope you're enjoying your trip!

Thanks. Pat

**Responses to Information Requests from House Oversight and Government Reform
Committee
Letter of May 26, 2011**

- 5. Documents, including e-mails and internal correspondence, related to concerns dissenting opinions, or objections to the March 16, 2011 recommendation or associated calculation.**

Before and during the time the decision was made to recommend extending the evacuation zone to 50 miles, no dissenting opinions or objections were found in the team chronologies (Reactor Safety Team, Protective Measures Team or Executive Team) from the NRC Operations Center or in other internal documentation. After the fact, discussions continued among the staff about the pros and cons of the decision.

The only contemporaneous debate that took place was over whether or not to release modeling data (aka "RASCAL run") used as part of the decision-making process. Some staff on the Protective Measures Team (PMT) have expressed concern that attaching this data to the March 16, 2011 press release could give the mistaken impression that the decision was driven by the modeling data alone. The Chairman believed transparency was important and directed that the modeling data be attached to the press release. The press release stated that a variety of factors were taken into account.

Documentation related to the staff's work regarding the NRC's recommendation will be provided with the response to Question #3.

Not for Public Disclosure

**Responses to Information Requests from House Oversight and Government Reform
Committee
Letter of May 26, 2011**

6. A list of personnel, including titles, at the NRC responsible for reviewing and approving the NRC's 50-mile radius recommendation prior to providing this information to the U.S. Ambassador to Japan and other federal agencies. Provide documents, including e-mails and internal correspondence, related to the review and approval of this recommendation.

The NRC's recommendation was concurred on by Naval Reactors at 0631 EST and provided by Chairman Jaczko to the White House at 0716 EST on March 16, 2011. This recommendation was based on the consideration of multiple factors, including limited and conflicting technical data, continued degradation of the reactors and spent fuel pools, TEPCO's unsuccessful mitigation efforts for the event, and the changing meteorological conditions that would bring the ongoing release onshore over populated areas.

Over the course of several shifts in the NRC's Operations Center, NRC technical staff members and decision-makers ran calculations, analyzed the hypothetical, rough estimates of plant conditions, and considered the other multiple factors listed above. Considering all these factors, Chairman Jaczko made a prudent and conservative recommendation regarding the protection of U.S. citizens in Japan. The names of the decision-makers on shift when the recommendation was finalized appear below. Documentation associated with the review and approval of the recommendation for a 50-mile evacuation of U.S. citizens will be included with the information provided in response to Question #3.

March 15-16, 2011 Decision-Makers (11:00 PM – 07:00 AM) Decision for the 50 miles evacuation zone made during this timeframe.

NRC Response Lead: Chairman Gregory Jaczko

ET Director: Dan Dorman

ET Response Advisor: Chris Miller

ET Protective Measures State Coordinator: Rob Lewis

PMT Director: Patricia Milligan

NRC Site Team Lead: Charles Casto

**Responses to Information Requests from House Oversight and Government Reform
Committee
Letter of May 26, 2011**

- 7. A list of federal agencies that received the NRC's proposed recommendation, the individual or individuals responsible for reviewing and approving information or recommendations received from the NRC, and any comments, questions, or concerns received by the NRC from those individuals or agencies. Please provide documents, including e-mails and internal correspondence, related to the review and approval of this recommendation by other federal agencies.**

The NRC provided its recommendation for a 50-mile evacuation of U.S. citizens around the Fukushima Daiichi reactor site to the following Departments and Agencies: White House (Dr. John Brennan), Department of State (U.S. Ambassador to Japan), Department of Energy's National Nuclear Security Administration (Thomas D'Agostino), and Department of Defense (Naval Reactors [NR] Admiral Mueller). The NRC's ET Chronology specifically states that the NRC Chairman provided "recommendations to White House with concurrence by NR." The NRC has no other documented information regarding the individuals responsible for reviewing and approving the information or recommendations provided by the NRC. Documentation associated with questions regarding the 50-mile evacuation recommendation for U.S. citizens will be included with the information provided in response to Question #3.

Not for Public Disclosure

Gilles, Nanette

From: Gilles, Nanette
Sent: Thursday, May 26, 2011 9:06 PM
To: Hipschman, Thomas
Subject: RE: VERSION C - Draft SRM on Briefing on Response to Events in Japan

Tom – Will do. We can talk tomorrow if you're in or on Tuesday.

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Hipschman, Thomas
Sent: Thursday, May 26, 2011 3:33 PM
To: Gilles, Nanette
Subject: FW: VERSION C - Draft SRM on Briefing on Response to Events in Japan

Nan,

(b)(5)

Tom

Thomas Hipschman
Policy Advisor for Reactors
Office of Chairman Gregory B. Jaczko
301-415-1832

From: Hipschman, Thomas
Sent: Thursday, May 26, 2011 3:31 PM
To: Hart, Ken; Baggett, Steven; Bovol, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Laufer, Richard
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Harves, Carolyn; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Lewis, Antoinette; Loyd, Susan; Monninger, John; Montes, David; Moore, Scott; Ho Nieh; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Warren, Roberta; Wright, Darlene
Subject: RE: VERSION C - Draft SRM on Briefing on Response to Events in Japan

(b)(5)

(b)(5)

Thomas Hipschman
Policy Advisor for Reactors
Office of Chairman Gregory B. Jaczko
301-415-1832

From: Hart, Ken
Sent: Thursday, May 26, 2011 2:53 PM
To: Hipschman, Thomas
Subject: FW: VERSION C - Draft SRM on Briefing on Response to Events in Japan

From: Laufer, Richard
Sent: Friday, May 13, 2011 2:26 PM
To: Hart, Ken; Baggett, Steven; Bovol, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Thomas, John; Vietti-Cook, Annette; Laufer, Richard
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Harves, Carolyn; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Lewis, Antoinette; Loyd, Susan; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Reddick, Darani; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Alberta; Wright, Darlene
Subject: VERSION C - Draft SRM on Briefing on Response to Events in Japan

Please review the changes to the draft SRM on the Briefing on Response to Events in Japan in the attached file (M110428.c.docx). This is **Version C**. Please respond by May 17, 2011.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

NOT FOR PUBLIC DISCLOSURE

Sosa, Belkys

From: Sharkey, Jeffry
Thursday, June 09, 2011 8:01 AM
Brenner, Eliot
Cc: Bubar, Patrice; Nieh, Ho; Sosa, Belkys; Batkin, Joshua
Subject: RE: additional TNT and a correction

Eliot,

(b)(5)

Thanks,

Jeff

From: Brenner, Eliot
Sent: Wednesday, June 08, 2011 8:53 PM
To: Brenner, Eliot
Subject: additional TNT and a correction

Sorry for the late hour, one dropped item and a correction:

OECD JAPAN MEETING: At least some European media covered a press conference today in Paris after an OECD meeting on the Fukushima issue at which Chairman Jaczko said world regulators should move dutifully to adopt the lessons of Fukushima, putting him at odds with French regulator Andre LaCoste who said it could take a decade to learn the lessons. "I think we should do better," said the chairman. Here is one such story:

<http://en.trend.az/regions/world/europe/1888518.html>

Also, we incorrectly reported the chairman would be meeting with the U.S. Ambassador to Japan and skipping a meeting with a Japanese emissary in town Friday to talk about the most recent Japanese lessons learned report. It is in fact the reverse – the chairman will be meeting with the Japanese official, not the U.S. Ambassador. We regret any confusion. As they say in the wire service business – first lead and correct, upfixing upgoof.

NOT FOR PUBLIC DISCLOSURE

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

To: Batkin, Joshua
Thursday, June 09, 2011 8:09 AM
Sharkey, Jeffrey; Brenner, Eliot
Cc: Bubar, Patrice; Nieh, Ho; Sosa, Belkys; Coggins, Angela
Subject: Re: additional TNT and a correction

(b)(5)

Joshua C. Batkin
Chief of Staff
Chairman Gregory B. Jaczko
(301) 415-1820

From: Sharkey, Jeffrey
To: Brenner, Eliot
Cc: Bubar, Patrice; Nieh, Ho; Sosa, Belkys; Batkin, Joshua
Sent: Thu Jun 09 08:01:25 2011
Subject: RE: additional TNT and a correction

Eliot,

(b)(5)

Thanks,

Jeff

From: Brenner, Eliot
Sent: Wednesday, June 08, 2011 8:53 PM
To: Brenner, Eliot
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Sorry for the late hour, one dropped item and a correction:

OECD JAPAN MEETING: At least some European media covered a press conference today in Paris after an OECD meeting on the Fukushima issue at which Chairman Jaczko said world regulators should move expeditiously to adopt the lessons of Fukushima, putting him at odds with French regulator Andre LaCoste who said it could take a decade to learn the lessons. "I think we should do better," said the chairman. Here is one such story:

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Apostolakis, George

From: Apostolakis, George
Date: Thursday, June 16, 2011 4:33 PM
Subject: Sosa, Belkys; Davis, Roger; Baggett, Steven
Attachments: Fw: DRAFT SRM - M110615 (Briefing Following Events in Japan)
M110615.srm.docx

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Wright, Darlene
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Harves, Carolyn; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Thoma, John; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Muessle, Mary; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Kristiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette
Date: Thu Jun 16 12:08:36 2011
Subject: DRAFT SRM - M110615 (Briefing Following Events in Japan)

The attached file contains a draft SRM which is being circulated for the normal 3-day period for Commission review. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review the SRM to ensure that the Commission decision is clear and understandable and that resource, scheduler, and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

IN RESPONSE, PLEASE
REFER TO: M110615

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

FROM: Annette Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – BRIEFING ON THE PROGRESS OF
THE TASK FORCE REVIEW OF NRC PROCESSES AND
REGULATIONS FOLLOWING THE EVENTS IN JAPAN, 9:30
A.M., WEDNESDAY, JUNE 15, 2011, COMMISSIONERS'
CONFERENCE ROOM, ONE WHITE FLINT NORTH,
ROCKVILLE, MARYLAND (OPEN TO PUBLIC ATTENDANCE)

(b)(5)

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OIG
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

~~NOT FOR PUBLIC DISCLOSURE~~

QUESTION 4.

With the American nuclear engineer workforce nearing a time of high retirements and the pipeline of graduating students still not growing sufficiently to fill the spots, why have you eliminated the University Program – especially given our need to keep our reactors safe both now and in the future?

We have heard that only a small portion of nuclear engineers currently go to work for industry. Given that, why do you believe that industry will fill in financial support in place of the university programs, as state in the Department of Energy's budget request?

ANSWER.

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

QUESTION 7d:

How much funding do you expect the comprehensive review of all nuclear facilities that was charged by the President to cost, and do you expect the 2012 request will need to change in order to accommodate it?

ANSWER.

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

QUESTION 8.

Chairman, your request for licensing activities for new plants is a slight increase over fiscal year 2010. It looks like your budget would fund two new combined licenses and continued work on new designs and early site permits. Have your plans changed following the tragedy in Japan?

ANSWER.

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

QUESTION 12a:

What is the estimate of your carryover funds for fiscal year 2010?

ANSWER:

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

QUESTION 12b:

Do you think the amount of FY 2010 carryover funds is appropriate? If not, what are you doing to "spend down" the funding to an appropriate level?

ANSWER:

(b)(5)

Gilles, Nanette

From: Gilles, Nanette
Sent: Thursday, June 16, 2011 11:13 PM
To: Baggett, Steven
Subject: Re: DRAFT SRM - M110615 (Briefing Following Events in Japan)

Thanks, Steve.

Sent from my NRC Blackberry

From: Baggett, Steven
To: Gilles, Nanette
Sent: Thu Jun 16 20:45:27 2011
Subject: FW: DRAFT SRM - M110615 (Briefing Following Events in Japan)

Nan

FYI

From: Apostolakis, George
Sent: Thursday, June 16, 2011 4:32 PM
To: Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: Fw: DRAFT SRM - M110615 (Briefing Following Events in Japan)

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Wright, Darlene
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Harves, Carolyn; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Thoma, John; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Muessle, Mary; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette
Sent: Thu Jun 16 12:08:36 2011
Subject: DRAFT SRM - M110615 (Briefing Following Events in Japan)

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~~NOT FOR PUBLIC DISCLOSURE~~
WRITTEN STATEMENT

BY GREGORY B. JACZKO, CHAIRMAN
UNITED STATES NUCLEAR REGULATORY COMMISSION
TO THE
ENVIRONMENT AND PUBLIC WORKS COMMITTEE
UNITED STATES SENATE

JUNE 16, 2011

(b)(5)

(b)(5)

(b)(5)

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(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

Sosa, Belkys

Davis, Roger
Friday, June 17, 2011 4:23 PM
Batkin, Joshua; Nieh, Ho; Sharkey, Jeffrey; Bubar, Patrice; Vietti-Cook, Annette; Schmidt, Rebecca; Monninger, John; Coggins, Angela

All.

Commissioner Apostolakis' response to Q. 2 in the 5/26/11 letter from Committee Chairman Issa to Chairman Jaczko is as follows:

I have not informed members of the ACRS that that they will not receive this information or that there will be a delay in receiving this information.

Roger K. Davis
Legal Counsel
to Commissioner Apostolakis
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, Maryland 20852
301-415-1762

From: Batkin, Joshua
Sent: Friday, June 17, 2011 11:05 AM
To: Nieh, Ho; Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys
Cc: Vietti-Cook, Annette; Monninger, John; Schmidt, Rebecca; Coggins, Angela
Subject: Issa response

We are trying to get the Issa letter done today. Again, can you please provide your bosses' response to the one question addressed to individual Commissioners? As has been previously discussed, we are attempting to incorporate all the information and circulate the final draft to you in advance so you could see it before it goes out. However, without any responses ASAP, it won't be possible to both do that and provide it on time...A response to this email would be appreciated.

Thank you,
Josh

Sosa, Belkys

Bubar, Patrice
Friday, June 24, 2011 12:18 PM
Hart, Ken; Bates, Andrew; Vietti-Cook, Annette; Sosa, Belkys; Nieh, Ho; Sharkey, Jeffrey;
Batkin, Joshua; Hirsch, Patricia; Rothschild, Trip
Bupp, Margaret; Coggins, Angela
May 26th letter from Congressman Issa

Cc:
Subject:

Hello everyone.

(b)(5)

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sosa, Belkys
Date: Friday, June 24, 2011 12:30 PM
To: Apostolakis, George; Davis, Roger; Sexton, Kimberly; Baggett, Steven; Gilles, Nanette
Subject: Fw: May 26th letter from Congressman Issa

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Bubar, Patrice
To: Hart, Ken; Bates, Andrew; Vietti-Cook, Annette; Sosa, Belkys; Nieh, Ho; Sharkey, Jeffrey; Batkin, Joshua; Hirsch, Patricia; Rothschild, Trip
Cc: Bupp, Margaret; Coggins, Angela
Sent: Fri Jun 24 12:17:52 2011
Subject: May 26th letter from Congressman Issa

Hello everyone.

(b)(5)

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

m: Sexton, Kimberly
t: Monday, June 27, 2011 11:43 AM
Cc: Sosa, Belkys; Apostolakis, George
Davis, Roger
Subject: RE: May 26th letter from Congressman Issa

(b)(5)

Thank you,

Kimberly Sexton
Counsel for NRC Staff
Office of the General Counsel
Mail Stop O15-D21
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
301-415-1151

m: Davis, Roger
Sent: Friday, June 24, 2011 3:14 PM
To: Sosa, Belkys; Apostolakis, George; Sexton, Kimberly
Subject: Re: May 26th letter from Congressman Issa

(b)(5) P.S. All checked in and eating

lunch

From: Sosa, Belkys
To: Apostolakis, George; Davis, Roger; Sexton, Kimberly; Baggett, Steven; Gilles, Nanette
Sent: Fri Jun 24 12:30:09 2011
Subject: Fw: May 26th letter from Congressman Issa

(b)(5)

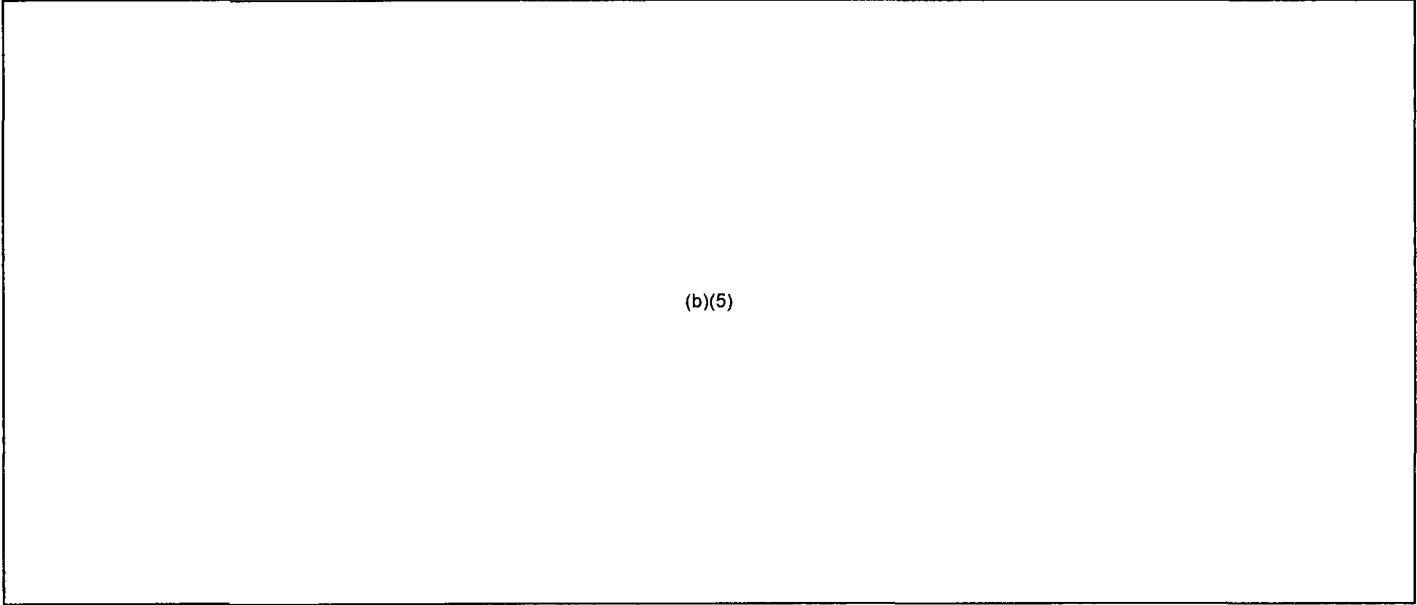
Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Bubar, Patrice
To: Hart, Ken; Bates, Andrew; Vietti-Cook, Annette; Sosa, Belkys; Nieh, Ho; Sharkey, Jeffrey; Batkin, Joshua; Hirsch, Julia; Rothschild, Trip
Jupp, Margaret; Coggins, Angela
Sent: Fri Jun 24 12:17:52 2011
Subject: May 26th letter from Congressman Issa

NOT FOR PUBLIC DISCLOSURE

Hello everyone.



(b)(5)

**Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895**

~~**NOT FOR PUBLIC DISCLOSURE**~~

Sosa, Belkys

Davis, Roger
Friday, June 24, 2011 3:14 PM
Sosa, Belkys; Apostolakis, George; Sexton, Kimberly
Re: May 26th letter from Congressman Issa

Subject:

(b)(5)

P.S. All checked in and eating

lunch

From: Sosa, Belkys
To: Apostolakis, George; Davis, Roger; Sexton, Kimberly; Baggett, Steven; Gilles, Nanette
Sent: Fri Jun 24 12:30:09 2011
Subject: Fw: May 26th letter from Congressman Issa

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Bubar, Patrice
To: Hart, Ken; Bates, Andrew; Vietti-Cook, Annette; Sosa, Belkys; Nieh, Ho; Sharkey, Jeffrey; Batkin, Joshua; Hirsch, [redacted]; Rothschild, Trip [redacted]; [redacted]p, Margaret; Coggins, Angela
Sent: Fri Jun 24 12:17:52 2011
Subject: May 26th letter from Congressman Issa

Hello everyone.

(b)(5)

Patrice Bubar
Chief of Staff
Office of Commissioner William D. Magwood

U.S. Nuclear Regulatory Commission
301-415-1895

~~NOT FOR PUBLIC DISCLOSURE~~

NOT FOR PUBLIC DISCLOSURE

NOT FOR PUBLIC DISCLOSURE



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 28, 2011

NOTE TO COMMISSIONERS' ASSISTANTS

OCM/GBJ

cc Josh Batkin
cc John Monninger
X Angela Coggins
 Lisa Clark
X Tom Hipschman
 Michael Marshall
 Anna Bradford
 Nehi Dhir
 Roberta Warren
 Melody Fopma
 Susan Loyd
 David Montes
 Patti Pace
 Herald Speiser
 Catina Gibbs

OCM/KLS

X Jeffrey Sharkey
 Darani Reddick
X Patrick Castleman
 John Thoma
 Janet Lepre
 Carolyn Harves

OCM/GEA

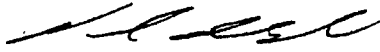
X Belkys Sosa
 Roger Davis
X Michael Snodderly
 Steve Baggett
 Kathleen Blake
 Carmel Savoy

OCM/WDM

X Patrice Bubar
X Bill Orders
 Rebecca Tadesse
 Margaret Bupp
 Carrie Crawford

OCM/WCO

X Ho Nieh
X Michael Franovich
 Andrea Kock
 Jason Zorn
 Linda Herr
 Sunny Bozin

FROM: Nader L. Mamish 
Assistant for Operations, OEDO

SUBJECT: DRAFT CHARTER AND TIMELINE FOR TRANSITION TO THE NRC'S
LONGER-TERM REVIEW OF THE EVENTS IN JAPAN

(b)(5)

Enclosures:
As stated

~~NOT FOR PUBLIC DISCLOSURE~~

P=> ML11179A066

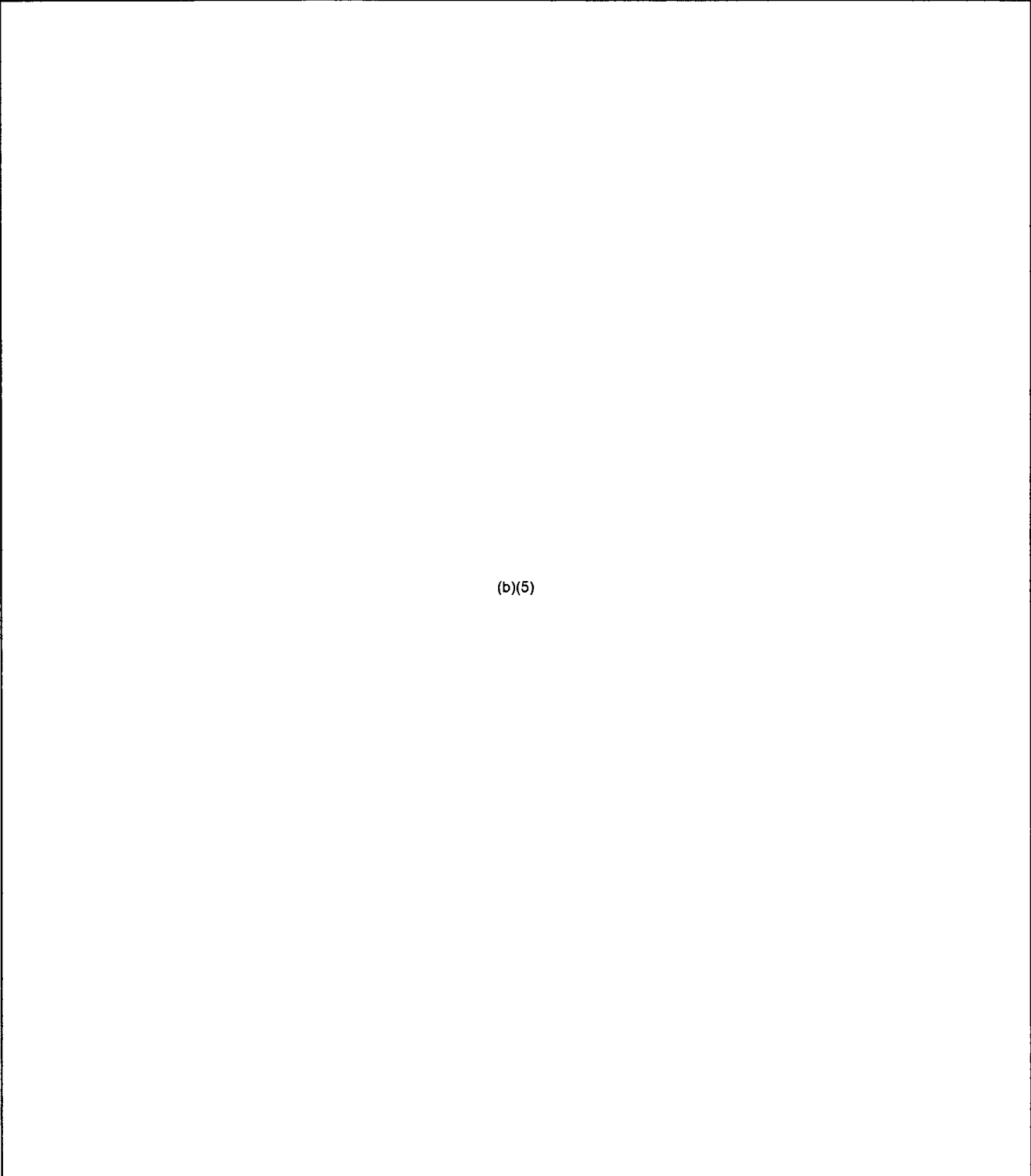
cc: R. W Borchardt, EDO	SECY
M. Virgilio, DEDR	OCA
M. Weber, DEDMRT	OGC
D. Ash, DEDCM	OPA
N. Mamish, AO	OIP
K. Brock, OEDO	OIS
G. Bowman, OEDO	CFO

~~NOT FOR PUBLIC RELEASE~~

NOT FOR PUBLIC RELEASE

NOT FOR PUBLIC DISCLOSURE

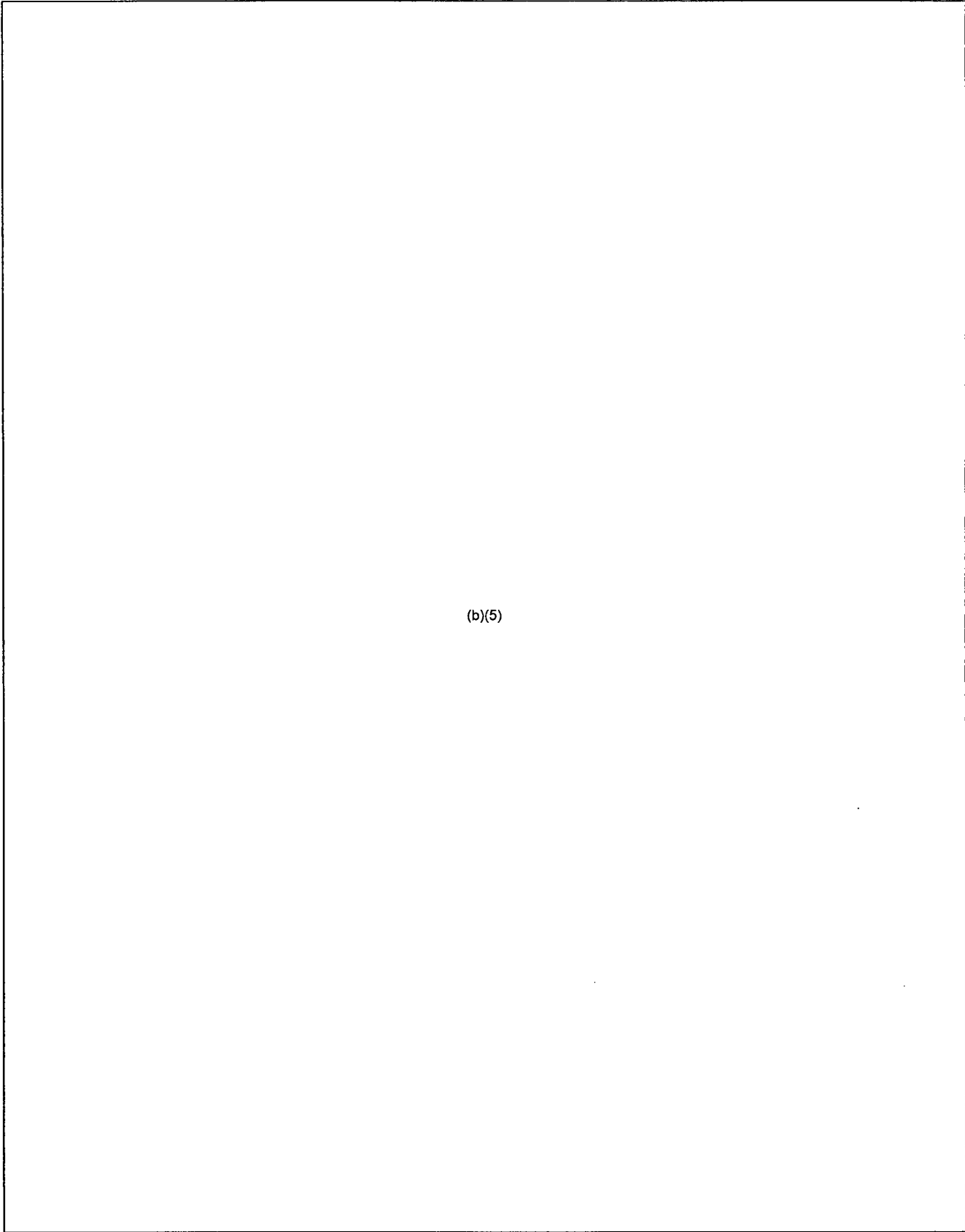
**CHARTER FOR THE NUCLEAR REGULATORY COMMISSION (NRC)
STEERING COMMITTEE TO CONDUCT A LONGER-TERM REVIEW
OF THE EVENTS IN JAPAN**



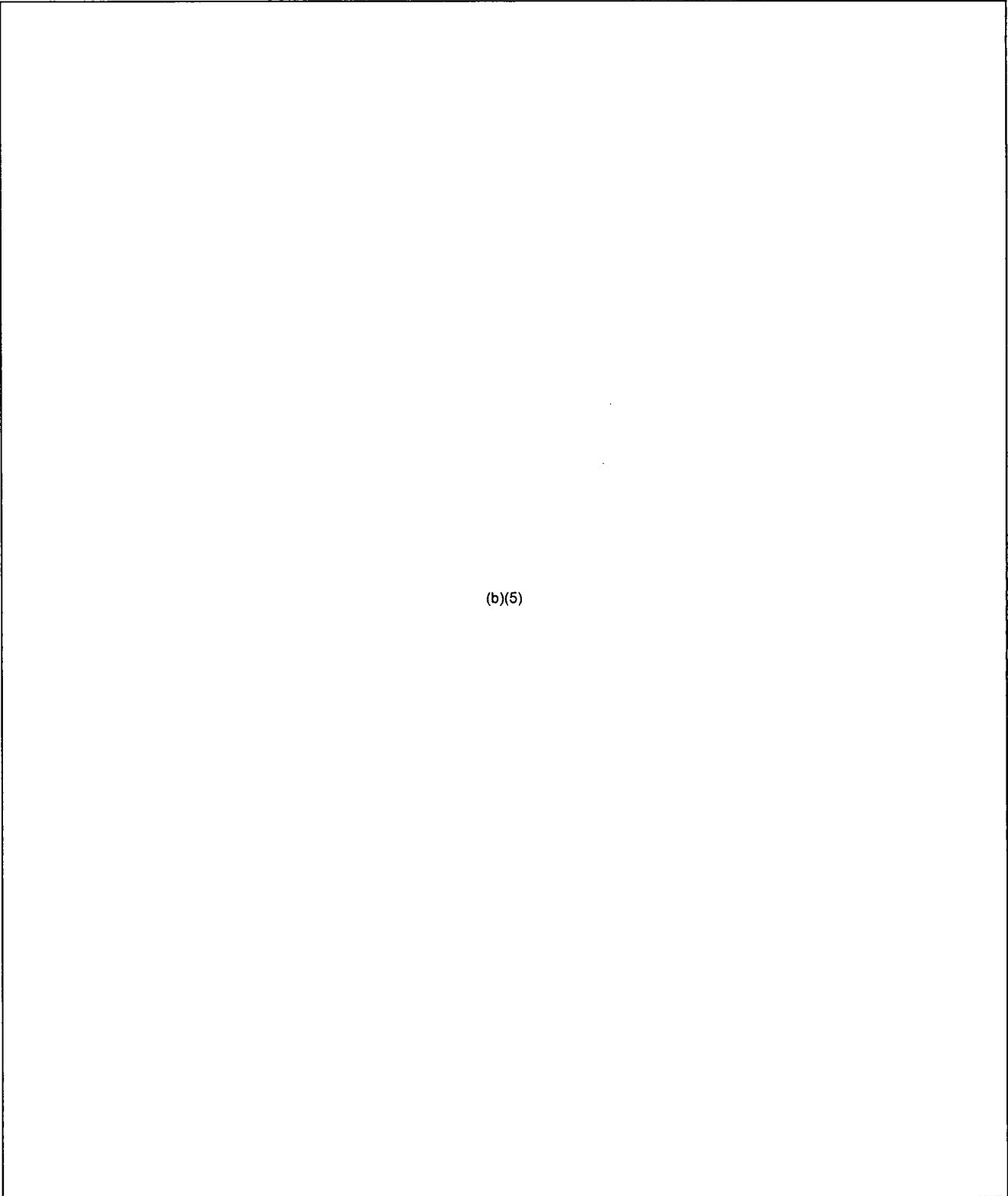
(b)(5)

ENCLOSURE 1

(b)(5)



(b)(5)



(b)(5)

Japan Near-Term Task Force Report Timeline

Date¹

Action

<u>Date</u> ¹	<u>Action</u>
	(b)(5)

(b)(5)

ENCLOSURE 2

COMMISSIONER
2011 JUN 29 11: 8: 21

~~NOT FOR PUBLIC DISCLOSURE~~

REMOVED DISCLOSURE

NOT FOR PUBLIC DISCLOSURE

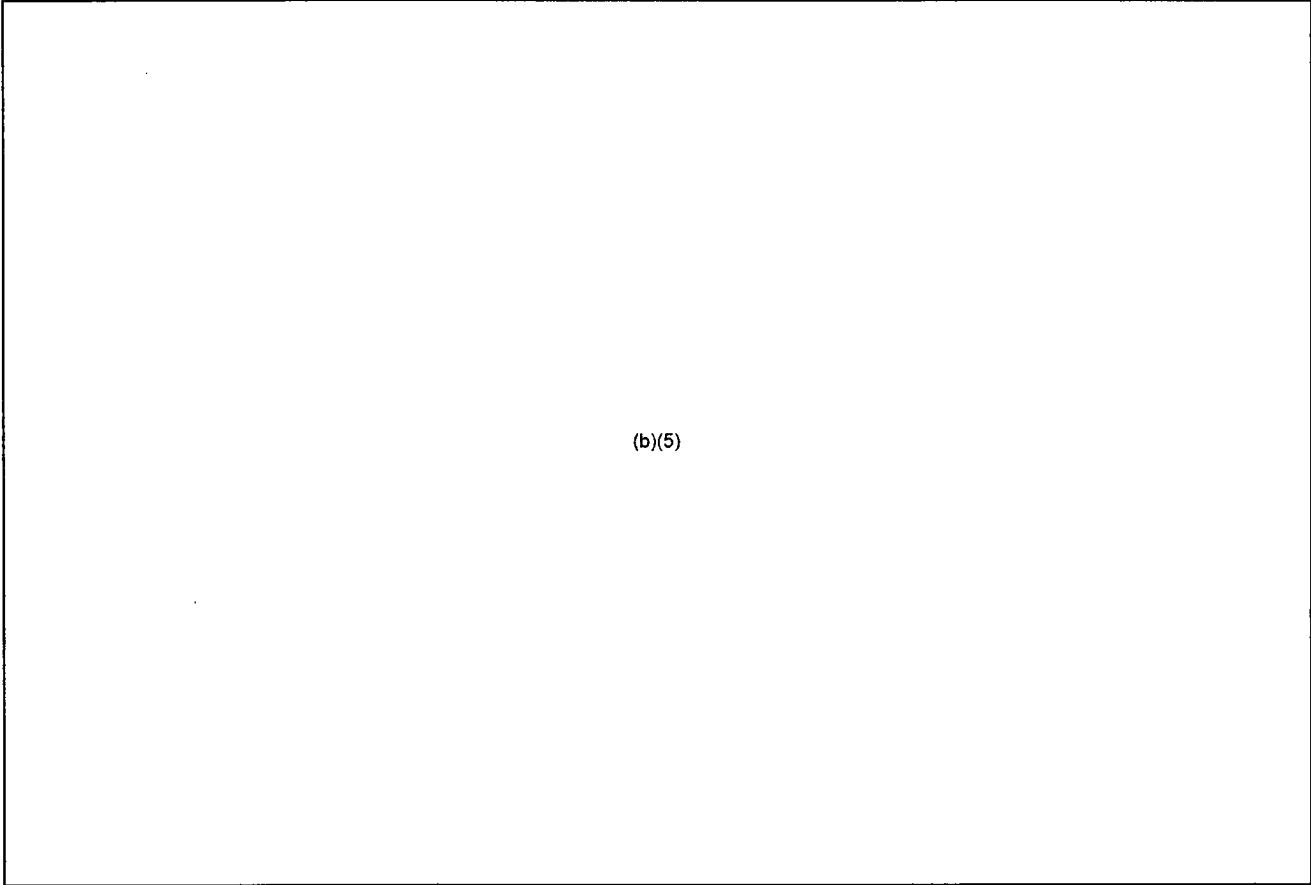
**ROADMAP FOR COMMISSION DECISIONMAKING AND OBTAINING STAKEHOLDER
INPUT ON THE NEAR-TERM TASK FORCE'S RECOMMENDATIONS**

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

- 2 -



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

TEMPLATE

SCHEDULING NOTE

Title: **BRIEFING ON JAPAN TASK FORCE REPORT
RECOMMENDATIONS ON [Insert Topic Area Here] (Public)**

Purpose: To provide the Commission an opportunity to receive feedback from external stakeholders on the U.S. Nuclear Regulatory Commission's (NRC's) Near-Term Task Force Report and to hear from staff regarding the Report's recommendations on safety through defense-in-depth [Insert Topic Area Here].

Scheduled: **August 30, 2011 – Ensuring Protection from External Events
September 13, 2011 - Mitigation
September 30, 2011 - Emergency Preparedness and 21st Century
Framework and Impact
9:30 am**

Duration: All Day

Location: Commissioners' Conference Room, 1st floor OWFN

Participants: **Presentation**

Morning Session Begins at 9:30am

NRC Staff Panel **80 mins.***

Bill Borchardt, Executive Director for Operations **5 mins.***

Marty Virgilio, Deputy Executive Director for Reactor and Preparedness Programs **5 mins.***

TBD, Task Force Representative for [Insert Topic Area Here] **10 mins.***

TBD, NRC Staff **60 mins.***
(up to 60 mins. Depending on topic area)

[Note: Other Task Force members will be seated in the well.]

Commission Q & A **50 mins.**

Lunch Break

~~NOT FOR PUBLIC DISCLOSURE~~

Afternoon Session Begins at 1:30pm

<u>Stakeholder Panel</u>	60 mins.
Stakeholders TBD	
Commission Q & A	75 mins.
Discussion – Wrap-up	5 mins.

*For presentation only and does not include time for Commission Q & A's.

Documents:

- SECY-11-0093, Near-Term Report and Recommendations for Agency Actions Following the Events in Japan, dated 7/12/11.
- Background Material (One Page) due to SECY: Ten business days prior to the briefing.
- Slides due to SECY: Five business days prior to the briefing.

061

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~~NOT FOR PUBLIC DISCLOSURE~~

NOT FOR PUBLIC DISCLOSURE

NOT FOR PUBLIC DISCLOSURE

Sosa, Belkys

Bubar, Patrice
Tuesday, June 28, 2011 5:42 PM
Batkin, Joshua; Sharkey, Jeffrey; Nieh, Ho; Sosa, Belkys; Bates, Andrew; Vietti-Cook, Annette;
Rothschild, Trip; Franovich, Mike
Cc: Jones, Bradley; Bupp, Margaret; Tadesse, Rebecca
Subject: Comments on Response to Issa May 26th letter

Below are comments on the draft response to Congressman Issa's May 26th letter – that was provided to the Commission offices at the EA meeting today.

(b)(5)

Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

NOT FOR PUBLIC DISCLOSURE

Sosa, Belkys

NOT FOR PUBLIC DISCLOSURE

From: Bubar, Patrice
Tuesday, July 05, 2011 1:50 PM
Sharkey, Jeffrey; Sosa, Belkys; Nieh, Ho
To: Bupp, Margaret
Subject: Charter and Timeline for Long Term Task Force
Attachments: charter long term task force.pdf; timeline long term task force.pdf

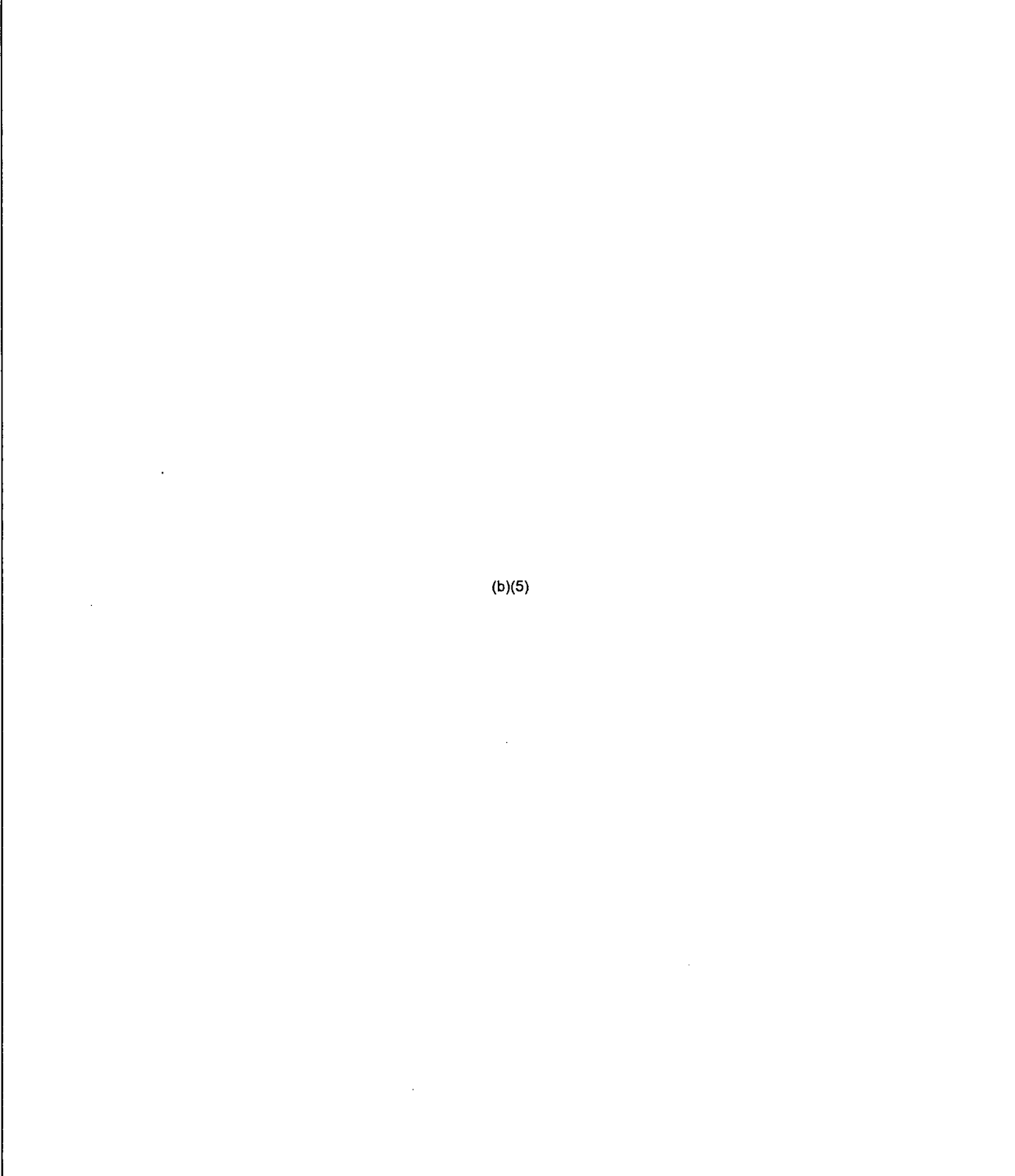
(b)(5)

Thank you.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

NOT FOR PUBLIC DISCLOSURE

**CHARTER FOR THE NUCLEAR REGULATORY COMMISSION (NRC)
STEERING COMMITTEE TO CONDUCT A LONGER-TERM REVIEW
OF THE EVENTS IN JAPAN**

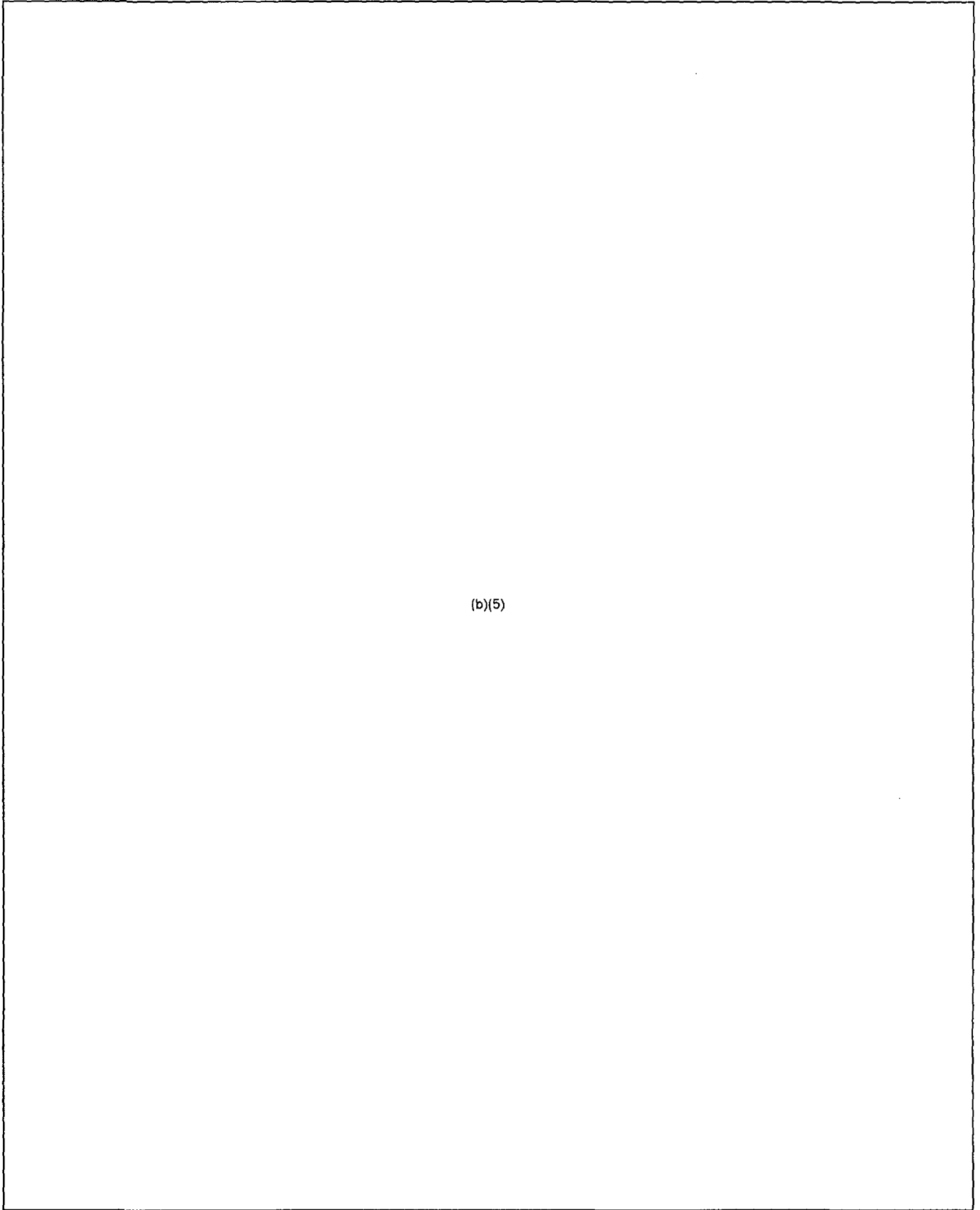


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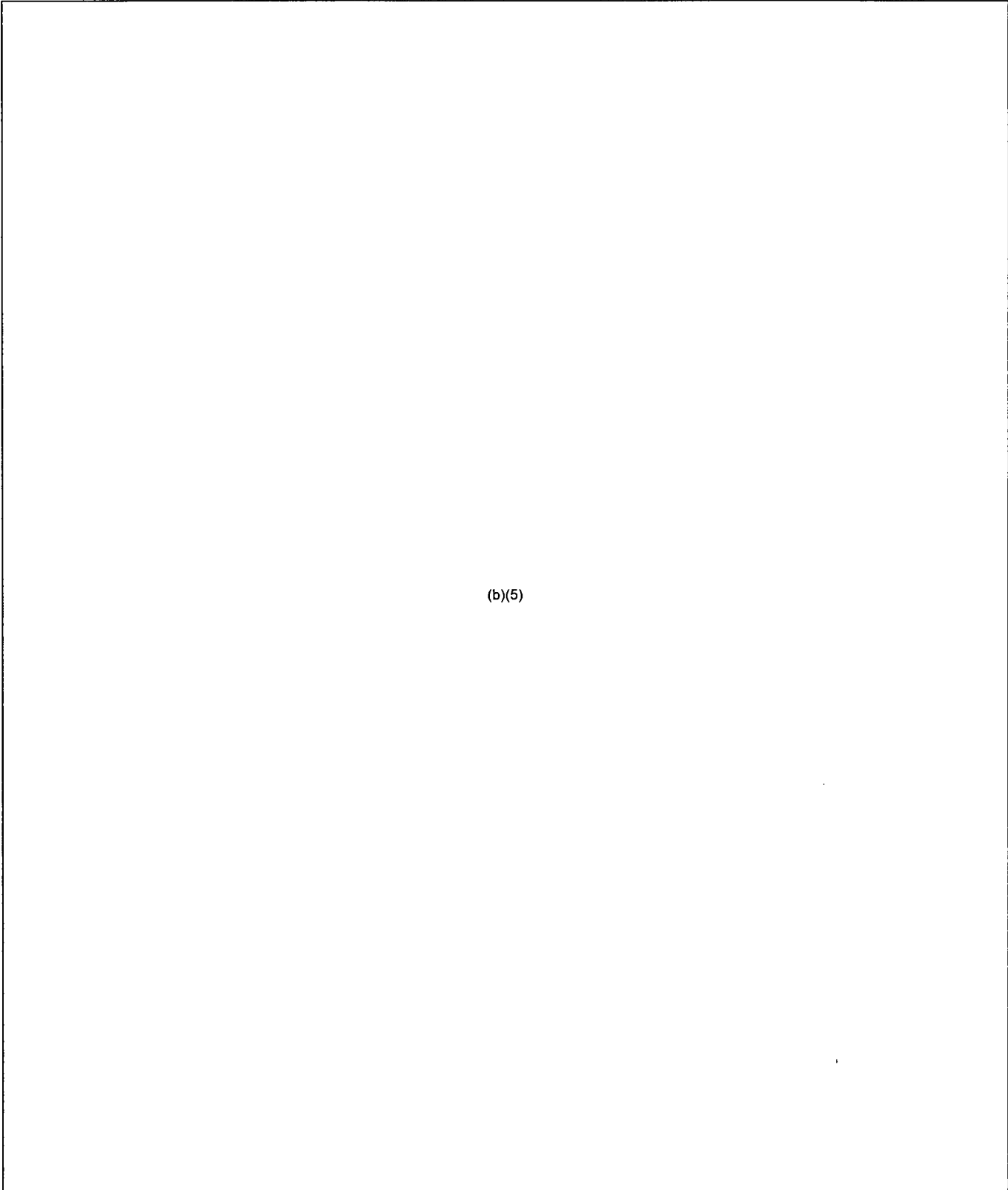
ENCLOSURE 1

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

Japan Near-Term Task Force Report Timeline

Date¹

Action

(b)(5)	
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(b)(5)

ENCLOSURE 2

Sosa, Belkys

Sosa, Belkys
Friday, July 08, 2011 5:11 PM

Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Thoma, John; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Harves, Carolyn; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Rothschild, Trip; Savoy, Carmel; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: RE: Request for Early Public Release of the Japan Task Force Report

Commissioner Apostolakis' office has no objections to the staff's request for early release of the subject report. Thanks, Belkys

From: Laufer, Richard

Sent: Friday, July 08, 2011 12:55 PM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Thoma, John; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, y; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly

Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Harves, Carolyn; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: Request for Early Public Release of the Japan Task Force Report

Staff is requesting that the Japan Task Force Report be publicly released on July 13, in support of the July 19 Commission meeting on the report.

Note that the staff is briefing the Commission TA's on the report on July 11 and the report will be provided to the Commission offices on July 12.

(b)(5)
(b)(5)

Please let SECY know if your office supports releasing the report on July 13.

Thanks,
Rich

Sosa, Belkys

From: Bubar, Patrice
Sunday, July 10, 2011 10:05 AM
Subject: Sosa, Belkys; Nieh, Ho; Sharkey, Jeffry
RE: Request for Early Public Release of the Japan Task Force Report

(b)(5)

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Sosa, Belkys
Sent: Friday, July 08, 2011 5:11 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Thoma, John; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Harves, Carolyn; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Pace, Patti; Pearson, Laura; Poole, Brooke; Rothschild, Trip; Savoy, Carmel; Speiser, Herald; Svinicki, Kristine; GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Request for Early Public Release of the Japan Task Force Report

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From: Laufer, Richard
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To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Thoma, John; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Harves, Carolyn; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Request for Early Public Release of the Japan Task Force Report

Staff is requesting that the Japan Task Force Report be publicly released on July 13, in support of the July 19 Commission meeting on the report.

That the staff is briefing the Commission TA's on the report on July 11 and the report will be provided to Commission offices on July 12.

(b)(5)

(b)(5)

Please let SECY know if your office supports releasing the report on July 13.

Thanks,
Rich

NOT FOR PUBLIC DISCLOSURE

NOT FOR PUBLIC DISCLOSURE

Sosa, Belkys

From: Sharkey, Jeffrey
Sunday, July 10, 2011 10:08 AM
Subject: Bubar, Patrice; Sosa, Belkys; Nieh, Ho
Re: Request for Early Public Release of the Japan Task Force Report

(b)(5)

Jeff

From: Bubar, Patrice
To: Sosa, Belkys; Nieh, Ho; Sharkey, Jeffrey
Sent: Sun Jul 10 10:04:34 2011
Subject: RE: Request for Early Public Release of the Japan Task Force Report

(b)(5)

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
15-1895

From: Sosa, Belkys
Sent: Friday, July 08, 2011 5:11 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Thoma, John; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Harves, Carolyn; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Rothschild, Trip; Savoy, Carmel; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Request for Early Public Release of the Japan Task Force Report

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Thanks, Belkys

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NOT FOR PUBLIC DISCLOSURE

FM 2602 of 2929

532

~~NOT FOR PUBLIC DISCLOSURE~~

Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Request for Early Public Release of the Japan Task Force Report

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[redacted] (b)(5)

Please let SECY know if your office supports releasing the report on July 13.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

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Sent: Sunday, July 10, 2011 10:12 AM
To: Sharkey, Jeffrey; Sosa, Belkys; Nieh, Ho
Subject: RE: Request for Early Public Release of the Japan Task Force Report

(b)(5)

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Sharkey, Jeffrey
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To: Bubar, Patrice; Sosa, Belkys; Nieh, Ho
Subject: Re: Request for Early Public Release of the Japan Task Force Report

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From: Bubar, Patrice
To: Sosa, Belkys; Nieh, Ho; Sharkey, Jeffrey
Sent: Sun Jul 10 10:04:34 2011
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Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
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301-415-1895

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Subject: RE: Request for Early Public Release of the Japan Task Force Report

NOT FOR PUBLIC DISCLOSURE

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Thanks, Belkys

Laufer, Richard

Friday, July 08, 2011 12:55 PM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Thoma, John; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Harves, Carolyn; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

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(b)(5)

(b)(5)

Please let SECY know if your office supports releasing the report on July 13.

Thanks,

Sosa, Belkys

From: Bubar, Patrice
Monday, July 11, 2011 3:50 PM
Sosa, Belkys
Subject: Next STeps for Task Force Report

Belkys – when you have a minute, please give me a call.

(b)(5)

(b)(5)

Thanks.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

Gilles, Nanette

~~NOT FOR PUBLIC DISCLOSURE~~

From: Gilles, Nanette
Sent: Monday, July 11, 2011 5:44 PM
To: Skeen, David; Franovich, Mike; Orders, William; Marshall, Michael; Hipschman, Thomas; Laufer, Richard; Castleman, Patrick; Sharkey, Jeffrey
Cc: Taylor, Robert
Subject: RE: Tuesday Japan Briefing

Thanks for the info, Dave. Canceling the briefing works for me.

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Skeen, David
Sent: Monday, July 11, 2011 5:42 PM
To: Franovich, Mike; Gilles, Nanette; Orders, William; Marshall, Michael; Hipschman, Thomas; Laufer, Richard; Castleman, Patrick; Sharkey, Jeffrey
Cc: Taylor, Robert
Subject: RE: Tuesday Japan Briefing

All,

I'm fine with canceling this week's briefing, if you are. I was planning on attending the Commission meeting in the morning, too.

Only one item of interest for you this week: we had a call with our interagency group this afternoon and got agreement to allow U.S. citizens to use the Sendai airport. If you recall, the airport lies right on the border of the 50-mile evacuation zone for U.S. citizens. DOS wanted us to get buy-in from other Federal partners before we provided DOS our recommendation. We will incorporate comments from the interagency contacts on the call this afternoon and hope to provide our recommendation to DOS within the next day or two. Then, they will revise the travel advisory.

Please let me know if you have any questions.

From: Franovich, Mike
Sent: Monday, July 11, 2011 5:31 PM
To: Gilles, Nanette; Orders, William; Marshall, Michael; Hipschman, Thomas; Skeen, David; Laufer, Richard
Subject: RE: Tuesday Japan Briefing

Works for me.

From: Gilles, Nanette
Sent: Monday, July 11, 2011 5:28 PM
To: Orders, William; Franovich, Mike; Marshall, Michael; Hipschman, Thomas; Skeen, David; Laufer, Richard
Subject: Tuesday Japan Briefing

~~NOT FOR PUBLIC DISCLOSURE~~

FM 2607 of 2929 529

~~NOT FOR PUBLIC DISCLOSURE~~

Can we reschedule or cancel (if there's nothing to report) tomorrow's Japan briefing since there is a morning Commission meeting?

anette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180

Email: nanette.gilles@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

From: Vietti-Cook, Annette
nt: Monday, July 11, 2011 6:30 PM
: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Bovol, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader
Subject: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

The Chairman proposes scheduling an Agenda Planning meeting to discuss path forward related to the near term task force report for Tuesday 7/12/11 at 11:30 am following the Commission Briefing on NRC Actions for Addressing the Integrated Regulatory Review Service Report, OR Monday 7/18/11. The Chairman can make himself available on Monday 7/18/11 anytime between 9-11 am and 3 pm – COB. Please let SECY know your preference for scheduling an Agenda Planning Session for this purpose.

The near term task force report is to be provided to the Commission tomorrow Tuesday 7/12/11, and a Commission meeting is planned for 7/19/11 9:30-11:30 am.

Apostolakis, George

From: Sharkey, Jeffry
Sent: Monday, July 11, 2011 7:40 PM
To: Vietti-Cook, Annette; Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Bovol, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader
Subject: Re: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

Annette,

Commissioner Svinicki supports an Agenda Planning session after the Commission receives and has an opportunity to review the Task Force report (i.e., Monday, July 18).

Thanks,

Jeff

From: Vietti-Cook, Annette
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Bovol, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader
Sent: Mon Jul 11 18:30:23 2011
Subject: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

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The near term task force report is to be provided to the Commission tomorrow Tuesday 7/12/11, and a Commission meeting is planned for 7/19/11 9:30-11:30 am.

Apostolakis, George

From: Apostolakis, George
sent: Monday, July 11, 2011 9:11 PM
to: Sosa, Belkys; Gilles, Nanette; Baggett, Steven
subject: Fw: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Vietti-Cook, Annette
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Baval, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader
Sent: Mon Jul 11 18:30:23 2011
Subject: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

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The near term task force report is to be provided to the Commission tomorrow Tuesday 7/12/11, and a Commission meeting is planned for 7/19/11 9:30-11:30 am.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Baggett, Steven
Sent: Tuesday, July 12, 2011 4:36 AM
To: Apostolakis, George; Sosa, Belkys; Gilles, Nanette
Subject: RE: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

Commissioner,

(b)(5)

Steve

From: Apostolakis, George
Sent: Monday, July 11, 2011 9:11 PM
To: Sosa, Belkys; Gilles, Nanette; Baggett, Steven
Subject: Fw: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

(b)(5)

George Apostolakis
Commissioner, US NRC

Blackberry (b)(6)

From: Vietti-Cook, Annette
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Sharkey, Jeffry; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Baval, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader
Sent: Mon Jul 11 18:30:23 2011
Subject: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

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~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Bubar, Patrice
To: Tuesday, July 12, 2011 8:24 AM
Sosa, Belkys
Subject: Follow up to our discussion

Hi Belkys. Thanks for talking with me yesterday.

(b)(5)

I will stop by when you get in or you can email me back.

Thanks.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
Nuclear Regulatory Commission
15-1895

Apostolakis, George

From: Magwood, William
Date: Tuesday, July 12, 2011 8:28 AM
Subject: Apostolakis, George
FW: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

George,

Just wanted to let you know that I think it still makes sense to vote this week whether Greg's meeting is today or Monday. If his vision regarding how we will proceed is different from how the Commission views it (which appears to be the case), it's better that that be clarified well before he speaks at the National Press Club.

Bill

From: Vietti-Cook, Annette
Sent: Monday, July 11, 2011 6:30 PM
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Bavol, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader
Subject: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

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Sosa, Belkys

From: Nieh, Ho
 Tuesday, July 12, 2011 9:11 AM
 Vietti-Cook, Annette; Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William

Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Herr, Linda; Bavoil, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader

Subject: RE: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

Commissioner Ostendorff supports conducting the proposed Agenda Planning session on Monday, July 18.

Commissioner Ostendorff notes that during last Thursday's Agenda Planning session, Marty Virgilio committed to provide a memo to the Commission by July 15 that includes a roadmap of the recommended path forward and associated revisions to the Charter for the "Steering Committee to Conduct a Longer Term Review of the Events in Japan."

Commissioner Ostendorff looks forward to reviewing this roadmap, as well as the Near Term Task Force report, since those documents will help inform the discussion on July 18.

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

From: Vietti-Cook, Annette
Sent: Monday, July 11, 2011 6:30 PM
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Bavoil, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader
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Sosa, Belkys

From: Sosa, Belkys
Sent: Tuesday, July 12, 2011 9:20 AM
To: Vietti-Cook, Annette; Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Sharkey, Jeffrey; Lepre, Janet; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Baval, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader
Subject: RE: Proposed Agenda Planning RE: path forward related to the near term task force report for Tuesday 7/12 11:30 am OR Monday 7/18

Commissioner Apostolakis supports the agenda planning session on Monday 7/18/11.

Thanks,
Belkys

From: Vietti-Cook, Annette
Sent: Monday, July 11, 2011 6:30 PM
To: Svinicki, Kristine; Apostolakis, George; Magwood, William; Ostendorff, William
Cc: Jaczko, Gregory; Batkin, Joshua; Coggins, Angela; Pace, Patti; Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Baval, Rochelle; Laufer, Richard; Hart, Ken; Bates, Andrew; Burns, Stephen; Virgilio, Martin; Mamish, Nader
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Sosa, Belkys

From: Vietti-Cook, Annette
Date: Tuesday, July 12, 2011 1:01 PM
To: Sharkey, Jeffrey; Lepre, Janet; Riddick, Nicole; Riddick, Nicole; Sosa, Belkys; Blake, Kathleen; Savoy, Carmel; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Bozin, Sunny
Cc: Bates, Andrew; [redacted] (b)(5)
Subject: Recommendations for Enhancing Reactor Safety in the 21st century near term task force review of insights from the Fukushima Dai-ichi Accident

Today you received the subject report, and an advance copy of a SECY paper (SECY-11-0093) [redacted] (b)(5) has requested return of the SECY paper in order to make changes. Please destroy the Advance Copy of the paper you received. You will be receiving a corrected version shortly.

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Sosa, Belkys
Sent: Tuesday, July 12, 2011 1:15 PM
To: Gilles, Nanette; Davis, Roger; Baggett, Steven; Apostolakis, George
Subject: FYI: Recommendations for Enhancing Reactor Safety in the 21st century near term task force review of insights from the Fukushima Dai-ichi Accident

fyi

From: Vietti-Cook, Annette
Sent: Tuesday, July 12, 2011 1:01 PM
To: Sharkey, Jeffrey; Lepre, Janet; Riddick, Nicole; Riddick, Nicole; Sosa, Belkys; Blake, Kathleen; Savoy, Carmel; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Bozin, Sunny
Cc: Bates, Andrew; (b)(5)
Subject: Recommendations for Enhancing Reactor Safety in the 21st century near term task force review of insights from the Fukushima Dai-ichi Accident

Today you received the subject report, and an advance copy of a SECY paper (SECY-11-0093), (b)(5) has requested return of the SECY paper in order to make changes. Please destroy the Advance Copy of the paper you received. You will be receiving a corrected version shortly.

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Bubar, Patrice
Tuesday, July 12, 2011 9:19 PM
Sharkey, Jeffrey; Nieh, Ho; Sosa, Belkys
Subject: Re: report leaks/press release

(b)(5)

From: Sharkey, Jeffrey
To: Nieh, Ho; Bubar, Patrice; Sosa, Belkys
Sent: Tue Jul 12 21:02:06 2011
Subject: Fw: report leaks/press release

(b)(5)

Your thoughts?

From: Brenner, Eliot
To: Batkin, Joshua; Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Schmidt, Rebecca
Sent: Tue Jul 12 20:03:50 2011
Subject: report leaks/press release

(b)(5)

<http://online.wsj.com/article/SB10001424052702304584404576442551499164400.html>

given the interest in this issue, here is the release we will send out in the morning about 9 a.m.

Eliot

Sosa, Belkys

n: Sharkey, Jeffry
t: Tuesday, July 12, 2011 9:27 PM
: Bubar, Patrice; Nieh, Ho; Sosa, Belkys
Subject: Re: report leaks/press release

Thanks, Patty.

(b)(5)

Jeff

From: Bubar, Patrice
To: Sharkey, Jeffry; Nieh, Ho; Sosa, Belkys
Sent: Tue Jul 12 21:19:20 2011
Subject: Re: report leaks/press release

(b)(5)

m: Sharkey, Jeffry
To: Nieh, Ho; Bubar, Patrice; Sosa, Belkys
Sent: Tue Jul 12 21:02:06 2011
Subject: Fw: report leaks/press release

(b)(5)

Your thoughts?

From: Brenner, Eliot
To: Batkin, Joshua; Sharkey, Jeffry; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Schmidt, Rebecca
Sent: Tue Jul 12 20:03:50 2011
Subject: report leaks/press release

(b)(5)

<http://online.wsj.com/article/SB10001424052702304584404576442551499164400.html>

~~NOT FOR PUBLIC DISCLOSURE~~

given the interest in this issue, here is the release we will send out in the morning about 9 a.m.

Fliot

~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

From: Ostendorff, William
Sent: Wednesday, July 13, 2011 8:33 AM
To: Jaczko, Gregory
Cc: Magwood, William; Svinicki, Kristine; Apostolakis, George; Batkin, Joshua; Brenner, Eliot
Subject: FW: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement
Attachments: 11-127.docx

(b)(5)

From: OPA Resource
Sent: Wednesday, July 13, 2011 8:21 AM
To: Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bollwerk, Paul; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Cutler, Iris; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitts, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Vertyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Chery; McGrady-Finneran, a; McIntyre, David; Mensah, Tanya; Mfthyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Jorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffry; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy; Zorn, Jason
Subject: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

The attached for release in approximately one hour.

Please note: The link to the report is not yet live, but will be at the time of public release.

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



NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Telephone: 301/415-8200

Washington, D.C. 20555-0001

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

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

No. 11-127

July 13, 2011

NRC'S JAPAN TASK FORCE RECOMMENDS CHANGES TO DEFENSE IN DEPTH MEASURES AT NUCLEAR PLANTS; CITES STATION BLACKOUT, SEISMIC, FLOODING AND SPENT FUEL POOLS AS AREAS FOR IMPROVEMENT

The Nuclear Regulatory Commission's Japan Task Force has proposed improvements in areas ranging from loss of power to earthquakes, flooding, spent fuel pools, venting and preparedness, and said a "patchwork of regulatory requirements" developed "piece-by-piece over the decades" should be replaced with a "logical, systematic and coherent regulatory framework" to further bolster reactor safety in the United States.

The report has been given to the five members of the Nuclear Regulatory Commission, who are responsible for making decisions regarding the Task Force's recommendations.

While declaring that "a sequence of events like the Fukushima accident is unlikely to occur in the United States" and that plants can be operated safely, the Task Force also recognized that "an accident involving core damage and uncontrolled release of radioactivity to the environment, even one without significant health consequences, is inherently unacceptable." Thus, the Task Force developed a comprehensive set of 12 recommendations – many with both short and long term elements – to increase safety and redefine what level of protection of public health is regarded as adequate. It also recommended additional study of some issues.

"Our recommendations are grouped into four areas beyond the overarching suggestion to clarify the agency's regulatory framework," said Charles Miller, an NRC veteran who was about to retire when tapped to lead the review team. "We looked at ensuring protection, enhancing accident mitigation, strengthening emergency preparedness and improving the efficiency of NRC programs. The independence given our team was outstanding. Everything was on the table and we felt free to take a holistic approach to these key subjects."

"We asked the Japan Task Force to undertake a systematic and methodical review of our processes and regulations to determine if the Commission should make additional improvements in our regulations and to give us recommendations for policy direction. This comprehensive report fulfills that charter," said NRC Chairman Gregory Jaczko. "I am proud of the diligence and dedication of the Task Force and look forward to working with my fellow commissioners to respond to these recommendations."

On July 19 the Commission will meet to hear from Miller and his team, and pose questions about their nearly four-month effort. On July 28 the Task Force will hold a public meeting to discuss the report, and members will appear before the Advisory Committee on Reactor Safeguards on Aug. 17. Additional meetings may be scheduled to seek public input on the recommendations.

The report noted that the current NRC approach to regulation includes requirements for protection and mitigation of design-basis events, requirements for some "beyond-design-basis" events through regulations, and voluntary industry initiatives to address severe accident issues.

"This regulatory approach, established and supplemented piece-by-piece over the decades, has addressed many safety concerns and issues, using the best information and techniques available at the time. The result is a patchwork of regulatory requirements and other safety initiatives, all important, but not given equivalent consideration and treatment by licensees or during NRC technical review and inspection. Consistent with the NRC's organizational value of excellence, the Task Force believes that improving the NRC's regulatory framework is an appropriate, realistic and achievable goal," said the report.

The authors added, "Continued operation and continued licensing activities do not pose an imminent risk to public health and safety. However, the Task Force also concludes that a more balanced application of the Commission's defense-in-depth philosophy using risk insights would provide an enhanced regulatory framework that is logical, systematic, coherent and better understood. Such a framework would support appropriate requirements for increased capability to address events of low likelihood and high consequence, thus significantly enhancing safety."

By recommending a more "coherent regulatory framework for adequate protection that appropriately balances defense-in-depth and risk considerations," the report recommends:

- Requiring plants to reevaluate and upgrade as necessary their design-basis seismic and flooding protection of structures, systems and components for each operating reactor and reconfirm that design basis every 10 years;
- Strengthening Station Black Out (SBO) mitigation capability for existing and new reactors for design-basis and beyond-design-basis natural events – such as floods, hurricanes, earthquakes, tornadoes or tsunamis – with a rule to set minimum coping time without offsite or onsite AC power at 8 hours; establishing equipment, procedures and training to keep the core and spent fuel pool cool at least 72 hours; and preplanning and pre-staging offsite resources to be delivered to the site to support uninterrupted core and pool cooling and coolant system and containment integrity as needed;
- Requiring that facility emergency plans address prolonged station blackouts and events involving multiple reactors;
- Requiring additional instrumentation and seismically protected systems to provide additional cooling water to spent fuel pools if necessary; and requiring at least one system of electrical power to operate spent fuel pool instrumentation and pumps at all times. The Task Force noted it will take some time for a full understanding of the sequence of events and condition of the spent fuel pools. The report said based on information available to date the two most cogent insights related to the availability of pool instrumentation and the plant's capability for cooling and water inventory management;

- Requiring reliable hardened vent designs in boiling water reactors (BWRs) with Mark I and Mark II containments;
- Strengthening and integrating onsite emergency response capabilities such as emergency operating procedures, severe accident management guidelines and extensive damage mitigation guidelines;
- Identifying, as part of the longer term review, insights about hydrogen control and mitigation inside containment or in other buildings as more is learned about the Fukushima accident;
- Evaluating, as part of the longer term review, potential enhancements to prevent or mitigate seismically induced fires or floods;
- Pursuing, as part of the longer term review, additional emergency preparedness topics related to SBO and multiunit events;
- Pursuing, as part of the longer term review, emergency preparedness topics on decision making, radiation monitoring and public education;
- Strengthened regulatory oversight of plant safety performance – the NRC’s Reactor Oversight Process by which plants are monitored on a daily basis – by focusing more attention on defense-in-depth requirements.

The report also acknowledged work on flooding and seismic issues under way at the NRC before the March 11 Fukushima event. The short-term review will be followed by a longer term review with a report with recommendations for the Commission’s consideration within six months.

Editors: The full report can be found at this [link](#). The broad area recommendations are contained in the Executive Summary. Detailed proposed actions – either rulemaking or “orders” – can be found in Appendix A.

###

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

Sosa, Belkys

To: Sosa, Belkys
Wednesday, July 13, 2011 9:24 AM
Davis, Roger; Baggett, Steven; Gilles, Nanette
Subject: FYI: This morning's press release

fyi

From: Bubar, Patrice
Sent: Wednesday, July 13, 2011 7:13 AM
To: Nieh, Ho; Sharkey, Jeffrey; Sosa, Belkys
Cc: Bupp, Margaret
Subject: FW: This morning's press release

fyi

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Magwood, William
Wednesday, July 13, 2011 7:00 AM
Czko, Gregory
Stendorff, William; Svinicki, Kristine; Apostolakis, George; Bubar, Patrice; Burns, Stephen; Vietti-Cook, Annette
Subject: This morning's press release

Greg,

Thanks for sharing the planned press release on the task force report. A few comments:

First, I think it is absolutely vital that the headline of this press release focus on the fact that the task force found no imminent threat to safety or security as a result of its analysis. I think that should be the central message and it isn't even mentioned in the draft release. As it is, someone reading this would think that every reactor in the country is a time bomb waiting to go off.

Second, I think it is ill-advised to place so much focus on the task force's comment about the "patchwork of regulatory requirements." The press release does not place this in sufficient context and the comment could be viewed as a condemnation of our entire regulatory framework.

Finally, whereas our press releases are generally dispassionate, this one is almost breathless. I think the tone is too forward-leaning. It should treat the report in much the same way it would treat any proposal coming to the Commission.

Hope these comments are of some help. Let me know if I can do anything to support your efforts as this report is rolled out.

Davis, Roger

From: Sosa, Belkys
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To: Davis, Roger; Baggett, Steven; Gilles, Nanette
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Subject: FW: This morning's press release

fyi

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Magwood, William
Sent: Wednesday, July 13, 2011 7:00 AM
To: Jaczko, Gregory
Cc: Ostendorff, William; Svinicki, Kristine; Apostolakis, George; Bubar, Patrice; Burns, Stephen; Vietti-Cook, Annette
Subject: This morning's press release

Greg,

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First, I think it is absolutely vital that the headline of this press release focus on the fact that the task force found no imminent threat to safety or security as a result of its analysis. I think that should be the central message and it isn't even mentioned in the draft release. As it is, someone reading this would think that every reactor in the country is a time bomb waiting to go off.

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Finally, whereas our press releases are generally dispassionate, this one is almost breathless. I think the tone is too forward-leaning. It should treat the report in much the same way it would treat any proposal coming to the Commission.

Hope these comments are of some help. Let me know if I can do anything to support your efforts as this report is rolled out.

Bill

Apostolakis, George

From: Sosa, Belkys
Sent: Wednesday, July 13, 2011 12:09 PM
To: Apostolakis, George; Davis, Roger; Baggett, Steven; Gilles, Nanette; Lui, Christiana
Subject: RE: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

(b)(5)

From: Apostolakis, George
Sent: Wednesday, July 13, 2011 12:06 PM
To: Sosa, Belkys; Davis, Roger; Baggett, Steven; Gilles, Nanette; Lui, Christiana
Subject: FW: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(701) 415-1810

From: Ostendorff, William
Sent: Wednesday, July 13, 2011 8:33 AM
To: Jaczko, Gregory
Cc: Magwood, William; Svinicki, Kristine; Apostolakis, George; Batkin, Joshua; Brenner, Eliot
Subject: FW: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

(b)(5)

From: OPA Resource
Sent: Wednesday, July 13, 2011 8:21 AM
To: Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bollwerk, Paul; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Cutler, Iris; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitts, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Hollan, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mityng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Orville; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine;

Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy; Zorn, Jason

Subject: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

The attached for release in approximately one hour.

Please note: The link to the report is not yet live, but will be at the time of public release.

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

Apostolakis, George

From: Apostolakis, George
Date: Wednesday, July 13, 2011 12:26 PM
Subject: Sosa, Belkys; Davis, Roger; Baggett, Steven; Gilles, Nanette; Lui, Christiana
RE: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

(b)(5)

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(301) 415-1810

From: Sosa, Belkys
Sent: Wednesday, July 13, 2011 12:09 PM
To: Apostolakis, George; Davis, Roger; Baggett, Steven; Gilles, Nanette; Lui, Christiana
Subject: RE: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

(b)(5)

From: Apostolakis, George
Sent: Wednesday, July 13, 2011 12:06 PM
To: Sosa, Belkys; Davis, Roger; Baggett, Steven; Gilles, Nanette; Lui, Christiana
Subject: FW: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(301) 415-1810

From: Ostendorff, William
Sent: Wednesday, July 13, 2011 8:33 AM
To: Jaczko, Gregory
Cc: Magwood, William; Svinicki, Kristine; Apostolakis, George; Batkin, Joshua; Brenner, Elliot
Subject: FW: Press Release: NRC'S Japan Task Force Recommends Changes to Defense in Depth Measures at Nuclear Plants; Cites Station Blackout, Seismic, Flooding and Spent Fuel Pools as Areas for Improvement

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

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

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Office of Public Affairs
Nuclear Regulatory Commission
45-8200
opa.resource@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Bubar, Patrice
Sent: Wednesday, July 13, 2011 12:59 PM
To: Vietti-Cook, Annette; Bates, Andrew
Cc: (b)(5); Sharkey, Jeffrey; Lepre, Janet; Sosa, Belkys; Blake, Kathleen; Savoy, Carmel; Crawford, Carrie; Nieh, Ho; Herr, Linda; Bozin, Sunny; Batkin, Joshua; Riddick, Nicole; Bupp, Margaret; Reddick, Darani; Davis, Roger; Sexton, Kimberly
Subject: RE: Recommendations for Enhancing Reactor Safety in the 21st century near term task force review of insights from the Fukushima Dai-ichi Accident

Per the Internal Commission Procedures (page III-4), if the staff recommends withdrawal of a SECY paper, the staff must explain to the Commission in writing the basis for the request. SECY will then poll the Commission on the staff's request. Although the email below from Annette Vietti-Cook regarding the withdrawal request does not specifically request the Commission's views on the staff request, per the procedures, SECY must poll the Commission to obtain authorization for this action. We are unable to initiate this process without a written basis for the request from the staff.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Vietti-Cook, Annette
Sent: Tuesday, July 12, 2011 1:01 PM
To: Sharkey, Jeffrey; Lepre, Janet; Riddick, Nicole; Riddick, Nicole; Sosa, Belkys; Blake, Kathleen; Savoy, Carmel; Bubar, Patrice; Crawford, Carrie; Nieh, Ho; Herr, Linda; Bozin, Sunny
Cc: Bates, Andrew; (b)(5)
Subject: Recommendations for Enhancing Reactor Safety in the 21st century near term task force review of Insights from the Fukushima Dai-ichi Accident

Today you received the subject report, and an advance copy of a SECY paper (SECY-11-0093). (b)(5) has requested return of the SECY paper in order to make changes. Please destroy the Advance Copy of the paper you received. You will be receiving a corrected version shortly.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sharkey, Jeffrey
Thursday, July 14, 2011 12:42 PM
Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Subject: FYI

ML11186A950

Highlight SECY-11-0093 (right click and select Properties from the drop-down menu, then click on the Revision Tab). See the recommendation at Revision 18.

Jeffrey M. Sharkey
Chief of Staff
Office of Commissioner Kristine L. Svinicki
US Nuclear Regulatory Commission
301-415-1867 (w)
301-415-1863 (fax)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

1

FM 2633 of 2929 ⁴⁸¹

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Sosa, Belkys
at: Thursday, July 14, 2011 1:31 PM
Subject: Gilles, Nanette; Davis, Roger
FYI

fyi

From: Sharkey, Jeffry
Sent: Thursday, July 14, 2011 12:42 PM
To: Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Subject: FYI

ML11186A950

Highlight SECY-11-0093 (right click and select Properties from the drop-down menu, then click on the Revision Tab). See the recommendation at Revision 18.

Jeffry M. Sharkey
Chief of Staff
Office of Commissioner Kristine L. Svinicki
US Nuclear Regulatory Commission
301-415-1867 (w)
301-415-1863 (fax)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Date: Thursday, July 14, 2011 1:50 PM
Subject: Sosa, Belkys; Davis, Roger
RE: FYI

Interesting. I also noted in looking at the various versions yesterday that the "official" version, dated 7/12/11, was not added to ADAMS until the morning of 7/13.

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Sosa, Belkys
Sent: Thursday, July 14, 2011 1:31 PM
To: Gilles, Nanette; Davis, Roger
Subject: FYI

fyi

From: Sharkey, Jeffry
Date: Thursday, July 14, 2011 12:42 PM
Subject: Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Subject: FYI

ML11186A950

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Jeffry M. Sharkey
Chief of Staff
Office of Commissioner Kristine L. Svinicki
US Nuclear Regulatory Commission
301-415-1867 (w)
301-415-1863 (fax)

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sosa, Belkys
Thursday, July 14, 2011 5:13 PM
Subject: Sharkey, Jeffry
FW: FYI

Jeff, refer to the following note from Nan. Thanks for sharing, - Belkys

From: Gilles, Nanette
Sent: Thursday, July 14, 2011 1:50 PM
To: Sosa, Belkys; Davis, Roger
Subject: RE: FYI

Interesting. I also noted in looking at the various versions yesterday that the "official" version, dated 7/12/11, was not added to ADAMS until the morning of 7/13.

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Sosa, Belkys
Thursday, July 14, 2011 1:31 PM
To: Gilles, Nanette; Davis, Roger
Subject: FYI

fyi

From: Sharkey, Jeffry
Sent: Thursday, July 14, 2011 12:42 PM
To: Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Subject: FYI

ML11186A950

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Jeffry M. Sharkey
Chief of Staff
Office of Commissioner Kristine L. Svinicki
US Nuclear Regulatory Commission
301-415-1867 (w)
301-415-1863 (fax)

Gilles, Nanette

~~NOT FOR PUBLIC DISCLOSURE~~

From: Baggett, Steven
Sent: Friday, July 15, 2011 2:17 PM
To: Gilles, Nanette
Subject: FW: WDM Draft comments on Secy 11-0093
Attachments: [Untitled].pdf

Nan,

Sorry, just realized you were not on cc.

(b)(5)

Steve

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

From: Blake, Kathleen
Sent: Friday, July 15, 2011 11:16 AM
To: Apostolakis, George
Cc: Sosa, Belkys; Baggett, Steven; Davis, Roger
Subject: WDM Draft comments on Secy 11-0093

(b)(5)

kb

Kathleen M. Blake
Administrative Assistant
to Commissioner Apostolakis
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, Maryland 20852
301-415-1810

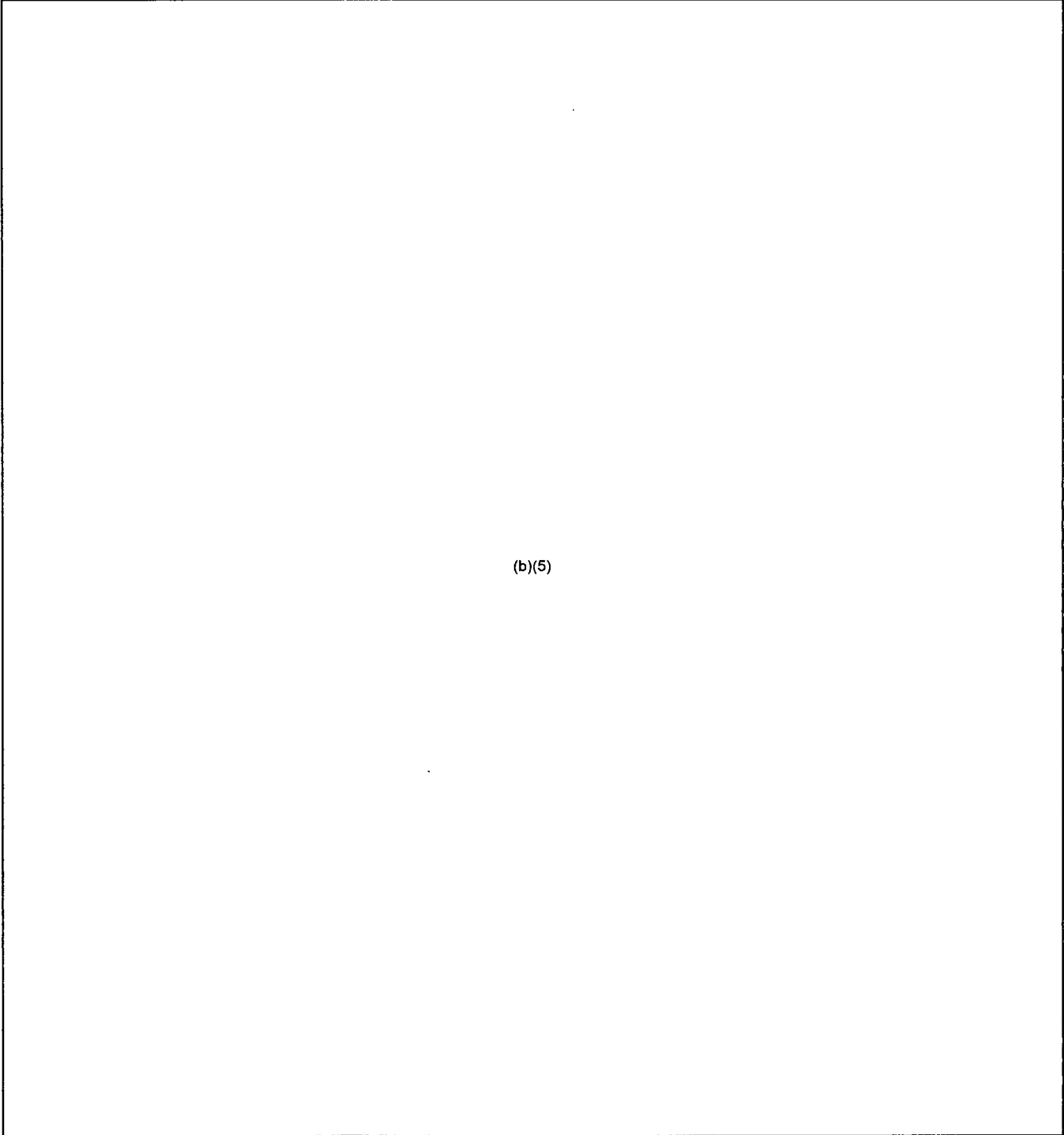
-----Original Message-----

From: KATHLEEN.BLAKE@NRC.GOV [mailto:kathleen.blake@nrc.gov]
Sent: Thursday, July 14, 2011 5:24 PM
To: Blake, Kathleen
Subject:

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

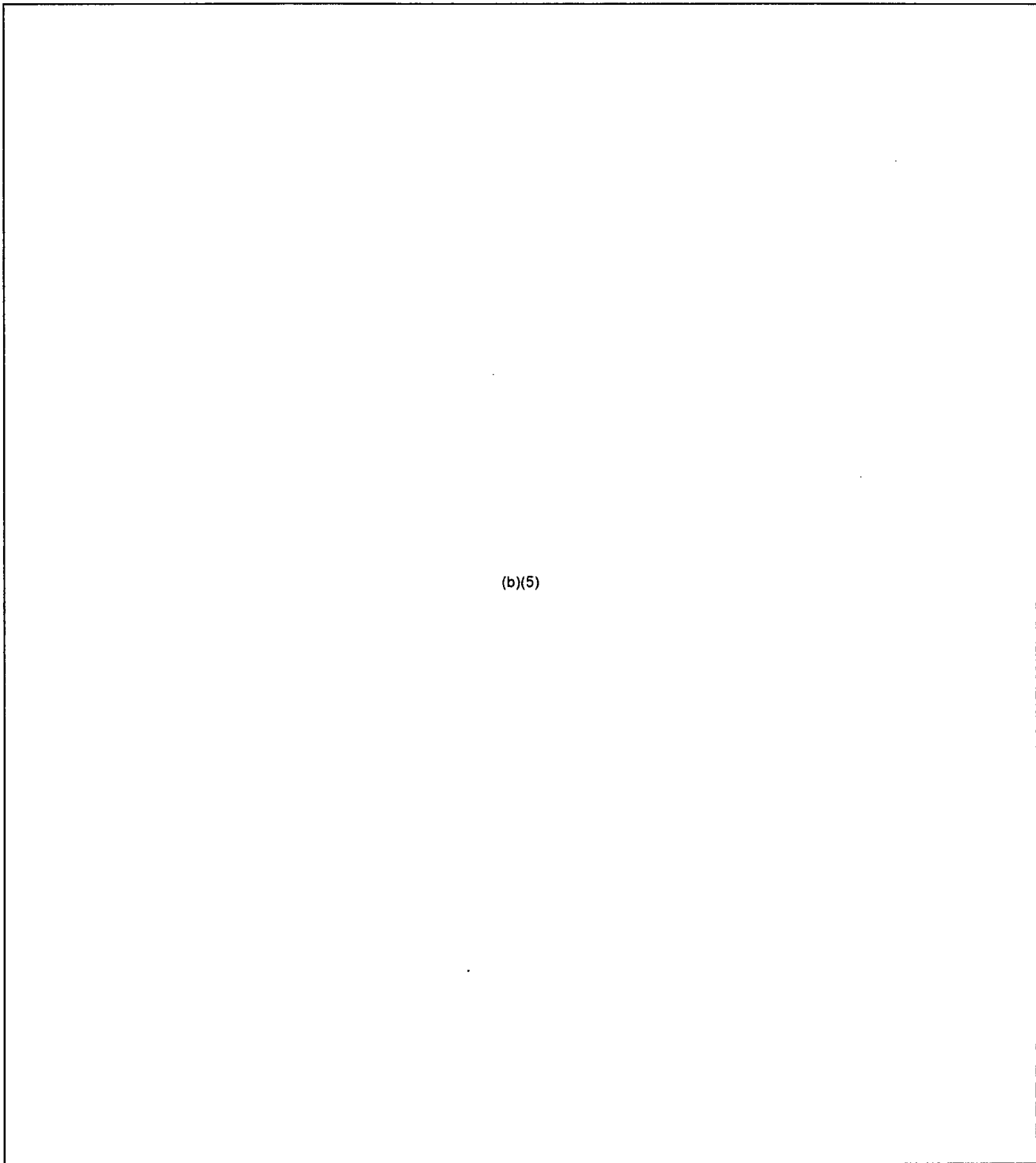
**Commissioner Magwood's Comments on SECY-11-0093
"Near Term Report and Recommendations for
Agency Actions Following The Events in Japan"**



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Coggins, Angela
Sent: Friday, July 15, 2011 6:25 PM
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
cc: Vietti-Cook, Annette; Baval, Rochelle; Virgilio, Martin
Subject: FW: Task Force Roadmap (2).docx
Attachments: 11xxxx TEMPLATE Japan Task Force Topic Meetings.docx; Task Force Roadmap (2).docx

I understand these documents were walked around to your offices late this afternoon, but I thought I would provide electronic copies just in case this would make it easier for you to review. Thanks and have a great weekend!

Angela B. Coggins
Policy Director
Office of Chairman Gregory B. Jaczko
U.S. Nuclear Regulatory Commission
[301-415-1828](tel:301-415-1828)/angela.coggins@nrc.gov

From: Baval, Rochelle
Sent: Friday, July 15, 2011 5:10 PM
To: Coggins, Angela
Cc: Vietti-Cook, Annette; Virgilio, Martin; Bowman, Gregory
Subject: RE: Task Force Roadmap (2).docx

Attached are the final versions of the roadmap and template scheduling note that we are sharing this afternoon.

Rochelle

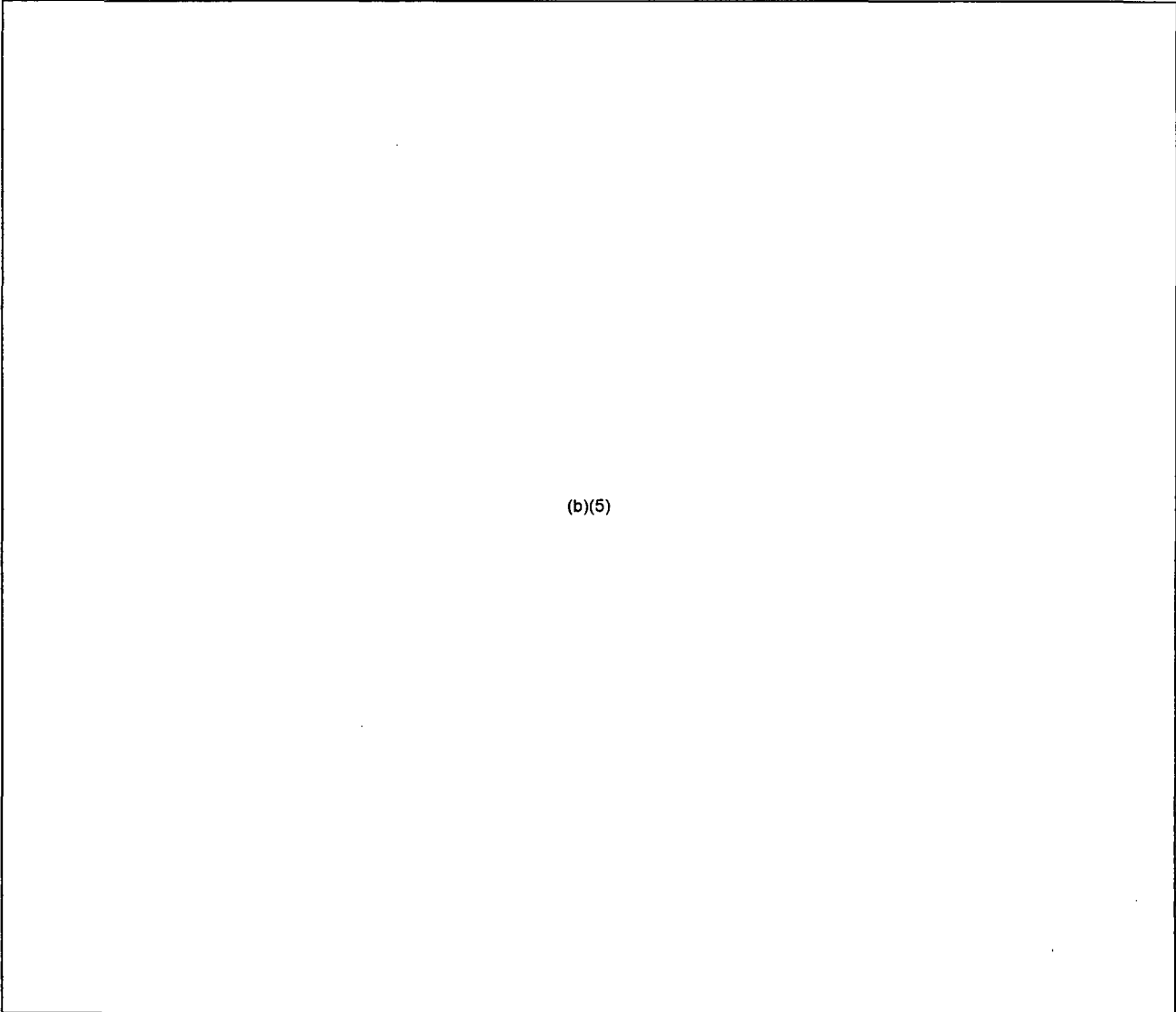
~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

**ROADMAP FOR COMMISSION DECISIONMAKING AND OBTAINING STAKEHOLDER
INPUT ON THE NEAR-TERM TASK FORCE'S RECOMMENDATIONS**

(b)(5)

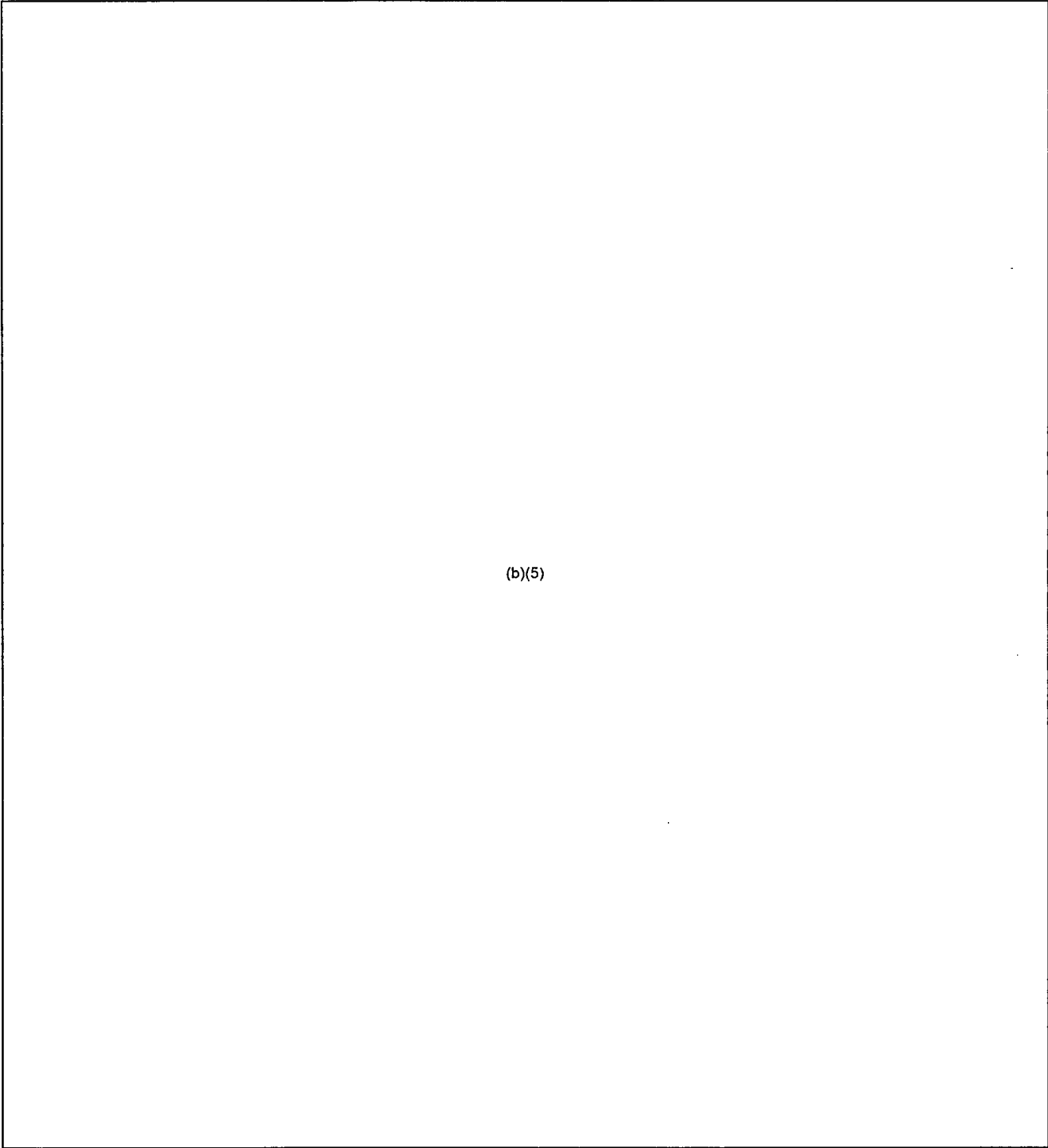
~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

**ROADMAP FOR COMMISSION DECISIONMAKING AND OBTAINING STAKEHOLDER
INPUT ON THE NEAR-TERM TASK FORCE'S RECOMMENDATIONS**

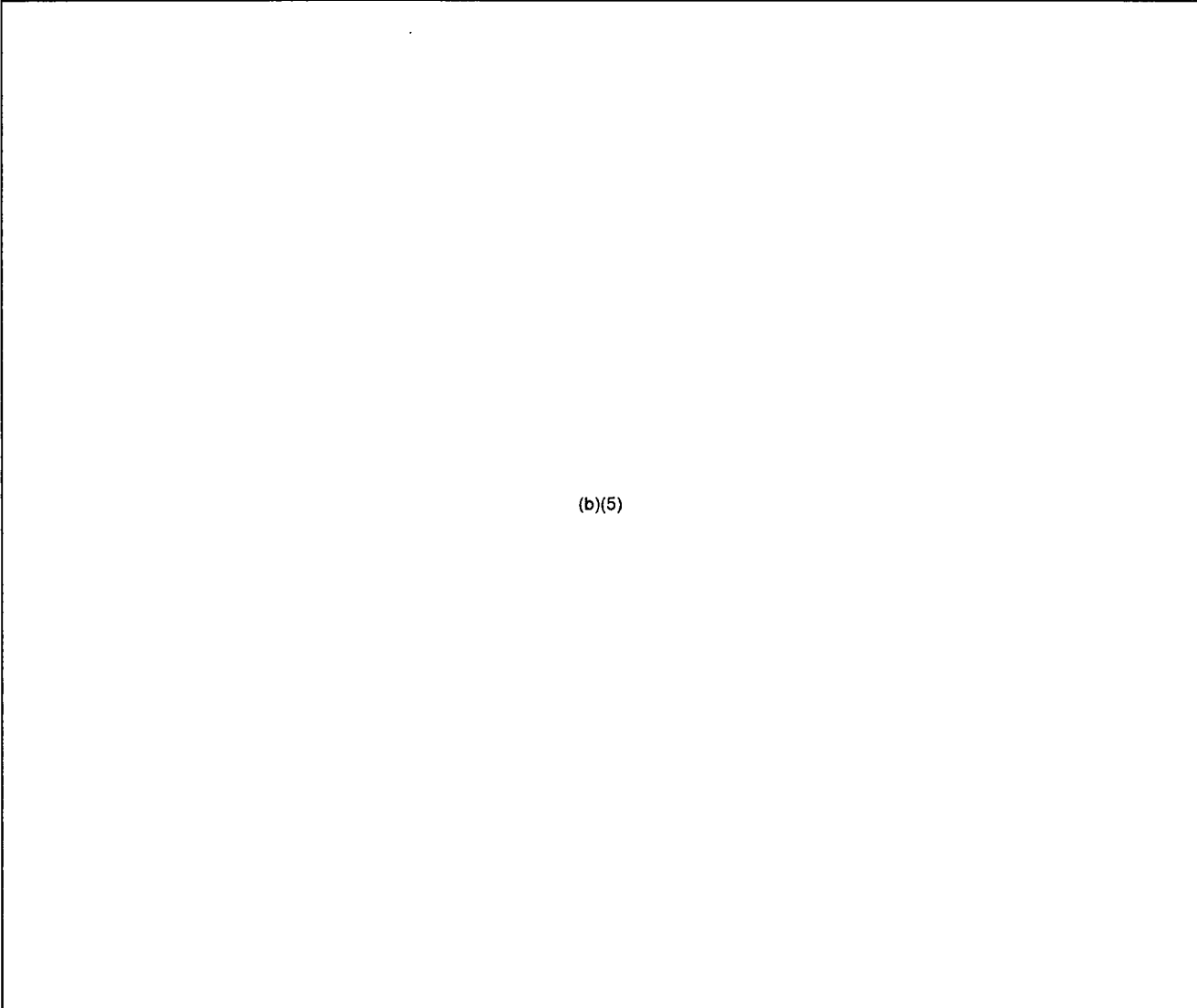


(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

- 2 -



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sosa, Belkys
Date: Friday, July 15, 2011 8:07 PM
To: Apostolakis, George; Gilles, Nanette; Davis, Roger; Baggett, Steven
Subject: Fw: Draft Speech
Attachments: Draft Speech.docx

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Montes, David
To: Bubar, Patrice; Nieh, Ho; Sosa, Belkys; Sharkey, Jeffry
Cc: Batkin, Joshua; Coggins, Angela; Loyd, Susan; Monninger, John
Sent: Fri Jul 15 18:05:19 2011
Subject: Draft Speech

Attached is the draft speech for Monday.

David

~~NOT FOR PUBLIC DISCLOSURE~~

Thank you for that kind introduction. I am pleased and honored to be here today, speaking at this venerable institution. The National Press Club is a venue like no other. It has been at the center of Washington journalism and news for more than 100 years, and has welcomed every U.S. president since Theodore Roosevelt. The Press Club podium has hosted speeches by prime ministers, members of Congress, Cabinet officials, ambassadors, entertainers, business leaders and athletes. So, I am humbled and honored to be here today.

I especially appreciate the Club's official emblem of the owl. To the Press Club, the owl symbolizes wisdom, awareness, and long nights spent on the job. I won't claim wisdom. I believe I have a strong sense of awareness. But, I can absolutely guarantee that I have spent a number of sleepless nights on the job!

As Chairman of the Nuclear Regulatory Commission, one of the best aspects of my job is having the opportunity to lead a staff of nearly 4,000 talented, dedicated public servants. Like any regulatory agency, we hear from all sides and all perspectives both about our own safety record and that of the industry we regulate. We know we can always do better, and we always strive to do better. But I have absolute confidence—and the American people should as well—in the experience, expertise, and professionalism of the NRC staff. Today, I've brought three excellent representatives of our team with me, and I'd like to introduce them to you.

Michelle Catts has a degree in nuclear engineering and has worked for the NRC for nine years. She currently serves as one of two senior resident NRC inspectors at the Indian Point nuclear power plant in New York. As a resident inspector, she is the eyes and ears of the NRC. Ms. Catts and the other NRC resident inspectors are the front-line staff who conducted the inspections of domestic plants that the NRC ordered in the days following the nuclear accident in Japan.

Dan Frumkin is originally from the D.C. area and has a degree in fire protection engineering from Maryland. After working on fire protection programs for two nuclear plants, he has worked on improving fire protection at nuclear plants all across the country for the past 11 years at the NRC. This is a very important and long-standing issue for nuclear safety, and Mr. Frumkin has been a big part of the NRC efforts to definitively resolve this issue.

Jennifer Uhle has been with the agency for 20 years. She has a doctorate in nuclear engineering from MIT, and in fact, the NRC helped provide her the opportunity to pursue those studies. Right now, she helps make decisions on where the NRC spends its research money to best advance the science of nuclear safety. Most recently, Ms. Uhle was part of our 24-7 Operations Center team during the Japan crisis and, because of her expertise, she was asked to serve on the International Atomic Energy Agency's fact-finding mission to Japan.

These three outstanding professionals are representatives of the thousands of individuals who work day in and day out to make sure we meet our responsibilities to the public.

I am sure the recent events in Japan and their implications for how we approach nuclear safety in this country are foremost on everyone's mind. Since the events began to unfold four months ago, the NRC

has taken strong and immediate actions to ensure the continued safety of the nation's nuclear power plants. In light of the events in Japan, the Commission has undertaken a systematic and methodical review of the NRC's nuclear safety program. This review, which has both short- and long-term components, has moved forward with a strong sense of urgency, given the significant safety issues under examination.

To spearhead this effort, the Commission established a Task Force, made up of some of the agency's most experienced and expert staff. In conducting its work, the Commission's Task Force had full access to the NRC headquarters and regional staff and the NRC site team in Japan. As part of its review, the Task Force reached out to the Federal Emergency Management Agency to benefit from their expertise in emergency management, as well as the Institute for Nuclear Power Operations in order to understand the industry's response. Additionally, the Task Force considered information received from stakeholders and monitored international efforts and reports by the International Atomic Energy Agency, the Nuclear Energy Agency, and other organizations.

Last week, the Task Force completed its 90-day review and submitted its Report and recommendations to the Commission for its consideration. In line with the NRC's commitment to openness and transparency, the Commission has made the full report publicly available. The Task Force will also formally present the Report to the Commission at a public meeting tomorrow morning. I want to thank the members of the Task Force for their tremendous work. It's clear that their focus always remained first and foremost on nuclear safety. In particular, I want to acknowledge Charlie Miller who delayed his retirement in order to lead this effort. Charlie still has hopes of retiring sometime soon, but we're doing our best to talk him out of it.

In its Report, the Task Force concluded that the current "patchwork of regulatory requirements" developed "piece-by-piece over the decades" should be replaced by a "logical, systematic and coherent regulatory framework" to further bolster reactor safety in the United States. Toward this end, the Task Force developed a comprehensive set of 12 recommendations—many with both short- and long-term elements—and also recommended additional study of other issues. In its review, the Task Force did not find any imminent risk to public health and safety from the continued operation of the nation's nuclear power plants. The Task Force was clear, however, that any accident involving core damage and uncontrolled radioactive releases—even one without significant health consequences—is inherently unacceptable.

Throughout the NRC's history, our approach to nuclear safety and security has necessarily evolved as new scientific information and operational experience have given us a better understanding of nuclear technology and its risks. Although this process has primarily unfolded incrementally through piecemeal and patchwork changes along the way, the history of nuclear power has also been punctuated by several significant events that challenged old truths and upended our understanding of nuclear safety and security. The 1975 Brown's Ferry Fire, the 1979 Three Mile Island accident, and the September 11, 2001 terrorist attacks were all such watershed events. These events led to dramatic changes in both how the NRC regulates and how the nuclear industry operates—changes that remain with us to this day. Based on the analysis and recommendations in their Report, it is clear that the accident at the Fukushima Dai-ichi site is another such event.

In laying out a Regulatory Framework for the 21st Century, the Commission's Task Force has charted a path forward on how we can fundamentally strengthen the NRC's nuclear safety program. The report recognizes that our defense-in-depth philosophy is the centerpiece of our approach to safety, one that seeks to address both the expected and the unexpected through multiple, independent, and redundant layers of defense. And it is with an eye towards ensuring that the NRC always strikes an effective balance between these protection, mitigation, and emergency planning strategies that the Task Force developed its specific recommendations.

The Task Force's recommendations are too extensive for me to fully discuss today. Those recommendations range in areas from loss of power to earthquakes, flooding, spent fuel pools, venting, and emergency preparedness. They include new requirements for nuclear power plants to reevaluate and upgrade their seismic and flooding protection, to strengthen their ability to deal with the prolonged loss of power, and to develop emergency plans that specifically contemplate the possibility of events involving multiple reactors. Throughout the Report, the Task Force emphasizes that effective NRC action is essential in addressing these challenges and that voluntary industry initiatives are no substitute for strong and effective NRC oversight. I also want to emphasize that the report examined the NRC organization itself, offering recommendations on how we can clarify our regulatory framework and improve our efficiency.

As we consider and respond to these recommendations, the Commission is committed to involving the public and our stakeholders in this process. At the NRC, we never forget that nuclear regulation is the public's business and that we have the responsibility to conduct our work openly and transparently. Since my very first speech after joining the Commission almost seven years ago, I have emphasized that openness and transparency are indispensable ingredients for effective decision making.

To ensure that we move forward openly, transparently, and quickly, I have proposed to my Commission colleagues a roadmap for taking action on the Report. The centerpiece of my proposal is a series of three public Commission meetings with staff and stakeholders—each focused on one aspect of our defense-in-depth philosophy and the Task Force's recommendations within that area. Prior to each of these Commission meetings, there would be opportunities for stakeholders to provide feedback on the Task Force's recommendations and for the staff to provide additional information to the Commission. By moving forward in this way, the Commission will ensure that we benefit from the information and perspectives that our stakeholders bring to the table.

We are in a strong position today to be able to move forward quickly and effectively because of the Task Force's outstanding work. The American public should be grateful and proud of the service that the Task Force members have provided. The Task Force has clearly done its part in helping us to better understand what nuclear safety requires in a post-Fukushima world. Now, it is time for my Commission colleagues and me to do our part. We have the responsibility to the American people to quickly and thoroughly review these recommendations, and make the best decisions to ensure the continued safety of the public.

~~NOT FOR PUBLIC DISCLOSURE~~

Because of the tremendous work done by the Task Force, I see no reason why the Commission cannot provide clear direction on each of the Task Force's recommendations in less than 90 days. That is the time the Commission gave the Task Force to do its job, and I believe that is more than enough time for the Commission to outline a clear path forward. That does not mean that the agency will be able to take final action on all these matters, since certain recommendations require rules that may take months or years to develop. I believe we have enough information at this time, however, to take the necessary interim steps on issues identified by the Task Force and initiate longer-term rulemakings that will allow for full and meaningful participation by the public.

In order to provide that clear direction within the next 90 days, the Commission may need to do things differently than it normally does. That should be expected, since these are not normal times for the NRC or for the nuclear industry. We all know that some changes are in order, and none of us want to make rushed, poor decisions. We must move forward, however, with the urgency called for by these safety issues. As Chairman, I am committed to ensuring that the Commission has all the information it needs to make timely decisions and take decisive actions in response to the Task Force's recommendations.

As I alluded to earlier in my remarks, this is by no means the first time we have undertaken a significant reevaluation of what nuclear safety and security requires. Nearly a decade ago, we embarked on an effort to overhaul and strengthen the security of the nation's nuclear plants in the aftermath of the September 11th attacks. While we moved forward with short-term changes, it has taken the NRC and the industry almost 10 years to fully develop and implement that new framework. I believe that it would be unacceptable for our current effort to take that long.

That is why I am calling today for the NRC and the nuclear industry to commit to complete and implement the process of learning and applying the lessons of the Fukushima accident within five years. This will take a lot of hard work, strong and decisive leadership from the Commission, and a commitment by the industry to put safety first. We have no other choice. The costs of inaction are simply too high.

The Task Force has provided an excellent start to this effort. I believe that we are more than up to the task of seeing this effort through. This is not an NRC problem or a nuclear industry problem. This is an imperative for nuclear safety. The American people are looking to everyone involved in nuclear safety—from the operators to the regulators—to do their part in continuing to protect the public. We must deliver. Thank you.

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

n: Apostolakis, George
t: Sunday, July 17, 2011 2:05 PM
To: Sosa, Belkys; Gilles, Nanette; Davis, Roger; Baggett, Steven
Subject: RE: Agenda planning tomorrow

(b)(5)

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

From: Sosa, Belkys
Sent: Sunday, July 17, 2011 1:08 PM
To: Apostolakis, George; Gilles, Nanette; Davis, Roger
Subject: Fw: Agenda planning tomorrow

(b)(5)

~~Sent from an NRC Blackberry~~
Belkys Sosa

(b)(6)

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

From: Nieh, Ho
To: Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys
Sent: Sun Jul 17 12:04:27 2011
Subject: Agenda planning tomorrow

Hey all - hope you are enjoying the nice weekend.

(b)(5)

(b)(5)

am available today to chat with you over the phone, if you would like to discuss further.

Ho Nieh

Chief of Staff

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

(301) 415-1811 (office)

(b)(6)

(mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

NOT FOR PUBLIC DISCLOSURE

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Nieh, Ho
It: Sunday, July 17, 2011 12:04 PM
Subject: Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys
Agenda planning tomorrow

Hey all - hope you are enjoying the nice weekend.

(b)(5)

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

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sosa, Belkys
Sent: Sunday, July 17, 2011 1:08 PM
To: Apostolakis, George; Gilles, Nanette; Davis, Roger
Subject: Fw: Agenda planning tomorrow

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Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

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(301) 415-1757 (fax)

o.nieh@nrc.gov

Davis, Roger

From: Sosa, Belkys
Sent: Sunday, July 17, 2011 2:03 PM
To: Apostolakis, George; Gilles, Nanette; Davis, Roger; Baggett, Steven
Subject: Fw: Agenda planning tomorrow

Fyi

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Sharkey, Jeffry
To: Nieh, Ho; Bubar, Patrice; Sosa, Belkys
Sent: Sun Jul 17 13:28:30 2011
Subject: RE: Agenda planning tomorrow

Ho,

(b)(5)

(b)(5)

How does OCWE fit in?

OCWE contributes substantially to fulfilling the agency's mission of protecting people and the environment.

OCWE is a key component of our internal safety culture. It allows us to operate in a way that ensures that we keep safety as our overriding priority.

Everyone has a role in safety at the NRC.

Whether it's the engineer performing an inspection at a power plant, the budget analyst approving funds to support the inspection, the IT specialist providing a laptop for the inspection, or the administrative assistant putting the inspection report into ADAMS, we all have a common goal of fulfilling our safety mission.

OCWE is consistent with our Organizational Values.

Simply put, OCWE represents who we are, what we do, and how we do it.

Why is OCWE important?

OCWE improves our regulatory decision-making. There is value in considering alternative approaches and diverse views even when the views are not adopted. Having all perspectives improves our chances of making the best decisions.

OCWE engages, empowers, and maximizes the potential of all individuals at all levels of the organization and across all the job functions. Now, more than ever, we need to harness the collective skills we have. We need to plug into our seasoned staff who can share insights and the history behind the way we do business and tap into our new colleagues who can offer us an opportunity to re-examine the way we do business.

(b)(5)

Jeff

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

From: Nieh, Ho
Sent: Sunday, July 17, 2011 12:04 PM
To: Sharkey, Jeffry; Bubar, Patrice; Sosa, Belkys
Subject: Agenda planning tomorrow

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U.S. Nuclear Regulatory Commission

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ho.nieh@nrc.gov

Davis, Roger

From: Sosa, Belkys
Sent: Sunday, July 17, 2011 2:32 PM
To: Apostolakis, George; Gilles, Nanette; Davis, Roger; Baggett, Steven
Subject: Re: Agenda planning tomorrow

(b)(5)

**Sent from an NRC Blackberry
Belkys Sosa**

(b)(6)

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

From: Apostolakis, George
To: Sosa, Belkys; Gilles, Nanette; Davis, Roger; Baggett, Steven
Sent: Sun Jul 17 14:05:22 2011
Subject: RE: Agenda planning tomorrow

(b)(5)

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

From: Sosa, Belkys
Sent: Sunday, July 17, 2011 1:08 PM
To: Apostolakis, George; Gilles, Nanette; Davis, Roger
Subject: Fw: Agenda planning tomorrow

(b)(5)

**Sent from an NRC Blackberry
Belkys Sosa**

(b)(6)

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

From: Nieh, Ho
To: Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys
Sent: Sun Jul 17 12:04:27 2011
Subject: Agenda planning tomorrow

Hey all - hope you are enjoying the nice weekend.

(b)(5)

(b)(5)

I am available today to chat with you over the phone, if you would like to discuss further.

Ho Nieh

Chief of Staff

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

(01) 415-1811 (office)

(b)(6)

(mobile)

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ho.nieh@nrc.gov

Davis, Roger

From: Gilles, Nanette
Sent: Sunday, July 17, 2011 7:02 PM
To: Apostolakis, George; Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: RE: Draft Speech

(b)(5)

From: Apostolakis, George
Sent: Sunday, July 17, 2011 2:03 PM
To: Gilles, Nanette; Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: RE: Draft Speech

(b)(5)

From: Gilles, Nanette
Sent: Sunday, July 17, 2011 2:02 PM
To: Apostolakis, George; Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: Re: Draft Speech

The speech doesn't make any reference to the longer-term steering committee. It only mentions that there are long-term components to some of the recommendations. Similarly, there is no mention of the SC in the Roadmap document we got Friday. This does not appear to be the EDO's roadmap.

Sent from my NRC Blackberry

From: Apostolakis, George
To: Sosa, Belkys; Gilles, Nanette; Davis, Roger; Baggett, Steven
Sent: Sat Jul 16 16:40:17 2011
Subject: Re: Draft Speech

Does the long-term task force have a role in the proposed schedule?

George Apostolakis
Commissioner, US NRC
Blackberry [redacted] (b)(6)

From: Sosa, Belkys
To: Gilles, Nanette; Apostolakis, George; Davis, Roger; Baggett, Steven
Sent: Sat Jul 16 15:24:48 2011
Subject: Re: Draft Speech

[redacted] (b)(5)

Sent from an NRC Blackberry
Belkys Sosa

[redacted] (b)(6)

From: Gilles, Nanette
To: Sosa, Belkys; Apostolakis, George; Davis, Roger; Baggett, Steven
Sent: Sat Jul 16 12:54:08 2011
Subject: Re: Draft Speech

[redacted] (b)(5)

nt from my NRC Blackberry

From: Sosa, Belkys
To: Apostolakis, George; Gilles, Nanette; Davis, Roger; Baggett, Steven
Sent: Fri Jul 15 20:07:01 2011
Subject: Fw: Draft Speech

Sent from an NRC Blackberry
Belkys Sosa

[redacted] (b)(6)

From: Montes, David
To: Bubar, Patrice; Nieh, Ho; Sosa, Belkys; Sharkey, Jeffrey
Cc: Batkin, Joshua; Coggins, Angela; Loyd, Susan; Monninger, John
Sent: Fri Jul 15 18:05:19 2011
Subject: Draft Speech

Attached is the draft speech for Monday.

David

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Bubar, Patrice
to: Tuesday, July 19, 2011 5:53 PM
Sosa, Belkys
cc: Tadesse, Rebecca
Subject: WDM will be releasing his vote on the Task Force

Hi Belkys: I wanted to let you know that we will be requesting SECY to release Commissioner Magwood's vote on the Task Force report publicly. We expect to have it released tomorrow. We are actually on travel now but reachable. If you have any questions or your boss needs to talk to Commissioner Magwood let me know.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sosa, Belkys
Date: Tuesday, July 19, 2011 8:06 PM
Subject: Apostolakis, George; Davis, Roger; Gilles, Nanette; Baggett, Steven
Fw: WDM will be releasing his vote on the Task Force

Fyi

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

— Original Message —

From: Bubar, Patrice
To: Sosa, Belkys
Cc: Tadesse, Rebecca
Sent: Tue Jul 19 17:52:34 2011
Subject: WDM will be releasing his vote on the Task Force

Hi Belkys. I wanted to let you know that we will be requesting SECY to release Commissioner Magwood's vote on the Task Force report publicly. We expect to have it released tomorrow. We are actually on travel now but reachable. If you have any questions or your boss needs to talk to Commissioner Magwood let me know.

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Date: Tuesday, July 19, 2011 8:47 PM
Subject: Apostolakis, George; Sosa, Belkys; Davis, Roger
RE: Please

(b)(5)

Nan

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

From: Apostolakis, George
Sent: Tuesday, July 19, 2011 8:44 PM
To: Sosa, Belkys; Gilles, Nanette; Davis, Roger
Subject: Fw: Please

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

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

From: Jaczko, Gregory
To: Apostolakis, George
Sent: Tue Jul 19 19:23:41 2011
Subject: Please

Don't vote until we talk tomorrow. We are in good shape

Sosa, Belkys

m: Sosa, Belkys
l: Tuesday, July 19, 2011 8:52 PM
o: Gilles, Nanette; Apostolakis, George; Davis, Roger
Subject: Re: Please

I got a request from Josh to meet tomorrow morning

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

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

From: Gilles, Nanette
To: Apostolakis, George; Sosa, Belkys; Davis, Roger
Sent: Tue Jul 19 20:47:21 2011
Subject: RE: Please

(b)(5)

Nan

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

From: Apostolakis, George
Sent: Tuesday, July 19, 2011 8:44 PM
To: Sosa, Belkys; Gilles, Nanette; Davis, Roger
Subject: Fw: Please

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

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

From: Jaczko, Gregory
To: Apostolakis, George
Sent: Tue Jul 19 19:23:41 2011
Subject: Please

Don't vote until we talk tomorrow. We are in good shape

Sosa, Belkys

m: Sosa, Belkys
t: Tuesday, July 19, 2011 10:39 PM
cc: Bubar, Patrice
Subject: Tadesse, Rebecca
Re: WDM will be releasing his vote on the Task Force

Thks for the headsup. Enjoy your trip.

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

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

From: Bubar, Patrice
To: Sosa, Belkys
Cc: Tadesse, Rebecca
Sent: Tue Jul 19 17:52:34 2011
Subject: WDM will be releasing his vote on the Task Force

Hi Belkys. I wanted to let you know that we will be requesting SECY to release Commissioner Magwood's vote on the Task Force report publicly. We expect to have it released tomorrow. We are actually on travel now but reachable. If you have any questions or your boss needs to talk to Commissioner Magwood let me know.

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sosa, Belkys
Sent: Wednesday, July 20, 2011 10:15 AM
To: Apostolakis, George; Gilles, Nanette; Davis, Roger; Baggett, Steven
Subject: FYI: Public Release of Commissioner Svinicki's Vote on SECY-11-0093

fyi

From: Sharkey, Jeffry
Sent: Wednesday, July 20, 2011 9:55 AM
To: Vietti-Cook, Annette
Cc: Sosa, Belkys; Bubar, Patrice; Nieh, Ho; Batkin, Joshua
Subject: Public Release of Commissioner Svinicki's Vote on SECY-11-0093

Annette,

In accordance with Internal Commission Procedures, Commissioner Svinicki is informing SECY and her Commission colleagues that she is publicly releasing her vote on SECY-11-0093 today. SECY should promptly make her vote available on NRC's public website and in ADAMS.

Thanks,

Jeff

Jeffrey M. Sharkey
Chief of Staff
Office of Commissioner Kristine L. Svinicki
US Nuclear Regulatory Commission
301-415-1867 (w)
301-415-1863 (fax)

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sosa, Belkys
Date: Wednesday, July 20, 2011 10:19 AM
To: Bubar, Patrice
Subject: RE: WDM will be releasing his vote on the Task Force

(b)(5)

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

From: Bubar, Patrice
Sent: Wednesday, July 20, 2011 2:48 AM
To: Sosa, Belkys
Subject: Re: WDM will be releasing his vote on the Task Force

Are you willing to share your bosses plans?

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

From: Sosa, Belkys
To: Bubar, Patrice
Cc: Tadesse, Rebecca
Sent: Tue Jul 19 22:38:56 2011
Subject: Re: WDM will be releasing his vote on the Task Force

for the heads up. Enjoy your trip.

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

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

From: Bubar, Patrice
To: Sosa, Belkys
Cc: Tadesse, Rebecca
Sent: Tue Jul 19 17:52:34 2011
Subject: WDM will be releasing his vote on the Task Force

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~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
t: Wednesday, July 20, 2011 3:30 PM
Apostolakis, George
cc: Sosa, Belkys; Davis, Roger
Subject: FW: Early Public Release of SECY-11-0093

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Hart, Ken
Sent: Wednesday, July 20, 2011 2:05 PM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Mela; Vietti-Cook, Annette
Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Mark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Spelser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren; Roberta; Wright, Darlene
Subject: Early Public Release of SECY-11-0093

Noting that two Commissioners have released their votes to the public, the KLS office has requested that SECY-11-0093 be released to the public early. (It is scheduled for release on 7/26.)

Please let SECY know whether or not your office agrees with the early public release of this paper.

Thanks, Ken

~~NOT FOR PUBLIC DISCLOSURE~~

Please let SECY know whether or not your office agrees with the early public release of this paper.

anks, Ken

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

From: Apostolakis, George
Date: Wednesday, July 20, 2011 4:59 PM
To: Gilles, Nanette
Cc: Sosa, Belkys; Davis, Roger
Subject: RE: Early Public Release of SECY-11-0093

Yes

Commissioner George Apostolakis
US Nuclear Regulatory Commission
One White Flint North, MS O16 G4
11555 Rockville Pike
Rockville, MD 20852

(301) 415-1810

From: Gilles, Nanette
Sent: Wednesday, July 20, 2011 3:30 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Davis, Roger
Subject: FW: Early Public Release of SECY-11-0093

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

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Email: nanette.gilles@nrc.gov

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Sent: Wednesday, July 20, 2011 2:05 PM
To: Baggett, Steven; Bavoil, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Early Public Release of SECY-11-0093

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~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

FM 2671 of 2929 425

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Gilles, Nanette
Date: Thursday, July 21, 2011 9:32 AM
To: Hart, Ken; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Early Public Release of SECY-11-0093

Commissioner Apostolakis approves early public release of SECY-11-0093.

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

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Email: nanette.gilles@nrc.gov

From: Hart, Ken
Sent: Wednesday, July 20, 2011 2:05 PM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Pearson, Laura; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Early Public Release of SECY-11-0093

Noting that two Commissioners have released their votes to the public, the KLS office has requested that SECY-11-0093 be released to the public early. (It is scheduled for release on 7/26.)

Please let SECY know whether or not your office agrees with the early public release of this paper.

Thanks, Ken

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sosa, Belkys
Sent: Friday, July 29, 2011 3:09 PM
To: Apostolakis, George; Gilles, Nanette; Baggett, Steven; Biggins, James; Davis, Roger
Subject: FYI: response to Congressman Markey
Attachments: Letter to Edward Markey from WDM dtd July 29 re Fukushima.pdf

fyi

From: Bubar, Patrice
Sent: Friday, July 29, 2011 1:49 PM
To: Sosa, Belkys; Nieh, Ho
Subject: response to Congressman Markey

Attached is a response to Congressman Markey's letter to Commissioners Svinicki and Magwood that Commissioner Magwood signed out today.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895



COMMISSIONER

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

July 29, 2011

The Honorable Edward J. Markey
United States House of Representatives
Washington, D.C. 20515

Dear Representative Markey:

Thank you for your July 21, 2011, letter sharing your views about the Nuclear Regulatory Commission's (NRC's) progress toward identifying and responding to the lessons learned from this past spring's events at Japan's Fukushima Daiichi nuclear plant. I appreciate your concerns and your ongoing interest in this issue.

As you detail in your letter, the Commission and the public received a report from the Near Term Task Force on July 13, 2011. This task force was chartered by the Commission to conduct a 90-day review of the Fukushima crisis and provide recommendations regarding actions the NRC might take to enhance the U.S. nuclear regulatory framework based on insights provided by the Japanese experience. As you point out in your letter, the task force found that continued operation and continued licensing activities pose no imminent risk to public health and safety. Nevertheless, there are insights to be gained from Fukushima and the task force has suggested several recommendations to modify our regulatory posture.

I recently released my vote on how I believe we should proceed to consider the task force's recommendations. As I understand your letter, you are concerned that the approach I have suggested would unjustifiably delay taking the steps needed to assure the safety of U.S. nuclear power plants.

Neither my vote nor my intention represents any desire for any unnecessary delay in responding to the lessons of Fukushima. Quite to the contrary, the approach I have proposed would require the staff to immediately engage stakeholders to review the details of the task force recommendations with all stakeholders—including public interest groups, licensees, state and local governments—in an open and transparent manner. I believe that a Commission decision to adopt any staff-generated recommendations without the benefit of an open process of stakeholder engagement would be both unwise and arrogant.

I am aware that the alternative proposal highlighted in your letter suggests that stakeholder interaction regarding the very important, complex, and highly technical recommendations made by the task force can occur in the context of a set of three Commission meetings. I do not agree. In such meetings, the agency invites hand-picked representatives of various areas of

interest to provide a few minutes of comments and respond to a few minutes of questions from Commissioners. When the Commission holds meetings of this nature, they generally come after significant work by the staff to understand and respond to a very broad range of stakeholder inputs, concerns, and suggestions. The Commission meetings that have been proposed to address the task force recommendations would not have the benefit of the detailed and thorough stakeholder process that is emblematic of the NRC.

Three Commission meetings are no substitute for the many hours of discussion the staff can have with the full range of stakeholders. An approach based on a few Commission meetings might provide the Commission with an opportunity to be conspicuously visible and project that it is "in charge", but it is unlikely to provide our many stakeholders a fair opportunity to discuss their views, concerns, and alternative suggestions in a comprehensive fashion.

I have every expectation that the approach outlined in my vote would enable the agency to take appropriate action in a timely manner—with some measures approved for implementation far earlier than is anticipated by the "three meetings" proposal. More importantly, I believe the approach I've suggested should, in fact, enable the agency to implement all necessary regulatory changes much faster than any approach that attempts to truncate stakeholder engagement.

I am committed to work with my colleagues on the Commission and the NRC staff to assure that our efforts to respond to the lessons of Fukushima remain a very high priority for this agency. I hope these comments allay your concerns. Should you have additional questions or concerns, I am available to discuss this matter further at your convenience.

Sincerely,



William D. Magwood, IV

Baggett, Steven

From: Sosa, Belkys
Sent: Tuesday, August 02, 2011 3:11 PM
To: Apostolakis, George; Davis, Roger; Baggett, Steven; Gilles, Nanette
Subject: FYI: Fukushima Hotspot Facts (the rest of the story, which was not mentioned at the hearing)

fyi

From: Sharkey, Jeffrey
Sent: Tuesday, August 02, 2011 2:53 PM
To: Bubar, Patrice; Nieh, Ho; Sosa, Belkys.
Subject: Fukushima Hotspot Facts (the rest of the story, which was not mentioned at the hearing)

~~NOT FOR PUBLIC DISCLOSURE~~

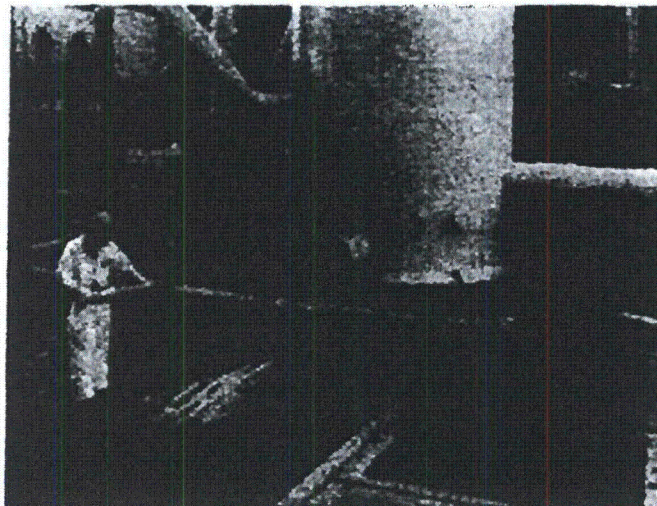
You may already have this, but just in case...

Fukushima radiation hotspot

02 August 2011

An area of extremely high radiation has been found at Fukushima Daiichi in a filtration system that helped to reduce emissions from the reactor accident. New water treatment equipment is starting trial operation.

Tokyo Electric Power Company (Tepco) declared a reading in excess of 10,000 millisieverts per hour coming from part of the Standby Gas Treatment System (SGTS) for units 1 and 2. This moves air from the reactor buildings to the environment through a series of filters, ultimately releasing it through an exhaust stack shared by those reactors. It also provides the route from which excess pressure can be released by venting.



Taking measurements at the foot of the stack yesterday

During normal operation the system also maintains low pressure within the reactor buildings to prevent any potentially contaminated air leaving through tiny holes. In addition to its use during the venting of units 1 and 2 during the accident, it may also have been in operation since power was re-connected, slowly building up radioactivity as it filtered air from the highly contaminated reactor buildings.

The high dose rate was measured in the last part of the SGTS, very near the foot of the stack, and highlighted a radiation map of the Daiichi site released by Tepco.

Comparison to earlier versions of the map showed that Tepco has cleared many of the radiation hotspots caused by rubble spread around by explosions at the height of the accident sequence. Patches of concrete and

steel previously recorded at 950, 550 and 170 millisieverts per hour have been cleared, although more work remains regarding areas with readings of 250, 160 and 120 millisieverts per hour.

In line with this work, as well as the spraying of dust control agents, air sampling at the site border yesterday showed no detection of iodine-131, caesium-134 or caesium-137. This actually shows that airborne radiation at the plant boundary is low enough for normal working practices but Tepco is not expected to lower its precautions for some time to come.

Water treatment and cooling

Tepco is constructing a new treatment system to supplement current arrangements for water that has built up in the basements of units 1, 2 and 3 having leaked through the reactor vessel. Management of this water, which once approached a total of 100,000 tonnes, has been a major concern.

An ad-hoc cooling loop sources water from the basements and treats it before re-injection to the reactor vessels, but pipework for this is extensive and problematic. It currently includes an Areva-supplied treatment system, while a second 'streamlined' system is forthcoming using equipment from Toshiba. The use of these two centres should increase "stability and redundancy," Tepco said.

Levels of water in the basements are on a gradual downward trend, which should eventually allow Tepco to step up the rate at which coolant water is injected and aim for 'cold shutdown' for all three wrecked reactor cores. Unit 1 has been below 100°C for several days, while unit 3 is at 106.6°C. Unit 2 however, remains further from the goal at 122.5°C.

*Researched and written
by World Nuclear News*

Jeffrey M. Sharkey

Chief of Staff

Office of Commissioner Kristine L. Svinicki

US Nuclear Regulatory Commission

301-415-1867 (w)

301-415-1863 (fax)

Gilles, Nanette

From: Gilles, Nanette
Sent: Tuesday, August 02, 2011 3:37 PM
To: Sosa, Belkys; Apostolakis, George; Davis, Roger; Baggett, Steven
Subject: RE: Fukushima Hotspot Facts (the rest of the story, which was not mentioned at the hearing)

FYI – During our weekly call on Japan today, Dave Skeen said that our folks were not surprised by the discovery of this high reading at the Offgas stack and that the high reading was likely just made now because they have finally cleared enough debris away to get to the area.

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Sosa, Belkys
Sent: Tuesday, August 02, 2011 3:11 PM
To: Apostolakis, George; Davis, Roger; Baggett, Steven; Gilles, Nanette
Subject: FYI: Fukushima Hotspot Facts (the rest of the story, which was not mentioned at the hearing)

fyi

From: Sharkey, Jeffrey
Sent: Tuesday, August 02, 2011 2:53 PM
To: Bubar, Patrice; Nieh, Ho; Sosa, Belkys
Subject: Fukushima Hotspot Facts (the rest of the story, which was not mentioned at the hearing)

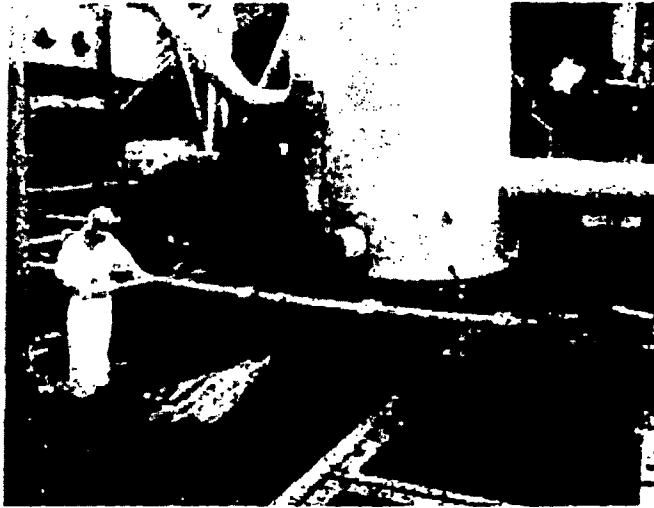
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*Researched and written
by World Nuclear News*

Jeffrey M. Sharkey
Chief of Staff

Office of Commissioner Kristine L. Svinicki
US Nuclear Regulatory Commission
301-415-1867 (w)
1-415-1863 (fax)

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sosa, Belkys
Date: Wednesday, August 03, 2011 2:52 PM
To: Davis, Roger
Subject: Fw: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Fyi

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Sharkey, Jeffry
To: Sharkey, Jeffry; Bubar, Patrice; Sosa, Belkys; Nieh, Ho
Sent: Wed Aug 03 14:45:07 2011
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

From: Sharkey, Jeffry
Sent: Wednesday, August 03, 2011 11:22 AM
To: Bubar, Patrice; Sosa, Belkys; Nieh, Ho
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

From: Bubar, Patrice
Sent: Wednesday, August 03, 2011 8:42 AM

~~NOT FOR PUBLIC DISCLOSURE~~

To: Sosa, Belkys; Sharkey, Jeffrey; Nieh, Ho
Subject: Fw: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

From: Laufer, Richard
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Sent: Wed Aug 03 06:19:03 2011
Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Please note below the GBJ extension request in which to vote on the subject paper. Assuming there are no objections, the extension will be granted. Any office having an objection should notify SECY.

Thanks,
Rich

From: Hipschman, Thomas
Sent: Tuesday, August 02, 2011 4:44 PM
To: Hart, Ken; Laufer, Richard
Cc: Vietti-Cook, Annette; Batkin, Joshua; Monninger, John; Marshall, Michael; Coggins, Angela
Subject: RE: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

The Chairman requests an extension to Friday, August 12, 2011.

From: Wright, Darlene
Sent: Wednesday, July 13, 2011 8:46 AM
To: Baggett, Steven; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hart, Ken; Herr, Linda; Hipschman, Thomas; KLS Temp; Kock, Andrea; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; Laufer, Richard; Baval, Rochelle; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, WCO; Temp, WDM; Warren, Roberta; Apostolakis, George; Temp, GEA; Tadesse, Rebecca; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Lui, Christiana; Lisann, Elizabeth; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

Please save the attached Word file for use in voting on the subject paper. In saving the file, be sure to replace the XXX with your Commissioner's initials and insert the Commissioner's name in the document. Upon completion of the vote, be sure to insert the date and the /RA/.

? ADAMS Accession # for the SECY is PKG ML11186A950.

Apostolakis, George

From: Bubar, Patrice
Date: Wednesday, August 03, 2011 6:16 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Sosa, Belkys; Nieh, Ho
Cc: Armstrong, Janine; Blake, Kathleen; Bozin, Sunny; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Bupp, Margaret; Tadesse, Rebecca
Subject: Re: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Commissioner Magwood does not approve the extension request from the Chairman on SECY-11-0093. As discussed at the Congressional hearing yesterday - he is interested in providing direction to the staff expeditiously to begin the disposition of the Task Force's recommendations.

From: Laufer, Richard
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Sent: Wed Aug 03 06:19:03 2011
Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Please note below the GBJ extension request in which to vote on the subject paper. Assuming there are no objections, the extension will be granted. Any office having an objection should notify SECY.

Thanks,
Rich

From: Hipschman, Thomas
Sent: Tuesday, August 02, 2011 4:44 PM
To: Hart, Ken; Laufer, Richard
Cc: Vietti-Cook, Annette; Batkin, Joshua; Monninger, John; Marshall, Michael; Coggins, Angela
Subject: RE: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

The Chairman requests an extension to Friday, August 12, 2011.

From: Wright, Darlene
Sent: Wednesday, July 13, 2011 8:46 AM
To: Baggett, Steven; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hart, Ken; Herr, Linda; Hipschman, Thomas; KLS Temp; Kock, Andrea; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; Laufer,

Richard; Baval, Rochelle; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, WCO; Temp, WDM; Warren, Roberta; Apostolakis, George; Temp, GEA; Tadesse, Rebecca; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Lui, Iustiana; Lisann, Elizabeth; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole Mitchell-Funderburk, Natalie

Subject: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

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The ADAMS Accession # for the SECY is PKG ML11186A950.

Davis, Roger

From: Sosa, Belkys
Sent: Wednesday, August 03, 2011 6:27 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
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Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

From: Laufer, Richard
Sent: Wednesday, August 03, 2011 6:19 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
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Rich

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Cc: Vietti-Cook, Annette; Batkin, Joshua; Monninger, John; Marshall, Michael; Coggins, Angela
Subject: RE: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

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Svinicki, Kristine; Temp, WCO; Temp, WDM; Warren, Roberta; Apostolakis, George; Temp, GEA; Tadesse, Rebecca; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Lui, Christiana; Lisann, Elizabeth; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
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bject: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

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The ADAMS Accession # for the SECY is PKG ML11186A950.

Apostolakis, George

m: Sosa, Belkys
it: Wednesday, August 03, 2011 6:30 PM
o: Apostolakis, George
Subject: FYI: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)
Attachments: Re: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

Thanks, - Belkys

From: Sosa, Belkys
Sent: Wednesday, August 03, 2011 6:27 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

m: Laufer, Richard
it: Wednesday, August 03, 2011 6:19 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Please note below the GBJ extension request in which to vote on the subject paper. Assuming there are no objections, the extension will be granted. Any office having an objection should notify SECY.

Thanks,
Rich

From: Hipschman, Thomas
Sent: Tuesday, August 02, 2011 4:44 PM
To: Hart, Ken; Laufer, Richard
Subject: RE: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

The Chairman requests an extension to Friday, August 12, 2011.

From: Wright, Darlene

Sent: Wednesday, July 13, 2011 8:46 AM

To: Baggett, Steven; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; ...man Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, ...; Gibbs, Catina; Hart, Ken; Herr, Linda; Hipschman, Thomas; KLS Temp; Kock, Andrea; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; Laufer, Richard; Baval, Rochelle; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, WCO; Temp, WDM; Warren, Roberta; Apostolakis, George; Temp, GEA; Tadesse, Rebecca; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Lui, Christiana; Lisann, Elizabeth; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

Please save the attached Word file for use in voting on the subject paper. In saving the file, be sure to replace the XXX with your Commissioner's initials and insert the Commissioner's name in the document. Upon completion of the vote, be sure to insert the date and the /RA/.

The ADAMS Accession # for the SECY is PKG ML11186A950.

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sharkey, Jeffrey
Sent: Wednesday, August 03, 2011 6:40 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Four Commissioners voted within the requested timeframe. Given the shared commitment by the Commission to act expeditiously on the Japan Task Force Report, Commissioner Svinicki disapproves any extension request.

From: Laufer, Richard
Sent: Wednesday, August 03, 2011 6:19 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Please note below the GBJ extension request in which to vote on the subject paper. Assuming there are no objections, the extension will be granted. Any office having an objection should notify SECY.

Thanks,
Rich

From: Hipschman, Thomas
Sent: Tuesday, August 02, 2011 4:44 PM
To: Hart, Ken; Laufer, Richard
Cc: Vietti-Cook, Annette; Batkin, Joshua; Monninger, John; Marshall, Michael; Coggins, Angela
Subject: RE: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

The Chairman requests an extension to Friday, August 12, 2011.

From: Wright, Darlene
Sent: Wednesday, July 13, 2011 8:46 AM
To: Baggett, Steven; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hart, Ken; Herr, Linda; Hipschman, Thomas; KLS Temp; Kock, Andrea; Lepre, Janet; Loyd, Susan;

~~NOT FOR PUBLIC DISCLOSURE~~

1
FM 2689 of 2929 619

Mamish, Nader; Marshall, Michael; Monninger, John; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; Laufer, Richard; Bovol, Rochelle; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, WCO; Temp, WDM; Warren, Roberta; Apostolakis, George; Temp, GEA; Tadesse, Rebecca; Astlerman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Lui, Cristiana; Lisann, Elizabeth; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

Please save the attached Word file for use in voting on the subject paper. In saving the file, be sure to replace the XXX with your Commissioner's initials and insert the Commissioner's name in the document. Upon completion of the vote, be sure to insert the date and the /RA/.

The ADAMS Accession # for the SECY is PKG ML11186A950.

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Sent: Thursday, August 04, 2011 9:14 AM
To: Sosa, Belkys
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Sosa, Belkys
Sent: Thursday, August 04, 2011 9:12 AM
To: Apostolakis, George; Gilles, Nanette
Subject: Fw: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Nieh, Ho
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Sent: Thu Aug 04 08:46:44 2011
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

Ho

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

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

From: Laufer, Richard

Sent: Wednesday, August 03, 2011 6:19 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Vietti-Cook, Annette

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Please note below the GBJ extension request in which to vote on the subject paper. Assuming there are no objections, the extension will be granted. Any office having an objection should notify SECY.

Thanks,
Rich

From: Hipschman, Thomas

Sent: Tuesday, August 02, 2011 4:44 PM

To: Hart, Ken; Laufer, Richard

Cc: Vietti-Cook, Annette; Batkin, Joshua; Monninger, John; Marshall, Michael; Coggins, Angela

Subject: RE: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

The Chairman requests an extension to Friday, August 12, 2011.

From: Wright, Darlene

Sent: Wednesday, July 13, 2011 8:46 AM

To: Baggett, Steven; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hart, Ken; Herr, Linda; Hipschman, Thomas; KLS Temp; Kock, Andrea; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; Laufer, Richard; Baval, Rochelle; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, WCO; Temp, WDM; Warren, Roberta; Apostolakis, George; Temp, GEA; Tadesse, Rebecca; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Lui, Christiana; Lisann, Elizabeth; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

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The ADAMS Accession # for the SECY is PKG ML11186A950.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Batkin, Joshua
Sent: Monday, August 08, 2011 9:53 PM
To: Batkin, Joshua; Bates, Andrew; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho; Baggett, Steven; Sosa, Belkys
Cc: Vietti-Cook, Annette; Hipschman, Thomas; Monninger, John; Coggins, Angela
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)
Attachments: Draft GBJ task force vote.pdf

As promised, attached please find our draft of the Chairman's vote on the task force report. I look forward to engaging you in a dialogue about it tomorrow before he finalizes and votes it.

Thank you,
Josh

From: Batkin, Joshua
Sent: Monday, August 08, 2011 7:46 PM
To: Bates, Andrew; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho
Cc: Vietti-Cook, Annette; Sosa, Belkys; Hipschman, Thomas; Monninger, John; Coggins, Angela
Subject: Re: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

An update - the Chairman didn't sign his vote out tonight but will circulate a draft to his colleagues tomorrow for comments and in the interest of reaching prompt resolution on the issues. Thanks.

Joshua C. Batkin
Chief of Staff
Chairman Gregory B. Jaczko
(202) 415-1820

From: Batkin, Joshua
To: Bates, Andrew; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho
Cc: Vietti-Cook, Annette; Sosa, Belkys; Hipschman, Thomas; Monninger, John
Sent: Fri Aug 05 13:49:22 2011
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Thank you - appreciate the additional time. The Chairman intends to issue his vote on Monday.

Josh

From: Bates, Andrew
Sent: Friday, August 05, 2011 10:00 AM
To: Batkin, Joshua; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho
Cc: Vietti-Cook, Annette; Sosa, Belkys
Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5) has advised me that (b)(5) would also not object to an extension until the COB on Wednesday, August 10, (b)(5)

Andy

From: Nieh, Ho
Sent: Thursday, August 04, 2011 5:56 PM

~~NOT FOR PUBLIC DISCLOSURE~~

FM 2693 of 2929

608

~~NOT FOR PUBLIC DISCLOSURE~~

To: Vietti-Cook, Annette

Cc: Batkin, Joshua; Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip

Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Annette,

(b)(5)

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6) (mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

From: Nieh, Ho

Sent: Thursday, August 04, 2011 8:47 AM

To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

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~~NOT FOR PUBLIC DISCLOSURE~~

ho.nieh@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

From: Laufer, Richard

Sent: Wednesday, August 03, 2011 6:19 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

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Thanks,
Rich

From: Hipschman, Thomas

Sent: Tuesday, August 02, 2011 4:44 PM

To: Hart, Ken; Laufer, Richard

Cc: Vietti-Cook, Annette; Batkin, Joshua; Monninger, John; Marshall, Michael; Coggins, Angela

Subject: RE: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

The Chairman requests an extension to Friday, August 12, 2011.

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Sent: Wednesday, July 13, 2011 8:46 AM

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Cc: Mitchell-Funderburk, Natalie

Subject: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

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~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

Apostolakis, George

m: Apostolakis, George
t: Monday, August 08, 2011 10:52 PM
o: Sosa, Belkys; Davis, Roger
Cc: Gilles, Nanette; Baggett, Steven
Subject: Re: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Sosa, Belkys
To: Apostolakis, George; Davis, Roger
Cc: Gilles, Nanette; Baggett, Steven
Sent: Mon Aug 08 22:28:40 2011
Subject: Fw: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Fyi

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Batkin, Joshua
To: Batkin, Joshua; Bates, Andrew; Sharkey, Jeffry; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho; Baggett, Steven; Sosa, Belkys
Cc: Vietti-Cook, Annette; Hipschman, Thomas; Monninger, John; Coggins, Angela
Sent: Mon Aug 08 21:52:31 2011
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

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Thank you,
Josh

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To: Bates, Andrew; Sharkey, Jeffry; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho
Cc: Vietti-Cook, Annette; Sosa, Belkys; Hipschman, Thomas; Monninger, John; Coggins, Angela
Subject: Re: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

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Joshua C. Batkin
Chief of Staff
Chairman Gregory B. Jaczko
(301) 415-1820

From: Batkin, Joshua
Bates, Andrew; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho
Vietti-Cook, Annette; Sosa, Belkys; Hipschman, Thomas; Monninger, John
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Cc: Vietti-Cook, Annette; Sosa, Belkys
Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

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Andy

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Sent: Thursday, August 04, 2011 5:56 PM
To: Vietti-Cook, Annette
Batkin, Joshua; Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Annette,

(b)(5)

Ho

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
Nuclear Regulatory Commission ~~NOT FOR PUBLIC DISCLOSURE~~
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(b)(6) (mobile)
(301) 415-1757 (fax)

ho.nieh@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

From: Nieh, Ho

Date: Thursday, August 04, 2011 8:47 AM

To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6)

(mobile)

(301) 415-1757 (fax)

nieh@nrc.gov

From: Laufer, Richard

Sent: Wednesday, August 03, 2011 6:19 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Please note below the GBJ extension request in which to vote on the subject paper. Assuming there are no objections, the extension will be granted. Any office having an objection should notify SECY.

Thanks,

Rich

From: Hipschman, Thomas

Date: Tuesday, August 02, 2011 4:44 PM

Hart, Ken; Laufer, Richard

To: Vietti-Cook, Annette; Batkin, Joshua; Monninger, John; Marshall, Michael; Coggins, Angela

Subject: RE: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

~~NOT FOR PUBLIC DISCLOSURE~~

The Chairman requests an extension to Friday, August 12, 2011. ~~NOT FOR PUBLIC DISCLOSURE~~

From: Wright, Darlene

Date: Wednesday, July 13, 2011 8:46 AM

To: Baggett, Steven; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hart, Ken; Herr, Linda; Hipschman, Thomas; KLS Temp; Kock, Andrea; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; Laufer, Richard; Baval, Rochelle; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, WCO; Temp, WDM; Warren, Roberta; Apostolakis, George; Temp, GEA; Tadesse, Rebecca; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Lui, Christiana; Lisann, Elizabeth; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

Please save the attached Word file for use in voting on the subject paper. In saving the file, be sure to replace the XXX with your Commissioner's initials and insert the Commissioner's name in the document. Upon completion of the vote, be sure to insert the date and the /RA/.

The ADAMS Accession # for the SECY is PKG ML11186A950.

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

Gilles, Nanette

From: Nieh, Ho
Sent: Tuesday, August 09, 2011 9:34 AM
To: Batkin, Joshua; Bates, Andrew; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Baggett, Steven; Sosa, Belkys
Cc: Vietti-Cook, Annette; Hipschman, Thomas; Monninger, John; Coggins, Angela
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Josh,

(b)(5)

Thanks again,

Ho

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

From: Batkin, Joshua
Sent: Monday, August 08, 2011 9:53 PM
To: Batkin, Joshua; Bates, Andrew; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho; Baggett, Steven; Sosa, Belkys
Cc: Vietti-Cook, Annette; Hipschman, Thomas; Monninger, John; Coggins, Angela
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

As promised, attached please find our draft of the Chairman's vote on the task force report. I look forward to engaging you in a dialogue about it tomorrow before he finalizes and votes it.

Thank you,
Josh

From: Batkin, Joshua
Sent: Monday, August 08, 2011 7:46 PM
To: Bates, Andrew; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho
Cc: Vietti-Cook, Annette; Sosa, Belkys; Hipschman, Thomas; Monninger, John; Coggins, Angela
Subject: Re: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

an update - the Chairman didn't sign his vote out tonight but will circulate a draft to his colleagues tomorrow for comments and in the interest of reaching prompt resolution on the issues. Thank you.

~~NOT FOR PUBLIC DISCLOSURE~~

Joshua C. Batkin

Chief of Staff
Chairman Gregory B. Jaczko
(301) 415-1820

~~NOT FOR PUBLIC DISCLOSURE~~

From: Batkin, Joshua
To: Bates, Andrew; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho
Cc: Vietti-Cook, Annette; Sosa, Belkys; Hipschman, Thomas; Monninger, John
Sent: Fri Aug 05 13:49:22 2011
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Thank you - appreciate the additional time. The Chairman intends to issue his vote on Monday.

Josh

From: Bates, Andrew
Sent: Friday, August 05, 2011 10:00 AM
To: Batkin, Joshua; Sharkey, Jeffrey; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip; Nieh, Ho
Cc: Vietti-Cook, Annette; Sosa, Belkys
Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5) has advised me that (b)(5) would also not object to an extension until the COB on Wednesday, August 10, (b)(5)

Andy

From: Nieh, Ho
Sent: Thursday, August 04, 2011 5:56 PM
To: Vietti-Cook, Annette
Cc: Batkin, Joshua; Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Gilles, Nanette; Bupp, Margaret; Rothschild, Trip
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Annette,

(b)(5)

Ho

~~NOT FOR PUBLIC DISCLOSURE~~

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

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(6)

(mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

From: Nieh, Ho

Sent: Thursday, August 04, 2011 8:47 AM

To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

(b)(5)

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6)

(mobile)

(301) 415-1757 (fax)

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From: Laufer, Richard

Sent: Wednesday, August 03, 2011 6:19 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: FW: GBJ Extension Request to Vote on SECY-11-0093 (Japan Task Force Report)

Please note below the GBJ extension request in which to vote on the subject paper. Assuming there are no objections, the extension will be granted. Any office having an objection should notify SECY.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

From: Hipschman, Thomas

Sent: Tuesday, August 02, 2011 4:44 PM

To: Hart, Ken; Laufer, Richard

~~NOT FOR PUBLIC DISCLOSURE~~

Cc: Vietti-Cook, Annette; Batkin, Joshua; Monninger, John; Marshall, Michael; Coggins, Angela
Subject: RE: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

e Chairman requests an extension to Friday, August 12, 2011.

From: Wright, Darlene

Sent: Wednesday, July 13, 2011 8:46 AM

To: Baggett, Steven; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hart, Ken; Herr, Linda; Hipschman, Thomas; KLS Temp; Kock, Andrea; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; Laufer, Richard; Baval, Rochelle; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, WCO; Temp, WDM; Warren, Roberta; Apostolakis, George; Temp, GEA; Tadesse, Rebecca; Castleman, Patrick; Montes, David; Dhir, Neha; Adler, James; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Lui, Christiana; Lisann, Elizabeth; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: VOTE SHEET FOR SECY-11-0093 (Japan Task Force Report)

Please save the attached Word file for use in voting on the subject paper. In saving the file, be sure to replace the XXX with your Commissioner's initials and insert the Commissioner's name in the document. Upon completion of the vote, be sure to insert the date and the /RA/.

The ADAMS Accession # for the SECY is PKG ML11186A950.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Bubar, Patrice
Sent: Tuesday, August 09, 2011 12:46 PM
To: Vietti-Cook, Annette; Bates, Andrew; Laufer, Richard; Baval, Rochelle; Hart, Ken
Cc: Batkin, Joshua; Sosa, Belkys; Sharkey, Jeffrey; Nieh, Ho; Baggett, Steven; Castleman, Patrick; Reddick, Darani; Franovich, Mike; Sexton, Kimberly; Gilles, Nanette; Hipschman, Thomas; Marshall, Michael; Hirsch, Patricia; Rothschild, Trip; Orders, William; Bupp, Margaret; Bubar, Patrice; Davis, Roger; Clark, Lisa
Subject: Request that SRM for SECY-11-0093 (Japan Task Force Report) be provided to the Commission for review

The Internal Commission Procedures (ICPs) provide that voting on a SECY Notation or Affirmation paper or on a COM or COMSECY shall be concluded in 10 days. Further, the ICPs provide that "[w]hen a majority of the Commission has voted...[t]he Commissioners who have not responded are advised that they have 3 additional business days to vote." (Page III-9). If a Commissioner is unable to vote within the 10 day deadline or within 3 days after a majority of the Commission has voted, a Commissioner may request an extension of time. A 5-day extension will normally be automatically granted, but further requests will not be granted if a majority of the Commission objects. (Page III-9).

SECY-11-0093 was provided to the Commission on July 13, 2011, with an original deadline of July 27, 2011. Four Commissioners voted on or before July 27, 2011; therefore the remaining Commissioner, the Chairman, should have voted by August 2, 2011. Instead, in accordance with procedures, the Chairman's office requested an extension until August 12, 2011. Due to the sensitive and important nature of SECY-11-0093, a majority of the Commission disapproved the request. The Chairman's office requested that the Commissioners reconsider their positions on the request, and two Commissioners indicated that they would be amenable to an extension request until August 10, 2011, if such a request were made by the Chairman's office.

However, no additional extension request was made by the Chairman's office, and, therefore, the time period for voting on SECY-11-0093 has expired. Because voting is completed and a majority position has been established, SECY should draft an SRM that reflects the majority position of the Commission and forward it to the Commission for review, in accordance with paragraph f on page III-3 of the ICPs.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sharkey, Jeffry
Sent: Tuesday, August 09, 2011 5:50 PM
To: Bubar, Patrice; Vietti-Cook, Annette; Bates, Andrew; Laufer, Richard; Baval, Rochelle; Hart, Ken
Cc: Batkin, Joshua; Sosa, Belkys; Nieh, Ho; Baggett, Steven; Castleman, Patrick; Reddick, Darani; Franovich, Mike; Sexton, Kimberly; Gilles, Nanette; Hipschman, Thomas; Marshall, Michael; Hirsch, Patricia; Rothschild, Trip; Orders, William; Bupp, Margaret; Davis, Roger; Clark, Lisa
Subject: RE: Request that SRM for SECY-11-0093 (Japan Task Force Report) be provided to the Commission for review

Commissioner Svinicki agrees with Commissioner Magwood's proposal that SECY should draft an SRM that reflects the majority position of the Commission and forward it to the Commission for review, in accordance with ICPs.

From: Bubar, Patrice
Sent: Tuesday, August 09, 2011 12:46 PM
To: Vietti-Cook, Annette; Bates, Andrew; Laufer, Richard; Baval, Rochelle; Hart, Ken
Cc: Batkin, Joshua; Sosa, Belkys; Sharkey, Jeffry; Nieh, Ho; Baggett, Steven; Castleman, Patrick; Reddick, Darani; Franovich, Mike; Sexton, Kimberly; Gilles, Nanette; Hipschman, Thomas; Marshall, Michael; Hirsch, Patricia; Rothschild, Trip; Orders, William; Bupp, Margaret; Bubar, Patrice; Davis, Roger; Clark, Lisa
Subject: Request that SRM for SECY-11-0093 (Japan Task Force Report) be provided to the Commission for review

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Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Sent: Tuesday, August 09, 2011 5:56 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Baggett, Steven
Subject: FW: Request that SRM for SECY-11-0093 (Japan Task Force Report) be provided to the Commission for review

FYI

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Sharkey, Jeffrey
Sent: Tuesday, August 09, 2011 5:50 PM
To: Bubar, Patrice; Vietti-Cook, Annette; Bates, Andrew; Laufer, Richard; Baval, Rochelle; Hart, Ken
Cc: Batkin, Joshua; Sosa, Belkys; Nieh, Ho; Baggett, Steven; Castleman, Patrick; Reddick, Darani; Franovich, Mike; Sexton, Kimberly; Gilles, Nanette; Hipschman, Thomas; Marshall, Michael; Hirsch, Patricia; Rothschild, Trip; Orders, William; Bupp, Margaret; Davis, Roger; Clark, Lisa
Subject: RE: Request that SRM for SECY-11-0093 (Japan Task Force Report) be provided to the Commission for review

Commissioner Svinicki agrees with Commissioner Magwood's proposal that SECY should draft an SRM that reflects the majority position of the Commission and forward it to the Commission for review, in accordance with ICPs.

From: Bubar, Patrice
Sent: Tuesday, August 09, 2011 12:46 PM
To: Vietti-Cook, Annette; Bates, Andrew; Laufer, Richard; Baval, Rochelle; Hart, Ken
Cc: Batkin, Joshua; Sosa, Belkys; Sharkey, Jeffrey; Nieh, Ho; Baggett, Steven; Castleman, Patrick; Reddick, Darani; Franovich, Mike; Sexton, Kimberly; Gilles, Nanette; Hipschman, Thomas; Marshall, Michael; Hirsch, Patricia; Rothschild, Trip; Orders, William; Bupp, Margaret; Bubar, Patrice; Davis, Roger; Clark, Lisa
Subject: Request that SRM for SECY-11-0093 (Japan Task Force Report) be provided to the Commission for review

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~~NOT FOR PUBLIC DISCLOSURE~~

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~~NOT FOR PUBLIC DISCLOSURE~~

However, no additional extension request was made by the Chairman's office, and, therefore, the time period for voting on SECY-11-0093 has expired. Because voting is completed and a majority position has been established, SECY should draft an SRM that reflects the majority position of the Commission and forward it to the Commission for review, in accordance with paragraph f on page III-3 of the ICPs.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Sent: Wednesday, August 10, 2011 10:00 AM
To: Baggett, Steven; Davis, Roger; Apostolakis, George; Sosa, Belkys
Subject: FW: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)
Attachments: 11-0093.srm.docx

FYI – We are meeting with the other 18th floor offices this afternoon to discuss WDM's proposals.

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Bubar, Patrice
Sent: Wednesday, August 10, 2011 9:52 AM
To: Nieh, Ho; Reddick, Darani; Gilles, Nanette
Cc: Sharkey, Jeffry; Sosa, Belkys; Bupp, Margaret
Subject: FW: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

Our office can meet anytime this afternoon.

Patty Buřar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Wright, Darlene
Sent: Wednesday, August 10, 2011 9:38 AM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, berta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Wendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Maxton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

~~NOT FOR PUBLIC DISCLOSURE~~

The attached file contains a draft SRM which is being circulated for the normal 3-day period for Commission review. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review SRM to ensure that the Commission decision is clear and understandable and that resource, scheduler, and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~
August 10, 2011

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Annette L. Vietti-Cook, Secretary /s/

SUBJECT: DRAFT STAFF REQUIREMENTS MEMORANDUM
SECY-11-0093 – NEAR-TERM REPORT AND
RECOMMENDATIONS FOR AGENCY ACTIONS FOLLOWING
THE EVENTS IN JAPAN

(b)(5)

Attachment:
As stated

cc: EDO
OGC

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

Edwin M. Hackett, Executive Director
Advisory Committee on Reactor Safeguards

FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – SECY-11-0093 – NEAR-TERM
REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS
FOLLOWING THE EVENTS IN JAPAN

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

**Additional Commissioner Comments to be Included in the SRM
if Agreed to by a Majority of the Commission**

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Bubar, Patrice
Sent: Wednesday, August 10, 2011 12:45 PM
To: Gilles, Nanette; Nieh, Ho; Reddick, Darani
Cc: Sharkey, Jeffrey; Sosa, Belkys; Bupp, Margaret; Baggett, Steven; Davis, Roger
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

I have heard from most of you. Lets meet at 2:00 in the auxiliary room in the hall between KLS and WDM offices.

Thank you.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Gilles, Nanette
Sent: Wednesday, August 10, 2011 9:59 AM
To: Bubar, Patrice; Nieh, Ho; Reddick, Darani
Cc: Sharkey, Jeffrey; Sosa, Belkys; Bupp, Margaret; Baggett, Steven; Davis, Roger
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

Patty – I am available anytime this afternoon.

in

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Bubar, Patrice
Sent: Wednesday, August 10, 2011 9:52 AM
To: Nieh, Ho; Reddick, Darani; Gilles, Nanette
Cc: Sharkey, Jeffrey; Sosa, Belkys; Bupp, Margaret
Subject: FW: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

Folks – Commissioner Magwood is quite interested in moving the SRM from the Task Force Report along so that voting could be completed as early as possible.

We have some slight markups to the SRM that we would like to discuss with the Commission offices that we either have a majority on or are close to a majority.

Would you be willing to spend some time this afternoon as a group going through the proposed changes?

our office can meet anytime this afternoon.

Patty Bubar

Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
1-415-1895

~~NOT FOR PUBLIC DISCLOSURE~~

From: Wright, Darlene

Sent: Wednesday, August 10, 2011 9:38 AM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

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~~NOT FOR PUBLIC DISCLOSURE~~

Filename: SECY-11-0093 draft srm.docx
Directory: P:
Template: C:\Documents and Settings\nvg\Application
Data\Microsoft\Templates\Normal.dotm
Title:
Subject:
Author: Kenneth R. Hart
Keywords:
Comments:
Creation Date: 8/10/2011 4:10:00 PM
Change Number: 4
Last Saved On: 8/10/2011 4:20:00 PM
Last Saved By: nvg
Total Editing Time: 20 Minutes
Last Printed On: 12/2/2011 12:09:00 PM
As of Last Complete Printing
Number of Pages: 7
Number of Words: 1,520 (approx.)
Number of Characters: 8,665 (approx.)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLO.~~

August 10, 2011

Field Code Changed

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Annette L. Vietti-Cook, Secretary /s/

SUBJECT: DRAFT STAFF REQUIREMENTS MEMORANDUM
SECY-11-0093 – NEAR-TERM REPORT AND
RECOMMENDATIONS FOR AGENCY ACTIONS FOLLOWING
THE EVENTS IN JAPAN

(b)(5)

Attachment
As stated

cc: EDO
OGC

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

Edwin M. Hackett, Executive Director
Advisory Committee on Reactor Safeguards

FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – SECY-11-0093 – NEAR-TERM
REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS
FOLLOWING THE EVENTS IN JAPAN

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

~~NOT FOR PUBLIC DISCLOSURE~~

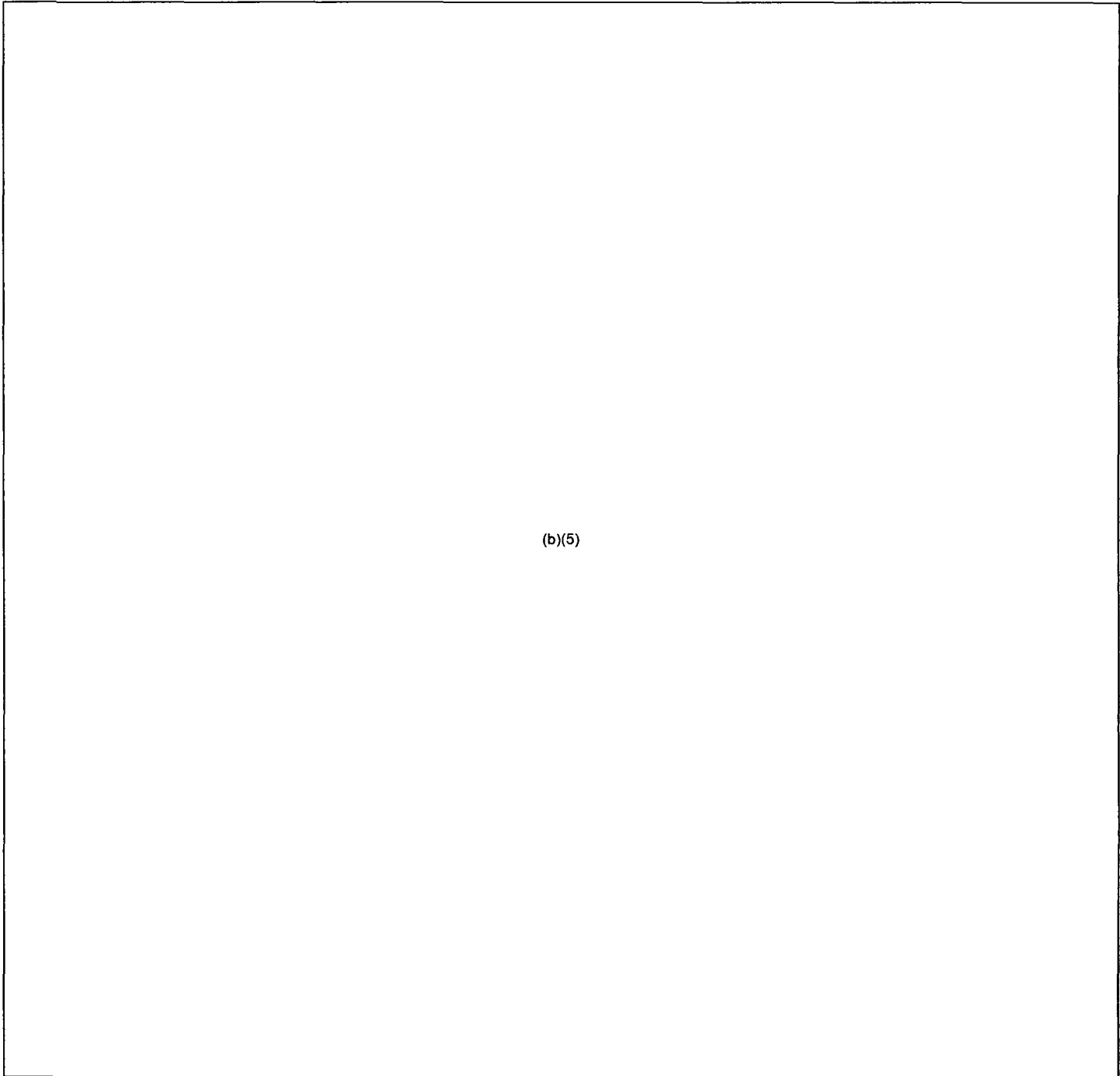
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**Additional Commissioner Comments to be Included in the SRM
if Agreed to by a Majority of the Commission**

(b)(5)

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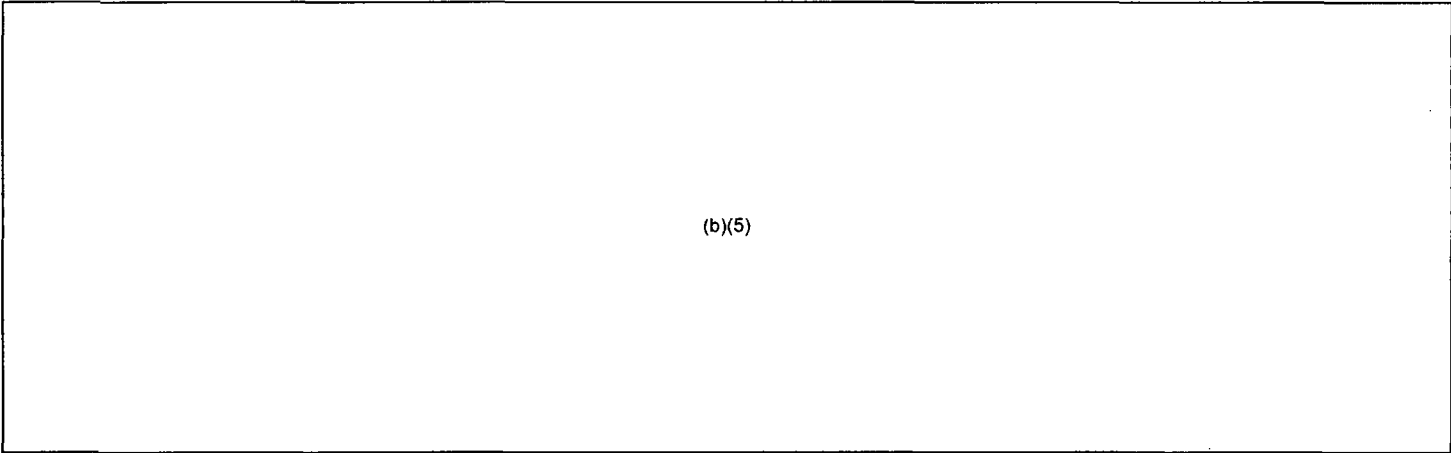
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~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Gilles, Nanette
Sent: Wednesday, August 10, 2011 4:54 PM
To: Bubar, Patrice
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

Thanks,
Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Bubar, Patrice
Sent: Wednesday, August 10, 2011 9:52 AM
To: Nieh, Ho; Reddick, Darani; Gilles, Nanette
Cc: Sharkey, Jeffrey; Sosa, Belkys; Bupp, Margaret
Subject: FW: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

Our office can meet anytime this afternoon.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Wright, Darlene
Sent: Wednesday, August 10, 2011 9:38 AM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Bovol, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Lloyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren,

~~NOT FOR PUBLIC DISCLOSURE~~

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Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

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~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Nieh, Ho
Sent: Thursday, August 11, 2011 5:09 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)
Attachments: 11-0093 srm - WCO edits.docx

(b)(5)

Thanks.

Ho

Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission
(301) 415-1811 (office)
(b)(6) (mobile)
(301) 415-1757 (fax)
ho.nieh@nrc.gov

From: Wright, Darlene
Sent: Wednesday, August 10, 2011 9:38 AM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

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and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

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~~NOT FOR PUBLIC DISCLOSURE~~

August 10, 2011 IVCO edits 8/11/11

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Annette L. Vietti-Cook, Secretary /s/

SUBJECT: DRAFT STAFF REQUIREMENTS MEMORANDUM
SECY-11-0093 – NEAR-TERM REPORT AND
RECOMMENDATIONS FOR AGENCY ACTIONS FOLLOWING
THE EVENTS IN JAPAN

(b)(5)

Attachment
As stated

cc: EDO
OGC

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

Edwin M. Hackett, Executive Director
Advisory Committee on Reactor Safeguards

FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – SECY-11-0093 – NEAR-TERM
REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS
FOLLOWING THE EVENTS IN JAPAN

(b)(5)

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(b)(5)

- cc: Chairman Jaczko
- Commissioner Svinicki
- Commissioner Apostolakis
- Commissioner Magwood
- Commissioner Ostendorff
- OGC
- CFO
- OCA
- OPA
- Office Directors, Regions, ACRS, ASLBP (via E-Mail)
- PDR

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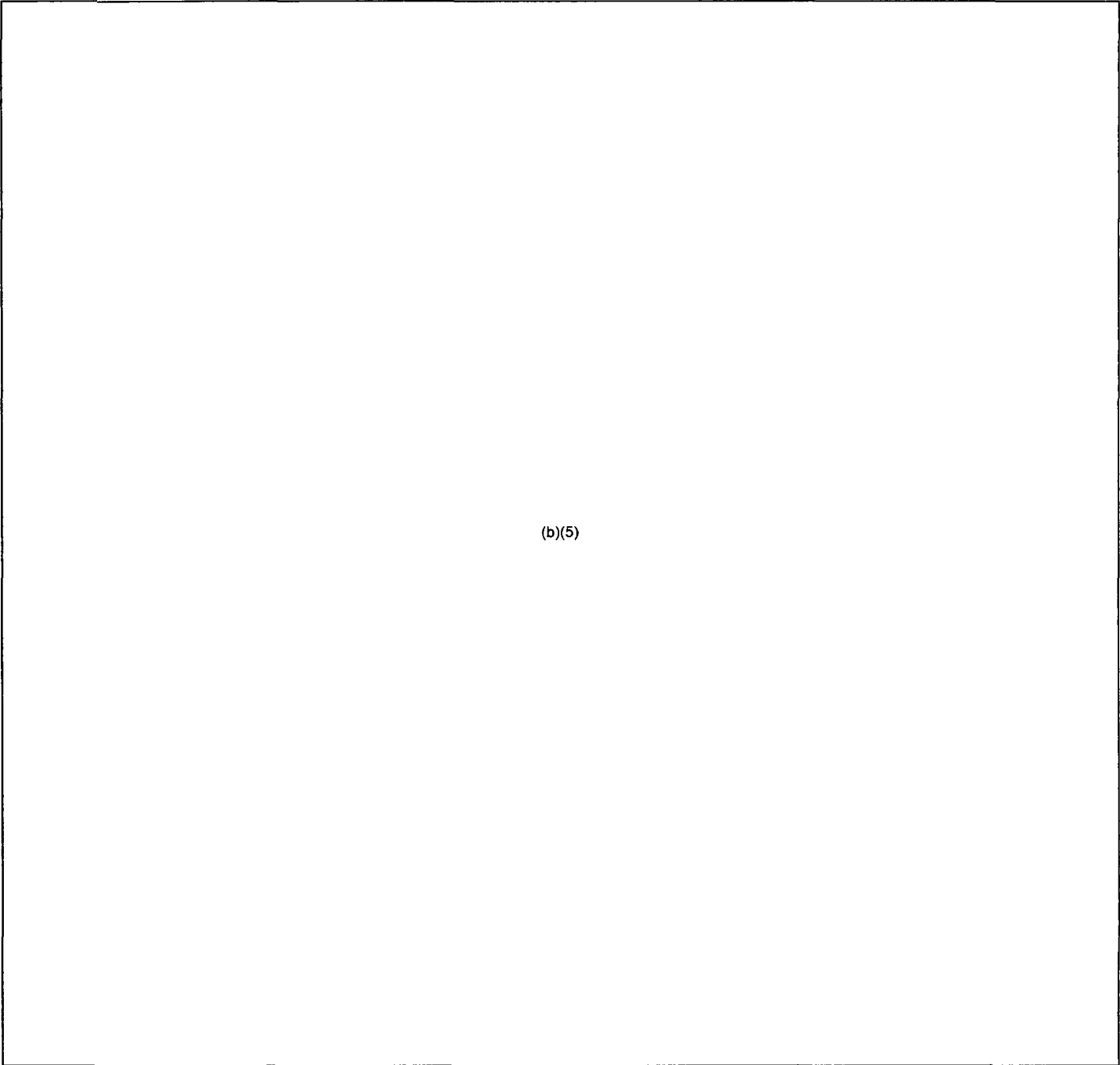
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**Additional Commissioner Comments to be Included in the SRM
If Agreed to by a Majority of the Commission**

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~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Bubar, Patrice
Sent: Thursday, August 11, 2011 6:04 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)
Attachments: WDM Comments SRM for SECY-11-0093.docx

Commissioner Magwood approves the draft SRM subject to the attached edits.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Wright, Darlene
Sent: Wednesday, August 10, 2011 9:38 AM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
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1.

August 10, 2011

Field Code Changed

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Annette L. Vietti-Cook, Secretary /s/

SUBJECT: DRAFT STAFF REQUIREMENTS MEMORANDUM
SECY-11-0093 – NEAR-TERM REPORT AND
RECOMMENDATIONS FOR AGENCY ACTIONS FOLLOWING
THE EVENTS IN JAPAN

(b)(5)

Attachment:
As stated

cc: EDO
OGC

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WDM Comments

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

Edwin M. Hackett, Executive Director
Advisory Committee on Reactor Safeguards

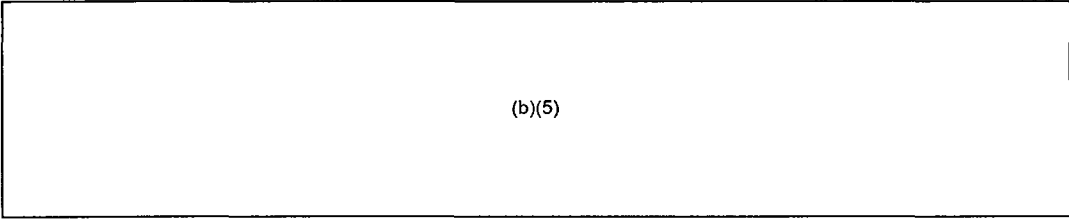
FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – SECY-11-0093 – NEAR-TERM
REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS
FOLLOWING THE EVENTS IN JAPAN

(b)(5)

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cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

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**Additional Commissioner Comments to be Included in the SRM
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(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

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(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Date: Friday, August 12, 2011 9:57 AM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)
Attachments: 11-0093 srm-GEA.docx

(b)(5)

Nanette V. Gilles
 Technical Assistant for Reactors
 to Commissioner Apostolakis
 11 S. Nuclear Regulatory Commission

Phone: 301-415-1180
 Email: nanette.gilles@nrc.gov

From: Wright, Darlene
Sent: Wednesday, August 10, 2011 9:38 AM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

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Field Code Changed

August 10, 2011

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostotakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Annette L. Vietti-Cook, Secretary /s/

SUBJECT: DRAFT STAFF REQUIREMENTS MEMORANDUM
SECY-11-0093 – NEAR-TERM REPORT AND
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THE EVENTS IN JAPAN

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Attachment:
As stated

cc: EDO
OGC

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GEA Comments

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

Edwin M. Hackett, Executive Director
Advisory Committee on Reactor Safeguards

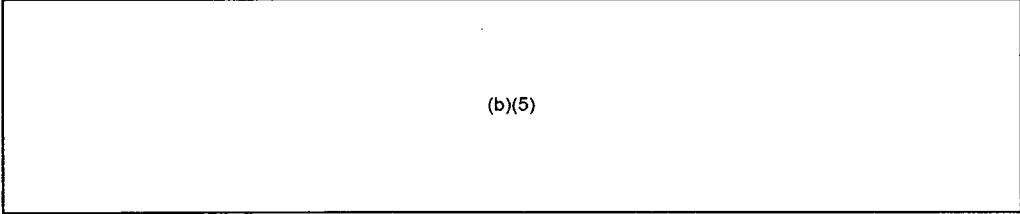
FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS - SECY-11-0093 - NEAR-TERM
REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS
FOLLOWING THE EVENTS IN JAPAN

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(b)(5)

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cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorf
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

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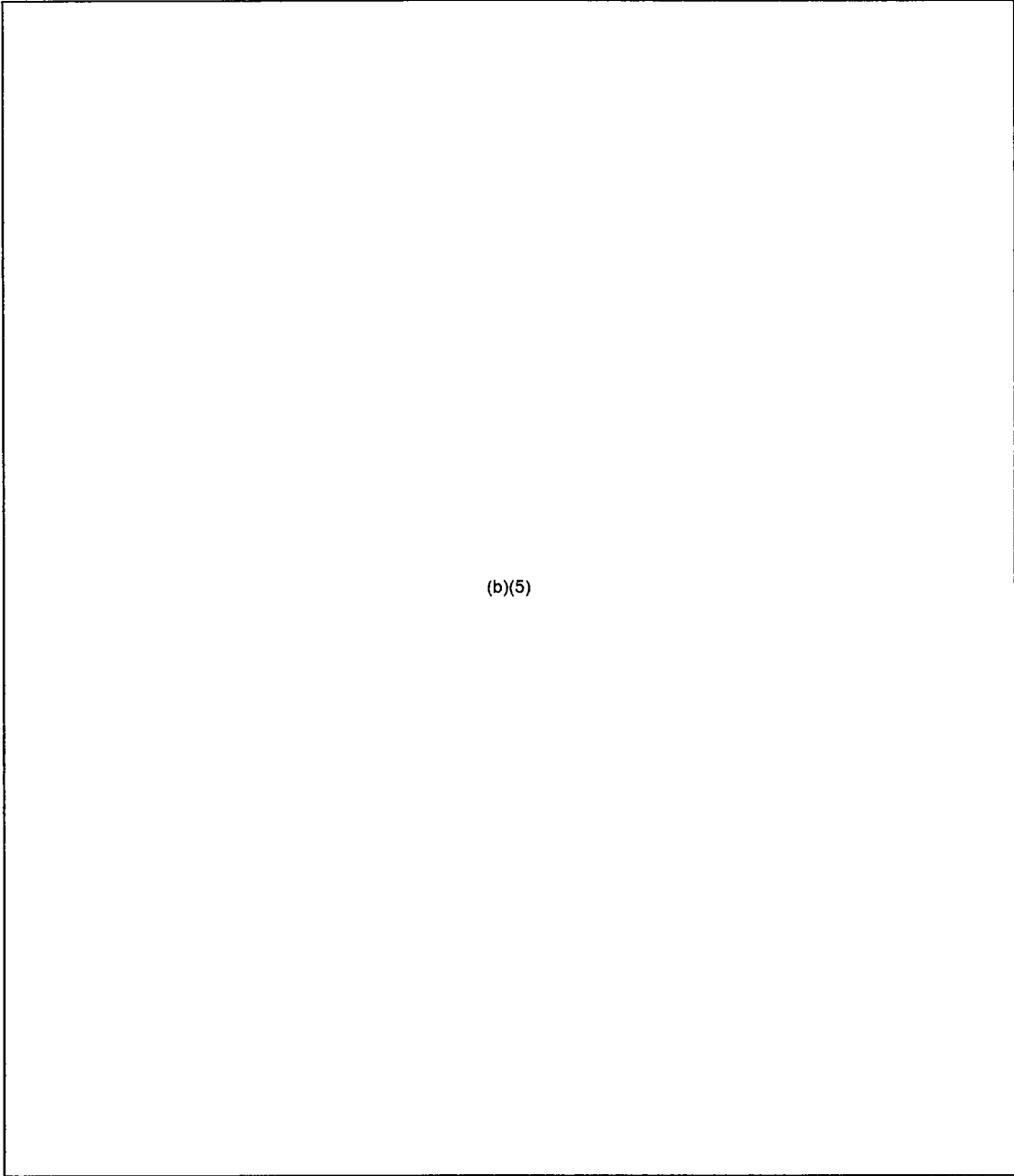
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(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

m: Apostolakis, George
t: Friday, August 12, 2011 10:30 AM
o: Gilles, Nanette
Subject: Re: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Gilles, Nanette

To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Le, Hong; ~~Sexton, Kimberly~~; Beasley, Benjamin; Riddick, Nicole

Mitchell-Funderburk, Natalie

rt: Fri Aug 12 09:57:18 2011

Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Wright, Darlene

Sent: Wednesday, August 10, 2011 9:38 AM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; ~~Sexton, Kimberly~~; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

~~NOT FOR PUBLIC DISCLOSURE~~

The attached file contains a draft SRM which is being circulated for the normal 3-day period for Commission review. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review SRM to ensure that the Commission decision is clear and understandable and that resource, scheduler, legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Coggins, Angela
Sent: Friday, August 12, 2011 3:59 PM
To: Sharkey, Jeffrey; Reddick, Darani; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Subject: FW: Chairman Correspondence (Senators Inhofe & Boxer)
Attachments: 08-12-11 Ltr to Inhofe_Boxer.pdf
Importance: High

Here is the Chairman's response we discussed at a recent CoS meeting.

Thanks!

Angela B. Coggins
Policy Director
Office of Chairman Gregory B. Jaczko
U.S. Nuclear Regulatory Commission
[301-415-1828](tel:301-415-1828)/angela.coggins@nrc.gov

From: Mike, Linda
Sent: Friday, August 12, 2011 3:49 PM
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Monninger, John; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Chairman Temp; Coggins, Angela; Crawford, Carrie; Gibbs, Catina; Herr, Linda; Jimenez, Patricia; KLS Temp; Lepre, Janet; Pace, Patti; Riddick, Nicole; Savoy, Carmel; Speiser, Herald; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Hart, Ken; Champ, Billie; Lewis, Antoinette; Droggitis, Spiros
Subject: Chairman Correspondence (Senators Inhofe & Boxer)
Importance: High

Subject –
Chairman Correspondence - CORR-11-0097

The attached response letter dated August 12, 2011, addressed to Senator James Inhofe and Barbara Boxer from Chairman Jaczko, responds to letter relating to the Regulatory Safety Comparisons with that of Japan, will be dispatched by SECY on Monday, August 15, 2011. Both the response and incoming are provided in the attachment.

Linda

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

vm: Sosa, Belkys
nt: Tuesday, August 16, 2011 4:11 PM
to: Apostolakis, George; Davis, Roger; Baggett, Steven; Gilles, Nanette
Subject: FYI: Extension Request DSRM SECY-11-0093 NEAR-TERM REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS FOLLOWING THE EVENTS IN JAPAN

fyi

From: Vietti-Cook, Annette
Sent: Tuesday, August 16, 2011 3:51 PM
To: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Coggins, Angela; Hart, Ken; Laufer, Richard; Baval, Rochelle
Subject: Extension Request DSRM SECY-11-0093 NEAR-TERM REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS FOLLOWING THE EVENTS IN JAPAN

The Chairman requested an extension to the end of today to respond to DSRM SECY-11-0093 - NEAR-TERM REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS FOLLOWING THE EVENTS IN JAPAN.

Consistent with the Internal Commission Procedures Commissioner requests for extensions for review will be granted up to 2 business days unless a majority of the Commission objects. Today is the two business day extension.

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Nieh, Ho
Sent: Tuesday, August 16, 2011 5:16 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)
Attachments: comwdm wco 11-0001 b - WCO.docx

(b)(5)

Please let me know if you have any questions.

Thanks,

Ho

o Nieh
 Chief of Staff
 Office of Commissioner William C. Ostendorff
 U.S. Nuclear Regulatory Commission
 (301) 415-1811 (office)
 (b)(6) (mobile)
 (301) 415-1757 (fax)
ho.nieh@nrc.gov

From: Laufer, Richard
Sent: Tuesday, August 16, 2011 10:04 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

Please review the changes to the draft SRM on COMWDM-11-0001/COMWCO-11-0001 (Events in Japan) in the attached file (comwdm.wco.11-0001.b.docx). This is **Version B**. Please respond by August 18, 2011.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

VERSION B; 8/16/11; 10:00 a.m.

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

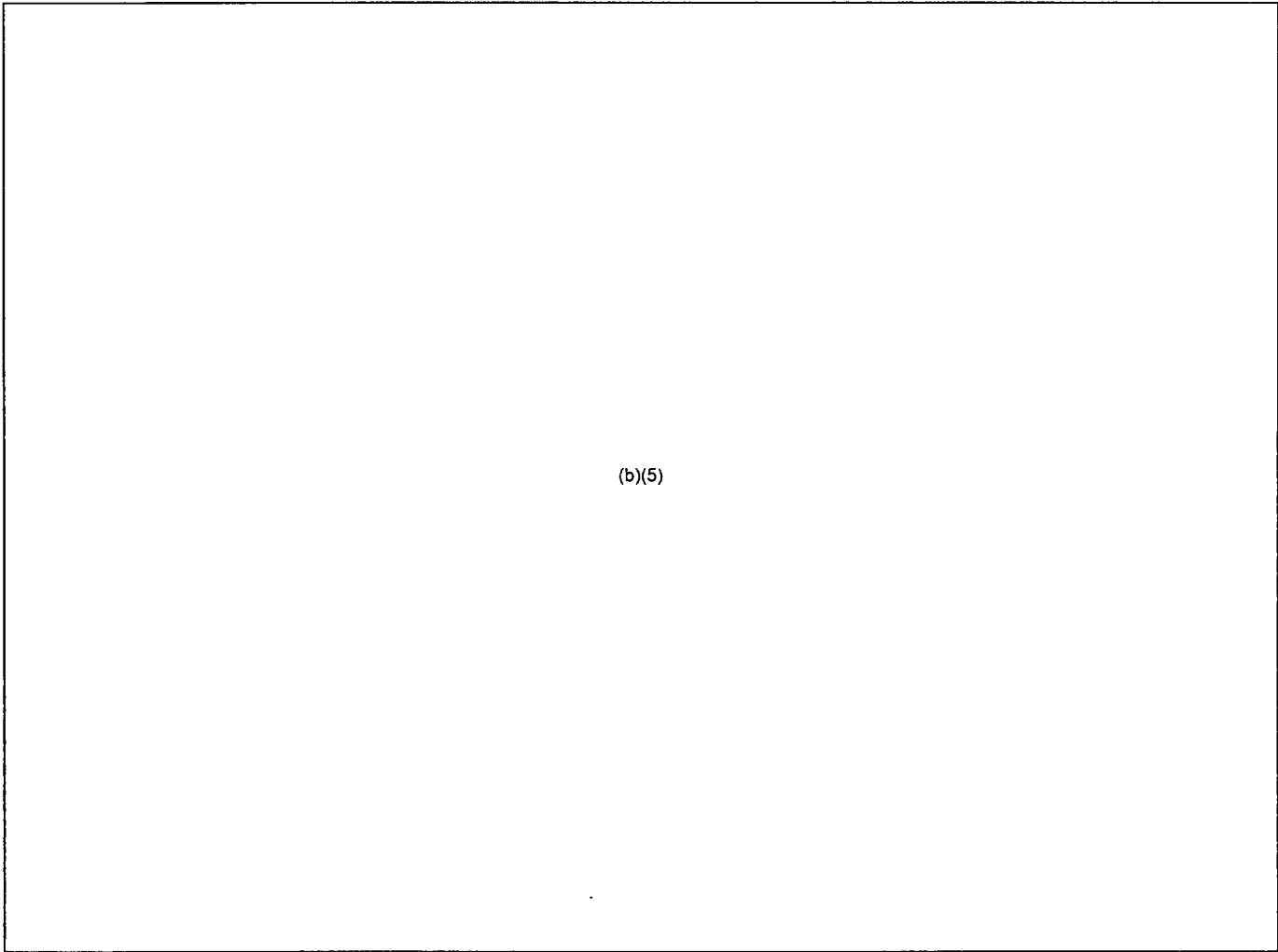
FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – COMWDM-11-0001/COMWCO-11-0001 – ENGAGEMENT OF STAKEHOLDERS REGARDING THE EVENTS IN JAPAN

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Coggins, Angela
Sent: Tuesday, August 16, 2011 5:17 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

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

From: Wright, Darlene
Sent: Wednesday, August 10, 2011 9:38 AM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

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~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sosa, Belkys
Sent: Tuesday, August 16, 2011 6:04 PM
To: Davis, Roger; Blake, Kathleen; Gilles, Nanette; Baggett, Steven; Apostolakis, George
Subject: Heads Up - Chairman is asking to speak to you

(b)(5)

Thanks,
Belkys

From: Coggins, Angela
Sent: Tuesday, August 16, 2011 5:17 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, da; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Lyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

Angela B. Coggins
Policy Director
Office of Chairman Gregory B. Jaczko
U.S. Nuclear Regulatory Commission
1-415-1828/angela.coggins@nrc.gov

From: Wright, Darlene
Sent: Wednesday, August 10, 2011 9:38 AM

~~NOT FOR PUBLIC DISCLOSURE~~

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Bavol, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Ja; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Lord, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Spelser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
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~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sharkey, Jeffry
Sent: Tuesday, August 16, 2011 6:32 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

(b)(5)

Thanks,

eff

From: Laufer, Richard
Sent: Tuesday, August 16, 2011 10:04 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca
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Subject: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

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Thanks,
Rich

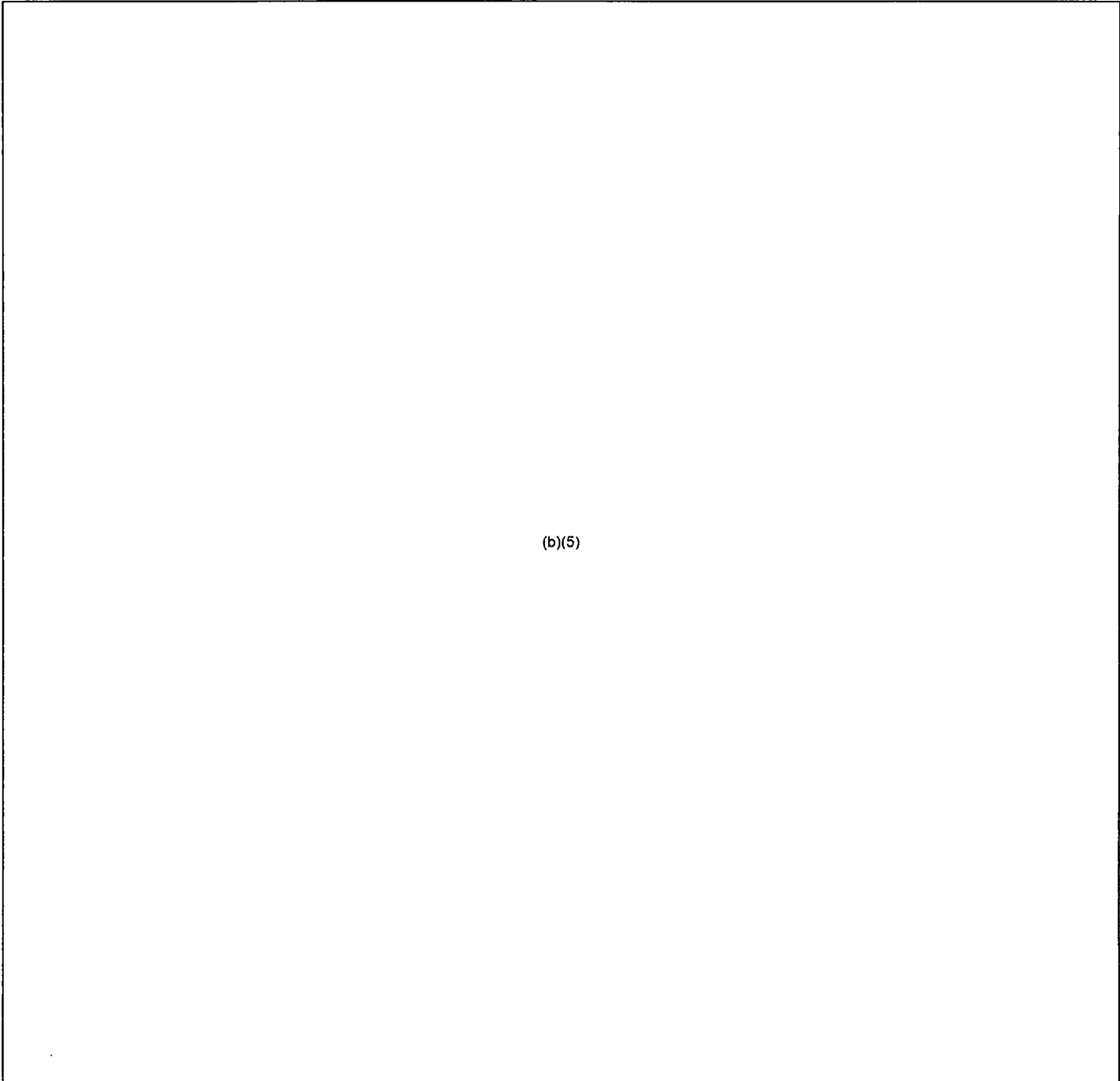
~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

m: Davis, Roger
it: Tuesday, August 16, 2011 7:17 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Gilles, Nanette
Subject: FW: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

Commissioner,



(b)(5)

Roger

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

From: Coggins, Angela

Sent: Tuesday, August 16, 2011 5:17 PM

To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

Angela B. Coggins

Policy Director

Vice of Chairman Gregory B. Jaczko

U.S. Nuclear Regulatory Commission

301-415-1828/angela.coggins@nrc.gov

From: Wright, Darlene

Sent: Wednesday, August 10, 2011 9:38 AM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

The attached file contains a draft SRM which is being circulated for the normal 3-day period for Commission review. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review the SRM to ensure that the Commission decision is clear and understandable and that resource, schedular, and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Burns, Stephen
Sent: Tuesday, August 16, 2011 8:35 PM
To: Davis, Roger
Cc: Rothschild, Trip
Subject: Re: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

Steve

From: Davis, Roger
To: Burns, Stephen
Cc: Rothschild, Trip
Sent: Tue Aug 16 18:12:18 2011
Subject: FW: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

Thanks,
Roger

From: Coggins, Angela
Sent: Tuesday, August 16, 2011 5:17 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Bavor, Rochelle; Blake, Kathleen; Bozin, Sunny; Crawford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

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

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

From: Wright, Darlene

Sent: Wednesday, August 10, 2011 9:38 AM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Jar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Spelser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

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~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

n: Apostolakis, George
t: Wednesday, August 17, 2011 3:59 AM
o: Sosa, Belkys; Davis, Roger; Gilles, Nanette; Baggett, Steven
Subject: Re: Heads Up - Chairman is asking to speak to you

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Sosa, Belkys
To: Davis, Roger; Blake, Kathleen; Gilles, Nanette; Baggett, Steven; Apostolakis, George
Sent: Tue Aug 16 18:04:21 2011
Subject: Heads Up - Chairman is asking to speak to you

(b)(5)

Thanks,
Belkys

From: Coggins, Angela
Sent: Tuesday, August 16, 2011 5:17 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

(b)(5)

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

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Sent: Wednesday, August 10, 2011 9:38 AM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

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Davis, Roger

m: Gilles, Nanette
nt: Wednesday, August 17, 2011 7:40 AM
To: Apostolakis, George; Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: RE: Heads Up - Chairman is asking to speak to you

Commissioner,

(b)(5)

Nan

From: Apostolakis, George
Sent: Wednesday, August 17, 2011 3:59 AM
To: Sosa, Belkys; Davis, Roger; Gilles, Nanette; Baggett, Steven
Subject: Re: Heads Up - Chairman is asking to speak to you

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Sosa, Belkys
To: Davis, Roger; Blake, Kathleen; Gilles, Nanette; Baggett, Steven; Apostolakis, George
Sent: Tue Aug 16 18:04:21 2011
Subject: Heads Up - Chairman is asking to speak to you

(b)(5)

(b)(5)

anks,
alkys

From: Coggins, Angela
Sent: Tuesday, August 16, 2011 5:17 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

5

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

From: Wright, Darlene
Sent: Wednesday, August 10, 2011 9:38 AM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

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~~NOT FOR PUBLIC DISCLOSURE~~

and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Bavoi (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Bubar, Patrice
Sent: Wednesday, August 17, 2011 8:48 AM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

(b)(5)

Please let me know if you have any questions.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Laufer, Richard
Sent: Tuesday, August 16, 2011 10:04 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Please review the changes to the draft SRM on COMWDM-11-0001/COMWCO-11-0001 (Events in Japan) in the attached file (comwdm.wco.11-0001.b.docx). This is **Version B**. Please respond by August 18, 2011.

anks,
jh

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

m: Gilles, Nanette
nt: Wednesday, August 17, 2011 9:20 AM
o: Sosa, Belkys
Cc: Davis, Roger; Baggett, Steven
Subject: FW: Draft SRM on SECY-11-0093 - Task Force Near-Term Recommendations
Attachments: 11-0093 b -- WCO.docx

(b)(5)

Nan

From: Nieh, Ho
Sent: Wednesday, August 17, 2011 9:07 AM
To: Hart, Ken; Bubar, Patrice; Sharkey, Jeffrey; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Shea, Pamela; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Draft SRM on SECY-11-0093 - Task Force Near-Term Recommendations

(b)(5)

Thanks.

Ho

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

From: Hart, Ken
Sent: Tuesday, August 16, 2011 6:05 PM
To: Nieh, Ho; Bubar, Patrice; Sharkey, Jeffrey; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Shea, Pamela; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd,

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: Draft SRM on SECY-11-0093 - Task Force Near-Term Recommendations

Please review the changes to the draft SRM on SECY-11-0093 (Task Force Near-Term Recommendations) in the attached file (11-0093.b.docx). This is **Version B**. Please respond by August 18, 2011.

Thanks, Ken

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

VERSION B

8/16/11

8:00 p.m.

Field Code Changed

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

Edwin M. Hackett, Executive Director
Advisory Committee on Reactor Safeguards

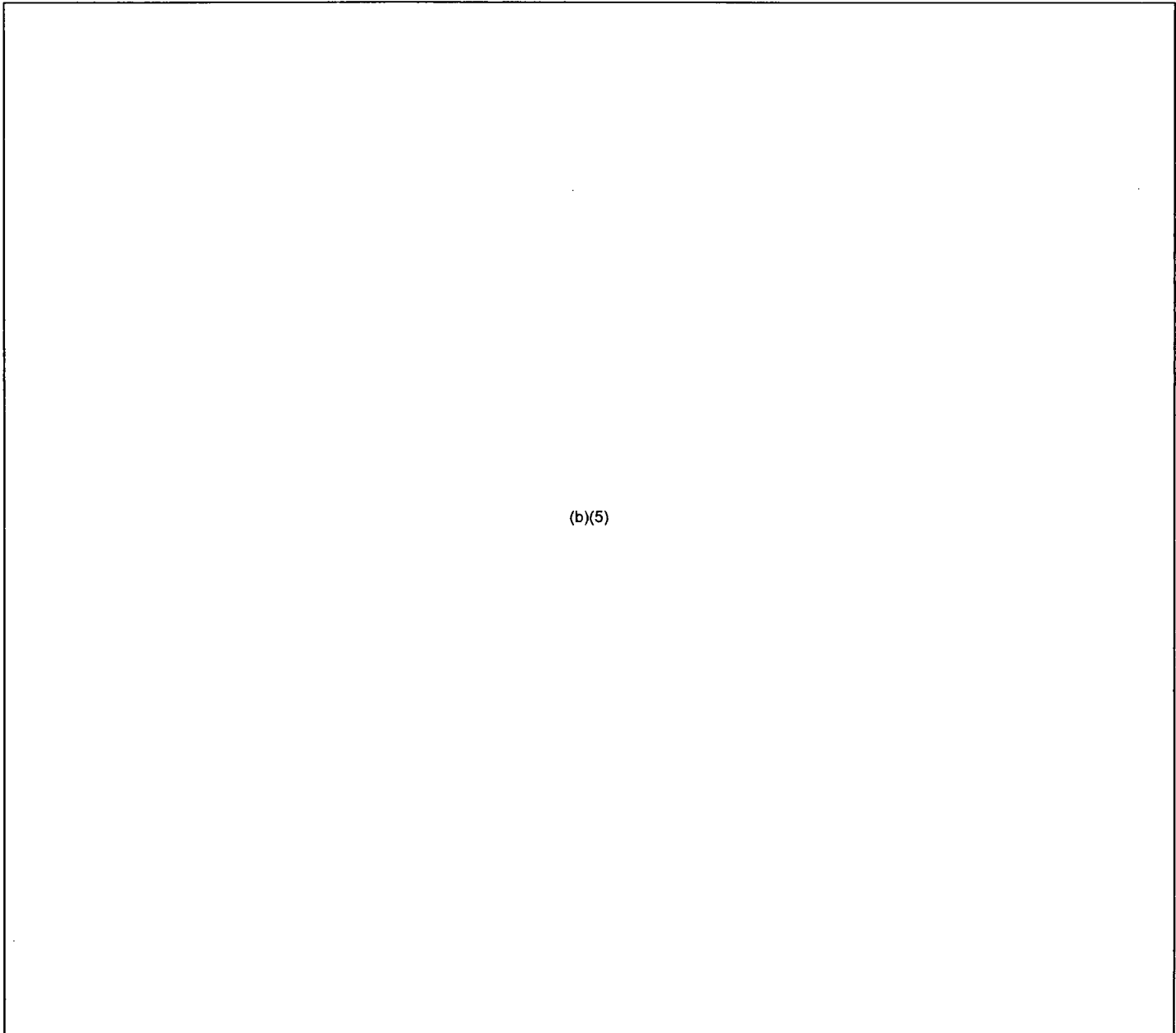
FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – SECY-11-0093 – NEAR-TERM
REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS
FOLLOWING THE EVENTS IN JAPAN

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

- cc: Chairman Jaczko
- Commissioner Svinicki
- Commissioner Apostolakis
- Commissioner Magwood
- Commissioner Ostendorff
- OGC
- CFO
- OCA
- OPA
- Office Directors, Regions, ACRS, ASLBP (via E-Mail)
- PDR

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

~~NOT FOR PUBLIC DISCLOSURE~~

m: Davis, Roger
t: Wednesday, August 17, 2011 10:11 AM
o: Apostolakis, George; Sosa, Belkys; Gilles, Nanette; Baggett, Steven
Subject: RE: Heads Up - Chairman is asking to speak to you

Commissioner,

Re: the SRM on the TASK FORCE REPORT

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

FM 2790 of 2929 561

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

From: Apostolakis, George
Sent: Wednesday, August 17, 2011 3:59 AM
To: Sosa, Belkys; Davis, Roger; Gilles, Nanette; Baggett, Steven
Subject: Re: Heads Up - Chairman is asking to speak to you

(b)(5)

George Apostolakis
Commissioner, US NRC
Blackberry

(b)(6)

~~NOT FOR PUBLIC DISCLOSURE~~

FM 2791 of 2929

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sosa, Belkys
Davis, Roger; Blake, Kathleen; Gilles, Nanette; Baggett, Steven; Apostolakis, George
Sent: Tue Aug 16 18:04:21 2011
Subject: Heads Up - Chairman is asking to speak to you

(b)(5)

Thanks,
Belkys

From: Coggins, Angela
Sent: Tuesday, August 16, 2011 5:17 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Lord, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Mike; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

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

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Sent: Wednesday, August 10, 2011 9:38 AM
To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford,

~~NOT FOR PUBLIC DISCLOSURE~~

Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Lloyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Mike; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; ...a, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
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Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

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~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

~~NOT FOR PUBLIC DISCLOSURE~~

m: Davis, Roger
it: Wednesday, August 17, 2011 10:38 AM
To: Apostolakis, George; Sosa, Belkys; Gilles, Nanette; Baggett, Steven
Subject: RE: Heads Up - Chairman is asking to speak to you

(b)(5)

From: Apostolakis, George
Sent: Wednesday, August 17, 2011 3:59 AM
To: Sosa, Belkys; Davis, Roger; Gilles, Nanette; Baggett, Steven
Subject: Re: Heads Up - Chairman is asking to speak to you

(b)(5)

orge Apostolakis
Commissioner, US NRC
Blackberry (b)(6)

From: Sosa, Belkys
To: Davis, Roger; Blake, Kathleen; Gilles, Nanette; Baggett, Steven; Apostolakis, George
Sent: Tue Aug 16 18:04:21 2011
Subject: Heads Up - Chairman is asking to speak to you

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Thanks,
Belkys

From: Coggins, Angela
Sent: Tuesday, August 16, 2011 5:17 PM
To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman, Terry; Cerny, John; Crawford, John

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie
Subject: RE: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

(b)(5)

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

From: Wright, Darlene

Date: Wednesday, August 10, 2011 9:38 AM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Le, Hong; Sexton, Kimberly; Beasley, Benjamin; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0093 (Near-Term Report - Events in Japan)

The attached file contains a draft SRM which is being circulated for the normal 3-day period for Commission review. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review the SRM to ensure that the Commission decision is clear and understandable and that resource, schedular, and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Gilles, Nanette
Date: Wednesday, August 17, 2011 11:56 AM
To: Apostolakis, George
Cc: Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: DRAFT VOTE on Version B Draft SRM on SECY-11-0093 - Task Force Near-Term Recommendations
Attachments: 11-0093.b.docx

(b)(5)

Nan

From: Hart, Ken
Date: Tuesday, August 16, 2011 6:05 PM
To: Nieh, Ho; Bubar, Patrice; Sharkey, Jeffrey; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Shea, Pamela; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Draft SRM on SECY-11-0093 - Task Force Near-Term Recommendations

Please review the changes to the draft SRM on SECY-11-0093 (Task Force Near-Term Recommendations) in the attached file (11-0093.b.docx). This is **Version B**. Please respond by August 18, 2011.

Thanks, Ken

~~NOT FOR PUBLIC DISCLOSURE~~

VERSION B

8/16/11

6:00 p.m.

MEMORANDUM TO:

R. W. Borchardt
Executive Director for Operations

Edwin M. Hackett, Executive Director
Advisory Committee on Reactor Safeguards

FROM:

Annette L. Vietti-Cook, Secretary

SUBJECT:

STAFF REQUIREMENTS – SECY-11-0093 – NEAR-TERM
REPORT AND RECOMMENDATIONS FOR AGENCY ACTIONS
FOLLOWING THE EVENTS IN JAPAN

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

m: Apostolakis, George
it: Wednesday, August 17, 2011 12:00 PM
to: Gilles, Nanette
Cc: Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: RE: DRAFT VOTE on Version B Draft SRM on SECY-11-0093 - Task Force Near-Term Recommendations

(b)(5)

From: Gilles, Nanette
Sent: Wednesday, August 17, 2011 11:56 AM
To: Apostolakis, George
Cc: Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: DRAFT VOTE on Version B Draft SRM on SECY-11-0093 - Task Force Near-Term Recommendations

(b)(5)

Nan

From: Hart, Ken
Sent: Tuesday, August 16, 2011 6:05 PM
To: Nieh, Ho; Bubar, Patrice; Sharkey, Jeffrey; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Shea, Pamela; Vietti-Cook, Annette; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Spelser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Draft SRM on SECY-11-0093 - Task Force Near-Term Recommendations

Please review the changes to the draft SRM on SECY-11-0093 (Task Force Near-Term Recommendations) in the attached file (11-0093.b.docx). This is **Version B**. Please respond by August 18, 2011.

anks, Ken

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Gilles, Nanette
Sent: Wednesday, August 17, 2011 1:55 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: FW: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)
Attachments: comwdm.wco.11-0001.b.docx; RE: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan); RE: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan); RE: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

(b)(5)

Nan

From: Laufer, Richard

Sent: Tuesday, August 16, 2011 10:04 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

Please review the changes to the draft SRM on COMWDM-11-0001/COMWCO-11-0001 (Events in Japan) in the attached file (comwdm.wco.11-0001.b.docx). This is **Version B**. Please respond by August 18, 2011.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

VERSION B; 8/16/11; 10:00 a.m.

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – COMWDM-11-0001/COMWCO-11-0001 – ENGAGEMENT OF STAKEHOLDERS REGARDING THE EVENTS IN JAPAN

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Apostolakis, George
Date: Thursday, August 18, 2011 4:23 AM
To: Gilles, Nanette
Cc: Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: RE: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

(b)(5)

From: Gilles, Nanette
Sent: Wednesday, August 17, 2011 1:55 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Davis, Roger; Baggett, Steven
Subject: FW: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

(b)(5)

Nan

From: Laufer, Richard
Sent: Tuesday, August 16, 2011 10:04 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggittis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: VERSION B - DRAFT SRM - COMWDM-11-0001/COMWCO-11-0001 (Events in Japan)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Please review the changes to the draft SRM on COMWDM-11-0001/COMWCO-11-0001 (Events in Japan) in the attached file (comwdm.wco.11-0001.b.docx). This is **Version B**. Please respond by August 18, 2011.

anks,
jh

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Date: Wednesday, August 24, 2011 12:52 PM
To: Baggett, Steven; Sosa, Belkys; Davis, Roger
Subject: Re: Letter from Senator Inhofe

Steve - Roger and Belkys were working on this when I left last week.

Sent from my NRC Blackberry

From: Bubar, Patrice
To: Baggett, Steven; Sosa, Belkys; Gilles, Nanette
Sent: Wed Aug 24 12:48:02 2011
Subject: Letter from Senator Inhofe

(b)(5)

Thanks

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Nieh, Ho
Sent: Thursday, September 01, 2011 5:42 PM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Thanks,

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

From: Baval, Rochelle
Sent: Thursday, September 01, 2011 1:12 PM
To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan
Importance: High

Attached are the scheduling notes for the September 14th and October 11th Commission meetings on Japan (Japan Task Force Short-Term Actions and Prioritization of Recommendations) that will follow the 21 day and 7 day notation vote papers on the same topics due September 9th and October 3rd respectively, which the Chairman has approved.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Please let SECY know as soon as possible if your Commissioner approves the scheduling notes. The September 14th meeting is only 8 business days from today. SECY is prepared to make invitations as soon as we get Commission approval.

gchelle

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Davis, Roger
Sent: Friday, September 02, 2011 4:59 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Gilles, Nanette
Subject: FW: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan
Attachments: 110914 Japan Short-Term Actions Scheduling Note Version D-kls.docx; 110914 Japan Short-Term Actions Scheduling Note Version D.docx

Commissioner,

(b)(5)

Roger

From: Sharkey, Jeffry
Sent: Friday, September 02, 2011 3:35 PM
To: Vietti-Cook, Annette; Nieh, Ho; Bavol, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Thanks,

Jeff

From: Vietti-Cook, Annette
Sent: Friday, September 02, 2011 9:25 AM
To: Nieh, Ho; Bavol, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, John; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas;

~~NOT FOR PUBLIC DISCLOSURE~~

Batkin, Joshua; Marshall, Michael; Orders, William

Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Thanks for your prompt feedback. Since the September 14 meeting is 7 business days away, including today, I would appreciate priority consideration of the September 14 scheduling note by the Commissioners. I would like to extend invitations at the earliest possible time so we can see who will be available on short notice. Thanks for your support!

From: Nieh, Ho

Sent: Thursday, September 01, 2011 5:42 PM

To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Thanks,

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6) (mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

From: Baval, Rochelle

Sent: Thursday, September 01, 2011 1:12 PM

To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Importance: High

Attached are the scheduling notes for the September 14th and October 11th Commission meetings on Japan (Japan Task Force Short-Term Actions and Prioritization of Recommendations) that will follow the 21 day and

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

45 day notation vote papers on the same topics due September 9th and October 3rd respectively, which the Chairman has approved.

Please let SECY know as soon as possible if your Commissioner approves the scheduling notes. The September 14th meeting is only 8 business days from today. SECY is prepared to make invitations as soon as we get Commission approval.

Rochelle

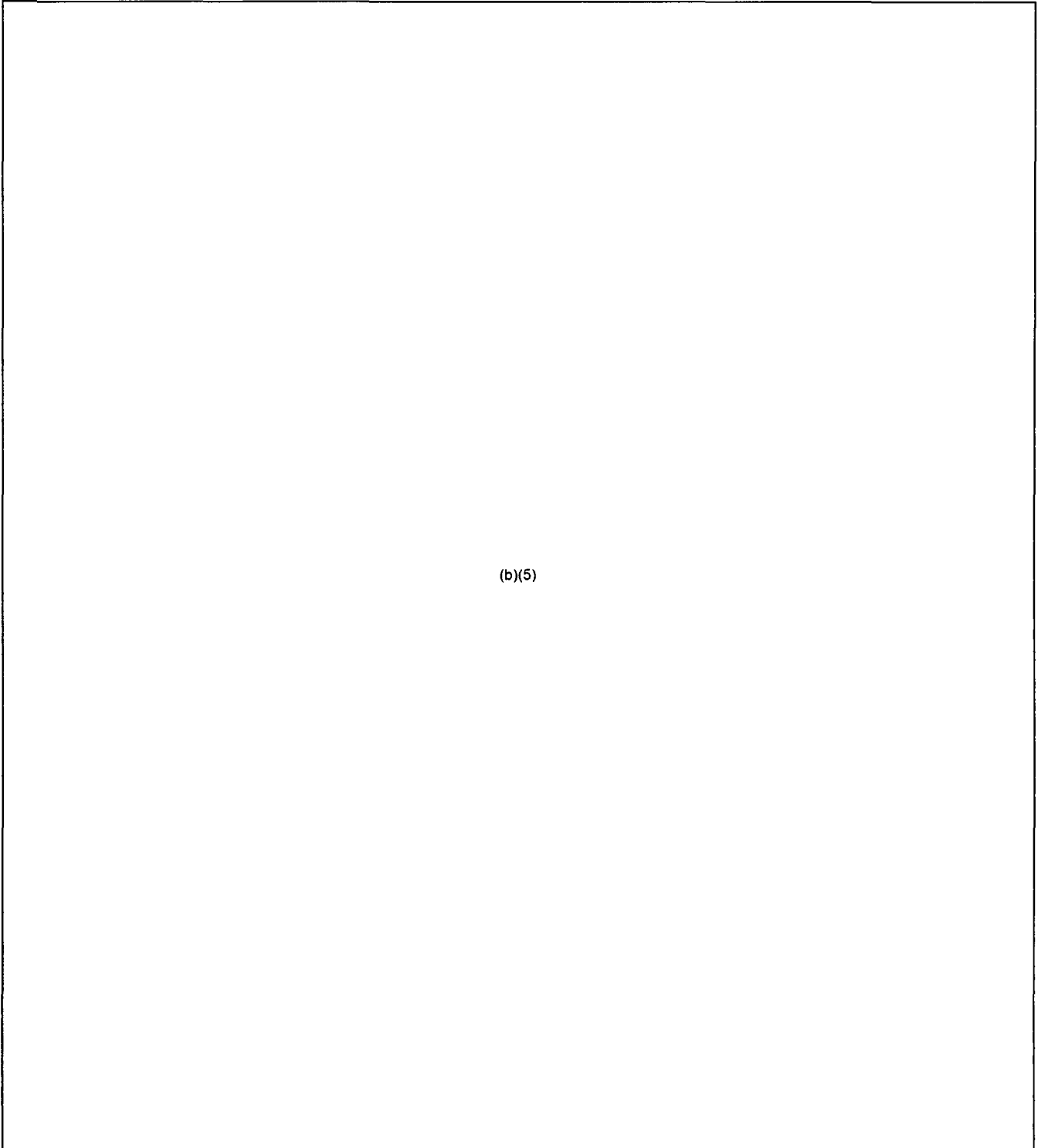
~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Commissioner Svinicki's Comments

Draft: 9/1/11

SCHEDULING NOTE



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sharkey, Jeffry
Sent: Friday, September 02, 2011 3:35 PM
To: Vietti-Cook, Annette; Nieh, Ho; Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan
Attachments: 110914 Japan Short-Term Actions Scheduling Note Version D-kis.docx

(b)(5)

Thanks,
Jeff

From: Vietti-Cook, Annette
Sent: Friday, September 02, 2011 9:25 AM
To: Nieh, Ho; Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Thanks for your prompt feedback. Since the September 14 meeting is 7 business days away, including today, I would appreciate priority consideration of the September 14 scheduling note by the Commissioners. I would like to extend invitations at the earliest possible time so we can see who will be available on short notice. Thanks for your support!

From: Nieh, Ho
Sent: Thursday, September 01, 2011 5:42 PM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

nanks,

Ho

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

From: Baval, Rochelle

Sent: Thursday, September 01, 2011 1:12 PM

To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Importance: High

Attached are the scheduling notes for the September 14th and October 11th Commission meetings on Japan (Japan Task Force Short-Term Actions and Prioritization of Recommendations) that will follow the 21 day and 45 day notation vote papers on the same topics due September 9th and October 3rd respectively, which the Chairman has approved.

Please let SECY know as soon as possible if your Commissioner approves the scheduling notes. The September 14th meeting is only 8 business days from today. SECY is prepared to make invitations as soon as we get Commission approval.

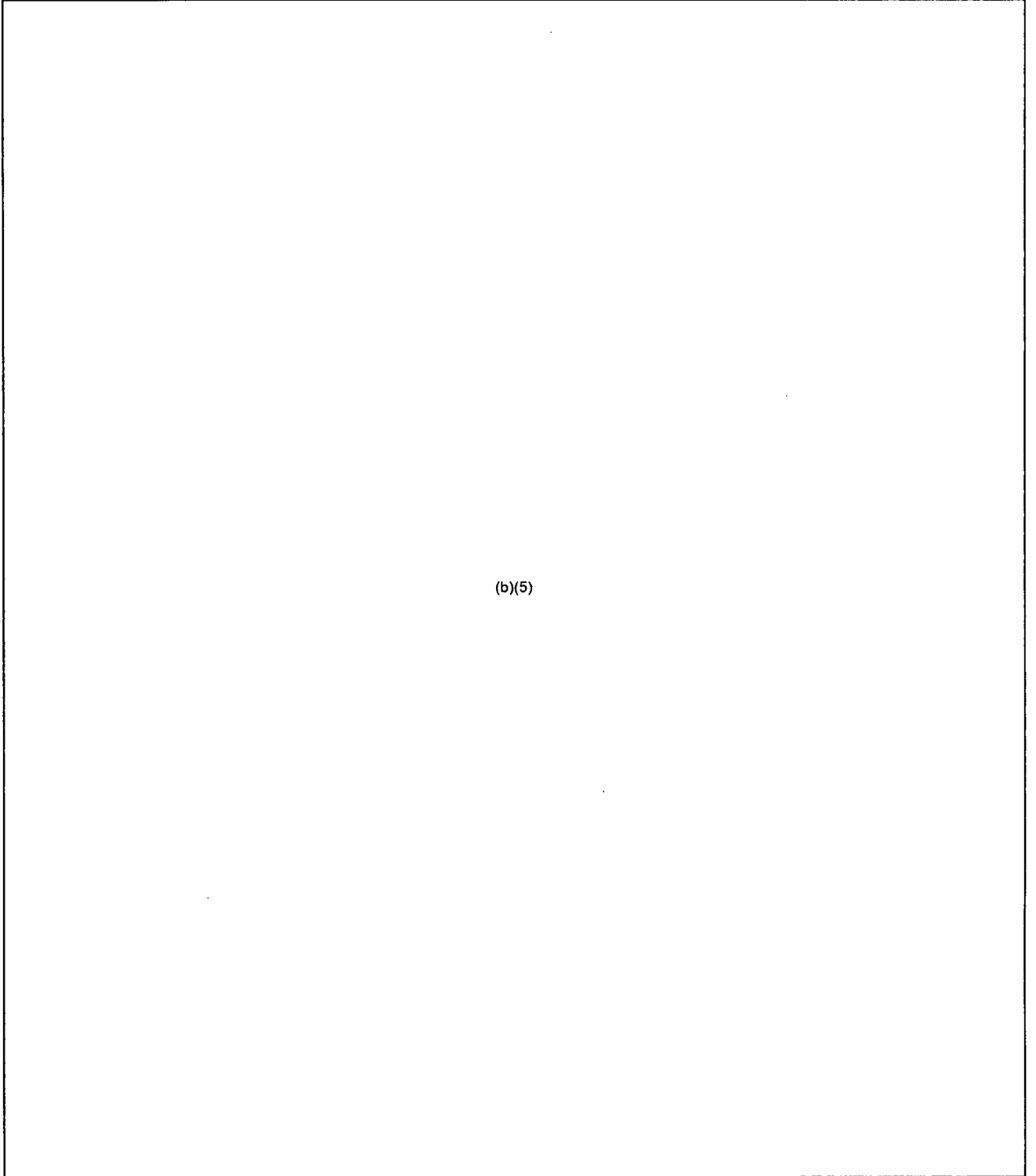
Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

Commissioner Svinicki's Comments

Draft: 9/1/11

SCHEDULING NOTE



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sharkey, Jeffrey
Sent: Friday, September 02, 2011 6:17 PM
To: Vietti-Cook, Annette; Nieh, Ho; Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan
Attachments: 111011 Japan Prioritization Scheduling Note Version F-KLS.docx

(b)(5)

Thanks,

Jeff

From: Vietti-Cook, Annette
Sent: Friday, September 02, 2011 9:25 AM
To: Nieh, Ho; Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Thanks for your prompt feedback. Since the September 14 meeting is 7 business days away, including today, I would appreciate priority consideration of the September 14 scheduling note by the Commissioners. I would like to extend invitations at the earliest possible time so we can see who will be available on short notice. Thanks for your support!

From: Nieh, Ho
Sent: Thursday, September 01, 2011 5:42 PM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

(b)(5)

Thanks,

Ho

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

From: Baval, Rochelle

Sent: Thursday, September 01, 2011 1:12 PM

To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Importance: High

Attached are the scheduling notes for the September 14th and October 11th Commission meetings on Japan (Japan Task Force Short-Term Actions and Prioritization of Recommendations) that will follow the 21 day and 45 day notation vote papers on the same topics due September 9th and October 3rd respectively, which the Chairman has approved.

Please let SECY know as soon as possible if your Commissioner approves the scheduling notes. The September 14th meeting is only 8 business days from today. SECY is prepared to make invitations as soon as we get Commission approval.

Rochelle

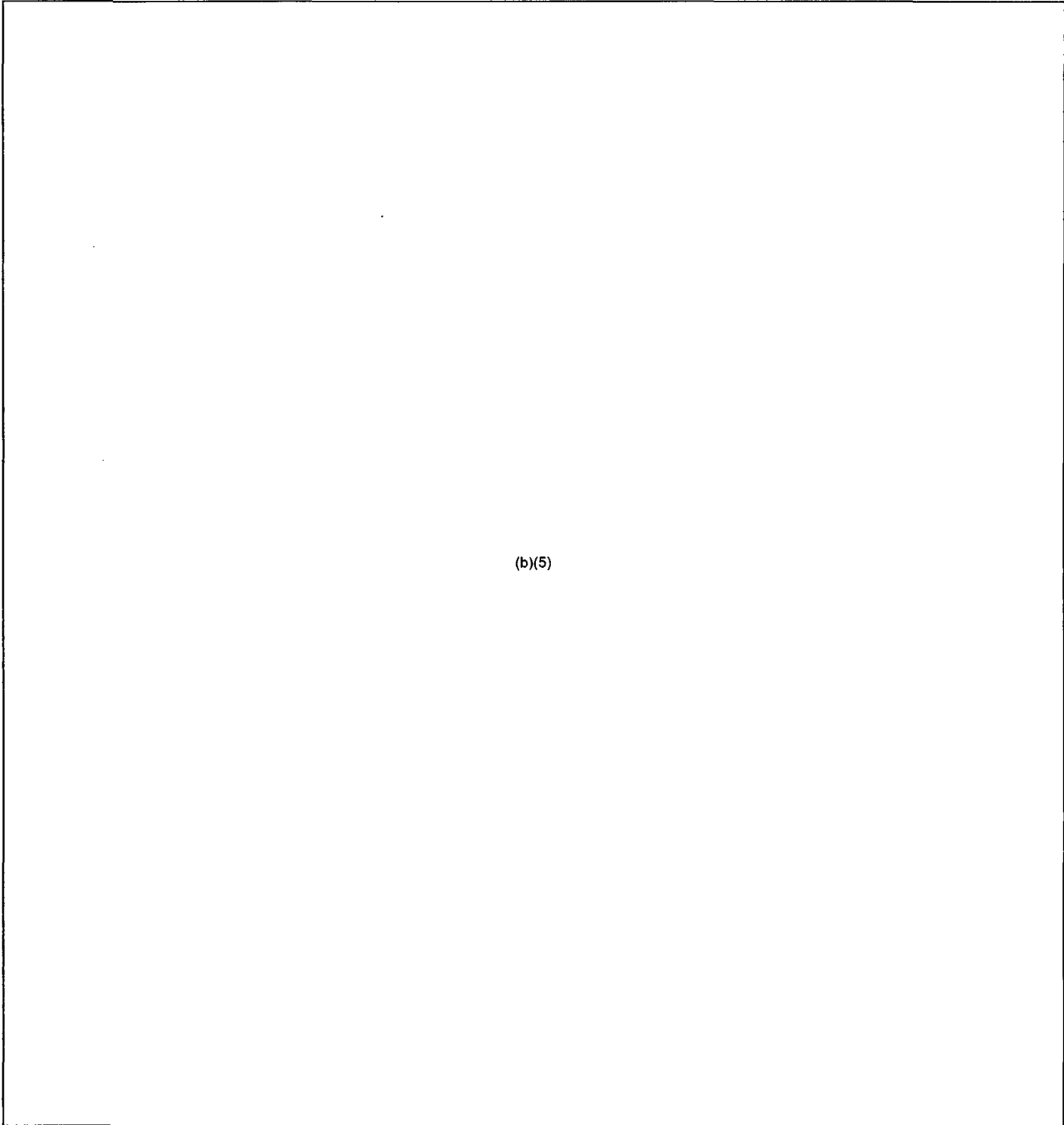
~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Commissioner Svinicki's Comments

Draft: 9/1/11

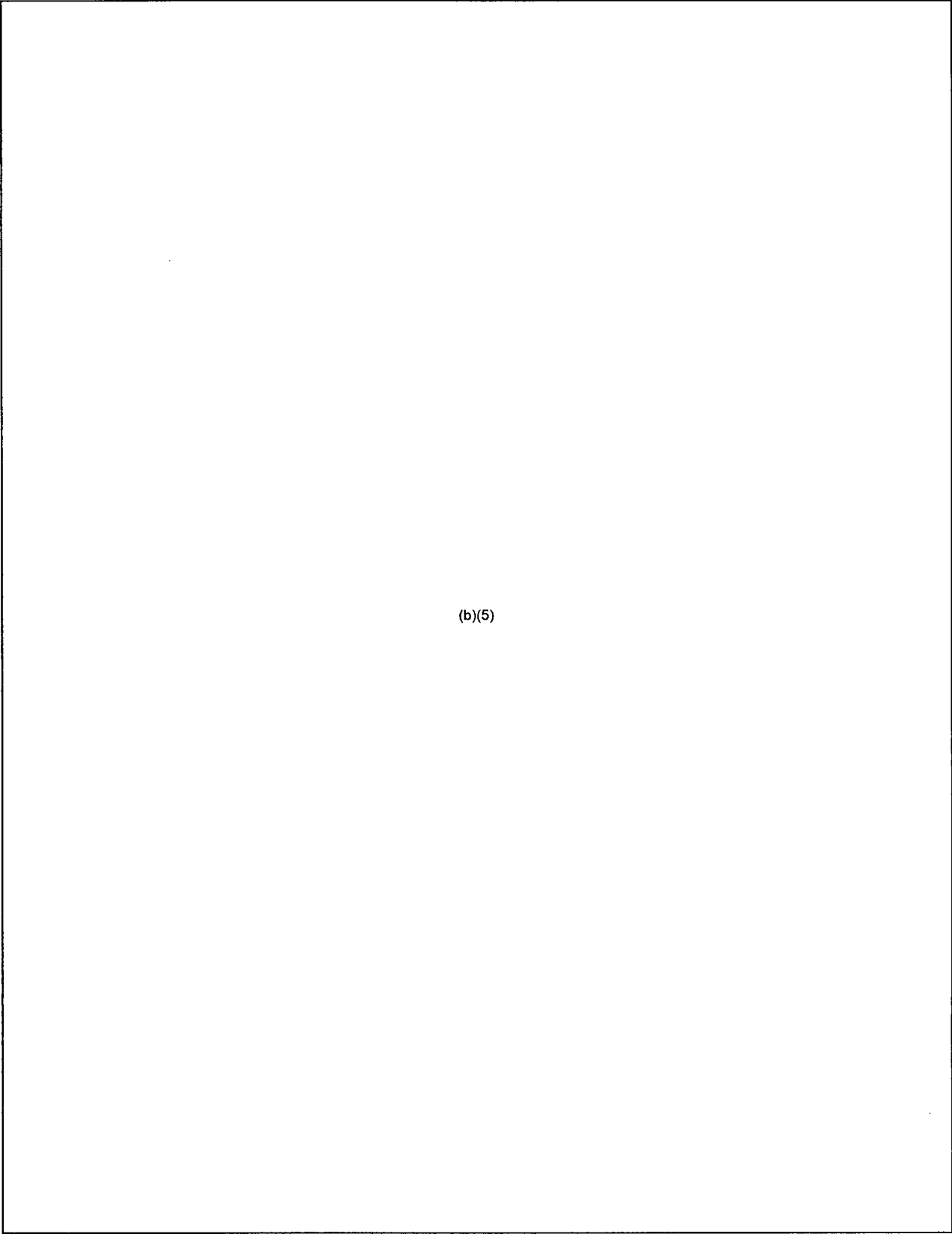
SCHEDULING NOTE



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

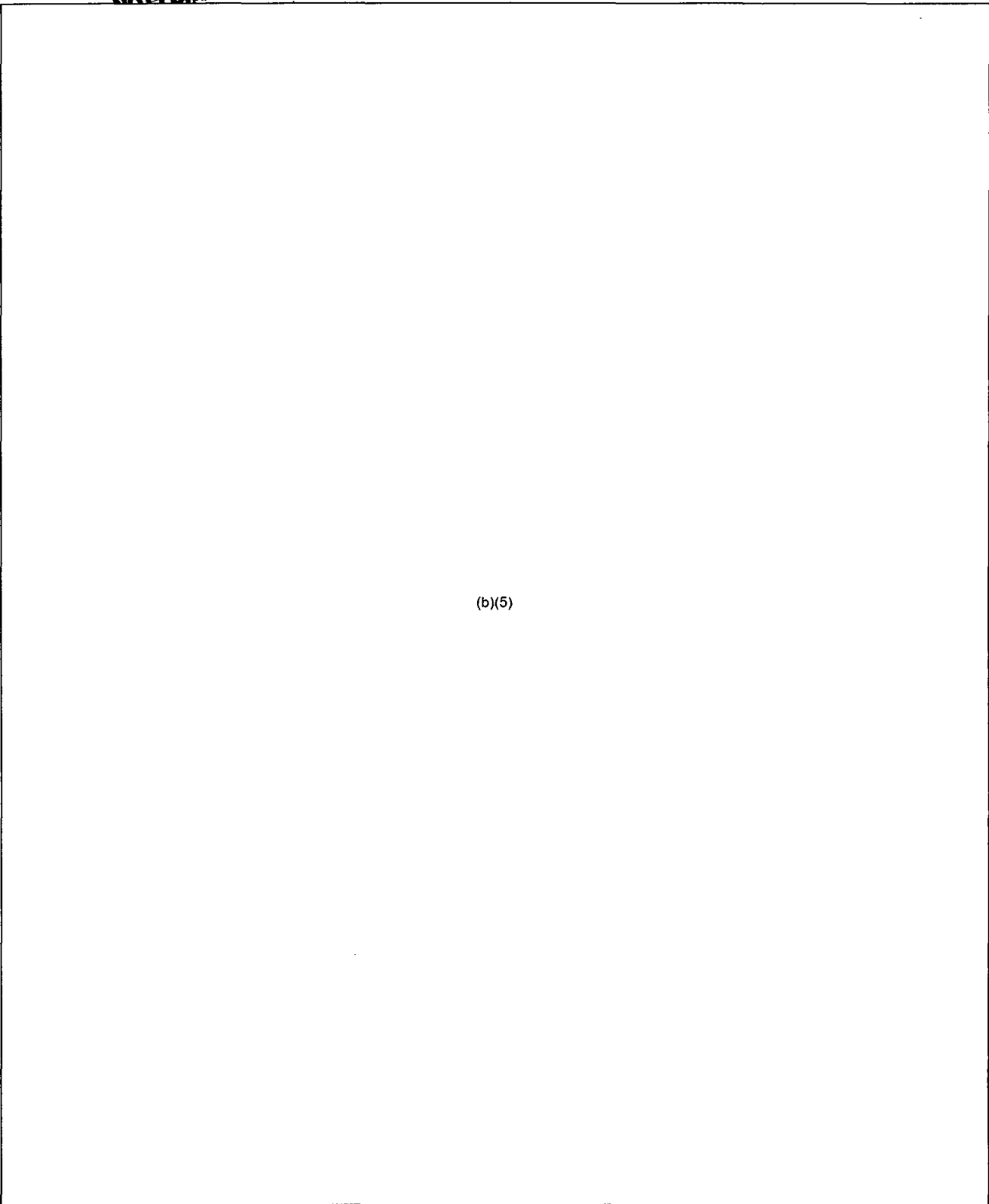
~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

Apostolakis, George

From: Apostolakis, George
Sent: Saturday, September 03, 2011 12:56 PM
To: Davis, Roger
Cc: Sosa, Belkys; Gilles, Nanette
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

From: Davis, Roger
Sent: Friday, September 02, 2011 4:59 PM
To: Apostolakis, George
Cc: Sosa, Belkys; Gilles, Nanette
Subject: FW: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Commissioner,

(b)(5)

Roger

From: Sharkey, Jeffry
Sent: Friday, September 02, 2011 3:35 PM
To: Vietti-Cook, Annette; Nieh, Ho; Bovol, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

anks,

ff ~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

From: Vietti-Cook, Annette

Sent: Friday, September 02, 2011 9:25 AM

: Nieh, Ho; Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Thanks for your prompt feedback. Since the September 14 meeting is 7 business days away, including today, I would appreciate priority consideration of the September 14 scheduling note by the Commissioners. I would like to extend invitations at the earliest possible time so we can see who will be available on short notice. Thanks for your support!

From: Nieh, Ho

Sent: Thursday, September 01, 2011 5:42 PM

To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Thanks,

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

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(b)(6)

(mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

From: Baval, Rochelle

Sent: Thursday, September 01, 2011 1:12 PM

: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval,

~~NOT FOR PUBLIC DISCLOSURE~~

27

FM 2824 of 2929

~~NOT FOR PUBLIC DISCLOSURE~~

Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Importance: High

Attached are the scheduling notes for the September 14th and October 11th Commission meetings on Japan (Japan Task Force Short-Term Actions and Prioritization of Recommendations) that will follow the 21 day and 45 day notation vote papers on the same topics due September 9th and October 3rd respectively, which the Chairman has approved.

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Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Gilles, Nanette
Sent: Monday, September 05, 2011 8:55 PM
To: Sosa, Belkys
Subject: FW: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

From: Nieh, Ho
Sent: Thursday, September 01, 2011 5:42 PM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Thanks,

Ho

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
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ho.nieh@nrc.gov

From: Baval, Rochelle
Sent: Thursday, September 01, 2011 1:12 PM
To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

~~NOT FOR PUBLIC DISCLOSURE~~

Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan
Importance: High

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Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sosa, Belkys
Sent: Tuesday, September 06, 2011 2:03 PM
To: Gilles, Nanette
Cc: Davis, Roger
Subject: Re: Public release of SECY paper on Japan Task Force Short Term Action recommendations.

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Gilles, Nanette
To: Sosa, Belkys
Cc: Davis, Roger
Sent: Tue Sep 06 13:18:53 2011
Subject: FW: Public release of SECY paper on Japan Task Force Short Term Action recommendations.

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Tadesse, Rebecca
Sent: Tuesday, September 06, 2011 1:12 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Public release of SECY paper on Japan Task Force Short Term Action recommendations.

Commissioner Magwood will make a decision on early release once he sees the paper.

Thanks
Rebecca Tadesse

From: Laufer, Richard
Sent: Tuesday, September 06, 2011 12:02 PM

~~NOT FOR PUBLIC DISCLOSURE~~

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Pop, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly; Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Anir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Public release of SECY paper on Japan Task Force Short Term Action recommendations.

On Friday, September 9, in response to the SRM for SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan," the Commission will receive a Notation Vote paper with the staff's recommendations regarding any Task Force recommendations that can, and in the staff's judgment, should be implemented, in part or in whole, without unnecessary delay.

SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Wednesday, September 14.

Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Sent: Monday, September 05, 2011 8:55 PM
To: Sosa, Belkys
Subject: FW: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

From: Nieh, Ho
Sent: Thursday, September 01, 2011 5:42 PM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Thanks,

Ho

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

From: Baval, Rochelle
Sent: Thursday, September 01, 2011 1:12 PM
To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

~~NOT FOR PUBLIC DISCLOSURE~~

Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Importance: High

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Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Sent: Tuesday, September 06, 2011 1:19 PM
To: Sosa, Belkys
Cc: Davis, Roger
Subject: FW: Public release of SECY paper on Japan Task Force Short Term Action recommendations.

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Tadesse, Rebecca
Sent: Tuesday, September 06, 2011 1:12 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Re: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Public release of SECY paper on Japan Task Force Short Term Action recommendations.

Commissioner Magwood will make a decision on early release once he sees the paper.

Thanks
Rebecca tadesse

From: Laufer, Richard
Sent: Tuesday, September 06, 2011 12:02 PM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Public release of SECY paper on Japan Task Force Short Term Action recommendations.

On Friday, September 9, in response to the SRM for SECY-11-0093, "Near-Term Report and Recommendations for Agency Action Following the Events in Japan," the Commission will receive a Notation

~~NOT FOR PUBLIC DISCLOSURE~~

Vote paper with the staff's recommendations regarding any Task Force recommendations that can, and in the staff's judgment, should be implemented, in part or in whole, without unnecessary delay.

SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Wednesday, September 14.

Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

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~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Date: Tuesday, September 06, 2011 9:33 AM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Baval, Rochelle
Date: Thursday, September 01, 2011 1:12 PM
To: ; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan
Importance: High

Attached are the scheduling notes for the September 14th and October 11th Commission meetings on Japan (Japan Task Force Short-Term Actions and Prioritization of Recommendations) that will follow the 21 day and 45 day notation vote papers on the same topics due September 9th and October 3rd respectively, which the Chairman has approved.

Please let SECY know as soon as possible if your Commissioner approves the scheduling notes. The September 14th meeting is only 8 business days from today. SECY is prepared to make invitations as soon as we get Commission approval.

Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Laufer, Richard
Sent: Tuesday, September 06, 2011 12:02 PM
To: Baggett, Steven; Bavol, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Public release of SECY paper on Japan Task Force Short Term Action recommendations.

On Friday, September 9, in response to the SRM for SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan," the Commission will receive a Notation Vote paper with the staff's recommendations regarding any Task Force recommendations that can, and in the staff's judgment, should be implemented, in part or in whole, without unnecessary delay.

SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Wednesday, September 14.

Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

From: Gilles, Nanette
Sent: Friday, September 09, 2011 10:26 AM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Public release of SECY paper on Japan Task Force Short Term Action recommendations.

Commissioner Apostolakis supports early release of the subject paper 3 hours after the paper is delivered to the Commission. Early release is appropriate to support the upcoming Commission meeting. However, as a matter of principle, the Commission should normally be afforded sufficient review time for papers before they are made publicly available, including under unusual circumstances where Commission meetings are planned to occur shortly after papers are due.

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Laufer, Richard
Sent: Tuesday, September 06, 2011 12:02 PM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Astwood, Heather; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
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SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Wednesday, September 14.

~~NOT FOR PUBLIC DISCLOSURE~~

Please let SECY know if your office supports the early release of this paper.

anks,
.ch

Sosa, Belkys

From: Nieh, Ho
Sent: Friday, September 09, 2011 10:55 AM
To: Gilles, Nanette; Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Thanks,

Ho

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

From: Gilles, Nanette
Sent: Wednesday, September 07, 2011 6:16 PM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
mail: nanette.gilles@nrc.gov

From: Baval, Rochelle
Sent: Thursday, September 01, 2011 1:12 PM

To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Bovol, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; sa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bovol, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Janette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Importance: High

Attached are the scheduling notes for the September 14th and October 11th Commission meetings on Japan (Japan Task Force Short-Term Actions and Prioritization of Recommendations) that will follow the 21 day and 45 day notation vote papers on the same topics due September 9th and October 3rd respectively, which the Chairman has approved.

Please let SECY know as soon as possible if your Commissioner approves the scheduling notes. The September 14th meeting is only 8 business days from today. SECY is prepared to make invitations as soon as we get Commission approval.

Rochelle

Sosa, Belkys

From: Sosa, Belkys
Sent: Friday, September 09, 2011 11:29 AM
To: Baval, Rochelle; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Hart, Ken; Kock, Andrea; Laufer, Richard; Lisann, Elizabeth; Shea, Pamela; Tadesse, Rebecca; Vietti-Cook, Annette; Baggett, Steven; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Svinicki, Kristine; Montes, David
Subject: RE: Update and Reply Requested: Scheduling Note for 9/14/11 Commission Meeting on the Japan Task Force Report - Short Term Actions

Commissioner Apostolakis approves Thomas Cochran as the replacement for Chris Paine.

Thanks,
Belkys

From: Baval, Rochelle
Sent: Friday, September 09, 2011 7:22 AM
To: Baval, Rochelle; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Hart, Ken; Kock, Andrea; Laufer, Richard; Lisann, Elizabeth; Shea, Pamela; Tadesse, Rebecca; Vietti-Cook, Annette; Baggett, Steven; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Svinicki, Kristine; Montes, David
Subject: Update and Reply Requested: Scheduling Note for 9/14/11 Commission Meeting on the Japan Task Force Report - Short Term Actions

Good Morning,

Attached is a revised scheduling note for the September 14th Commission meeting. Tim Greten will be representing FEMA. Joe McClelland is not available next week due to Congressional meetings, so FERC will not be participating. Chris Paine is not available to participate due to previously scheduled travel. He recommended that Thomas Cochran represent NRDC, which the Chairman has approved.

Please let SECY know if your Commissioner approves Thomas Cochran to represent NRDC. SECY would like to be able to formally invite Mr. Cochran today.

Thank you,
Rochelle

From: Baval, Rochelle
Sent: Wednesday, September 07, 2011 4:01 PM
To: Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Hart, Ken; Kock, Andrea; Laufer, Richard; Lisann, Elizabeth; Shea, Pamela; Tadesse, Rebecca; Vietti-Cook, Annette; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken;

~~NOT FOR PUBLIC DISCLOSURE~~

Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Svinicki, Kristine; Montes, David

Subject: Scheduling Note for 9/14/11 Commission Meeting on the Japan Task Force Report - Short Term Actions

Attached is the approved scheduling note for the September 14th Commission meeting on the Japan Near Term Task Force Report – Short Term Actions. It includes changes approved by a majority of the Commission.

SECY has been making invitations and has made substantial progress:

Those who are confirmed to participate:

- Bill Leith, USGS
- Chip Pardee, Exelon*
- Ed Lyman, UCS
- Sue Perkins-Grew, NEI
- Pat Mulligan, NJ and Federal Radiological Preparedness Coordinating Committee
- FEMA – FEMA has agreed to participate but is still working to determine who will be their representative – Mr. Mitchell, Mr. Greten, or another manager.

- David Nevios, NERC, indicated that NERC was declining the invitation, so I have contacted Joe McClelland at FERC.
- Chris Paine, NRDC, has been contacted, and I am awaiting his response.
- Ted Schiffley, BWROG, has indicated that the BWROG leadership is unavailable for both meetings: next week they are in Tokyo for their international conference, and in October they have their general conference.

*Since the BWROG will not be able to participate, and in consulting with the staff, Mr. Pardee would be able to also cover the areas that we asked the BWROG to cover. The attached scheduling note reflects Mr. Pardee covering the BWROG areas.

SECY will continue to keep you informed as we work to confirm participants.

Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

om: Sosa, Belkys
nt: Friday, September 09, 2011 12:36 PM
o: Gilles, Nanette
Subject: RE: Update and Reply Requested: Scheduling Note for 9/14/11 Commission Meeting on the Japan Task Force Report - Short Term Actions

I didn't see your response until later. Thanks, - Belkys

From: Gilles, Nanette
Sent: Friday, September 09, 2011 12:20 PM
To: Sosa, Belkys
Subject: RE: Update and Reply Requested: Scheduling Note for 9/14/11 Commission Meeting on the Japan Task Force Report - Short Term Actions

Belkys – I had already responded (see attached) after talking to GA this morning.

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
mail: nanette.gilles@nrc.gov

From: Sosa, Belkys
Sent: Friday, September 09, 2011 11:29 AM
To: Baval, Rochelle; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Hart, Ken; Kock, Andrea; Laufer, Richard; Lisann, Elizabeth; Shea, Pamela; Tadesse, Rebecca; Vietti-Cook, Annette; Baggett, Steven; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Svinicki, Kristine; Montes, David
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~~NOT FOR PUBLIC DISCLOSURE~~ 16

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~~NOT FOR PUBLIC DISCLOSURE~~

Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Svinicki, Kristine; Montes, David

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Rochelle

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Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Bubar, Patrice
Sent: Friday, September 09, 2011 1:40 PM
To: Gilles, Nanette; Sosa, Belkys
Cc: Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Gilles, Nanette
Sent: Wednesday, September 07, 2011 6:16 PM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

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Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Baval, Rochelle
Sent: Thursday, September 01, 2011 11:12 PM
To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

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Rochelle

Sosa, Belkys

From: Sosa, Belkys
Sent: Friday, September 09, 2011 3:29 PM
To: Bubar, Patrice; Gilles, Nanette
Cc: Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Hi Patty, I'm available now. Thanks, - Belkys

From: Bubar, Patrice
Sent: Friday, September 09, 2011 1:40 PM
To: Gilles, Nanette; Sosa, Belkys
Cc: Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
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301-415-1895

From: Gilles, Nanette
Sent: Wednesday, September 07, 2011 6:16 PM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

~~NOT FOR PUBLIC DISCLOSURE~~

Phone: 301-415-1180

Email: nanette.gilles@nrc.gov

From: Baval, Rochelle

Sent: Thursday, September 01, 2011 1:12 PM

To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Astwood, Heather; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: Reply Requested: Scheduling Notes for 9/14 and 10/11 Commission Meetings on Japan

Importance: High

Attached are the scheduling notes for the September 14th and October 11th Commission meetings on Japan (Japan Task Force Short-Term Actions and Prioritization of Recommendations) that will follow the 21 day and 45 day notation vote papers on the same topics due September 9th and October 3rd respectively, which the Chairman has approved.

Please let SECY know as soon as possible if your Commissioner approves the scheduling notes. The September 14th meeting is only 8 business days from today. SECY is prepared to make invitations as soon as we get Commission approval.

Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Sosa, Belkys
Sent: Wednesday, September 21, 2011 10:49 AM
To: Gilles, Nanette
Subject: Fw: SRM on Task Force Charter

Nan, pls refer to Jeff's request and see if we can accommodate. Thks

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Sharkey, Jeffry
To: Bubar, Patrice; Nieh, Ho; Sosa, Belkys
Cc: Castleman, Patrick; Reddick, Darani
Sent: Wed Sep 21 04:36:34 2011
Subject: SRM on Task Force Charter

All:

(b)(5)

Thanks,

:ff

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Gilles, Nanette
Date: Monday, October 03, 2011 11:33 AM
From: Sosa, Belkys
Cc: Davis, Roger; Baggett, Steven
Subject: FW: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Importance: High

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Laufer, Richard

Sent: Monday, October 03, 2011 11:04 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Importance: High

The SECY paper with the staff's recommendations for the prioritization of the Japan Task Force recommendations is with the EDO for signature. Once SECY receives the signed copy it will send an advance copy to the Commission offices.

SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Tuesday, October 11.

Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sosa, Belkys
Sent: Monday, October 03, 2011 12:03 PM
To: Gilles, Nanette
Cc: Davis, Roger; Baggett, Steven
Subject: Re: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Gilles, Nanette
To: Sosa, Belkys
Cc: Davis, Roger; Baggett, Steven
Sent: Mon Oct 03 11:32:38 2011
Subject: FW: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Laufer, Richard
Sent: Monday, October 03, 2011 11:04 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.
Importance: High

The SECY paper with the staff's recommendations for the prioritization of the Japan Task Force recommendations is with the EDO for signature. Once SECY receives the signed copy it will send an advance copy to the Commission offices.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

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Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sosa, Belkys
Sent: Tuesday, October 04, 2011 4:54 AM
To: Gilles, Nanette
Cc: Davis, Roger; Baggett, Steven; Apostolakis, George; Savoy, Carmel
Subject: Query: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Did we get a copy of the paper yet?

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Gilles, Nanette
To: Sosa, Belkys
Cc: Davis, Roger; Baggett, Steven
Sent: Mon Oct 03 11:32:38 2011
Subject: FW: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Laufer, Richard
Sent: Monday, October 03, 2011 11:04 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.
Importance: High

The SECY paper with the staff's recommendations for the prioritization of the Japan Task Force recommendations is with the EDO for signature. Once SECY receives the signed copy it will send an advance copy to the Commission offices.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Tuesday, October 11.

Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Sent: Tuesday, October 04, 2011 11:37 AM
To: Sosa, Belkys
Cc: Davis, Roger
Subject: FW: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations
Attachments: 111011 Japan Prioritization Scheduling Note Version-VER B-One Staff Panel.docx; Wilmshurst, Neil_bio-2010-04.pdf
Importance: High

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180

Email: nanette.gilles@nrc.gov

From: Baval, Rochelle

Sent: Tuesday, October 04, 2011 11:26 AM

To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William

Subject: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

Attached is an updated scheduling note for the October 11th Commission meeting on Japan NTTF Report – Prioritization of Recommendations which shows both external panels in the morning and the staff panel in the afternoon and includes an additional industry representative, which the Chairman has approved.

(b)(5)

Thank you,
Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

SCHEDULING NOTE

Title: **BRIEFING ON THE JAPAN NEAR TERM TASK FORCE REPORT
– PRIORITIZATION OF RECOMMENDATIONS (Public)**

Purpose: To provide the Commission with a discussion of the staff's recommendations and external stakeholders' input on the prioritization of regulatory actions to be taken by the staff to respond to the Japan Near Term Task Force (NTTF) report and longer term evaluations to facilitate Commission voting on the notation vote paper providing staff's recommendations.

Scheduled: **October 11, 2011
9:00 am and 1:00pm**

Duration: **Approx. 5 hours**

Location: **Commissioners' Conference Room, 1st floor OWFN**

Morning Session

External Panel 1 **25 mins.***

**William Leith, Earthquake Hazards Program Coordinator,
U. S. Geological Survey
[Recommendation 2 – seismic hazards]** **5 mins.***

**Christopher Paine, Natural Resources Defense Council
[NGO general comments on Recommendations 2, 3, 4, 5, 6, 7, 8]** **5 mins.***

**Charles Pardee, Chairman, Industry Fukushima Response Steering
Committee and Chief Operating Officer, Exelon Generation
[Recommendations 2- licensee evaluation of seismic and flooding hazards; 3-
seismically induced fires and floods; 4 – licensee SBO coping and 50.54(hh) equipment
readiness; 5 – hardened vents; 6 – hydrogen control and mitigation; 7 – spent fuel
pools; and 8 – EOPs, SAMGs, EDMGs]** **5 mins.***

**Ed Lyman, Senior Staff Scientist, Union of Concerned Scientists
[NGO general comments on Recommendations 2, 3, 4, 5, 6, 7, 8]** **5 mins.***

**Neil Wilmshurst, Vice President and Chief Nuclear Officer,
Electric Power Research Institute
[Recommendations 2, 3, 4, 5, 6, 7, 8]** **5 mins.***

~~NOT FOR PUBLIC DISCLOSURE~~

Topic: Input on prioritization of the Japan NTTF recommendations related to Ensuring Protection and Enhancing Mitigation, including regulatory actions to be taken by the staff, implementation challenges, technical and regulatory bases for the prioritization and any additional recommendations. The panelists will address specific NTTF recommendations as indicated, as well as any general comments on protection and mitigation issues.

Commission Q & A	50 mins.
Break	5 mins.
<u>External Panel 2</u>	20 mins.
Sue Perkins-Grew, EP Director, Nuclear Energy Institute [Industry input on Recommendation 9, 10 and 11 issues]	5 mins.*
Patrick Mulligan, State of New Jersey and Federal Radiological Preparedness Coordinating Committee [Input on Recommendation 9, 10 and 11 related to offsite resources and communications]	5 mins.*
Timothy Greten, FEMA, Deputy Director, Technological Hazards Division [Federal agency input on Recommendation 9 related to offsite resources and communications]	5 mins.*
Deborah Brancato, Staff Attorney, Riverkeeper [NGO general comments on recommendations 9, 10 and 11]	5 mins.*
<p><u>Topic:</u> Input on prioritization of the Japan NTTF recommendations related to Emergency Preparedness, including regulatory actions to be taken by the staff, implementation challenges, technical and regulatory bases for the prioritization and any additional recommendations.</p>	
Commission Q & A	50 mins.
Lunch Break (11:30 a.m. – 1:00 p.m.)	1 hour and 35 minutes.

~~NOT FOR PUBLIC DISCLOSURE~~

~~Afternoon Session NOT FOR PUBLIC DISCLOSURE~~

NRC Staff Panel

60 mins.

Bill Borchardt, Executive Director for Operations

Eric Leeds, Director, Office of Nuclear Reactor Regulation

Jim Wiggins, Director, Office of Nuclear Security and Incident Response

(Steering committee members will be seated in the well.)

Topic: Recommendations of prioritization of the Japan NTF recommendations related to Ensuring Protection, Enhancing Mitigation, and Emergency Preparedness including regulatory actions to be taken by the staff, implementation challenges, technical and regulatory bases for the prioritization and any additional recommendations.

Commission Q & A

50 mins.

Discussion – Wrap-up

5 mins.

*For presentation only and does not include time for Commission Q & As

Documents:

- SECY11-0137, Prioritization of Recommended Actions to be Taken in Response to Fukushima Lessons Learned, October 3, 2011.

Slides due to SECY: October 3, 2011.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~
~~Sosa, Belkys~~

From: Sosa, Belkys
Sent: Tuesday, October 04, 2011 12:05 PM
To: Gilles, Nanette
Cc: Davis, Roger
Subject: Re: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Gilles, Nanette
To: Sosa, Belkys
Cc: Davis, Roger
Sent: Tue Oct 04 11:37:16 2011
Subject: FW: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

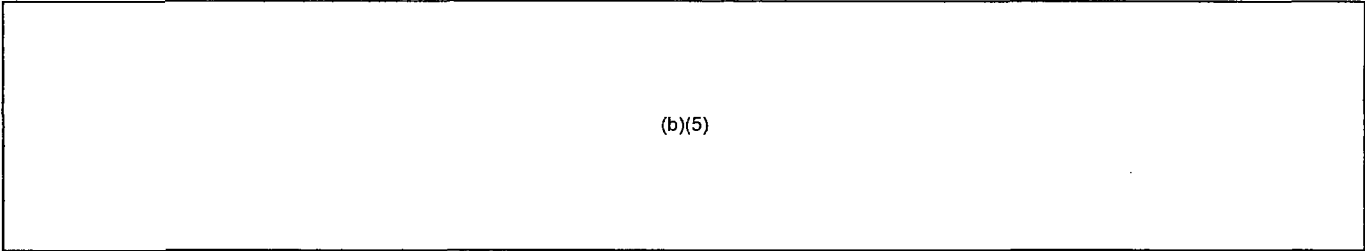
Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Baval, Rochelle
Sent: Tuesday, October 04, 2011 11:26 AM
To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

Attached is an updated scheduling note for the October 11th Commission meeting on Japan NTTF Report – Prioritization of Recommendations which shows both external panels in the morning and the staff panel in the afternoon and includes an additional industry representative, which the Chairman has approved.

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

Thank you,
Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Reddick, Darani
Sent: Tuesday, October 04, 2011 5:14 PM
To: Bavol, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

(b)(5)

Thanks,
Darani

From: Bavol, Rochelle
Sent: Tuesday, October 04, 2011 11:26 AM
To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Bavol, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Baggett, Steven; Bavol, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

Attached is an updated scheduling note for the October 11th Commission meeting on Japan NTTF Report – Prioritization of Recommendations which shows both external panels in the morning and the staff panel in the afternoon and includes an additional industry representative, which the Chairman has approved.

(b)(5)

Thank you,
Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Nieh, Ho
Sent: Tuesday, October 04, 2011 5:24 PM
To: Bavol, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

Commissioner Ostendorff approves the changes to the scheduling note.

Thanks,

Ho

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

From: Bavol, Rochelle
Sent: Tuesday, October 04, 2011 11:26 AM
To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Bavol, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Baggett, Steven; Bavol, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

Attached is an updated scheduling note for the October 11th Commission meeting on Japan NTTF Report – Prioritization of Recommendations which shows both external panels in the morning and the staff panel in the afternoon and includes an additional industry representative, which the Chairman has approved.

(b)(5)

Thank you,
Rochelle

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Nieh, Ho
Sent: Tuesday, October 04, 2011 5:25 PM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Commissioner Ostendorff approves early public release.

Thanks,

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6)

(mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

From: Laufer, Richard

Sent: Monday, October 03, 2011 11:04 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Importance: High

The SECY paper with the staff's recommendations for the prioritization of the Japan Task Force recommendations is with the EDO for signature. Once SECY receives the signed copy it will send an advance copy to the Commission offices.

SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Tuesday, October 11.

~~NOT FOR PUBLIC DISCLOSURE~~

Please let SECY know if your office supports the early release of this paper.

anks,
ch

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Batkin, Joshua
Sent: Tuesday, October 04, 2011 5:29 PM
To: Sosa, Belkys
Cc: Gilles, Nanette
Subject: Fw: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Hey - I know you're far away, but can you guys please weigh in on this one? We need to get this paper out to stakeholders asap! Thanks Josh

Joshua C. Batkin
Chief of Staff
Chairman Gregory B. Jaczko
(301) 415-1820

From: Nieh, Ho
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggittis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Cole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, A; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Sent: Tue Oct 04 17:24:30 2011
Subject: RE: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Commissioner Ostendorff approves early public release.

Thanks,

Ho

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

From: Laufer, Richard
Sent: Monday, October 03, 2011 11:04 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggittis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet;

~~NOT FOR PUBLIC DISCLOSURE~~

Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Importance: High

The SECY paper with the staff's recommendations for the prioritization of the Japan Task Force recommendations is with the EDO for signature. Once SECY receives the signed copy it will send an advance copy to the Commission offices.

SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Tuesday, October 11.

Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Bubar, Patrice
Sent: Tuesday, October 04, 2011 5:29 PM
To: Baval, Rochelle; Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Baggett, Steven; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: RE: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

Commissioner Magwood approves the revised scheduling note

(b)(5)

(b)(5)

Patty Bubar
 Chief of Staff
 Office of Commissioner William D. Magwood
 U.S. Nuclear Regulatory Commission
 301-415-1895

From: Baval, Rochelle
Sent: Tuesday, October 04, 2011 11:26 AM
To: Svinicki, Kristine; Montes, David; Bates, Andrew; Batkin, Joshua; Bubar, Patrice; Bupp, Margaret; Chairman Temp; Clark, Lisa; Coggins, Angela; Davis, Roger; Dhir, Neha; Hart, Ken; Laufer, Richard; Loyd, Susan; Monninger, John; Nieh, Ho; Reddick, Darani; Baval, Rochelle; Rothschild, Trip; Joosten, Sandy; Sexton, Kimberly; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Burns, Stephen; Vietti-Cook, Annette; Warren, Roberta; Baggett, Steven; Baval, Rochelle; Bradford, Anna; Castleman, Patrick; Kock, Andrea; Lisann, Elizabeth; Tadesse, Rebecca; Franovich, Mike; Gilles, Nanette; Hipschman, Thomas; Batkin, Joshua; Marshall, Michael; Orders, William
Subject: Reply Requested: Scheduling Note for October 11th Commission Meeting on Japan NTTF Report - Prioritization of Recommendations

Attached is an updated scheduling note for the October 11th Commission meeting on Japan NTTF Report – Prioritization of Recommendations which shows both external panels in the morning and the staff panel in the afternoon and includes an additional industry representative, which the Chairman has approved.

(b)(5)

Thank you,
Rochelle

Gilles, Nanette

m: Gilles, Nanette
at: Tuesday, October 04, 2011 5:36 PM
to: Sosa, Belkys
Subject: RE: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Batkin, Joshua
Sent: Tuesday, October 04, 2011 5:29 PM
To: Sosa, Belkys
Cc: Gilles, Nanette
Subject: Fw: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

...y - I know you're far away, but can you guys please weigh in on this one? We need to get this paper out to stakeholders asap! Thanks Josh

Joshua C. Batkin
Chief of Staff
Chairman Gregory B. Jaczko
(301) 415-1820

From: Nieh, Ho
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Camel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Sent: Tue Oct 04 17:24:30 2011
Subject: RE: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Commissioner Ostendorff approves early public release.

anks,

Ho

~~NOT FOR PUBLIC DISCLOSURE~~

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

From: Laufer, Richard

Sent: Monday, October 03, 2011 11:04 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Importance: High

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SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Tuesday, October 11.

Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sosa, Belkys
Sent: Wednesday, October 05, 2011 12:57 AM
To: Gilles, Nanette
Subject: Re: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Ok

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Gilles, Nanette
To: Sosa, Belkys
Sent: Tue Oct 04 17:36:21 2011
Subject: RE: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
Commissioner Apostolakis
U.S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Batkin, Joshua
Sent: Tuesday, October 04, 2011 5:29 PM
To: Sosa, Belkys
Cc: Gilles, Nanette
Subject: Fw: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Hey - I know you're far away, but can you guys please weigh in on this one? We need to get this paper out to stakeholders asap! Thanks Josh

Joshua C. Batkin
Chief of Staff
Chairman Gregory B. Jaczko
(301) 415-1820

From: Nieh, Ho
To: Laufer, Richard; Baggett, Steven; Bovol, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Statti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Reddick, Darani; Sexton, Kimberly; Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden,

~~NOT FOR PUBLIC DISCLOSURE~~

Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

sent: Tue Oct 04 17:24:30 2011

subject: RE: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Commissioner Ostendorff approves early public release.

Thanks,

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6)

(mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

From: Laufer, Richard

Sent: Monday, October 03, 2011 11:04 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly.

Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Fair, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Importance: High

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SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Tuesday, October 11.

Please let SECY know if your office supports the early release of this paper.

Thanks,

Rich

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Sent: Wednesday, October 05, 2011 7:24 AM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Commissioner Apostolakis approves early release of the SECY paper to allow time for stakeholder's to review it prior to Tuesday's Commission meeting.

From: Laufer, Richard

Sent: Monday, October 03, 2011 11:04 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Importance: High

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Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Bubar, Patrice
nt: Wednesday, October 05, 2011 10:16 AM
To: Laufer, Richard; Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

Commissioner Magwood supports early public release of SECY-11-0137 – to allow stakeholders to be familiar with the document before the Commission meeting next week.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
1-415-1895

From: Laufer, Richard
Sent: Monday, October 03, 2011 11:04 AM
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.
Importance: High

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SECY is requesting early public release of this SECY paper to allow time for stakeholder's to review it prior to the Commission meeting on Tuesday, October 11.

Please let SECY know if your office supports the early release of this paper.

Thanks,
Rich

51 ~~NOT FOR PUBLIC DISCLOSURE~~

FM 2873 of 2929 740

Sosa, Belkys

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sharkey, Jeffry
nt: Wednesday, October 05, 2011 10:46 AM
J: Laufer, Richard; Baggett, Steven; Bovol, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Lisann, Elizabeth; Marshall, Michael; Orders, William; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: RE: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.

(b)(5)

Thanks,

Jeff

om: Laufer, Richard
nt: Monday, October 03, 2011 11:04 AM
o: Baggett, Steven; Bovol, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffry; Shea, Pamela; Vietti-Cook, Annette; Bradford, Anna; Kock, Andrea; Tadesse, Rebecca; Ammon, Bernice; Bupp, Margaret; Burns, Stephen; Clark, Lisa; Coggins, Angela; Davis, Roger; Nieh, Ho; Reddick, Darani; Sexton, Kimberly
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Chairman Temp; Crawford, Carrie; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Olive, Karen; Pace, Patti; Poole, Brooke; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Subject: Early Public release of SECY paper on Prioritization of Japan Task Force recommendations.
Importance: High

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Please let SECY know if your office supports the early release of this paper.

Thanks,
:h

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Field

October 6, 2011

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Annette L. Vietti-Cook, Secretary /s/

SUBJECT: DRAFT STAFF REQUIREMENTS MEMORANDUM
SECY-11-0124 – RECOMMENDED ACTIONS TO BE TAKEN
WITHOUT DELAY FROM THE NEAR-TERM TASK FORCE
REPORT

(b)(5)

Attachment:
As stated

cc: EDO
OGC

NOT FOR PUBLIC DISCLOSURE

FM 2875 of 2929 725

~~NOT FOR PUBLIC DISCLOSURE~~

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – SECY-11-0124 – RECOMMENDED
ACTIONS TO BE TAKEN WITHOUT DELAY FROM THE NEAR-
TERM TASK FORCE REPORT

(b)(5)

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

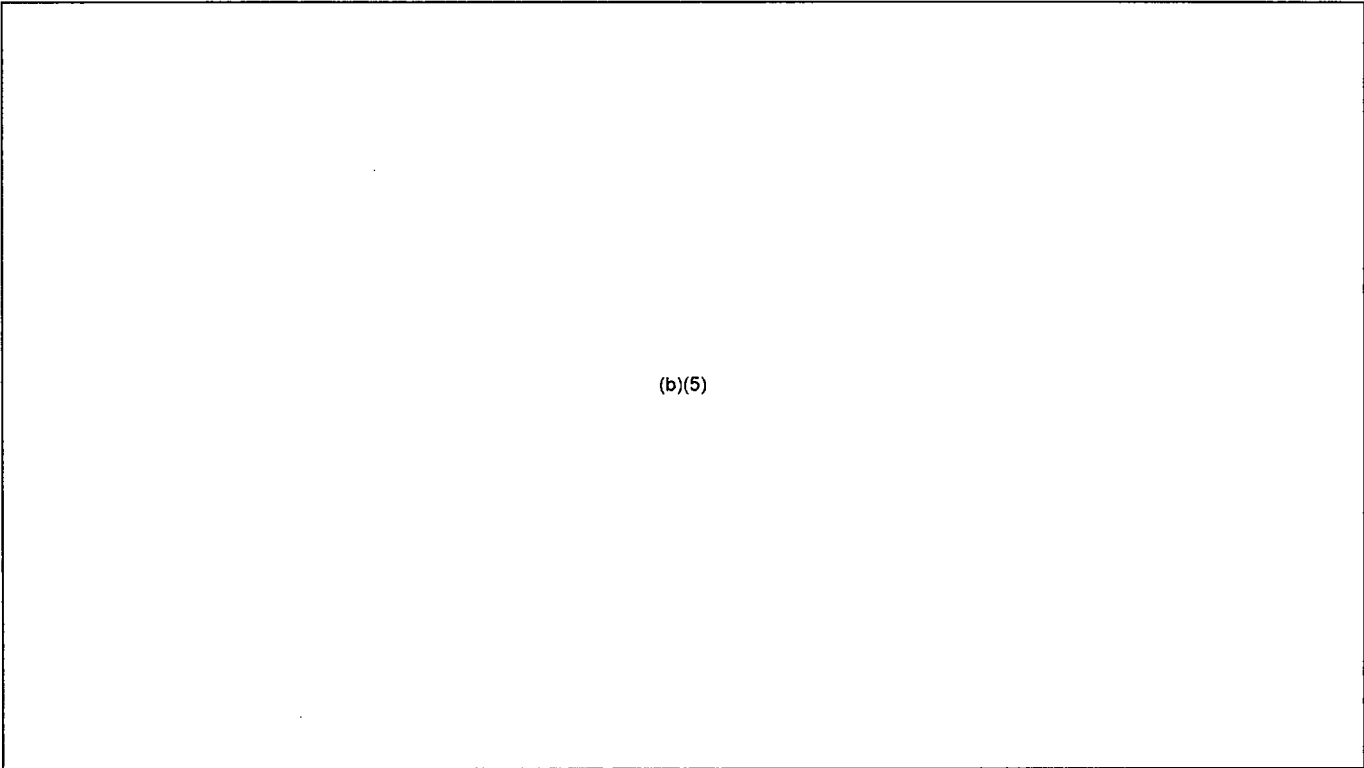
**Additional Commissioner Comments to be Included in the SRM
if Agreed to by a Majority of the Commission**

[Empty rectangular box for comments]

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~



(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Filename: 11-0124 srm GA.docx
Directory: P:
Template: C:\Documents and Settings\nvg\Application
Data\Microsoft\Templates\Normal.dotm
Title:
Subject:
Author: Kenneth R. Hart
Keywords:
Comments:
Creation Date: 10/10/2011 11:56:00 AM
Change Number: 4
Last Saved On: 10/10/2011 12:10:00 PM
Last Saved By: gea
Total Editing Time: 18 Minutes
Last Printed On: 12/2/2011 11:52:00 AM
As of Last Complete Printing
Number of Pages: 4
Number of Words: 940 (approx.)
Number of Characters: 5,364 (approx.)

~~NOT FOR PUBLIC DISCLOSURE~~

10/10/2011

~~NOT FOR PUBLIC DISCLOSURE~~

Field Code Changed

October 6, 2011

MEMORANDUM TO: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff

FROM: Annette L. Vietti-Cook, Secretary /s/

SUBJECT: DRAFT STAFF REQUIREMENTS MEMORANDUM
SECY-11-0124 - RECOMMENDED ACTIONS TO BE TAKEN
WITHOUT DELAY FROM THE NEAR-TERM TASK FORCE
REPORT

(b)(5)

Attachment:
As stated

cc: EDO
OGC

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: STAFF REQUIREMENTS – SECY-11-0124 – RECOMMENDED
ACTIONS TO BE TAKEN WITHOUT DELAY FROM THE NEAR-
TERM TASK FORCE REPORT

(b)(5)

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

**Additional Commissioner Comments to be Included in the SRM
if Agreed to by a Majority of the Commission**

(b)(5)

(b)(5)

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Batkin, Joshua
Content: Tuesday, October 11, 2011 2:33 PM
:
Batkin, Joshua; Nieh, Ho; Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys; Vietti-Cook, Annette; Rothschild, Trip
Cc: Speiser, Herald; Coggins, Angela
Subject: RE: CoS mtg. today

The Commissioners got done early but here are my notes from this morning's 830. Please let me know if you have any questions:

Bill

- DOS revised its travel advisory around Fukushima to 20km
- Palo Verde had a U/E over the weekend - a suspected explosion turned out to be water in a junction box and they exited
- Honeywell had a HF leak too small to be reportable
- NY IMPEP -- the program will remain under heightened oversight

Becky

(b)(5)

Scott

- a group of Japanese Diet members are visiting DC and will meet with senior managers and get an ops center tour at the NRC tomorrow

Annette

- Diablo and Shieldalloy ready for affirmation tomorrow morning

Steve

- nothing today

Eliot

- Clips

Jim

(b)(5)

- spoke with Senate Appropriations staff last week about 2012 bill

Thanks,
Josh

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

From: Batkin, Joshua
Sent: Tuesday, October 11, 2011 8:11 AM
To: Nieh, Ho; Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys; Vietti-Cook, Annette; Rothschild, Trip
Cc: Speiser, Herald; Coggins, Angela
Subject: CoS mtg. today

~~NOT FOR PUBLIC DISCLOSURE~~

I think its going to be pretty tough to find time to meet today and tomorrow with the back-to-back all-day Commission meetings. Let me see how much comes up at 830 and maybe I can just email some info around.
Thanks Josh

shua C. Batkin
Chief of Staff
Chairman Gregory B. Jaczko
(301) 415-1820

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sosa, Belkys
nt: Tuesday, October 11, 2011 6:23 PM
: Apostolakis, George; Gilles, Nanette; Davis, Roger; Baggett, Steven
Subject: FYI: CoS mtg. today

Please refer to the following summary of the morning events briefing. Thanks, - Belkys

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

From: Batkin, Joshua
Sent: Tuesday, October 11, 2011 2:33 PM
To: Batkin, Joshua; Nieh, Ho; Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys; Vietti-Cook, Annette; Rothschild, Trip
Cc: Speiser, Herald; Coggins, Angela
Subject: RE: CoS mtg. today

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ckky

(b)(5)

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- Diablo and Shieldalloy ready for affirmation tomorrow morning

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Jim

(b)(5)

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Thanks,
sh

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Sent: Tuesday, October 11, 2011 8:11 AM

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: Speiser, Herald; Coggins, Angela

Subject: CoS mtg. today

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Thanks Josh

Joshua C. Batkin
Chief of Staff
Chairman Gregory B. Jaczko
(301) 415-1820

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

**CHARTER FOR THE NUCLEAR REGULATORY COMMISSION TASK FORCE
TO CONDUCT A NEAR-TERM EVALUATION OF THE NEED FOR AGENCY ACTIONS
FOLLOWING THE EVENTS IN JAPAN**

Objective

The objective of this task force is to conduct a methodical and systematic review of relevant NRC regulatory requirements, programs, and processes, and their implementation, to recommend whether the agency should make near-term improvements to our regulatory system. This task force will also identify a framework and topics for review and assessment for the longer-term effort.

Scope

The task force review will include the following:

- a. A near-term review to:
 - Evaluate currently available technical and operational information from the events that have occurred at the Fukushima Daiichi nuclear complex in Japan to identify potential or preliminary near-term/immediate operational or regulatory actions affecting domestic reactors of all designs, including their spent fuel pools. The task force will evaluate, at a minimum, the following technical issues and determine priority for further examination and potential agency action:
 - External event issues (e.g. seismic, flooding, fires, severe weather)
 - Station blackout
 - Severe accident measures (e.g., combustible gas control, emergency operating procedures, severe accident management guidelines)
 - 10 CFR 50.54 (hh)(2) which states, "Each licensee shall develop and implement guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with loss of large areas of the plant due to explosions or fire, to include strategies in the following areas: (i) Fire fighting; (ii) Operations to mitigate fuel damage; and (iii) Actions to minimize radiological release." Also known as B.5.b.
 - Emergency preparedness (e.g., emergency communications, radiological protection, emergency planning zones, dose projections and modeling, protective actions)
 - Develop recommendations, as appropriate, for potential changes to NRC's regulatory requirements, programs, and processes, and recommend whether generic communications, orders, or other regulatory actions are needed.

~~NOT FOR PUBLIC DISCLOSURE~~

ENCLOSURE

- b. Recommendations for the content, structure, and estimated resource impact for the longer-term review.

Coordination and Communications

The near-term task force will:

- Solicit stakeholder input as appropriate, but remain independent of industry efforts.
- Coordinate and cooperate where applicable with other domestic and international efforts reviewing the events in Japan for additional insights.
- Provide recommendations to the Commission for any immediate policy issues identified prior to completion of the near-term review.
- Provide recommendations to program offices for any immediate actions not involving policy issues, prior to completion of the near-term review.
- Identify resource implications of near-term actions.
- Consider information gained from Temporary Instruction 2515/183, "Followup to the Fukushima Daiichi Nuclear Station Fuel Damage Events."
- Develop a communications plan.
- Update and brief internal stakeholders, as appropriate.

Expected Product and Schedule

The task force will provide its observations, conclusions, and recommendations in the form of a written report to the Deputy Executive Director for Reactor and Preparedness Programs at the completion of the 90-day near-term review.

During the development of its report, the task force will brief the Commission on the status of the review at approximately the 30- and 60-day points.

The report will be transmitted to the Commission via a SECY paper, and the task force will brief the Commission on the results of the near-term effort at approximately the 90-day point. The report will be released to the public via normal Commission processes.

The task force will recommend a framework for a longer-term review as a part of the near-term report. The longer-term review will begin as soon as the NRC has sufficient technical information from the events in Japan (with a goal of beginning by the end of the near-term review).

~~NOT FOR PUBLIC DISCLOSURE~~

Staffing

The task force will consist of the following members:

Leader	Charles Miller	FSME
Senior Managers	Daniel Dorman	NMSS
	Jack Grobe	NRR
	Gary Holahan	NRO
	Amy Cabbage	NRO
Senior Staff	Nathan Sanfilippo	OEDO
Administrative Assistant	Cynthia Davidson	OGC

Additional task force members will be added as needed. For the near-term review, other staff members may be consulted on a part-time basis.

EDO Interface

The task force will keep agency leadership informed on the status of the effort and provide early identification of significant findings. The task force will report to Martin J. Virgilio, Deputy Executive Director for Reactor and Preparedness Programs.

~~NOT FOR PUBLIC DISCLOSURE~~

Gilles, Nanette

From: Gilles, Nanette
Sent: Wednesday, October 12, 2011 8:36 AM
To: Nieh, Ho
Subject: RE: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Nieh, Ho
Sent: Wednesday, October 12, 2011 7:54 AM
To: Gilles, Nanette
Subject: RE: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

Never mind (b)(5)

Thanks.

Ho

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

From: Nieh, Ho
Sent: Wednesday, October 12, 2011 7:53 AM
To: Gilles, Nanette
Subject: FW: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

Hi Nan – can you help me understand why (b)(5)

I am hoping to talk with WCO today about the SRM.

Thanks.

Ho

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)
(b)(6) (mobile)
(301) 415-1757 (fax)
ho.nieh@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

From: Gilles, Nanette

Sent: Tuesday, October 11, 2011 5:39 PM

To: Wright, Darlene; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Sexton, Kimberly; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: RE: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180

Email: nanette.gilles@nrc.gov

From: Wright, Darlene

Sent: Thursday, October 06, 2011 4:44 PM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Sexton, Kimberly; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

The attached file contains a draft SRM which is being circulated for the normal 3-day period for Commission review. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review the SRM to ensure that the Commission decision is clear and understandable and that resource, scheduler, and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Jfer (RJL), Rochelle Baval (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Gilles, Nanette
Sent: Thursday, October 13, 2011 5:26 PM
To: Mitchell-Funderburk, Natalie; Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Wright, Darlene; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Sexton, Kimberly; Riddick, Nicole; Frazier, Alan
Cc: Wright, Darlene
Subject: RE: DRAFT SRM - Briefing on the Japan Near Term Task Force Report- Prioritization of Recommendations (SECY-11-0137) on 10/11/11
Attachments: image001.gif

(b)(5)

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U.S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Mitchell-Funderburk, Natalie
Sent: Tuesday, October 11, 2011 4:01 PM
To: Baggett, Steven; Mitchell-Funderburk, Natalie; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Wright, Darlene; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Sexton, Kimberly; Riddick, Nicole; Frazier, Alan
Cc: Wright, Darlene
Subject: DRAFT SRM - Briefing on the Japan Near Term Task Force Report- Prioritization of Recommendations (SECY-11-0137) on 10/11/11

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Natalie Mitchell-Funderburk

U.S. Nuclear Regulatory Commission
Office of the Secretary of the Commission
11555 Rockville Pike
Rockville, MD 20852
Mailstop: O-16G4
Phone: (301) 415-1968
Fax: (301) 415-1101
Natalie.Mitchell-Funderurk@nrc.gov



Davis, Roger

From: Gilles, Nanette
Sent: Friday, October 14, 2011 2:32 PM
To: Sosa, Belkys; Apostolakis, George; Baggett, Steven; Davis, Roger
Subject: Re: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

(b)(5)

Sent from my NRC Blackberry

From: Sosa, Belkys
To: Apostolakis, George; Baggett, Steven; Davis, Roger; Gilles, Nanette
Sent: Fri Oct 14 10:18:38 2011
Subject: Fw: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Laufer, Richard
To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Sent: Fri Oct 14 06:27:01 2011
Subject: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

Please note below the GBJ extension request in which to respond to the subject draft SRM. Assuming there are no objections, the extension will be granted. Any office having an objection should notify SECY.

Thanks,
Rich

From: Marshall, Michael
Sent: Thursday, October 13, 2011 5:08 PM
To: Hart, Ken; Laufer, Richard
Cc: Coggins, Angela; Batkin, Joshua; Monninger, John; Baval, Rochelle; Shea, Pamela
Subject: RE: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

~~NOT FOR PUBLIC DISCLOSURE~~

Hello Ken and Rich,

The Chairman's office requests an extension until Friday, October 21, 2011.

Michael L. Marshall, Jr.
Policy Advisor for Reactors
Office of the Chairman
U.S. Nuclear Regulatory Commission

Phone: 301-415-1750

Email: michael.marshall@nrc.gov

From: Wright, Darlene

Sent: Thursday, October 06, 2011 4:44 PM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Bavol, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Spelser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Sexton, Kimberly; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

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~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Baggett, Steven
Sent: Friday, October 14, 2011 2:59 PM
To: Davis, Roger
Subject: Re: FYI: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

Roger,

(b)(5)

Steve

From: Davis, Roger
To: Sosa, Belkys; Apostolakis, George; Baggett, Steven; Gilles, Nanette
Sent: Fri Oct 14 14:27:29 2011
Subject: RE: FYI: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

(b)(5)

(b)(5)

From: Sosa, Belkys
Sent: Friday, October 14, 2011 11:25 AM
To: Apostolakis, George; Baggett, Steven; Davis, Roger; Gilles, Nanette
Subject: Fw: FYI: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

Fyi

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Sharkey, Jeffry
To: Bubar, Patrice; Nieh, Ho; Sosa, Belkys
Sent: Fri Oct 14 11:21:31 2011
Subject: FYI: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

(b)(5)

(b)(5)

Jeff

From: Laufer, Richard

Sent: Friday, October 14, 2011 6:27 AM

To: Baggett, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette

Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

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Thanks,
Rich

From: Marshall, Michael

Sent: Thursday, October 13, 2011 5:08 PM

To: Hart, Ken; Laufer, Richard

Cc: Coggins, Angela; Batkin, Joshua; Monninger, John; Baval, Rochelle; Shea, Pamela

Subject: RE: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

~~NOT FOR PUBLIC DISCLOSURE~~

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The Chairman's office requests an extension until Friday, October 21, 2011.

Michael L. Marshall, Jr.
Policy Advisor for Reactors
Office of the Chairman
U.S. Nuclear Regulatory Commission

Phone: 301-415-1750
Email: michael.marshall@nrc.gov

From: Wright, Darlene

Sent: Thursday, October 06, 2011 4:44 PM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Bovol, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffry; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Sexton, Kimberly; Riddick, Nicole
Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

The attached file contains a draft SRM which is being circulated for the normal 3-day period for Commission review. As provided in the Internal Commission Procedures, the staff is "...afforded an opportunity to review the SRM to ensure that the Commission decision is clear and understandable and that resource, schedular, and legal constraints are properly considered." Please provide any responses to Ken Hart (KRH), Richard Laufer (RJL), Rochelle Bovol (RCB5), and Pam Shea (PWS).

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Sosa, Belkys
Sent: Friday, October 14, 2011 10:19 AM
To: Apostolakis, George; Baggett, Steven; Davis, Roger; Gilles, Nanette
Subject: Fw: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

(b)(5)

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Laufer, Richard
To: Baggett, Steven; Bovol, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette
Cc: Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene
Sent: Fri Oct 14 06:27:01 2011
Subject: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

Please note below the GBJ extension request in which to respond to the subject draft SRM. Assuming there are no objections, the extension will be granted. Any office having an objection should notify SECY.

Thanks,
Rich

From: Marshall, Michael
Sent: Thursday, October 13, 2011 5:08 PM
To: Hart, Ken; Laufer, Richard
Cc: Coggins, Angela; Batkin, Joshua; Monninger, John; Bovol, Rochelle; Shea, Pamela
Subject: RE: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

Hello Ken and Rich,

The Chairman's office requests an extension until Friday, October 21, 2011.

Michael L. Marshall, Jr.
Policy Advisor for Reactors
Office of the Chairman
U.S. Nuclear Regulatory Commission

Phone: 301-415-1750
Email: michael.marshall@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

From: Wright, Darlene

Sent: Thursday, October 06, 2011 4:44 PM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Sexton, Kimberly; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

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Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sosa, Belkys
Date: Friday, October 14, 2011 11:25 AM
To: Apostolakis, George; Baggett, Steven; Davis, Roger; Gilles, Nanette
Subject: Fw: FYI: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

Fyi

Sent from an NRC Blackberry
Belkys Sosa

(b)(6)

From: Sharkey, Jeffrey
To: Bubar, Patrice; Nieh, Ho; Sosa, Belkys
Sent: Fri Oct 14 11:21:31 2011
Subject: FYI: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

(b)(5)

From: Laufer, Richard
Sent: Friday, October 14, 2011 6:27 AM

1 ~~NOT FOR PUBLIC DISCLOSURE~~

FM 2902 of 2929 7/3

To: Baggètt, Steven; Baval, Rochelle; Castleman, Patrick; Franovich, Mike; Gilles, Nanette; Hart, Ken; Hipschman, Thomas; Batkin, Joshua; Laufer, Richard; Lisann, Elizabeth; Marshall, Michael; Orders, William; Sharkey, Jeffrey; Shea, Pamela; Vietti-Cook, Annette

Armstrong, Janine; Batkin, Joshua; Blake, Kathleen; Bozin, Sunny; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Crawford, Carrie; Davis, Roger; Dhir, Neha; Doane, Margaret; Droggitis, Spiros; EDO_ETAs; Fopma, Melody; Gibbs, Catina; Greathead, Nancy; Hayden, Elizabeth; Henderson, Karen; Herr, Linda; Hudson, Sharon; Jimenez, Patricia; Joosten, Sandy; KLS Temp; Lepre, Janet; Loyd, Susan; Mitchell-Funderburk, Natalie; Monninger, John; Montes, David; Moore, Scott; Nieh, Ho; Olive, Karen; Pace, Patti; Poole, Brooke; Reddick, Darani; Riddick, Nicole; Rothschild, Trip; Savoy, Carmel; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Warren, Roberta; Wright, Darlene

Subject: GBJ extension request to respond to DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

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Thanks,
Rich

From: Marshall, Michael

Sent: Thursday, October 13, 2011 5:08 PM

To: Hart, Ken; Laufer, Richard

Cc: Coggins, Angela; Batkin, Joshua; Monninger, John; Baval, Rochelle; Shea, Pamela

Subject: RE: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

Hello Ken and Rich,

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Michael L. Marshall, Jr.
Policy Advisor for Reactors
Office of the Chairman
U.S. Nuclear Regulatory Commission

Phone: 301-415-1750

Email: michael.marshall@nrc.gov

From: Wright, Darlene

Sent: Thursday, October 06, 2011 4:44 PM

To: Baggett, Steven; Bates, Andrew; Batkin, Joshua; Baval, Rochelle; Blake, Kathleen; Bozin, Sunny; Bradford, Anna; Bubar, Patrice; Bupp, Margaret; Burns, Stephen; Chairman Temp; Clark, Lisa; Coggins, Angela; Cordes, John; Crawford, Carrie; Davis, Roger; Fopma, Melody; Franovich, Mike; Gibbs, Catina; Hackett, Edwin; Hart, Ken; Henderson, Karen; Herr, Linda; Hipschman, Thomas; Hudson, Sharon; Joosten, Sandy; KLS Temp; Kock, Andrea; Laufer, Richard; Lepre, Janet; Loyd, Susan; Mamish, Nader; Marshall, Michael; Monninger, John; Moore, Scott; Orders, William; Pace, Patti; Poole, Brooke; Reddick, Darani; RidsEdoDraftSrmVote Resource; Rothschild, Trip; Savoy, Carmel; Sharkey, Jeffrey; Shea, Pamela; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Temp, GEA; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Warren, Roberta; Tadesse, Rebecca; Joosten, Sandy; Castleman, Patrick; Montes, David; Dhir, Neha; Jimenez, Patricia; Nieh, Ho; Ostendorff, William; Apostolakis, George; Lui, Christiana; Lisann, Elizabeth; Golder, Jennifer; Gilles, Nanette; Sexton, Kimberly; Riddick, Nicole

Cc: Mitchell-Funderburk, Natalie

Subject: DRAFT SRM - SECY-11-0124 (Near-Term Task force Report)

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~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Sharkey, Jeffry
Date: Monday, October 17, 2011 9:53 AM
To: Bubar, Patrice; Nieh, Ho; Sosa, Belkys
Subject: Fw: NRC News Summary for Friday, October 14, 2011

FYI

I also spoke with Frank A-Z. He had nothing more to add. Frank asserts that AP 1000 is top priority.

From: Sharkey, Jeffry
To: Burnell, Scott
Cc: Brenner, Eliot
Sent: Fri Oct 14 14:43:44 2011
Subject: RE: NRC News Summary for Friday, October 14, 2011

Thanks for the clarification, Scott. Very helpful.

Jeff

From: Burnell, Scott
Sent: Friday, October 14, 2011 2:39 PM
To: Sharkey, Jeffry
Cc: Brenner, Eliot
Subject: RE: NRC News Summary for Friday, October 14, 2011

Hi Jeff;

My conversation with the Wilmington paper yesterday on the ESBWR included this main point – The NRC's current new reactor resource priorities are the AP1000 design certification and the associated Combined Licenses; wrapping up the ESBWR design certification will follow those activities. In hindsight I obviously should have reiterated how the agency issued its Final Design Approval for the ESBWR back in very early March.

The conversation also included my separate, general comment that the events of March 11 had "put a kink" in everything the agency's doing.

The Wilmington paper's lead sentence inappropriately combined those two points to suggest Fukushima delayed the ESBWR; Reuters ran a version with an even stronger version of the mistake in the headline.

We contacted Reuters and they've cleaned it up considerably:

NRC to complete AP1000 certification before ESBWR

- * NRC expects to act by year-end on Westinghouse AP1000
- * Consideration of GE Hitachi's ESBWR delayed to next year

(Officially corrects NRC statements about Fukushima causing delays to new reactor certifications, replaces headline, releads and recasts first few paragraphs)

~~NOT FOR PUBLIC DISCLOSURE~~

By Jim Brumm

WILMINGTON, N.C., Oct 13 (Reuters) - The U.S. Nuclear Regulatory Commission's priority for new reactors is to complete the certification of the Westinghouse Electric AP1000 design and the associated combined licenses for new AP1000 units in Georgia and South Carolina.

After that, the agency will wrap up the certification of General Electric's <GE.N> new Economic Simplified Boiling Water Reactor (ESBWR) design, NRC spokesman Scott Burnell said.

He said the full commission is still expected to act on the final certification of the AP1000 design by year-end, which would make the certification effective in 2012.

Burnell said placing the ESBWR certification behind the AP1000 was an issue of priorities.

"The people that would be taking care of the ESBWR certification have been concentrating on the AP1000 ... because that is the area most likely to produce a license to build a new reactor first," Burnell said.

He noted the Fukushima nuclear accident in Japan earlier this year has not directly slowed the agency's new licensing and certification activities.

But Burnell did mention that Fukushima has increased the NRC's workload and with only so many people, Congress has already given the NRC permission to reallocate existing funds to help deal with Fukushima related issues.

The NRC staff has been analyzing the Fukushima Daiichi plant after the earthquake and tsunami and making recommendations for future NRC action aimed at averting such an accident in the United States.

NRC consideration of GE Hitachi Nuclear Energy's ESBWR has been delayed until next year, Burnell said in a telephone interview.

~~NOT FOR PUBLIC DISCLOSURE~~

We're still waiting to hear from the reporter in Wilmington.

Scott

From: Sharkey, Jeffrey

Sent: Friday, October 14, 2011 2:33 PM

To: Burnell, Scott

Subject: FW: NRC News Summary for Friday, October 14, 2011

Scott,

Understand there is a garble in the article regarding the ESBWR design certification schedule delay. What is the garble, and what is the straight scoop?

Thanks,

Jeff

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sharkey, Jeffry
Sent: Tuesday, October 18, 2011 5:52 PM
To: Gilles, Nanette; Nieh, Ho
Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick; Davis, Roger
Subject: RE: Steering Committee Charter -- SECY-11-0117

Thanks. Nan.

(b)(5)

Jeff

From: Gilles, Nanette
Sent: Tuesday, October 18, 2011 5:50 PM
To: Nieh, Ho; Sharkey, Jeffry
Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick; Davis, Roger
Subject: RE: Steering Committee Charter -- SECY-11-0117

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
Commissoner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Nieh, Ho
Sent: Tuesday, October 18, 2011 8:39 AM
To: Gilles, Nanette; Sharkey, Jeffry
Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick
Subject: RE: Steering Committee Charter -- SECY-11-0117

(b)(5)

(b)(5)

Ho

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)
(b)(6) (mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

~~NOT FOR PUBLIC DISCLOSURE~~

~~NOT FOR PUBLIC DISCLOSURE~~

From: Gilles, Nanette
Sent: Tuesday, October 18, 2011 8:03 AM
To: Nieh, Ho; Sharkey, Jeffry
: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick
Subject: RE: Steering Committee Charter -- SECY-11-0117

Thanks, Ho. I intend to discuss with GA today.

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

From: Nieh, Ho
Sent: Tuesday, October 18, 2011 7:33 AM
To: Sharkey, Jeffry; Gilles, Nanette
Cc: Bubar, Patrice; Sosa, Belkys; Franovich, Mike; Orders, William; Castleman, Patrick
Subject: Steering Committee Charter -- SECY-11-0117
Importance: High

Jeff, Nan,

(b)(5)

Thanks.

Ho

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission

(1) 415-1811 (office)
(b)(6) (mobile)

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

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

~~NOT FOR PUBLIC DISCLOSURE~~

From: Sosa, Belkys
Sent: Tuesday, October 18, 2011 3:12 PM
To: Gilles, Nanette; Davis, Roger
Subject: FW: DRAFT SRM - SECY-11-0117- Proposed Charter for the Longer-Term Review of Lessons Learned from the March 11, 2011....

FYI

From: Laufer, Richard
Sent: Tuesday, October 18, 2011 7:49 AM
To: Nieh, Ho; Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice
Cc: Hart, Ken; Baval, Rochelle; Vietti-Cook, Annette
Subject: DRAFT SRM - SECY-11-0117- Proposed Charter for the Longer-Term Review of Lessons Learned from the March 11, 2011....

For the subject draft SRM, there are two ACC items that SECY is looking for feedback on before the SRM can be finalized.

(b)(5)

Please respond to SECY on these two items.

Thanks,
Rich

~~NOT FOR PUBLIC DISCLOSURE~~

Davis, Roger

From: Gilles, Nanette
Sent: Tuesday, October 18, 2011 5:53 PM
To: Laufer, Richard
Cc: Sosa, Belkys; Davis, Roger; Nieh, Ho; Sharkey, Jeffrey; Bubar, Patrice; Hart, Ken; Bovol, Rochelle; Vietti-Cook, Annette
Subject: RE: DRAFT SRM - SECY-11-0117- Proposed Charter for the Longer-Term Review of Lessons Learned from the March 11, 2011....

(b)(5)

Nan

Nanette V. Gilles
Technical Assistant for Reactors
to Commissioner Apostolakis
U. S. Nuclear Regulatory Commission

Phone: 301-415-1180
Email: nanette.gilles@nrc.gov

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Cc: Hart, Ken; Bovol, Rochelle; Vietti-Cook, Annette
Subject: DRAFT SRM - SECY-11-0117- Proposed Charter for the Longer-Term Review of Lessons Learned from the March 11, 2011....

(b)(5)

Please respond to SECY on these two items.

Thanks,
Rich

Sosa, Belkys

From: Sharkey, Jeffry
Date: Thursday, October 20, 2011 10:59 AM
To: Batkin, Joshua; Coggins, Angela
Cc: Monninger, John; Bubar, Patrice; Sosa, Belkys; Bupp, Margaret; Vietti-Cook, Annette; Brenner, Eliot
Subject: FW: NRC Takes Action on Japan Near-Term Task Force Recommendations
Attachments: 11-202.docx

Josh,

(b)(5)

Jeff

From: OPA Resource
Sent: Thursday, October 20, 2011 9:56 AM
To: Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Teresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffry; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy
Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

For distribution in approximately one hour.

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



NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Telephone: 301/415-8200

Washington, D.C. 20555-0001

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

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

No. 11-202

October 20, 2011

NRC TAKES ACTION ON JAPAN NEAR-TERM TASK FORCE SAFETY RECOMMENDATIONS

The Nuclear Regulatory Commission has directed the agency's staff to begin immediately implementing seven safety recommendations from the NRC's Near-Term Task Force on lessons learned from the reactor accident at Fukushima. The seven recommendations are among 12 comprehensive safety recommendations presented by the Task Force to the Commission in July.

"I am pleased that the Commission has taken this first step in responding to and implementing the safety recommendations of the Task Force," said NRC Chairman Gregory B. Jaczko. "My colleagues and I expect that within five years, and significantly sooner in some cases, the staff will have enhanced our already robust safety standards by carrying out these recommendations."

The NRC staff reviewed the Task Force's July 12 report and provided a proposal to the Commission that selected the seven recommendations as most appropriate for immediate action. The recommendations cover issues including the loss of all A/C electrical power at a reactor (also called "station blackout"), reviews of seismic and flooding hazards, emergency equipment and plant staff training.

In keeping with the agency's regulatory actions over the past few years, such as mitigation strategy requirements, the Commission called on the staff to utilize performance-based standards in any new or revised regulations wherever possible. Performance-based requirements specify the objective or result to be attained, rather than prescribing to licensees how the objective or result is to be attained.

For the recommendation calling for a new station blackout rule, the Commission set a goal of completing the rulemaking process by April 2014.

"The station blackout rulemaking is an achievable goal," said Chairman Jaczko. "It will, however, be complicated by the Commission's direction to initiate the rulemaking through an advance notice of rulemaking, rather than as a proposed rule. This will add an extra step to the process. Nevertheless, addressing station blackout is a high priority, and I will do my best to lead the staff in accomplishing this effort."

In its reports to the Commission in September, and again in early October, the staff endorsed virtually all of the Task Force's recommendations. The October staff review also proposed additional steps beyond the Task Force recommendations, which touch on safety issues such as spent fuel storage and emergency planning. The remaining Task Force recommendations, along with the additional recommendations, are currently pending with the Commission.

The Commission's memo to the staff is available on the NRC's [website](#).

###

News releases are available through a free *listserv* subscription or by clicking on the EMAIL UPDATES link on the NRC homepage (www.nrc.gov). E-mail notifications are sent to subscribers when news releases are posted to NRC's website. For the latest news, follow the NRC on www.twitter.com/NRCgov.

~~NOT FOR PUBLIC DISCLOSURE~~

Sosa, Belkys

From: Nieh, Ho
Sent: Thursday, October 20, 2011 11:07 AM
To: Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys
Subject: Fw: NRC Takes Action on Japan Near-Term Task Force Recommendations

Fyi.

Sent via BlackBerry

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

From: Loyd, Susan
To: Nieh, Ho
Cc: Batkin, Joshua
Sent: Thu Oct 20 11:05:49 2011
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

re release has already been issued and posted. Sorry.
Susan

Susan K. Loyd
Communications Director
Office of the Chairman
U.S. Nuclear Regulatory Commission
Tele: 301-415-1838
Susan.Loyd@nrc.gov

From: Nieh, Ho
Sent: Thursday, October 20, 2011 10:59 AM
To: OPA Resource; Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mityng, Viktoria; Monninger, John; Montes, David; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Shaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny;

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Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations
Importance: High

(b)(5)

Thanks.

Ho

Ho Nieh
Chief of Staff
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From: OPA Resource

Sent: Thursday, October 20, 2011 9:56 AM

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

Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

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Sosa, Belkys

From: Nieh, Ho
Sent: Thursday, October 20, 2011 11:14 AM
To: Sosa, Belkys; Bubar, Patrice; Sharkey, Jeffrey
Subject: FW: NRC Takes Action on Japan Near-Term Task Force Recommendations

fyi

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
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(301) 415-1757 (fax)
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From: Hayden, Elizabeth
Sent: Thursday, October 20, 2011 11:07 AM
To: Nieh, Ho
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Ho, That language was put in by the Chairman's office and I flagged it before we put it out as being "provocative." If the Chairman agrees to delete this language, we will do so. Thanks.

Elizabeth Hayden
Senior Advisor
Office of Public Affairs
U.S. Nuclear Regulatory Commission
-- Protecting People and the Environment
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From: Nieh, Ho
Sent: Thursday, October 20, 2011 10:59 AM
To: OPA Resource; Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitleyng, Viktoria; Monninger, John; Montes, David; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Stehman, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Christine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

~~NOT FOR PUBLIC RELEASE~~

Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations
Importance: High

(b)(5)

Thanks.

Ho

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission
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To: Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Koc, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

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Sosa, Belkys

From: Sosa, Belkys
Sent: Thursday, October 20, 2011 11:18 AM
To: Apostolakis, George
Subject: FW: NRC Takes Action on Japan Near-Term Task Force Recommendations
Attachments: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

(b)(5)

Thanks,
Belkys

P.S. (b)(6) I will be back before the All Hands meeting. Call me if you need anything.

From: Nieh, Ho
Sent: Thursday, October 20, 2011 11:07 AM
To: Sharkey, Jeffry; Bubar, Patrice; Sosa, Belkys
Subject: Fw: NRC Takes Action on Japan Near-Term Task Force Recommendations

Fyi.

Sent via BlackBerry

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

From: Loyd, Susan
To: Nieh, Ho
Cc: Batkin, Joshua
Sent: Thu Oct 20 11:05:49 2011
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Ho:
The release has already been issued and posted. Sorry.
Susan

Susan K. Loyd
Communications Director
Office of the Chairman
U.S. Nuclear Regulatory Commission
Tel: 301-415-1838
Susan.Loyd@nrc.gov

William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Importance: High

(b)(5)

Thanks.

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

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From: OPA Resource

Sent: Thursday, October 20, 2011 9:56 AM

To: Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Berman, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

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Sosa, Belkys

From: Bubar, Patrice
Sent: Thursday, October 20, 2011 11:42 AM
To: Nieh, Ho; Sharkey, Jeffrey; Sosa, Belkys
Subject: Re: NRC Takes Action on Japan Near-Term Task Force Recommendations

(b)(5)

From: Nieh, Ho
To: Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys
Sent: Thu Oct 20 11:07:06 2011
Subject: Fw: NRC Takes Action on Japan Near-Term Task Force Recommendations

Fyi.

Sent via BlackBerry

Ho Nieh
Chief of Staff
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U.S. Nuclear Regulatory Commission
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(b)(6) (mobile)
(301) 415-1757 (fax)
h.nieh@nrc.gov

From: Loyd, Susan
To: Nieh, Ho
Cc: Batkin, Joshua
Sent: Thu Oct 20 11:05:49 2011
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Ho:
The release has already been issued and posted. Sorry.
Susan

Susan K. Loyd
Communications Director
Office of the Chairman
U.S. Nuclear Regulatory Commission
Tele: 301-415-1838
Susan.Loyd@nrc.gov

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Sent: Thursday, October 20, 2011 10:59 AM
To: OPA Resource; Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchartt, Bill; Bozin, Timmy; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawken, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins,

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Verlyh; Johnrson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Importance: High

(b)(5)

Thanks.

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

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Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

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opa.resource@nrc.gov

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Sosa, Belkys

From: Sosa, Belkys
Sent: Thursday, October 20, 2011 11:19 AM
To: Apostolakis, George; Davis, Roger; Gilles, Nanette
Subject: FYI: NRC Takes Action on Japan Near-Term Task Force Recommendations

Please refer to the following series of emails regarding the subject press release.

From: Nieh, Ho
Sent: Thursday, October 20, 2011 11:14 AM
To: Sosa, Belkys; Bubar, Patrice; Sharkey, Jeffrey
Subject: FW: NRC Takes Action on Japan Near-Term Task Force Recommendations

fyi

Ho Nieh
Chief of Staff
Office of Commissioner William C. Ostendorff
U.S. Nuclear Regulatory Commission
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(301) 415-1757 (fax)
ho.nieh@nrc.gov

From: Hayden, Elizabeth
Sent: Thursday, October 20, 2011 11:07 AM
To: Nieh, Ho
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Ho, That language was put in by the Chairman's office and I flagged it before we put it out as being "provocative." If the Chairman agrees to delete this language, we will do so. Thanks.

Beth Hayden
Senior Advisor
Office of Public Affairs
U.S. Nuclear Regulatory Commission
— Protecting People and the Environment
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elizabeth.hayden@nrc.gov
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From: Nieh, Ho

Sent: Thursday, October 20, 2011 10:59 AM

To: OPA Resource; Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Importance: High

(b)(5)

Thanks.

Ho

✓ Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

(301) 415-1811 (office)

(b)(6) (mobile)

(301) 415-1757 (fax)

ho.nieh@nrc.gov

From: OPA Resource

Sent: Thursday, October 20, 2011 9:56 AM

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

Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

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For distribution in approximately one hour.

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Nuclear Regulatory Commission
1-800-415-8200
opa.resource@nrc.gov

Sosa, Belkys

From: Bubar, Patrice
Sent: Thursday, October 20, 2011 7:05 PM
To: Sosa, Belkys; Nieh, Ho; Sharkey, Jeffrey
Subject: RE: Query

WDM has one tomorrow.

Patty Bubar
Chief of Staff
Office of Commissioner William D. Magwood
U.S. Nuclear Regulatory Commission
301-415-1895

From: Sosa, Belkys
Sent: Thursday, October 20, 2011 6:29 PM
To: Bubar, Patrice; Nieh, Ho; Sharkey, Jeffrey
Subject: Query

Did your bosses have/had a periodic with the Chairman this week?

From: Bubar, Patrice
Sent: Thursday, October 20, 2011 11:42 AM
To: Nieh, Ho; Sharkey, Jeffrey; Sosa, Belkys
Subject: Re: NRC Takes Action on Japan Near-Term Task Force Recommendations

(b)(5)

From: Nieh, Ho
To: Sharkey, Jeffrey; Bubar, Patrice; Sosa, Belkys
Sent: Thu Oct 20 11:07:06 2011
Subject: Fw: NRC Takes Action on Japan Near-Term Task Force Recommendations

Fyi.

Sent via BlackBerry

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

From: Loyd, Susan
To: Nieh, Ho
CC: Batkin, Joshua
Sent: Thu Oct 20 11:05:49 2011
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Ho:
The release has already been issued and posted. Sorry.
Susan

Susan K. Loyd
Communications Director
Office of the Chairman
U.S. Nuclear Regulatory Commission
Tele: 301-415-1838
Susan.Loyd@nrc.gov

From: Nieh, Ho

Sent: Thursday, October 20, 2011 10:59 AM

To: OPA Resource; Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggittis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Hollan, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mityng, Viktoria; Monninger, John; Montes, David; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Yvette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Importance: High

(b)(5)

Thanks.

Ho

Ho Nieh
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U.S. Nuclear Regulatory Commission
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From: OPA Resource

Sent: Thursday, October 20, 2011 9:56 AM

To: Abbott, Coleman; Apostolakis, George; Ash, Darren; Baggett, Steven; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Blake, Kathleen; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggittis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary;

~~NOT FOR PUBLIC DISCLOSURE~~

Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Vertyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mithyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, [unclear]; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, [unclear]; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffry; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

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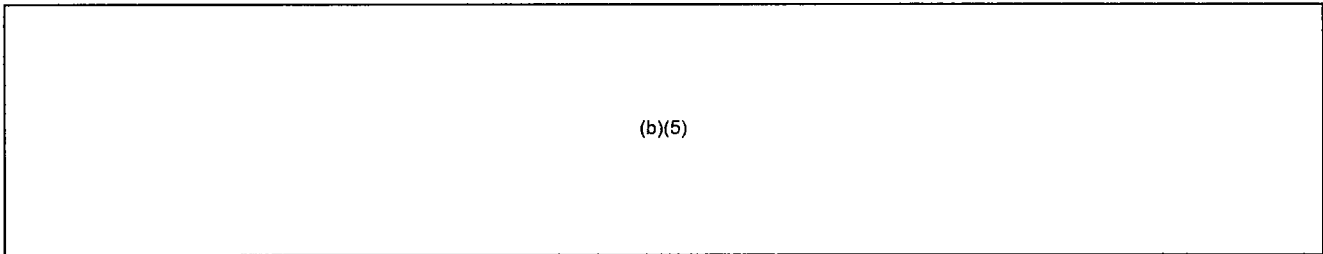
Office of Public Affairs
US Nuclear Regulatory Commission
301-415-8200
opa.resource@nrc.gov

Sosa, Belkys

From: Nieh, Ho
Sent: Thursday, October 20, 2011 11:41 AM
To: Batkin, Joshua
Cc: Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Josh,

<http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-202.pdf>



Ho

Ho Nieh
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U.S. Nuclear Regulatory Commission
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ho.nieh@nrc.gov

From: Loyd, Susan
Sent: Thursday, October 20, 2011 11:06 AM
To: Nieh, Ho
Cc: Batkin, Joshua
Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Ho:
The release has already been issued and posted. Sorry.
Susan

Susan K. Loyd
Communications Director
Office of the Chairman
U.S. Nuclear Regulatory Commission
Tele: 301-415-1838
Susan.Loyd@nrc.gov

From: Nieh, Ho
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Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Gilles, Nanette; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hawkens, Roy; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quayle, Lisa; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Sosa, Belkys; Steger (Tucci), Christine; Stuckle, Elizabeth; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy

Subject: RE: NRC Takes Action on Japan Near-Term Task Force Recommendations

Importance: High

(b)(5)

Thanks.

Ho

Ho Nieh

Chief of Staff

Office of Commissioner William C. Ostendorff

U.S. Nuclear Regulatory Commission

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Subject: NRC Takes Action on Japan Near-Term Task Force Recommendations

For distribution in approximately one hour.

Sosa, Belkys

Vietti-Cook, Annette
Monday, June 13, 2011 4:16 PM
Sharkey, Jeffrey; Sosa, Belkys; Bubar, Patrice; Nieh, Ho
Cc: Batkin, Joshua; Monninger, John; Rothschild, Trip; Schmidt, Rebecca; Powell, Amy
Subject: May 26, 2011 Issa Corr re: ACRS review of NRC review of Fukushima Daiichi

With respect to the subject Corr

(b)(5)